PLANNING BOARD

Tuesday, February 13, 2024 at 4:30 PM
Hybrid Meeting, Room 24 (Basement Level of City Hall) and Zoom

MEMBERS
Brandon Mazer, Chair
Justin Barker, Vice Chair
Marpheen Chann
Sean Murphy
David Silk
Austin Smith
Maggie Stanley

The Planning Board invites the public to attend the meeting in person or Zoom pursuant to the Remote Meeting Policy adopted by the Planning Board. Prior to the meeting, please check the Agenda Center (https://portlandme.portal.civicclerk.com) to view memos and reports which will be posted by the end of the day on the Friday before the Planning Board meeting. To submit written public comment on an agenda item, email planningboard@portlandmaine.gov. Submissions must be received by 12:00 pm the day before the Planning Board meeting to guarantee their inclusion in the agenda packet. All submissions must include the commenter's name and legal address. To help ensure your comment is submitted for the correct item, please include the name of the agenda item (see below).

REMOTE PARTICIPATION
Allow your computer to install the free Zoom app to get the best meeting experience. If you are not able to attend either in person or via Zoom, a recording will be available in the Agenda Center following the meeting.

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Or One tap mobile +13052241968,,88309467587# US; +13092053325,,88309467587# US
Or Telephone: Dial(for higher quality, dial a number based on your current location): +1 305 224 1968 US; +1 309 205 3325 US; +1 312 626 6799 US (Chicago); +1 646 931 3860 US; +1 929 205 6099 US (New York); +1 301 715 8592 US (Washington DC); +1 253 205 0468 US; +1 253 215 8782 US (Tacoma); +1 346 248 7799 US (Houston); +1 360 209 5623 US; +1 386 347 5053 US; +1 507 473 4847 US; +1 564 217 2000 US; +1 669 444 9171 US; +1 669 900 6833 US (San Jose); +1 689 278 1000 US; +1 719 359 4580 US
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AGENDA:

WORKSHOP - 4:30 PM

i. Major Site Plan and Site Location of Development; 1 Bean Pot Circle; Northeastern University, Applicant. The Planning Board will hold a hybrid workshop to consider a proposal to construct a 238,000 square foot Learning, Research & Collaboration Building, renovation of the 58,000 square foot Bean Building to create a business incubator space, construction of a 234,550 square foot parking garage, and development of a 7,500 square foot childcare facility. Other improvements include replacement of the existing pier on the property, and the development of new public open spaces and pathways. The subject property totals approximately 24 acres, including submerged lands, and is zoned B-5 Urban Commercial and also located within the Roux Institute Institutional Overlay Zone. A

project and plan summary are available for viewing on the city's CSS Portal (https://css.portlandmaine.gov/) by referencing Plan Number PL-002724-2023.

ii. Major Site Plan; 186 Woodford Street; Community Housing of Maine (CHOM), Applicant. The Planning Board will hold a hybrid workshop to consider a proposal by Community Housing of Maine to construct a new building with 42 age-restricted affordable units, and redevelopment of the existing Parish House at the Woodford Congregational Church property into 37 age restricted affordable units. The project also includes various parking, utility and landscaping improvements. The church on the property will continue to function as a place of worship under the existing ownership authority. The subject property totals 1.92 acres, and is zoned B-2 Community Business. A project and plan summary are available for viewing on the city's CSS Portal (https://css.portlandmaine.gov/) by referencing Plan Number PL-002753-2023.

PUBLIC HEARING - 6:00 PM

1. ROLL CALL AND DECLARATION OF QUORUM

2. COMMUNICATION AND REPORTS

509 Forest Avenue (Approval Letter)

3. REPORT OF ATTENDANCE AT THE MEETING HELD ON JANUARY 23, 2024

Public Hearing
509 Forest Avenue: Barker, Mazer, Murphy, and Smith present. Chann and Stanley absent. Silk recused.
716 Stevens Avenue: Barker, Murphy, Silk, and Smith present. Chann, and Stanley absent. Mazer recused.

4. REPORTS OF DECISIONS AT THE MEETING HELD ON JANUARY 23, 2024

i. Major Site Plan; 331 Veranda Street; Martin's Point Health Care, Applicant. Barker motioned, and Silk seconded a motion to table the workshop for the major site plan for 331 Veranda Street to March 12, 2024. Vote 5-0, Chann and Stanley absent.

ii. Major Site Plan and Conditional Use; 509 Forest Avenue; DC 509, LLC, Applicant. Barker motioned, and Smith seconded a motion to waive Technical Manual Standard Sec. 1.5.1.C to reduce the required driveway separation for driveways located on arterial roads from 100 feet to 75 feet. Vote 4-0, Chann and Stanley absent, Silk recused. Barker motioned, and Smith seconded a motion to waive Technical Manual Standard 1.10.3 to reduce the required minimum two-way driveway aisle width from 24 feet to 23 feet. Vote 4-0, Chann and Stanley absent, Silk recused. Barker motioned, and Smith seconded a motion to approve the major site plan application. Vote 4-0, Chann and Stanley absent, Silk recused. Barker motioned, and Smith seconded a motion to approve the conditional use application for inclusionary zoning. Vote 4-0, Chann and Stanley absent, Silk recused.

iii. Major Site Plan and Site Location of Development; 716 Stevens Avenue; University of New England, Applicant. Silk motioned, and Smith seconded a motion to waive Technical Manual Standard 12.3.5, which permits a maximum color temperature for site lighting of 3,000 CCT, to permit a color temperature of 4,000 CCT. Vote 4-0, Chann and Stanley absent, Mazer recused. Silk motioned, and Smith seconded a motion approve the major site plan application. Vote 4-0, Chann and Stanley absent, Mazer recused. Silk motioned, and Smith seconded a motion to adopt the draft Planning Board approval letter as the Board's decision, and authorize the Board Chair to sign the letter as drafted. Vote 4-0, Chann and Stanley absent, Mazer recused.

5. NEW BUSINESS

i. Historic Preservation Designation; 142 Free Street; Portland Museum of Art, Applicant. The Planning Board will hold a hybrid public hearing to consider a proposal by the Portland Museum of Art to reclassify the property located at 142 Free Street, located within the Congress Street Historic District, from a contributing structure to a non-contributing structure. The Planning Board will make a recommendation to the City Council regarding the property's designation. Application materials will be available on the City's Agenda Center for this meeting.

To:	Chair Mazer & Members of the Planning Board
From:	Zach Powell
Date:	February 9, 2024
Re:	1 Bean Pot Circle
Project ID:	PL-002724-2023
Meeting Date:	February 13, 2024

I. INTRODUCTION

The Initiative for Digital Engineering and Life Sciences (IDEALS) & Northeastern University has submitted a Major Site Plan and Site Location of Development (SLOD) application to facilitate the construction of a ±238,000 square foot post-secondary education building with on-site restaurant (Identified in **Figure 1** as the Learning, Research & Collaboration building), construction of a ±241,950 square foot mixed-use building with 625 automobile parking spaces and ±7,500 square feet of daycare facility space, redevelopment of the ±58,000 square foot Cannery Building, and associated site improvements & landscaping. This application is the first site plan application reviewed under the Roux Institute Institutional Overlay Zone (hereafter referred to as Roux IOZ), which was approved by the City Council on February 6, 2023, under Orders 125-22/23 & 127-22/23.

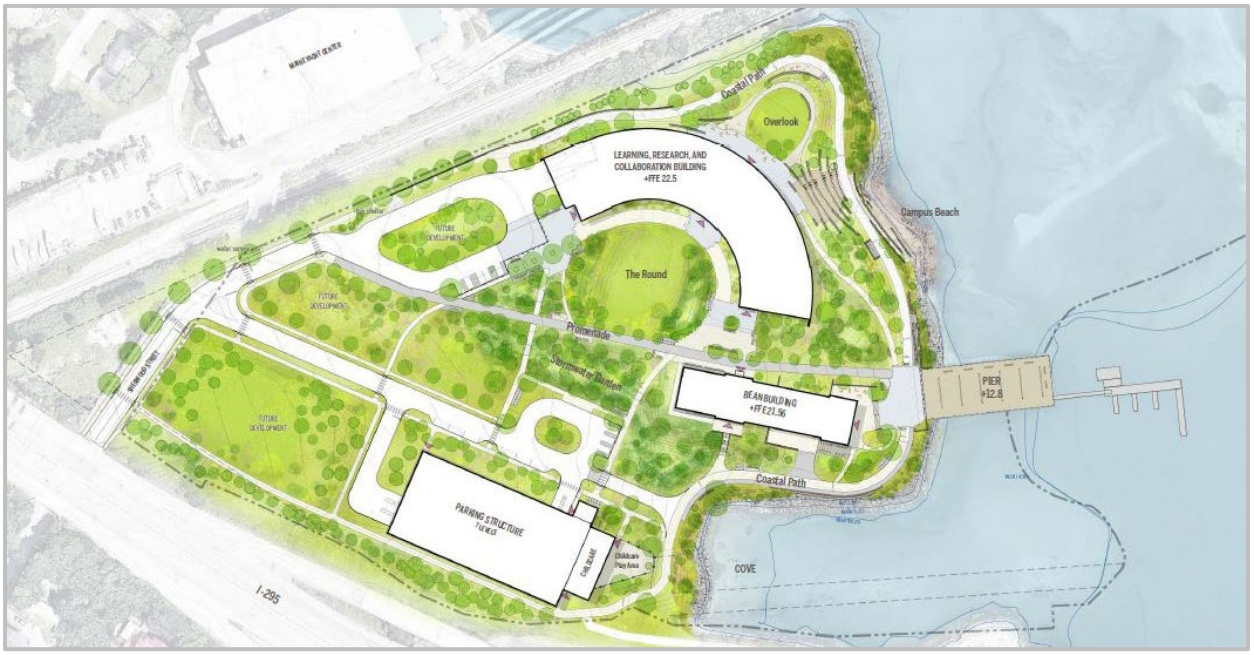


Figure 1: Phase 1 Rendered Site Plan

This memorandum is intended to provide an overview of the project and discuss the initial review by City Staff.

The Planning and Urban Development Department mailed 157 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the February 2, 2024, and February 3, 2024 editions of the *Portland Press Herald*.

Applicant: IDEALS & Northeastern University
Applicant Representative: Denise Cameron, Woodard & Curran

II. REQUIRED REVIEWS & REQUESTED WAIVERS

Review	Applicable Standards
Roux IOZ	Section 8.5.7
Major Site Plan Review	Section 14.6
Historic Preservation	Sections 8.5.7 (J) & 17.7.1
B-5 Design Review Standards	Design Manual
Site Location of Development	Technical Manual Section 14

Waiver Requests	*Applicable Standards*
Parking garage space width of 8.5'	City of Portland Technical Manual §1.10 Parking Lot and Parking Space Design – Standard parking spaces shall be 9 feet wide by 18 feet long, except that low turnover parking spaces, such as those used by residents or employees, may be designed with a width of 8.5' and considered a standard parking space
To directly discharge stormwater into Casco Bay	City of Portland Technical Manual Section 5 - Stormwater Management Standards and Maine DEP Chapter 500 Stormwater Management Section IV
To use concrete as a sidewalk material on Sherwood Street, instead of asphalt	City of Portland Technical Manual – Appendix 1: Sidewalk Materials Policy

III. PROJECT DATA

Existing Zoning	B-5 Urban Commercial Zone Roux IOZ	
Property Size	1,152,589 square feet (~26.46 acres including 12.86 acres of submerged land)	
Existing Use	Vacant	
Proposed Use	Post-secondary school	230,000 square feet
	Parking	234,450 square feet (625 spaces)
	Office	58,000 square feet
	Restaurant	8,000 square feet
	Daycare facility	7,500 square feet

	Existing	Proposed	Net Change
Building Footprint	47,160 sq. ft.	49,030 sq. ft.	+96,190 sq. ft.
Building Floor Area	58,000 square feet	537,950 square feet	+479,950 square feet
Parking Spaces	171	625 structured 14 surface	+468
Bicycle Parking Spaces	-	166	+166
EV Charging Stations	-	24	24

IV. RIGHT, TITLE, AND INTEREST

The applicants have submitted a purchase and sale agreement between IDEALS & Northeastern University as demonstration of Right, Title, and Interest (Attachment G). The Applicant notes that the proposed transfer of property from IDEALS to Northeastern University will occur before the submission of a building permit application for the project.

V. FINANCIAL AND TECHNICAL CAPACITY

The applicant has provided a letter from Northeastern University in Attachment D stating that the project costs of Phase 1 ($470 million) would come from already pledged philanthropic resources and debt.

Also included in Attachment D is a summary of the engineering, landscape architecture, and architecture firms and partners who are completing various aspects of design. The project team includes Woodard & Curran (Engineering), Stephen Stimson Associates (Landscape architecture), Cambridge Seven Associates (New construction architecture), and Bruner/Cott Architects (Historic preservation architecture). The combined experiences and portfolios of all partners demonstrate technical capacity.

VI. SITE CONTEXT

The former B&M Baked Beans facility operated continuously from this site between 1913 and 2021, with the signature cannery building dating back to 1912. This property totals 26.46 acres, with an additional 12.86 acres of submerged land, and is zoned Urban Commercial (B-5) with the Roux IOZ. Several interconnected structures were demolished in 2023, with the five-story Cannery Building and three-story Cod Fish Building, built over the existing pier, still occupying the site. The majority of the non-submerged portion of the property is impervious surface, with 10 acres being either building area, off-street parking, or vehicle maneuvering/loading area. The remainder of the site is either lawn or early successional non-lawn area.

In terms of surrounding context, the site is geographically constrained; bordered by Casco Bay to the South, Maine DOT rail right-of-way to the north and east, and Maine DOT I-295 right-of-way to the north and west. There is a single vehicular access point to the site via Sherwood Street, which connects with Veranda Street. Surrounding uses, aside from those just mentioned, include the Maine Yacht Center, located just north of the rail corridor, which is zoned Low Impact Industrial (I-L), residential uses to the north and west of the site, zoned R-3 and R-5 Residential, respectively, and commercial uses along both Veranda Street and Washington Avenue, zoned Community Business (B-2b).

Automobile, bicycle, and pedestrian access to the site is provided by Sherwood Street via Veranda Street. Two METRO routes (7 & 9A/9B) have existing stops within the vicinity of the project, and an additional ten local and express routes are accessible via one transfer. The site is also proximate to shared-use facilities on the Back Cove Trail and the western portion of Tukey's Bridge, which provides connections to the Eastern Promenade and Bayside Trail.

VII. PRIOR REVIEWS

The subject site plan application is the first phase of development envisioned as part of the Roux IOZ. The Roux IOZ, as well as a zoning map amendment from IM to B-5, was reviewed by the Planning Board throughout 2022, through four workshops and one hearing, with final action taken by the City Council on February 6, 2023.

Parallel to the IOZ & B-5 map amendment reviews, the Cannery Building was unanimously recommended by the Historic Preservation Board for designation as a local landmark, which was designated by the City Council on October 17, 2022, under Order 86-22/23. As part of the Cannery Building designation, a Certificate of Appropriateness is required for any exterior alterations to the building or within the designation boundaries as shown in **Figure 2**, however, no historic preservation advisory review is required for work within 100 feet of the designation boundary.

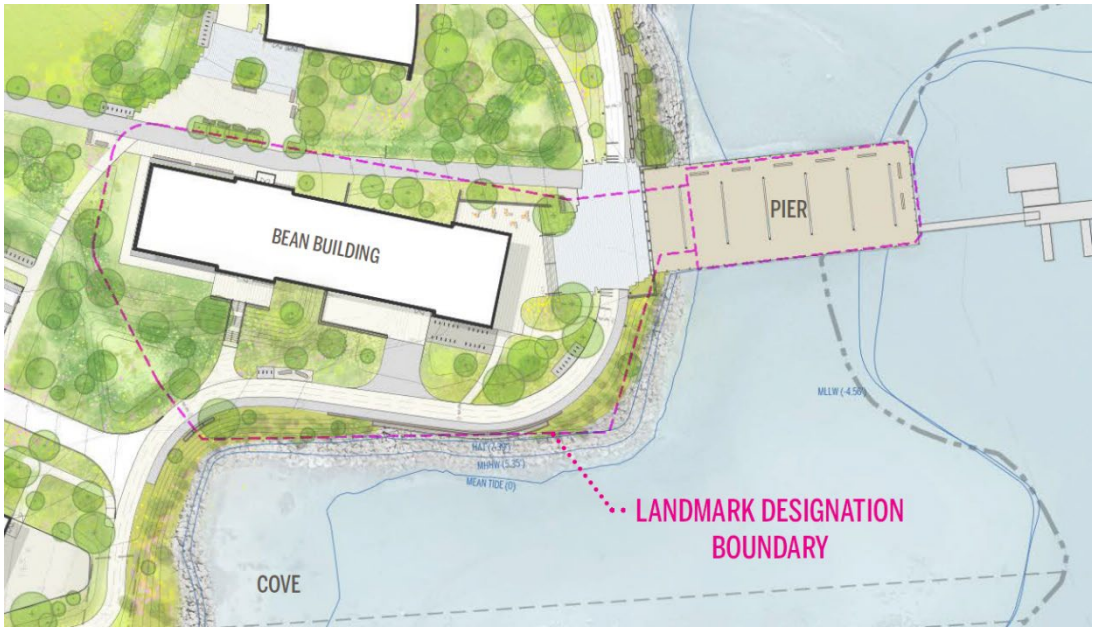


Figure 2: Cannery Building Designation

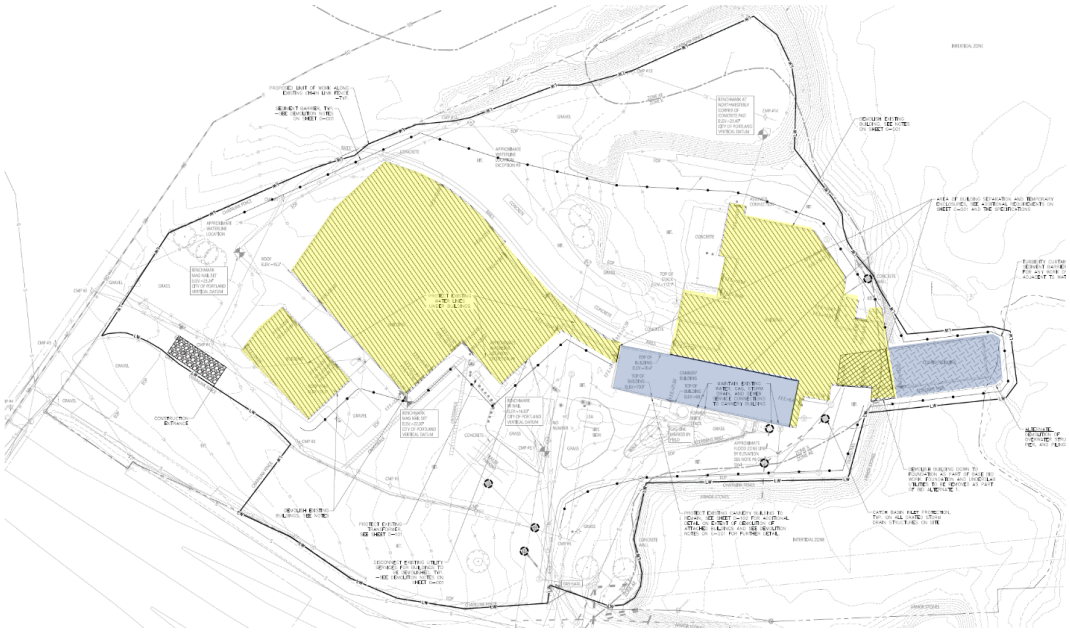


Figure 3: Exhibit of buildings demolished under DEM2023-00228 (shown in yellow) and buildings retained (shown in blue)

On May 23, 2023, a demolition permit (DEM2023-00228) was issued to demolish ±118,141 square feet of building space on the site, which did not include the Cannery or Codfish buildings. **Figure 3** shows the buildings demolished in yellow and the buildings retained in blue. The Cod Fish building & the supporting pier are proposed to be demolished as part of the submitted site plan application.

A timeline of prior reviews is shown in **Figure 4**.

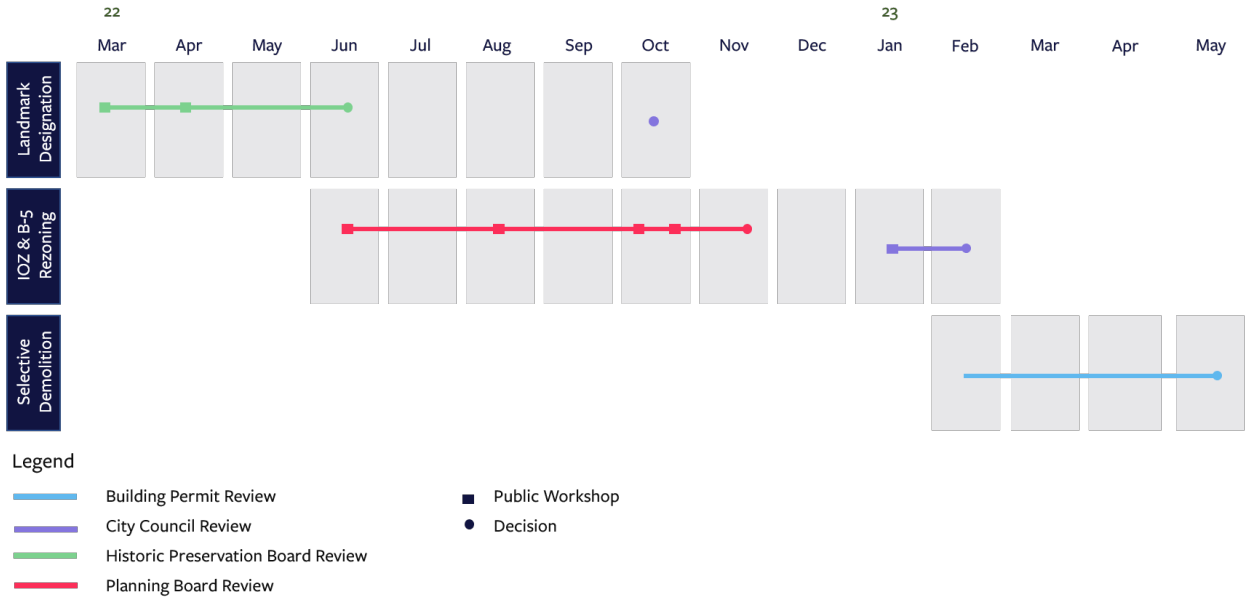


Figure 4: Timeline of prior approvals

VIII. INSTITUTIONAL DEVELOPMENT PLAN & PROPOSED DEVELOPMENT

I. Institutional Development Plan (IDP)

In the IDP approved by the Planning Board, the Applicant proposed a mix of different uses in the near term.

A breakdown of those uses is listed below and shown to the right in **Figure 5** in their contemplated locations:

- Post-secondary education (Shown in purple)
- Office space (Shown in orange)
- Residential (Shown in green)
- Hotel (Shown in blue), and
- Restaurant & Retail (Shown in purple)

Along with these uses, the IDP proposed a combination of structured parking, collocated with the uses listed above, along with multiple surface parking areas, that would be redeveloped as other uses during future phases outlined in the IDP. A variety of different open spaces are also proposed, including a perimeter loop path, passive recreation grassed areas, formal & informal seating areas, and the construction of a new pier.



Figure 5: IDP Conceptual Near-Term Development Plan, with shading by contemplated use locations

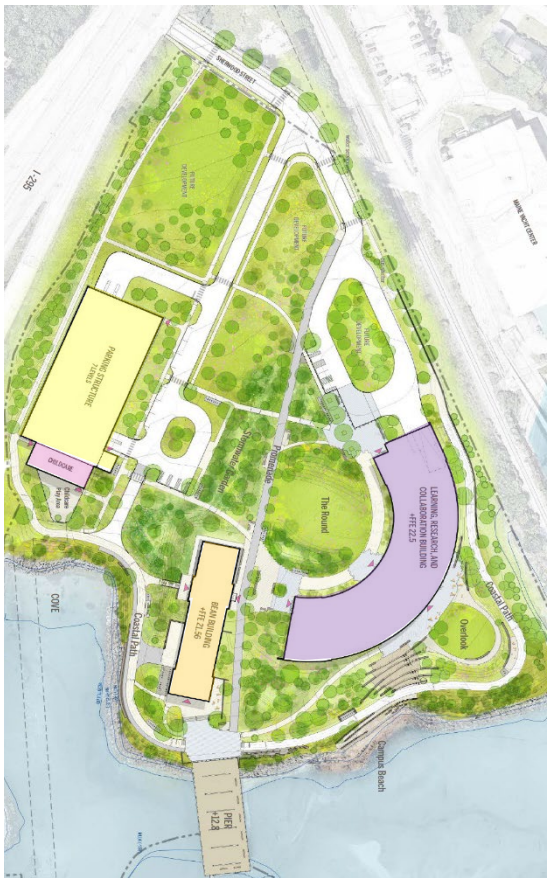


Figure 6: Rendered site plan, with shading by proposed use

II. Proposed Project

Compared to the conceptual vision outlined in the IDP, the subject application includes a similar mix of post-secondary education, office space, retail, and related site improvements/landscaping. The residential & hotel uses contemplated in the IDP are not included as part of the submitted application, and the combination of lower-level structured parking & surface parking has changed into a larger structured parking building with 625 automobile parking spaces and an accompanying daycare center.

A breakdown of the proposed uses in the submitted application is included below and shown above in **Figure 6**:

- Post-secondary education (Shown in purple)
- Structured parking (Shown in yellow)
- Office space (Shown in orange)
- Restaurant & Retail (Shown in purple)
- Daycare center (Shown in magenta)

A summary of the proposed uses is included below in Table 1.

Table 1: Proposed Uses by Size	
Use	*Scale of Use*
Post-secondary education	3,123 students (230,000 square feet)
Office	58,000 square feet
Restaurant & Retail	8,000 square feet
Structured parking	625 spaces (234,450 square feet)
Daycare center	7,500 square feet

IX. CONCURRENT REVIEWS

I. Certificate of Appropriateness

The Applicant has submitted a certificate of appropriateness application to the Historic Preservation Board for the rehabilitation of the Cannery Building and Interpretive elements on and surrounding the reconstructed pier. The application appeared before the Historic Preservation Board on December 6, 2023, and the rehabilitation work on the Cannery Building was received favorably. A second workshop with the Board is anticipated this spring to discuss the proposed interpretive elements, as shown in **Figure 7**.

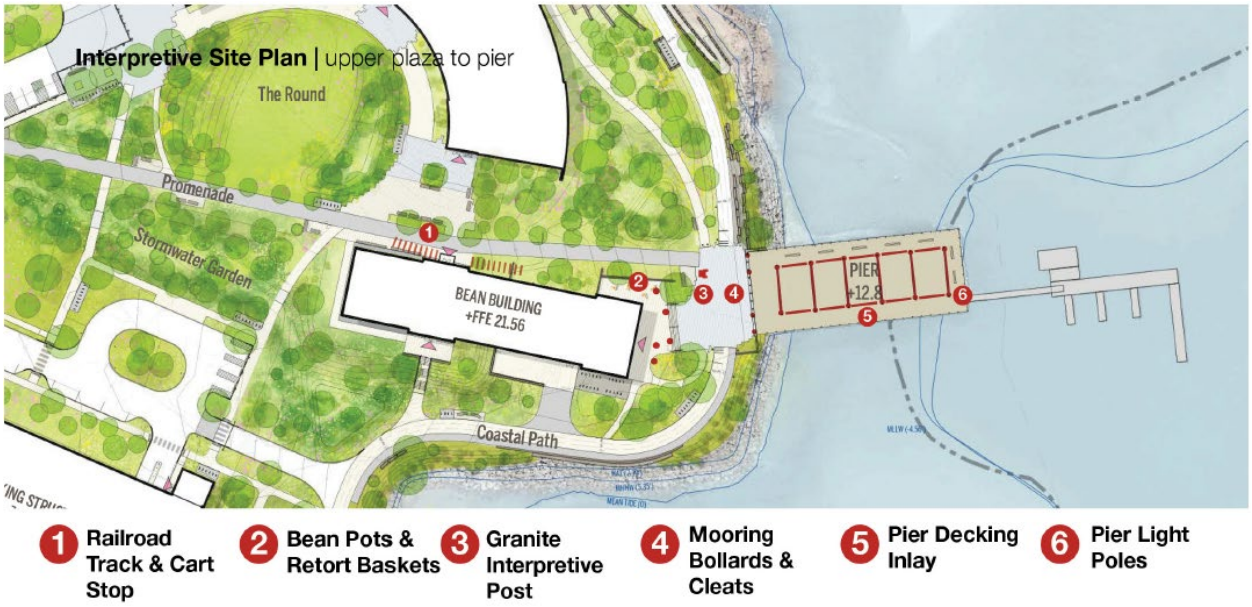


Figure 7: Keyed site plan with proposed interpretive elements

II. Site Location of Development (SLOD)

The City of Portland has delegated review authority from the Maine Department of Environmental Protection for larger projects that trigger Site Location of Development Act review. The Standards for Local Site Location of Development Review can be found in Section 14 of the City of Portland Technical Manual. As the reviews of the NRPA & TMP applications progress, an assessment of compliance with these standards will be provided in a subsequent staff report.

III. Natural Resource Protection Act (NRPA) Permit by Rule

The development is proposed within and adjacent to an intertidal wetland, and the project site contains significant wildlife habitats for endangered species (Northern Long-eared Bat & Roseate Tern), as well as numerous migratory birds. Given this, the project requires NRPA review through the Maine Department of Environmental Protection. To avoid impacts on the northern long-eared bat, tree clearing is proposed to be conducted between August and May to avoid having negative impacts occur during the summer, when the bats traditionally nest in trees. The review of this application is still ongoing.

III. Traffic Movement Permit (TMP)

For the majority of projects exceeding the threshold for a TMP, the City has delegated review authority from MaineDOT. Given the proximity to I-295, MaineDOT is leading the review of the TMP application for the site. A scoping meeting for the TMP was held on December 13, 2023. Overall, the discussion focused on how trips between different uses on site (AKA internal capture trips) were being counted towards overall totals, bicycle & pedestrian connections off-site, sightlines for left turns at Sherwood & Veranda Streets, crash data near the site, and a recommended consideration for a parking permit program for residential streets east of I-295.

At this time, the City is awaiting scoping meeting notes from MaineDOT. The next step in the TMP review process is for a traffic study to be completed as Section 7 of the TMP, which will also identify the required mitigation. Consulting Traffic Engineer Tom Errico and other City staff are continuing to provide comments throughout the review of the TMP. As with other site plan reviews, the TMP may be approved after site plan approval, but the project will be required to demonstrate how the application meets the site plan transportation standards, independent of the review and any mitigation required through the TMP process.

X. STAFF REVIEW

Initial staff comments on the Roux IOZ & site plan standards are included in Attachments #1-4. Overall, comments focused on:

- Demonstrating how the sole proposed bicycle & pedestrian connection from Sherwood Street will foster connectivity and community engagement
- Encouraging a reconfiguration of the structured parking & daycare center building to increase activation at ground level, improved site design & improved internal connectivity between the structured parking spaces and the daycare center
- Building entrance design for the Learning, Research & Collaboration Building & Structured Parking & Daycare Center Building
- Increasing the width of the perimeter access loop based on the anticipated volume of users in the current and proposed phases.
- Reconfiguration of the proposed two-way cycle track, pedestrian facility & adjacent seating areas
- Landscaping, transportation & utility improvements along Sherwood Street, particularly the transition where Sherwood Street is located beneath I-295 as well as potential connections to the Back Cove Trail system under Tukey's Bridge to enhance connectivity.
- Design, screening of parking & activation of the perimeter access loop & adjacent landscaped areas between the Structured Parking & Daycare Center Building and I-295
- Awaiting additional information related to concurrent reviews mentioned in Section IX of this memorandum and for the Sustainability Charter.

Consulting Traffic Engineer has expressed support for the submitted waiver request to reduce the parking space width from 9 feet to 8.5 feet for the parking garage. Waivers for discharges into Casco Bay & sidewalk materiality are still under review by Consulting Stormwater Engineering Firm Wright Pierce & the Department of Public Works, respectively.

The Applicant team provided a response letter (Attachment A1.) along with some of the requested community meeting materials (Attachments S-T), updated construction management plan (Attachment R1), & enlarged figures (Attachment U) from the Zoning & Transportation documents (Attachments D & H). Updated application materials that respond to staff comments and comments from the Planning Board are anticipated to be submitted over the course of February. City staff will continue to review updated application materials as they are submitted.

XI. NEIGHBORHOOD MEETING & PUBLIC COMMENT

The applicant held a Neighborhood Meeting on December 13, 2023, and 46 people attended the meeting. Comments focused on parking on and off-site, the scope of the traffic study, how future growth is being integrated into the design of the site, and maintenance of transportation facilities (e.g., bicycle lanes, bus stops).

The Planning & Urban Development Department has received four public comments. Comments generally focus on the transportation impacts of the projects, with PC2 including questions & recommendations on data collection and mitigation activities.

Portland METRO has submitted written comments (PC4.) speaking to the overall coordination between the Applicant team, City, and METRO, along with potential options of extending service for Route 5 or deviating Route 7 onto the site to enhance transit service to and from the site.

XII. NEXT STEPS

Planning Staff is seeking feedback from the Planning Board on:

- The proposed design of the Structured Parking & Daycare Center building
- The proposed width & design of the perimeter access loop, including the Structured Parking & Daycare Center Building
- Whether the sole bicycle & pedestrian access point from Sherwood Street to the site sufficiently demonstrates community engagement & connectivity

Following the workshop, the Applicant will incorporate feedback from the Board and continue to address Staff comments as part of resubmission. Following a complete resubmission by the Applicant, Planning Staff will schedule a subsequent Planning Board meeting.

XIII. ATTACHMENTS

STAFF ATTACHMENTS

1. City Zoning Worksheet
2. City Site Plan Worksheet
3. Peer Reviewer Comments
4. Sustainability Charter Comments
5. Annotated IDP with Requested Updates

APPLICANT DOCUMENTS

A. Summary
A1. February 5, 2024 Response Letter
B. Major Site Plan Checklist
C. Permitting & Approvals
D. Zoning
E. Zoning Analysis Table
F. Waiver Table
G. Right, Title, & Interest
H. Transportation Standards
I. TMP Application
J.TDM Plan
K. Environmental Quality Standards
L. Stormwater Management Report
M. SLOD Report
N. Sustainability Charter
O. Infrastructure & Safety Standards
P. Site Design Standards
Q. Comprehensive Plan Standards
R. Construction Management Plan 2023-09-14
R1. Construction Management Plan 2024-01-25
S. October 30, 2023 Community Advisory Group Meeting Summary
T. December 13, 2023 Neighborhood Meeting Summary
U. Enlarged Set of Figures
V. EV Charging Demand Study

PLANS

A. Site Plan Set
B. Rendered Site Plan
C. Landscape Plans
D. Shadow Study Plans
E. Signage Plans
F. Site Security, Lighting and Photometrics Plans
G. Survey
H. Elevations – Cannery Building
I. Elevations – Learning, Research & Collaboration Building
J. Elevations – Structured Parking & Daycare Center Building
K. Floor Plans – Cannery Building
L. Floor Plans – Learning, Research & Collaboration Building
M. Floor Plans – Structured Parking & Daycare Center Building
M1. Floor Plans – Structured Parking & Daycare Center Building 2024-01-31
N. Sherwood Street Plans
O. Average Grade Calculation

PUBLIC COMMENT

PC 1. Tomas Peredy (November 26, 2023)
PC 2. East Deering Neighbors (February 6, 2024)
PC 3. East Deering Neighbors (February 8, 2024)
PC 4. METRO (February 8, 2024)

Zoning Worksheet | January 30, 2024 | PL-002724-2023 | 1 Bean Pot Circle
Submission #1: November 21, 2023
Planner: Zach Powell (zpowell@portlandmaine.gov)

Zoning Use Review (Article 6)

Use Permissions (Table 6-A – Table 6-F)

Proposed Use	***Zones***	***Permitted, Conditional or Accessory Use***
General office (>5,000 SF)	***B-5 & Roux IOZ***	Permitted.
Laboratory and research facility		
Off-street parking		
Post-secondary school		
Preschool facility		
Restaurant		

Zoning Performance Standards (Sec. 6.8)

Standard	***Discussion***	***Finding***
§6.8.8(A)	Overview: The proposed design screens the majority of parking and accessory site elements. The one exception is the first two floors of the western façade of the Structured parking & preschool facility building, which will be located next to a public open space (Perimeter Access Loop). Updates Requested • Update architectural drawings to include screening for the first two levels of the Structured parking & preschool facility building.	Not Met.

Zoning Dimensional Review (Article 7)

Dimensional Standards (Table 7-A – Table 7-H)

Standard	***Requirement - IOZ***	***Proposed – LRC building***	***Proposed – Structured parking & preschool facility building***	***Finding***
Structure height	Comply with Roux Height Map	75' Height Zone: **53.2'** 150' Height Zone: **128.3'** 155' Height Zone: **133.1'**	75' Height Zone: **66.2'** 155' Height Zone: **86.7'** 170' Height Zone: **66.2'**	Met.

Supplemental Dimensional Standards (Sec. 7.4)

Standard	***Requirement 1***	***Requirement 2***	***Proposed***	***Finding***
7.4.3(B)(2)(c)	Photovoltaic structures can have a maximum height of 8 feet and must be setback from the building façade 1' for 1' of the proposed height.	4-6' heights	Setback 12+' from building edges	Met.

Roux IOZ Standards (§8.5.7)

Applicability Standards (§8.5.7(A))

Standard	Discussion	Finding
Applicability	Overview: Please refer to the accompanying site plan worksheet on the conformance of the submitted application. Comments included in Attachment 3 from Zoning Administrator Ann Machado have requested clarification on how average grade is calculated, clarification on the term *approximate FEMA flood zone* line, and updating the site plan set to show the 25-foot shoreland zoning setback. As an advisory note, a floodplain permit application will need to be submitted as part of the building permit process for new construction and elevation certificates. Updated floodplain maps are anticipated to be implemented within the summer of 2024.	Not Met.
	Updates Requested • Revise application materials to satisfy requested updates identified in Attachment 3.	

Phasing and Monitoring (§8.5.7(B))

Standard	Discussion	Finding
Monitoring and Amendments	Overview: Monitoring reports are required to be filed every three years, which will be required in 2026. Minor updates to the IDP have been identified in Attachment 5 and do not rise to the level of an IDP amendment. Updates to the IDP are reviewed by the Planning Authority.	Not Met.
	Updates Requested • Submit an updated copy of the IDP incorporating the proposed changes identified in Attachment 5.	
Public Space	Overview: The proposed site plan and landscaping plan create a complete design through the use of active and passive recreation facilities, plantings & gardens, and shared-use pathways that define future development blocks. At this time, Phase 1 does not propose active construction concurrent with other proposed operations of the Institute. Additional clarification may need to be provided if the site plan is phased.	Met at this time.
Minor & Major Amendments	Overview: Based on the review of the updates that need to be made to the IDP, the changes do not rise to a level that meet a minor or major amendment threshold. No further action is required.	Met.

Uses (§8.5.7(C))

Standard	Discussion	Finding
Overview of Uses	Overview: The subsection provides an overview of permitted uses. The proposed application aligns with the envisioned and permitted uses for the campus. No action is needed.	Met.
Community Engagement and Connectivity	Overview: The proposed design includes passive and active public open space along the waterfront and building entrances to enhance connectivity for visitors. Public space on the ground floor of the Bean Building, as well as a maker's space and café in the	Not Met.

	academic building, promote social permeability between indoor and outdoor spaces for members of the public while providing separate meeting/recreational space on upper floors for students & faculty. Public open spaces are proposed to be accessed through shared-use connections, which support the reduction of automobile trips to and on-site. Clarification should be provided on how the sole shared-use connection on Sherwood Street will foster connectivity and community engagement.	
	Updates Requested • Submit a narrative and/or figures that demonstrate how the Sherwood Street connection will achieve connectivity and community engagement with the surrounding neighborhood.	
Ground-floor Uses	Overview: All of the buildings in the submitted application include ground-floor community-oriented uses. No further action is required.	Met.
Hotel Use Standards	Overview: Not applicable. The submitted application does not include hotel uses.	Met.
Dimensional Requirements (§8.5.7(D))		
Standard	***Discussion***	***Finding***
Applicability	Overview: The submitted application does not comply with all of the zoning performance standards and IOZ dimensional requirements.	Not Met.
	Updates Requested • Update the application to comply with zoning performance standards and IOZ dimensional requirements.	
Minimum and Maximum Street wall heights	Overview: The proposed Structured parking & preschool facility building and learning & research center have minimum street wall heights of 45 and 51 feet, respectively. Both buildings provide stepbacks >10 feet at 45 and 51 feet respectively. No further action is required.	Met.
Stepbacks	Overview: The proposed Structured parking & preschool facility building provides a street wall stepback of 10 feet at 45 feet. The LRC building provides a street wall stepback of 13.5 feet at 51 feet. No further action is required.	Met.

Building Length	Overview: The learning & research center has a current length of 244 feet, which does not necessitate a continuous, publicly accessible corridor. The Applicant has indicated that the center is intended to have an addition at a later phase of development that would necessitate a continuous, publicly accessible corridor. Based on the current design, the space identified as Gather Portal Auditorium Multi-Purpose mostly meets the corridor requirements providing visual interest between both ends of the corridor, including informal seating, and adequate lighting. However, while the majority of the corridor is>30 feet in height, there is a 21-foot-long segment along the Western entrance that only has a 17-foot height. The proposed Structured parking & preschool facility building includes a building length is less than 250 feet, which complies with the building length requirements. City staff encourages the consideration of an alternate design (e.g., Incorporating the preschool facility within the footprint of the structured parking area, shifting the preschool facility to the eastern façade of the building).	Met.
Transitions and buffers	Overview: The shoreline transition space connects occupants of the three buildings to the water and includes a variety of passive and active recreational facilities. Proposed building heights within the buffer areas along the perimeter of the site comply with the maximum permitted heights of 75 feet. The western façade of the Structured parking & preschool facility building serves as a transition area onto the site that should correspond to thoughtful pedestrian-scale design and screening of nuisance features, such as parking. Currently, the 1st-3rd levels of the structured parking are not screened and do not positively contribute to the thoughtful pedestrian-scale design. Updates Requested • Update architectural drawings to include screening of all structured parking levels on the western façade.	Not Met.
Transportation (§8.5.7(E))		
Standard	***Discussion***	***Finding***
Transportation Demand Management	Overview: §8.5.7(E)(1)(a) requires that a campus-wide TDM Plan be submitted at the time of the first site plan review. The submitted TDM plan only accounts for the first phase of development. Updates Requested • Update the TDM plan to establish a framework for all envisioned phases of development, including a data collection plan. Staff encourages establishing a plan differentiating parking passes by types of garage users (e.g., Staff vs. student; resident vs. hotel guest vs. off-site visitor), as well as installing permanent bicycle & pedestrian counters at planned & potential shared-use entrances to the site.	Not Met.

Traffic Movement Permit	Overview: Comments on the Traffic Movement Permit (TMP) application are provided in Attachment 3. Continuing comments will be provided as the review of the TMP continues. Updates Requested • Update the application to provide materials requested in Attachment 3 and continue to coordinate with MaineDOT & City staff for future comments & requested revisions.	Not Met.
Bicycle and pedestrian access and safety	Overview: There are multiple figures within the application materials that address the circulation for cyclists and pedestrians, but are not identified as a Transportation, Access, and Circulation Plan. During the first site plan review, an updated Transportation, Access, and Circulation Plan is required to be submitted. Comments provided by Transportation Program Manager Bruce Hyman identify improvements to and from the site to ensure safe connections that relate to projected City shared-use facilities on Veranda Street. Submitted floor plans for the Structured parking & preschool facility building should be updated to clarify connections between uses in the building, as well as ingress/egress points for pedestrians. Given the proposed frequency and volume of pedestrian & bicycle trips on the site, City staff are recommending that the perimeter access loop have a minimum width of 20 feet and that all other on-site pedestrian facilities should have a minimum width of 12 feet. As part of enabling easy connections for cyclists to existing and prospective bicycle facilities, the continuation of a shared-use facility on the northern portion of the site should be provided to Sherwood Street. Updates Requested • Submit an updated Transportation, Access, and Circulation Plan as a separate document to include pedestrian facilities, as well as contemplated connection points to the rail trail and Tukey's Bridge. Contemplate connections can be differentiated with a dashed line and for Tukey's Bridge, do not need to provide a finalized alignment. • Update application materials to address comments from Bruce Hyman regarding the proposed design of Sherwood Street. • Update floor plans for the Structured parking & preschool facility building to provide additional detail on interior connections between building uses, and ingress/egress points for pedestrians. • Update the application to include a minimum perimeter access loop width of 20 feet and a minimum 12-foot width for all other pedestrian facilities.	Not Met.

Parking	Overview: The application has included a parking analysis in the TDM plan stating that the TMP anticipates a parking demand of 881 spaces in 2032. Preliminary strategies to diversify mode share and decrease parking demand have been referenced in the TDM plan and will need additional clarification as part of the development of the TDM plan. As part of each site plan phase, a parking ratio will need to be established. In the submitted application materials, a parking ratio has not been provided. Further, it is unclear where the anticipated parking demand figure of 881 spaces in 2032 is in the TMP application.	Not Met.
	Updates Requested • Updated application materials to include a parking ratio based on the parking analysis. • Identify where the estimated parking demand of 881 spaces for 2032 is in the TMP application.	
Circulation	Overview: The site plan includes a circulation network that includes a perimeter access loop, internal pedestrian pathways, and a promenade that help define development blocks, enhance the relationship with the built and natural environment, and include a combination of lighting, wayfinding, buffers, and open space. As mentioned in comments from Transportation Program Manager Bruce Hyman, the edge of the perimeter access loop to the north and west is listed as a multi-use path in the circulation plan, but is a combination of separate pedestrian and bicycle facilities.	Not Met.
	Updates Requested • Update the application to include at least a 20-foot wide shared-use path for the entirety of the perimeter access loop.	
Environment (§8.5.7(F))		
Standard	***Discussion***	***Finding***
Open Space	Overview: Figure 3-18 identifies the proposed public open space for this phase, but does not provide an accompanying amount of acreage or a draft public access easement for the access loop for review by the Planning Board and Corporation Counsel.	Not Met.
	Updates Requested • Submit a site plan sheet that shows the proposed public open space with the total amount of open space (in acreage). • Submit a draft public access easement for the perimeter access loop and buffer around the loop for review by the Planning Board and Corporation Counsel.	
Sustainability and Resilience Charter	Overview: A Sustainability and Resilience Charter was submitted before the submission of the site plan application, including standards on energy, water, transportation, equity, and resilience.	Not Met.

	The separate Design Development document indicates that the charter is aligning with some of the elements from LEED standards. City staff has reviewed the charter and in Attachment 4 identified missing/unclear information to ensure that the submitted application is consistent with the goals outlined in the Charter. **Updates Requested** • Update application materials to respond to the comments in Attachment 4.	
Lighting	**Overview:** The Applicant has submitted interior lighting plans for the Learning, Research, and Collaboration building, exterior lighting, and rooftop lighting for the Structured parking & preschool facility building. Upon review, the designs comply with ANSI/ASHRAE/IES Standard 90.1-2022. Submission of interior lighting for the Cannery Building and the Structured parking & preschool facility building will be required to confirm compliance with ANSI/ASHRAE/IES Standard 90.1-2022. **Updates Requested** • Submit interior lighting plans, sequence of operations, and control details for the Cannery Building and the Structured parking & preschool facility building will be required to confirm compliance with ANSI/ASHRAE/IES Standard 90.1-2022.	Not Met.
Design Flood Elevation (DFE)	**Overview:** The proposed finished floor elevation (FFE) of the Learning, Research, and Collaboration building is 22.5 feet while the proposed grade for the lowest point of the building is 19.5 feet, which exceeds the 2-foot above base flood elevation (BFE) requirement. The Cannery Building proposes an FFE of 12.79, with a BFE of 9 feet, which exceeds the 2-foot above base flood elevation requirement. Staff are requesting the FFE for the preschool facility to confirm that it is equal to or greater than 2 feet above base flood elevation. **Updates Requested** • Submit the FFE for the preschool facility.	Not met.
Shoreline Stabilization & Natural Resource Impacts	**Overview:** Given the high-wave action along the shoreline of the property, the Applicant has proposed rip rap armoring since many living shorelines are better suited for lower-wave activity. City staff encourage the use of vegetative breakwater solutions, such as an oyster breakwater reef, in concert with the rip rap to decrease tidal action and promote habitat stability. Work within wetlands and significant wildlife habitats is still currently under review through multiple entities and based on these review processes, this section will be updated accordingly.	No action required at this time.

Bird-Safe Design	Overview: Site lighting is proposed to be cut-off and down-lit to minimize the potential of bird collisions. The Learning, Research, and Collaboration building uses a combination of frit/acid etch glass products that are identified as bird-safe, but will need to be confirmed at the time of building permit. Laminated glass fins identified as GL-C1 (WT-C1) are proposed for a significant portion of the lower floors of the building, but are not identified as having a bird-safe treatment or design. Some detail specifications have been provided for the proposed Cannery Building windows, but materials do not clarify whether the windows will have finishes/film/etc., to ensure bird safety. No detail specifications have been provided for the glass proposed for the Structured parking & preschool facility building. Updates Requested • Update architectural drawings for the Learning and Research Center to clarify how the proposed laminated glass fins identified as GL-C1 will include a bird-safe treatment/design with American Bird Conservancy and Cornell Ornithology Lab standards. • Submit updated detail drawings for the proposed new windows in the Cannery building to demonstrate that the windows or additional treatment to the windows will provide a bird-safe design with American Bird Conservancy and Cornell Ornithology Lab standards. • Submit detail drawings for the proposed windows for the Structured parking & preschool facility building that demonstrate a bird-safe design with American Bird Conservancy and Cornell Ornithology Lab standards.	Not Met.
Mitigation Measures (§8.5.7(G))		
Standard	***Discussion***	***Finding***
Off-Site Infrastructure	Overview: Mitigation for off-site infrastructure will continue to be assessed through the review of the site plan & TMP applications. An assessment of the proportionality of mitigation measures will be assessed later on in the review process to account for data collection and analysis conducted as part of the TMP, as well as any other applicable impacts identified by City reviewers.	No action required at this time.
Natural Resources	Overview: Mitigation for natural resources will continue to be assessed through the review of the site plan & TMP applications. An assessment of the proportionality of mitigation measures will be assessed later on based on feedback from local, state, and federal reviewers.	No action required at this time.

Design (§8.5.7(H))		
Standard	***Discussion***	***Finding***
Waterfront	Overview: The Applicant has proposed three acres of permanent publicly accessible open space within the Phase 1 development plan, to include waterfront recreational space and a network of bicycle/pedestrian pathways. Staff finds the network of paved pathways at the perimeter of the site allows for public access to the waterfront, the Applicant proposes access to the water's edge, viewing destinations with seating, bike storage, and other publicly accessible social gathering spaces that Staff finds appropriate. The Applicant has proposed a curved principal structure, functioning as the Academic (Learning, Research and Collaboration) Building, that responds to the coastal edge and allows for a publicly accessible entrance at the waterfront facade. Staff finds the waterfront facing façade material of the Academic Building welcomes ground-level glazing to indicate a publicly accessible corridor in addition to a social gathering defined with unique paving material, landscape areas, and seating opportunities. Staff observes Vestibule 3 (LS10.01) as the primary public entrance at the waterfront-facing facades, which the Applicant should include a detailed elevation for Staff review.	Not met.
	Updates Requested • Submit a detailed elevation for Vestibule 3 for further Staff review.	
Cohesive Campus	Overview: The Applicant's Phase 1 submission is consistent with the Roux Institutional Development Plan (IDP) and incorporates a composition of new structures of transitional heights to create an overall campus identity.	Met.
Historic preservation	Overview: Staff requests the Applicant address the intended function of the radius paved surface leading to the western façade of the Cannery Building, and to clarify if ancillary, delivery, or utility functions are proposed in this area.	Not met.
	Updates Requested • Submit clarification on the intended function/s of the radius paved surface leading to the western façade of the Cannery Building, including, but not limited to, any ancillary, delivery, or utility functions.	
Connectivity	Overview: The Applicant has proposed a circulation network for Phase 1 that is consistent with the approved IDP that emphasizes pedestrian connectivity and limits personal vehicles to the peripheries. The Applicant has proposed material selections for asphalt paving and granite cobblestone pavers as vehicular along the coastal path, Staff is requesting the Applicant provide a written description of the intended use along the coastal path. Staff will review the appropriateness of vehicular use along the coastal path and potential maintenance operations around the perimeter of new and existing structures.	Not met.

	The Applicant has submitted the Parking Structure plans to proposed multiple garage entrances along the north and east facades, Staff is recommending the Applicant address why the vehicular program requires multiple garage entrances. Staff recommends a reduction of garage entrances for vehicles to the north facade to reduce vehicles within the core of the campus and if possible limit vehicles only to drop-off locations.	
	Updates Requested • Submit a written description of uses along the coastal path in relation to motorized vehicles. • Submit a narrative discussing the need for multiple garage entrances.	
Open space	Overview: The proposed landscape areas transition varies property edges and open space program, Staff recommends a landscape palette at the waterfront edge with specific native coastal shrubs and grasses palette to mitigate the occasional inundation of coastal flooding and salt spray. Staff finds the organization of site materials to include retaining walls, seating elements, paving materials, and amenities to unify the site design with multiple opportunities for public engagement.	Not met.
	Updates Requested • Update the landscape plan to include native coastal shrubs and grasses along the waterfront edge.	
Sustainable practice	Overview: The Applicant should indicate on plan submission whether there will be PV panels during Phase 1 for the Structured parking building & preschool facility on the rooftop level.	Not met.
	Updates Requested • Confirm whether photovoltaic panels will be installed as part of Phase 1 for the Structured parking & preschool facility building.	
Resilience	Overview: The submitted design includes several resilient design choices for the proposed buildings and includes several publicly accessible spaces that are out of the floodplain for the site. Outstanding resiliency items from the sustainability charter should be addressed as part of updated application materials. While information was provided on generators for the LRC building and Cannery Building, clarification should be provided on whether a generator(s) will be included for the Structured parking & preschool facility building and if not how emergency power generation & elevator egress will be provided for the building.	Not met.
	Updates Requested • Confirm whether a generator(s) will be included for the Structured parking & preschool facility building. If not, submit a narrative on how emergency power generation & elevator egress will be supplied.	

Building design	Overview: The Applicant's submission for the Parking Structure includes a preschool facility at the south façade with an associated outdoor play space. Staff recommends that the Applicant provide revisions that address the location of the preschool facility that may integrate the facility within the east or south façade to create ground-floor activation at the Parking Structure, relocate as an independent structure/play space, or relocate as a building appendage connected with the stair tower along the east facade. Staff finds the metal screening reduces the negative visual impacts of the structural concrete parking garage and utilizes a consistent material in the type and color of the overall campus. The Applicant must submit architectural plans for the Childcare Facility to include the proposed FFE. The Applicant's submission for the Academic (LRC) Building includes a scaled massing with articulation along the first 35 feet through the organization of proposed materials with glass/aluminum curtainwall and stone, the upper floors include a transition of materials with glass, and aluminum panels and metal screening of the mechanical equipment that Staff finds appropriate. Planning Board and/or Staff may request physical samples for the proposed materials. Updates Requested • Submit architectural floor plans and proposed FFE for the preschool facility.	Not met.
Building entrances	Overview: The Applicant submission indicates several vestibules along the street wall east and west facing façades of the Academic (LRC) Building, Staff finds the location of these publicly accessible ground-level entrances difficult to distinguish from the proposed façade materials. This is particularly important at the interior campus-facing and waterfront façades, Staff recommends additional entrance articulation in addition to the Applicant's cantilevered curtainwall detail to assist as wayfinding for the publicly accessible entrances. Updates Requested • Update architectural drawings to include additional entrance articulation that supports wayfinding to publicly accessible entrances.	Not met.

Mitigation of impacts	Overview: Staff finds the Applicant submission for Phase 1 is consistent with the shadow impacts outlined in the approved IDP and submitted materials. The Applicant has designed the Phase 1 buildings in compliance with the IOZ Height Overlay Map and spacing of buildings 40 feet apart to reduce the impacts of wind. The Applicant has calculated allowable noise designed to not exceed city guidelines, Staff will review with further comments if required. Staff finds the arrangement of buildings, limited surface parking, and site programming to mitigate heat throughout the Phase 1 development plan. Planning Board and/or Staff may request the thermal comfort analysis study performed by the Applicant. Staff finds the implementation of building materials to include aluminum fins or "sails" to reduce glare significantly, along with the arrangement of glass panels in the concave facade. Planning Board and/or Staff may request the reflected solar irradiance study performed by the Applicant. Staff finds the Applicant submission for Phase 1 is universally consistent to include comfortable and safe lighting solutions. Staff finds the Applicant employs design strategies to mitigate environmental threats such as bird strikes, flooding, and locally sourced materials where possible.	No action required at this time.
Neighborhood integration (§8.5.7(I))		
Standard	***Discussion***	***Finding***
Neighborhood engagement	Overview: The IDP and regulatory framework require the creation and maintenance of a project website, the creation of a community advisory group with quarterly meetings, and quarterly neighborhood forums. Four neighborhood forums have been held on February 28th, April 27th, June 29th, and October 18th, with videos and meeting notes posted to the project website. In the October 18th neighborhood forum meeting notes, October 30th was identified as a tentative meeting date for the community advisory group. Confirmation of that meeting and the members of the advisory group shall be submitted to City staff. As part of the project website's function as a repository for project information, identification of the designated community contact should be added to the project website and existing content should be reviewed to ensure that information is up to date.	Not Met.
	Updates Requested • Submit the October 30th Community Advisory Group meeting minutes, including a complete list of Advisory Group members (present and not present) and a summary of discussion topics.	

	• Provide confirmation of who is serving as the designated community contact. City staff recommends that the community contact be identified on the project website along with the contact email provided at the bottom of each page. • In keeping with the goal of the IDP to provide up-to-date information through the project website, review and update accordingly the timeline listed under the Info page of the project website.	
Construction management	Overview: The submitted Construction Management Plan provides an overview of communication strategies, site maintenance, relevant City permits, and erosion & sediment controls. Additional information is requested to confirm compliance with the IDP and for referenced documents that have not been submitted yet.	Not Met.
	Updates Requested • Submit a draft design for a dedicated construction webpage that includes communication methods through social media, texting, and hotline • A detailed construction schedule is referenced but is not attached to the Construction Management Plan. Submit a detailed construction schedule for City staff review. • Submit a truck routing plan that identifies routes to and from the site, along with anticipated hours for deliveries. Temporary off-site storage locations should be identified as part of the truck routing plan. • Under Erosion Control and Preservation of Trees, clarify that temporary ESC measures shall be removed post-construction. • A wheel wash is included for the eastern construction entrance, but there is not a wheel wash for the southern entrance/ there is no connection for trucks to enter through the southern entrance and exit through the eastern entrance. Clarify what ESC controls are proposed for the southern entrance and if vehicular connections are proposed between the southern and eastern entrances. • On the Sitework/Foundation sheet of the Site Logistics Plan, the Codfish Building and Pier are identified to be demolished at a later date. However, the demolition of these elements is included in the site plan set. Clarify.	
Historic Preservation (§8.5.7(J))		
Standard	***Discussion***	***Finding***

Historic preservation review	Overview: Work on the Cannery Building and within a 25-foot radius around the Cannery Building is currently under review by the Historic Preservation Board. Any additional actions requested by the Historic Preservation Board and the City's Historic Preservation staff members will be relayed by the City's Historic Preservation staff.	No action required at this time.
Required interpretive elements	Overview: A review of interpretive elements within the footprint of the existing pier will happen with the Historic Preservation Board. Any additional actions requested by the Historic Preservation Board and the City's Historic Preservation staff members will be relayed by the City's Historic Preservation staff.	No action required at this time.

Site Plan Review Standards (Sec. 14.6)

Transportation Standards (Sec. 14.6.1)

Standard	Discussion	Finding
Impact on Surrounding Street Systems	Overview: The project is being reviewed under a Traffic Movement Permit (TMP) application to assess impacts on the surrounding street network and anticipated increases in traffic congestion. A scoping meeting was held on December 13th, with scoping meeting notes to be sent to the Applicant team by MaineDOT. Planning Staff and MaineDOT continue to review the TMP application and the ongoing review will better assess anticipated impacts and associated mitigation strategies. Updates Requested • Continue to update application materials in conjunction with comments and recommended mitigation strategies as part of the TMP review process.	No action at this time.
Access and Circulation	Overview: As mentioned above, the TMP review process is reviewing elements of the site access and circulation that will help inform future updates to the design of the site. Additional comments will come up as the TMP review process continues and as future public-private projects to enhance site connections are more clearly defined. Additional comments from the Department of Public Works (Attachment 3) have identified site improvements, such as continuing the 10-foot shared-use path from Sherwood Street and along the site frontage, revision to the proposed sidewalk widths to match the anticipated pedestrian use of the site, and consideration of a roundabout at the eastern site entrance. Updates Requested • Update application materials to satisfy comments provided in Attachment 3. • Continue to update application materials in conjunction with comments and recommended mitigation strategies as part of the TMP review process.	Not met.
Public Transit Access	Overview: The application proposes the construction of a transit shelter that connects to the public sidewalk system.	Met.
Parking	Overview: In Attachment 3, consulting traffic engineer Tom Errico has requested a parking demand analysis to support the proposed parking supply as part of both the TMP and site plan review process. Results from this demand analysis may result in further comments related to this section. Tom Errico has supported the submitted waiver for the size of the proposed parking spaces in the garage based on the anticipated low vehicle turnover. As part of the application process, a TDM plan is under review and the demand analysis will help inform updates to the TDM plan. Updates Requested: • Submit a parking demand analysis that provides evidence supporting the proposed parking supply. • As necessary, update the TDM plan for any changes resulting from the parking demand analysis.	Not met.

Transportation Demand Management	Overview: The project exceeds the thresholds for §14.6.1(E)(1)(b&c) of the Land Use Code and is required to submit a TDM plan. The submitted TDM plan has been reviewed by Transportation Program Manager Bruce Hyman, who has provided in-line comments in Attachment 3. Overall, comments primarily focus on seeking additional definition for the proposed strategies.	Not met.
	Updates Requested • Update TDM plan to satisfy comments in Attachment 3.	
Environmental Quality Standards (Sec. 14.6.2)		
Standard	***Discussion***	***Finding***
Preservation of Significant Natural Features	Overview: The site includes a coastal wetland, that encompasses a blue mussel habitat, a habitat for candidate endangered species (Monarch Butterfly, and a habitat for endangered species (Northern Long-eared Bat & Roseate Tern). No critical habitats have been identified within the project area. Tree clearance will occur between August and May to mitigate impacts on the northern long-eared bat to avoid migratory periods. Continuing assessment of impacts will occur through the review processes of the associated NRPA permit and Army Corps of Engineers General Permit. Identification of significant natural features will need to be included on one sheet (at a minimum), as part of the site plan set and the survey.	Not met.
	Updates Requested • Update the site plan set and survey to identify all significant natural features on and immediately adjacent to the site. Updates should specify the approximate boundaries of habitats of endangered species.	
Landscape Preservation	Overview: §4.3.1. of the Technical Manual requires projects to submit a tree survey from a licensed land surveyor arborist, forester, or landscape architect identifying the forest type and location, size, and species of all existing trees 10" DBH or greater on the site and in the right of way. A tree survey was not included as part of the application submission. City Arborist Mark Reiland has requested the submission of a tree survey meeting the standards of §4.3.1. of the Technical Manual. If trees are identified as being 10" DBH or greater, protection and incorporation of those trees shall be integrated into the landscape plan.	Not met.
	Updates Requested • Submit a tree survey for the site that meets the standards of §4.3.1. of the Technical Manual.	
Site Landscaping and Buffers	Overview: The site location being buffered by I-295, the rail line, and Casco Bay will sufficiently buffer the proposed site uses from the public right-of-way and neighboring properties. The site includes two surface parking lots, each with five parking spaces, and requires the planting of two trees in parking islands. Both surface parking areas provide more than two trees in the parking islands and meet parking lot landscaping requirements.	Not met.

	The site has 288.57 feet of street frontage and is required to plant one tree per 25-35 feet on center, or 8-12 street trees, within the public right-of-way. As submitted, no trees are proposed to be planted within the public right-of-way. §4.6.4 of the Technical Manual permits several street tree alternatives subject to the review of the City Arborist. Some potential alternatives to meet the requirement of 8-12 trees include the planting of new street trees within 20 feet of the property line, as well as plantings on public land in the same neighborhood. City Arborist Mark Reiland has stated in Attachment 3 that alternative species will need to be provided to the proposed Maple varieties, with five of the trees planted within 20 feet of the property frontage being Autumn Blaze Freeman Maples.	
	Updates Requested • Update application materials to provide 8-12 street trees within the City right-of-way or through an alternative strategy meeting the standards of §4.6.4. of the Technical Manual. If alternatives are proposed, alternative street tree planting strategies are subject to the review of the City Arborist and may require additional documentation for future preservation/evidence that proposed planting sites are unlikely to be redeveloped in the near future.	
Water Quality, Stormwater Management and Erosion Control	Overview: The stormwater management application materials were reviewed by third-party stormwater consultants Wright Pierce. Upon their review, the team requested application updates in Attachment 3. Overall, requested application updates focused on stormwater infrastructure on Sherwood Street, minor clarifications and updates on notes, and clarification of how the application is complying with Maine DEP standards.	Not Met.
	Updates Requested • Update the application to satisfy comments from Wright Pierce.	
Public Infrastructure and Community Safety Standards (Sec. 14.6.3)		
Standard	***Discussion***	***Finding***
Consistency with City Master Plans	Overview: Overall, the submitted application aligns with the goals of One Climate Future, through the inclusion of renewable energy infrastructure, goals to reduce single occupancy vehicle miles traveled through transit and shared-use connections & facilities, and sustainable development practices outlined in the Sustainability Charter.	Met.
Public Safety and Fire Prevention	The application has been reviewed by Captain Jason Grant of the Portland Fire Department, who has confirmed that the application provides sufficient access and infrastructure for the site. E-911 addresses will need to be created as part of the review process and should be coordinated with Charles Wordell (cww@portlandmaine.gov) at the Department of Public Works. As mentioned in the design comments in the Zoning worksheet, continuing updates to the site design of the western portion of the perimeter access loop will promote an enhanced experience for cyclists and pedestrians, and ensure greater cohesion. continued use as part of the larger campus.	Not met.
	Updates Requested • Email the Department of Public Works to begin the E-911 address process, with Zach Powell copied on the email. The applicant team shall work with the	

	Department of Public Works to identify any additional steps that need to be taken before site plan approval. • Update architectural drawings to demonstrate how the western portion of the perimeter access loop is actively integrated into the overall campus design and how the site design enhances the overall experience of using the perimeter access loop for cyclists and pedestrians.	
Public Utilities	Overview: The application includes copies of the ability to serve requests to applicable utilities. City Staff will await final approval from these utilities and will request copies of letters as conditions of approval or sooner, if feasible. Updates Requested • Submit ability to serve letters from utilities when available and provide any additional information requested by the Portland Water District, as requested.	No action at this time.
Site Design Standards (Sec. 14.6.4)		
Standard	***Discussion***	***Finding***
Massing, Ventilation and Wind Impact	Overview: The property abuts Maine DOT rights-of-way and Casco Bay, which does not result in ventilation impacts to abutting structures or a diminution in the value of neighboring structures. HVAC venting is directed upwards away from public spaces on-site and is not proximate to any residential properties.	Met.
Shadow	Overview: Shadow standards are not applicable in the B-5 zone.	Met.
Snow and Ice Loading	Overview: The proposed building designs are not located close enough to Sherwood Street or lot lines with adjacent properties to result in significant ice/snow loading/accumulation.	Met.
View Corridors	Overview: The site is not located along a public view corridor identified in the *Downtown Vision View Corridor Protection Plan*.	Met.
Historic Resources	Overview: The project site includes a locally designated landmark (The Cannery Building and a 25-foot radius surrounding the building). Building and site improvements are currently under review by the Historic Preservation Board and comments will be provided by the Historic Preservation Board and Historic Preservation Staff. §8.5.7(J)(3) of the Land Use Code exempts the project from the 100-foot review for the Cannery Building. Under §8.5.7(J)(2) of the Land Use Code, the Historic Preservation Board will review and approve proposed interpretative elements of the reconstructed pier, but not the demolition of the Codfish Building and current pier, construction of a new pier, or related infrastructure. Historic Preservation Staff have requested additional information related to the interpretive elements of the reconstructed pier. Action Requested • Submit an updated copy of the site plan set that shows the limits of the designation boundary. • Update application materials to satisfy Board and Staff comments from the December 6, 2023 Historic Preservation Board Meeting. • Await comments from the Historic Preservation Board and Historic Preservation Staff.	Not met.

Exterior Lighting	Overview: One residential (Local/Minor) street light is required to be installed per 120 feet of street frontage and meet the requirements of §10.2. and Figure X-1 of the City's Technical Manual. The site has ~166 feet of frontage along Sherwood Street and would require the installation of two street lights. The submitted application proposes the installation of three light fixtures along the right-of-way at mounting heights of 20' and unspecified CCT that do not comply with §10.2 and Figure X-1 of the City's Technical Manual. Site lighting does not comply with the following standards: • Uniformity: 20:1 (24.5 proposed) • Average Illumination at grade: 1.25 (1.78 proposed) • Average Illumination (Surface Parking Lot near LRC): 2.15 (0.5 required) • Uniformity Ratio (Surface Parking Lot near LRC): 2.9:2.1 (3:1 required) • Average Illumination (Surface Parking near Structured Parking: 1.54 (0.5 required) • Uniformity Ratio (Surface Parking near Structured Parking): 2.1:1.3 (3:1 required) • Maximum Lumens (Path lighting): 5,332 (1,500 maximum permitted) (Applies to E01A and E02a fixtures along pathways) Assessment of average illumination, uniformity ratio, and maximum illuminance was provided for the roof of the Structured parking & preschool facility building when measurements were required to be assessed at ground level.	Not Met.
	Updates Requested • Update the application to include two street lights that meet the standards of §10.2 and Figure X-1 of the City's Technical Manual or seek waivers. • Update application to have site lighting meet the standards of §12.3 of the Technical Manual • Update photometric plans to provide average illumination, uniformity ratio, and maximum illuminance at ground level around the Structured parking & preschool facility building. • Confirm the CCT that will be used for each proposed luminaire. • Add information on luminaire E11 to the Luminaire Schedule table.	
Noise and Vibration	Overview: Mechanical equipment is located interior to the roofs of proposed buildings & the site. Equipment is also not proximate to residential properties.	Met.
Signage and Wayfinding	Overview: The proposed monument signage for the campus includes a variety of typologies with a unified design. Given that none of the building signage is proposed to be building mounted, signage will not conceal architectural features, and the proportionality of the signage to a building façade, and attachment to rooftop appurtenances is not applicable. Signage is sufficiently setback from Sherwood Street and access drives do not adversely affect visibility. All proposed lighting associated with signage is internally illuminated.	Met.
Design Standards	Overview: Please refer to Roux IOZ design comments in the Zoning worksheet.	Not Met.

WRIGHT-PIERCE
Engineering a Better Environment

Memorandum

Date: 12/22/2023

Project No.: 21697A

To: Zach Powell, AICP, City of Portland Planner

From: Jaime Wallace, PE, Wright-Pierce
Brooke Springer, EI, Wright-Pierce

Subject: Major Site Plan – Northeastern University's Roux Institute Phase 1 (PL-002724-2023)

Wright-Pierce has performed a stormwater review of the Major Site Plan application to develop Phase 1 of the Roux Institute at Northeastern University's campus located at 1 Beanpot Circle on the Portland Waterfront (PL-002724-2023).

Documents Reviewed by Wright-Pierce

- Project Plans:
  - Average Grade Plan Set developed by CambridgeSeven consisting of sheets AS61.01 through AS61.03 dated October 27, 2023.
  - Civil Plans developed by CambridgeSeven and Woodard & Curran consisting of sheets G-000, G-001, C-001, C-002, C-101, C-102, C-201, C-202, C-301 through C-304, and D-401 through D-407 dated October 27, 2023.
  - Landscape Plans developed by Cambridge Seven consisting of sheets L3.00, L3.01, L3.10, L4.00, L4.01, L4.02, L5.00, L6.00 through L6.03, and L8.00 dated October 27, 2023.
  - Sherwood Street Plans developed by VHB consisting of sheets 1 through 16 dated November 1, 2023.
  - Existing Conditions Survey developed by VHB consisting of sheets Sv-1 through Sv-3 dated September 15, 2023.
- Application Documents
  - Major Site Plan Application documents developed by Woodard Curran consisting of sections 1 through 9 dated November 2023.
  - Construction Management Plan developed by Consigli updated September 14, 2023.
  - Site Location of Development Application developed by Woodard & Curran dated November 2023.
  - Stormwater Management Plan developed by Woodard & Curran dated October 2023.
  - Waiver Table developed by Woodard & Curran.

Comments:

It is our understanding that the site plan and associated documents have been previously reviewed by the City of Portland Water Resources Division and Portland Water District. The following comments provided by Wright-Pierce focus on the stormwater infrastructure on site with respect to the City of Portland Technical Manual and Maine DEP Chapter 500 and Best Management Practices.

1. **Maine DEP Chapter 500 Review:**
   The applicant has provided a narrative report in support of a Site Location of Development (SLOD) permit application. The following comments are related to review of this SLOD report and associated plan details.

a. Urban Impaired Stream Standard
    i. As noted by the applicant, the proposed development is not located within an urban impaired stream watershed. Therefore, this standard is not applicable.
b. Basic Standard
    i. On Sheet C-002 of the Civil Plans, it appears the perimeter barrier falls within the edge of water called out on the plans. It is recommended to relocate the perimeter barrier to keep it out of the water.
    ii. On Sheet C-002 Inset B of the Civil Plans, it appears the perimeter barrier crosses an existing building. Please confirm and revise as necessary.
    iii. On Sheet D-401 of the Civil Plans, trench and foundation de-watering is discussed. Please confirm whether dewatering is anticipated on this project. If dewatering is anticipated, please consider including a detail for de-watering treatment in the plans and discussion on proper discharge in the Stormwater Management Plan.
    iv. In Appendix B (Inspection and Maintenance) of Maine DEP Chapter 500 it is noted that during post-construction ditches and swales should be inspected after heavy rains in addition to in the spring and late fall. We would recommend including this additional inspection requirement in the Stormwater Inspection & Maintenance Plan.
    v. Sheet D-401 of the Civil Plans notes Winter Construction is between November 1 and April 1 and that areas must be stabilized by November 15 or winter stabilization methods will be required. However, in Appendix A.7 of Maine DEP Chapter 500 it is noted that Winter Construction is between November 1 and April 15 and that areas must be stabilized by November 1 or winter stabilization methods will be required. We recommend the applicant update the dates in the Civil Plans to match Maine DEP requirements.
    vi. If winter construction is anticipated, we would recommend including Winter Construction requirements outlined in Maine DEP Chapter 500 in the Stormwater Water Management Plan.
c. General Standard
    i. The applicant has demonstrated that they meet the treatment requirements for a redevelopment project under the General Standards of Maine DEP Chapter 500. Based on the pollutant ranking calculations provided in the Stormwater Management Plan, the proposed development is required to treat 50% of the proposed developed area. The applicant provided a treatment summary indicating that they are treating more than 50% of the developed area.
    ii. In Appendix B of the Stormwater Management Plan, the applicant provides sediment pre-treatment calculations for the bio-retention filters and R-Tank systems. The pre-treatment calculations for the bio-retention filters appear to meet the minimum requirements based on Chapter 7.2. However, the pre-treatment calculations for the R-Tank system do not use the calculations provided under Appendix B of the BMP manual for R-Tank. We would recommend the applicant confirm that proposed pre-treatment meets the requirement of proprietary systems under Appendix B of the Maine DEP BMP manual.
d. Flooding Standard
    i. The applicant states in the Stormwater Management Plan that the portion of the project which discharges to Casco Bay is eligible for a waiver under Maine DEP Chapter 500 Section 4.F(3) since it is discharging to a tidal waterbody. The drainage within Sherwood

Street will not drain to Casco Bay, however, the applicant is requesting a waiver from the Flooding Standard for the campus development.

2. General Comments
    a. Section 25 of the Site Location of Development Application states that "public notice requirements associated with MaineDEP Site Law do not apply" because the "City of Portland has Delegated Review Authority." However, in the Maine DEP Site Location of Development Permit Application Form C it states that applicants shall "provide public notice for all Site Location projects with the exception of minor revisions and condition compliance applications." Please confirm public notices will not be required for this application.
    b. In Chapter 7.2 Bioretention Filters of Volume III. BMP Technical Design Manual, it is stated that the "geotextile fabric should be Mirafi 170N or equivalent." On Sheet D-407 of the Civil Plans, the filter fabric is called out as 140N. We recommend the applicant confirm that 140N is acceptable for this application.

3. Stormwater Management Plan
    a. It is stated in Section 3 of the Stormwater Management Plan that stormwater infrastructure on Sherwood Street is still being resolved. Please provide updated stormwater plans for Sherwood Street once completed.
    b. We would recommend the applicant provide stormwater modeling results to confirm bioretention ponds and R-Tank systems meet the requirements of Maine DEP Stormwater BMP Manual.
    c. In Section 32-38 City of Portland's Code of Ordinance, it is noted the City requires an annual inspection report completed by a qualified post-construction stormwater inspector to be submitted to the Department of Public Works. It is recommended to include this requirement in the Stormwater Inspection & Maintenance Plan.

4. Plan Comments
    a. On the Sand Filter details on sheet D-405, there is a callout for "underdrain to outlet structure (size, location, and length to be determined by Engineer of Record)." On sheet C-302 the underdrains for the sand filters are shown discharging to daylight and not to a structure. Please confirm intent of detail and revise as appropriate.
    b. On sheet C-304, one of the structure tables is cut off and appears to be missing OCS-9. Please provide an updated table showing all OCS information.
    c. Information for SD103 should be provided on Sheet C-304 in the pipe table.
    d. On sheets C-301 and C-302, hydrodynamic separators are shown for Subsurface Sand Filter 1 (HDS1) and Subsurface Sand Filter 3 (HDS2). It is stated in the MaineDEP R-Tank Approval Letter, "If the area draining to the pre-treatment structure is a source of hydrocarbons or debris (i.e. parking lots, roads, drive-through commercial enterprises), the pretreatment structure must be preceded by a practice that will trap these products." It appears Subsurface Sand Filter 4 collects drainage from the road through CB14. Please verify if a hydrodynamic separator is required for Subsurface Sand Filter 4.
    e. We would recommend adding a detail for pipe insulation of shallow pipes.
    f. We would recommend adding a detail that shows horizontal and vertical utility separation requirements.
    g. On sheet L4.00, consider outlining bioretention cell location as it relates to the proposed vegetation. Confirm native shrubs and perennials are located within the bioretention area, per Maine DEP – Chapter 7.2 – Bioretention Filters.

Zachary Powell <zpowell@portlandmaine.gov>

Roux Institute - Initial Traffic Review Comments

Tom Errico <thomas.errico@tylin.com> Wed, Dec 13, 2023 at 12:23 PM
To: "zpowell@portlandmaine.gov" <zpowell@portlandmaine.gov>
Cc: Janine Ba <janineba@portlandmaine.gov>, Bruce Hyman <bhyman@portlandmaine.gov>, Keith Gray <kgray@portlandmaine.gov>

Hi Zack – I have reviewed the application materials and have the following initial comments.

- The project requires a Traffic Movement Permit. The MaineDOT is administering the Traffic Movement Permit and is holding a Traffic Scoping Meeting on December 13, 2023. I will provide comments upon receipt of the traffic study.
- The applicant shall provide the parking demand analysis back up information in support of the projects parking supply.
- The applicant shall provide sight distance measurements at the Veranda Street/Sherwood Street intersection.
- The alignment/configuration of the internal three-way STOP intersection is a concern given the heaviest egress traffic movement will have to make a hard left maneuver. I would be interested in the evaluation of a small roundabout at this location.
- I support a waiver for the size of parking spaces in the garage given low vehicle turnover.
- There has been discussion of a direct ramp connection from Exit 8 of I295 into the site. If deemed appropriate through the TMP process, it would be helpful to see how this connection would be integrated into the existing site plan.

Please contact me if you have any questions.

Best regards,

Tom Errico, P.E.
NE TRAFFIC ENG. DIRECTOR
T +1 207.347.4354
M +1 207.400.0719
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Zachary Powell <zpowell@portlandmaine.gov>

PL-002724-2023 1 Bean Pot Circle/Roux Ph. 1 DPW Comments

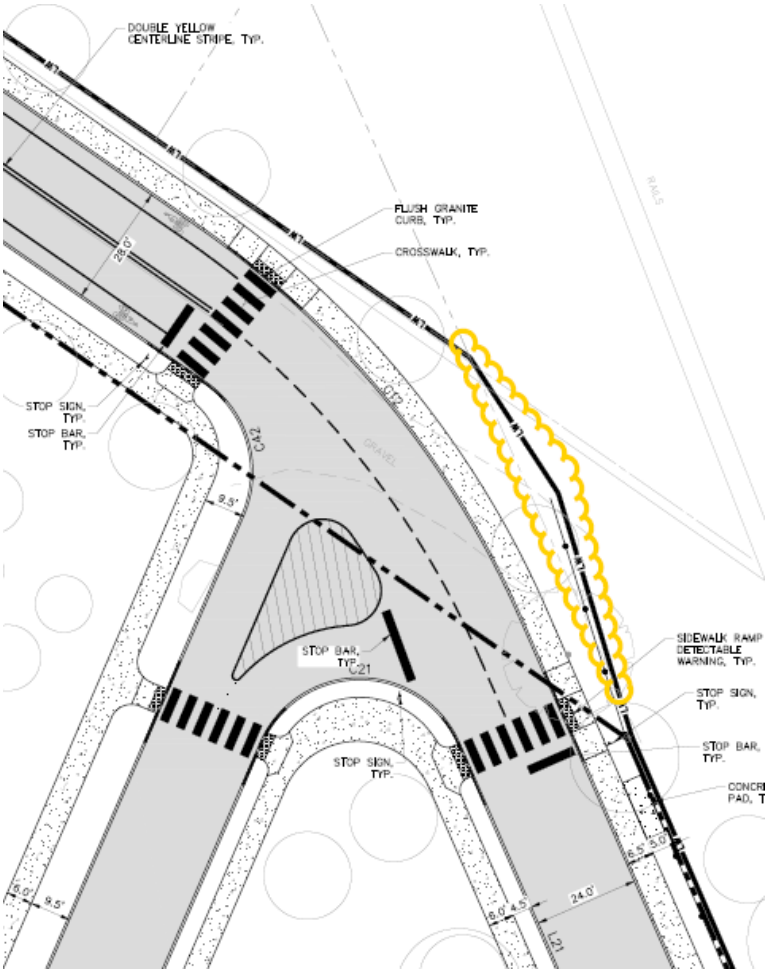
Janine Ba <janineba@portlandmaine.gov> Fri, Dec 15, 2023 at 3:25 PM
To: Zachary Powell <zpowell@portlandmaine.gov>
Cc: Keith Gray <kgray@portlandmaine.gov>, Justin Pellerin <jrp@portlandmaine.gov>, Benjamin Pearson <bnp@portlandmaine.gov>, Lauren Swett <lswett@woodardcurran.com>, Tom Errico <thomas.errico@tylin.com>, Bruce Hyman <bhyman@portlandmaine.gov>

Zachary,

Below are DPW's comments for PL-002724-2023 1 Bean Pot Circle/Roux Ph. 1. Let me know if you have any questions.

PL-002724-2023
1 Bean Pot Circle/Roux Ph. 1
DPW Development Review Comments
12/15/2023

- DPW Transportation
  - DPW agrees with the proposed cross sections provided by the Transportation Program Manager for Sherwood Street that includes a 10’ shared use path and feel it should be continued onto the campus and transition at the intersection.
  - The applicant shall label the roadway (Sherwood Street) ROW and centerline on the plan view and cross section sheets.
  - When printed it can be hard to distinguish between existing and proposed elevation. All elevations in the plan set need to be labeled as existing or proposed to prevent confusion. Update the plan set by using EX. or parentheses () to distinguish between the type of elevation.
  - DPW feels a traffic circle would work better at the intersection pictured below.



- DPW has concerns with the minimum 5ft sidewalk width proposed for the site. The sidewalk width should be sized to meet the pedestrian demand for the campus.
- The **-LW-** limits of work must remain within the applicant's property (see picture above for example). Revise the plans to adjust the **-LW-** within the property or provide documentation that shows the applicant has permission to be on the property.

--
Janine Ba
Project Engineer
City of Portland Department of Public Works
212 Canco Rd. Suite B
Portland, ME 04103
janineba@portlandmaine.gov
Desk: 207-874-8463
Cell: 207-245-2074

Zachary Powell <zpowell@portlandmaine.gov>

Reminder – 1 Bean Pot Circle (PL-002724-2023) Comments due tomorrow

Mark Reiland <mreiland@portlandmaine.gov> Fri, Dec 15, 2023 at 3:57 PM
To: Zachary Powell <zpowell@portlandmaine.gov>

Hi Zach,
Here are my comments, I thought I sent them the other day but must have got sidetracked, sorry about that:

1 Bean Pot Circle

- Please include location, species, and DBH of existing trees on site and indicate tree protection measures for existing trees to be preserved
  - Groups of trees or wooded to be preserved can be indicated by showing the location of the collective group canopy dripline
- Please choose alternative species for the proposed maple selections:
  - Silver Maple, Red Maple, Sugar Maple, and Freeman Maple
    - The urban forest in the greater Portland area is over saturated with maple (>30% by count) creating a high degree of susceptibility to Asian Longhorned Beetle infestation

Mark Reiland
City Arborist

City of Portland, Maine

212 Canco Road - Suite A
Portland, ME 04103

[Quoted text hidden]

Zachary Powell <zpowell@portlandmaine.gov>

Reminder – 1 Bean Pot Circle (PL-002724-2023) Comments due tomorrow

Jason Grant <jgrant@portlandmaine.gov> Tue, Dec 19, 2023 at 8:22 AM
To: Zachary Powell <zpowell@portlandmaine.gov>

Thanks for checking Zach. I did not have any comments as we have been working with the developer behind the scenes and they incorporated our suggestions already.

Jason Grant CFI-2, CFPE
Fire Marshal / Fire Prevention Coordinator
Portland Fire Prevention Bureau
fireprevention@portlandmaine.gov

[Quoted text hidden]

PRELIMINARY COMMENTS (12/5/23)
ADDITIONAL COMMENTS MAY BE MADE AS SITE PLAN REVIEW AND TRAFFIC MOVEMENT PERMIT REVIEW PROGRESSES



The Roux Institute at Northeastern University

Transportation Demand Management Plan

PREPARED FOR

Roux Institute at Northeastern University / IDEALS
100 Commercial Street
Portland, ME 04101

PREPARED BY

500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150

NOVEMBER 2023

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1

Introduction

Pursuant to Section 17.3 of the City of Portland Technical Manual, the Roux Institute at Northeastern University's Transportation Demand Management Plan (TDM) provides a cohesive approach to establish a targeted set of strategies aimed at reducing single occupancy vehicle trips to and from the proposed campus in Portland, Maine. The TDM plan describes how the Roux Institute at Northeastern University will provide information and education, enhance alternative transportation infrastrucutre and mobility, and incentivize students, faculty, and staff so that they use more sustainable, multimodal commuting options such as walking, bicycling, transit, carpooling and telecommuting. The Roux Institute at Northeastern University is committed to ongoing annual surveying to monitor the implementation and succcess of the TDM plan.

1.1 Program Summary and Project Status

In 2020, the Roux Institute at Northeastern University was launched to build expertise at the intersection of humans and technology. The campus is currently temporarily operating at 100 Fore Street but will be relocating to the redeveloped B&M Baked Beans facility. In its permanent waterfront location in East Deering, the Roux Institute at Northeastern University will continue to provide educational, research, and collaborative programs in areas including artificial intelligence, computer and data sciences, digital engineering, advanced life sciences, and medicine. The Roux Institute at Northeastern University offers post-graduate degrees and certifications, conducts research, assists start-ups, and partners with private, public and non-profit organizations. The mission of the Roux Institute at Northeastern University is *a vision to enable the creation of a synergistic technology and life science-driven economy and workforce, the Roux Institute at Northeastern University designs, curates, and integrates learning, research, and entrepreneurial solutions in collaboration with industry, academic institutions, and community organizations to catalyze talent development and economic impact throughout Maine*.

In February 2023, the Portland City Council approved the Institutional Overlay Zone for the campus at the old B&M Baked Beans site. The project team is currently embarking on the site plan review and public input process with the City of Portland, which includes the preparation and submission of a MaineDOT Traffic Movement Permit application. Permits are expected by the summer of 2024, when construction will begin, with an opening date in 2027. The campus will continue to grow over time in subsequent years and phases.

1.1.1 Existing Conditions

The Roux Institute at Northeastern University currently leases 84,000 sf of institutional space at 100 Fore Street adjacent to the East End neighborhood and near the waterfront in downtown Portland. In the fall of 2023, there were 665 enrolled students and 175 staff, researchers and faculty. There are currently 16 graduate programs in computer and data science, analytics, cloud software, cybersecurity, life sciences, and project management. To realize its full potential, the Roux Institute at Northeastern University is seeking to relocate its campus and expand in size as described in the following section.

1.1.2 Proposed Development Program

The campus will be anchored by a 238,000 square foot Learning, Research and Collaboration building and the 58,000 square foot Bean Building housing a start-up incubator program. By 2032, the campus plans to accommodate 3,123 graduate students in addition to supporting uses as shown in Table 1. An 8,000 square foot café and a day care center providing care for 50 children will be located on-site primarily for the families of students, staff, and faculty. In addition to its academic offerings, the campus will benefit the community by contributing to local economic growth and providing open space along the waterfront, active transportation accommodations throughout the site, job creation, and innovation space. The site plan is shown in Figure 1.

Table 1 Development Program

Program Component		2027 (Opening)	2032
Day care center		50 Children	50 Children
Academic Café		8,000 sf	8,000 sf
Roux Institute at Northeastern University	Graduate students	1,899 students	3,123 students
	Faculty, Staff, and Researchers[1]	225 staff	300 staff
	Embedded startup[1]	60 staff	100 staff
	JAX and Other Signature Partners[1]	55 staff	64 staff
	Affiliated Users[2]	35 visitors	100 visitors
	Special Events (daily)	150 attendees	150 attendees

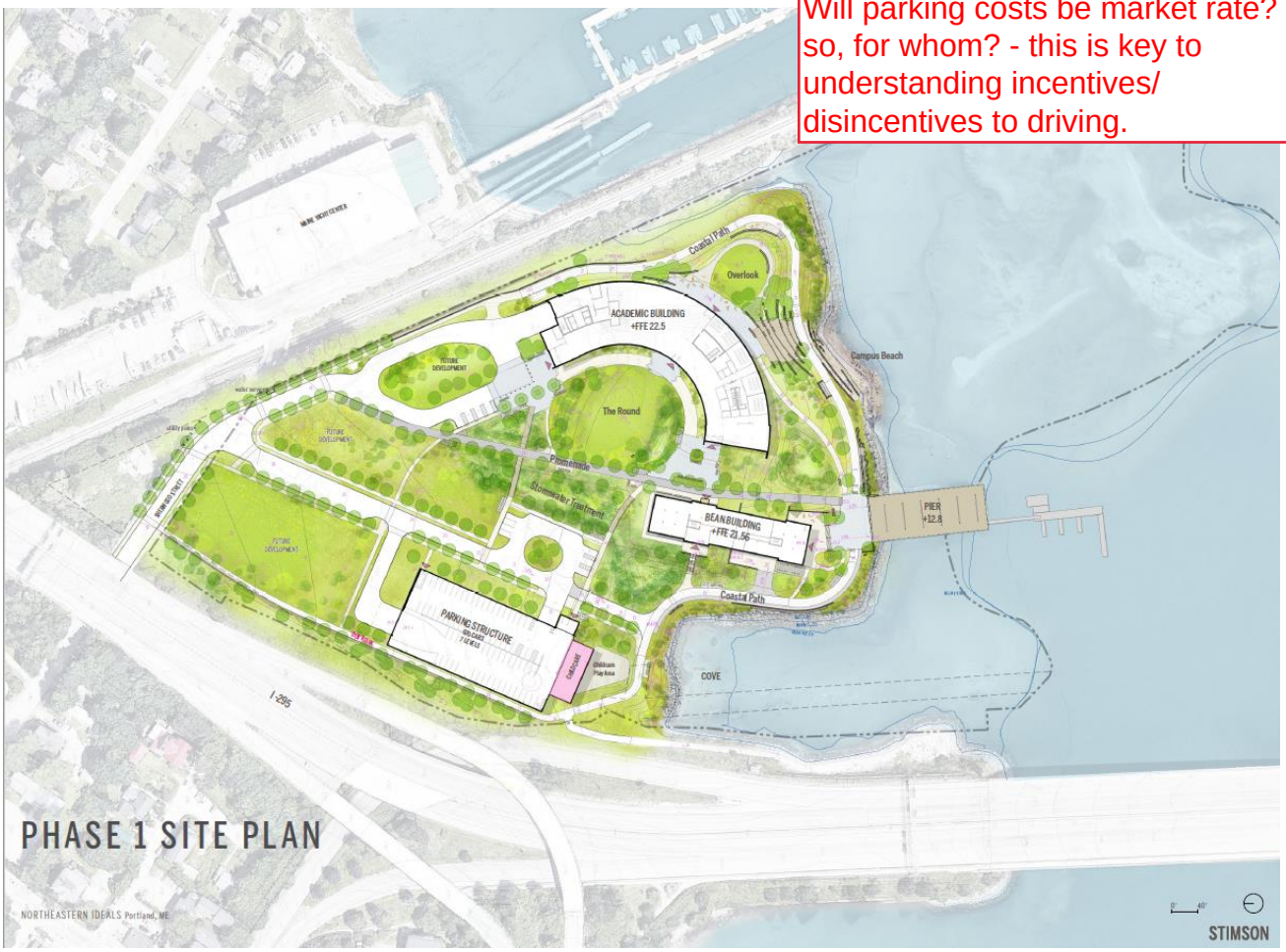
1 All staff counts are in full-time equivalents.
2 Affiliated Users is a broad category for occasional visitors such as corporate learners, investors, donors, mentors, and neighbors.

The garage has been designed to accommodate 708 parking spaces. For this phase, 16 of those parking spaces will be used to accommodate parking for 66 bicycles and the remaining 692 parking spaces will be used to accommodate vehicular parking. In addition to the garage spaces, there will be 14 parking spaces provided at grade on the site. All on-site parking will be paid parking, and a parking office will be created to manage permitting and enforcement for the

campus. Parking costs and regulations may vary between categories of users (students, staff, faculty, visitors, etc.). Parking will be shared between uses within the campus only. This development will not rely on any on-street parking. The campus may include on-site car sharing, enabling travel to and from the site using other modes, with the comfort that vehicles are available if necessary. The TDM measures presented in this plan will be critical to maintaining the expected parking demand.

Will the full capacity of the parking garage be available during Phase I? Will parking costs be market rate? If so, for whom? - this is key to understanding incentives/ disincentives to driving.

Figure 1 Proposed Site Plan



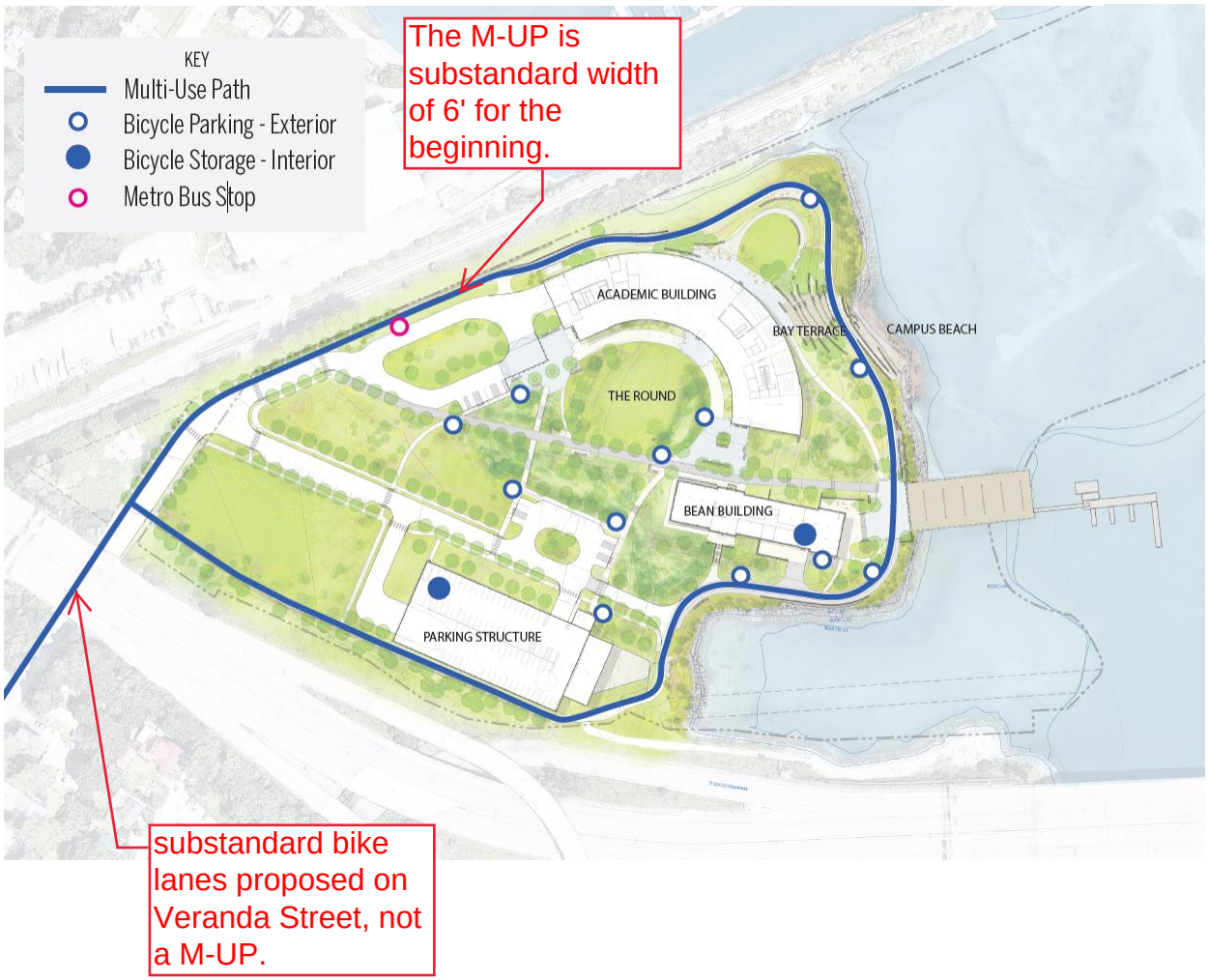
2

Mobility Context

For a TDM plan to be successful in shifting drive alone vehicle trips to transit, carpool, walk, and bicycle trips, it is essential to understand the multimodal transportation system surrounding the site. This section describes the existing transportation network challenges and future opportunities the Roux Institute at Northeastern University faces in redeveloping the site for their permanent campus.

The proposed waterfront site is located in East Deering adjacent to a marina and residential neighborhood comprising of single and multifamily homes as well as a commercial area which includes restaurants, bars, auto mechanics, and offices. I-295 runs along the western edge of the site, however the site will be well connected to the East Deering neighborhood, Back Cove, and the Portland Peninsula on the eastern promenade via vehicle, pedestrian, bicycle, transit and potential water taxi facilities. As shown in Figure 2, there are several promising opportunities to enhance and expand these transportation systems as part of the project to improve transportation mobility in and around the campus.

Figure 2 Campus Transportation Access



2.1 Vehicular Access and Circulation

A single vehicular access point to the site is provided via Sherwood Street at the intersection with Veranda Street through a 40-foot-wide highway underpass. Sherwood Street will continue to serve as vehicular access into and out of the campus in the future. The site is in close proximity to I-295, Route 1, Washington Avenue, and Baxter Boulevard. The traffic signal system along Washington Avenue is a traffic responsive system operating with high efficiency. Intersections of Washington Avenue at Veranda Street, at Presumpscot Street, and at Ocean Avenue are each signalized intersections.

2.2 Walking and the Pedestrian Environment

2.2.1 Existing Conditions

50' ROW

The surrounding East Deering neighborhood provides pedestrian amenities including sidewalks along Washington Avenue and Veranda Street. A sidewalk runs along the west side of Bates Street but narrows and is periodically blocked by utility poles. There is no sidewalk present on the east side of Bates Street. The Back Cove trail (multi-use path) runs along the Back Cove and Tukey's Bridge near the site. The main roadway access to the site is via Sherwood Street which consists of a 30-foot-wide roadway in a 40-foot wide right of way and includes non-continuous sidewalk segments mostly on the north side. The pedestrian connectivity to the Portland Peninsula is accessible from the Back Cove Trail across the west side of Tukey's Bridge. The sidewalk connecting from the intersection of Washington Avenue/Veranda Street is narrow and adjacent to vehicular traffic on the ramp to I-295. The sidewalk merges with the Back Cove Trail which adds bicycle and pedestrian demand to a narrow, shared use path over Tukey's Bridge. There is no existing direct connection to this shared use path from the campus.

2.2.2 Future Commitment

The Roux Institute at Northeastern University will improve pedestrian safety and connectivity to the East Deering neighborhood from the campus by providing continuous sidewalks on both sides of Sherwood Street. A crosswalk will be implemented across Sherwood Street at Veranda Street. Once on the site, pedestrian facilities will connect site uses and points along the waterfront. Improvements to pedestrian connections will increase walkability for the site.

2.2.3 Potential Future MaineDOT Infrastructure

or 12'?

The infrastructure described above will be constructed to allow for future connections to potential MaineDOT infrastructure. MaineDOT is contemplating a 14-16-foot-wide shared use path on a new bridge parallel to Tukey's Bridge on the east side that would provide a direct connection from the campus to the Portland Peninsula. In addition, a 10-foot-wide shared use path under Tukey's Bridge would improve pedestrian access to and from the campus to the Back Cove trail and for pedestrians traveling between East Deering and the Portland Peninsula using the future shared use path bridge. These new shared use paths would provide wider, safer, and more comfortable accommodations for pedestrians and improve connectivity.

Berlin/SLA pathway? Veranda St bike lanes?

2.3 Bicycling Environment and Facilities

2.3.1 Existing Conditions

or bike to Baxter Blvd/Back Cove Trail - safer

Bicycle facilities are present in the East Deering neighborhood on Washington Avenue including buffered bike lanes north of Presumpscot Street and faded sharrows along Veranda Street. Bates Street provides a bike lane from Washington Avenue to Baxter Boulevard. The Back Cove trail (multi use path) runs along the Back Cove and Tukey's Bridge near the site. There are currently no bicycle facilities on Sherwood Street. Similar to the discussion above describing the pedestrian access across the shared use path on Tukey's Bridge, bicyclists must also use the narrow path to connect to the Portland Peninsula. Although this shared use path provides access to the Back Cove trail, it does not provide direct access to the campus. There are 8 public U-racks totaling 16 bicycle parking spaces located within the 970 Baxter Boulevard parking lot.

Walkscore.com rates East Deering with a Bikescore of 58/"Bikeable" indicating some bike infrastructure is present. The 15-minute bike shed zone from the campus is illustrated in Figure 3.

Figure 3 15 Minute Bike Shed Zone

Quite skeptical this is the 15 min. bike shed & barely even drive shed



2.3.2 Future Commitment

The Roux Institute at Northeastern University is dedicated to creating a safer, complete street along Sherwood Street to accommodate bicyclists into and out of the site by providing bicycle lanes. The campus will provide 166 bicycle parking spaces for students, staff, faculty and visitors. This quantity is more than triple the required amount of bicycle parking per the Portland Technical Manual. Shower and locker facilities will be provided for those commuters who bicycle to campus. The Roux Institute at Northeastern University will explore providing a Bike Fix-it Station for bike commuters and other visitors to the site.

2.3.3 Potential Future MaineDOT Infrastructure

The infrastructure described above will be constructed to allow for future constructed connections to potential MaineDOT infrastructure. MaineDOT is contemplating a 14-16 foot wide shared use path on a new bridge parallel to Tukey's Bridge on the east side that would provide a direct connection from the campus to the Portland Peninsula. In addition, a 10-foot-wide shared use path under Tukey's Bridge would improve bicycle access from the campus to the Back Cove trail and bicycle connectivity between East Deering and greater Portland.

2.3.4 Other Potential Future Infrastructure

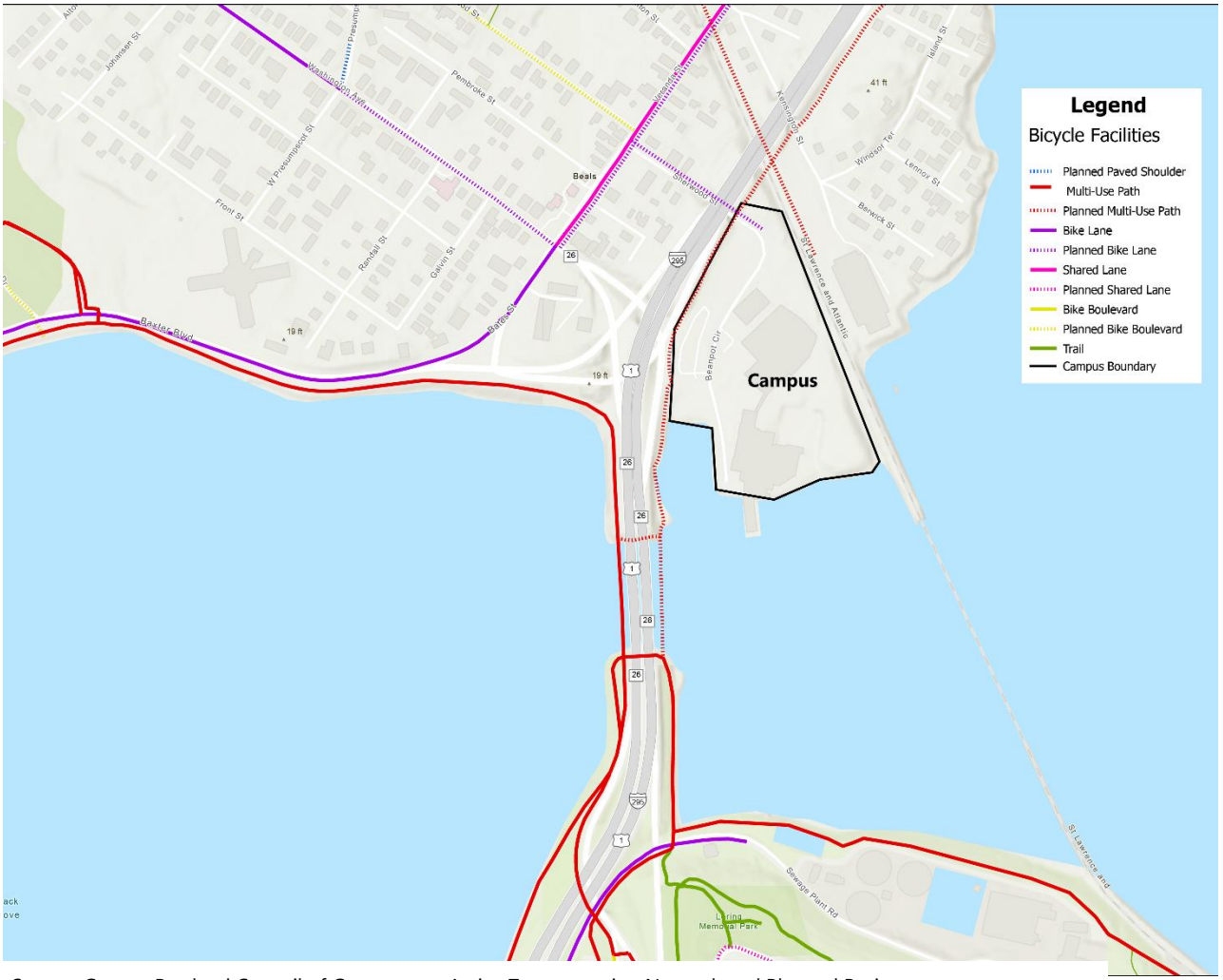
The City of Portland is currently working on the *Baxter Boulevard | Bates Street | Veranda Street Bikeway Project*[1] to implement buffered bicycle lanes on Veranda Street and a two-way bi-directional separated bike lane on Bates Street. Other potential opportunities for multi-use paths in the area include the Berlin Subdivision railroad right-of-way to points north ending at the Yarmouth Park and Ride on Exit 15 of I-295. Additionally, the Martin's Point Shared Use Path study considered a shared use path from Sherwood Street to the recently installed shared use path west of the Martin's Point Bridge starting at Wordsworth Street.

The City of Portland and Tandem Mobility have partnered to provide a bike share system in Portland. There are over 200 bicycles at over 40 stations predominately throughout the Portland peninsula. Pedal bikes and electric bikes are available by the minute and memberships are available on a monthly or yearly basis. There are currently no Portland BIKESHARE locations within the East Deering neighborhood in close proximity to the site, however there are a few on the East End across Tukey's Bridge. There is an opportunity to explore providing a new station on the campus which would expand the BIKESHARE network to the East Deering neighborhood.

Figure 4 presents the existing and potential future bicycle facilities surrounding the campus.

[1] Baxter Boulevard| Bates Street| Veranda Street Bikeway Project https://portland.civilspace.io/en/projects/better-bikeways-initiative

Figure 4 Existing and Potential Future Bicycle Facilities



Source: Greater Portland Council of Government Active Transportation Network and Planned Projects
https://gpcog.maps.arcgis.com/apps/View/index.html?appid=d5d7dbbc69534242b5fd4092c78f26e4

2.4 Public Transit

2.4.1 Existing Conditions

As shown in Figure 5, two bus lines currently stop near the campus: Metro Route 7 and Metro Routes 9A / 9B. Route 7 provides service between Portland and Falmouth with a stop at the Metro Pulse on the Peninsula as well as a stop near the campus at Veranda Street/Sherwood Street approximately a quarter of a mile from the center of the campus. Routes 9A/9B provide circular bus service between downtown Portland and North Deering with service running along Washington Avenue and Congress Street. Route 9A/9B stops on Washington Avenue near the site at Galvin Street and Veranda Street respectively which is under a half mile from the site. Bus transfers can be made at the Pulse and other stops on the Peninsula to reach the rest of Portland and several outlying towns.

Buses run continuously throughout the day, readily accommodating the varied schedules of students and other campus users. Metro BREEZ express bus service to Yarmouth, Freeport, and Brunswick and the Husky Line to Westbrook and Gorham establish a regional footprint for transit service. Ten local and express routes connect the campus to most of the Portland area with no more than one transfer.

The monthly ridership on Metro Route 7 is one of the lowest in the Metro system. In 2021, on an average weekday, there were 2521 boardings on Route 7. Each bus has the capacity of approximately 30 people and the bus runs 13 times per weekday inbound and outbound or a monthly capacity of approximately 7800 boardings, which leaves plenty of capacity on Route 7 to accommodate site related traffic.

In addition to the local Metro system, the Portland Transportation Center (PTC) in Thompson's Point provides regional bus and train service. Concord Coach Lines runs bus service from Portland to Boston, Massachusetts, Logan International Airport, and New York City as well as points north of Portland. The Amtrak Downeaster provides train service between Brunswick and Boston with a stop in Portland. Greyhound provides bus service between East Bayside in Portland and Boston, Massachusetts.

Figure 5 Public Transit Access



2.4.2 Future Opportunities

Metro is contemplating improvements to the transit system throughout Portland. In addition, the Roux Institute at Northeastern University is working with Metro to consider site specific transit accommodation for an on-campus bus stop that would connect the Roux Institute at Northeastern University to other key locations across the City, including housing, additional transportation connections, and partner organizations. The Roux Institute at Northeastern is also working with Metro and MaineDOT to identify park and ride locations where Roux students, faculty and staff can park and use Metro to travel to the site.

2.4.2.1 Transit Together Plan

In January 2023, The Portland Area Comprehensive Transportation System (PACTS) Policy Board approved the Transit Together Plan[2]. As of August 27, 2023, this plan enabled changes to Route 9 to provide more consistent 30-minute headways from 6am to 6pm on weekdays and from about 8am to 6pm on Saturdays. Route 9B will run one hour later in the evening.

In the Spring of 2024, Metro plans to make improvements to Route 7 by extending the route to the Portland Jetport via Congress Street with improved frequency and hours of operation.

[2] Transit Together - https://gpmetro.org/1644/Transit-Together---Route-and-Schedule-Ch

Frequency for Route 7 will improve from 60 to 30 minutes Monday through Saturday and services will be provided until 10pm or 11pm. The Falmouth loops will be eliminated, and Route 7 will use the Shaw's parking lot in Falmouth to turnaround. In conjunction, Route 5 service to the Jetport and Hutchins Drive will be discontinued to improve travel time between Portland and the Maine Mall. In addition, microtransit service will be implemented in east Falmouth. Microtransit riders within the zone will be able to request a ride using a smartphone app or phone call. These changes significantly increase the frequency and daily service to the campus.

2.4.2.2 Other Metro Opportunities

Metro is in the preliminary planning stages of studying how to extend Route 7 service along US Route 1 to Yarmouth. This extension could provide a bus route for campus commuters, with parking at the MaineDOT Exit 15 Park and Ride in Yarmouth.

The Roux Institute at Northeastern University is working with Metro to improve the quality and frequency of transit connections to the campus. Reduction of headways, modification of Route 5 or Route 7 to make a stop at the campus, and construction of a transit stop and turnaround on the campus, are all under consideration to further the convenience of transit for commuting to and from campus. The Roux Institute at Northeastern University will promote and incentivize transit use by subsidizing transit passes for students, staff, and faculty.

at what level: 100%?

2.5 Ride-Hailing

In addition to driving, transit, walking, bicycling, and carpooling, commuters have the option of using ride hailing services such as Uber, Lyft and/or traditional taxis. Although these services result in vehicle trips to and from the campus, they reduce the parking demand and allow for less vehicle ownership and more flexibility with commute mode choices.

2.6 Current Parking Policies

Parking is currently provided to staff, faculty and embedded partners at $50 per month, per spot. There are 176 parking spaces allocated for the Roux Institute at Northeastern University in the on-site garage. Embedded partners and employees who opt out of monthly parking pay $1/hour to park in the garage. Parking for visitors is also provided via a public rate of $5/hour and in adjacent, paid parking lots. Students of the Roux Institute at Northeastern University are not currently charged to park on-site but will be at the future campus.

2.7 Existing TDM Efforts

As part of this TDM plan, the Roux Institute at Northeastern University plans to bolster its current TDM efforts for the permanent campus proposed in East Deering. However, they are currently implementing TDM strategies on the existing campus at 100 Fore Street to help reduce drive alone trips:

- Appointed a transportation coordinator who surveys students, faculty and staff to develop an understanding about mode choice.

at what level: 100%?

- Subsidizing transit passes for faculty, staff and students. Posting transit related information in highly visible areas on site. Providing information on transportation commuting options including transit on the Roux Institute at Northeastern University's website.
- Offering convenient, hybrid course formats that blend online and on-site learning thus reducing the demand for commuting.
- Charging staff, faculty and embedded partners $50 per month per parking space.

what are students charged?

3

TDM Coordinator

The Roux Institute at Northeastern University will designate a TDM coordinator to oversee the administration of the TDM plan and the annual surveying and reporting process.

The Roux Institute at Northeastern University plans to follow industry best practice by appointing a campus-wide transportation coordinator. The TDM Coordinator will collect data on the TDM progress to ensure it evolves as the site develops. Once the site is operational, the TDM Coordinator will conduct a transportation survey for students, staff, and faculty to establish a baseline for future drive alone mode share reduction goals. They will also collect and disseminate information (including non-automobile travel options) on-site and organize outreach events and campaigns to encourage TDM participation. The TDM Coordinator will promote alternative transportation choices to educate those commuting to and from the campus and coordinate the implementation of TDM strategies to reduce single occupancy vehicle (SOV) trips. In addition, the TDM Coordinator will work with the City of Portland, Metro, GoMaine, car share, and bike share programs to improve non-SOV mode shares. The responsibilities of the TDM Coordinator include the following:

- Promote alternative transportation choices to students, staff, faculty, and visitors to reduce single occupant vehicles (SOV) trips.
- Coordinate the implementation of TDM strategies with students, staff, and faculty and conduct orientations to educate those commuting to and from the campus regarding their transportation options.
- Monitor bike rack usage and make recommendations as needed to accommodate potential growing demand.
- Coordinate with the City of Portland, Metro, GoMaine, car share and bike share, and other potential partners to improve access to non-SOV modes.
- Conduct annual Transportation Monitoring and activities necessary to measure the effectiveness of the TDM program in achieving the mode share reduction target.
- Administer and review TDM surveys on a yearly basis.

- Complete the standard City of Portland TDM Reporting Form, which will summarize how effective the various strategies have been, mode share data based on the surveys and program success and barriers.
- File annual TDM reports by May 15th of each year with the City of Portland.

The TDM Coordinator will be the primary point of contact for students, staff, and faculty regarding the TDM plan. The TDM Coordinator will develop strategies and incentives for students, staff, faculty, and visitors where applicable. The TDM Coordinator will also collaborate with commuters prior to when they start to inform them of the robust network of alternative mode choices available to them.

4

Baseline TDM Data

Baseline travel demand and supply data for the campus has been quantified for the Traffic Movement Permit (TMP) Application being submitted to MaineDOT as part of the site plan review process. Baseline data includes estimated mode split, future trip generation estimates, and proposed parking supply and future demand estimates. Reviewing survey data and how the existing students, faculty and staff are currently commuting to campus, and how they expect to commute to the proposed campus, provides insight to which alternative modes may have the greatest potential to reduce drive alone trips.

4.1 Modal Split

4.1.1 Roux Institute at Northeastern University Transportation Survey

The Roux Institute at Northeastern University conducted transportation surveys on a quarterly basis throughout 2022 and 2023 which collected responses from students, staff, and faculty at the existing 100 Fore Street campus. The survey asked how the respondents commuted to campus and then how they imagine they will commute to the new campus in East Deering. The results of the survey mode share data are presented in Table 2. It is important to note that the data collected slightly varied throughout the time of year. Additionally, the Roux Institute at Northeastern University is an evolving, growing Institute currently in a temporary location and this data is only representative of a portion of students, staff and faculty. Based on feedback collected from the survey, it is anticipated that transit and bicycle trips will increase, walk trips will decrease, and drive trips will slightly decrease due to the proposed campus location and existing transportation system in East Deering. The Roux Institute at Northeastern University will continue to survey on a quarterly basis and make adjustments as circumstances evolve.

Table 2 Transportation Survey Mode Split Data

	Existing Commute at 100 Fore Street		
	August 2022	April 2022	January 2023
Drive	77%	72%	73%
Transit	4%	3%	4%
Walk	13%	16%	19%
Bike	6%	7%	4%
Other	0%	2%	0%

what was response rate to the surveys? Is there a meaningful breakdown by Students vs staff/ faculty/others since mode share targets are different for each?

4.1.2 Traffic Movement Permit Mode Split Data

In addition to the data collected as part of the transportation surveys, expected mode share splits assumed in the Traffic Movement Permit (TMP) by land use are also provided in Table 3. The TMP mode splits are slightly more conservative in terms of analyzing vehicular traffic impact on the study area intersections. As additional bicycle and pedestrian connections are constructed in future years, it is likely that those mode shares will increase.

Table 3 TMP Mode Split

Population	Drive	Transit	Walk/Bike
Students	80%	10%	10%
All Other Populations	90%	5%	5%

Source: TMP indicates mode share assumptions presented in the Traffic Movement Permit

4.2 Trip Generation

As part of the TMP application, a trip generation analysis was conducted based on the 2032 development program presented in Table 1 using Institute of Transportation Engineers (ITE) publication, Trip Generation 11th edition as well as a custom trip generation methodology for the academic use of the site. The following assumptions were made to estimate student trip generation based on data from the campus:

- 43% of student enrollment are present on campus each day.
- 40% are daytime students and 60% are evening students.

Mode shares that were previously presented in Table 3, and applicable on site, internal capture trip rates were applied to the trip generation estimate to determine the external vehicle, pedestrian and walk trips as well as transit trips. The resulting estimated trip generation for the campus is presented in Table 4. The campus is expected to generate 237 morning and 521 evening peak hour vehicle trips, 20 morning and 51 evening peak hour transit trips, and 20 morning and 51 evening peak hour pedestrian and bicycle trips.

Table 4 Trip Generation

	Vehicle Trips	Transit Trips	Ped/Bike Trips
AM Peak Hour			
In	227	20	20
Out	10	0	0
Total	237	20	20
PM Peak Hour			
In	276	30	30
Out	245	21	21
Total	521	51	51

Source: Trip Generation Analysis presented in the Traffic Movement Permit

4.3 Proposed Parking Supply/Demand

A parking analysis was performed to estimate parking demand for the Roux Institute at Northeastern University. It was determined that parking demand peaks during the overlap between day and night users. Based on travel patterns of existing daytime and night students, the future enrollment will result in a peak demand of 561 spaces in the opening year and if the auto mode share stays as high as outlined in the TMP, 881 spaces in 2032.

The Roux Institute at Northeastern University is planning on providing parking on campus in a proposed parking garage designed to accommodate 708 parking spaces. For the first phase 16 of those parking spaces will be used to accommodate parking for 66 bicycles and the remaining 692 parking spaces will be used to accommodate vehicular parking. In addition to the garage spaces, there will be 14 parking spaces provided at grade on site. Since it is not feasible to construct parking garage levels during different phases of development, the parking garage will be constructed in 2027 to accommodate future demand. However, each interim phase will use only the number of parking spaces allocated based on that phase program.

In order to help mitigate the amount of vehicular traffic traveling to the campus, The Roux Institute at Northeastern University is actively exploring opportunities for satellite parking spots at existing park and ride locations within a short commute to the campus via tying into nearby transit routes or a Northeastern University-owned shuttle service.

To ensure parking usage in the structured garage does not exceed the permitted supply for each phase of development, the Roux Institute at Northeastern University will collect annual parking data to determine the number of vehicles parked throughout the day and evening. The TDM coordinator will obtain gate data for in, out, and occupancy counts on an hourly basis during the spring to coincide with the annual survey week. Moving into the future, the TDM coordinator will be working to reduce the automobile mode share to the site so that the garage is able to accommodate campus growth with that parking supply.

How will this be managed: e.g., restricting parking to 561 within a garage with a capacity of 692 spaces during Ph 1?

5

TDM Mode Split Targets

The TDM plan establishes short-term (3-5 year) and long-term modal split targets.

The TDM mode split target includes goals for reducing vehicle trips and increasing multimodal trips. Based on the future transportation system the campus will be supported by and TDM measures that will be implemented, the short and long-term targets that are proposed as part of this TDM plan are presented in Table 5. The mode share goals are within range of the City's *One Climate Future* document that sets a Key Transportation Milestone that by 2035, 26% of trips in the city will use alternative transportation modes, (up from 12%)[3]. The long-term goals are based on mode splits presented as part of the approved Institutional Development Plan for the Roux Institute at Northeastern University. The Roux Institute at Northeastern University is committed to implementing the TDM strategies presented in the following Section 6 to work towards achieving these mode split targets. The targets will be reviewed and updated based upon the annual TDM reporting process.

Table 5 Drive Mode Split Targets

Population	Mode Split Targets	
	Short-term (3-5 Years)	Long-term
Students	80%	70%
All Other Populations	90%	80%

Does "Drive" include all carpool occupants?

[3] https://www.oneclimatefuture.org/wp-content/uploads/2021/02/OneClimateFuture_FinalJan2021_Downsized.pdf

6

Mode Split Target Strategies

The TDM plan includes a set of strategies aimed at achieving the TDM goals described above. The strategies are targeted to students, staff, and faculty traveling to and from the campus in East Deering. The Roux Institute at Northeastern University is committed to enhancing the multimodal transportation systems around the campus including providing improved pedestrian and bicycle facilities and transit access/service.

As part of the quarterly transportation survey, the Roux Institute at Northeastern University gathered data on which TDM strategies would more likely encourage students, staff, and faculty to commute differently to the proposed campus. The feedback indicates that Roux Institute at Northeastern University commuters are most likely to shift to a different mode share when showers, lockers and bike storage is available, there is a credit system for sustainable commuting, a bus route is provided from downtown, a park and go is available and bike share is available for commuters. Additional open-ended comments were provided and are also reflected in the TDM strategies presented in this section.

Table 6 below presents the strategies that the Roux Institute at Northeastern University is committed to fulfilling which are grouped into three main categories: Infrastructure/Transit/Mobility Improvements and Contributions; Incentives; and Information/Education/Marketing. These commitments include timelines for implementation. Table 7 provides a list of potential strategies the Roux Institute at Northeastern University is considering implementing in a future phase of the project.

Is the 'Long-Term' column in Table 6 what was intended for Table 7?

Timeline Years	
Short-term (0-2 Years)	Long-Term (2+ Years)

Table 6 TDM Strategies – Commitments			Timeline Years	
Category	**Strategy**	**Targeted User/Group**	**Short-term (0-2 Years)**	**Long-Term (2+ Years)**
Investments				
Public Transit Access	Work with Metro to provide a new transit stop on campus. The transit stop will include a shelter and provide real-time bus information as well as a turnaround area on site.	Students/Staff/Faculty/Visitors	Implement	
Public Transit Access	Subsidize the purchase of student and staff/faculty bus passes. What is the level of subsidy? 100%?	Students/Staff/Faculty	Implement	
Bicycle Access	Secured bicycle parking will be provided via 100 exterior and 66 interior spaces. This equates to over 3 times the City of Portland Land Use Code parking requirements totaling 166 bicycle spaces. This equates to over 3 times the required amount of bicycle parking. What happens to the interior bike parking when more veh. parking needed?	Students/Staff/Faculty/Visitors	Implement	Continue to monitor and provide additional bicycle parking if demand increases.
Bicycle Access	Improve Sherwood Street by providing bicycle lanes. The current plans show substandard width bike lanes (4').	Students/Staff/Faculty/Visitors	Implement Sherwood Street bicycle lanes.	
Bicycle Access	Provide on-site showers and lockers Where are these planned to be located? Is there a campus gym?	Students/Staff/Faculty	Implement	
Pedestrian Access	Improve the pedestrian network by providing new sidewalks along Sherwood Street and a new crosswalk across Sherwood Street at Veranda Street.	Students/Staff/Faculty/Visitors	Implement Sherwood Street improvements.	
Constrained Parking	Parking on-site will be constrained to a parking garage designed to accommodate 708 parking spaces (only 692 to be used for vehicular parking and 16 for 66 bicycle parking spaces) in addition to 14 at-grade parking spaces.	Students/Staff/Faculty	Implement	Ongoing parking management as long-term phasing is completed.
Water Access/Marine Feature	Build a modern pier over the footprint of the current pier, in order to accommodate water shuttles and taxis.	Students/Staff/Faculty/Visitors		Implement
Incentives				
Flexible Work and/or On-line Learning	Provide a hybrid course format that allows online and on-site learning.	Students/Staff/Faculty	Implement	
Flexible Work and/or On-line Learning	Flexible scheduling (ability to start-stop some class hours outside of peak travel periods, e.g.)	Students/Staff/Faculty	Implement	
Parking Pricing	Parking charge for students, staff/faculty (unbundled parking costs - not included with tuition and not provided as a benefit to staff/faculty) What is the anticipated cost/month --> market rate?	Students/Staff/Faculty	Implement	
Transit Incentives	Pre-tax transit pass purchasing for employees Not a transit pass provided via employee/student ID as done by most institutions (USM/SMCC, etc) with no out of pocket outlay required?			
Preferential Parking	Prioritize parking for carpools. where?/how?	Students/Staff/Faculty	Implement	
	Carpools will receive reduced price parking.	Students/Staff/Faculty	Implement	
Programmatic Incentives	Join the Emergency Ride Home program through the GOMAINE program.	Students/Staff/Faculty	Implement	
Electric Vehicle Parking	Monitor EV parking demand study and increase the chargers, their power, and number of EV-ready spaces as demand dictates.	Students/Staff/Faculty/Visitors		Monitor usage and provide additional EV charging infrastructure as needed.
Information/Education/Marketing				
Education on Travel Choices	Join GOMAINE. Encourage staff/faculty to join Go Maine & Record “green trips”.	Students/Staff/Faculty	Implement	
Education on Travel Choices	Provide a website that will present travel choices to campus available to students/staff/faculty with links to resources. Information on bicycling routes, bicycle parking infrastructure, and walking infrastructure will be provided on the website	Students/Staff/Faculty/visitors	Implement	
Education on Travel Choices	The TDM coordinator will send out organizational emails promoting alternative modes/TDM program to staff/faculty and students.	Students/Staff/Faculty	Implement	
Education on Travel Choices	The TDM coordinator will facilitate carpools by maintaining a database of interested parties; commuters will be matched with others who live near them or can access a park and ride location along their route. The Roux Institute at Northeastern University will also participate in the Maine DOT/Maine Turnpike Authority GOMAINE, which facilitates carpools across nearby sites and provides participants with rewards for carpooling	Students/Staff/Faculty	Implement	
Education on Travel Choices	The TDM coordinator will provide new students, staff, and faculty with orientation packets describing non drive-alone commutes and incentives.	Students/Staff/Faculty	Implement	
Education on Travel Choices	Provide transit maps and schedules on-campus.	Students/Staff/Faculty/Visitors	Implement	
Education on Travel Choices	Provide a real-time electronic screen displaying transit information – ‘Next Bus’ at bus stop.	Students/Staff/Faculty/Visitors	Implement	

Can these also be added to the lobbies of the two main Ph 1 buildings for increased visibility of multimodal options?

Table 6 TDM Strategies – Commitments			Timeline Years	
Category	**Strategy**	**Targeted User/Group**	**Short-term (0-2 Years)**	**Long-Term (2+ Years)**
Future Investments				
Bicycle Access	Consider installing a bike repair station Seems logical and low-priced to add short-term in garage	Students/Staff/Faculty/Visitors	Investigate	Implement
Bicycle Access	Consider providing electric bike charging Can 'simple' AC outlets be added in vicinity of interior bike parking in short-term to encourage e-bike/bike usage in general?	Students/Staff/Faculty/Visitors		Investigate through surveys to determine if this would be effective and used.
Portland BIKESHARE	Investigate establishing a new BIKESHARE station on campus. Currently, there are no BIKESHARE stations located in East Deering. Reported survey results said high desirability of bikeshare - implement short-term?	Students/Staff/Faculty/Visitors	Investigate	Implement as demand dictates
Car Share	Explore providing one car share vehicle on campus.	Students/Staff/Faculty		Provide car share parking as future program is developed.

7

Monitoring and Reporting Plan

Program monitoring and reporting are important components of a successful TDM program because they provide a quantitative benchmark of the program's effectiveness in reducing single occupancy vehicle trips and resulting parking demand over time. The monitoring process provides feedback on whether progress toward the TDM targets is being made. The TDM Coordinator will use the information gathered through the monitoring plan to direct the ongoing implementation of the TDM program, allowing for adjustments and the introduction of new strategies.

The TDM Coordinator will be responsible for monitoring the efficacy of the TDM plan and making adjustments to the plan as needed to achieve modal split targets.

An annual survey will be administered to gather data for student, staff, and faculty commuting characteristics. Surveys provide a qualitative understanding of how well TDM program elements are working. This survey will ask respondents how they commuted to campus for the last five days and will provide a comprehensive list of mode share choices. Additional information including vehicle ownership, parking costs, and mode share barriers and incentives will also be collected. Parking utilization count data will be obtained annually to support the monitoring process. The TDM Coordinator will obtain data to quantify the hourly in, out, and number of parked vehicles in the garage. This data will help to establish the resulting parking demand for the enrollment at that time.

Should additional data such as bicycle parking counts or other TDM tracking efforts be needed to support the monitoring effort, additional data will be collected. This might include the following data needs:

- Should bicycle parking utilization counts be needed to support the monitoring process, the number of bicycles parked on campus will be tracked. This data will be reviewed for trends in

bicycle usage over time to determine if bicycle parking is adequate and meets the needs of the bicyclists.

› The TDM Coordinator will work with Metro to track the transit usage of commuters via the pass program implemented. The data for the same time period as outlined above in the surveys will be obtained and reviewed.

The results of monitoring effort will be reported to the City of Portland on an annual basis by May 15th using the standard reporting tools provided by the city.

Zachary Powell <zpowell@portlandmaine.gov>

1 Bean Pot Circle PL-002724-2023 DPW WR Comments

Justin Pellerin <jrp@portlandmaine.gov> Wed, Dec 13, 2023 at 3:29 PM
To: Zachary Powell <zpowell@portlandmaine.gov>
Cc: Janine Ba <janineba@portlandmaine.gov>, Bradley Roland <brad@portlandmaine.gov>, Benjamin Pearson <bnp@portlandmaine.gov>, Keith Gray <kgray@portlandmaine.gov>

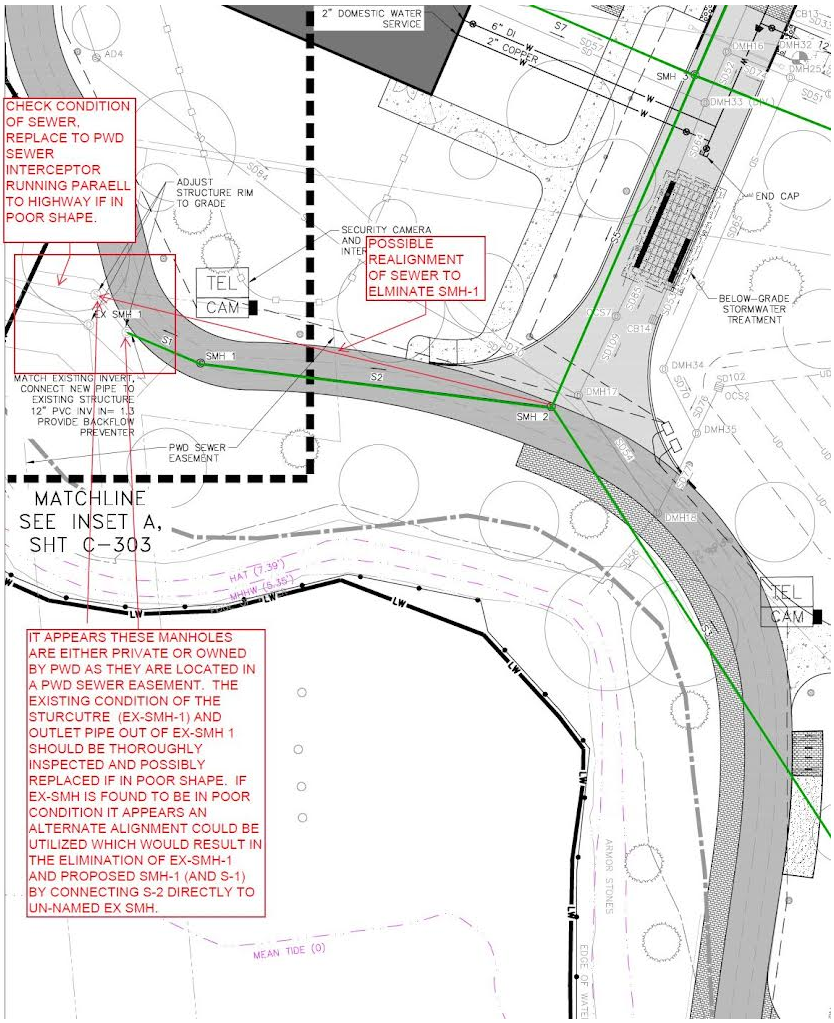
Hi Zach
Here are the Water Resource's comments for the 1 Bean Pot Road Submission.

Sherwood Street Roadway Improvement comments:

- New catch basin structures in Sherwood Street should be installed per City of Portland Technical Manual standards. Each basin should have a headstone and be installed with a 3' sump. Include applicable details in the plan set.
- All storm drains and underdrains 10" and greater shall meet the City's stormdrain material specifications listed in section #2 of the technical manual.
- It appears the proposed 12" underdrain/stormdrain pipe running along the southerly curb line between station 212+00 and 213+00 is in conflict with an existing gas main. Is the applicant working with Unitil to relocate the gas main in this area?
- DPW is in the process of inspecting the existing storm drain line in Sherwood Street. Improvements may be needed within the project paving limits if the pipe is found to be in poor condition.

Campus Site Plan Comments:

- Please review and reference the email sent from the Water Resources division to Woodard and Curran on 12/13/23 for discussion and comments pertaining to the proposed modifications of the existing storm drains and water mains in Sherwood Street. It appears the alignment of the existing Sherwood Street storm drain is not shown correctly on the plans which is resulting in stormdrain design conflicts with existing 12" watermain and the proposed 12" water main improvements. The existing condition plans and design plans should be updated to address the storm drain alignment issues and to resolve any remaining utility conflicts between the 12" water main and the City's storm drain system in Sherwood Street.
- PWD should review the proposed sanitary connection into Ex SMH-1. The City's mapping indicates this structure is owned by PWD, however that is somewhat unclear.
- See sketch below for further comments on the proposed private sanitary sewer connection into the municipal system.



- The plans should be updated to depict the locations of all the required ESC controls including but not limited to dewatering/stockpiling areas with proposed BMPs and the proposed location of the anticipated stone construction entrance.
- The applicant shall confirm the sizing and design of the proposed external grease trap associated with the LRCB building and verify it is designed in accordance with Chapter 7 of the City's sewer use rules and regulations.
- The project will be required to submit a dewatering plan to the Water Resouce's Compliance Coordinator in accordance with chapter 8 of the City's sewer use rules and regulations prior to any excavation work and dewatering activities occurring on-site.

Justin Pellerin, P.E.
Senior Water Resources Engineer
Department of Public Works
jrp@portlandmaine.gov
207-874-8881

public works

2023-12-13 City of Portland Mail - 1 Bean Pot Circle_Sherwood Street Drain Alignment_WC...pdf
363K

Justin Pellerin <jrp@portlandmaine.gov>

1 Bean Pot Circle PL-002724-2023: Existing Sherwood Street Storm Drain Location

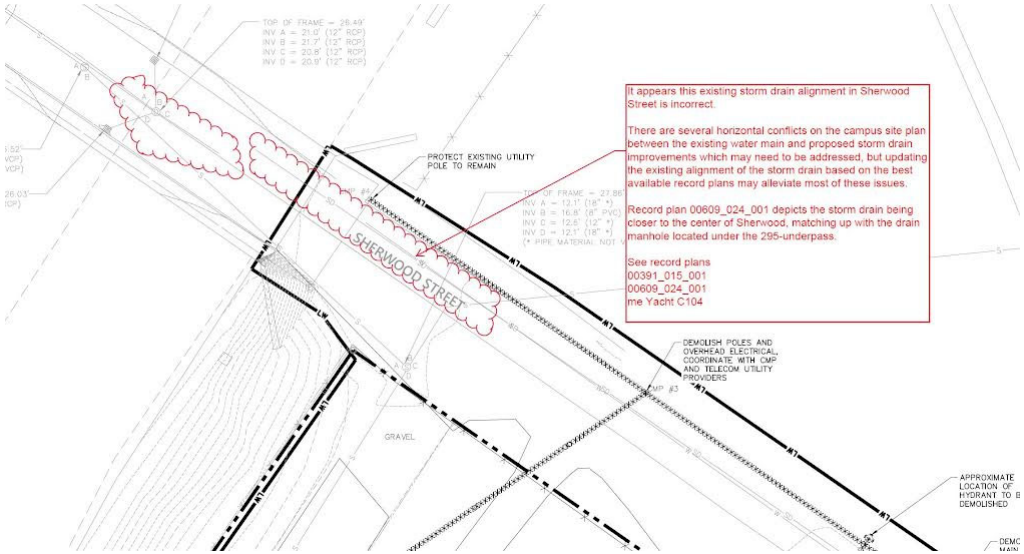
1 message

Justin Pellerin <jrp@portlandmaine.gov> Wed, Dec 13, 2023 at 3:06 PM
To: Lauren Swett <lswett@woodardcurran.com>, Amy LeBel <alebel@woodardcurran.com>
Cc: Zachary Powell <zpowell@portlandmaine.gov>, Bradley Roland <brad@portlandmaine.gov>

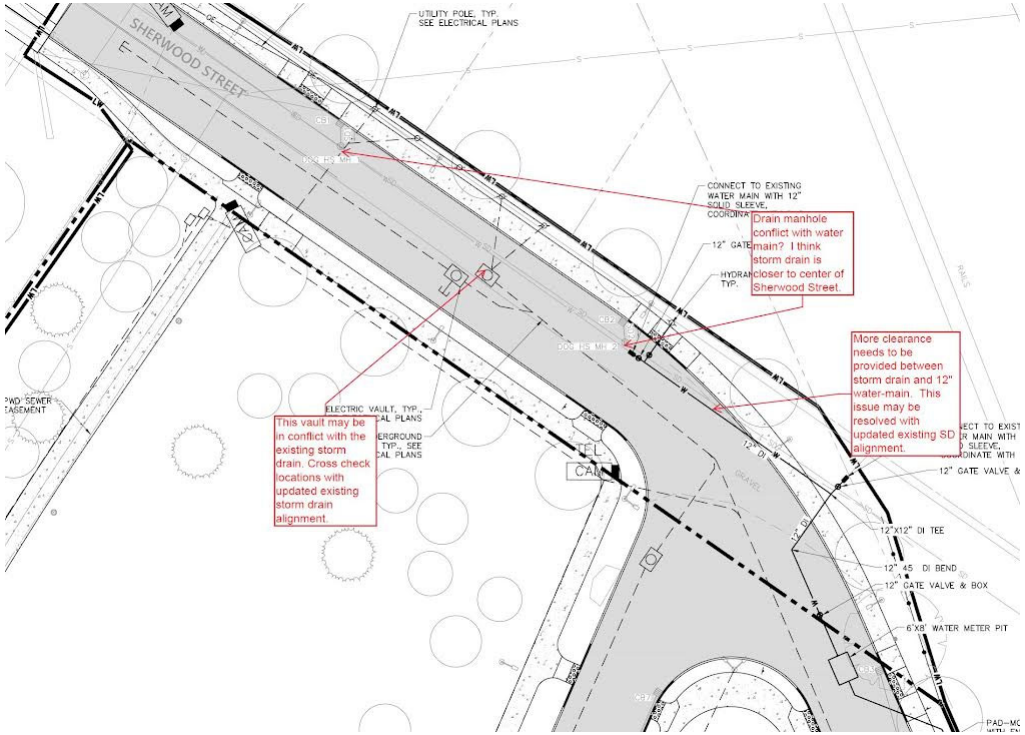
Hi Amy
Can you send me a share file link so I can send you a few record plans I've tracked down which depict the location of the existing storm drain system in Sherwood Street?

In reviewing the Phase 1 NU development and Sherwood Street improvement plans it appears the location of the existing drain line might not be depicted correctly in our GIS or in the project's existing conditions survey.

Record plans **00609_024_001** and **00391_015_001** show the pipe to be located more towards the center line of Sherwood Street, lining up with the existing surveyed DMH under the I-295 bridge.



This alignment issue appears to be causing some horizontal conflicts between the proposed Sherwood Street watermain and storm drain modifications. If the existing storm drain alignment and water main alignment are correct, then one of those pipes would have to be offset to allow for these proposed modifications to be made.



I think generally these conflicts may be non-existent once the alignment is updated. I am going to see if we can get this pipe CCTV'ed and have the horizontal alignment verified. I'll let you know when that happens and it may make sense to send your project surveyor out to update the field verified alignment.

I will reference this email in my general project dev rev project comments. Didn't want to send this novel through the formal comments response protocol.

Let me know if you have any questions, and please send along that file share link.

Thank you!
Justin Pellerin, P.E.
Senior Water Resources Engineer
Department of Public Works
jrp@portlandmaine.gov
207-874-8881

public works

Zachary Powell <zpowell@portlandmaine.gov>

1 Bean Pot Circle - PL-002724-2023

Ann Machado <amachado@portlandmaine.gov> Wed, Dec 13, 2023 at 5:31 PM
To: Zachary Powell <zpowell@portlandmaine.gov>

Zach -

Here are my review comments:

Section 8.5.7.D

1. B-5 is the underlying zone - no dimensional requirements under Table 7-E except height which is governed under the IOZ requirements.

3. Street Wall Height
- min. 45' & max. is 105'
  - LRC - 68.6
  - garage - 66.2 stair tower (86.7)

4. Stepback - needed at street wall if higher than 105' - 10' min. - LRC goes from 22.5' to 13.5'

5. Building length
- a. no building is longer than 250 ' - don't need publically accessible corridor. - figure 3.3 244'
- c. & d. seem to be part of the design review not zoning per se

Building Height - Figure 8-F
The maximum height for the various height zones based on the average grade appears to be met. **My only issue is with the Average Grade plans. The sheet (AS61.0 gives the average grade of the garage as 20.8. I calculate it as 18.8'**

Civil Plan C-102

Shoreland Zone -The highest annual tide has been located but I don't see a 25' shoreland zone setback located

Floodplain
- Both the approximate FEMA flood zone line and the approximate flood zone line based on EL 9 are shown. I'm not sure what they mean by the approximate FEMA flood zone line. Are they overlaying the FIRM from 1986? EL 9 impacts the LRC building and we will need a floodplain permit application for new construction and elevation certificates.
- The other question that I have is about the timing of the new flood zone maps. We still don't know when the new maps will go into effect. Obviously we are reviewing the current site plan under the current floodplain maps. My question is, if the new maps go into effect before the building permits are applied for, would the buildings then need to meet the base flood elevation for the new maps?

Let me know if you have any questions or if I missed anything.

Thanks.

Ann

Ann Machado
Zoning Administrator
Permitting and Inspections Department
City of Portland, Maine
(207) 874-8709
amachado@portlandmaine.gov

Roux LRC, Bean Building, Site & Future Development Charter

	Commitment	Applicability	Strategies	City Staff Review - Phase 1 (January 12, 2024)
Code mandated items				
Energy	Design the building to achieve the energy requirements of IECC 2021 (ASHRAE 90.1-2019).	All buildings	Meet code applicable at time of permitting.	To be determined at time of permitting.
Responsible Materials	Specify, at a minimum, PFAS free carpet, rugs, and fabrics to align with the State of Maine's PFAS ban.	All buildings	Utilize PFAS free carpets.	
Occupant Experience	Provide mechanical or mixed mode ventilation to all residential units.	All buildings	Provide ERVs or other energy efficient ventilation systems to each regularly occupied space.	
Energy				
	Eliminate on-site fossil fuels in building HVAC and Food service.	All buildings	All electric mechanical systems utilizing efficient equipment such as ASHPs and energy recovery ventilators.	Heat pumps are proposed in the LRC building. Additional information will need to be submitted for the Cannery Building and the Structured parking & preschool facility building to confirm that efficient electrical mechanical systems are being utilized.
		All buildings	Eliminate the combustion of fossil fuels on-site except for emergency backup power and non-permanently installed equipment.	Submit a narrative confirming how fossil fuels will not be combusted on the site for any of the uses of the site (e.g., lab, café space).
		All buildings	All electric domestic hot water.	Hot water is provided through electric heaters, as noted in Sheet P1.01.
	Provide infrastructure for future PV installation.	All buildings	Identify location for future PV equipment in building. Provide conduit from roof to central electrical room.	PV locations identified for the LRC and Cannery buildings, but is not identified for the Structured parking & preschool facility building. Update the floor plans for the Structured parking & preschool facility building to identify the location of future PV equipment for the building.
	Design the building to be 30% better than ASHRAE 90.1-2019 and 15% of roof area dedicated for PV.	The LRC	Utilize geothermal HVAC system and on/off site PV to achieve aggressive energy targets for project.	Geothermal HVAC shown in Sheet GT-01 and photovoltaic systems >15% of the roof area are proposed for the roof of the LRC building. Applicant shall submit a narrative demonstrating how the combined systems will be designed to be 30% better than ASHRAE 90.1-2019.
Embodied Carbon				
	Reuse existing historic building.	Bean Building	Efficient engineering to optimize material selection.	Applicant shall provide narrative clarifying how the submitted strategy is being achieved through the proposed renovation of the Cannery Building.
	Advocate for Environmental Product Declarations (EPDs) for all concrete used on the project.	All buildings	Design and construction team to work with suppliers and request EPDs are generated. Availability of EPDs will be included in procurement decisions.	Applicant shall identify when procurement for materials is anticipated to take place and when copies of procurement notices can be sent to City Staff for confirmation relative to the submission & issuance of building permits.
	Perform a whole building life cycle analysis (LCA) to study carbon conservation measures.	All Buildings	Quantify the embodied carbon of project by completing an LCA.	Identify when a LCA will be completed/be able to be submitted for review by City Staff prior to issuance of building permits for the project.
	Reduce the embodied carbon of structural materials in the building by 15% from a typical design. Demonstrate a reduction of at least 10% for building embodied carbon.	The LRC	Utilize Mass Timber for a portion of building .	Mass timber is proposed for a portion of the building.
		The LRC	Utilize interior materials with lower than average carbon footprint.	Identify through EPDs and/or LCA how the 10% reduction in embodied carbon will be achieved and at what point City Staff can confirm reduction prior to issuance of building permits for the project.
Responsible Materials				
	Source wood products from Maine forests and/or sustainably managed forests or salvaged/reclaimed wood suppliers.	All buildings	Wood products sourced from sustainable managed forests will be prioritized. Wood sourcing considerations will be included in procurement decisions.	Applicant shall identify when procurement for materials is anticipated to take place and when copies of procurement notices can be sent to City Staff for confirmation relative to the submission & issuance of building permits.
		All buildings	Utilize Maine products to the maximum extent possible. Wood sourcing considerations will be included in procurement decisions.	
	Advocate for the removal of PFAS chemicals in other targeted product categories.	Bean Building	Team to identify targeted categories. PFAS content will be included in procurement decisions.	
	In coordination with the contractor, identify key materials to procure from the state of Maine.	All buildings	Team to identify targeted categories. Sourcing availability content will be included in procurement decisions.	
	Divert at least 50% of no-hazardous construction and demolition waste from the landfill.	All buildings	Source separate construction and demolition waste.	Prior to a certificate of occupancy, a waste hauler contract for the site shall be submitted to review and confirm that 50% landfill diversion of non-hazardous materials will be ensured.
		All buildings	Include requirements in contract with waste hauler.	
		Site areas	Identify opportunities for reuse/salvage of existing materials.	Reuse of rail lines and bean pots have been proposed as part of interpretive work related to historic preservation. On the project website, under Site Work, a July 28, 2023 post identified historic elements that will be reused and construction materials to be reused/recycled. Update application materials to identify how the construction materials are being reused/recycled.
	Target Red List free finishes in targeted spaces.	The LRC	Classrooms and offices will target red list free flooring, ceilings, and furniture.	October 19, 2023 Design Development document states that red list free materials shall be used.
	Use best practices for bird friendly design.	The LRC	Include bird safe glass and design measures to reduce bird strike hazards.	Bird safe glass treatments are proposed for some of the glass in the LRC building. Confirmation that the entirety of the building glass is bird safe has been requested to meet §8.5.7(F)(6) of the Land Use Code.
Water				
	Reduce indoor water use from 25% from a code baseline building.	All buildings	Select high efficiency, low flow plumbing fixtures for all spaces with lower then code flow rates.	Flow rates for plumbing fixtures have not been provided as part of the submitted application materials. Update application materials to state the proposed flow rate for plumbing fixtures and the applicable code requirements for flow rate.
		Public spaces	Maximize the use of urinals while providing gender inclusive restrooms.	Urinals are proposed in public bathrooms for the LRC, but are not shown in the Cannery Building or the Structured parking & preschool facility building. Clarify why urinals are not proposed in the Cannery Building and whether any urinals are proposed for the Structured parking & preschool facility building.
	Maximize the use of native and drought tolerant landscape plants.	Associated Site areas	Landscaping to be primarily drought tolerant native woody, perennial, or meadow mix plants requiring minimal irrigation after establishment and during severe/extended drought events.	Native and low-maintenance plantings have been prioritized to require fewer short- and long-term maintenance needs.
	Stormwater Management in accordance with Maine Department of Environmental Protection Best Management Practices Manual and City of Portland Technical Manual.	Site Areas	Incorporate Low Impact Development Design Strategies and Stormwater Quality Treatment Systems.	Application is designed to meet Chapter 500 standards and has incorporated LID strategies such as protecting natural drainage systems, utilizing low-maintenance landscaping, minimizing impervious surfaces, and providing vegetated open-channel conveyance systems.
	Prohibit the use of all synthetic pesticides and fertilizers for the operation and maintenance of landscape and agriculture through Integrated pest management (IPM)conducted as part of an overall Plant Health Care Program for the Roux site.	Site Areas	Consideration will be given, during the initial site design, to plants that require fewer chemical inputs for both establishment and long- term maintenance needs. This includes anticipated needs that will likely arise as the landscape itself evolves and matures.	Native and low-maintenance plantings have been prioritized to require fewer short- and long-term maintenance needs.
Occupant Experience & Equity				
	Optimize natural daylight and mitigate glare.	All buildings	Provide shades or curtains at all regularly occupied spaces which face east, west, or south.	Confirmed in General Note 8 on Sheet A12.01 of the architectural plans for the LRC building. Confirmation of shades or curtains for the Cannery Building and the Structured parking & preschool facility building have not been provided. Update architectural drawings to confirm that shades or curtains will be provided for regularly occupied spaces that face east, west, and south for the Cannery Building and the Structured parking & preschool facility building.
	Incorporate biophilic design principles.	All buildings	Use of natural materials.	Mass timber and stone are proposed to be used for the LRC building. Currently, only non-natural materials are identified for the Structured parking & preschool facility building. Update architectural drawings to identify what natural materials are proposed to be used for the Structured parking & preschool facility building.
		The LRC & Bean Buildings	Create cultural and ecological connections to place - art and signage.	Provide a supplemental narrative and/or sample designs on how the proposed art and signage for the campus will create cultural and ecological connections to place, as well as the locations for the proposed locations for art and signage.
	Use the building to educate building and site users.	The LRC & Bean Buildings	Incorporate signage that tells about sustainability features of building.	Identification of informational signage on sustainability features of the LRC & Cannery buildings is not included in the signage plans. Update the architectural drawings and/or signage plans to identify where the proposed informational signage on sustainability features of each building will be located and the proposed design of the signage.
	Provide amenities to support public access.	All buildings	Provide drinking fountains and/or bottle fillers.	The submitted floor plans for the LRC building include drinking fountains and/or bottle filters. The submitted floor plans for the Cannery Building and the Structured parking & preschool facility buildings do not show drinking fountains and/or bottle filters. Update floor plans for the Cannery Building and the Structured parking & preschool facility building to identify the location(s) of drinking fountains and/or bottle fillers.
		All buildings	Provide publicly accessible restrooms adjacent to public spaces.	Publicly accessible restrooms are provided in the LRC and Cannery buildings. Submitted floor plans for the Structured parking & preschool facility building do not provide enough detail to confirm whether restrooms will be publicly accessible next to the proposed shoreland open space. Update architectural drawings to clarify if and how publicly accessible restrooms will be provided.
		Site Areas	Provide bike/pedestrian paths.	Complies. Shared-use facilities are provided throughout the site.
		Site Areas	Provide benches.	Complies. Benches are provided throughout the site.
		Site Areas	Provide site wayfinding.	Complies. Site wayfinding package is included as part of the application materials.

	Provide Gender inclusive restrooms.	All buildings	Provide gender inclusive restrooms in public areas.	Public, gender inclusive restrooms are provided in public areas in the LRC building. The split of restroom facilities in the Cannery Building connotes that bathroom facilities will not be gender inclusive. Confirm that the both public area bathrooms on the lower level of the Cannery Building are gender inclusive.
	Provide lactation rooms.	The LRC & Bean Buildings	Provide a designated lactation room with a locking door, sink, changing table, comfortable seating, lighting control and electrical outlets.	Lactation rooms not identified in the floor plans for the LRC and Cannery buildings. Update floor plans to identify lactation rooms that include a locking door, sink, changing table, comfortable seating, lighting control and electrical outlets.
Transportation				
	Conduct study of EV charging needs. Provide required EV capacity to meet anticipated demand.	Campus	Work with city to determine appropriate approach to EV charging strategy and identify percentage of day one EV charging stations and future infrastructure	EV Charging Study is still under review by City Staff. As Study is under review, Application should confirm whether the charging should meet the demand in coordination with EV or PV requirements approved by the City.
		Site Areas	Provide EV charging to meet demand identified in coordination with PV requirements approved by city.	
		Site Areas	Annually evaluate the EV charging capacity needs by the campus.	EV Charging assessment should be coordinated with the submission of TDM reports. City staff encourage the assessment of EV charging for automobiles and bicycles as part of the campus goals to reduce SOV automobile trips.
	Integrate quality/ secure bicycle storage into the site design and provide shower facilities.	Residential buildings	Provide at least one bike storage space per four units.	**Not applicable for this phase.**
		The LRC & Bean Buildings	Provide secure bicycle storage.	Bicycle storage is proposed on the lower level of the Cannery Building. Bicycle storage is not provided in the LRC building. Update floor plans for the LRC building to identify interior, secure bicycle storage.
		Bean Building	Provide shower facilities for bike commuters.	Showers are provided on the lower level of the Cannery Building.
		Site Areas	Provide Portland Bike Share stations.	Bikeshare stations are not currently identified in the submitted application materials. Update application materials to identify proposed locations for bikeshare stations for review and further discussion with City staff.
		Site Areas	Provide quality and dispersed bike parking for site users near each building.	Exterior bicycle parking is distributed throughout the site for buildings in the first phase and future phases of development. As mentioned three standards above, secure bicycle storage will need to be provided for in the LRC building.
	In collaboration with the surrounding community, work to improve multi-modal transportation to the Roux Site.	Community	Maximize non single occupancy vehicle transportation to the site, by charging for parking, working with Metro and/or shuttle services to efficiently connect the site to key city locations, encourage bike and pedestrian access, and enabling water taxi service.	Application identifies opportunities to reduce SOV trips through unbundled parking, ongoing collaboration with METRO and MaineDOT, on-site shared-use facilities with anticipated connection points to the rest of the peninsula and off-peninsula, as well as pier improvements to facilitate water taxi service.
Resilience				
	Incorporate near-term future-projected climate change data (2050s) in design of mechanical, electrical, and plumbing systems and/or components on a regular replacement cycle. Incorporate long-term future-projected climate change data (2100+) in the design of the building and infrastructure, including flood resistant materials below the 2100 sea level rise design flood elevation and elevate critical infrastructure above this elevation.	All New buildings	All critical building infrastructure shall be located above the design flood elevation (DFE) of 22.5ft NAVD88.	Critical building infrastructure has been identified in the LRC building to be located above 22.5 feet NAVD88. Additional information still needs to be provided to confirm that no critical building infrastructure is located below 22.5 feet NAVD88 for the Structured parking & preschool facility building, particularly in the Preschool Facility portion of the building.
		All buildings	Review the extreme heat projections with MEP consultant for consideration of future cooling degree days. Allow additional cooling and heating capacity. Utilize weather shift model anticipating conditions in year 2050 for calculations.	Heat projections with MEP consultant not included with application materials. Applicant should clarify the anticipated development of the projections and point for City staff to review prior to Certificate of Occupancy.
	Prepare emergency action plan and provide appropriate level of backup power to support life safety. Incorporate campus-wide emergency preparedness planning to enhance overall resilience of the campus/site community.	The LRC & Bean Buildings	Provide emergency generator with capacity to support essential operations such as research requirements in addition to life safety for 48 hours.	Unable to confirm whether generator can provide 48 hours of energy for essential operations. Applicant should provide supporting documentation based on the proposed storage capacity or the manufacturer that the proposed nitrogen generator can supply energy for 48 hours to essential operations.
		Student Housing	Developer to provide emergency generator with capacity to support operations including food service and life safety for 48 hours.	**Not applicable for this phase.**
		All buildings	Provide campus wide emergency preparedness plan and coordinate with local jurisdictions.	Emergency preparedness plan not submitted. Applicant should clarify the anticipated development date of the plan and point for City staff to review prior to Certificate of Occupancy.
		All other	Provide emergency generator.	Generator provided on Level 1 of LRC building.

	Complies
	Confirmation of compliance to occur at later point
	Does not comply
	Not applicable to current phase

Institutional Development Plan

Roux Institute Campus

November 2022

Att. 5



IDEALS
Initiative for Digital Engineering and Life Sciences

The Roux Institute
Northeastern University

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Introduction



Artist Interpretation

Northeastern University's Roux Institute represents a bold new model for learning, research, and entrepreneurship, developed from day one in partnership with industry, government, and other colleges and universities. Through the strong partnership and jointly held vision of Northeastern University leaders, Barbara and David Roux, and the Harold Alfond Foundation, the Roux Institute is delivering on the university's mission to erase the boundaries between the real world and academia.

Northeastern University founded The Roux Institute to stimulate the regional economy through the cultivation of talent and cutting-edge technology capabilities within Maine and northern New England. It achieves this goal by customizing learning programs and research initiatives to meet the needs of employers, by integrating classroom learning with professional experience, and by supporting the launch of innovative startup companies. The Roux Institute's collaborations with its employer-partners keep the institute in step with the economy's—and society's—changing needs and opportunities. They also enable the Roux Institute to identify and begin to address the state's most consequential challenges.

The Initiative for Digital Engineering and Life Sciences (IDEALS) is a Maine non-profit organization tasked with and solely committed to locating and developing a campus for the Roux Institute. Northeastern University in Portland, Maine: a space for cutting-edge educational, research, and collaborative programs in areas including artificial intelligence, computer and data sciences, digital engineering, advanced life sciences, and medicine. IDEALS was formed in 2018 with support from David Roux, a technology entrepreneur and Lewiston native, and his wife Barbara. They sought to create a graduate institute providing opportunities for Maine people to fill talent gaps for growing digital and life sciences companies while ensuring the 21st century success of greater Portland and Maine's economies. IDEALS recruited Northeastern University to establish and run the program, and the Roux Institute at Northeastern University launched in 2020. The Roux Institute now offers post-graduate degrees and certifications, conducts research, assists start-up entities, and partners with private, public, and non-profit entities to develop 21st century workforce talent and spur innovation.

The Roux Institute is temporarily located in leased space in Portland. A permanent campus for the Roux Institute is essential to fulfill its educational and economic potential. The vision for that home - the Roux Institute Campus - is one that allows for continued growth of the education, research, entrepreneurial, and collaborative programs of the Roux Institute while providing space to support those programs and serve the community. After completing an exhaustive four-year search both on and off the Portland peninsula and its surrounding area, IDEALS acquired land formerly occupied by the B&M Baked Beans facility along the Portland waterfront.

Recognizing the prominent role that major educational and healthcare institutions play in the health and well-being of the community, the City of Portland's Land Use Code allows for the creation of Institutional Overlay Zones (IOZ) to "provide a regulatory mechanism where an improved regulatory structure is needed to facilitate a consistent, predictable, and clear growth management process." Consistent with that purpose, we seek designation of an IOZ for the Roux Institute Campus. We will simultaneously seek to change the underlying zone to B-5 Mixed-Use Business. The IOZ designation process requires two components: an Institutional Development Plan (IDP, this document) and a regulatory framework. The purpose of this IDP is to establish baseline institutional data for existing land uses and services while also communicating planned growth; it is the basis of the proposed regulatory framework, submitted under separate cover. The regulatory framework translates the IDP into a set of clear and specific zoning requirements, which will constitute the text and map amendment to the City's Land Use Code. Unlike other institutions for which the IDP process was established, the Roux Institute is in its early years and has not established a stand-alone campus. The IDP allows Northeastern University and IDEALS to memorialize the long-term strategic plan for the Roux Institute Campus in consultation with the Portland community at the very outset of development.

Creation of a new campus provides the opportunity to establish a people-oriented space right from the start. It will prioritize people over cars by creating a pedestrian-friendly landscape supported by multi-modal programs that provide incentives for alternative transportation options. The campus will improve site resilience and sustainability by replacing much of the existing pavement and rooftops with green space and incorporating sustainable building practices.

We intend to create a dynamic, mixed-use campus that contributes to the East Deering neighborhood without encroaching on it or burdening City resources. By providing ancillary uses on site (office and lab space for institutional partners, housing for students, faculty, and employees, a hotel for visitors to the Institute and its partners, retail, and personal services), the Roux Institute Campus will meet demand created by the Roux Institute at Northeastern University and its collaborating partners.

1. Establishing the Context



Our Roots



IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute Campus will be the first of its kind in the Northeast. It will integrate graduate education in technology and science with groundbreaking research and a wide range of collaborations to spark innovation and economic development. The campus is being designed at a scale that will facilitate learning, collaboration, and research breakthroughs and innovations, encourage start-up businesses, and strengthen existing Maine businesses and institutions. Every component of the campus is directly linked to the mission of the Roux Institute, from the housing – keep students and faculty on campus to foster collaboration and reduce traffic, to the hotel – provide a convening space and accommodation for Institute guests from around the globe so that, together, they can spark new ideas. The iconic waterfront location, minutes from downtown Portland (by bike, bus, boat, car, or on foot) with striking architecture and a vibrant community, will attract talent from around the globe and spread economic advancement throughout Portland and beyond.

At the direction of Northeastern University, IDEALS will oversee the design and construction of a primary academic building housing the Roux Institute and will also seek partnerships from the private sector to construct and operate ancillary uses, such as housing, parking, a hotel, and commercial office and laboratory buildings that support the primary academic uses—all of which would be on a ground lease basis.

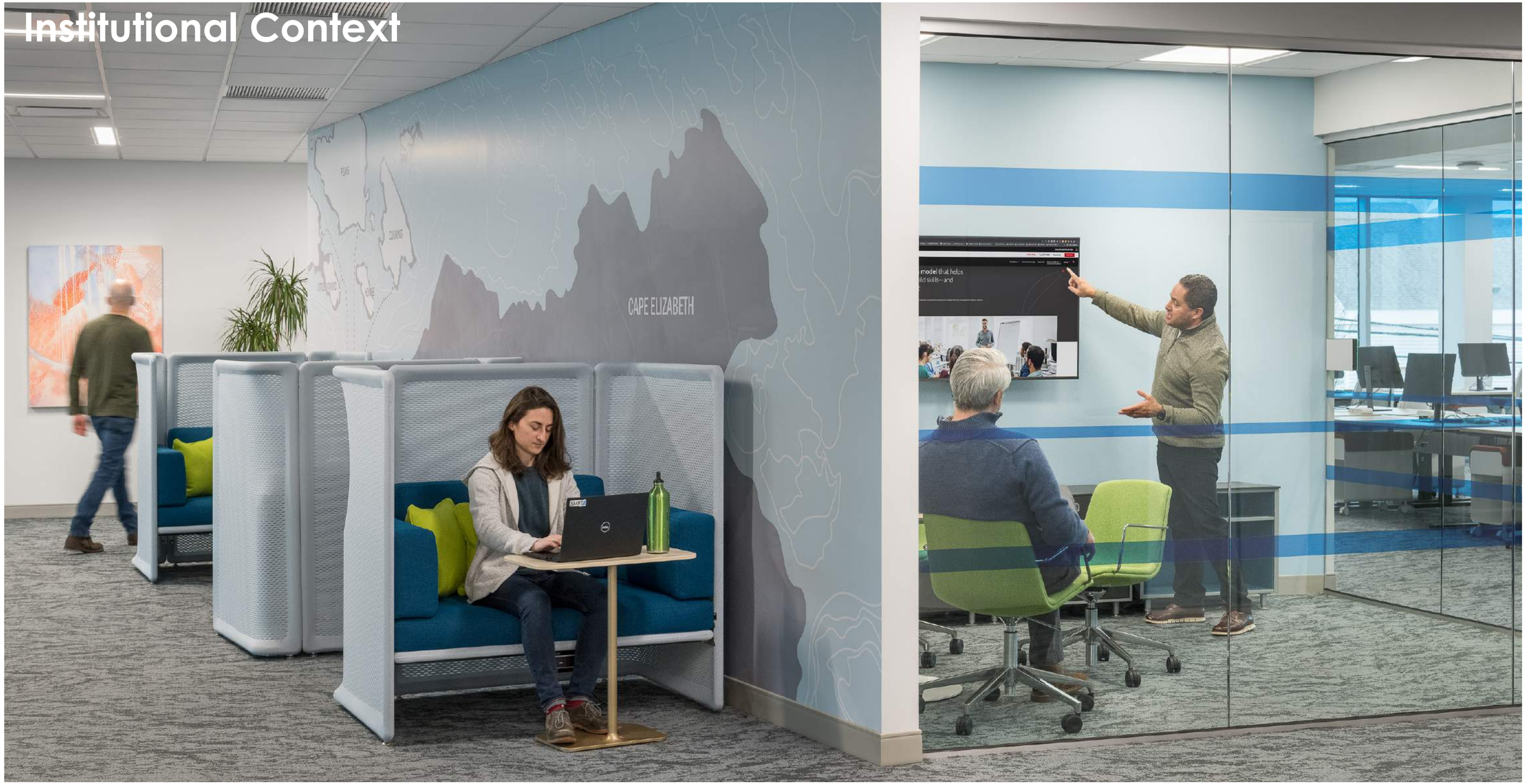
The Roux Institute
Northeastern University

The Roux Institute at Northeastern University was established to develop talent, conduct research, and encourage innovation to support and attract businesses that will thrive in the 21st century economy.

Vision: The State of Maine will be home to a thriving, high-tech economy fueled by people and businesses leading in experiential artificial intelligence, machine learning, big data, life sciences and medicine, engineering, and data visualization. This new economy will attract people and businesses from around the world to the region and provide unprecedented opportunities for all Mainers in a manner that honors and enriches the Maine lifestyle and culture.

Mission: With a vision to enable the creation of a synergistic technology and life science-driven economy and workforce, the Roux Institute designs, curates, and integrates learning, research, and entrepreneurial solutions in collaboration with industry, academic institutions, and community organizations to catalyze talent development and economic impact throughout Maine.

Institutional Context



The Roux Institute at Northeastern University currently has 125 full-time, Maine-based employees, 55 of whom are faculty and post-doctoral staff. The Institute currently has 500 graduate students enrolled. Of Maine's 16 counties, 15 are represented in the student body. The Institute offers 17 graduate programs in computer and data science, analytics, cloud software, cybersecurity, life sciences, and project management.

These educational programs are bolstered by collaboration. The Institute's partnership ranks have grown tenfold as more than 110 Maine organizations now work with and benefit from the institute. Approximately 900 of these partners' employees have taken courses designed by the Roux Institute in concert with their employers. Additionally, 36 startup companies have worked in residence at the Roux Institute, creating 52 new Maine jobs and raising $21M in investment capital to grow their businesses.

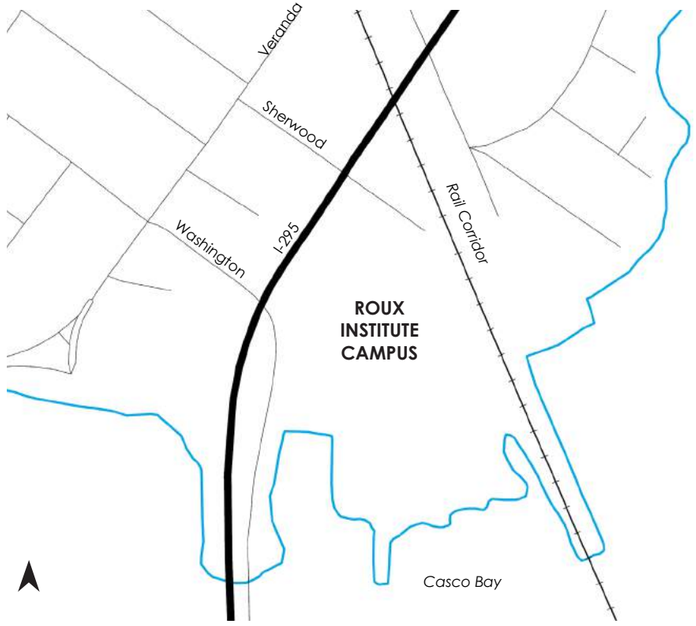
The Roux Institute at Northeastern University currently occupies 44,000 square feet of space leased at 100 Fore Street. This space enabled the Roux Institute to begin providing graduate education services in Portland, but significantly more physical space is needed to meet its Mission & Vision. In the near term (0-5 years), the Roux Institute anticipates enrollment expanding to 1,750 learners; in the medium term (10-20 years), enrollment is anticipated to grow to 2,500; and in the long term (20+ years), enrollment is projected to grow to 5,100, including on-campus, virtual, and hybrid learning settings. The Roux Institute intends to transfer all operations from 100 Fore Street to the new Roux Institute Campus.

Neighborhood Context

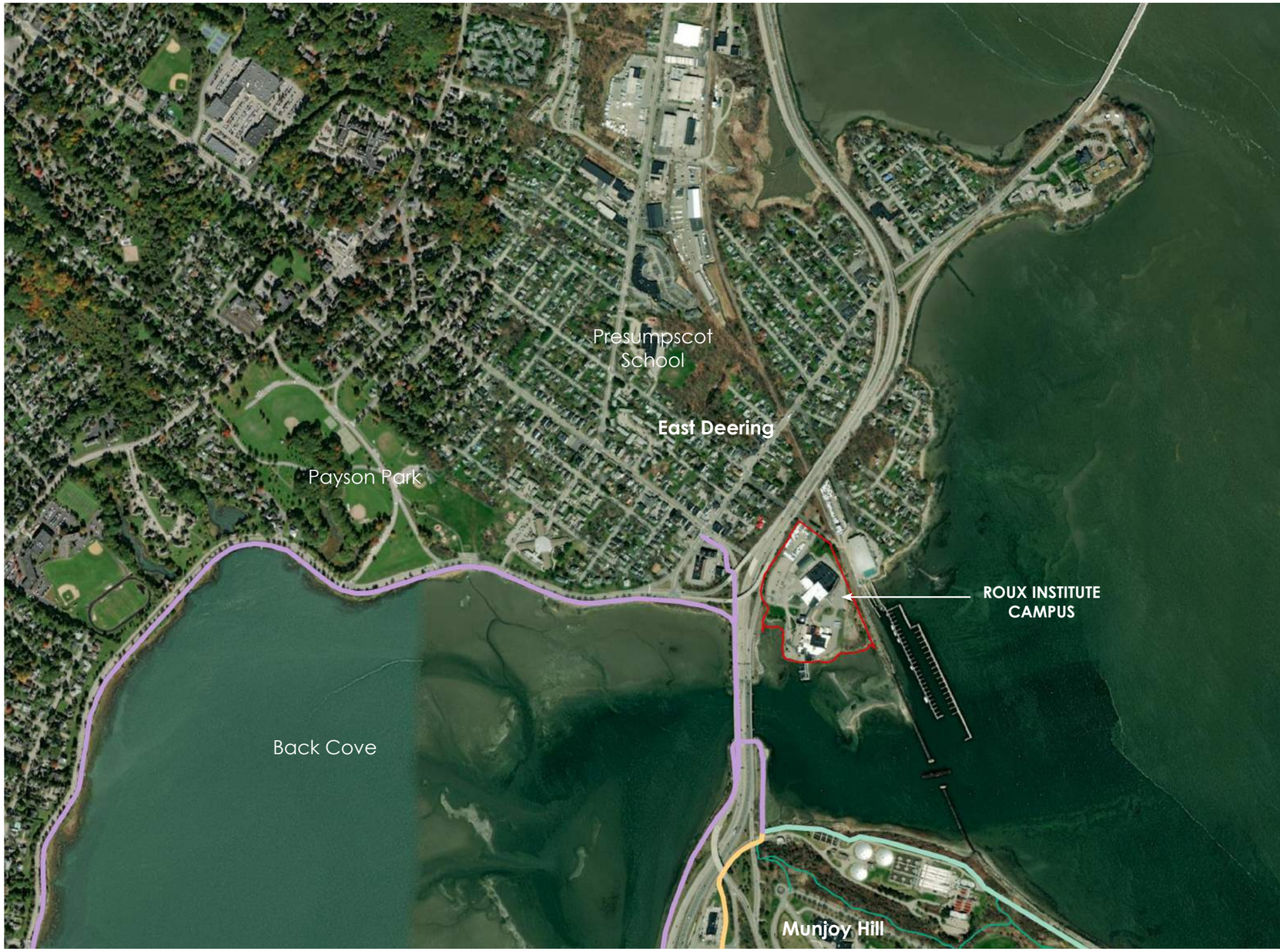
The proposed Roux Institute Campus is located within Portland's East Deering neighborhood, near a residential area of single and multi-family homes (three-story apartment buildings) and a commercial node featuring restaurants, bars, mechanics, and offices. While proximate to these areas, the site is remarkably buffered. I-295 to the west, state-owned vacant parcels to the north, a disused rail corridor and marine business to the east, and Casco Bay to the south collectively surround the property. Access to the site is via Sherwood Street at the intersection with Veranda Street, through a 40-foot-wide highway underpass.

This setting makes for a campus full of potential. Due to its relatively large 13+ acre size and existing buffers, the site lends itself to dense development. Taller buildings with smaller footprints will allow for additional public open space, a mix of landscaped and natural green space, and public waterfront access while helping to reduce impact on Portland's challenged housing stock. The Roux Institute Campus will connect to and enhance the surrounding East Deering neighborhood while simultaneously fostering its own identity.

Future development will acknowledge these advantages and constraints. The site must be planned responsibly to maximize community access while minimizing off-property impacts. The creation of compelling pedestrian, bicycle, water taxi, and public transit connections to the Roux Institute Campus and the waterfront will be particularly crucial. Additional information regarding mode splits, pedestrian, transit and bicycle infrastructure is included in Section 3 of this IDP.



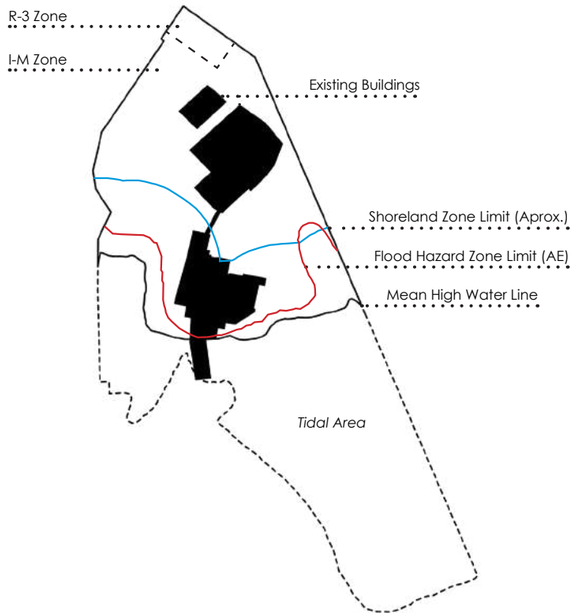
The site's current industrial use does not allow for public open space or amenities or access to considerable shoreline frontage.

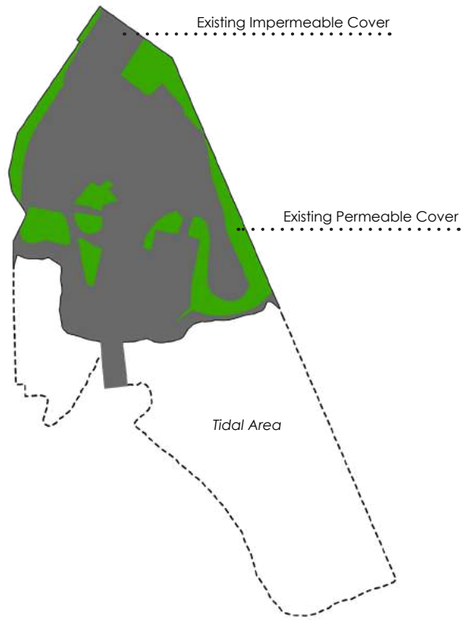


The site is near several of Portland's most popular bike and pedestrian trails, including Back Cove Trail, Bayside Trail, and Eastern Prom Trail. Its redevelopment can facilitate better community access to Portland's waterfront, as public open space enhancement is a key design parameter for the Roux Institute at Northeastern University.

Site Context









Under current conditions, the site is inaccessible to the public.

Zoning
The majority of the site is currently zoned I-M (Moderate-Impact Industrial), with the area immediately adjacent to and across Sherwood Street zoned R-3 (Residential). Parcels adjacent to the site include I-L (Low-Impact Industrial) at the Maine Yacht Center to the east and R-3 (Residential) across the railroad tracks to the north. Parcels west of I-295 are generally zoned R-5 (Residential) and B-2 (Mixed-Use Business).

Existing Buildings & Parking
City property assessment records indicate existing buildings were previously used for manufacturing and warehousing. The site has 272 striped parking spaces and additional unstriped trailer parking areas. The reported general building use and total floor area is provided in the table below.

Size of Existing Buildings (Food & Seafood Processing, Packing, and Distribution Land Use Classification)	Total Floor Area (SF)
Main Production (Bean) Building	63,255
Warehouse, Annex and Fuel Storage Building	49,897
Maintenance (Fish House) Building	16,728
Storage, Labeling and Packing Building	80,180
Finished Product Warehouse Storage Building	9,572

Relationship to Water
The parcel includes approximately 13+ acres above mean high water line (the site) as well as an adjacent 11 acres of submerged lands. The site has 1,000 linear feet of waterfront, within associated Flood Hazard and Shoreland Zones.

The City of Portland designates a shoreland zone within 250 feet of tidal water bodies. Within the shoreland zone, a minimum setback of 25 feet from the normal high-water level is required for structures, roads, and driveways.

Portions of the site are delineated as Special Flood Hazard Areas according to FEMA's Flood Insurance Rate Map (FIRM). The current and effective FIRMs for Cumberland County, based upon FEMA's 1986 publication, indicate portions of the site are within the AE Zone, representing 1% annual chance of flooding. Base flood elevations range from 9 to 11 feet.

Impervious Areas
The majority of the site is developed land, with limited areas of natural vegetation. Approximately 10 acres of land above the mean high-water line are impervious (paved areas, building roofs, etc.). The remaining 2.5 acres of permeable area include lawn and approximately half an acre of vegetated, early successional non-lawn area adjacent to the rail corridor abutting the site to the east.

Not only is the site largely covered in pavement and building structures, it is also inaccessible to the public. Fencing prevents access to the waterfront and the interior of the site. This security was necessary for industrial use. However, new development can "soften" site edges and provide improved access to the waterfront.

Geotechnical & Environmental Investigations
IDEALS conducted preliminary soil investigations of the site. The results of these investigations inform the design of structures. Beneath a surficial layer of pavement or topsoil, the test borings encountered a soil profile generally consisting of fill and uncontrolled fill, overlying glaciomarine clays or bay mud, overlying marine sands, overlying glacial till, and overlying refusal surfaces (probable bedrock).

IDEALS also conducted environmental site assessments, including review of available documentation (such as current permits, record drawings, historic photos, and maps) and site investigations involving soil and groundwater sampling, as well as survey for and sampling of building materials. The environmental site assessments indicated no evidence of oil or hazardous material releases that would require remediation. Environmental conditions including fill soil that may be encountered during earthwork or generated as excess material will be properly managed within the context of the construction project. IDEALS identified hazardous building materials including PCB-contaminated caulking and asbestos containing materials (ACM) consistent with what would reasonably be anticipated given building ages, which will be remediated during the demolition and development process.

Utilities

B&M's facilities required intensive utility and infrastructure development sized appropriately for industrial use. Fortunately, this historic use translates well to re-use in a denser development, as proposed. Based upon existing utility infrastructure age and historic and projected demand, we anticipate the need for targeted investment and renewal; however, there are no foreseen barriers to servicing the campus development.

Water
Domestic and fire protection services are provided by Portland Water District's (PWD) infrastructure at Sherwood Street. The public water mains nearest to the site are 8-inch and 12-inch, consisting of ductile iron and cast iron. The site is, and will continue to be, serviced by a combined domestic/fire protection loop.

Wastewater
Wastewater will continue to discharge to a gravity public sewer along the I-295 corridor. Downstream of the service connection, public sewer transitions from 15-inch to 48-inch reinforced concrete gravity line conveying combined storm and sanitary sewer from the East Deering neighborhood west of I-295. The 48-inch combined sewer transitions to a 3-barrel (two 18-inch and one 30-inch) siphon along Tukey's bridge and discharges through a pumping station prior to treatment at the Portland Water District's (PWD) East End Wastewater Treatment Facility.

Wastewater is conveyed across a portion of the site near Sherwood Street and I-295 from properties to the northeast (Lennox, Berwick, and Kensington Streets) via an easement benefiting PWD. This easement will remain in place unless otherwise approved by PWD.

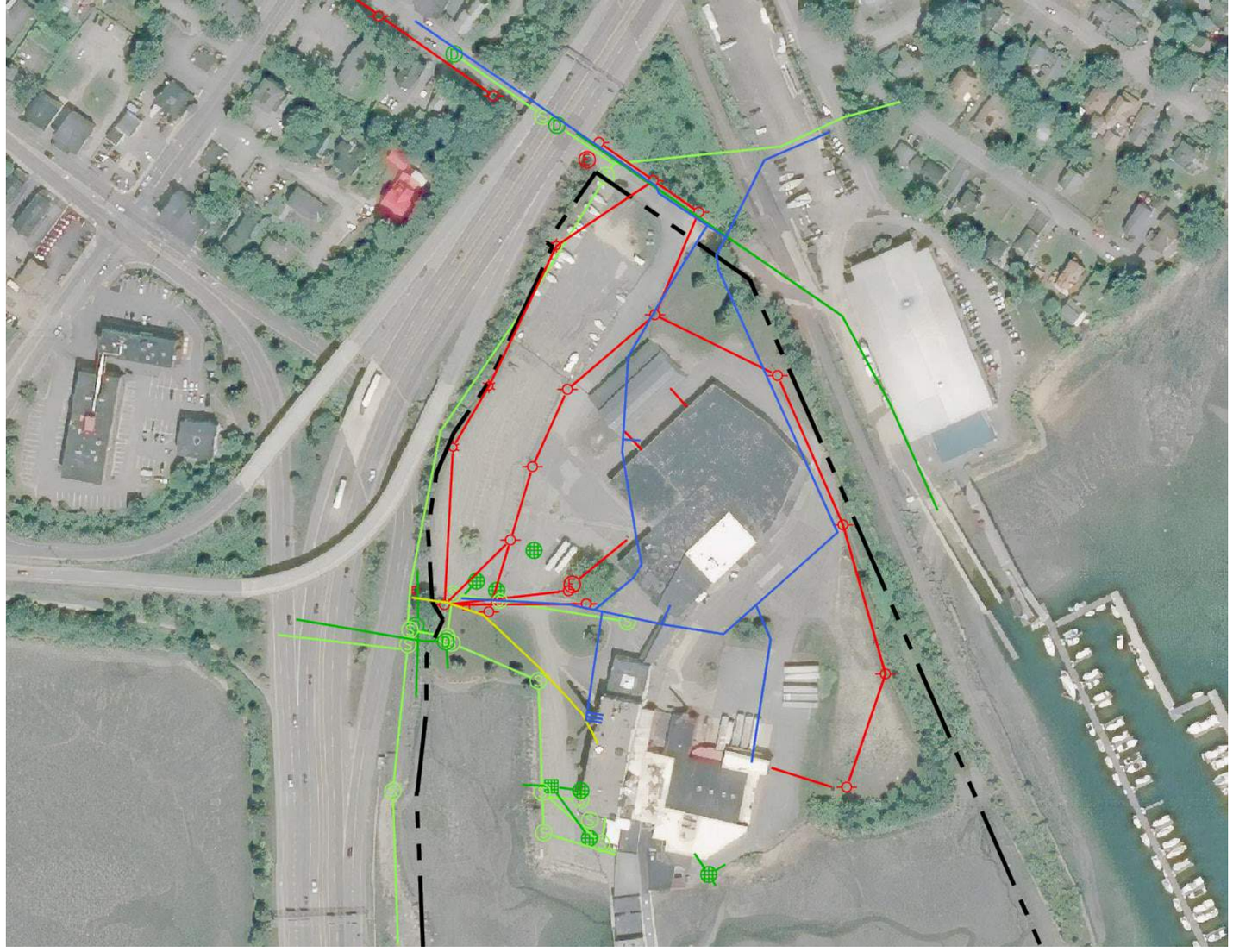
Stormwater
Stormwater runoff from the site is managed through a combination of catch basins, buried infrastructure, and overland flow, discharging untreated runoff via outfalls to the bay. The Roux Institute Campus redevelopment allows for reduction of site impervious area and incorporation of low-impact development techniques; these will improve the water quality and reduce the quantity of runoff prior to its discharge into Casco Bay.

In addition to private stormwater outfalls, a public stormwater outfall is located at the site's southwest corner. This outfall will continue to convey drainage from the neighborhood west of I-295 through an easement located near the southwest corner of the site.

Electricity
Central Maine Power provides electric power via an overhead 12.47kV 3-phase distribution system. The facility has two main secondary metered services. New utility corridors will include electrical infrastructure improvements. Energy-saving technologies and renewable energy sources will be incorporated into building and campus design to reduce electricity consumption and advance sustainability goals. Additional information regarding Energy Conservation Measures is included in Section 3 of this IDP.

Telephone & Data
Fiber-optic internet is located along Veranda Street and Sherwood Street.

Natural Gas
Unitil provides natural gas service to the site via a 6-inch diameter service. Natural gas infrastructure in the East Deering neighborhood is provided at intermediate pressure.



Utility	B&M Historic Demand Reference	Roux Institute Campus Projected Demand (Near-Term)	Roux Institute Campus Projected Demand (Long-Term)
Water	153,000 gallons per day	87,000 gallons per day	215,000 gallons per day
Wastewater	90,000 gallons per day	79,000 gallons per day	195,000 gallons per day
Electricity	0.5 megawatts	11 megawatts	28 megawatts
Telephone & Data	Unknown	Multiple service providers resulting in redundant services to the campus.	Potential service hub for cloud providers such as AWS, Microsoft, etc.
Natural Gas	72,000 average monthly therm	183,000 average monthly therm	408,000 average monthly therm

Coastal & Natural Resources

Immediately adjacent to this highly developed site are natural resource areas including: an estuarine inter-tidal emergent marsh located east of the site near the rail corridor; coastal wetlands for all areas below highest annual tide; tidal waterfowl and wading bird habitat, and blue mussel habitat. Portions of the site are delineated as Special Flood Hazard Areas according to FEMA's Flood Insurance Rate Map (FIRM).

The majority of the on-site work will occur adjacent to, but outside of, coastal wetlands and estuarine inter-tidal emergent marsh areas. Erosion and sediment control measures will be required during construction to protect adjacent natural resources. On-site work in coastal wetlands will be required for pier removal and replacement, bank stabilization and stormwater outfall installation. The footprint of the proposed pier will not extend beyond the existing pier. Likewise, bank stabilization is not intended to extend beyond the toe of the existing riprap slope. Off-site improvements for the bike/pedestrian trail connection will likely require fill in coastal wetlands and will be coordinated through Maine DOT and permitted through Maine DEP and ACOE. Work in coastal wetlands will be minimized to the maximum extent and completed in accordance with Maine DEP wetland permitting requirements (NRPA).

Topography of the site slopes downward from the north to the south, toward the water. The highest elevations are near Sherwood Street, at elevation 28 +/-. The lowest grades are near the loading dock at the B&M Bean Building, at elevation 8.5 +/-. These low areas are only 1-foot above Highest Astronomical Tide.

In recognition of existing vulnerabilities and future sea level rise, resiliency will be key to the Roux Institute Campus. The redevelopment will raise site grades and incorporate infrastructure improvements to create a flood resilient landscape. It will also rehabilitate this brownfield site, enhance natural resource areas, and reduce the impacts of current impervious, industrial conditions by creating habitats that foster ecological diversity and productivity at the water's edge.



The coastal wetland includes rockweed anchored to rocks in tidal mudflat.



Stormwater outfalls drain into the wetland where a scour channel cuts across the mudflat.



The tidal flat is home to tidal waterfowl and wading bird habitat.



Blue mussels are abundant under the pier, where soft-shell clams also grow.

The tidal mudflat portion of the site stretches far into the inlet, resulting in dramatic daily change.



Outfall pipes drain to wetlands in the ravine.



The ravine's slope is vegetated with native sumac and invasive Japanese knotweed.



The estuarine system extends up a ravine along the site's eastern boundary.

Historic Resources

The campus was occupied by residences and a lobster cannery prior to 1913, when Burnham & Morrill (B&M) relocated its operations to the site from Franklin Street. The address of the B&M facility at that time was Water Street, which granted access from the west prior to construction of I-295. By 1913, the five-story B&M Bean Building stood on site, as well as the cod-fish building located on the pier. In the 1920s, B&M began experimenting with brick-oven baked beans in an attempt to offset declines in other product lines (canned fish, meat, and vegetables), and in the 1920s and 1930s began selling brick-oven baked beans in cans. In 1965, B&M's address was designated as 1 Bean Pot Circle. With an appreciation for the B&M history at the site, IDEALS, as the landowner, nominated the B&M Bean Building for designation as a City Historic Landmark. Following a positive recommendation from the City's Historic Preservation Board, the Council approved the landmark designation of the Bean Building (Cannery) and area surrounding the building including the pier. A more extensive description of site history and the preservation of the Bean Building may be found in the Landmark Designation Report for the Burnham & Morrill Company Cannery by Heritage Consulting and Essex Preservation Consulting, dated June 2022.

Bean Building

The Bean Building (Cannery) was the cornerstone and flagship of the B&M food manufacturing facility. Constructed circa 1912 by Aberthaw Construction Co., Boston, MA, the building housed the baked bean manufacturing processes and the plant management offices. It is a robust five-story, reinforced-concrete building with a high live-load floor capacity. The concrete frame is exposed on the exterior of the building with brick and masonry infill walls and glass windows. The building is structurally sound with only minor structural modifications required. The main entry is on the 2nd floor level, which is at elevation 21.5', well above today's 100-year flood zone elevation. This, along with the rugged structure and historic community value, make the building an ideal candidate for reuse. A permanent exhibit of artifacts and photographs is planned for the site.

A Changing Shoreline

Buildings are not the only changes that occurred onsite over the last 100-plus years. As indicated in the diagram at right, the shoreline has significantly shifted in reach and shape across decades. Some of the shifts were caused by intentional human manipulation; others appear to have been natural changes where mud flats (with limited salt marshes) extended onto the site.

A New Perspective

The historic relationship of the East Deering neighborhood and B&M site was one of stark contrast between residential and industrial uses. Sudden transitions between residential and manufacturing zones, and from manufacturing to the sea, heightened the disparity. Construction of the Grand Trunk railroad line in the 1860s, and then of Interstate 295 in the 1960s, further isolated the campus' industrial identity. The Roux Institute Campus presents an opportunity for new connections, public access, and thoughtful transitions from the surrounding neighborhoods into a dynamic environment built around the B&M Bean Building.

Changes to shoreline from 1930 to 2022





The Bean Building as it stands today









Views of the B&M campus and related infrastructure earlier in Portland's development (all images from Maine Memory Network)

Municipal Plan Context

The former B&M site is ripe for renewed use and redevelopment. The proposed campus includes adaptive re-use of the B&M Bean Building, facilitates public interaction with the waterfront, creates a new walkable core of diverse uses, and bolsters economic opportunity in East Deering, the City of Portland, and beyond.

Portland's Plan 2030 focuses primarily on eight aspects of Portland's identity and performance: environment, waterfront, transportation, housing, recreation and open spaces, facilities, historic resources, and economy. While the facilities section generally focuses on municipal operations and the waterfront section is focused on the working western, central, and eastern waterfront areas of the peninsula, the other six sections are directly relevant to the proposed plan. Excerpts from the plan relevant to the Roux Institute Campus are provided here.



Portland's Plan 2030, adopted in 2017, is the City's comprehensive plan.

Environment
"Adopt sustainable land use and transportation policies that support connectivity, walkable neighborhoods, and multi-modal transportation."

"Plan for the mitigation and redevelopment of brownfields to support productive uses and a healthier environment for residents."

Transportation
"Promote multi-modal accessibility, enabling residents and visitors of all ages and abilities to participate fully in the social and economic life of the community."

Housing
"Encourage additional contextually appropriate housing density in and proximate to neighborhood centers..."

"Identify priority growth areas."

"Allow for a range of housing models in City codes, whether small units, co-housing, or others that may suit changing needs and demographics."

Recreation & Open Space
"Encourage physical and visual access to Portland's waterfront – Casco Bay, Back Cove, and the Stroudwater, Presumpscot, and Fore Rivers – as a "blueway" network and an extension of public space for local and regional recreation and transportation needs."

Historic Resources
"Stabilize and enhance historic areas of the city by ensuring quality investment in existing structures and compatible infill development."

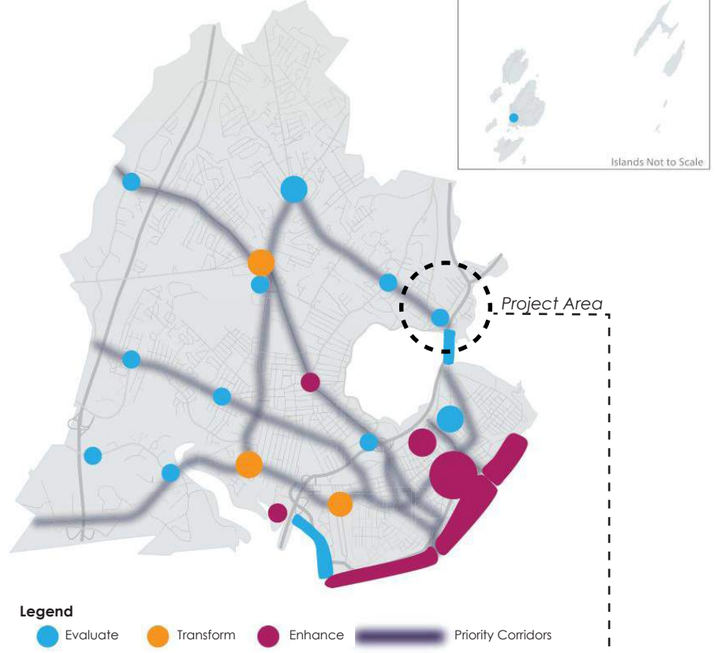
"Ensure an appropriate balance of continuity and change as Portland grows and evolves."

Economy
"Support job creation and business growth through public initiatives and private, institutional, and regional partnerships."

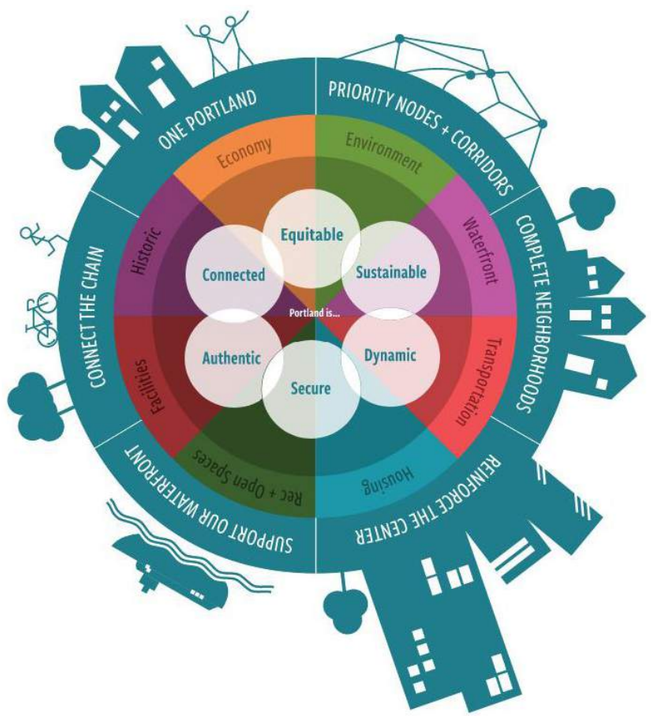
"Develop programs that support industries with high-growth/high-value potential such as life sciences, food production, information technology, and marine-related industries."

"Modify ordinances and make strategic investments to better promote business development and job creation in priority areas."

"Ensure that the growth of Portland's educational, medical, and cultural institutions is integrated into Portland's urban fabric through the use of high-quality design, management of impacts, community partnerships, and innovative planning."



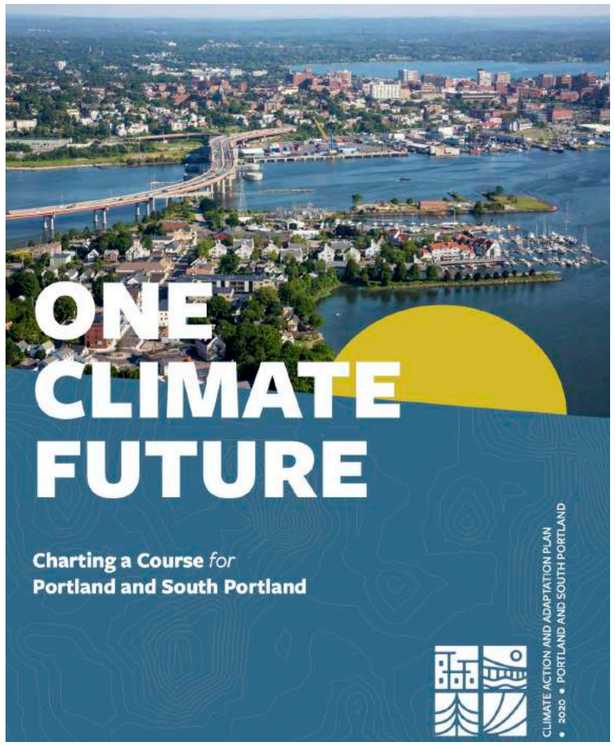
Nodes & Priority Corridors
Portland's Plan 2030 emphasizes potential evolutions in land use. Washington Avenue is identified as a priority corridor, which can provide "additional mixed-use, higher density growth to take advantage of the transit benefits and services that well-designed, diverse corridors can offer." The Washington Avenue/Veranda Street/Tukey's Bridge area is called out for evaluation: such areas "should be assessed for their ability to address neighborhood needs and serve as centers for complete neighborhoods."



Municipal Plan Context (continued)

One Climate Future
The Roux Institute Campus is an opportunity to showcase sustainable buildings, fostering a resilient community across East Deering and the region of Portland. Its waterfront location demands proactive planning for extreme weather and storm surge events although it is not located within the FEMA Velocity Zone. Its location on a developed, industrial piece of land with a single point of access/egress, means that campus development must take advantage of existing infrastructure within the East Deering neighborhood, facilitating trips by active alternative, multi-modal, and mass-transit options.

In 2020, the Cities of Portland and South Portland both adopted a collaborative sustainability and resilience plan: One Climate Future. The plan addresses many challenges, priorities, and strategies for responsible climate stewardship and mitigation of climate-related public health threats. It includes great specificity and is summarized by six general action items. The following are One Climate Future's "six big moves" and discussion of their relevance to the Roux Institute Campus.



Portland and South Portland both adopted the One Climate Future plan in 2020.

1. Build better buildings.
A new campus of higher education, research, and development deserves thoughtful design; it represents an opportunity to implement best practices for energy efficiency, healthy communities, human comfort, and interaction with the surrounding environment. Aside from the iconic B&M Bean Building, existing on-site buildings are not suitable for adaptive reuse. Much of the site will be redeveloped with new construction. In order to attract and respect climate-conscious students and corporate partners, these new buildings will be created with sustainability and resilience top-of-mind. As described in the design guidelines within this plan, Northeastern University is committed to high-performance buildings while setting a standard for design through signature architecture.

2. Connect people to places, to opportunity.
Graduate education, research, and collaboration exist in order to provide opportunity. At their best, they do this in a collaborative and social setting. The Roux Institute at Northeastern University will achieve both. The campus presents this opportunity to the nearby community, where on-site resources become local community resources, as shown on the 15-minute walkshed map included on page 27. Finally, by establishing itself within and supporting existing public transportation networks, the Roux Institute Campus will be accessible to all Portlanders as well as those in the broader greater Portland region, and beyond.

3. Power everything* with clean renewable electricity.
Electrification allows for appliances, buildings, and systems to support the shift to renewable energy in our power grid, without cementing a need for fossil fuels moving forward. This entails moving away from carbon intensive heating and energy sources, as more energy is produced by clean energy renewable sources like solar and wind. IDEALS and Northeastern University will evaluate power purchase agreements for renewable energy sourcing, incorporate passive solar and photovoltaics, consider the use of geothermal and sea water exchange heating and cooling for buildings, and encourage EV usage through on-site charging capacity.

4. Grow a circular economy.
Fostering technology knowledge and life-science research in Portland will diversify its economy and help prepare for the future. Yet workers in these fields will still rely on other, existing aspects of the regional economy. Food producers and preparers, makers and artists, essential workers, and support staff, all make the City of Portland a compelling and delightful place to live. On a small scale, the Roux Institute Campus will facilitate a circular economy through mixed-use, neighborhood-scaled urbanism that creates a place to live, learn, work, and play. On a broader scale, it will strengthen the region through education, research, and collaboration with corporate and community partners; fueling progress through innovation.

5. Nourish ecosystems, which nourish us.
The Roux Institute Campus' tidal waterfront location will allow it to meaningfully contribute to ecological health by designing with nature in mind. While B&M has been a steward of their property, the campus development will result in a significant reduction in impervious surfaces and yield a healthier site that protects and enhances the local ecosystem, which has been diminished through the historically industrial development of the property.

6. Build collaborative capacity to create this future.
The Roux Institute at Northeastern University will develop technology and life science talent and position Mainers, new Mainers, and international students for financially stable and personally rewarding careers. The campus will connect budding talent with existing corporate and community partners, and thus create opportunity for fresh thinking and an innovative future. The Roux Institute Campus will catalyze tech talent and innovation in Portland.

Other Studies
A number of other studies have been conducted that are centered on or relevant to the project area, as outlined below:

I-295 Corridor Update – Scarborough to Brunswick. The I-295 Corridor Update included a study of 17 interchanges that provided access between I-295 and major highways/arterials extending from Scarborough to Brunswick. Improvements for this project were recommended into near-term, medium-term, and long-term. Despite acknowledgement of the heavy volumes and weave section in the vicinity of the Roux Institute project site, no specific improvements were included at the Exit 8 interchange. The long-term recommendations include future study of travel demands, capacity, and opportunities in the urban core of Portland.

Veranda Plan. The Veranda Plan started with an investigation of the rehabilitation and replacement alternatives for I-295 over Veranda Street and US Route 1 bridge. Ultimately, the bridge was replaced and the project construction continues. The project will realign Veranda Street to improve safety and operations by allowing all movements between Veranda Street and points south on I-295 via signalized intersections. The project will also improve bicycle and pedestrian travel along Veranda Street by upgrading it to a complete street.

Martin's Point Shared Use Path Study. The Martin's Point Shared Use Path Study recommended several projects to improve the connection from the Back Cove Trail to Martin's Point including crossing the Roux Institute Campus site. Unfortunately, the current design of the I-295/Veranda Street interchange did not include right of way for a shared use path connection as was envisioned in the Martin's Point Shared Use Path Study. However, the project will be providing a shared use path connection along the waterfront of the site and is interested in future connections that may be developed to reach Martin's Point and beyond.

2. Imagining the Future

Artist Interpretation

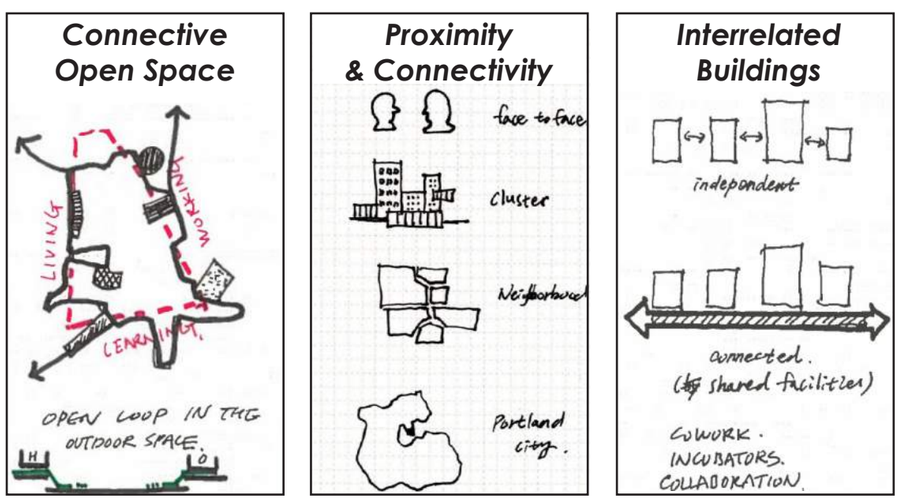
Campus Programming

The Roux Institute Campus will encompass mixed uses regularly associated with graduate education and research: classrooms and laboratories, faculty offices, an incubator, dining areas, convening spaces, fitness centers, neighborhood retail facilities, and housing. As an essential part of the Roux Institute's graduate education programming, the campus will support collaboration with private industry, other institutions, and community organizations. This collaboration is essential to the Roux Institute at Northeastern University's approach to learning through integrated research, student-work opportunities, and entrepreneurial endeavors. Light manufacturing, research and design facilities, and other industry-oriented spaces will allow start-up businesses and established companies to contribute employment opportunities, foot traffic, and dynamism to the area. Hotel rooms will cater to prospective students, start-ups, visiting lecturers, specialists, business partner guests, and families of students. Most importantly, the hotel will provide the opportunity for unplanned and informal interactions that are so essential to new ideas and innovation.

A range of rental housing options will foster community and provide on-site opportunities for students, faculty, staff, and their families. These units will ease some of the housing and traffic pressure that might otherwise result from new residents attracted to Portland by the Institute. Housing units not occupied by residents affiliated with the Roux Institute may be made available to the public to further assist in easing the housing pressure.

Public open space, including waterfront access and recreational uses, will foster a sense of community. Restaurant, neighborhood grocery, and/or other limited retail options will provide another means for welcoming the neighborhood while reducing dependence on automobiles. The Roux Institute will incentivize transportation options including buses, bikes, pedestrian access, car pooling, and water shuttle or taxi connections.

The long-term vision for the site is to maximize green space and public shoreline access. That vision includes a potential bike and pedestrian path under Tukey's Bridge and bicycle and pedestrian connections at Sherwood Street, Veranda Street, and beyond. These would link to the Back Cove, Eastern Promenade, Bayside, Martin's Point Bridge, and future trail systems.



Concept sketches by Tsoi Kobus Design display the intent to build dynamic, community-rooted space.



Phasing

Before shifts in transportation and distribution networks, the site offered a competitive location for food processing and manufacturing in the 20th century. Now, the site's many compelling attributes enable the pursuit of science, education, and entrepreneurship for the 21st century and beyond. The Roux Institute Campus is envisioned as a hub for collaboration, innovation, and inspiration that contributes to the education of Roux Institute students, stimulates Maine's economy, and enriches the lives of Portlanders through the resources it offers.

While the proposed vision represents an ambitious undertaking, the entire endeavor is based on simple tenets of placemaking: provide a mix of uses, allow for creativity and entrepreneurship, and encourage recreation. This vision takes time to grow and develop. Understanding that institutional uses have phased planning horizons, this IDP considers near, medium, and long-term growth plans. The resulting phasing of the development is represented in the figure to the right.

Fortunately, the nature of the Roux Institute at Northeastern University lends itself well to phasing strategies. Corporate partnerships are a core part of the institute's educational strategy, meaning that office and laboratory partners will sit comfortably within the primary academic building during its first years, before extending outward in the longer term. As the site develops, more and more students, faculty, and employees will be drawn to live and work on site. Like any new campus, as the population of students, residents, and employees grow, so will demand for limited retail and restaurants. In addition, the expanding program needs of the campus may be supported by such uses as on site daycare, bike commuter facilities, maintenance facilities, and security offices.

The proposed vision offers a realistic framework for flexible growth. As the Roux Institute Campus evolves, and the world changes, new opportunities and needs may present themselves. Neighborhood feedback will also inform future growth. A core presence of educational, research, incubator, and partner space will provide the Roux Institute Campus with a strong start, around which additional community needs and services can thrive over time.

Anticipated Phasing (Cumulative Totals)

Building Program	Near-Term (0-5 Years)	Medium-Term (10 Years)	Long-Term (20 Years +)
Academic & Research	1,750 Students 222,000 sf.	2,500 Students 372,000 sf.	5,100 Students 372,000 sf.
Office/Lab Partners	Included in the Roux Institute	Included in the Roux Institute	200,000 sf.
Business Incubation	40,000 - 50,000 sf.	40,000 - 50,000 sf.	40,000 - 50,000 sf.
Residential	175 - 250 Units 150,000 - 200,000 sf.	350 - 425 Units 300,000 - 350,000 sf.	525 - 650 Units 450,000 - 550,000 sf.
Hotel	90,000 sf.	90,000 sf.	90,000 sf.
Retail (Restaurant, Cafe, Market, Kayak, etc.)	10,000 sf.	15,000 sf.	25,000 sf.
Totals	**512,000 - 572,000 sf.**	**817,000 - 877,000 sf.**	**1.177 - 1.287 million sf.**

Potential Phasing



At the completion of each phase, the Roux Institute Campus will be a model of comprehensive design. At least three acres of permanent, significant public space will be established early in the development of the campus to ensure public benefit. Interim features such as surface parking lots or construction staging areas will be designed to not detract from the pedestrian experience through planting, lighting, wayfinding, graphics, artwork, or fencing. Other interim areas of the site will be appropriately landscaped or accommodate gathering on lawns and hardscape spaces. Interim features such as parking lots may also be programmed with markets, festivals, or cultural events. Lighting and layout of these spaces will be considered to facilitate flexibility so that they can accommodate a variety of campus events.

Development Plan

Near-Term



Mid-Term



Long-Term



- Pedestrian
- Bike/Pedestrian
- Water Taxi
- Potential Shared Use Path Connection
- Vehicular
- Primary Entrance
- Potential Off-Ramp

Development Plans are conceptual and intended to illustrate how design guidelines and principals could potentially be implemented at this site.

Design Principles

The Roux Institute Campus will be a paradigm for 21st-century education with urban, sustainable, and resilient design. All elements of the campus will be conceived holistically to support the educational program of the Roux Institute. Near and long-term planning supports a vibrant campus environment with views and connections to the waterfront, a variety of public spaces, and site access via bike paths, walkways, and the public pier. Key principles of the design approach include:

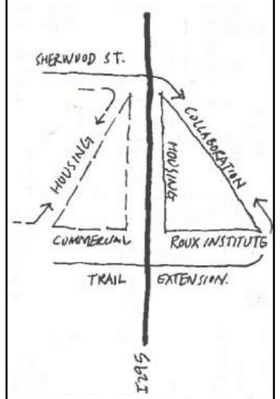
Connected to the Waterfront, Portland, & the World
- Engage the waterfront
- Promote visual and physical connectivity
- Encourage connections to the waterfront through diverse spaces
- Create a holistically built environment
- Restore, repurpose, and revitalize the Bean Building
- Create an iconic architectural expression

Places to Gather
- Welcome the surrounding neighborhood
- Foster community with shared spaces and interaction
- Build a strong association with the City of Portland
- Develop purpose-driven spaces that yield regular connections
- Provide public open space
- Provide spaces where neighbors can work and read while enjoying the campus's environment

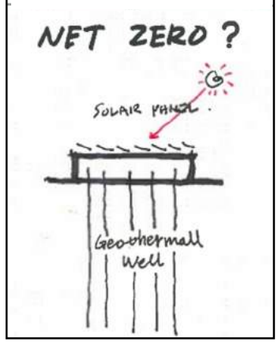
A Sustainable & Resilient Campus
- Employ sustainability benchmarking for environmental stewardship
- Incorporate state-of-the-art features, systems, and techniques
- Minimize energy consumption campus-wide
- Build for resilience; prepare for extreme weather and climate change
- Maximize green space through appropriate building height

Integrated Landscape
- Enhance access through TDM and multi-modal support
- Contribute to Portland's open space network

Welcoming the Neighborhood



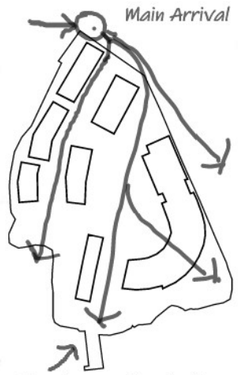
Sustainable & Resilient



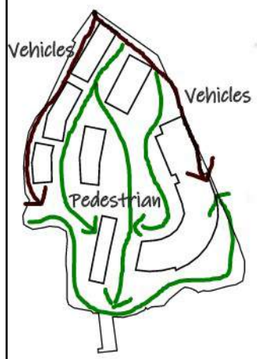
Iconic Architectural Expression



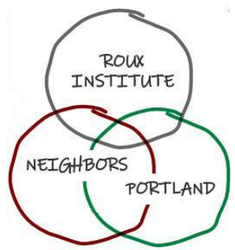
Waterfront Connections



Pedestrian Campus



Foster Community



Above: Concept sketches by Cambridge Seven and Tsoi Kobus Design

Artist Interpretation



Design Guidelines

Waterfront
- The waterfront will be publicly accessible to provide a variety of open spaces throughout all phases of development that foster social interaction.
- New principal buildings on the waterfront shall include a publicly accessible entrance to interior public space (if provided) from the waterfront side and upland side of the building along an anticipated desire line. Said interior public space (if provided) may be closed to the public during special events, outside normal operation hours, and when necessary for security or public safety purposes.

Cohesive campus
- The overall composition and experience of the campus will be considered for cohesive identity from approaches along I-295 and views from the East Deering neighborhood.

Historic preservation
- Buildings, site development, circulation, and open space will respect the B&M Cannery Building, a designated historic landmark.

Connectivity
- Prioritize the bicycle and pedestrian circulation network on campus while providing connectivity for auto, public transit, service, and emergency vehicles at each development phase.
- Surface parking lots shall be located to the maximum extent practicable toward the rear or side of a building not occupied by a principal entry to a building facing a street, public right-of-way, major pedestrian access routes, open spaces, and/or the waterfront.

Open space
- Open space will be publicly accessible to provide multiple functions for recreation, social gathering and buffers that integrate within the overall composition and experience of the campus at each development phase.

Sustainable practice
- Buildings and site development will incorporate sustainable technologies in building design, orientation, energy production and sensitivity to natural resources at each development phase.

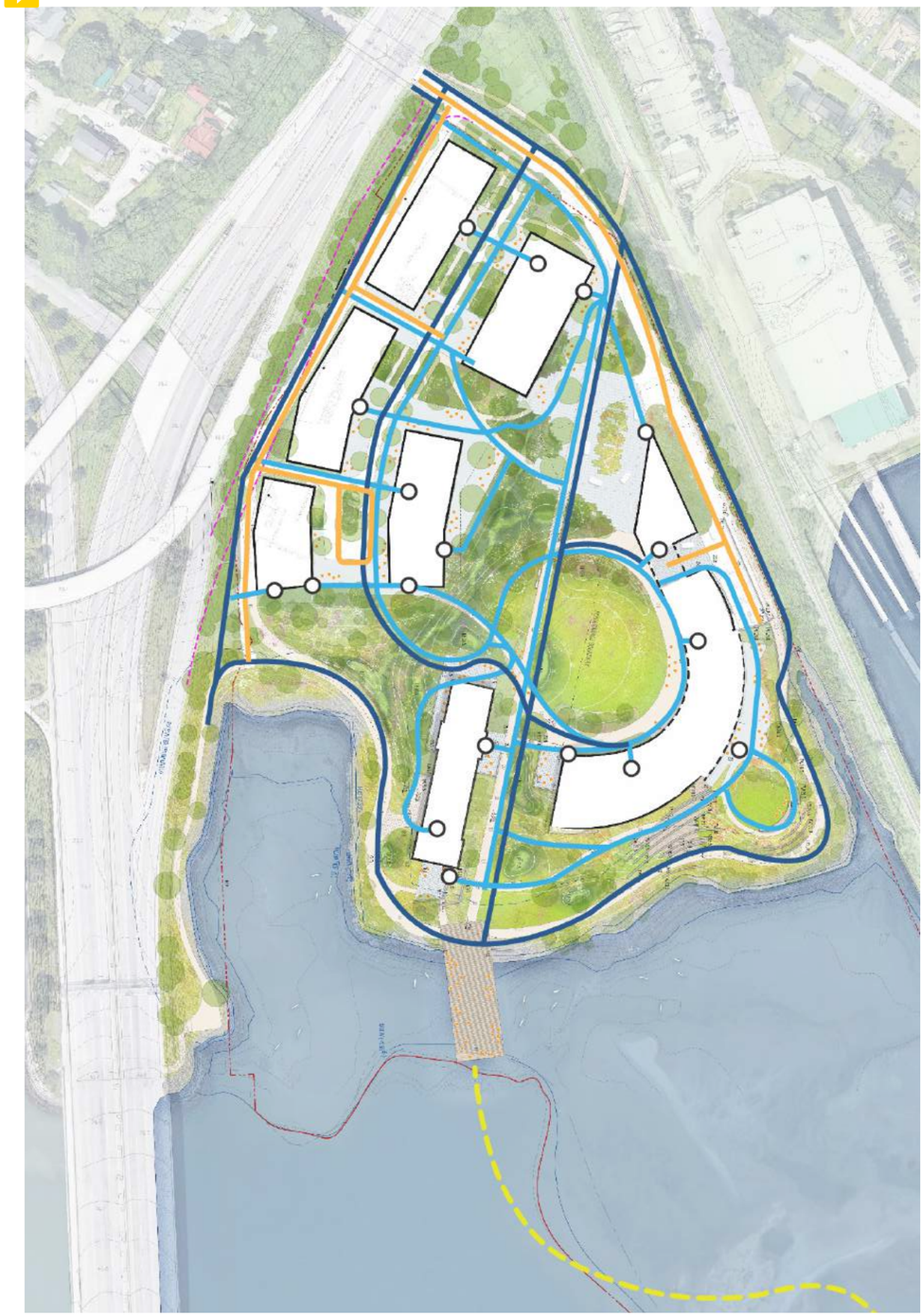
Resilience
- Buildings and site development will incorporate resilience strategies to account for flooding, severe weather events and integration of publicly accessible spaces at each development phase.

Building design
- Building facade materials will be of high quality, durable to the marine climate and contribute to an attractive public realm. The first 35 feet of building height shall complement the pedestrian character in materiality, transparency, and detailing.
- Rooftop appurtenances will be incorporated, screened, and set back from roof edges to reduce visual impact from the surrounding neighborhood.

Building entrances
- Building entrances will include prominent facades and be oriented toward, located adjacent to, or accessible from rights-of-way, major pedestrian access routes, or open spaces.

Mitigation of impacts
- Buildings and site development will endeavor to minimize potential negative impacts related to shadows, wind, noise, heat, glare, lighting, contaminants, and the environment.

Visualizing the Guidelines: Potential Long-Term Layout & Circulation



Connected to the Waterfront, Portland, & the World

Artist Interpretation



Development of a new landmark campus, with focus toward the community and the waterfront, will enhance the East Deering neighborhood. New, forward-looking campus buildings adjacent to the restored and repurposed Bean Building will update and respect its legacy. The waterfront will integrate with the entire campus through ecologically focused design. Water views from the ground and buildings will emphasize the site's uniqueness and become an integral part of the campus identity. Pedestrian/bicycle trail connections and water shuttle or taxi service will let the waterfront serve as an entrance to the campus.

Places to Gather

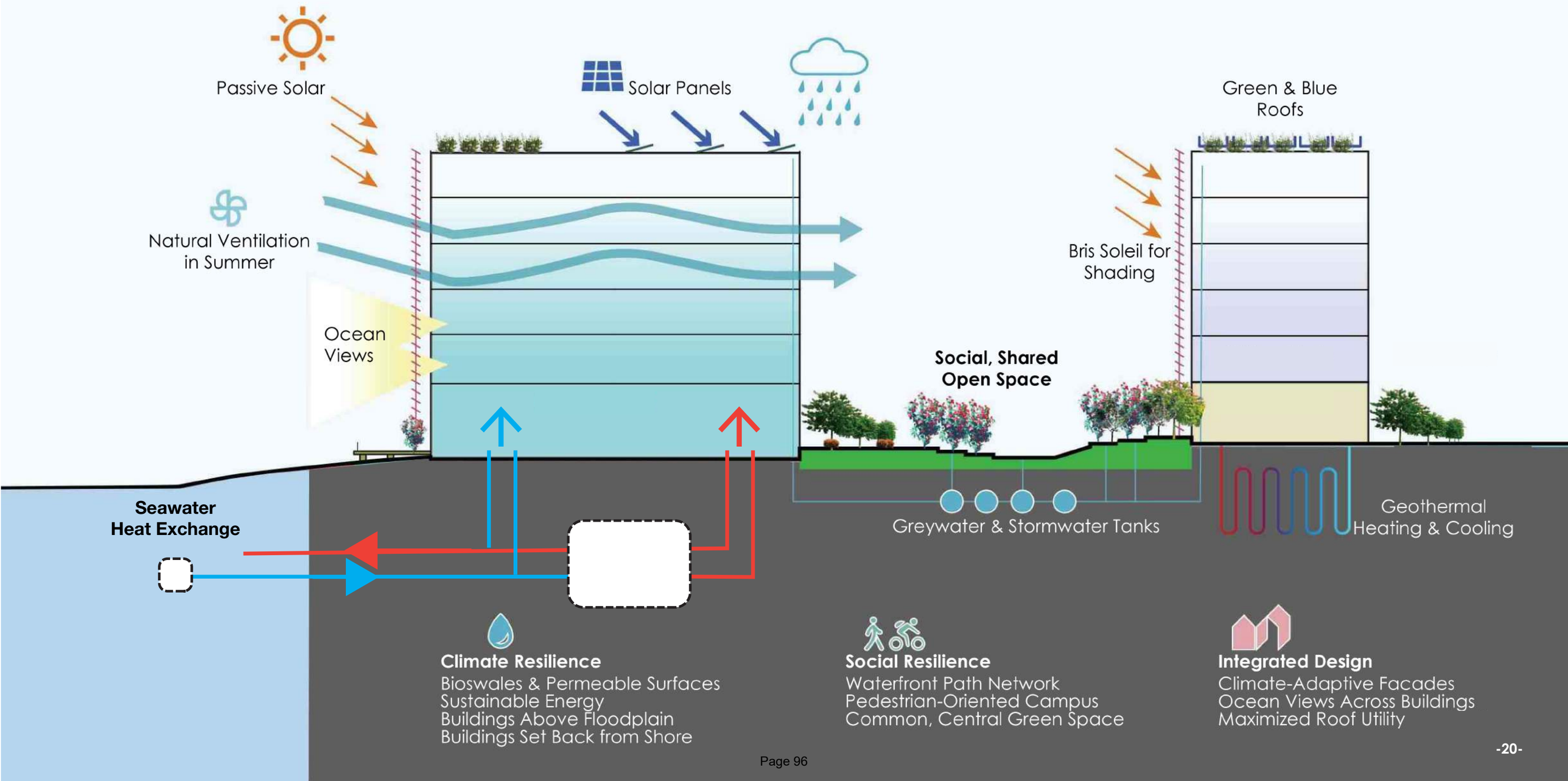
Artist Interpretation



All new buildings will connect through linking landscaped terraces with a central, pedestrian-oriented green space. The campus will maximize publicly accessible open space through building height and density. This plan will foster a mixed-use environment encouraging interaction and innovation. Internal connections are echoed by external circulation and access points (pedestrian, bicycle, public transit, potential water taxi, automobile) that further strengthen the connection with neighboring communities and the City of Portland.

A Sustainable & Resilient Campus

The Roux Institute Campus intends to incorporate state-of-the-art sustainable technologies. Examples of possible technologies (illustrated below) that will be thoroughly studied include geothermal heating and cooling, photovoltaic solar panels, high-performance building envelopes with triple glazing, green roofs, blue roofs, stormwater/greywater management, passive solar gain, sea water cooling, and natural summer ventilation. If necessary, purchase of renewable power produced off-site will supplement on-site sources. Resilience strategies like constructing buildings well above the 100-year flood zone will also be deployed to account for rising sea levels and severe weather events.



Enhance Access

The striking campus is visible from Interstate 295, as well as from its on- and off-ramps which are located nearby. US Route 1 and downtown Portland are both accessible within minutes. Via Sherwood Street, the Roux Institute Campus will connect to the East Deering and Back Cove neighborhoods. Bus routes within easy walking distance, and waterfront pedestrian and bicycle trails (including a potential new connection under Tukey's Bridge and improvements to Sherwood and Veranda Streets) will link the Roux Institute Campus to the neighborhood as well as to the Back Cove Trail, Bayside Trail, Eastern Promenade, and future trail networks. Within the site, ADA pathways and inclusive design principles will ensure the site benefits all users.

Adjacent to the Roux Institute Campus (but not on its property) is the former Grand Trunk Railway line, which could one day provide a new transportation route. Connections to Casco Bay ensure water access to the peninsula, islands, and the entire Maine coast.

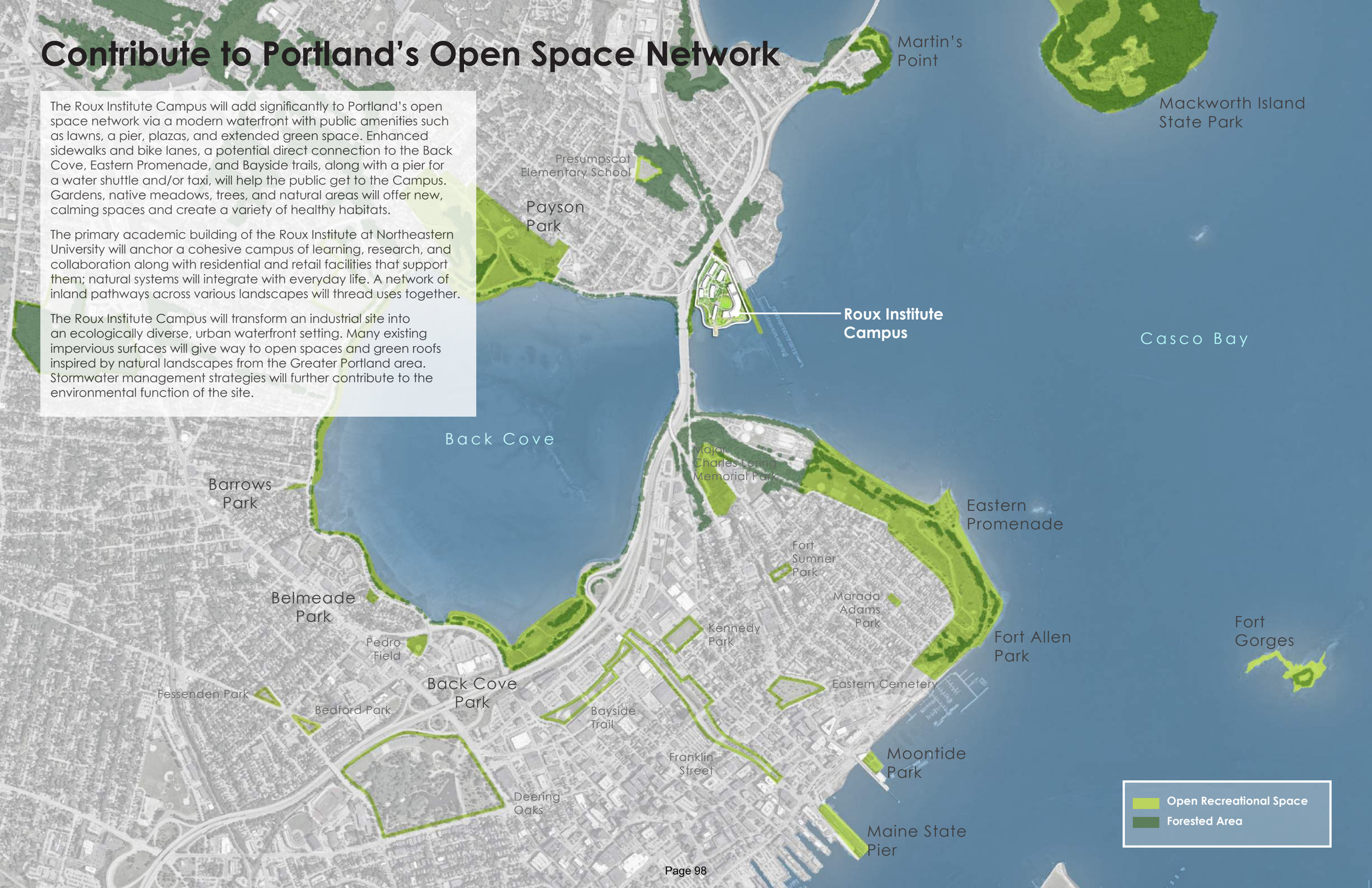


Contribute to Portland's Open Space Network

The Roux Institute Campus will add significantly to Portland's open space network via a modern waterfront with public amenities such as lawns, a pier, plazas, and extended green space. Enhanced sidewalks and bike lanes, a potential direct connection to the Back Cove, Eastern Promenade, and Bayside trails, along with a pier for a water shuttle and/or taxi, will help the public get to the Campus. Gardens, native meadows, trees, and natural areas will offer new, calming spaces and create a variety of healthy habitats.

The primary academic building of the Roux Institute at Northeastern University will anchor a cohesive campus of learning, research, and collaboration along with residential and retail facilities that support them; natural systems will integrate with everyday life. A network of inland pathways across various landscapes will thread uses together.

The Roux Institute Campus will transform an industrial site into an ecologically diverse, urban waterfront setting. Many existing impervious surfaces will give way to open spaces and green roofs inspired by natural landscapes from the Greater Portland area. Stormwater management strategies will further contribute to the environmental function of the site.



3. Creating the Path Forward

Artist Interpretation

Assessment of Growth

The City's Land Use Code establishes content requirements for Institutional Development Plans, including considerations of transportation, environment, infrastructure, design, and neighborhood engagement. The following pages apply these lenses to the Roux Institute Campus, how they interact, and the opportunities they create.

Transportation
With one vehicle entry point, the development must be properly planned to minimize impacts on the surrounding street network. Reductions in trip generation through complementary on site uses, alternative modes of transportation, and transportation demand management are crucial.

Infrastructure
Any development is limited by the capacity of nearby utilities infrastructure. Fortunately, the site's previous industrial demands dovetail nicely with the needs of a mixed-use development. High-performance buildings can help reduce further infrastructure demands.

Environment
One compelling aspect of the Roux Institute Campus is the waterfront location; yet decades of production and transportation-oriented industrial use diminished its ecological function. Thoughtful redevelopment will restore some of this function over time.

Design
While the Roux Institute at Northeastern University seeks to inspire aesthetically, the Roux Institute Campus will be designed with neighborhood context and nature in mind. It can serve as a proving ground for best practices in ecological and urban design.

Neighborhood Engagement
The Roux Institute at Northeastern University cannot thrive without the support and goodwill of its neighbors. By establishing and maintaining community engagement, the organization will incorporate fresh ideas and build trust.

The environment of the site influences its design. That design leads to higher or lesser demands on transportation networks and utility infrastructure, which in turn impact the environment. Underlying the entire process is neighborhood engagement, without which the Roux Institute at Northeastern University cannot succeed.

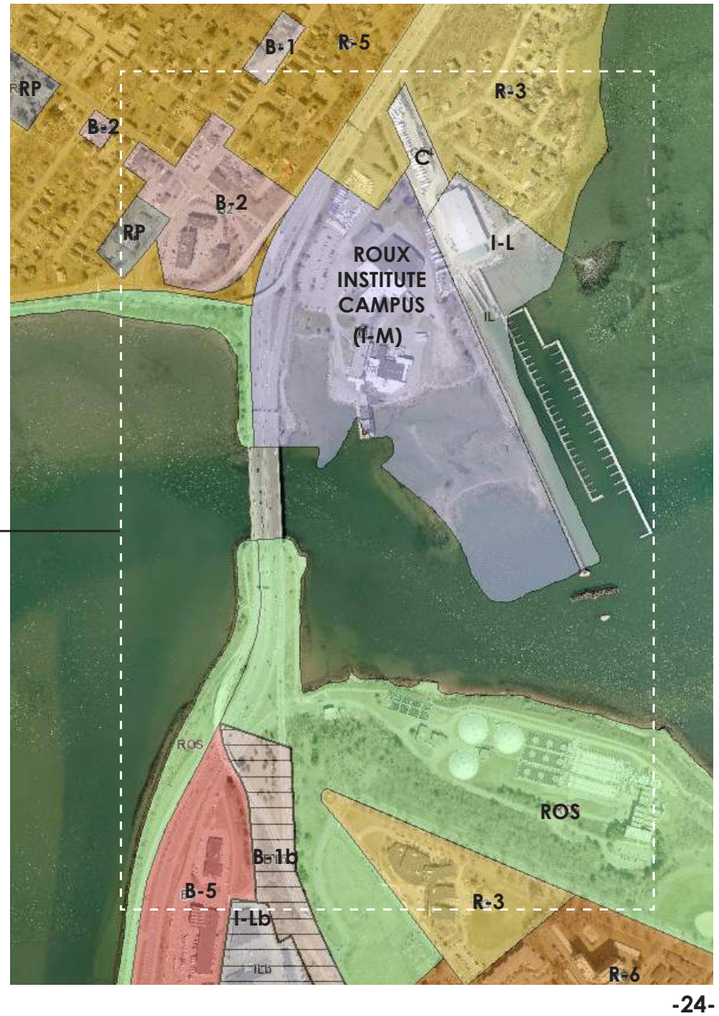
Boundary of Proposed B-5 & IOZ



The proposed Roux Institute Campus aligns well with the B-5 (Urban Commercial) purpose statement in the City of Portland's Land Use Code:

"To provide areas of the peninsula* near the downtown where a mixture of uses, including marine, industrial, commercial, and residential, is encouraged. The B-5 and B-5b zones are characterized by larger underdeveloped lots with great potential for denser, clustered, urban mixed-use development and more efficient reuse of existing land and buildings. It is anticipated that the dense, mixed-uses of the B-5 and B-5b zones will rely on a shared infrastructure system, including service alleys, parking lots, public transportation facilities, stormwater management, and driveways."

**Per the City of Portland's Land-Use Code, "on-peninsula" is defined as all land south of I-295. The proposed Roux Institute Campus is south of I-295.*



Transportation

The Roux Institute Campus is well-situated to several major thoroughfares, including I-295, US Route 1, Washington Avenue, and Baxter Boulevard. The site has a single access point, located on Sherwood Street; that access will continue to provide vehicular access in and out of the site in the future. Access to Sherwood Street is provided via Veranda Street which connects to Washington Avenue, I-295, Baxter Boulevard, and US Route 1.



The intersection of Washington Avenue and Veranda Street is critical. Traffic from I-295, Baxter Boulevard, and Washington Avenue all travel through it to reach the site.

Washington Avenue accommodates all users, with traffic using two lanes in each direction south of Presumpscot Street, one lane in each direction north of that point, and buffered bike lanes north of Presumpscot. Bus routes run along Washington Avenue and pedestrian accommodations are present, including sidewalks. In addition, the traffic signal system along Washington Avenue is a traffic responsive system operating with high efficiency. Intersections of Washington Avenue at Veranda Street, at Presumpscot Street, and at Ocean Avenue are each signalized intersections with pedestrians processed concurrently to traffic.

Veranda Street accommodates vehicular traffic with a single lane in each direction. Sharrows (faded) indicate that bicycles share the travel lane. Sidewalks are provided on both sides of Veranda Street and transit stops are present. Sherwood Street is a two-way roadway that is not striped and allows parking. Sherwood Street intersects Veranda Street to form a slightly offset four-way intersection. Both Sherwood Street approaches are stop-controlled at Veranda Street as well as Presumpscot Street.

Bates Street extends from the intersection of Washington Avenue and Veranda Street toward Baxter Boulevard, and consists of a vehicular traffic lane in each direction and a bike lane from Washington Avenue to Baxter Boulevard. A sidewalk runs along the west side of the street, but narrows and is periodically blocked by utility poles. A single lane in each direction at the intersection of Bates Street and Baxter Boulevard provides access north on I-295. Access south on I-295 is via a two-lane connection in each direction at the intersection of Washington Avenue at Veranda Street and Bates Street. This widens at Washington Avenue for turn lanes.

Adjusted Traffic Volumes at Washington Avenue and Veranda Street (2021)

Approach	Movement	AM Peak Hour Volume	PM Peak Hour Volume
Veranda St. Southbound	Left Through Right	130 65 50	70 95 60
Washington Ave. Eastbound	Left Through Right	35 1195 65	50 995 90
Veranda St. Northbound	Left Through Right	65 45 160	65 95 155
1-295 Exit Ramp Westbound	Left Through Right	100 650 80	150 1090 190

Several high crash locations (segments or intersections with eight or more traffic crashes and a critical rate factor exceeding 1.00 over the most recent three-year period) are located near the campus:

Intersections (with Crash Totals)
Washington Ave. at Randall St. (8)
US-1 at Veranda and I-295 Ramps (14)

Segments (with Crash Totals)
Washington Ave. I-295 NB Exit 8 to Veranda St. (12)
Washington Ave. from Veranda St. to Galvin St. (11)

From 2019 to 2021, one fatal crash occurred within the study area at the HCL location of Veranda Street/US-1 with the I-295 SB On-Ramps. The crash was determined to be caused from a driver running a stop sign. Safety improvements are being made as a part of the Veranda Street Bridge Replacement project.

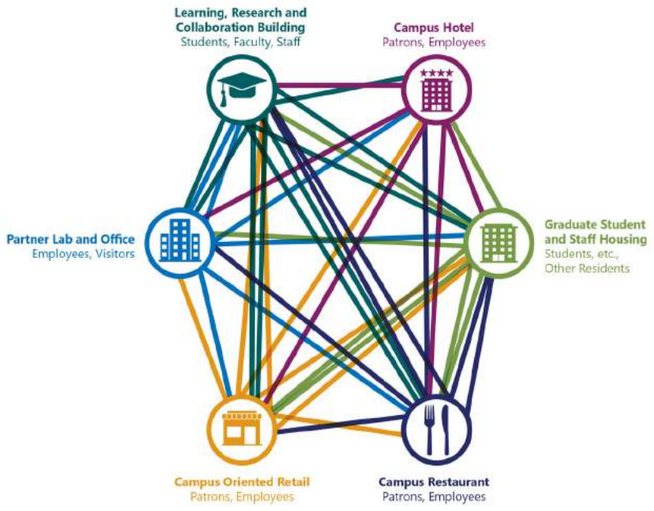
With adequate sight distance, the crashes along Washington Avenue, including at Randall Street, may be attributed to vehicles changing lanes or attempting to turn in or out of side streets where adequate gaps are not available due to congestion. There were no reported pedestrian crashes at the HCL locations. Three bicycle crashes occurred in the study area: one each at the intersections of Washington Avenue/Bates Street/ Veranda Street, Bates Street/Baxter Boulevard, and Washington Avenue/Churchill Street.

Trip Generation

The site is currently closed and therefore does not generate any existing vehicular, bicycle, pedestrian, or transit trips to and from the site. Future trip generation was evaluated using standard rates and Maine DOT guidance for the long-term development of the site. Trip generation rates were obtained from the Institute of Transportation Engineers Trip Generation Manual, 11th Edition, where available. Input was received from the City of Portland regarding appropriate land use codes, specifically for the restaurant component. In addition, because the land use code for university/college does not reflect the type of institution proposed here, VHB developed a trip generation methodology based on the anticipated populations at the site.

Relevant uses for the Roux Institute Campus include general office building (LUC 710), multi-family housing mid-rise (LUC 221), high-turnover sit-down restaurant (LUC 932), strip retail plaza (LUC 822), and hotel (LUC 310). As a mixed-use development, many trips will occur between destinations on the campus. Students, faculty, and staff will eat in on-site restaurants and shop at on-site retail stores. Some students and staff will live in the residential units or work in the office space. Partner employees may travel between offices, university buildings, restaurants, and stores.

Inclusion of ancillary uses on the campus, such as housing, hotel, office space and retail, will reduce the number of external trips to the site; internal trips will not generate external traffic or impact the adjacent road network. For traffic generation purposes, internal trips are separated from total trips estimated using engineering standards. The overall internal trip capture across the land uses for this development were estimated to be approximately 28% in the AM peak hour and 22% in the PM peak hour for the IDP full build program. Detailed trip tables are provided in the Transportation Appendix C.



Vehicle Trip Assignment

Vehicle trips were assigned to area roadways by estimating the proportion of trips arriving or leaving on each approach to the area. Estimates were based on data from several sources, including population density maps and US Census Journey to Work data. The process was repeated using catchment areas of various sizes, with minimal change in results. Trip distribution for people within a commuting distance of the site is shown in the adjacent top graphic.

Approximately 50% of trips are anticipated to travel from the south to reach the site and 15% are anticipated to approach from the north. (The thicknesses of arrows are scaled to indicate the share of trips that will use that route.)

Anticipated distribution of vehicular trips on neighborhood streets is shown in the adjacent bottom graphic. Almost 90% of trips are expected to travel through the intersection of Washington Avenue and Veranda Street. However, to access I-295 southbound, some drivers may choose instead to exit by taking a right and traveling up to the southbound on-ramp.

Additionally, approximately 20% of the site traffic is oriented to points west /southwest along local roadways or to and from the north on I-295; this will impact the intersection of Bates Street and Baxter Boulevard.





Mode Share

As indicated above, the existing site in not operational, so there are no regular trips visiting the site from any mode. The East Deering Neighborhood is served by multiple bus routes and, at many locations, features a pedestrian network and bicycle network. With improvements to these resources, the campus will be well suited for trips by modes other than single-occupant vehicles. The Roux Institute Campus is committed to working with Portland METRO to support increased transit opportunities to and from the campus area. These factors, in addition to a Transportation Demand Management (TDM) plan, will reduce auto mode share at the site.

The existing Roux Institute Campus population was surveyed in August 2022 to estimate existing campus mode shares. The survey revealed that 23% of the Roux population is currently using alternate modes of travel with 13% walking, 4% using transit and 6% bicycling. With a more aggressive TDM program, as envisioned at the site, as well as investment in pedestrian, bicycle and transit opportunities, much higher percentages of non-auto trips may be reached.

A transportation engineer developed target mode shares for each envisioned Roux Institute Campus land use, in consultation with City of Portland and Maine Department of Transportation officials. These shares were applied to external trips to determine the likely number of trips by each mode, yielding the estimates in the table at right.

Estimated Mode Split (%)

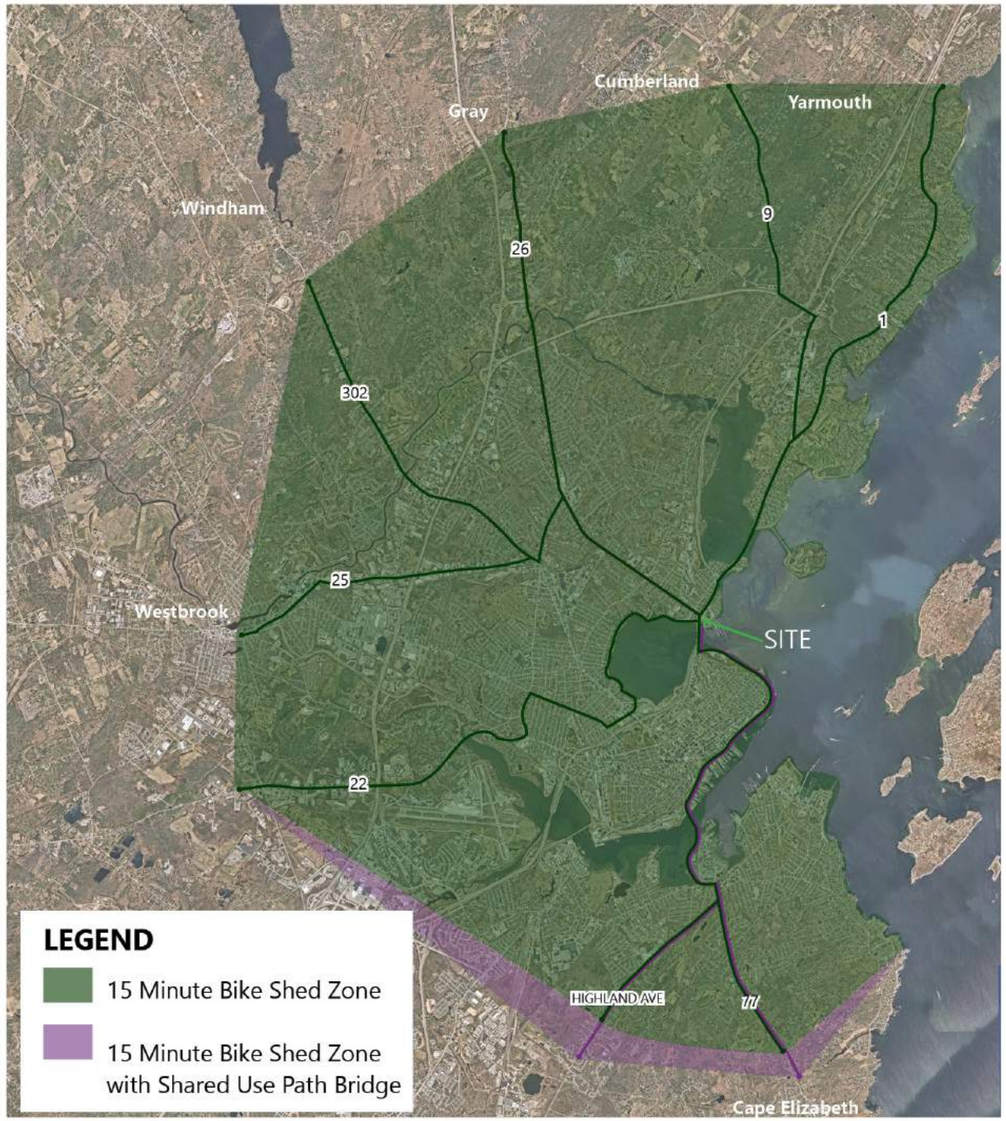
Land Use	Transit	Ped. & Bike	Vehicle	Carpool Rider
Office	10	10	75	5
Retail	10	50	40	0
Restaurant	10	50	40	0
University	10	20	65	5
Residential	10	20	65	5
Hotel	10	10	75	5

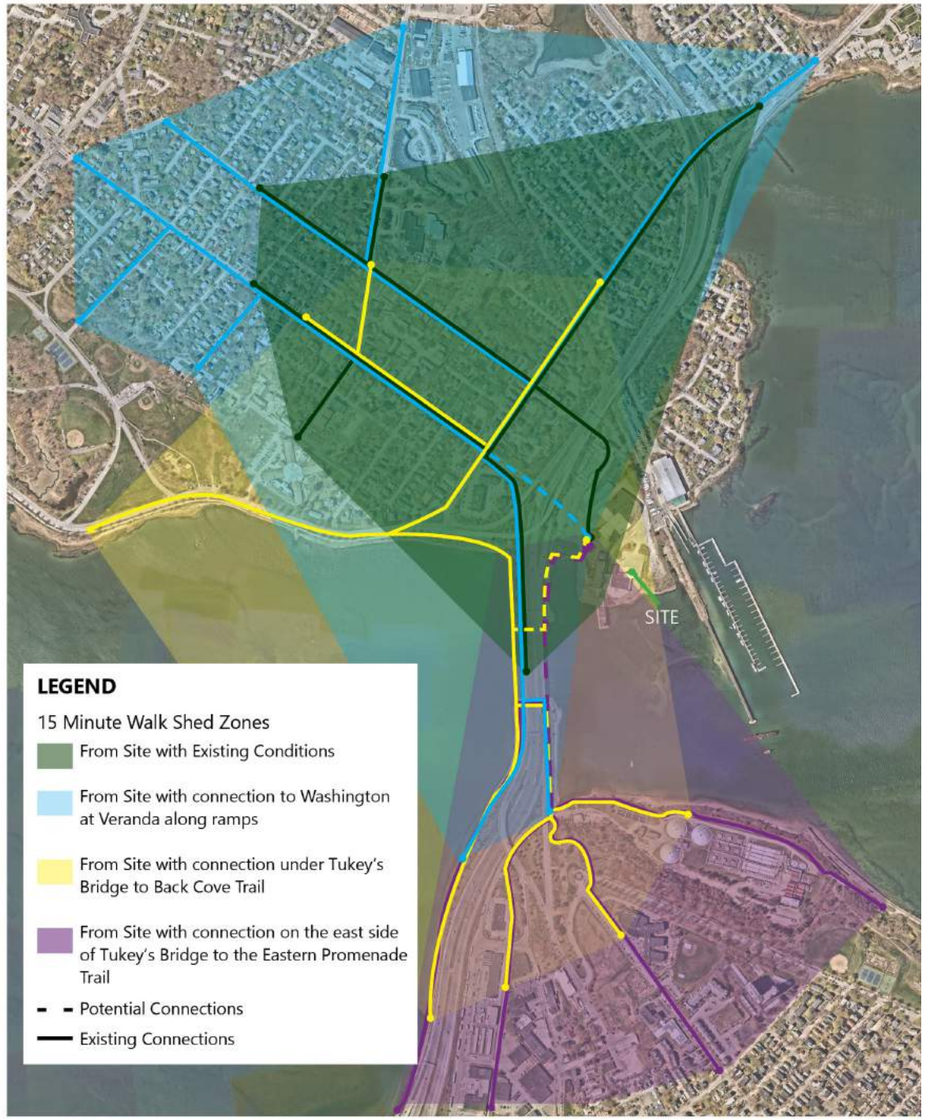
Transportation Improvement Opportunities

Bicycle and Pedestrian Connection Opportunities
The existing bicycle and pedestrian network includes known constraints along the existing bicycle and pedestrian route across Tukey's Bridge. The sidewalk connecting from the intersection of Washington/Veranda is narrow and adjacent to vehicular traffic on the ramp to I-295. Then this walkway meets the Back Cove Trail which adds bicycle and pedestrian demand to a narrow shared use path over Tukey's Bridge which according to Portland Trails data carries an average of 1300 to 1400 daily trips during the summer months. Current pedestrian and bicycle demand in the study area is low. During the PM peak hour for example, only 6 pedestrians and 6 bicyclists traveled along Veranda Street crossing either leg of Sherwood Street. Similarly, only a total of 20 pedestrian crossings were reported across all legs of the intersection of Washington Avenue and Veranda Street during the PM peak hour during turning movement counts collected by VHB in 2021.

Improvements to bicycle and pedestrian connections will increase those mode shares for the site and Infrastructure improvements can alleviate some neighborhood traffic impacts. Two opportunities stand out when considering bicycle and pedestrian improvements.

The first is an improved connection between the Back Cove Trail and Washington Avenue. At present, users of the Back Cove Trail face a 90-foot mid-block crossing to reach the northwest side of Bates Street. Converting the intersection of Bates Street and sweeping right-turn maneuver would create a shorter, safer crossing. The second improvement is a direct connection from the Roux Institute Campus to the existing trail network, either by extending the shared-use path below and alongside the north end of Tukey's Bridge or by a shared use path on a new bridge parallel to Tukey's, or both. The site walkshed and bikeshed distances, or typical distances that people are comfortable choosing alternate modes, increase to points south with these connections, increasing the opportunities for bicycle and pedestrian trips and improving the overall bicycle and pedestrian network.





The Roux is committed to working with the City and MaineDOT to provide additional bicycle and pedestrian capacity to accommodate future demand. A Traffic Movement Permit will be required for each phase of the project. At that time, actual mitigation will be tied to the impacts that are anticipated at that time.

Transportation Improvement Opportunities (continued)

Parking Demand and Capacity
Parking will be built over time as part of the development program. All vehicular trips are intended to park on site. As demand increases during the phased development, parking will be introduced incrementally to avoid excess supply and inadvertent encouragement of driving to the site.

Base parking demand (calculated for each hour of the day using ITE Parking Generation Manual rates, 5th Edition, and the same land use codes as for trip generation) indicate that total parking demand across all uses on the site will peak at 4 PM. At completion of the near-term phase of development, parking demand is expected to be approximately 700 vehicles. Demand at full build-out could be as high as 1900 vehicles, inclusive of day users and residents with goal mode shares. All on-site parking is intended to be communal; availability in the closest lot to a destination will not be guaranteed. Additionally, uses with opposing peak parking demands will be able to share parking resources.

All on-site parking will be paid parking, and a parking office will be created to handle permitting and enforcement for the campus. Parking costs and regulations may vary between categories of users (students, staff, residents, office tenants, visitors, etc.). The Roux Institute Campus may include on-site car share, enabling travel to and from the site using other modes, with the comfort that vehicles are available if necessary.

The parking numbers are estimates based on target mode shares and the currently contemplated building program. As the site is developed, Site Plan Review and Traffic Movement Permits will be required that will involve monitoring and reporting on traffic and parking. Based on monitoring results and TDM measures included in these submittals, the parking demand and ultimately supply will be determined so that the site is properly parked for the context at that time. As stated in the Land Use Code, the Planning Board will establish the off-street parking requirement based on a parking study. The Roux Institute is actively pursuing strategies with the City of Portland to prevent on-street parking by campus visitors.

Public Transit
Two bus lines currently stop near the site: METRO Route 7 and METRO Routes 9A/9B. These routes provide direct connections to the peninsula, North Deering and Falmouth. With a transfer at any of the Downtown Transfer Centers, riders can reach the rest of Portland and Greater Portland Region.

Buses run continuously throughout the day, readily accommodating the varied schedules of students and other campus users. METRO BREEZ express bus service to Yarmouth, Freeport, and Brunswick and the Husky Line to Westbrook and Gorham establish a regional footprint for transit service. Ten local and express routes connect the campus to most of the Portland area with no more than one transfer.

The monthly ridership on the Metro Route 7 is one of the lowest in the Metro system. In 2021, on the average weekday, there were 2521 boardings on Route 7. Each bus has the capacity of approximately 30 people and the bus runs 13 times per weekday inbound and outbound or a monthly capacity of approximately 7800 boardings, which leaves plenty of capacity on Route 7 to accommodate site related traffic.

The Roux Institute Campus is working with METRO to improve the quality and frequency of transit connections to the Roux Institute Campus. Reduction of headways on Route 7, creation of a new route that ends at the Roux and travels through the Peninsula, and construction of a transit stop and turnaround for either service to travel into the site, furthering the convenience of transit as a mode of travel are all being considered.

In addition, the Roux Institute at Northeastern University will promote and incentivize transit use by subsidizing transit passes for students, staff and faculty.



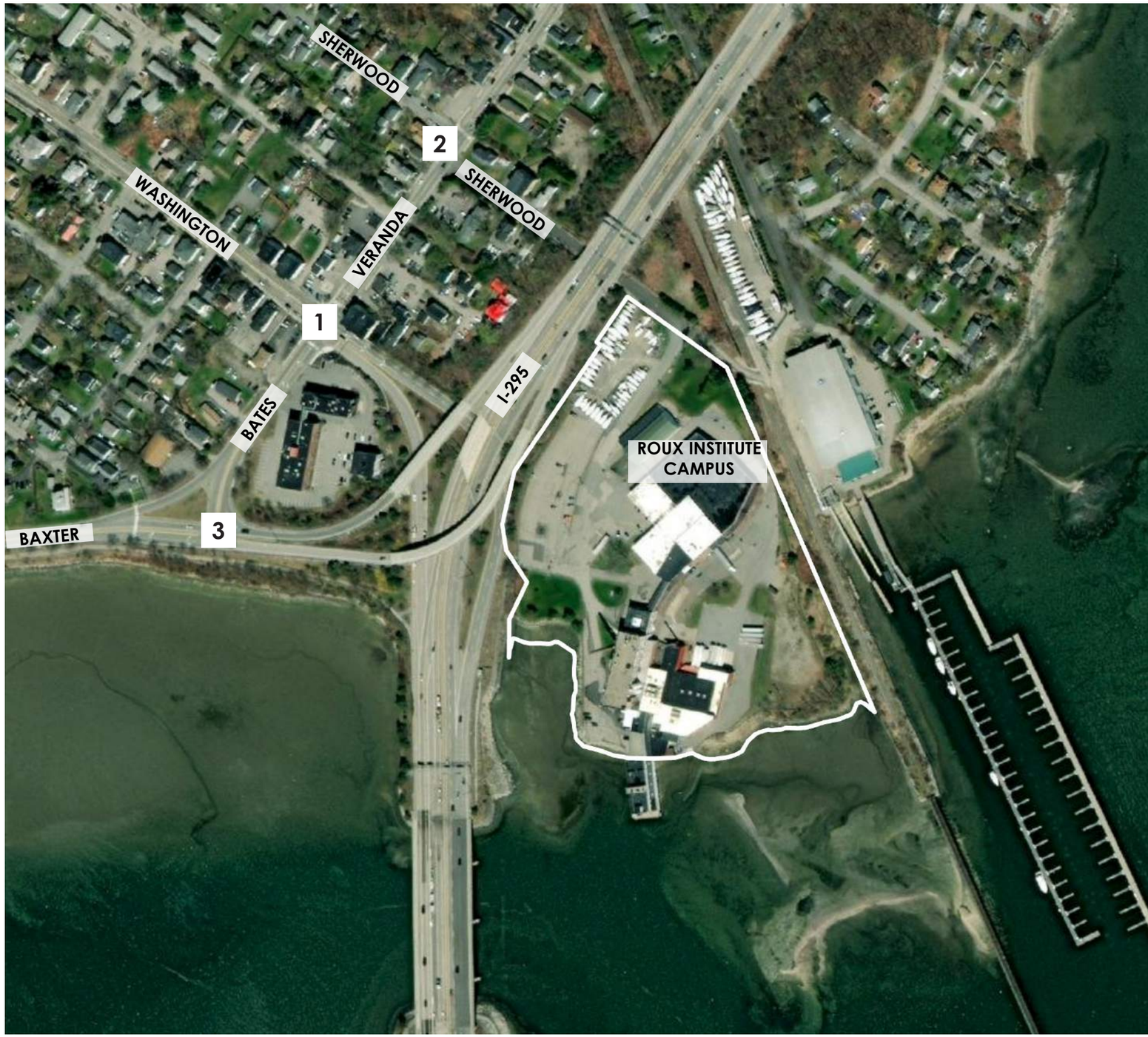
Transportation Improvement Opportunities (continued)

The Roux Institute Campus is constrained on three sides by the Bay, I-295, and a rail line, with Sherwood Street as the access road. The campus's vehicle traffic will be highly concentrated on certain streets and intersections immediately surrounding the site. Targeted roadway improvements at these locations can increase capacity and prevent excessive congestion.

These improvements are not tied to specific years or development phases. They are held out as potential mitigation measures to be considered as future traffic warrants. As development continues, the Roux Institute will apply for traffic movement permits (TMP). Potential improvements will be evaluated during the TMP process in collaboration with the Maine Department of Transportation and City of Portland.

1. Vehicles exiting the campus via Sherwood Street may turn right or left on Veranda Street to access I-295 South. The left turn lane from southbound Veranda Street to Washington Avenue currently has a storage length of only 130 feet. At higher traffic volumes, the line of vehicles waiting to turn left may extend beyond this length, delaying through and right turning vehicles from reaching the intersection. If this type of congestion becomes frequent, it may be mitigated by extending the left turn lane further back. This will require widening Veranda Street between Washington Avenue and Sherwood Street within the existing right-of-way. Widening on Veranda Street would also allow bicycle lanes to be added. This impact will also be reduced through use of signs indicating that I-295 South can also be readily reached by turning right and using the Veranda Street on-ramp.
2. With 100% of campus traffic traveling through the intersection of Sherwood Street and Veranda Street, improvements may become necessary. The intersection is currently controlled with a stop sign on Sherwood Street. To improve traffic flow, Sherwood Street could be widened at the intersection within available city right-of-way to separate outbound traffic into left and right turn lanes. A bicycle lane could also be added within this space. This would substantially increase capacity on the Sherwood Street approach. If traffic volumes eventually exceed this new capacity, a traffic signal could be installed at the intersection.
3. Vehicles approaching the campus from I-295 southbound will exit at Baxter Boulevard and make a right onto Bates Street. There is a significant unused right of way on Bates Street between Baxter Boulevard and Veranda Street that could be repurposed to increase capacity. Another northbound turn lane could be added (isolating left, through, and right movements) at the intersection as well as adding a bike lane. A bike lane would also have the benefit of completing the trail connection from the Back Cove Trail. The intersection of Washington Avenue, Veranda Street, and Bates Street may eventually need other mitigating measures to increase capacity, such as reconfiguring lanes on the I-295 exit ramp approach.

A potential timeline has been developed and is provided in the Transportation Appendix for when the improvements described above may be implemented if development proceeds as currently anticipated and goal mode shares are met. As the site is developed, Site Plan Review and Traffic Movements Permits will be required that will involve monitoring and reporting on traffic and parking. Based on monitoring results and Transportation Demand Management (TDM) measures included in these submittals, the parking demand and ultimately supply for each phase will be determined so that the site is properly parked for the context at that time. As stated in the Land Use Code, the Planning Board will establish the off-street parking requirement based on a parking study.



Managing Transportation Demand

Active Transportation
In addition to the transit options in the study area, the Roux Institute Campus development will benefit from existing pedestrian and bicycle infrastructure. Sidewalks are in good condition and pedestrians are accommodated at signalized intersections with crosswalks and concurrent pedestrian signal phasing. Future visitors will benefit from upgraded pedestrian accommodation along Sherwood Street. Once on the site, pedestrian connections will link site uses and points along the waterfront.

The Roux Institute Campus can promote human-powered trips to the site through improved connections to this infrastructure. The area is densely populated, bicycle lanes are provided along Washington Avenue and other roadways, and the Back Cove Trail is nearby. In the future, cyclists will be accommodated on Veranda Street and into the site on Sherwood Street via dedicated bicycle lanes.



Transportation, Access, and Circulation Plan

Multi Use Path
Shared Lanes
Bike Lanes Two way
Neighborhood Byways
Bike Lanes One Way
Paved Shoulders

Transportation Demand Management (TDM)
TDM programs seek reductions in traffic impacts by subsidizing and marketing alternative commute options. Northeastern University plans aggressive targets of non-single occupant auto trips and intends to limit on-site parking - the goal is a 37 percent reduction in automobile trips from ITE Trip Generation predictions, and a minimum of 20 percent reduction in parking demand compared to anticipated ITE Parking Generation. As mixed uses are created during development, internal trip-making will increase, and these targets may be revised.

Transportation Coordinator: Northeastern University plans to follow industry best practice by appointing a campus-wide transportation coordinator. This person will collect data on the TDM program to ensure it evolves as the site develops. Once aspects of the site are operational, they will conduct a transportation survey to establish a baseline for future trip reduction goals. They will also collect and disseminate information (including non-automobile travel options) among the employers and facility managers on site to encourage TDM participation.

Public Transit Support: Northeastern University intends to partner with Portland METRO to subsidize shorter headway service to the Roux Institute Campus. Student subsidies will enable frequent and reliable service to and from the site.

To further support trips via public transit, the Roux Institute at Northeastern University intends to subsidize bus trips for students and employees (for employees, their purchase can also be included as a pre-tax benefit). Lease agreements will encourage transit pass subsidies by other on-site employers.

Carpools: Northeastern University will prioritize parking for carpools near building entrances. The transportation coordinator can facilitate carpools by maintaining a database of interested parties; commuters may be matched with others who live near them or can access a park-and-ride location along their route. The coordinator can also participate in the Maine DOT commuter resource program, which facilitates carpools across nearby sites and provides participants with rewards for carpooling.

Parking Fees: Paid parking is intended to be shared across uses on the Roux Institute Campus, not guaranteed in individual lots.

Bicycle Travel: Northeastern University will support active transportation by investing in complete streets and trail connections, bike storage, and shower facilities and lockers.

Water Travel: Northeastern University plans to build a modern pier over the footprint of the current pier, in order to accommodate water shuttles and taxies, and those accessing the site and commuting by boat.

Monitoring: Northeastern University will monitor transportation to the campus in order to ensure that mode share goals are being met and shall make adjustments as necessary to achieve such goals established in the applicable TDM or TMP.

Transitions

With I-295 to the west, state-owned vacant parcels to the north, the rail corridor and marine business to the east, and Casco Bay to the south, the Roux Institute Campus is surrounded by existing areas of transition from the campus to the surrounding neighborhoods. In addition to the existing buffers, development will further ease the transition to and from the campus through the following design methods.

Between Site Entrance & Campus
Public open space will ease transition from the smaller scale of Sherwood Street. Views to the water and the Bean Building, and clear wayfinding and circulation of pedestrian and bicycle pathways, will welcome site visitors further into the campus. A smooth transition will also be accomplished through thoughtful facade design at the pedestrian level. Potential nuisance features like dumpsters, air handlers, and parking will be appropriately screened. Buildings will avoid blank walls to respect the adjacent neighborhood and facilitate a sense of permeability and welcome.

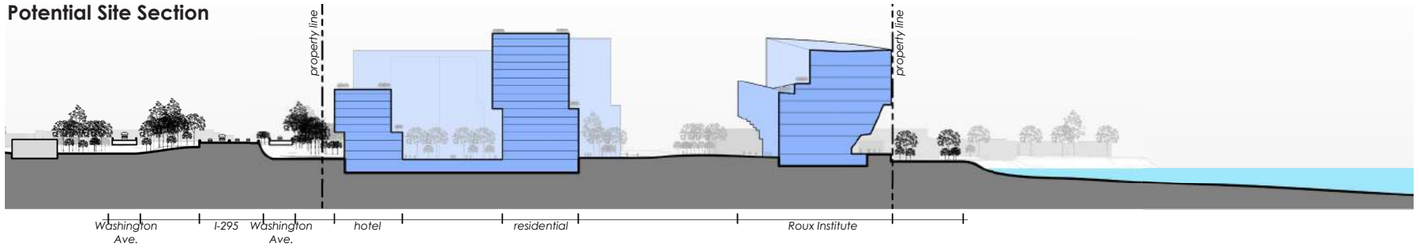
Between Buildings & Campus
Building entrances will face major public spaces or circulation paths. Lower stories will be programmed for activation where they meet the pedestrian realm or feature visually interesting details and activities related to the building. Building articulation, massing, and materials will contribute to the sense of a well-textured, connected campus.

Between Campus & Water
The shoreline area between the buildings and the water will serve as meaningful public open space. This open space will contain a combination of pedestrian and bike trails, passive and active gathering spaces, restored and ecologically improved landscape and shoreline to anchor the site's relationship with the water. Building facades facing the water will be considered public-facing, with views designed for interest from the water and Eastern Promenade Trail.

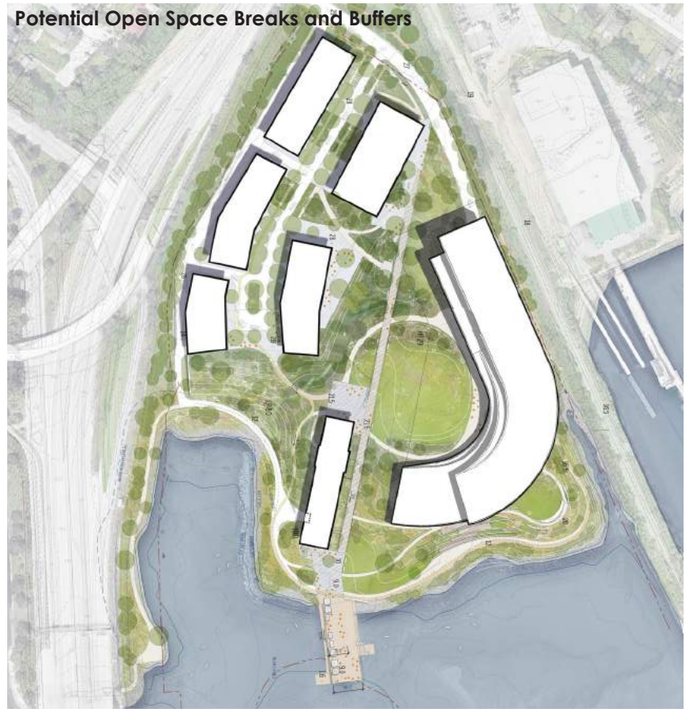
Crime Prevention Through Environmental Design (CPTED)
Key to these successful transitions is a sense of welcome, comfort, and safety. To ensure this, the campus will incorporate the following CPTED design strategies demonstrated to deter crime:

- Mixed use, multi-tenant 24-hour campus that generates "threshold capacity" for a diversity of places, people, and programs
- Ecologically restored, biophilic and publicly accessible campus connected to the wider community
- Highly durable, vandal-resistant materials in the public realm to communicate a well-maintained, clean campus
- Systematic, clear, and appropriately scaled wayfinding to guide and inform all transportation modes and user groups
- Matrix of pedestrian and bike paths connecting well-lit transit stops, bike storage areas, and parking areas to maintain clear sight lines
- Street-level building elevations designed for visibility, minimizing hidden corners and spaces
- Transparency and openness of buildings at ground levels and entrances to connect with the public realm and create pathways
- Controlled campus access points for special events or emergencies

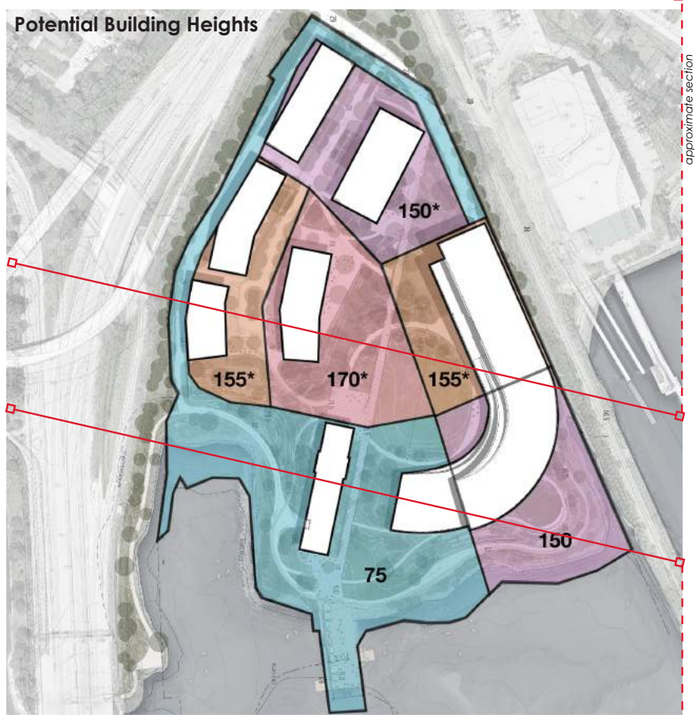
Potential Site Section



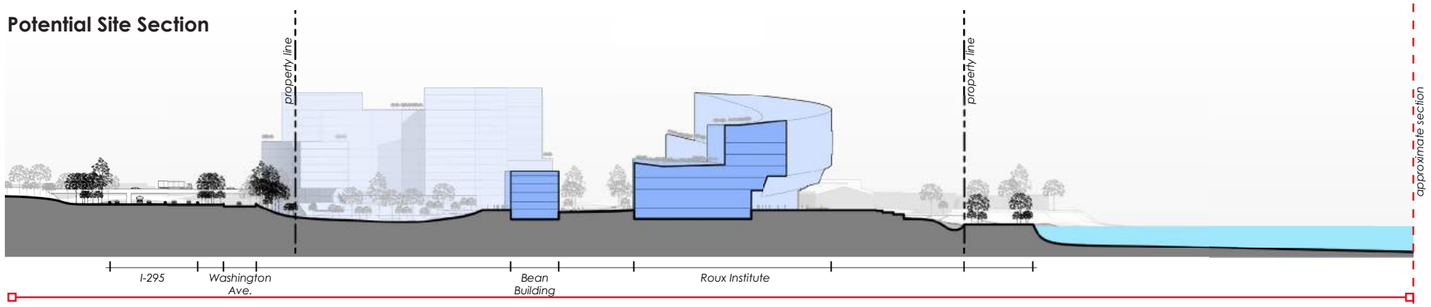
Potential Open Space Breaks and Buffers



Potential Building Heights



Potential Site Section



As campus growth occurs, measures appropriate to each phase will be implemented and scaled to the Institute population and site usage. These measures may include such things as increased lighting, emergency phones, maintenance of clear sight lines, additional wayfinding and attention to spaces between buildings to ensure the governing CPTED principles are maintained.

Safety & Environment

Strengthening Resilience & Ecology
The site is roughly 75% impervious with approximately 10 acres of building roofs, parking areas, and loading dock space. Minimal shoreline buffer is present at the site, with pavement extending right up to the armored embankment along much of the shoreline. Existing site grades adjacent to the Bean Building are only 1-foot above highest astronomical tide. In recognition of these existing vulnerabilities and with a desire to improve ecological function for the site, the redevelopment will raise interior site grades and soften landscapes to reduce impervious area and increase flood resilience.

Energy Consumption
The development presents an opportunity to mitigate energy consumption through high performance building envelopes, particularly with the likely southern exposure of the Academic/Research building. Similarly, we intend to explore and hopefully incorporate renewable energy sources such as active and passive solar, sea water cooling, and/or geothermal. A sustainability charter will be developed for the campus prior to the first site plan submission to establish sustainability benchmarks and guidelines.

Energy Conservation Measures
The project design will include strategies to reduce the energy consumption of the building and associated utility demand and greenhouse gas emissions. The design will incorporate both passive and active energy conservation measures that will allow the project to realize significant reductions in energy demand. The project will incorporate high performance envelope features including triple glazed windows with low U-value, solar control systems and optimized solar heat gain coefficients to reduce heating gains in the summer but take advantage of them during the winter. High efficiency energy recovery systems will be installed to capture and reuse as much heat as possible to significantly reduce the energy required for conditioning outside air. Energy efficiency mechanical distribution systems are being targeted such as radiant heating and other Dedicated Outdoor Air Systems. The project is aiming to electrify as much of the campus energy use as possible and utilizing heat pump systems to maximize efficiency and minimize demand on the grid. Finally, solar generation is being explored as a way to reduce the energy consumption, energy cost and the building's CO_2 footprint.

Noise Generation
The proposed mixed-use academic campus is compatible in uses with the surrounding East Deering neighborhood. The Roux Institute Campus is buffered by I-295, the abandoned Grand Trunk Railway, and adjacent marine uses. Development will adhere to City of Portland technical standards regarding noise, vibration, and other potential nuisances. Pre-development noise measurements will serve as the baseline of analysis, in order to assess noise impacts accurately and to allow improvements to baseline conditions where possible. Development will employ noise abatement techniques (screening, acoustical attenuation, landscape buffering, etc.) for the benefit of residents, students, and all users of the site.


Artist Interpretation

Hazardous Materials
Use of hazardous materials, if any, will be in academic and laboratory contexts, and managed in conformance with all local, state, and federal requirements.

Heat, Glare, and Radiation
Development studies will include analysis of heat, glare, and radiation impacts in order to understand and eliminate safety hazards and lessen impacts of new development. Development will comply with all City standards regarding heat, glare, and radiation.

Wind
Occupant comfort analysis will be performed during each phase of development when applicable site plans are reviewed, with design modifications as necessary to maintain acceptable conditions. The analysis will include comfort at and around buildings as well as major public spaces. Existing buffers of plantings at property lines will be maintained or replaced where appropriate.

Lighting
Exterior lighting will be full cut-off and dark-sky friendly. Fixture output will comply with all City lighting regulations to avoid light spill into neighboring areas from the site. Photometric analysis at each phase of development will be used to inform lighting design in accordance with Illuminating Engineering Society of North America (IESNA) Standards.

Height and Massing
The allowable building heights on the Roux Institute Campus are informed by the historic location and prominence of the Bean Building, the desire to create meaningful public open space while meeting all programmatic goals for the Roux Institute, resilient building design, and potential shadow and other impacts to neighboring properties. Building heights will stagger, with the greatest height at the center of campus and lower heights near the site's boundaries. Building heights around the Bean Building and within 35' of the western and northern edges of the campus will be no greater than 75'. Conceptual massing studies based on proposed building heights are attached as Appendix A.

Shadows
Height and massing will minimize shadow impacts to neighbors and avoid negative impacts to nearby existing public open spaces. The campus height map places the greatest heights to the middle of the site and progressively lower zones to the perimeter. Mechanical enclosures will be set back from roof edges to minimize impact. Conceptual shadow studies based on proposed building heights are attached as Appendix B.

Public Safety
Access to the campus is via Sherwood Street, through a 40-foot wide, 14'10' high highway underpass. The underpass height exceeds the NFPA requirement of 13.5 feet of clearance. The East Deering Fire Station is located one mile away from the campus. In addition, fireboat access will be available at the campus pier.

Public safety needs for the campus will be similar to those on other higher education campuses. Northeastern will have a 24-hour security presence on the Roux Institute Campus. Security personnel will be trained in basic emergency medical services, such as CPR. Other security measures planned for the campus will consider most current proven technologies, including remote-monitored security cameras and emergency blue light telephone boxes.

Bird Safe
The development will incorporate proven technologies and materials with acknowledgment that bird-friendly buildings reduce threats to birds without sacrificing attractiveness, functionality, or natural lighting.

Open Space
The campus will include a minimum of three acres of public open space designed to enhance waterfront access and provide bicycle/pedestrian network connectivity. The public open space shall be meaningful space, functioning as recreational, natural habitat, and/or public gathering space.

Neighborhood Engagement

The Roux Institute Campus is intended to become an extension of the East Deering neighborhood, which is separated from the site by Interstate 295, the rail corridor, and Maine Yacht Services. The site will be a walkable addition to the neighborhood, with open spaces, waterfront, campus-oriented retail, and restaurant amenities, but it also represents a change. To ensure the campus is designed in a manner benefiting the neighborhood will require robust communication with interested stakeholders.

The Land Use Code requires two Neighborhood Meetings related to the Institutional Overlay Zone and Institutional Development Plan processes. The Roux Institute team has used those requirements as a starting point for ongoing dialogue. The first Neighborhood Meeting was held virtually on November 18, 2021, with 26 registered attendants and 11 attendees. The feedback was positive, and attendees expressed interest in construction job opportunities, sought additional information regarding traffic and associated transportation improvements, indicated a desire for bike/pedestrian connectivity, requested that lighting plans be considerate of adjacent neighborhoods, and asked about climate resilience and disturbance during construction. A second Neighborhood Meeting was held in person at the Ocean Avenue Elementary School on April 6, 2022. Although the City only requires that abutters within 500 feet of the campus be notified of the meeting, IDEALS and Northeastern expanded the list of invitees to include a much broader radius and mailed over 1700 meeting notices, 48 people attendance. Many attendees expressed concerns about the scale of the proposed development, building height, and traffic. As a result, IDEALS and Northeastern reduced the planned square footage of construction by 27% and the tallest proposed building heights by 19%.

In addition to Neighborhood Meetings required by the regulatory process, IDEALS and Northeastern have hosted periodic virtual forums called Roux Institute Campus Roundtables as a way to engage with the East Deering neighborhood and beyond on an on-going basis. The first such event occurred December 14, 2021. Additional meetings occurred on February 1, March 23, and June 2, 2022 An Open House was held at the site on September 6, 2022, with over 130 public participants.

To keep all potential stakeholders apprised of the development plans, IDEALS and Northeastern maintain a website, www.rouxcampusportland.org, to showcase up-to-date plans, present information about the Roux Institute at Northeastern University, and provide notice of upcoming events with links to meeting documents and recordings of prior forums. The site is an interactive platform with an email link for questions and a feedback section that probes for input on a wide variety of issues. This platform will also be a valuable communication tool during construction, providing a means to share information related to construction schedule, work hours, management plans, public safety, and site access.

Additionally, Northeastern University and IDEALS have a designated community contact for members of the public. This contact works closely with neighborhood and city stakeholders to solicit ideas and feedback and ensure that any concerns are dealt with promptly, whether reported in person or through the website.

Finally, members of the team are conducting regular outreach to interested stakeholders and potential partners to gain broad input into development plans. This will continue to facilitate assessment and calibration regarding how the Roux Institute Campus can fit into the Portland landscape and ways it can best live up to its potential as a model for education, economic development, recreation, and aesthetics.

Regular Neighborhood Forums
Northeastern University and IDEALS will continue to host neighborhood forums on a quarterly basis to discuss items such as phasing plans, project impacts, construction plans and schedule, and any neighbor concerns.

Northeastern University and IDEALS will provide an estimated construction schedule at the beginning of a project and provide regular updates throughout construction.



Community Advisory Group
Northeastern University and IDEALS will create a Community Advisory Group to maintain a dialog for the purpose of sharing information on project development, planning, and seeking input. To the extent practicable, the group shall be comprised of a representative from the following categories:

- East Deering Neighborhood
- Recreation, parks, and trails
- Bicycle/pedestrian
- Rail
- Public Transit
- Portland Harbor
- Portland Public School System
- Higher Education
- Sustainability
- Business Community

The Community Advisory Group will meet quarterly and may meet more frequently as necessary. Input gathered and meeting documentation from Neighborhood Forums will be provided to the Community Advisory Group.

Construction Management Principles

A detailed Construction Management Plan will be submitted as part of the site plan review, based on the following principles:

- Open and transparent communication
- One-on-one conversations whenever possible
- Multiple channels to give and receive information
- Timely sharing of plans and considerations
- Receptivity and response to input
- Respect for affected parties

Northeastern University and IDEALS are committed to communicating early and often with neighbors and interested parties. Existing communication platforms – in-person meetings and calls; website; info@rouxcampusportland.org; and Neighborhood Forums will be supplemented with a dedicated construction webpage on the website, along with social media, texting, and a hotline to ensure the public has easy access to timely and accurate information.

Project Schedule
A Master Project Schedule will be prepared at the onset of each stage of construction, with distinct project schedules for buildings developed over the course of construction. Scheduling updates will be shared at the outset of each undertaking.

Public Safety Considerations
During construction of the initial phase, the site will be off-limits to the public. Thereafter, secured fencing and signage will be used to protect public spaces from construction areas and direct traffic flow. Pedestrian, bike, and vehicular access will be clearly marked throughout the campus. Appropriate lighting will ensure safe pedestrian routes. Where possible, buffers will be established between construction sites and vehicular and pedestrian ways. Following completion of initial phase, interim connections to bike and pedestrian ways will be provided when temporary construction impacts are necessary. All procedures will be OSHA compliant.





Construction Staging
Construction staging will occur inside the project's limit of work, as designated on the site plan submission or as approved by the Planning Board during the site plan review process.

Truck Routes
Truck routes and timing will be addressed in the projects' Construction Management Plan during site plan review and monitored throughout construction. In coordination with the city, wayfinding signage may be installed where specific locations are identified as no-travel zones for reasons of safety or traffic impacts. Every effort will be made to schedule construction traffic to avoid undue impacts when roadways are busy and/or queuing to gain access to the site. There will be no truck or construction-related parking within the city right-of-way.

Noise Impacts
Notwithstanding the existing buffers to the site, there will be noise impacts as a result of construction activities. For those noise events that are above the regular background level, advance notifications will be provided using the communications mechanisms described above. The City of Portland Noise Ordinance will be followed.

Air Quality Impacts
Construction Managers have a range of tools available to mitigate and manage dust and other agents effecting air quality. While the waterfront location and general westerly winds will partially alleviate these impacts, additional measures to be implemented as needed include covering loaded truck beds and soil stockpiles, use of wetting agents, and periodic cleaning of construction staging areas, roadways, and truck wheels.

Community Benefits

The Roux Institute at Northeastern University, through its programming and its publicly accessible waterfront campus, will provide numerous benefits to the residents of the City of Portland and beyond. At the core of the Roux Institute's mission is service to Portland and Maine's people by offering graduate programs in high-growth fields with generous scholarship support, launching startups and driving talent development, and supporting existing Maine businesses and institutions--all with the goal of bringing cutting edge technology capabilities to Maine through education, research, and entrepreneurship. The nearly billion-dollar investment in the Portland Campus will generate local jobs at all levels, both temporary and permanent. The very nature of an innovation hub like the Roux Institute is to create new opportunities.

Community Spaces
The Roux Institute's publicly accessible, waterfront campus will benefit the adjacent neighborhoods and greater Portland community. Some of those benefits include:

- At least three acres of open space will be built in the first phase of construction and maintained thereafter, available for use by all members of the public
- Safe public bicycle/pedestrian trails linking to the Back Cove and Eastern Promenade trails available for use by all members of the public
- Open space and a waterfront pedestrian walkway available for use by all members of the public
- Indoor spaces for use by members of the public, as available
- Convening space available for use by members of the public
- Snow ban parking for adjacent neighbors
- A pier available for public use with facilities for kayaking and paddleboarding

Workforce Development During Construction
Construction of the Roux Institute campus provides an opportunity to educate and develop our workforce for the future. The following are some examples of community benefit opportunities during the construction phase of the project:

Outreach to Local Schools - Portland Public Schools, Trade Schools and Community Colleges
- Host a Roux Institute Campus Construction Lab, where interested parties including future and current tradespeople will be invited to come learn from the project team about construction techniques, project management strategies, and trade work on this complex and technical project. This will gain exposure for a younger population to learn about the trades and construction industry and will contribute to the advancement of Maine's existing trade workforce
- Attend and participate in training programs within each of the established educational facilities interested in participating
- Involve field supervisory staff and craft workers in establishment of a curriculum for the core skillsets anticipated for the project
- Involve staff members as part time "adjunct professors" in the interested educational facilities and work to incorporate elements of the planning of the project in curricula via:
  - » ACE Mentoring and similar programs to engage with high school students
  - » Community College and Portland area Higher Education Institutions with the goal of incorporating project specific construction scheduling, estimating, and virtual design concepts into the curriculum

Apprentice Program Development
- Encourage and educate potential subcontractors on the incorporation of apprenticeship programs in their current business/recruiting and employee retention planning
- Incorporate the evaluation of trade contractors' apprenticeship programs in the selection of the subcontractors for the project
- Evaluate the current and past performance of the apprenticeship programs when evaluating potential subcontractors
- Establish goals for apprentice participation in construction workers on site and at off-site fabrication facilities



Local Worker Preference
- Hold local job fairs prior to the start of construction and throughout the construction phase of the project to ensure that the maximum number of local workforce participation is achieved
- Set goals and measure performance of each contractor for local resident worker participation including other measures of business level participation in the project, such as:
  - » Maine Based Business participation
  - » Women Owned Business
  - » Disadvantaged Business
  - » New Mainers

Community Benefits (continued)

Northeastern University's Roux Institute is delivering on its mission to erase the boundaries between the real world and academia. It achieves this goal by customizing learning programs and research initiatives to meet the needs of employers, by integrating classroom learning with professional experience, and by supporting the launch of innovative startup companies. The Roux Institute's collaborations with its employer-partners keep the institute in step with the economy's—and society's—changing needs and opportunities. They also enable the Roux Institute to identify and begin to address the state's urgent and most consequential challenges.

Together, the Roux Institute and its partners are:

- Co-designing educational programs that prepare workforce talent for today's innovation economy, focusing on STEM fields such as artificial intelligence and the computer, data, and advanced life sciences, and by integrating classroom learning with professional experiences afforded by employer-partners
- Conducting interdisciplinary research focused on solving challenges that affect Portland, the state of Maine, and communities globally. The explicit goal is to translate findings into knowledge and activities that make a significant, measurable impact on the world. Priorities include widening access to equitable and effective healthcare; providing broader and more reliable access to technology; and devising data- and technology-driven methods to mitigate dependence on unreliable supply chains
- Attracting, supporting, and launching new businesses throughout Maine, opening new doors to opportunity and prosperity for people across the state and region

Now in its third academic year, the Roux Institute is steadily laying the groundwork for transforming Maine's economy and is securely rooted in Maine and leading important, transformational impact throughout the state. From its launch through the start of the current academic term in September 2022:

- The institute's partnership ranks have grown tenfold as more than 110 Maine organizations now work with and benefit from the institute
- Five hundred graduate students are enrolled, and more than 900 employees of partner organizations have completed custom training programs
- Thirty-six startup companies have worked in residence at the Roux Institute, creating 52 new Maine jobs and raising $21M in investment capital to grow their new businesses
- Five, robust research programs are established, led by globally recognized leaders who are pursuing substantial governmental and private funding to spur growth
- And more than 125 Mainers are employed by the institute, 25% of whom relocated to Maine to join the effort and support the institute's mission

Commitment to Diversity, Equity, and Inclusion
The COVID-19 pandemic, a heightened awareness of the devastating impact of racial and ethnic discrimination, and other global disruptions have starkly illustrated the need for a new higher education model that empowers people to navigate and solve complex problems across a multiplicity of contexts, whether geographic, political, intellectual, socioeconomic, or cultural.

To this end, Northeastern University recently unveiled *Academic Plan: Experience Unleashed*, a strategic vision that aligns learning, research, and entrepreneurship to solve urgent challenges in collaboration with partners around the world. Central to the plan is a commitment to human diversity. Throughout the university's global system, Northeastern teams are working with local partners and communities to build a diverse, equitable, and inclusive community of learners, faculty, entrepreneurs, staff, and partners. This work is based on the truth that humankind's toughest challenges are dynamic, interconnected, and affect people and communities in ways that depend upon context. To maximize our impact within diverse and rapidly evolving contexts, we must immerse learning, discovery, and innovation in real-world experience.



Enabling Access for all Mainers
Through the transformational Roux Institute's *Alfond Scholars Initiative*, the university will distribute $67 million in scholarships to Maine residents who are studying at the institute, providing unprecedented support for Mainers to pursue academic and career advancement. More than $11M in need-based scholarships have been awarded inception-to-date. The Roux Institute's *Alfond Scholars Initiative* also supports the recruitment and retention of diverse learners through its co-op and post-doctoral research programs.

Benefits to Employers and the Business Community
The Roux Institute was founded on collaboration with employer partners and higher education partners, which keep the Institute in step with the economy's—and society's—changing needs and opportunities. Twenty-three of the institute's industry partners are headquartered in Portland. Collectively, these organizations employ more than 40,000 people. Eleven Portland-based community and academic partners, who collectively employ 12,000 people, also work with the Roux Institute. These partnerships enable The Roux Institute to support Portland-based companies and the people they employ, while also identifying and beginning to address the city's most urgent and consequential challenges.

Benefits to Higher Education and Community Partners
Northeastern University, through its work at The Roux Institute, is committed to working with higher education and community partners throughout Maine to decrease the barriers of entry to high tech careers, and to bring our talent and expertise to benefit these vital organizations.

Community Benefits (continued)

The institute's work with Maine higher education partners focuses on building an ecosystem that creates clear pathways for learners to and through college and onto graduate learning, as well as building the critical R&D capacity across the city and the region. Through its fourteen higher education partnerships, the Roux Institute and its partners feature joint expertise to ensure that Maine-based learners get a robust education and can contribute effectively to workforce and research needs. For example, the institute has developed accelerated matriculation and completion pathways with five higher education partners, helping college graduates to maximize returns on both time and tuition investments, while remaining in Maine to complete master's degrees at The Roux Institute on an accelerated timeline.

The institute's various community partnerships focus on leveraging people, space, and networks to advance the work of Maine's mission-drive, community organizations. For example, Roux Institute faculty volunteer to lead computer science training for teachers in Portland schools; Casco Bay High School students complete internships at The Roux Institute; and the institute hosts Girls Who Code camps for middle and high school students from throughout Maine.

Similar, near-term events are planned as well – some of which are directly linked to the university's diversity, equity, and inclusion commitments. For example, The Third Place and The Roux Institute are partnering to host networking events to support BIPOC professionals as they connect, live, and work in Portland. The institute is committed to expanding and scaling these offerings. In the future, the institute's community engagement programs will support educators, students, and community groups that share our commitment to a diverse, equitable, and inclusive high-tech ecosystem that is a possibility for all – and benefits all.

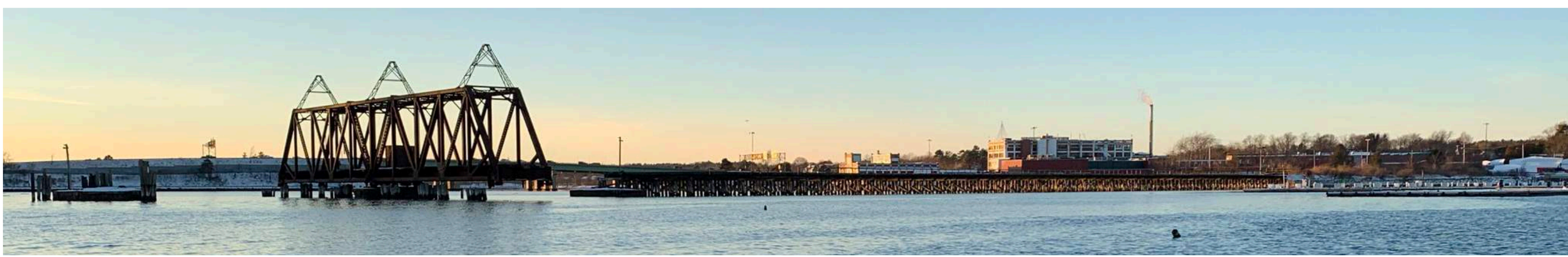


Supporting the Growth of Local Entrepreneurs

A final community benefit is the robust entrepreneurship programming supporting people to learn about business creation and supporting entrepreneurs to launch their ventures. Already, the Institute has hosted two "Maine Start Summits," which are three-day business creation hackathons and many other events for entrepreneurs, which create open and accessible on-ramps for anyone to bring an idea to life and begin to not only provide Portland with great products, but also generate more jobs and revenue at the same time.

Commitment to the City of Portland and our Region

Ultimately, the university's success will be inextricably linked to that of its faculty, graduates, and partners. Through the work of the Roux Institute and other organizations, Maine will be home to a thriving, tech-forward economy fueled by people and businesses leading innovations in realms from AI-driven healthcare to life sciences technology. This economy will attract new people and companies to the region. It will also provide unprecedented opportunities for all Mainers in a manner that honors and enriches their treasured lifestyle and culture.



Appendix A
Conceptual Massing Studies

Campus Concept | near-term



Campus Concept | near-term



Campus Concept | long-term



Campus Concept | long-term



Appendix B
Conceptual Shadow Studies

Shadow Study | December/June: 9am, 10:30am Noon, 1:30pm & 3pm, near-term & long-term



Appendix C
Supplemental Transportation Information

VHB's Technical Transportation Appendix

Trip Generation

The person trip generation estimates for the currently contemplated full development were determined including both internal trips between uses on the site and external trips that have either origins or destinations off site that use all modes to travel to and from the site. The total trips generating and their associated ITE Land Use Codes are provided in Table 1. Information on Roux projected population and programming and the resulting trip profile are provided in Table 2 below. For more specific information for the trip generation of the Academic Building, the detailed trips by academic population are illustrated in Tables 2, 3 and 4 for the near-, mid-, and long-term.

Table 1: Person Trips for IDP Full Build Development Program (including internal and external)

Site Land Uses and Descriptions				*AM Peak Hour*			*PM Peak Hour*		
LUC	**Land Use**	**Size**	**Unit**	**Total**	**Entering**	**Exiting**	**Total**	**Entering**	**Exiting**
N/A	Academic Building	400	1,000	314	288	26	562	138	425
221	Multifamily Housing (Mid-Rise)	650	Units	274	63	211	254	155	99
710	General Office Building	200	1,000 SF	304	268	36	288	49	239
760	Research and Development Center	50	1,000 SF	52	42	9	49	8	41
310	Hotel	125	Rooms	58	32	25	74	38	36
822	Strip Retail Plaza (<40k)	10	1,000 SF	24	14	9	66	33	33
932	High-Turnover Sit-Down Rest.	15	1,000 SF	144	79	65	136	83	53
	Total Trips			**1169**	**786**	**382**	**1428**	**503**	**926**

Table 2: Academic Building Trip Generation Components on a Typical Day (Near-Term)

		AM Peak Hour	*PM Peak Hour*
755 Enrolled Graduate Learners (hybrid)	in	14	22
	out	0	29
	total	14	51
1,000+ Corporate Learners (online and hybrid)	in	20	0
	out	0	40
	total	20	40
150 People at Special Events	in	15	50
	out	0	15
	total	15	65
30+ Embedded Startups (ITE LUC Office 70 emp)	in	30	10
	out	4	47
	total	34	57
65 Faculty & Staff (ITE LUC Office 65 emp)	in	28	9
	out	4	44
	total	32	53
10% more Visiting Faculty & Staff (ITE LUC Office 7 emp)	in	3	1
	out	0	4
	total	3	5
65 Researchers (ITE LUC R&D 65 emp)	in	33	4
	out	6	32
	total	39	36
Total Academic Building Population	**in**	**143**	**95**
	out	**14**	**211**
	total	**157**	**307**

Table 3: Academic Building Trip Generation Components on a Typical Day (Mid-Term)

		AM Peak Hour	*PM Peak Hour*
1,680 Enrolled Graduate Learners (hybrid)	in	32	48
	out	0	64
	total	32	112
2,500+ Corporate Learners (online and hybrid)	in	50	0
	out	0	100
	total	50	100
150 People at Special Events	in	15	50
	out	0	15
	total	15	65
50+ Embedded Startups (ITE LUC Office 100 emp)	in	43	13
	out	6	61
	total	49	74
120 Faculty & Staff (ITE LUC Office 120 emp)	in	52	14
	out	7	70
	total	59	84
10% more Visiting Faculty & Staff (ITE LUC Office 12 emp)	in	5	1
	out	1	7
	total	6	8
85 Researchers (ITE LUC R&D 85 emp)	in	42	6
	out	7	40
	total	49	46
Total Academic Building Population	**in**	**239**	**132**
	out	**21**	**357**
	total	**260**	**489**

Table 4: Academic Building Trip Generation Components on a Typical Day (Full Build out)

		AM Peak Hour	*PM Peak Hour*
1,680 Enrolled Graduate Learners (hybrid)	in	32	48
	out	0	64
	total	32	112
3,500+ Corporate Learners (online and hybrid)	in	70	0
	out	0	140
	total	70	140
150 People at Special Events	in	15	50
	out	0	15
	total	15	65
50+ Embedded Startups (ITE LUC Office 100 emp)	in	43	13
	out	6	61
	total	49	74
165 Faculty & Staff (ITE LUC Office 165 emp)	in	71	18
	out	10	88
	total	81	106
10% more Visiting Faculty & Staff (ITE LUC Office 16 emp)	in	7	2
	out	1	9
	total	8	11
105 Researchers (ITE LUC R&D 105 emp)	in	50	7
	out	9	48
	total	59	55
Total Academic Building Population	**in**	**288**	**138**
	out	**26**	**425**
	total	**314**	**562**

Target mode shares for each proposed Roux Campus land use were developed and discussed with City of Portland and Maine Department of Transportation officials at several meetings. These shares, as outlined in Table 5 below, were applied to external trips to determine the likely number of trips by each mode.

Table 5: Mode Share By Land Use

Land Use	*% Transit*	*% Ped/Bike*	*% Vehicle*	*% Carpool*
University	10%	20%	65%	5%
Residential	10%	20%	65%	5%
Office	10%	10%	75%	5%
Hotel	10%	10%	75%	5%
Retail	10%	50%	40%	0%
Restaurant	10%	50%	40%	0%
Overall Site Mode Shares	**10%**	**18/19%**	**67/66%**	**5%**

Applying each of these mode shares to the trip generation for the appropriate land use results in the trip generation by mode as shown in Table 6 below.

Table 6: External Trips by Land Use and Mode for Long-Term Build Out

Peak Hour	Vehicle			Transit			Walk/Bike/Other			Total Trips		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
AM	424	141	565	62	22	84	107	46	153	593	208	801
PM	217	520	737	34	77	111	77	133	211	329	730	1058

Parking Demand

Parking demand will be determined by phase as the existing parking demand and anticipate mode shares are determined. In each phase, the existing and future parking will be evaluated. Base parking demand was estimated for each hour of the day using ITE Parking Generation Manual, 5th Edition rates and the same land use codes as for trip generation with the exception of the Roux Institute which used the evaluation of population travel profiles as outlined above. The estimates indicate that total parking demand across all uses on the site will peak at 4 PM as driven by Roux Institute parking needs.

Table 7: Estimated Peak Parking Demand based on Current Long-Term Buildout Development Program[1]

LUC	Land Use Group	Size	Unit	Peak Parking Demand (4:00 PM)
710	General Office Building	200	1000 Sq. Ft.	329
820	Convenience Retail	10	1000 Sq. Ft.	6
932	High-Turnover (Sit Down) Restaurant	15	1000 Sq. Ft.	24
222	Multifamily Housing (High Rise)	650	Units	153
310	Hotel	125	# Rooms	55
550	Roux Institute	400	1000 Sq. Ft.	1002
760	Research and Development	50	1000 Sq. Ft.	62
			Total:	**1631**

[1] Parking demand as calculated based on goal mode shares provided above

As indicated, the parking numbers are estimates based on target mode shares and the currently contemplated building program. As the site is developed, Site Plan Review and Traffic Movements Permits will be required that will involve monitoring and reporting on traffic and parking. Based on monitoring results and TDM measures included in these submittals, the parking demand and ultimately supply will be determined so that the site is properly parked for the context at that time. As stated in the Land Use Code, the Planning Board will establish the off-street parking requirement based on a parking study. The Roux Institute is actively pursuing strategies with the City of Portland to prevent on-street parking by campus visitors.

Transportation Improvements

Based on the evaluation of the IDP full build program and the anticipated impact on the transportation network, a series of potential projects have been identified that could mitigate these impacts, if they are found to occur in the future. Each project is listed with the anticipated phase of the program development at which the mitigation may be necessary based on operations. On page 29 and 30 in the main IDP document, please find maps showing the locations of the potential transportation improvements.

- Sherwood Street (short-term)
  - Improve Sherwood Street to accommodate bicycles and pedestrians in separate facilities (i.e., bike lanes and sidewalk) where possible with potential shared accommodations through the limited cross section under the I-295 bridge. A separate left and right turn lane on Sherwood is not anticipated to be required until the mid-term and a traffic signal that is required in the long-term.
- Shared Use Path Connection (mid-term)
  - A shared use path connection from the site to provide better connectivity to the Back Cove Trail, neighborhood, and/or Eastern Promenade Trail

- Washington Avenue at Veranda Street (mid- to long-term)
    - Addition of an eastbound right turn lane (Bates approach) and northbound right-turn lane (I-295 Ramp). With these lanes, and timing changes, the overall LOS will improve to a C during the AM peak hour and LOS D during the PM peak hour (was LOS F without improvement). Alternatively, the ramp from the Washington Avenue off-ramp to Sherwood Street could be considered.
- Veranda Street (mid-term)
    - Improve Veranda Street to accommodate bicycles in separate space.
- Veranda Street at Sherwood Street (full IDP build program as currently contemplated)
    - Provide signalized control including a separate northbound left-turn lane. These changes would result in an overall LOS C/D during the AM/PM peak hours.
- Bates Street at Baxter Boulevard (full IDP build program)
    - Provide an all-way stop controlled intersection. Under all-way stop control, the intersection would experience a slight increase in delay resulting in less than 19 seconds of delay for the westbound and eastbound approaches. However, it would improve the southbound left turn from LOS B during the AM and PM peak hours to a LOS A.
- Washington Avenue at Presumpscot Street (full IDP build program as currently contemplated)
    - Per discussion with the City's Consultant, VHB also looked at the intersection of Washington Avenue at Presumpscot Street based on its likely effect on the operations of Washington Avenue at Veranda Street. For the full IDP build program, a northbound left turn prohibition would need to be considered, a second southbound thru lane added and the southbound left advance phase removed to address the poor operations during the AM peak hour. In addition, the pedestrian crossing the south leg of the intersection would need to be removed in order to improve overall operations.

1. PROJECT SUMMARY

On behalf of Northeastern University (Applicant) and their agent, Initiative for Digital Engineering and Life Sciences (IDEALS), Woodard & Curran is pleased to submit this Major Site Plan Application to develop Phase 1 of the Roux Institute at Northeastern University campus. A letter authorizing IDEALS and Woodard & Curran to act as the agent on behalf of the Applicant is attached to this Section.

1.1 Background

The Roux Institute at Northeastern University is a graduate-level education, entrepreneurialism and research center designed to build talent, spur innovation, and drive economic growth in Portland, the state of Maine, and the Northeast. The Institute launched in 2020 and is temporarily located in leased space in Portland. A permanent campus for the Roux Institute is essential to fulfill its educational and economic potential. Northeastern University seeks to create a campus that allows for continued growth of the education, research, entrepreneurial, and collaborative programs of the Roux Institute while providing space to support those programs and serve the community.

After completing an exhaustive four-year search both on and off the Portland peninsula and its surrounding area, IDEALS acquired land formerly occupied by the B&M Baked Beans facility along the Portland waterfront. IDEALS is currently in the process of transferring the property to Northeastern University, and a copy of the Purchase and Sale Agreement is included in Section 4. The conveyance of the property will occur subsequent to Site Plan approval and prior to application for a building permit.

As described in more detail herein, the City Council approved The Roux Institute at Northeastern University's Institutional Overlay Zone on February 6, 2023. This Site Plan Application is the first step in carrying out the goals set forth in the Institutional Development Plan and Regulatory Framework.

1.2 Campus Vision

Northeastern University's campus will integrate graduate education in technology and science with groundbreaking research and a wide range of collaborations to spark innovation and economic development. The campus is being designed at a scale that will facilitate learning, collaboration, and research breakthroughs and innovations, attract start-up businesses, and strengthen existing Maine businesses and institutions.

Creation of a new campus provides the opportunity to establish a people-oriented space right from the start. The campus interior will prioritize people over cars by creating a pedestrian-friendly landscape supported by multi-modal programs that provide incentives for alternative transportation options. The campus will improve site resilience and sustainability by replacing much of the existing pavement and rooftops with green space, adopting resilient approaches along the coastline, and incorporating sustainable building practices.

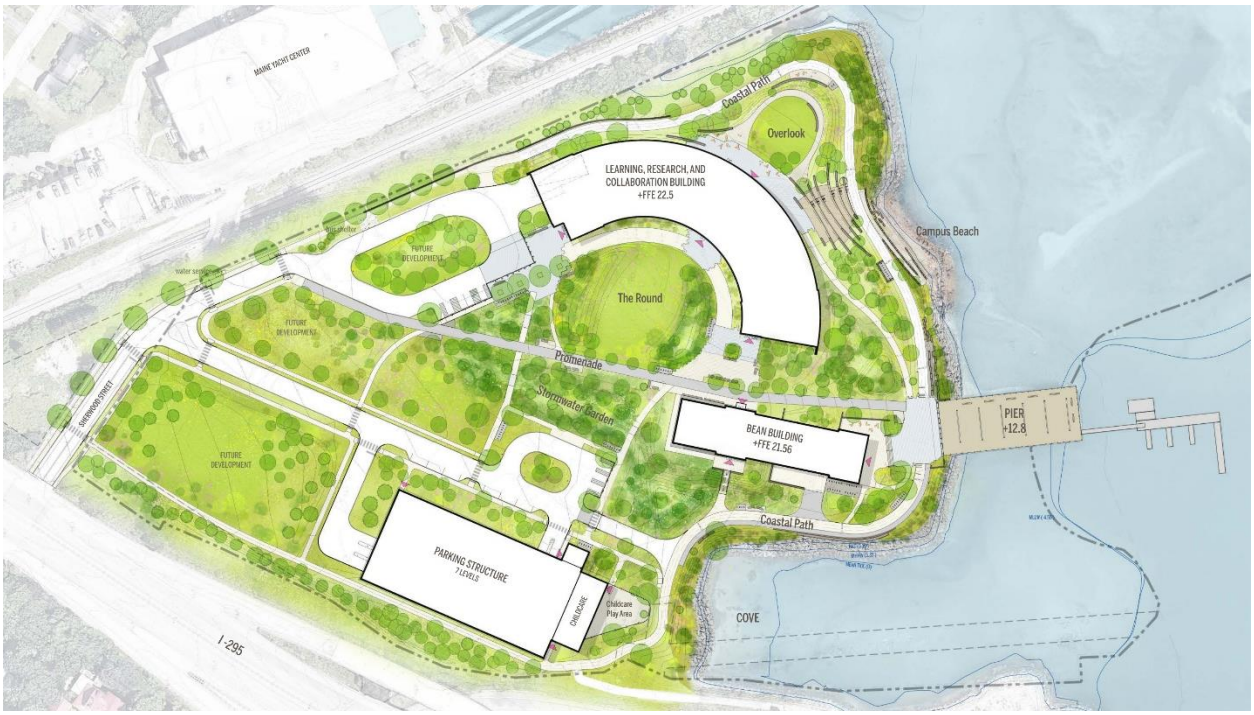


Figure 1-1: Rendered Site Plan

1.3 Rezoning

In 2022, Northeastern University and IDEALS began the process to rezone the site with an Institutional Overlay Zone (IOZ) for the campus at 1 Bean Pot Circle in Portland, Maine (the Site). The IOZ rezoning process involved the development of a long-range plan for the institution, known as an Institutional Development Plan (IDP), that informs the eligible institution's Regulatory Framework, which codifies supplemental zoning regulations to the base zoning district. The Regulatory Framework includes standards related to dimensions, design, transportation and parking, environment, neighborhood integration and engagement, mitigation of future impacts, and on-going monitoring. In addition to zoning amendments associated with the IOZ designation, IDEALS simultaneously sought a zoning map amendment to change the underlying zone for the Site to B-5 Mixed-Use Business. The City of Portland Planning Board approved Northeastern University's Campus IDP on November 22, 2022, and the Portland City Council subsequently and unanimously approved the zoning map and text amendments to establish the IOZ regulatory framework and change the underlying zone to B-5 Mixed-Use Business on February 6, 2023.

The extensive IDP development review process allowed Northeastern University and IDEALS to memorialize the long-term strategic plan for the Campus in consultation with the Portland community at the very outset of development. As required by the approved regulatory framework, regulatory requirements associated with the IOZ will be addressed during the Site Plan Application process for each phase of development.

1.4 Historic Preservation

The Site was occupied by residences and a lobster cannery prior to 1913, when Burnham & Morrill (B&M) relocated its food manufacturing operations to the Site from Franklin Street. Shortly thereafter, the flagship

cannery building (Bean Building) was constructed, as well as the adjacent codfish building on the pier. The Site was further improved with buildings and parking to support operations. Due to its industrial use, the Site is surrounded by security fencing, and the interior and waterfront have historically been inaccessible to the public. Canning operations ceased in 2021.

In 2022, IDEALS submitted a nomination to the City's Historic Preservation Board to designate the Bean Building as a local landmark. The five-story 1913 Bean Building was designated as a landmark by the City Council on October 17, 2022. During the Historic Preservation process, it was determined that the existing Codfish Building and pier were unsalvageable and will be demolished upon approvals from the City of Portland, Board of Harbor Commission, Maine Department of Environmental Protection and Army Corps of Engineers. This Site Plan Application proposes construction of a new pier in its place.

1.5 Existing Site

The Site includes approximately 13 acres above mean higher high water (MHHW) line as well as an adjacent 11 acres of submerged lands. The majority of the Site is developed land, with limited areas of natural vegetation. Approximately 9 acres of land above the mean higher high water line are impervious (paved areas, building roofs, foundations, etc.). The remaining 4 acres of permeable area include lawn and approximately half an acre of vegetated non-lawn area adjacent to the rail corridor abutting the Site to the east.

On May 23, 2023, IDEALS received a demolition permit from the City and commenced demolition of all existing buildings on the Site, retaining only the Bean Building and the Codfish Building.

The Site is located within Portland's East Deering neighborhood, at the end of Sherwood Street, adjacent to Maine Yacht Services and near a residential area of single and multi-family homes (three-story apartment buildings) and a commercial node featuring restaurants, bars, automobile mechanics, and offices. While proximate to these areas, the Site is remarkably buffered; I-295 to the west, state-owned vacant parcels to the north, a disused rail corridor and marine business to the east, and Casco Bay to the south collectively surround the property. Access to the Site from Veranda Street is via Sherwood Street, through a 40-foot-wide highway underpass.

1.6 Proposed Project Description – Phase 1

Phase 1 includes construction of a 238,000-sf Learning, Research & Collaboration Building, renovation of the 58,000-sf Bean Building to create a business incubator space, construction of a 234,450-sf parking garage (692 vehicular and 66 bike spaces), development of a 7,500-sf childcare facility, replacement of the pier, development of a coastal path, and other site improvements. Meaningful public open space will be established in this first phase to ensure public access to this signature waterfront amenity.

1.7 Attachments

- Agent Letter
- Location Map

Northeastern

October 25, 2023

Sam Reiche
Chief Operating Officer and Head of Real Estate
Initiative for Digital Engineering and Life Sciences (IDEALS)
100 Commercial Street, Suite 40
Portland, Maine 04101

Dear Sam:

Northeastern University is preparing plans for the first phase of development at the Roux Institute, located at 1 Bean Pot Circle in Portland Maine. Northeastern University is authorizing the Initiative for Digital Engineering and Life Sciences (IDEALS) and Woodard & Curran, Inc., to assist in the preparation of land-use permit applications for this project. IDEALS and Woodard & Curran are authorized as our agent to represent Northeastern University in addressing questions on the plans and applications for this project.

Sincerely,

Thomas E. Nedell,
Senior Vice President for Finance and Treasurer

Office of the Senior Vice President Finance

177 Huntington Ave.
360 Huntington Ave.
Boston, MA 02115

617.373.2240
fax 617.373.4728

finance.northeastern.edu



Woodard & Curran	Client Info: IDEALS ROUX INSTITUTE PHASE 1 1 BEAN POT CIRCLE PORTLAND, ME 04103	Job No: 0233482.00 Date: SEPT 2023 Scale: 1" = 24,000' Des by: JM Drn by: JM Chk by: AL	Drawing Title SITE LOCATION MAP	Drawing Number 0233482.00 Location Map

12 Mountfort Street
Portland, Maine 04101
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

Att. A1

February 5, 2024

Zach Powell, Senior Planner
City of Portland
389 Congress Street, 4th Floor
Portland, Maine 04101

Re: Response to City Staff Comments –Roux Institute at Northeastern University
Project ID PL-002724-2023

Dear Zach:

Thank you for coordinating the review of the Major Site Plan and Site Location of Development (SLOD) Application for the Roux Institute at Northeastern University. The following document provides written responses to the city review comments. Similar to the comments received, our responses are provided in tables in the following sections:

- Attachment 1. Site Plan Review Comment Responses
- Attachment 2. Zoning Review Comment Responses
- Attachment 3. Peer Review Comment Responses
- Attachment 4. Sustainability Charter Comment Responses

The following supporting documents have been uploaded to ProjectDox:

- Neighborhood Meeting Summary
- Community Advisory Group Meeting Summary
- Construction Management Plan, revised per comments received.
- Full size drawings of the following Figures:
- Figure 3-14 Planting Zone Plan
- Figure 3-17 Site Circulation Plan, revised per comments received.
- Figure 3-18 Areas of Public Open Space Plan, revised per comments received.
- Figure 3-24 Codfish Building Interpretive Elements
- Figure 5-1 Bike Amenities and Circulation
- Figure 5-2 Emergency Access Routes
- Figure 5-3 Bean Building Service Access
- Figure 5-4: Exterior Bicycle Parking

Also attached, please find updated floor plans for the proposed parking garage. These plans have been revised to eliminate the lowest level of vehicular parking spaces, thereby reducing the total parking on site from 706 to 641. The revised parking supply is consistent with projected parking demand at project occupancy and the resulting mode shares at full occupancy are in alignment with the mode shares outlined in the IDP.

If you have any questions or require additional information, please do not hesitate to contact me at (207) 558-3708 or dcameron@woodardcurran.com.

Sincerely,

WOODARD & CURRAN, INC.



Denise Cameron, P.E.
Project Manager

cc: Sam Reiche, IDEALS

1. ATTACHMENT 1: SITE PLAN REVIEW COMMENT RESPONSES

Site Plan Review Standards (Sec. 14.6)		
Transportation Standards (Sec. 14.6.1)		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Impact on Surrounding Street Systems	Continue to update application materials in conjunction with comments and recommended mitigation strategies as part of the TMP review process.	Acknowledged. No action at this time.
Access and Circulation	Update application materials to satisfy comments provided in Attachment 3. Continue to update application materials in conjunction with comments and recommended mitigation strategies as part of the TMP review process.	See Attachment 3 table for response.
Public Transit Access	No updates required.	This standard has been met.
Parking	Submit a parking demand analysis that provides evidence supporting the proposed parking supply. As necessary, update the TDM plan for any changes resulting from the parking demand analysis.	Parking demand is calculated hour-by-hour based on projected arrivals and departures. Because there are no components of this program that would create overnight parking (i.e., residential units or hotel rooms), parking demand is zero at the beginning of each day. As detailed in the TMP, time-of-day patterns for graduate student, affiliated user, special event, and some faculty

		trips were developed based on scheduling expectations and observed patterns at the current Fore Street campus. For these users, parking demand is calculated as the balance of arrivals and departures multiplied by the vehicle mode share. For other uses, standard rates from the Institute of Transportation Engineers Parking Generation Manual were applied. These are provided as a peak parking demand and the percent of peak demand at each hour of the day. Mode shares and internal trip reductions were applied using identical factors as for trips. At opening year, parking demand peaks at 601 spaces. Were auto mode share to remain at the TMP levels (80% for students, 90% for all others), peak demand would increase to 881 at completion of the TMP program. To be conservative, trip generation was calculated this way, however this level of demand exceeds parking supply. For this reason, the TDM plan specifies a program of strategies to reduce vehicle mode share below the levels in the TMP. The university will need to progress towards the mode shares in the TDM plan to keep demand within the site's parking constraints.
Transportation Demand Management	Update TDM plan to satisfy comments in Attachment 3.	See Attachment 3 table for response.
Environmental Quality Standards (Sec. 14.6.2)		

Standard	*Updates Requested by City Staff*	*Comment Response Provided by Applicant*
Preservation of Significant Natural Features	Update the site plan set and survey to identify all significant natural features on and immediately adjacent to the site. Updates should specify the approximate boundaries of habitats of endangered species.	Acknowledged. These updates will be included in a subsequent drawing submission.
Landscape Preservation	Submit a tree survey for the site that meets the standards of §4.3.1. of the Technical Manual.	A survey of existing trees 10" DBH or higher is being prepared and will be provided in a subsequent submission.
Site Landscaping and Buffers	Update application materials to provide 8-12 street trees within the City right-of-way or through an alternative strategy meeting the standards of §4.6.4. of the Technical Manual. If alternatives are proposed, alternative street tree planting strategies are subject to the review of the City Arborist and may require additional documentation for future preservation/evidence that proposed planting sites are unlikely to be redeveloped in the near future.	The team is working to designate street trees on the plan in accordance with city requirements. We will also provide substitutions for all maple trees, as requested. This plan will be provided in a subsequent submission.
Water Quality, Stormwater Management and Erosion Control	Update the application to satisfy comments from Wright Pierce.	See Attachment 3 for responses to Wright Pierce comments.

Public Infrastructure and Community Safety Standards (Sec. 14.6.3)		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Consistency with City Master Plans	No updates required.	This standard has been met.
Public Safety and Fire Prevention	Email the Department of Public Works to begin the E-911 address process, with Zach Powell copied on the email. The applicant team shall work with the Department of Public Works to identify any additional steps that need to be taken before site plan approval.	The applicant will initiate E-911 address process prior to planning board hearing.
	Update architectural drawings to demonstrate how the western portion of the perimeter access loop is actively integrated into the overall campus design and how the site design enhances the overall experience of using the perimeter access loop for cyclists and pedestrians.	The architectural/landscape drawings are being updated to widen the perimeter shared path to a minimum of 12 feet. A typical section of the revised perimeter path has been added to the attached Figure 3-17: Site Circulation Plan. The architectural drawings are being updated to add screening to the first two levels of the Structured Parking building to enhance pedestrian and cyclists' experience. These updated architectural and landscape drawings will be provided as part of a subsequent submission.
Public Utilities	Submit ability to serve letters from utilities when available and provide any additional information requested by the Portland Water District, as requested.	A request for ability to serve letters has been provided to Portland Water District and the Department of Public Works. The Applicant team has also been actively working with these utilities to review the proposed project design.

		The ability to serve documentation will be provided upon receipt.
Site Design Standards (Sec. 14.6.4)		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Massing, Ventilation and Wind Impact	No updates required.	This standard has been met.
Shadow	No updates required.	This standard has been met.
Snow and Ice Loading	No updates required.	This standard has been met.
View Corridors	No updates required.	This standard has been met.
Historic Resources	Submit an updated copy of the site plan set that shows the limits of the designation boundary.	The plan set will be revised to show the limits of the designation boundary. Revisions are in progress and will be provided as part of a subsequent submission.
	Update application materials to satisfy Board and Staff comments from the December 6, 2023 Historic Preservation Board Meeting. Await comments from the Historic Preservation Board and Historic Preservation Staff.	Application materials will be updated in response to Staff comments from 12/6/2023 HP Board Meeting and any subsequent comments from HP Board and HP Staff. An updated set of documents is expected to be issued around February 12, 2024 for HP Staff and Board review.

Exterior Lighting	Update the application to include two street lights that meet the standards of §10.2 and Figure X-1 of the City's Technical Manual or seek waivers.	The applicant assumes the two streetlights requested are for Sherwood Street. Clarification will be provided as part of a subsequent submission.
	Update application to have site lighting meet the standards of §12.3 of the Technical Manual.	The applicant used Section 12.3 of the Technical Manual as the basis of design. The lighting design and photometric plans are currently under review and updates will be provided as part of a subsequent submission, if required.
	Update photometric plans to provide average illumination, uniformity ratio, and maximum illuminance at ground level around the Structured parking & preschool facility building.	The lighting set will be updated as requested and will be provided as part of a subsequent submission.
	Confirm the CCT that will be used for each proposed luminaire.	Confirmed. All site lighting will be LED and shall not exceed 3000K Correlated Color Temperature (CCT). The applicant will clarify on drawings as part of a subsequent submission
	Add information on luminaire E11 to the Luminaire Schedule table.	The lighting Luminaire Schedule table will be updated to add information on luminaire E11 and will be provided as part of a subsequent submission
Noise and Vibration	No updates required.	This standard has been met.
Signage and Wayfinding	No updates required.	This standard has been met.

Design Standards	Please refer to Roux IOZ design comments in the Zoning worksheet.	Design review comment responses are provided in Attachment 2.

2. ATTACHMENT 2: ZONING REVIEW COMMENT RESPONSES

Zoning Use Review (Article 6)		
Zoning Performance Standards (Sec. 6.8)		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
§6.8.8(A)	Update architectural drawings to include screening for the first two levels of the Structured parking & preschool facility building.	The architectural drawings are being updated to add screening to the first two levels of the Structured Parking building and will be provided as part of a subsequent submission.
Zoning Dimensional Review (Article 7)		
Dimensional Standards (Table 7-A – Table 7-H)		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Structure height	No updates required.	This standard has been met.
Supplemental Dimensional Standards (Sec. 7.4)		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
7.4.3(B)(2)(c)	No updates required.	This standard has been met.

Roux IOZ Standards (§8.5.7)		
Applicability Standards (§8.5.7(A))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Applicability	Revise application materials to satisfy requested updates identified in Attachment 3.	See Attachment 3 table for response.
Phasing and Monitoring (§8.5.7(B))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Monitoring and Amendments	Submit an updated copy of the IDP incorporating the proposed changes identified in Attachment 5.	The IDP will be updated as requested and will be provided as part of a subsequent submission
Public Space	No updates required.	This standard has been met.
Minor & Major Amendments	No updates required.	This standard has been met.
Uses (§8.5.7(C))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***

Overview of Uses	No updates required.	This standard has been met.
Community Engagement and Connectivity	Submit a narrative and/or figures that demonstrate how the Sherwood Street connection will achieve connectivity and community engagement with the surrounding neighborhood.	The applicant has proposed to reconstruct Sherwood Street between Veranda St and the site driveway. The work will include a shared use path along the north side of Sherwood Street and a sidewalk along the south side of Sherwood Street, providing direct connections to the neighborhood and the signed bike route on Veranda Street. The applicant is invested in maximizing nonmotorized connectivity, and the site is ready for future connections as they become available. The landscape drawings are being updated to widen the perimeter shared path to a minimum of 12 feet. A typical section of the revised perimeter path has been added to the attached Figure 3-17: Site Circulation Plan. Lighting, pavement markings, and wayfinding will be provided to support community connectivity.
Ground-floor Uses	No updates required.	This standard has been met.
Hotel Use Standards	No updates required.	This standard has been met.
Dimensional Requirements (§8.5.7(D))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***

Applicability	Update the application to comply with zoning performance standards and IOZ dimensional requirements.	See responses below.
Minimum and Maximum Street wall heights	No updates required.	This standard has been met.
Stepbacks	No updates required.	This standard has been met.
Building Length	No updates required.	This standard has been met.
Transitions and buffers	Update architectural drawings to include screening of all structured parking levels on the western façade.	The architectural drawings are being updated to add screening to the first two levels of the Structured Parking building and will be provided as part of a subsequent submission.
Transportation (§8.5.7(E))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Transportation Demand Management	Update the TDM plan to establish a framework for all envisioned phases of development, including a data collection plan. Staff encourages establishing a plan differentiating parking passes by types of garage users (e.g., Staff vs. student; resident vs. hotel guest vs. off-site visitor), as well as installing permanent bicycle & pedestrian counters at planned &	The TDM has been developed to establish TDM measures appropriate for each of the user types at the site rather than by building. This sets the framework for incorporating the anticipated TDM approaches for future phases. Measures have been developed to encourage the use of the full spectrum of alternative modes and are scalable to continue to be expanded as the site and other opportunities are developed.

	potential shared-use entrances to the site.	
Traffic Movement Permit	Update application to provide materials requested in Attachment 3 and continue to coordinate with MaineDOT & City staff for future comments & requested revisions.	See Attachment 3 table for response.
Bicycle and pedestrian access and safety	Submit an updated Transportation, Access, and Circulation Plan as a separate document to include pedestrian facilities, as well as contemplated connection points to the rail trail and Tukey's Bridge. Contemplate connections can be differentiated with a dashed line and for Tukey's Bridge, do not need to provide a finalized alignment.	See Attached Figure 3-17: Site Circulation Plan.
	Update application materials to address comments from Bruce Hyman regarding the proposed design of Sherwood Street.	See Attachment 3 table for response.
	Update floor plans for the Structured parking & preschool facility building to provide additional detail on interior connections between building	The Structured Parking and Daycare facility are separated and are not connected. The site plan drawing is being updated to further

	uses, and ingress/egress points for pedestrians.	illustrate ingress/egress access for pedestrians and will be provided as part of a subsequent submission.
	Update the application to include a minimum perimeter access loop width of 20 feet and a minimum 12-foot width for all other pedestrian facilities.	The design team has reviewed the width of pathways and is currently revising the plans to widen sections of the perimeter path to a consistent 12 feet. A cross section of the perimeter path has been added to Figure 3-17: Site Circulation Plan, illustrating approach for pavement markings to accommodate shared use. This revised width meets or exceeds other existing trail networks within the City of Portland and will be suitable for the anticipated bike/ped volume. Increasing all pedestrian facilities to 12 feet and perimeter path to 20 feet is not warranted given anticipated use levels. The suggested widening would result in an additional 0.7 acres of impervious surface. Where possible, we are seeking to reduce impervious area to improve quality of our water resources.
Parking	Updated application materials to include a parking ratio based on the parking analysis.	Excluding the parking structure, total planned building area is 303,600 square feet. This equates to a peak parking demand of 2.9 spaces per thousand square feet. For comparison, the standard Institute of Transportation Engineers rate for a general office building is 2.39 spaces per thousand square feet. While the site includes a large office component, classrooms are a more person-intensive use of space. The academic uses drive parking demand somewhat higher than a pure office development on this site.

	Identify where the estimated parking demand of 881 spaces for 2032 is in the TMP application.	This is discussed beginning on page 9 of Chapter 6 of the TMP Application.
Circulation	Update the application to include at least a 20-foot wide shared-use path for the entirety of the perimeter access loop.	See above comment response *§8.5.7(E) Transportation: Bicycle and pedestrian access and safe*
Environment (§8.5.7(F))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Open Space	Submit a site plan sheet that shows the proposed public open space with the total amount of open space (in acreage).	This information has been added to the attached Figure 3-18 Areas of Public Open Space Plan
	Submit a draft public access easement for the perimeter access loop and buffer around the loop for review by the Planning Board and Corporation Counsel.	We will provide a draft public easement to Corporation Counsel, under separate cover. Figure 3-18 Areas of Public Open Space has been revised to extend the public access easement along the full length of the perimeter loop.
Sustainability and Resilience Charter	Update application materials to respond to the comments in Attachment 4.	See Attachment 4 table for response.

Lighting	Submit interior lighting plans, sequence of operations, and control details for the Cannery Building and the Structured parking & preschool facility building will be required to confirm compliance with ANSI/ASHRAE/IES Standard 90.1-2022.	The Structured Parking lighting set demonstrates compliance with ANSI/ASHRAE/IES Standard 90.1-2022 and will be provided as part of a subsequent submission. The Bean Building and Daycare facility are currently Shell+Core only. Compliant lighting plans will be provided in future building permit submissions once the 'fit out' designs of the Bean Building and Daycare facility are completed. "
Design Flood Elevation (DFE)	Submit the FFE for the preschool facility.	The FFE elevation of the daycare is 16. This FFE elevation will be added to the plans of the Daycare Center and will be provided as part of a subsequent submission.
Shoreline Stabilization & Natural Resource Impacts	No updates requested.	No action required at this time.
Bird-Safe Design	Update architectural drawings for the Learning and Research Center to clarify how the proposed laminated glass fins identified as GL-C1 will include a bird-safe treatment/design with American Bird Conservancy and Cornell Ornithology Lab standards.	The glass fins noted as type GL-C1 are Interior Structural Fins that are perpendicular fins supporting the facade. Accordingly, they pose no risk for bird collision.

	Submit updated detail drawings for the proposed new windows in the Cannery building to demonstrate that the windows or additional treatment to the windows will provide a bird-safe design with American Bird Conservancy and Cornell Ornithology Lab standards.	The applicant will provide more information as it pertains to bird safe glass in the Bean Building's new windows as part of a subsequent submission.
	Submit detail drawings for the proposed windows for the Structured parking & preschool facility building that demonstrate a bird-safe design with American Bird Conservancy and Cornell Ornithology Lab standards.	The applicant will provide a glazing schedule for the Structured Parking and Daycare Building that includes treatment for Bird Safe glass complying with Maine's Legislation LD 670 and conform to the City of Portland's Bird Friendly Ordinance as part of a subsequent submission.
Mitigation Measures (§8.5.7(G))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Off-Site Infrastructure	No updates requested.	No action required at this time.
Natural Resources	No updates requested.	No action required at this time.
Design (§8.5.7(H))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***

Waterfront	Submit a detailed elevation for Vestibule 3 for further Staff review.	The applicant is developing an updated elevation rendering that illustrates the details of Vestibule 3 as part of a subsequent submission.
Cohesive Campus	No updates required.	This standard has been met.
Historic preservation	Submit clarification on the intended function/s of the radius paved surface leading to the western façade of the Cannery Building, including, but not limited to, any ancillary, delivery, or utility functions.	Paved surface leading to the western facade of the Bean Building to be used for deliveries, trash/recycling pickup, and service access. In addition, this location will be used for bicycle access to a covered, indoor bike parking room. A required egress from the Bean Building will also exit onto this paved surface. See orange triangle graphics on "Figure 5-3 – Bean Building Service Access" designating these locations.
Connectivity	Submit a written description of uses along the coastal path in relation to motorized vehicles.	The coastal path around the Roux Campus is not intended for public vehicles other than emergency vehicles such as Ambulance and Fire Apparatus, and periodic service vehicles needing to access the Bean Building and pier. The coastal path is widened in these areas to accommodate emergency vehicles by incorporating a coble stone shoulder, as reflected in Figure 3-17.
	Submit a narrative discussing the need for multiple garage entrances.	The Garage entrances have been designed with consideration of vehicular flow and safety. The primary entrance will be the North entrance while the East entrance will be used primarily as an accessory entrance during peak hours.

Open space	Update the landscape plan to include native coastal shrubs and grasses along the waterfront edge.	An annotated list confirming native status of all plants within the coastal waterfront edge will be provided as part of our subsequent submission.
Sustainable practice	Confirm whether photovoltaic panels will be installed as part of Phase 1 for the Structured parking & preschool facility building.	Photovoltaic panels will not be installed as part of Phase 1 for the Structured Parking. However, infrastructure will be provided for possible installation in the future.
Resilience	Confirm whether a generator(s) will be included for the Structured parking & preschool facility building. If not, submit a narrative on how emergency power generation & elevator egress will be supplied.	The Elevator must be provided with standby power and comply with the emergency operation and signaling device requirements of the MUBC and NFPA 101. Emergency loads such as lighting and fire alarm will be provided by battery backup through either local battery units or central lighting inverter.
Building design	Submit architectural floor plans and proposed FFE for the preschool facility.	The FFE of the daycare will be 16. This FFE elevation will be added to the plans of the Daycare Center and updated architectural floor plans will be provided as part of a subsequent submission.
Building entrances	Update architectural drawings to include additional entrance articulation that supports wayfinding to publicly accessible entrances.	The applicant is developing updated architectural drawings and renderings that illustrate the details of publicly accessible entrances as part of a subsequent submission.
Mitigation of impacts	No updates requested.	No action required at this time.

Neighborhood integration (§8.5.7(l))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Neighborhood engagement	Submit the October 30th Community Advisory Group meeting minutes, including a complete list of Advisory Group members (present and not present) and a summary of discussion topics.	The following is submitted in response to comments and to demonstrate fulfillment of the commitment in the Institutional Development Plan to create and work collaboratively with a Community Advisory Group broadly reflective of interested constituencies in the City of Portland: <u>Community Advisory Group Members as of 10.30.2023</u> Tiffanie Bentley, Interim President, SMCC Sarah Boltz, Teacher, Presumpscot Elementary School Emma Bond, Portland Bike/Ped Advocacy Committee Charlie Collins, Friends of Payson Park Eamonn Dundon, Dir. of Advocacy, Portland Regional Chamber of Commerce Jason Judd, Executive Director, Educate Maine Cherie Juniwiecz, East Deering resident Cheryl Leeman, East Deering Neighborhood Association Adilah Mohammed, The Third Place Sarah Nadeau, Parent, Presumpscot Elementary School Bill Needelman, Waterfront Coordinator, City of Portland Jack Phillips, Executive Director, Portland Parks Conservancy Angie Taylor, Principal, Presumpscot Elementary School Aaron Townsend, Dep. Superintendent, Portland Public Schools Mike Tremblay, Director of Transit Development, Metro Steve Von Vogt, East Deering Neighborhood for Responsible Development Marie Caspard, The Island Institute

		<u>Positions yet to be filled but still in active recruitment:</u>
		Front Street Neighborhood representative
		Portland Housing Authority's Washington Gardens
		Portland Housing Authority's Front Street Development
		Rail representative
		
		The first meeting of Community Advisory Group was held on October 30, 2023 and a copy of the meeting notes are attached for your reference. Discussion topics of the first meeting included:
		- Overview of Roux Institute
		- Campus development plan and project status
		  o Phase 1 plans, site layout, buildings, landscaping, public access
		  o Institutional Overlay Zone and upcoming permitting process
		- Questions and discussion
		- Role of CAG
		- Draft Charter

	Provide confirmation of who is serving as the designated community contact. City Staff recommends that the community contact be identified on the project website along with the contact email provided at the bottom of each page.	Sam Reiche will continue to serve as the designated community contact, until that responsibility is transferred to the Roux Institute at Northeastern University on or around the time of campus opening. Responsiveness to community questions and input is encouraged through multiple channels on the www.rouxcampusportland.org website, including links to Subscribe to Updates, Leave Feedback and to Reach Out with questions or requests for a one-on-one meeting at info@rouxcampusportland.org. Requests are responded to promptly. This is standard and preferable to including a name and cell phone or email address for a specific individual and will

		facilitate a smooth transfer of responsibilities to Roux Institute at Northeastern University staff. The Reach Out link or Feedback link is on every page of the website. The website has received 10,159 unique visitors and has 320 followers who receive regular updates including notices of meetings, minutes, recordings and presentations.
	In keeping with the goal of the IDP to provide up-to-date information through the project website, review and update accordingly the timeline listed under the Info page of the project website.	The timeline is updated regularly to reflect current understanding of the project schedule. Accordingly, the anticipated date for campus opening is being changed to Fall, 2027.
Construction management	Submit a draft design for a dedicated construction webpage that includes communication methods through social media, texting, and hotline.	Northeastern University plans to establish a construction webpage similar to the one created for their recently completed research center, EXP (seen at this link: https://facilities.northeastern.edu/exp/[facilities.northeastern.edu]). As with the current Roux Campus website, www.rouxcampusportland.org, timely information on construction progress will be provided in the form of news and photos. Neighbors and the public can sign-up to receive regular email updates about construction status and other elements that could impact the neighborhood. Further details for the webpage and construction communication plans will be developed in collaboration with prime contractors and shared in advance of construction.

	A detailed construction schedule is referenced but is not attached to the Construction Management Plan. Submit a detailed construction schedule for City Staff review.	The attached Construction Management Plan has been updated accordingly.
	Submit a truck routing plan that identifies routes to and from the site, along with anticipated hours for deliveries. Temporary off-site storage locations should be identified as part of the truck routing plan.	The attached Construction Management Plan has been updated accordingly.
	Under Erosion Control and Preservation of Trees, clarify that temporary ESC measures shall be removed post-construction.	The attached Construction Management Plan has been updated accordingly.
	A wheel wash is included for the eastern construction entrance, but there is not a wheel wash for the southern entrance/ there is no connection for trucks to enter through the southern entrance and exit through the eastern entrance. Clarify what ESC controls are proposed for the southern entrance and if vehicular connections are proposed between the southern and eastern entrances.	The attached Construction Management Plan has been updated accordingly.

	On the Sitework/Foundation sheet of the Site Logistics Plan, the Codfish Building and Pier are identified to be demolished at a later date. However, the demolition of these elements is included in the site plan set. Clarify.	The attached Construction Management Plan has been updated accordingly.
Historic Preservation (§8.5.7(J))		
Standard	***Updates Requested by City Staff***	***Comment Response Provided by Applicant***
Historic preservation review	No updates requested.	No action required at this time.
Required interpretive elements	No updates requested.	No action required at this time.

3. ATTACHMENT 3: PEER REVIEW COMMENT RESPONSES

Peer Review Comments		
Wright-Pierce Chapter 500 Review Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Urban Impaired Stream Standard	As noted by the applicant, the proposed development is not located within an urban impaired stream watershed. Therefore, this standard is not applicable.	Noted.
Basic Standard	On Sheet C-002 of the Civil Plans, it appears the perimeter barrier falls within the edge of water called out on the plans. It is recommended to relocate the perimeter barrier to keep it out of the water.	The perimeter barrier will be revised as requested. The updated Civil Drawings will be provided as part of a subsequent submission.
	On Sheet C-002 Inset B of the Civil Plans, it appears the perimeter barrier crosses an existing building. Please confirm and revise as necessary.	The perimeter barrier will be revised as requested. The updated Civil Drawings will be provided as part of a subsequent submission.
Basic Standard	Please confirm whether de-watering is anticipated on the project. If de-watering is anticipated, please consider including a detail for de-watering treatment in the plans and discussion on proper discharge in the Stormwater Management Plan.	Dewatering is anticipated during construction. A detail will be added to the civil plans, to be submitted at a later date.

	In Appendix B of Maine DEP Chapter 500 it is noted that during post-construction ditches and swales should be inspected after heavy rains in addition to the spring and late fall. We would recommend including this additional inspection requirement in the Stormwater Inspection & Maintenance Plan.	The Stormwater Inspection and Maintenance Manual will be updated accordingly and provided as part of a future submission.
	We recommend the applicant updates winter construction dates on the Civil Plans Sheet D-401 to match Maine DEP requirements.	Sheet D-401 will be updated accordingly and provided as part of a future submission.
	If winter construction is anticipated, we would recommend including Winter Construction requirements outlined in Maine DEP Chapter 500 in the Stormwater Management Plan.	As noted on Sheet D-401, the contractor will be required to comply with the Maine DEP Erosion Control BMP Manual, which includes Winter Construction requirements. In our opinion, this satisfies the Maine DEP requirements.
General Standard	The applicant has demonstrated that they meet the treatment requirements for redevelopment project under the General Standards of Maine DEP Chapter 500.	Noted.
General Standard	We recommend the applicant confirm that proposed pre-treatment meets the requirement of proprietary systems under Appendix B of the Maine DEP BMP manual.	Sediment pretreatment rows designed by the manufacturer are provided for the proposed R-Tank systems in accordance with Chapter 500 requirements. A letter that demonstrates manufacturer review and approval of the design can be provided upon request.

Flooding Standard	The applicant states in the Stormwater Management Plan that the portion of the project which discharges to Casco Bay is eligible for a waiver under Maine DEP Chapter 500 Section 4.F(3) since it is discharging to a tidal waterbody. The drainage within Sherwood Street will not drain to Casco Bay; however, the applicant is requesting a waiver from the Flooding Standard for the campus development.	A waiver from the flooding standard is requested for the site development on private property, which drains in its entirety to Casco Bay. The project also requires upgrades to Sherwood Street, including the stormwater infrastructure in Sherwood Street. We are working with Public Works staff on the appropriate public stormwater infrastructure design in Sherwood Street.
Wright Pierce - General Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
a.	Section 25 of the Site Location of Development Application states that "public notice requirements associated with Maine DEP Site Law do not apply "because the "City of Portland has Delegated Review Authority." Please confirm public notices will not be required for this application.	We understand that the public notice for SLOD is submitted concurrently with public notice for Site Plan by City Staff; therefore, a separate notice sent by the Applicant is not required.
b.	In Chapter 7.2 Bioretention Filters of Volume III. BMP Technical Design Manual, it is stated that the "geotextile fabric should be Mirafi 170N or equivalent." On Sheet D-407 of the Civil Plans, the filter fabric is called out as 140N. We recommend the applicant confirm that 140N is acceptable for this application.	We will review geotextile materials and revise as needed.

Wright Pierce - Stormwater Management Plan Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
a.	It is stated in Section 3 of the Stormwater Management Plan that stormwater infrastructure on Sherwood Street is still being resolved. Please provide updated stormwater plans for Sherwood Street once completed.	We are working with Public Works staff on the stormwater infrastructure design in Sherwood Street; updated plans will be provided once completed.
b.	We would recommend the applicant provide stormwater modeling results to confirm bioretention ponds and R-Tank systems meet the requirements of Maine DEP Stormwater BMP Manual.	Based on conversations with Public Works staff in September 2023 prior to Site Plan submission, we understand that stormwater modeling documentation is not required due to the waiver of the Flooding Standard.
c.	In Section 32-38 City of Portland's Code of Ordinance, it is noted the City requires an annual inspection report completed by qualified post-construction stormwater inspector to be submitted to the Department of Public Works. It is recommended to include this requirement in the Stormwater Inspection & Maintenance Plan.	The Stormwater Inspection and Maintenance Plan will be updated accordingly and provided as part of a subsequent submission.
Wright Pierce – Plan Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
a.	On the Sand Filter details on sheet D-405, there is a callout for "underdrain to outlet structure (size, location,	The underdrains for all proposed Subsurface Sand Filters will discharge into outlet control

	and length to be determined by Engineer of Record)." On Sheet C-302 the underdrains for the sand filters are shown discharging to daylight and not to a structure. Please confirm intent of detail and revise as appropriate.	structures. Underdrain connections will be clarified in revised Civil Drawings to be provided as part of a subsequent submission.
b.	On sheet C-304, one of the structure tables is cut off and appears to be missing OCS-9. Please provide and updated table showing all OCS information.	The structure table will be updated accordingly. The updated table will be provided with revised Civil Drawings provided as part of a subsequent submission.
c.	Information on SD103 should be provided on Sheet C-304 in the pipe table.	The pipe table will be updated accordingly. The updated table will be provided with revised Civil Drawings provided as part of a subsequent submission.
d.	It appears Subsurface Sand Filter 4 collects drainage from the road through CB14. Please verify if a hydrodynamic separator is required for Subsurface Sand Filter 4.	CB14 is located along a gated access way that will only be used occasionally for service and emergency access; therefore, it is our opinion that the drainage area to CB14 does not meet the criteria that would require a separate pretreatment structure.
e.	We would recommend adding a detail for pipe insulation of shallow pipes.	This detail will be added to the revised Civil Drawings, which will be provided as part of a subsequent submission.
f.	We would recommend adding a detail that shows horizontal and vertical utility separation requirements.	This detail will be added to the revised Civil Drawings, which will be provided as part of a subsequent submission.

g.	On sheet L4.00, consider outlining bioretention cell location as it relates to the proposed vegetation. Confirm native shrubs and perennials are located within the bioretention area, per Maine DEP – Chapter 7.2 – Bioretention Filters.	The bioretention cells will be outlined on Sheet L4:00 and included in a subsequent submission.
Tom Errico, P.E. – NE Traffic Eng. Director Review Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
1.	The applicant shall provide the parking demand analysis back up information in support of the project's parking supply.	With the reduction in the size of the garage, the resulting parking supply (641) is in alignment with the projected demand (581) at project occupancy.
2.	The applicant shall provide sight distance measurements at the Veranda Street/Sherwood Street intersection.	Sight distance looking north from Sherwood Street exceeds the minimum 250 feet (Maine DOT standard at 30 mph). However, when exiting Sherwood Street, the sight distance looking left (south) is blocked by the on-street parking and is only visible to 230 feet. As in most urban areas, in actuality, vehicles pull up further than 10 feet behind the edge of pavement. If existing vehicles pull up to edge of roadway, beyond the impact of the parked vehicles on the south side of Veranda Street, sight lines increase dramatically.

3.	The alignment/configuration of the internal three-way STOP intersection is a concern given the heaviest egress traffic movement will have to make a hard left maneuver. I would be interested in the evaluation of a small roundabout at this location.	A small roundabout will create right of way impacts and there are concerns with buses traversing over a domed truck apron.
4.	I support a waiver for the size of parking spaces in the garage given low vehicle turnover.	Noted.
Janine Ba – DPW Transportation Development Review Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
1.	DPW agrees with the proposed cross sections provided by the Transportation Program Manager for Sherwood Street that includes a 10' shared use path and feel it should be continued onto the campus and transition at the intersection.	The Sherwood St design will be updated to include a 10' shared use path.
2.	The applicant shall label the roadway (Sherwood Street) ROW and centerline on the plan view and cross section sheets.	Labels will be added to the Civil Drawings to be provided as part of a subsequent submission.
3.	When printed it can be hard to distinguish between existing and proposed elevation. All elevations in the plan set need to be labeled as existing or proposed to prevent confusion. Update the plan set by using EX. Or	Plans will be updated as requested.

	parentheses () to distinguish between the type of elevation.	
4.	DPW feels a traffic circle would work better at the intersection pictured on page 2/2 of email from Janine Ba dated 12/20/23.	A small roundabout will create right of way impacts and there are concerns with buses traversing over a domed truck apron.
5.	DPW has concerns with the minimum 5ft sidewalk width proposed for the site. The sidewalk width should be sized to meet pedestrian demand for the campus.	The Sherwood St design will be updated to include a 10' shared use path on the north side of the street.
6.	Revise the plans to adjust the -LW- within the property or provide documentation that shows the applicant has permission to be on the property.	At this time, the proposed work will occur entirely within the Applicant's property and City Right-of-Way. The limits of work will be adjusted accordingly on Civil Drawings provided as part of a subsequent submission.
Mark Reiland – City Arborist Review Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
1.	Please include location, species, and DBH of existing trees on site and indicate tree protection measures for existing trees to be preserved. Groups of trees or wooded areas to be preserved can be indicated by showing the location of the collective group canopy dripline.	A survey of existing trees of 10" DBH or higher is being prepared and will be provided in a subsequent submission. The existing trees will not remain, as they will be impacted by the proposed grading and site improvements.

2.	Please choose alternative species for the proposed maple selections; Silver Maple, Red Maple, Sugar Maple and Freeman Maple. The urban forest in the greater Portland area is over saturated with maple (>30% by count) creating a high degree of susceptibility to Asian Longhorned Beetle infestation.	Subsequent submissions of the landscape plans will include substitutions for all maples.
Transportation Demand Management Plan Preliminary Comments Markup (dated 12/5/2023)		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Section 1.1.2	Will the full capacity of the parking garage be available during Phase 1? Will parking costs be market rate? If so, for whom? This is key to understanding incentives/ disincentives to driving.	With the reduction in the size of the garage, the resulting parking supply (641) is in alignment with the projected demand (581) at project occupancy.
Figure 2 Campus Transportation Access	The M-UP substandard width of 6′ for the beginning. Substandard bike lanes proposed on Veranda Street, not a M-UP.	Sherwood Street will be designed to accommodate a shared use path as requested by the City of Portland.
2.2.1 Existing Conditions	Confirm Sherwood Street right-of-way width.	ROW is 3 rod or 49.5 feet.
2.2.3 Potential Future MaineDOT Infrastructure	Discuss Berlin/SLA pathway and Veranda St bike lanes. Confirm shared-use path width.	The Veranda Street bike lanes are mentioned in 2.3.4 which discusses other potential future infrastructure as it is not a MaineDOT project.

2.3.1 Existing Conditions	Add alternative biking route around Baxter Boulevard via Back Cove Trail to narrative.	Agree, bicyclists can also use the Back Cove Trail or Baxter Blvd as a less direct route into the Portland Peninsula.
Figure 3. 15 Minute Bike Shed Zone	Quite skeptical this is the 15 min. bike shed & barely even drive shed. Confirm bike shed boundaries.	Bike shed boundaries will be updated/confirmed. Updates to this figure can be provided as part of a subsequent submission, as necessary.
2.4.2.2 Other Metro Opportunities	Confirm at what level transit passes will be subsidized for students, staff and faculty.	The Roux Institute is currently running a pilot program with METRO. Bus passes will be subsidized long term and the level of subsidy will be determined based off the pilot program.
2.7 Existing TDM Efforts	Confirm at what level transit passes will be subsidized for students, staff and faculty.	The Roux Institute is currently running a pilot program with METRO. Bus passes will be subsidized long term and the level of subsidy will be determined based off the pilot program.
	Confirm the rate students will be charged per parking space.	Users will be charged market rates for parking.
Table 2 Transportation Survey Mode Split Data	What was response rate to the Surveys? Is there a meaningful breakdown by students vs staff/faculty/others since mode share targets are different for each?	The surveys include a demographic breakdown between students, faculty, staff, others, ect.

4.3 Proposed Parking Supply/Demand	Confirm how interim phasing of allocated parking spaces will be managed (e.g. restricting parking to 561 within a garage with a capacity of 692 spaces during Ph 1).	With the reduction in the size of the garage, the resulting parking supply (641) is in alignment with the projected demand (581) at initial project occupancy. No further parking modification is required.
Table 5 Drive Mode Split Targets	Does "Drive" include all carpool occupants?	No, only the driver counts towards the percentages in this table.
6 Mode Split Target Strategies	Table 7 is not provided. Revise last sentence on page 20 to confirm intent.	Table number was mislabeled and should read Table 6.
Table 6. TDM Strategies - Commitments	What is the level of subsidy? 100%?	The Roux Institute is currently running a pilot program with METRO. Bus passes will be subsidized long term and the level of subsidy will be determined based off the pilot program.
	What happens to the interior bike parking when more vehicle parking is needed?	The Roux Institute at Northeastern anticipates that both bicycle parking and vehicular parking demand will continue to increase as enrollment increases, so it is anticipated the bicycle parking remains in the garage until and if it could be accommodated elsewhere. The Roux Institute at Northeastern University will continue to investigate additional measures to support reduction of vehicular trips to the site including remote parking in connection with

		transit and investment in additional alternative mode infrastructure.
	The current plans show substandard width bike lanes (4').	Sherwood Street will be designed to accommodate a shared use path as requested by the City of Portland.
	Where are the on-site showers and lockers planned to be located? Is there a campus gym?	Per Cannery Building Drawing A-100, there are on-site showers and lockers in the Lower Level of the Cannery Building. There is not a campus gym.
	What is the anticipated cost/month for parking spaces --> market rate?	Users will be charged market rates for parking.
	Confirm transit pass subsidy. Not a transit pass provided via employee/student ID as done by most institutions (USM/SMCC, etc) with no out of pocket outlay required?	The Roux Institute is currently running a pilot program with METRO. Bus passes will be subsidized long term and the level of subsidy will be determined based off the pilot program.
	Where and how will carpool parking be prioritized?	Grade level priority parking spaces will be provided as demand dictates.
	Can electronic screen displaying transit information be provided in the lobbies of the two main Ph 1 buildings for increased visibility of multimodal options?	Informational signage will be provided in both buildings.

	Can 'simple' AC outlets be added in vicinity of interior bike parking in short-term to encourage e-bike/bike usage in general?	Yes.
	Reported survey results said high desirability of bikeshare. Can this be implemented in short-term versus long-term?	Yes. The bike share location is shown on the Figure 5-1 Bike Amenities and Circulation.
Justin Pellerin, P.E. - DPW Sherwood Street and Campus Site Plan Response Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Sherwood Street Roadway Improvement Comments		
1.	New catch basin structures in Sherwood Street should be installed per City of Portland Technical Manual standards. Each basin should have a headstone and be installed with a 3' sump. Include applicable details in the plan set.	Noted. The details will be revised accordingly and provided with revised Civil Drawings to be provided with subsequent submission.
2.	All storm drains and underdrains 10" and greater shall meet the City's stormdrain material specifications listed in section #2 of the technical manual.	Noted.
3.	It appears the proposed 12" underdrain/stormdrain pipe running along the southerly curb line between station 212+00 and 213+00 is in conflict with an existing gas main. Is the applicant working with Until to relocate the gas main in this area?	This Sherwood St design is being revised to alter lane widths and add a shared use path as suggested. Coordination with Unitil will take place during future design if required.

4.	DPW is in the process of inspecting the existing storm drain line in Sherwood Street. Improvements may be needed within the project paving limits of the pipe is found to be in poor condition.	Noted.
Campus Site Plan Comments:		
1.	The existing condition plans and design plans should be updated to address the storm drain alignment issues and to resolve any remaining utility conflicts between the 12" water main and the City's storm drain system in Sherwood Street.	It is our understanding Public Works is completing CCTV evaluation of the storm drain in Sherwood Street. We will update our existing conditions and proposed plans accordingly.
2.	PWD should review the proposed sanitary connection into Ex SMH-1. The City's mapping indicates this structure is owned by PWD; however, that is somewhat unclear.	PWD confirmed the structures are owned by PWD. We are working with PWD on this sewer connection and will provide documentation of approval upon receipt.
5.	The existing condition of the structure (EX-SMH-1) and outlet pipe out of EX-SMH 1 should be thoroughly inspected and possibly replaced if in poor shape. If EX-SMH is found to be in poor condition it appears an alternate alignment could be utilized which would result in the Elimination of EX-SMH-1 and Proposed SMH-1 (And S-1) by connecting S-2 directly to un-named EX SMH.	Noted. We are working with PWD on this sewer connection and will provide documentation of approval upon receipt.

6.	The plans should be updated to depict the locations of all the required ESC Controls including but not limited to dewatering/stockpiling areas with proposed BMPs and the proposed location of the anticipated stone construction entrance.	The Civil Drawings will be updated accordingly, and provided as part of a subsequent submission.
7.	The applicant shall confirm the sizing and design of the proposed external grease trap associated with the LRC building and verify it is designed in accordance with Chapter 7 of the City's sewer use rules and regulations	The applicant will provide updated data on the size and design of external grease trap and verify it complies with Chapter 7 as part of a subsequent submission.
8.	The project will be required to submit a dewatering plan to the Water Resource's Compliance Coordinator in accordance with chapter 8 of the City's sewer use rules and regulations prior to any excavation work and dewatering activities occurring on-site.	Noted. A general note will be added to the Civil Drawings, which will be provided as part of a subsequent submission.
Ann Machado – Zoning Administrator Review Comments		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Section 8.5.7.D		
1. B-5 is the underlying zone	No dimensional requirements under Table 7-E except height which is governed under the IOZ requirements.	Noted.

3. Street Wall Height	Min. 45′ & max. is 105′ -LRC – 68.6 -Garage – 66.2 stair tower (86.7)	This standard is met.
4. Stepback	Needed at street wall if higher than 105′ – 10′ min. – LRC goes from 22.5′ to 13.5′	This standard is met.
5. Building Length	a. no building is longer than 250′ – don't need publicly accessible corridor – figure 3.3 244′	This standard is met.
Building Height – Figure 8-F	The maximum height for the various height zones based on the average grade appears to be met. My only issue is with the Average Grade plans. The sheet (AS61.0 gives the average grade of the garage as 20.8. I calculate it as 18.8′.	Elevations have been calculated at the four corners of the garage and do not include the daycare building. Please refer to figure 8-FA attached to this document for a visual summary.
Shoreland Zone	The highest annual tide has been located but I don't see a 25′ shoreland zone setback located.	The 250′ Shoreland Zone setback will be clarified on the revised Civil Drawings to be provided as part of a subsequent submission.
Floodplain	Both the approximate FEMA flood zone line and the approximate flood zone line based on EL 9 are shown. I'm not sure what they mean by the approximate FEMA flood zone line. Are they overlaying the FIRM from 1986? EL 9 impacts the LRC building and we will need a floodplain permit application for new construction and elevation certificates.	Both the FEMA FIRM flood zone line (from the FIRM) and an approximate flood zone line based on the existing contours and the flood elevation (EL 9) are provided. While the approximate flood zone line (EL 9) intercepts the LRC, the proposed FFE is 22.5, and therefore a floodplain permit application is not required.

	The other questions that I have is about the timing of the new flood zone maps. We still don't know when the new maps will go into effect. Obviously, we are reviewing the current site plan under the current floodplain maps. My question is, if the new maps go into effect before the building permits are applied for, would the buildings then need to meet the base flood elevation for the new maps?	Noted. We anticipate the City will make a determination on timing.

ATTACHMENT 4: SUSTAINABILITY CHARTER COMMENT RESPONSES

Sustainability Charter		
Code mandated items		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Energy, Responsible Materials, and Occupant Experience	To be determined at time of permitting.	We understand these will be reviewed as part of the building permit process.
Energy		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Eliminate on-site fossil fuels in building HVAC and Food service.	Heat pumps are proposed in the LRC building. Additional information will need to be submitted for the Cannery Building and the Structured parking & preschool facility building to confirm that efficient electrical mechanical systems are being utilized.	Fossil fuels will not be utilized for HVAC and food services. Design of mechanical systems will be provided as part of the building permit process.
	Submit a narrative confirming how fossil fuels will not be combusted on the site for any of the uses of the site (e.g., lab, café space).	The project is committed to utilizing all electric kitchens throughout. The design of

		these systems will be provided as part of the building permit process.
	Complies: Hot water is provided through electric heaters, as noted in Sheet P1.01.	No action required.
Provide infrastructure for future PV installation.	PV locations identified for the LRC and Cannery buildings, but is not identified for the Structured parking & preschool facility building. Update the floor plans for the Structured parking & preschool facility building to identify the location of future PV equipment for the building.	Conduits will be provided from roof areas to central electrical rooms to provide infrastructure for potential PV systems in the future. Details of this design will be provided as part of the building permit process.
Design the building to be 30% better than ASHRAE 90.1 2019 and 15% of roof area dedicated for PV.	Geothermal HVAC shown in Sheet GT-01 and photovoltaic systems >15% of the roof area are proposed for the roof of the LRC building. Applicant shall submit a narrative demonstrating how the combined systems will be designed to be 30% better than ASHRAE 90.1-2019.	Thorton Tomasetti ("TT") is performing an energy model for the project. The report will be submitted to the city for review prior to or as part of the building permit application.
Embodied Carbon		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Reuse existing historic building.	Applicant shall provide narrative clarifying how the submitted strategy is being achieved through the proposed renovation of the Cannery Building.	The Bean Building is being designed to support a flexible program. This includes limited use of permanent partitions which supports the strategy indicated.

Advocate for Environmental Product Declarations (EPDs) for all concrete used on the project.	Applicant shall identify when procurement for materials is anticipated to take place and when copies of procurement notices can be sent to City Staff for confirmation relative to the submission & issuance of building permits.	The project teams will require EPDs in specifications. A procurement schedule will be generated and shared with City when available.
Perform a whole building life cycle analysis (LCA) to study carbon conservation measures.	Identify when a LCA will be completed/be able to be submitted for review by City Staff prior to issuance of building permits for the project.	An LCA of each building will be submitted to the city for review prior to or as part of the building permit application.
Reduce the embodied carbon of structural materials in the building by 15% from a typical design.	Complies: Mass timber is proposed for a portion of the building.	No action required.
	Identify when a LCA will be completed/be able to be submitted for review by City Staff prior to issuance of building permits for the project.	An LCA of each building will be submitted to the city for review prior to or as part of the building permit application.
Responsible Materials		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***

Source wood products from Maine forests and/or sustainably managed forests or salvaged/reclaimed wood suppliers.	Applicant shall identify when procurement for materials is anticipated to take place and when copies of procurement notices can be sent to City Staff for confirmation relative to the submission & issuance of building permits.	A procurement schedule will be generated and can be shared with City when available.
Advocate for the removal of PFAS chemicals in other targeted product categories.		
In coordination with the contractor, identify key materials to procure from the state of Maine.		
Divert at least 50% of non-hazardous construction and demolition waste from the landfill.	Prior to a certificate of occupancy, a waste hauler contract for the site shall be submitted to review and confirm that 50% landfill diversion of non-hazardous materials will be ensured.	No action required at this time.
	Reuse of rail lines and bean pots have been proposed as part of interpretive work related to historic preservation. On the project website, under Site Work, a July 28, 2023	Website content from July is not the most current material. Review of project should be contained to the site plan application. If

	post identified historic elements that will be reused and construction materials to be reused/recycled. Update application materials to identify how the construction materials are being reused/recycled.	materials will be reused/recycled, the documents will be updated accordingly. Landscaping design details have not been finalized.
Target Red List free finishes in targeted spaces.	Complies: October 19, 2023 Design Development document states that red list free materials shall be used.	No action required.
Use best practices for bird friendly design.	Bird safe glass treatments are proposed for some of the glass in the LRC building. Confirmation that the entirety of the building glass is bird safe has been requested to meet §8.5.7(F)(6) of the Land Use Code.	The applicant will provide more information as it pertains to bird safe glass in the Cannery Building's new windows as part of a subsequent submission. The applicant will provide a glazing schedule for the Structured Parking and Daycare Building that includes treatment for Bird Safe glass complying with Maine's Legislation LD 670 and conform to the City of Portland's Bird Friendly Ordinance as part of a subsequent submission.
Water		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Reduce indoor water use from	Flow rates for plumbing fixtures have not been provided as part of the submitted application materials. Update application materials to state the proposed flow rate for	Flow rates for plumbing fixtures will be provided as part of the building permit process.

25% from a code baseline building.	plumbing fixtures and the applicable code requirements for flow rate.	
	Urinals are proposed in public bathrooms for the LRC, but are not shown in the Cannery Building or the Structured parking & preschool facility building. Clarify why urinals are not proposed in the Cannery Building and whether any urinals are proposed for the Structured parking & preschool facility building.	Urinal counts will be provided as part of the building permit process.
Maximize the use of native and drought tolerant landscape plants.	Complies: Native and low-maintenance plantings have been prioritized to require fewer short- and long-term maintenance needs.	No action required.
Stormwater Management in accordance with Maine Department of Environmental Protection Best Management Practices Manual and City of Portland Technical Manual.	Complies: Application is designed to meet Chapter 500 standards and has incorporated LID strategies such as protecting natural drainage systems, utilizing low-maintenance landscaping, minimizing impervious surfaces, and providing vegetated open-channel conveyance systems.	No action required.

Prohibit the use of all synthetic pesticides and fertilizers for the operation and maintenance of landscape and agriculture through Integrated pest management (IPM)conducted as part of an overall Plant Health Care Program for the Roux site.	Complies: Native and low-maintenance plantings have been prioritized to require fewer short- and long-term maintenance needs.	No action required.
Occupant Experience & Equity		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Optimize natural daylight and mitigate glare.	Confirmed in General Note 8 on Sheet A12.01 of the architectural plans for the LRC building. Confirmation of shades or curtains for the Cannery Building and the Structured parking & preschool facility building have not been provided. Update architectural drawings to confirm that shades or curtains will be provided for regularly occupied spaces that face east, west, and south for the Cannery Building and the Structured parking & preschool facility building.	Information regarding shades or curtains for the Cannery Building and Daycare facility will be provided as part of the building permit process. Shades are not assumed at structured parking as space is not regularly occupied.

Incorporate biophilic design principles.	Mass timber and stone are proposed to be used for the LRC building. Currently, only non-natural materials are identified for the Structured parking & preschool facility building. Update architectural drawings to identify what natural materials are proposed to be used for the Structured parking & preschool facility building.	The daycare facility will incorporate natural material on the interior. The materials will be indicated during the Planning Board process. The structured parking will incorporate a biophilic design through the expression of waves in the design of the west facade.
	Provide a supplemental narrative and/or sample designs on how the proposed art and signage for the campus will create cultural and ecological connections to place, as well as the locations for the proposed locations for art and signage.	Design of the proposed art/signage will be provided as part of the building permit process.
Use the building to educate building and site users.	Identification of informational signage on sustainability features of the LRC & Cannery buildings is not included in the signage plans. Update the architectural drawings and/or signage plans to identify where the proposed informational signage on sustainability features of each building will be located and the proposed design of the signage.	Design of the proposed signage will be provided as part of the building permit process.
Provide amenities to support public access.	The submitted floor plans for the LRC building include drinking fountains and/or bottle filters. The submitted floor plans for the Cannery Building and the Structured parking & preschool facility buildings do not show drinking fountains and/or bottle filters. Update floor plans for the Cannery Building and the Structured parking & preschool facility building to identify the location(s) of drinking fountains and/or bottle fillers.	Plans for drinking fountains/bottle fillers for Cannery Building will be provided as part of the building permit process. The Parking garage is a transient space so water fountains are not planned. The Daycare facility is not accessible to the public and the water needs of the staff and children are met by traditional sinks.

	Publicly accessible restrooms are provided in the LRC and Cannery buildings. Submitted floor plans for the Structured parking & preschool facility building do not provide enough detail to confirm whether restrooms will be publicly accessible next to the proposed shoreland open space. Update architectural drawings to clarify if and how publicly accessible restrooms will be provided.	For security and safety the Daycare facility is not publicly accessible. No public restrooms are planned for the structured parking.
	Complies. Shared-use facilities are provided throughout the site.	No action required.
	Complies. Benches are provided throughout the site.	No action required.
	Complies. Site wayfinding package is included as part of the application materials.	No action required.
Provide Gender inclusive restrooms.	Public, gender inclusive restrooms are provided in public areas in the LRC building. The split of restroom facilities in the Cannery Building connotes that bathroom facilities will not be gender inclusive. Confirm that the both public area bathrooms on the lower level of the Cannery Building are gender inclusive.	Both public area bathrooms on the lower level of the Cannery Building are gender inclusive.
Provide lactation rooms.	Lactation rooms not identified in the floor plans for the LRC and Cannery buildings. Update floor plans to identify lactation rooms that include a locking door, sink, changing table, comfortable seating, lighting control and electrical outlets.	Updated floor plans will be provided as part of the building permit process.

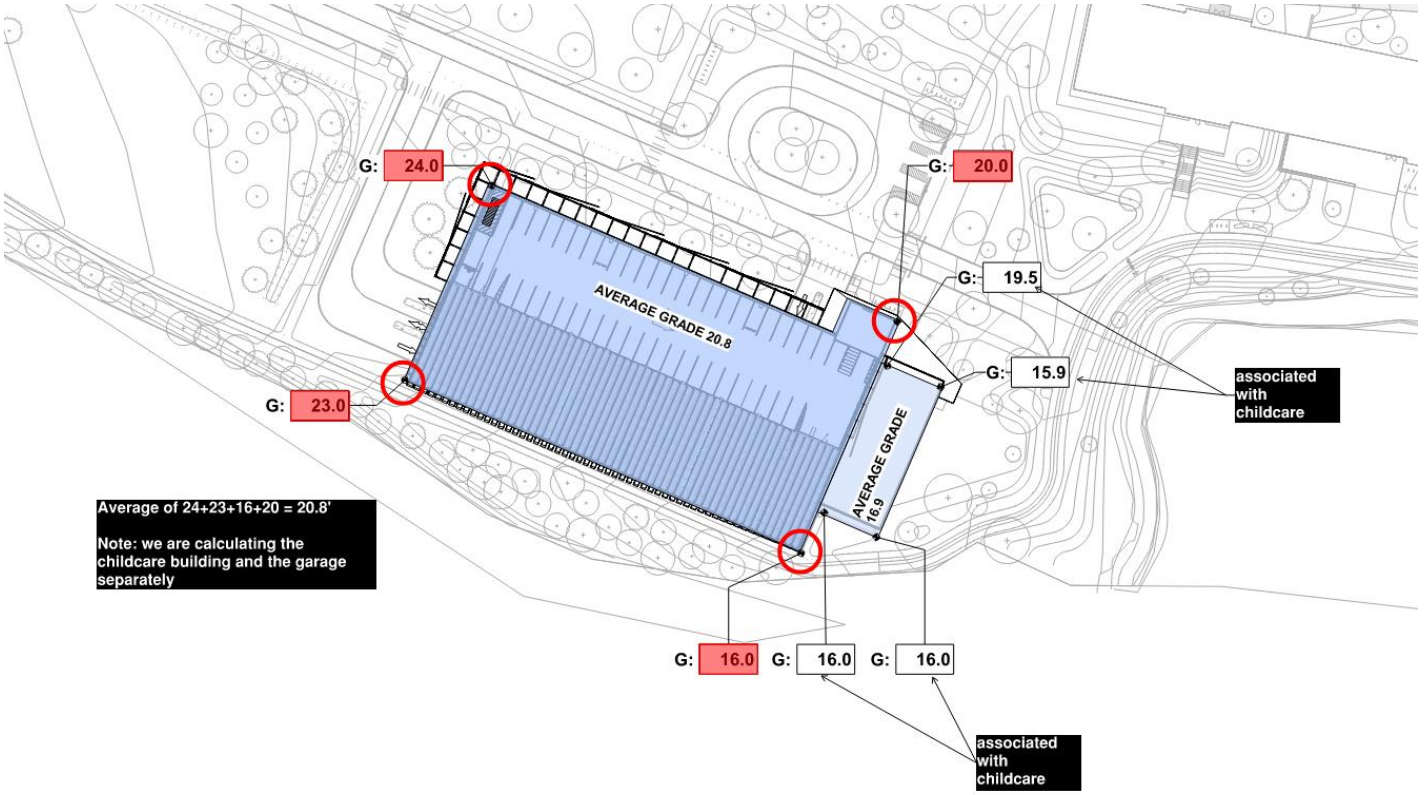
Transportation		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Conduct study of EV charging needs. Provide required EV capacity to meet anticipated demand.	EV Charging Study is still under review by City Staff. As Study is under review, Application should confirm whether the charging should meet the demand in coordination with EV or PV requirements approved by the City.	The EV charging provided is intended to be in compliance with site plan standards.
	EV Charging assessment should be coordinated with the submission of TDM reports. City staff encourage the assessment of EV charging for automobiles and bicycles as part of the campus goals to reduce SOV automobile trips.	No action required at this time.
Integrate quality/ secure bicycle storage into the site design and provide shower facilities.	Bicycle storage is proposed on the lower level of the Cannery Building. Bicycle storage is not provided in the LRC building. Update floor plans for the LRC building to identify interior, secure bicycle storage.	Users of the LRC building will utilize bike storage on site, provided in either the Bean Building and/or in the structured parking.
	Complies: Showers are provided on the lower level of the Cannery Building.	No action required.
	Bikeshare stations are not currently identified in the submitted application materials. Update application materials to identify proposed locations for bikeshare stations for review and further discussion with City staff.	The bike share location is shown on the Figure 5-1 Bike Amenities and Circulation.

	Complies: Exterior bicycle parking is distributed throughout the site for buildings in the first phase and future phases of development. As mentioned three standards above, secure bicycle storage will need to be provided for in the LRC building.	No action required regarding exterior bicycle parking. Sufficient indoor bicycle storage will be provided in Cannery Building or the Parking Structure.
	Complies: Application identifies opportunities to reduce SOV trips through unbundled parking, ongoing collaboration with METRO and MaineDOT, on-site shared-use facilities with anticipated connection points to the rest of the peninsula and off-peninsula, as well as pier improvements to facilitate water taxi service.	No action required.
Resilience		
Standard	***Comments/Recommendations made by Reviewer***	***Comment Response provided by Applicant***
Incorporate near-term future-projected climate change data (2050s) in design of mechanical, electrical, and	Critical building infrastructure has been identified in the LRC building to be located above 22.5 feet NAVD88. Additional information still needs to be provided to confirm that no critical building infrastructure is located below 22.5 feet NAVD88 for the Structured parking & preschool facility building, particularly in the Preschool Facility portion of the building.	No critical infrastructure will be located below 22.5 feet in the structured parking or daycare facility. That will be confirmed in the building permit process.

plumbing systems and/or components on a regular replacement cycle. Incorporate long-term future-projected climate change data (2100+) in the design of the building and infrastructure, including flood resistant materials below the 2100 sea level rise design flood elevation and elevate critical infrastructure above this elevation.	Heat projections with MEP consultant not included with application materials. Applicant should clarify the anticipated development of the projections and point for City staff to review prior to Certificate of Occupancy.	Required information will be provided prior to Certificate of Occupancy.
Prepare emergency action plan and provide appropriate level of backup power to support life safety.	Unable to confirm whether generator can provide 48 hours of energy for essential operations. Applicant should provide supporting documentation based on the proposed storage capacity or the manufacturer that the proposed nitrogen generator can supply energy for 48 hours to essential operations.	Refer to mechanical drawings for fuel oil tank size and location. LRC generator has been sized for 48 hours of run time.

Incorporate campus-wide emergency preparedness planning to enhance overall resilience of the campus/site community.	Emergency preparedness plan not submitted. Applicant should clarify the anticipated development date of the plan and point for City staff to review prior to Certificate of Occupancy.	An emergency preparedness plan will be submitted prior to Certificate of Occupancy.
	Complies: Generator provided on Level 1 of LRC building.	No action required.

FIGURE 8-FA: AVERAGE GRADE CALCULATION FOR GARAGE AND DAYCARE



CITY OF PORTLAND
Planning & Urban Development Department

MAJOR SITE PLAN
GENERAL DOCUMENT AND DRAWINGS CHECKLIST
Please submit each document as a separate PDF file.
Please confirm by electronically checking the boxes in the left-hand column.

**** PLEASE FILL OUT AND UPLOAD THE ZONING ASSESSMENT TABLE AND WAIVER TABLE SEPARATELY AS NOTED BELOW ****

At the time of application submission, please contact the Department of Public Works regarding E-911 addressing for your project.

GENERAL APPLICATION DOCUMENTS	
Yes √ NA	**Project Description** ● Cover letter with detailed project description
Yes √ NA	**Completed Checklist** (this document)
Yes √ NA	**Evidence of Right, Title, and Interest** ● Deeds, leases, or purchase and sales agreements
Yes √ NA	**Evidence of State or Federal Approvals** ● Permits or letters of non-jurisdiction, if applicable
Yes √ NA	**Zoning Assessment** (see Zoning Assessment Table) Summary of compliance with use and dimensional standards of the land use code
Yes √ NA	**Site Plan Standards Assessment** (see Section 14.6 of the land use code) • Summary of project compliance with site plan standards of the land use code
Yes √ NA	**Summary of Existing and/or Proposed Easements or Covenants, applicable.** ● Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way
Yes √ NA	**Waiver Requests** (see Waiver Table) ● Written request for waiver describing request and compliance with applicable waiver standards
Yes √ NA	**Financial Capability** ● Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
Yes √ NA	**Technical Capability** ● Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

MAJOR SITE PLAN
STANDARDS AND SUBMISSION CHECKLIST

Provide assessment of compliance with standards and include supplemental documentation, as applicable.
Please submit each document as a separate PDF file.

TRANSPORTATION	
Yes √ **NA**	**Impact on Surrounding Street Systems (14-14.6.1(A))** ● Describe incremental volume of traffic impacts and mitigation measures. If needed
Yes √ **NA**	**Access and Circulation (14-14.6.1(B))** Identify and describe the following: ● Site access and internal circulation, including ADA access ● Drive-up features, if applicable ● Loading and servicing needs, routes, and geometry, providing turning templates for delivery vehicles, if applicable ● Sidewalks and condition along street frontages and internal walkways ● Engineered details for ADA ramps and public sidewalks, meeting sidewalk material policy and construction requirements (Technical Manual, Section 1)
Yes √ **NA**	**Public Transit (14-14.6.1(C)), if applicable** Identify and describe the following: ● Existing available transit service and proposed transit improvements, including design details, such as easement, pad base, and shelter
Yes √ **NA**	**Off-Street Parking (14-14.6.1(D)), if applicable** Identify and describe the following: ● Proposed vehicular and bicycle parking supply (including ADA-compliant parking) in relation to applicable parking requirements in Article 19 of the land use code ● Curb cut separation and parking layout (Technical Manual, Section 1) ● Construction details for bicycle racks ● Management plan for snow storage and removal
Yes √ **NA**	**Transportation Demand Management (TDM) (14-14.6.1(E)), if applicable** ● Provide TDM plan drafted in accordance with Technical Manual Section 1 requirements

ENVIRONMENTAL	
Yes √ NA	**Preservation of Significant Natural Features (14-14.6.2(A)), if applicable** Identify and describe the following: ● High and moderate value waterfowl and wading habitat ● Aquifers (for Casco Bay Islands) ● Waterbodies (including wetlands, watercourses, significant vernal pools and floodplains) ● Proposed preservation areas and protection measures ● Documentation from environmental compliance consultants and determinations from applicable state and federal agencies
Yes √ NA	**Landscape Preservation (14-14.6.2(B))** Identify and describe the following: ● Measures to preserve trees, including within required zoning setbacks (Technical Manual, Section 4) ● Measures to protect existing vegetation during construction
Yes √ NA	**Site Landscaping and Buffers (14-14.6.2(C))** Identify and describe the following: ● Overall landscaping approach and consistency with standards ● The use of screening and buffering of service areas and between non-residential and residential uses ● Existing Heritage or Feature Trees on site and measures to preserve ● Compliance with street tree requirements
Yes √ NA	**Water Quality, Stormwater Management, and Erosion Control (14-14.6.2(D))** Identify and describe the following: ● Erosion and sedimentation control plan and measures ● Evidence of compliance with Urban Impaired Stream Standards pursuant to DEP Chapter 500 stormwater law, as applicable ● Subsurface sanitary sewage disposal and groundwater protection measures

PUBLIC INFRASTRUCTURE AND COMMUNITY SAFETY	
Yes √ NA	**Consistency with City Master Plans (14-14.6.3(A))** ● Describe proposed easements, rights and improvements to connect or continue off-premises public infrastructure, as applicable
Yes √ NA	**Public Safety and Fire Prevention (14-14.6.3(B))** Identify and describe the following: ● Compliance with Crime Prevention through Environmental Design (CPTED) requirements (Technical Manual, Section 3) ● Emergency vehicle access ● Consistency with public safety standards (Technical Manual, Section 3)
Yes √ NA	**Availability and Adequacy of Public Utilities (14-14.6.3(C)) (Technical Manual, Sections 2 & 9)** Identify and describe the following: ● Electrical services, including providing underground services ● Existing and proposed connections for public utilities and required public utility upgrades ● Sewer line connections
SITE DESIGN	
Yes √ NA	**Massing, Ventilations and Wind Impact (14-14.6.4(A))** Identify and describe the following: ● Wind and ventilation impacts on adjoining structures and/or adjacent public spaces, including wind study, if applicable ● Bulk, location, or height impacts on adjoining structures
Yes √ NA	**Shadows (14-14.6.4(B)), if applicable** ● Provide shadow analysis of impacts on publicly accessible open space (Technical Manual, Section 11)
Yes √ NA	**Snow and Ice Loading (14-14.6.4(C))** ● Describe building design measures to prevent snow and ice from loading or falling onto adjacent properties or public ways
Yes √ NA	**View Corridors (14-14.6.4(D)), if applicable** ● Describe any protection of designated view corridors (Portland Design Manual, Appendix. 1)
Yes √ NA	**Historic Resources (14-14.6.4(E)), if applicable** Identify and describe the following: ● The site's status as a designated landmark, within a historic district or historic landscape district, or within 100 feet of any designated landmark, historic district, or historic landscape district ● Compliance with standards for preservation and documentation of archaeological resources

Yes √ **NA**	**Exterior Lighting (14-14.6.4(F))** ● Describe how the proposed site lighting will adhere to photometrics requirements as it relates to light trespass and full cutoff fixture design, pursuant to Technical Manual Section 12
Yes √ **NA**	**Noise and Vibration (14-14.6.4(G))** ● Provide data on noise levels for HVAC and other mechanical equipment, such as design specifications, to demonstrate consistency with state and federal noise emissions requirements as well as City code
Yes √ **NA**	**Signage and Wayfinding (14-14.6.4(H)), if applicable** ● Provide signage plan showing the location, dimensions, height and setback of all existing and proposed signs ● Provide drawings of all commercial and directional signage on site
Yes √ **NA**	**Zone-Related Design Standards (14-14.6.4(I))** ● Address any applicable design review standards by zone, including compliance with Design Manual

MAJOR SITE PLAN
DRAWINGS CHECKLIST

Please upload the following DRAWINGS with the listed details into e-Plan as separate pdfs.

All drawings must be submitted in a 24 x 36 sheet size.

BOUNDARY SURVEY (stamped by a Maine Licensed Surveyor and drawn as per Technical Manual Sec. 13)

SITE PLAN(s) (stamped by a Maine Licensed Professional Engineer) including:

All sheets – Include a title block with project title and the following information:

- Project street address
- Name and address of property owner & applicant
- Licensed design professional, incl firm that produced plans
- North arrow
- Date of preparation and revision history block
- Tax parcel (chart, block, and lot) number

Existing Conditions Plan with the following:

- Existing structures, with distance from primary building façade(s) to the property line
- Approximate location of structures on abutting properties
- All streets and intersections adjacent to the site
- Existing driveways, pedestrian ways, and bicycle infrastructure, including dimensions and materials
- Existing public transit infrastructure
- Existing vehicle & bicycle parking areas
- Existing utilities on site and within adjacent rights-of-way
- Existing grades (two-foot contours preferred)
- Location of water courses, wetlands, and vegetation, or other significant natural features
- Existing soil conditions and location of test pits and borings
- Zoning boundary lines, including overlays
- Location of all existing easements and rights-of-way

Proposed Site Plan with the following:

- Proposed structures, including distance from primary building façade(s) to property lines
- Ground floor area, and finished floor elevations for all buildings
- Any proposed geometric modifications to streets and intersections adjacent to site
- Location, dimensions and materials of all proposed driveways, vehicle, bicycle, & pedestrian access ways with corresponding curb lines
- Engineered specifications/ cross-sections for proposed driveways, sidewalks & paved areas
- Location and dimensions of proposed loading areas, including turning templates
- Proposed transit infrastructure with dimensions/ engineering specifications
- Location of vehicle and bicycle parking with dimensions and engineering specifications
- Location of all snow storage areas
- Exterior lighting (please see Technical Manual Sec. 12 for photometrics requirements)

- Location of fire hydrants
- Location of solid waste management receptacles
- Location of all proposed HVAC and mechanical equipment, including proposed screening, where applicable
- Location of proposed easements and rights-of-way, including dimensions
- Please utilize color-coding and/or hatches and shading to delineate changes between the pre and post development condition as needed

UTILITY PLAN including:

- Proposed electrical infrastructure
- Location, sizing and directional flows of all proposed sewer and stormwater infrastructure
- Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site
- Electric utility infrastructure

GRADING AND DRAINAGE PLAN including:

- Proposed grades
- Proposed stormwater management measures meeting Technical Manual (Section 5) standards
- Any proposed alteration of a watercourse or wetlands
- Any groundwater protection measures
- Proposed buffers and preservation measures for wetlands or significant natural features

LANDSCAPE PLAN including:

- Existing vegetation to be preserved and preservation measures
- Proposed landscaping, screening, and street trees, including caliper widths for trees
- Planting schedule, including street trees

ARCHITECTURAL PLANS AND RENDERINGS including:

- Exterior building elevations, color renderings, illustrations of all sides
- Axonometric and street-level views for structures greater than three stories in height
- Provide context drawings, if applicable (Design Manual, page 1)
- Floor plans

CONSTRUCTION MANAGEMENT PLAN including:

- Specifics on traffic control, sidewalk sheds, and pedestrian rerouting
- Include a drawing and written narrative

OTHER

- Details and cross-sections, as necessary

2. PERMITTING

For the proposed Phase 1 development work, a Major Site Plan Application is required along with a number of associated permit applications.

2.1 Permits Required

2.1.1 Planning Board Review

The proposed Phase 1 development work will require approval by the Planning Board for multiple permit applications.

Major Site Plan

The project's size and scale qualify it for a Major Site Plan that will require review and approval by the Planning Board.

Site Location of Development (SLOD) Permit

The project is subject to the Maine Department of Environmental Protection (Maine DEP) regulations for a Site Location of Development Act (SLOD) or Site Law Permit. It is our understanding that the project will be reviewed as a new SLOD permit by the City of Portland under their Delegated Review Authority. A separate SLOD permit application has been provided with this Site Plan Application, and 3 paper copies will be provided for the City to give to the Maine DEP.

2.1.2 Other Local Permits

Portland Harbor Board of Harbor Commissioners Marine Construction Permit

The project requires review by the Board of Harbor Commissioners for proposed pier construction, waterfront improvements, and outfall installation in navigable waters.

Flood Hazard Development Permit

The project requires review by the Building Authority for building construction and renovation in Special Flood Hazard Areas.

Historic Preservation Certificate of Appropriateness (COA)

The project requires review by the Historic Preservation Board for the building and site areas included in the Historic Landmark Designation, as reflected in **Figure 2-1**. In accordance with the City's Land Use Code, Chapter 14 Section 8.5.7.J, a Certificate of Appropriateness will not be required for the demolition of the Codfish Building or construction of a new pier and related infrastructure, including future alterations to the pier structure. The Board's review of the pier is limited to any activity that would require a Certificate of Appropriateness that is proposed on top of the newly constructed pier. Additional information regarding Historic Preservation is included in Section 3.3.9 and Section 8.5.

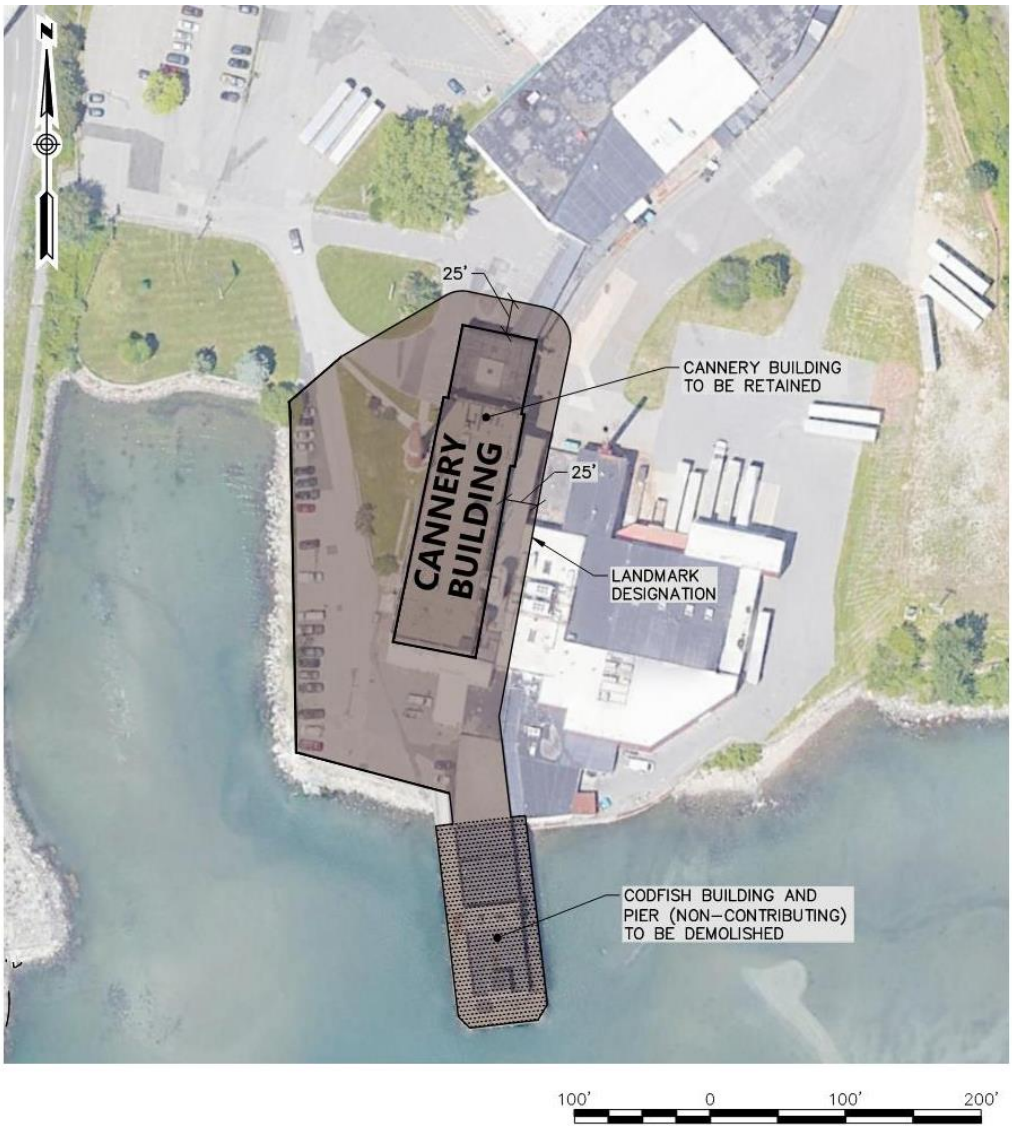


Figure 2-1: Landmark Designation

2.2 Evidence of State and/or Federal Approvals

The following state and federal permits will be required for the proposed work:

- Maine DEP Site Location of Development Act Permit (reviewed by City of Portland under Delegated Review Authority);
- Maine Construction General Permit Notice of Intent;
- Maine DOT Traffic Movement Permit (TMP);
- Maine DEP NRPA Individual Permit;
- Army Corps of Engineers General Permit; and
- FAA Notice of Proposed Construction.

Copies of these permit approvals will be provided to the City of Portland, upon request.

3. ZONING

Phase 1 of development is associated with multiple Zoning Districts including:

- B-5 Urban Commercial Business Zone (B5);
- Shoreland Overlay Zone; and
- The Roux Institute at Northeastern University Institutional Overlay Zone (IOZ).

3.1 B-5 Zone

As previously noted, the Portland City Council unanimously approved the zoning amendments to change the Site's underlying zone from Industrial to B-5 Mixed-Use Business in February 2023. The attached Zoning Assessment Table shows that the project complies with dimensional requirements specified in the City's Land Use Ordinance. For the B5 zone, most standard zoning analysis values are not applicable.

3.2 Shoreland Overlay Zone

The Site has roughly 1,400 linear feet of waterfront, within associated Flood Hazard and Shoreland Zones. The City's Land Use Code designates a shoreland zone within 250 feet of tidal water bodies. A minimum setback of 25 feet from the normal high-water level for principal and accessory structures will be maintained within the shoreland zone.

3.3 The Roux Institute at Northeastern University Institutional Overlay Zone

The following section describes the project's consistency with the regulatory framework of the Institutional Overlay Zone. The regulatory framework was incorporated into the City of Portland Land Use Code, and section references are included below with each standard.

3.3.1 Phasing and Monitoring (8.5.7.B)

As noted in the IDP (Institutional Development Plan), the Roux Institute Campus will present a coherent and holistic site at each phase of construction. The campus plan also enables future growth without sacrificing the near-term completeness. To allow for growth and coherence at each phase, the following design strategies and features are employed in Phase 1.

- Three acres of permanent, significant public space is being set aside in this first phase of development (**Figure 3-18**). It will provide a major focal point and anchor for the public life of the site in both Phase 1 and the long term.
- A complete network of vehicular, pedestrian and bicycle circulation routes are established in Phase 1 (**Figure 3-17**) which will continue to serve long-term development. A comprehensive system from Sherwood Street to the waterfront allows access around and through the site that is appropriate to each mode of transportation. Building a complete system in Phase 1 minimizes the interruption to traffic and circulation patterns during future expansions. These initial circulation networks are enhanced with site-wide lighting and wayfinding that is adaptable to future development. Lighting may be added where future uses require, and wayfinding and directional signs may be augmented with added information while remaining at key waypoints and intersections.

- Major underground utility corridors for water, sewer, electrical and telecommunications are similarly established in Phase 1 and intended to be maintained into the long term. Branch service will be tied to the main distribution corridors when new development occurs.
- Site stormwater management capacity is developed within the first phase to support a fully built-developed site.
- Future development parcels have been set aside with appropriate dimensions for pedestrian buffers, utility service access, building types and programs consistent with the Regulatory Framework.
- A comprehensive landscape strategy considers all areas of the campus in a Phase 1 planting approach. As shown in the Planting Zone Figure Plan (**Figure 3-14**) and detailed planting plans, the campus is composed of distinct ecological regions that are native to Maine ranging from a Coastal Edge at the water and a meadow near the site entry from Sherwood Street. Future development sites occur within the meadow planting zone which features low grasses, shrubs and flowers that establish quickly and yet are easily removed upon initiation of a new phase of construction.

The Learning, Research and Collaboration Building and Bean Building will accommodate initial growth of programs and expanded partnerships within shell space. This means immediate growth does not require new ground-up construction on other parts of the site.

3.3.2 Uses (8.5.7.C)

The proposed uses for Phase 1 are consistent with the IOZ regulatory framework, and include development of a post-secondary school, with associated laboratory, research, office space, and café'; restoration of the historic Bean Building to allow for creation of business incubator space; parking structure, childcare facility, and public pier with ramps and floats.

3.3.3 Dimensional Requirements (8.5.7.D)

Building Height

The Phase 1 buildings have been designed in compliance with the IOZ Height Overlay Map, as shown in **Figure 3-1** and **Figure 3-2** below. Proposed buildings over 50 feet are, at a minimum, 40 feet apart from other buildings. Building heights that span two or more height zones are measured by calculating the highest point of that portion of the building within a particular height zone. If the roof is sloped, height is measured at the midpoint of that portion of the slope located within the particular height zone.

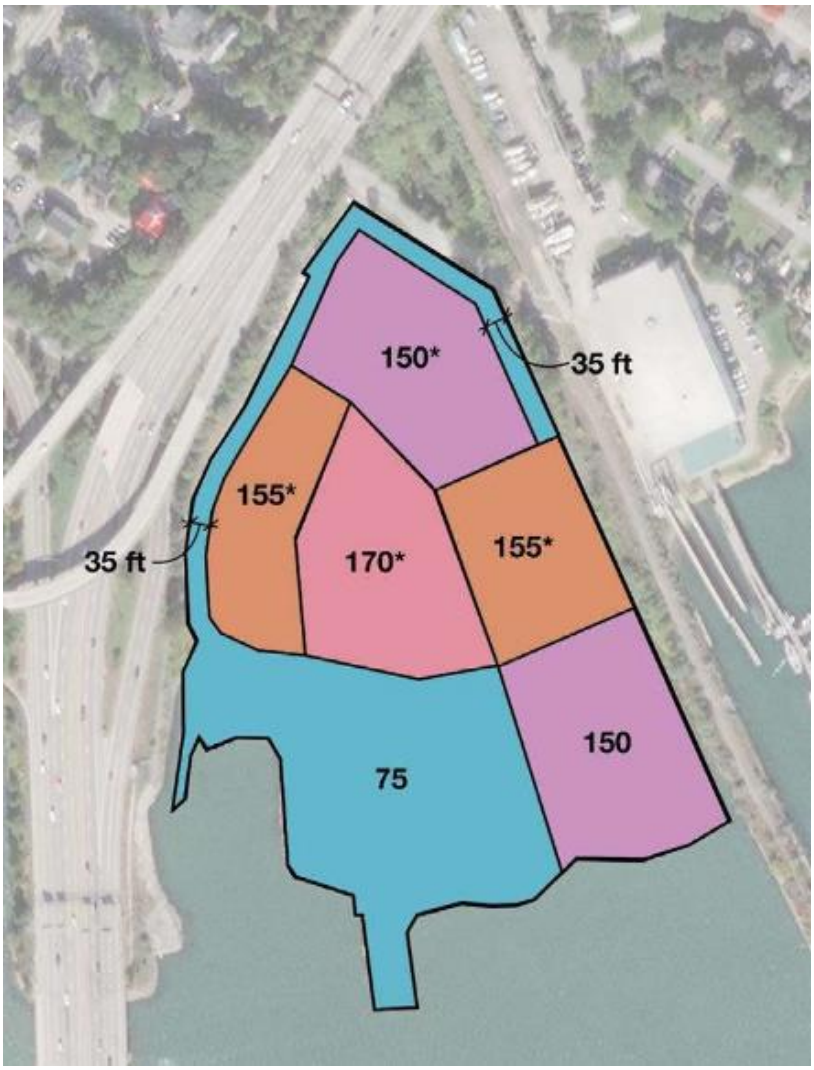


Figure 3-1: IOZ Height Overlay Map (Land Use Code Figure 8-F)

Note: For zones shown with an asterisk (*), no building floorplate shall exceed 35,000 square feet above height of 75 feet.

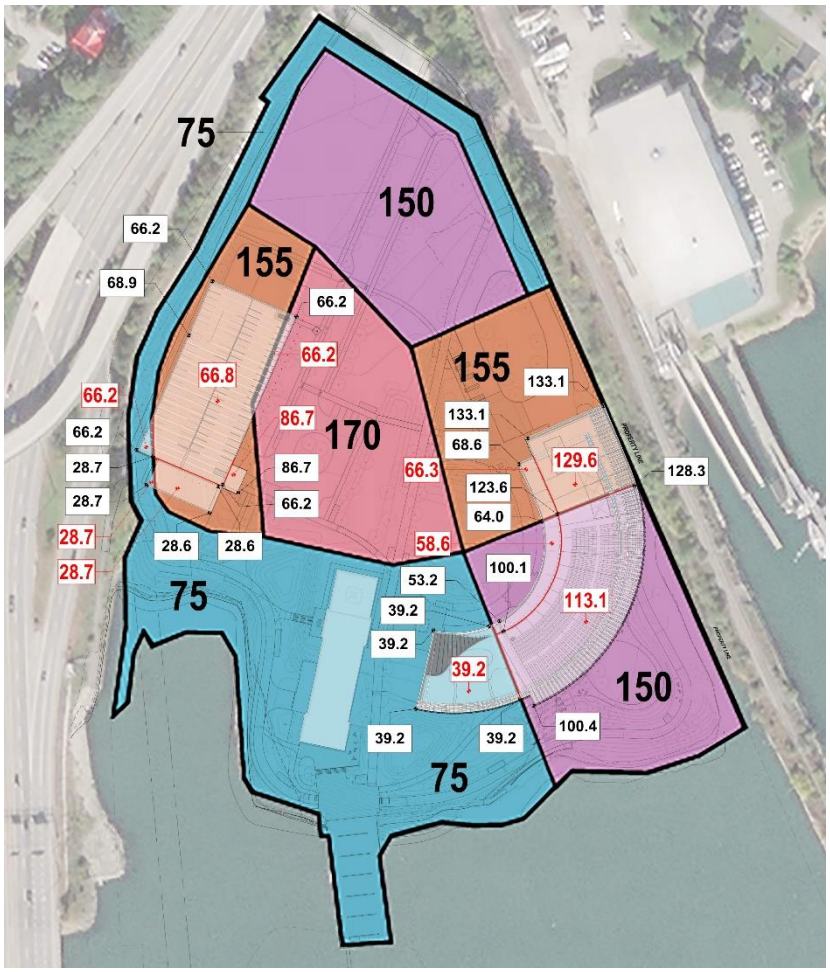


Figure 3-2: Building Heights

Per the City of Portland's Land Use Code, maximum building heights are calculated from average finished grade. **Figure 3-2** shows the calculated building heights around the Site, and figures showing the average grade as well as the height calculations are furnished under separate cover in the Drawings file. The resulting building heights are summarized in the table Below:

Table 3-1: Building Height Summary

Building (Map Color)	Max Height (ft) per Overlay Map	Proposed Maximum Height (ft)
Learning, Research, and Collaboration Building Orange	155	129.6
Learning, Research, and Collaboration Building Purple	150	113.1
Learning, Research, and Collaboration Building Blue	75	39.2
Parking Structure Orange	155	66.8
Parking Structure Pink	170	66.2
Parking Structure Blue	75	66.2
Childcare Facility Blue	75	28.7
Childcare Facility Orange	150	28.7

Street Wall and Building Stepbacks

As demonstrated by **Table 3-2** below, the street walls of principal buildings will have a minimum street wall height exceeding 45 feet and maximum height of 105 feet, in compliance with the IOZ regulations. Street walls are designated at the building's principal entrance, facing the open space, primary pedestrian routes, and entrance drives. A step back with a minimum depth of 10' is provided.

Table 3-2: Building Street Wall Summary

Building	Street Wall Designation	Street Wall Length	Street Wall Height
Learning, Research, and Collaboration Building	West Elevation Facing the Round	244'	68.5' max -51' min
Parking Structure	East Elevation Facing the entry drive and Promenade	219'	45.1

Refer to the following figures for step back and street wall measurements.

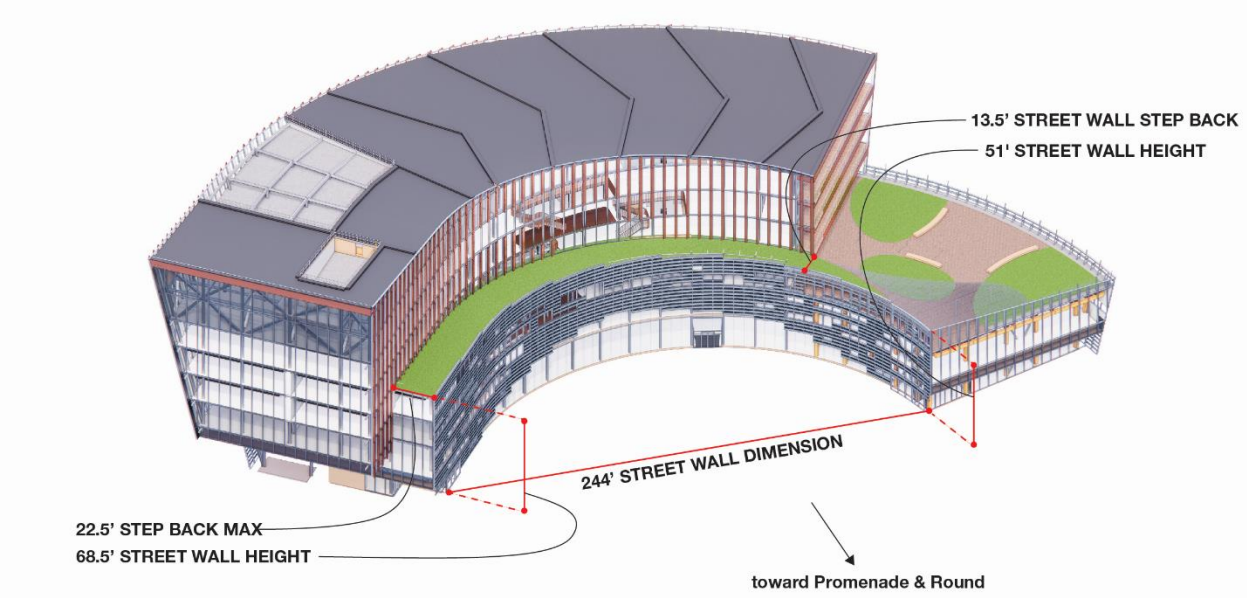


Figure 3-3: Learning, Research, and Collaboration Building Street Wall and Step Back Measurements

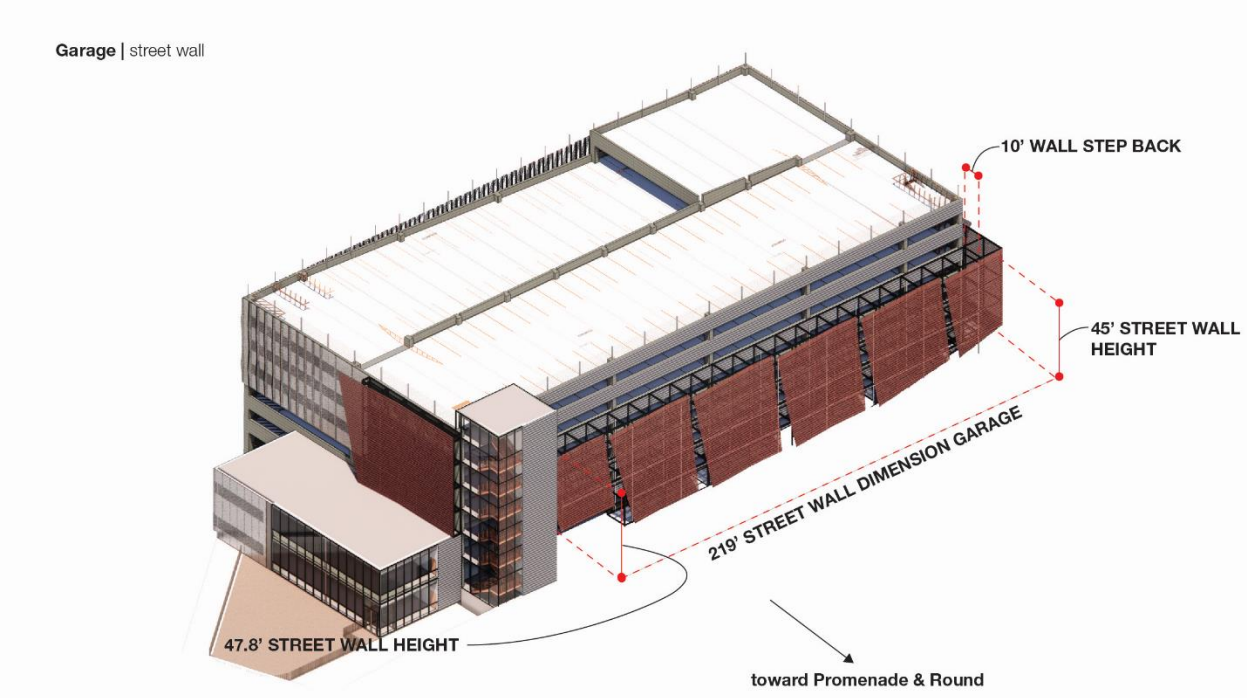


Figure 3-4: Garage Street Wall and Step Back Measurements

Each of these street walls will have the required 10-ft step back at a height above the minimum street wall height of 45 feet, but below the maximum of 105 feet. These street walls are less than 250-ft in length, and therefore publicly accessible corridors are not required.

Transitions and Buffers

In addition to the existing buffers of I-295 and the rail corridor, the development further eases the transition to and from the campus through the design in areas shown in **Figure 3-5** and sections in **Figure 3-6** and **Figure 3-7**.



Figure 3-5: Site Plan Section Key

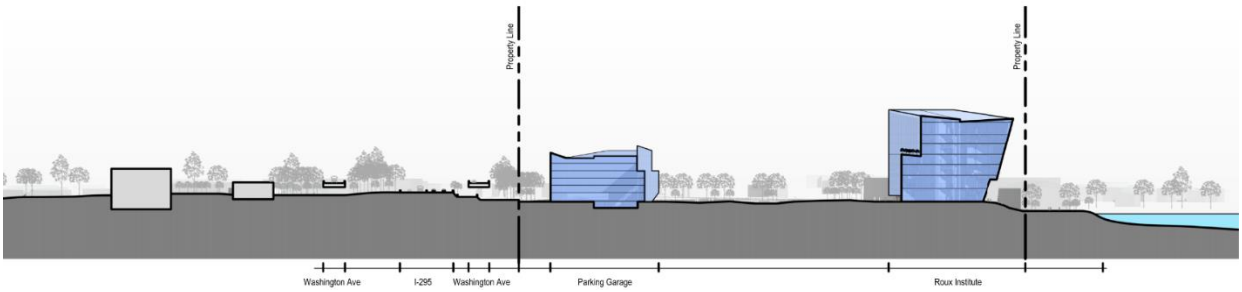


Figure 3-6: Site Section 1

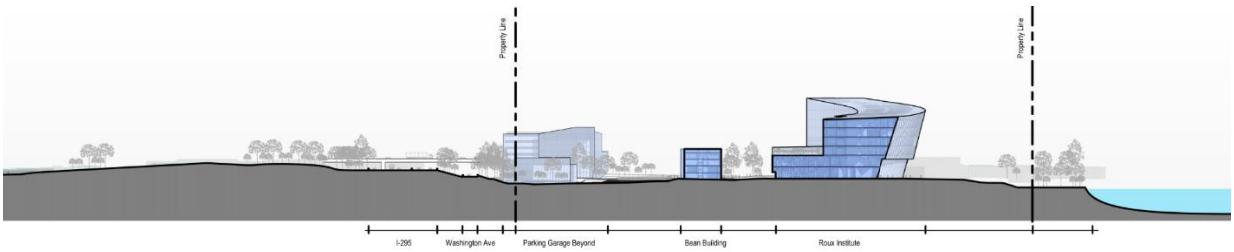


Figure 3-7: Site Section 2

Public open space will ease transition from the smaller scale of Sherwood Street. A transition onto the campus will also be accomplished through thoughtful facade design at the pedestrian level and above. Potential nuisance features like dumpsters, air handlers, backup generators, and parking are appropriately screened. Buildings have visually interesting elevations that avoid blank walls to respect the adjacent neighborhood and facilitate a sense of permeability and welcome.

The shoreline transition area between the buildings and the water serves as meaningful public open space. Building facades facing the water act as public facades with views designed for interest from and across the water including the Eastern Promenade Trail and more broadly the entire peninsula.



Figure 3-8: I-295/Tukey's Bridge Rendering

The transition area between the campus and I-295 contains a height limitation of 75 feet along the edge and between the highway and the B&M Cannery Building, preserving the historic view of the building from the highway and easing the transition to the greater allowable building heights in the center of campus.

The transition area along the edge of the campus adjacent to the rail corridor also contains a height limitation of 75 feet along the edge of the property closest to the residential neighborhood, further easing the transition to the greater allowable building heights at the center of campus, mitigating shadow impacts to adjacent properties.

3.3.4 Transportation (8.5.7.E)

Project consistency with IOZ Transportation requirements is described in Section 5.

3.3.5 Environment (8.5.7.F)

Project consistency with IOZ Environmental requirements is described in Section 3.3.7 and Section 6.

3.3.6 Mitigation Measures (8.5.7.G)

As discussed in Section 6, impacts to natural resources will be mitigated in accordance with local, state, and federal standards.

3.3.7 Design (8.5.7.H)

Landscape and Public Space

The campus provides a variety of landscaped open spaces throughout all phases of development to enhance the beauty of the waterfront and foster social interaction. Each space provides a different character and opportunity to engage with the environment and in a variety of social settings as described below:

Promenade

The central circulation element of the site design is the Promenade, a 12-foot-wide linear pathway that connects the Site by creating a central pedestrian spine from the sidewalks along Sherwood Street to the Pier and Coastal Path.



Figure 3-9: Promenade Rendering

Pier Plaza

The Pier Plaza, sitting at a confluence of circulation, connects the Pier with the Bean Building, the coastal path, and the waterfront.



Figure 3-10: Pier Plaza & Pier Rendering

Pier

The new Pier is a replacement of the existing Cod fish pier. The pier decking will be marine grade timber. Light poles reflect the façade of the codfish building and create an open, central space for multi-purpose gathering. The perimeter railing includes a lean-rail element to allow for comfortable standing, fishing, viewing or other standing activities along the pier edge. The Pier will provide access to water dependent uses, such as water taxi and/or shuttle, paddleboarding and kayaking.



Figure 3-11: Pier Rendering

Coastal Walk

The shoreline includes a Coastal Walk, a 12' wide multi-modal pathway, designed for bicycles, pedestrians, and emergency vehicles. The Coastal Walk provides access to various points along the waterfront, with seating, bike parking, and vantage points. It is part of a trail around the perimeter of the entire campus.



Figure 3-12: Coastal Campus Rendering

Bay Overlook

Spilling out from the Learning, Research, and Collaboration Building, the Bay Overlook space provides a lawn space for gatherings and views to Casco Bay. This space is appropriate for casual or formal gatherings. The Overlook is situated to provide a special vantage point above the adjacent railroad tracks and former rail bridge.

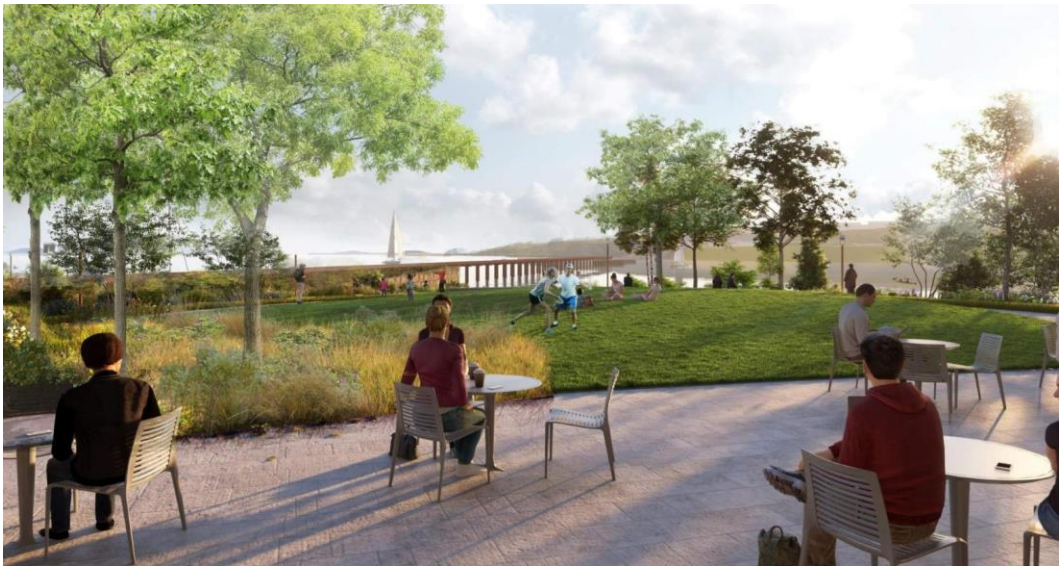


Figure 3-13: Bay Overlook Rendering

Tiered Seating

Adjacent to the Overlook is a series of tiered seating benches set into the hillside. The arrangement of wood and concrete seat-walls overlooks the water and allows for a relaxing informal space for views of Casco Bay the Eastern Promenade, and Munjoy Hill neighborhood.

Planting Approach

The landscape and planting approach for the campus converts a former nearly fully hardened industrial Site into a vibrant new public park-like amenity and private learning campus home for Northeastern University. In crafting the landscape design and planting approach for the project, embracing the region's unique ecology is of paramount importance. Our vision seeks not only to create a functional and visually appealing environment but to honor Maine's natural heritage by utilizing native species endemic to the state.

We understand that the City of Portland has expressed concern over the planting of Maple trees due to susceptibility to Asian Longhorn Beetle (ALB) and current overplanting of Maple trees throughout the City. In order to combat this risk while encouraging species diversity on the campus, the applicant proposes to establish and execute a thorough ALB testing and monitoring program utilizing trained professionals to ensure the long-term health of all trees on the campus.

The landscape and planting design narrative is organized into five distinctive categories: Coastal Edge, Coastal Upland, Scrub Barrens, Upland Meadow, and Stormwater Meadow, as shown in the figure below.

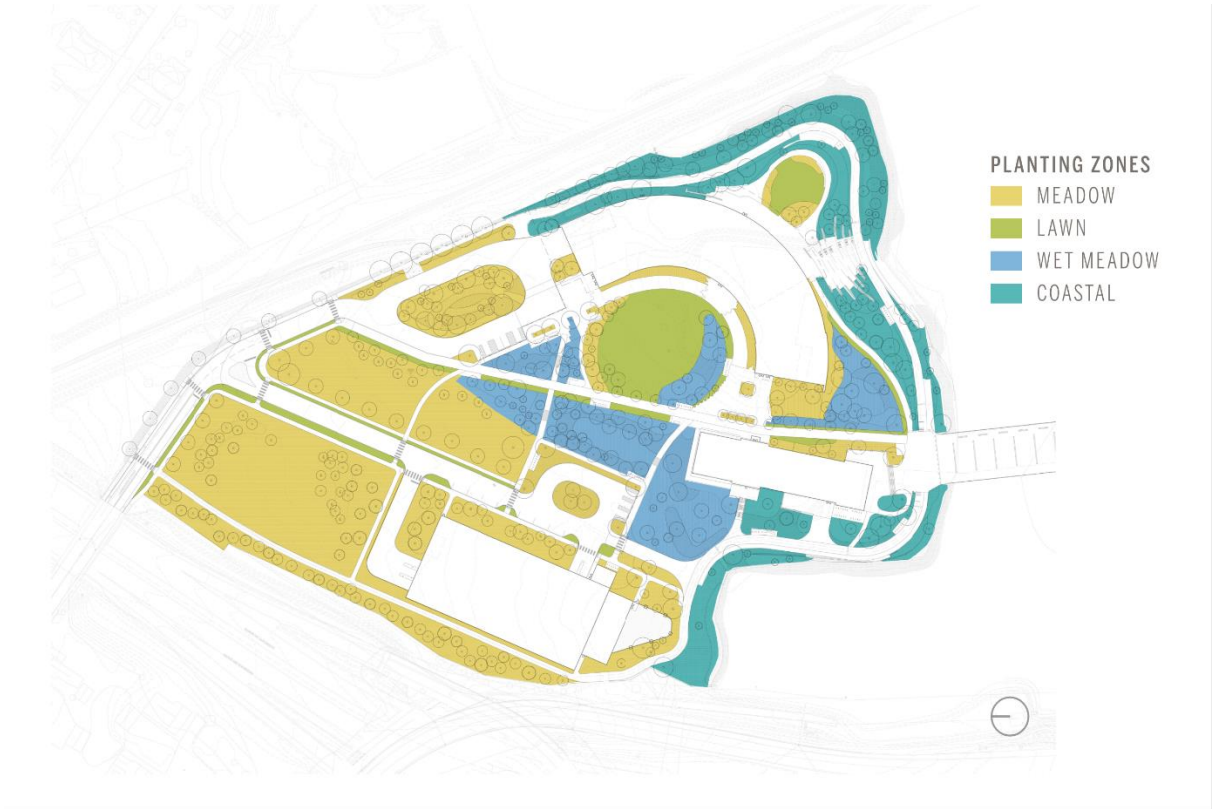


Figure 3-14: Planting Zone Plan

Coastal Edge: A Buffer of Resilience

The Coastal Edge serves as the frontline in the landscape strategy, acting as a resilient buffer against coastal erosion while showcasing the natural beauty of the area. An array of native coastal species, including beach plum, and seaside goldenrod, create a biodiverse buffer zone. These species are specifically chosen for their resilience to salt spray and ability to stabilize the shoreline.

Coastal Upland: A Treasured Oasis

The Coastal Upland represents an oasis for native flora and fauna, offering opportunities for exploration and contemplation while preserving the area's natural character. The Coastal Upland will be populated with native woodland species such as red maple, eastern white pine, and shadbush. These trees not only provide habitat for local wildlife but also offer shade and serenity for visitors. To further support biodiversity, this landscape will encourage nesting areas for ground-nesting birds like American Woodcock, ensuring a thriving community of native wildlife. A thoughtfully designed system of pathways and overlooks will allow residents and students to immerse themselves in the Coastal Upland's beauty while respecting its fragility.

Scrub Barrens: Embracing a Distinctive Ecosystem

The plan acknowledges the ecological significance of Scrub Barrens by preserving and restoring these unique habitats, known for their distinctive plant communities. Certain areas within the Scrub Barrens will be designated as preservation zones, where minimal human intervention will be allowed. These zones will serve as a sanctuary for native scrub barrens flora and fauna. We will initiate restoration efforts using native species like lowbush blueberry, sweet fern, and beach heather to restore natural balance. Interpretive signage will be placed strategically throughout the Scrub Barrens to inform visitors about this unique ecosystem's importance and how our conservation efforts contribute to its preservation.

Upland Meadow: A Haven for Biodiversity

The Upland Meadow is an opportunity to celebrate the beauty and vitality of Maine's coastal landscape while promoting biodiversity and community engagement. A diverse mix of native meadow species, including wild lupine, milkweed, and New England aster, will provide food and habitat for pollinators like monarch butterflies and native bees. This meadow zone will be managed in an ecologically sensitive manner, with periodic mowing and maintenance designed to preserve the meadow character while respecting habitat and ecology.



Figure 3-15: Stormwater Meadow Rendering

Stormwater Meadow: A Sanctuary of Tranquility

The design for the Stormwater Meadow focuses on creating a serene, ecologically rich environment that highlights the beauty of Southeast Maine's ecosystems. The Stormwater Meadow is populated with native draught-tolerant grasses which supports stormwater filtration, conveyance, and water quality improvement.

In conclusion, the landscape design and planting approach for the campus project reflects the project's deep commitment to preserving the state's natural beauty, fostering biodiversity, and creating spaces that educate and inspire. Using native species endemic to Maine can establish an enduring legacy that celebrates the ecological and cultural significance of this remarkable coastal region.

The integration between these ecological regions, the historic Bean Building and the Learning, Research, and Collaboration Building is of great importance as a goal for enhancing indoor/outdoor public space. The Learning, Research, and Collaboration Building has an entrance to an interior public space, known as the Portal, from the waterfront side facing Casco Bay. Another publicly accessible entrance on the upland side of the building, or West elevation, provides access from the Promenade. The Portal may be closed to the public during special events, outside normal operation hours, and when necessary for security or public safety purposes. In all cases the visual connections into and out of the ground floor of the Learning, Research, and Collaboration Building consider views of the special landscape areas, especially the Round, Overlook, Arrival Plaza, and Promenade.

Historic Preservation

The Bean Building is a critical component of the Site, and the site layout including placement of other buildings will allow the Bean building to be a signature feature. The siting of the Learning, Research, and Collaboration Building and the Garage are deferential to historic viewsheds of the Bean Building, especially from Tukey's Bridge/I-295. Plazas and landscape areas are designed to enhance pedestrian connectivity to the Bean Building and maintain this historic structure as a campus focal point.



Figure 3-16: Bean Building Rendering

Campus Cohesion

The project's design team has developed the Site to fit appropriately into the surrounding neighborhood. The position of buildings has been considered in detail to ensure that the campus's layout will support itself while being cohesive with the East Deering neighborhood. The campus will have a sense of completeness in this phase of construction. Areas identified for future development will have well-landscaped lawn and planted spaces that make the campus in its entirety appealing.

Connectivity

The site layout has prioritized the need for bicycle and pedestrian circulation. With parking primarily on one side of the campus, routes for walking and biking from the parking areas or directly from the site entrances have been incorporated into the site layout.

The design for the campus landscape provides a series of social gathering spaces, linked by a carefully orchestrated arrangement of multi-modal circulation. The circulation system has been designed to provide ready access to all parts of the campus. The Shoreline Path is intended to provide access to the water's edge in a variety of ways including, a coastal path for riding and walking parallel to the water, a tiered seating for viewing the water, and a pier allowing users to be over the water with access to seating, viewing, periodic events and water taxi embarkment. The upland circulation network is organized by the central Promenade which has a variety of spur paths that connect the buildings and spaces on the campus. A multimodal loop path occupies the entire perimeter of the Site and connects to the Sherwood Street entrance.

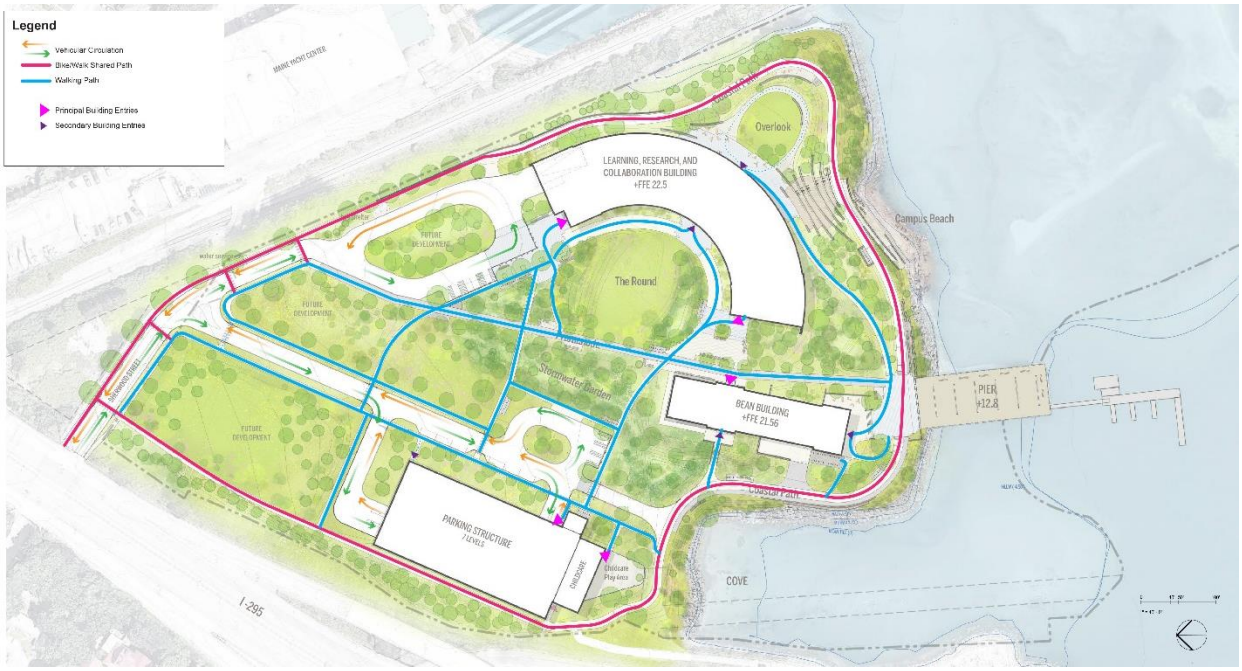


Figure 3-17: Site Circulation Plan

Public Open Space

In Phase 1, the campus contains a minimum of three acres of public open space which is designed to enhance waterfront access and provide bicycle/pedestrian network connectivity. Access to the open space can be provided via a proposed public access easement in the location shown in the figure below. The applicant will work with Corporation Counsel to draft an easement satisfactory to the Applicant and the City, in the event the Planning Board determines that a public access easement is necessary. The public open space functions as recreation areas, social gathering spaces and natural buffers as shown in the figure below.



Figure 3-18: Areas of Public Open Space Plan

Open space is available throughout the campus adjacent to buildings and access routes and at the waterfront. The layout of the Site has considered where open space is needed to support the campus's primary uses. The design of critical site components, like the Site's stormwater management systems, have also included consideration on how to integrate with the public space, adding to it instead of simply working separately for stormwater management.

Sustainable Practice

Northeastern University is reinventing the way universities approach academics. This idea of reinvention will materialize in the design of its new campus, with intent to forge an improved path to climate-responsive regenerative design for the built environment in Maine. Buildings and site development incorporate sustainable technologies in building design, orientation, energy production, and sensitivity to natural resources. A Sustainability and Resilience charter is provided as an appendix and illustrates the commitments the campus is making.

This charter is informed by a combination of industry best practices, Portland's One Climate Future Plan and Northeastern University Standards. The sustainability commitments for the campus fall into the following categories: energy, embodied carbon, responsible materials, water, occupant experience and equity, transportation, and resilience.

Resilience Approach, Sea Level Rise, and Shoreline Protection

The site layout has considered resilience in its design, with building finish floor elevations taking into consideration potential impacts of flooding, severe weather while integrating publicly accessible space within risk mitigation design strategies. While a wide range of risks were analyzed, the Site's waterside location necessitated a unique and careful understanding of present and future risks from sea level rise and coastal storms.

Shoreline protection is primarily improved by the reconstruction of certain sections of the riprap slope and block seawall along the shoreline. This includes providing a better, well-graded armor stone to protect against current and future storms. A section of the existing seawall is also planned to be removed to its foundation and a riprap slope created behind it. This will reduce the current wave reflection and wave energy in these locations. Upland plantings above astronomical high tide will reduce erosion from stormwater runoff. A rebuilt and slightly more elevated pier provides additional improvements to where the existing crumbling Codfish pier currently stands. Work in coastal wetlands and significant wildlife habitats (as defined by the Maine Department of Environmental Protection) will comply with all applicable local, state, and federal permitting requirements.

Portions of the Site are delineated as Special Flood Hazard Areas according to FEMA's Flood Insurance Rate Map (FIRM), attached to this Section. The current and effective FIRMs for Cumberland County, based upon FEMA's 1986 publication, indicate portions of the Site are within the AE Zone, representing 1% annual chance of flooding. Base flood elevations range from 9 to 11 feet along the waterfront.

The design team has performed a comprehensive multi-hazard climate risk and resilience assessment of the proposed campus. The following hazards were assessed for current and future trends, and relevant resilient mitigation strategies were proposed:

- Coastal Flooding and Storm Surge
- Earthquake Ground Shaking
- Liquefaction

- High Winds
- Severe Winter Weather (Snow and Ice)
- Tsunami
- Extreme Precipitation
- Extreme Heat

The design team reviewed existing site survey, site-specific flood hazard risk, and building code requirements, and conducted a technical analysis of flood mitigation options. The new Learning, Research, and Collaboration Building and the existing Bean Building are within the FEMA Special Flood Hazard Area (SFHA) Zone AE with a base flood elevation of 10.79ft City of Portland Vertical Datum (CPVD). To achieve the objective of functional recovery from a coastal flooding scenario for the new Learning, Research, and Collaboration Building, a design flood elevation (DFE) of 22.5ft (CPVD) is implemented which considers the current 100-year storm surge elevation combined with the intermediate sea level rise (SLR) projection for the Site. The finished floor elevation of the new Learning, Research, and Collaboration Building is thus elevated to this elected DFE of 22.5ft. The code compliant DFE of 12.79 ft is implemented at the existing Bean Building. Other buildings on-site, including a new garage and childcare center, are outside of the FEMA SFHA.

The structural design of the Learning, Research, and Collaboration Building is controlled by earthquake loading; thus, the design team performed a probabilistic seismic performance assessment of the current design of the building to draw recommendations for the later stages of the design that ensure an acceptable functional recovery time after a moderate or strong earthquake event.

Building Design

Building façade materials are of high quality, durable to the marine climate and contribute to an attractive public realm. As noted in the IOZ, the first 35 feet of building height shall complement the pedestrian character in materiality, transparency, and detailing.



Figure 3-19: Learning, Research, and Collaboration Building & Round Rendering

Learning, Research, and Collaboration Building Design

Sitting below its upper glass and aluminum "sail," the Learning, Research, and Collaboration Building has a highly articulated lower stone "base" which enriches the 35' high pedestrian zone in a variety of interesting ways. First, the authenticity of natural stone is within reach of pedestrian touch and sightline where scale and material quality can be appreciated at close quarters. The stone is envisioned to be locally sourced and arranged in an alternating open and closed pattern that references the famous crib stone bridge at Bailey Island 14 miles to the east in Casco Bay. Second, this zone of the building contrasts opaque areas of rugged stone with monumental open areas of glazing into the Portal and the principal entrances on the North and West elevations. These areas show off the important social and academic programs within the Learning, Research, and Collaboration Building and invite visitors to participate in the public life inside the building, or simply enjoy the view from the pathway and public space network on the outside.

While above the 35' pedestrian zone, the upper volume of the Learning, Research, and Collaboration Building, referred to as the sail, provides another richly textured visual offering. The facade is composed of alternating glass and copper-toned aluminum panels that change in percentage of glazed and solid in response to views and solar exposure that change at each elevation. The design is directly responsive to environmental conditions in limiting harmful solar glare and admitting desirable solar gain, but the result for the pedestrian is an ever changing experience as one walks along the pathways and promenades. The glass and aluminum curtain wall terminates cleanly at the top of the building and forms an extended parapet that screens all rooftop appurtenances from view. Louvered metal panels in the façade provide side-wall screening for any side-discharging equipment, appearing as an integral part of the building envelope design.

Building rooftop mechanical equipment and appurtenances are incorporated, screened, and set back from roof edges to reduce visual impact from the surrounding neighborhood as described in the figure below.

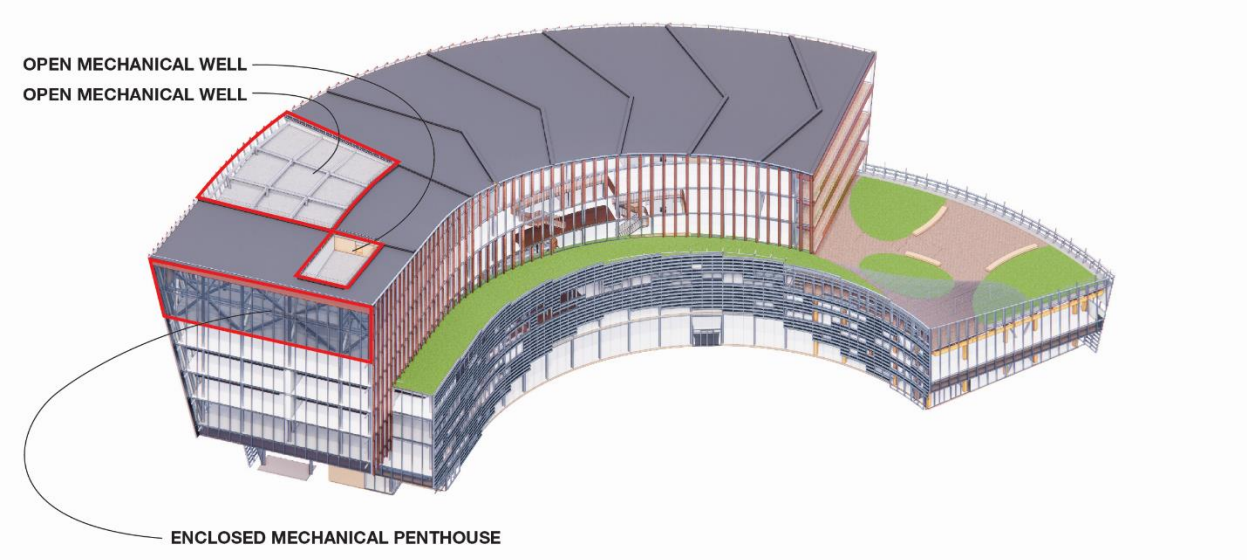


Figure 3-20: Mechanical Screening and Enclosure at Learning, Research, and Collaboration Building

Garage and Childcare Design

While the Garage does not have any rooftop equipment besides an elevator overrun, it nonetheless is wrapped in decorative metal screen on all four elevations. The screen serves to cover all the precast concrete

structural elements of the garage. The garage is planned to include 15,000-sf of photovoltaic canopies at the roof, to provide a source of renewable energy for the campus. It is further punctuated with a series of openings that have a pattern of residential-scaled openings that face the neighborhood as well as the campus, resulting in a thoughtful composition that offers visual interest to highway motorists, neighbors, and campus users.

Garage equipment and mechanical spaces are likewise screened on lower levels with the facade.

The contrast between the programs of childcare and parking is acknowledged in the different façade treatment of the childcare center. Whereas the garage and its vehicles are largely screened from view by a decorative metal façade, the childcare center is a primarily composed of a glass façade facing the principal elevation on the East toward the Round and the arrival, and on the South facing toward the water and adjacent to the protected play space. The openness of the façade allows for occupant daylighting and displays activity from the outside. Appropriate screening and shading will be provided for privacy as needed by the childcare program.



Figure 3-21: Parking Garage Rendering

Building Entrances

Building entrances include prominent facades and are oriented toward, located adjacent to, or accessible from rights-of- way, major pedestrian access routes, or open spaces.

Learning, Research, and Collaboration Building

The Learning, Research, and Collaboration Building has two principal entrances. On the North elevation, the entrance greets visitors arriving from Sherwood Street whether by bike, bus, or automobile with a landscaped Arrival Plaza, and a clearly marked entry vestibule which is protected by a building cantilever which serves as a canopy. At the ground level an integrated paving approach ties the vehicular space and pedestrian space together with common stone paving. Vehicular and pedestrian spaces are separated by

low vehicle bollards. Street trees, low plantings, site, lighting, wayfinding, benches, and bike racks reinforce the entry experience.



Figure 3-22: Arrival Plaza Rendering



Figure 3-23: West Entrance to Learning, Research, and Collaboration Building Plaza & Bean Building Rendering

The West entrance faces the Promenade - the major pedestrian thoroughfare through the campus. This principal entrance consists of a glass vestibule which is also protected by a cantilevered building edge which serves as a canopy. The entry faces a stone plaza which connects to the principal entrance of the Bean Building and is outfitted with benches, low plantings, seating, and lighting.

The Learning, Research, and Collaboration Building has two secondary entrances. The Entrance facing the Round on the Northwest facing elevation gives direct access to the major interior public space known as

the Portal which contains a café, gathering space and restrooms. A glass vestibule serves as the entrance to a small stone paver plaza and beyond that, to the Round.

The South entrance faces the public shore and Casco Bay. Like the Northwest facing entrance, a glass vestibule provides access to the Portal and the amenities described above. The entrance provides access from the interior to a series of important outdoor gathering spaces including the Overlook lawn space, the Bay Terrace tiered seating and several coastal bike and pedestrian paths as well as the Campus Beach.

Bean Building

The principal entrance of the Bean building is sited on the Promenade facing East and directly across from the Learning, Research, and Collaboration Building West entrance.

Garage

The Principal Entrance to the Garage faces East toward the vehicular turnaround and walking path.

Childcare Center

Slightly further to the south but in close proximity to the Garage entrance, the childcare entrance is accessed through a secure playground gate, providing another level of control and buffer to the Campus realm.

Mitigation of Impacts

The buildings and site development are designed to minimize potential negative impacts related to shadows, wind, noise, heat, glare, and lighting; contaminants as described in Section 7.2; and the environment as described in Section 6.

Shadows

Heights and massing of buildings have been designed to minimize shadow impacts to neighbors and avoid negative impacts to existing public open spaces. In general, the buildings step down in deference to the Bean Building and the edges of the Site. To further limit shadow impacts, heights are further restricted at the edge of campus where buildings border other residential uses.

Refer to attached shadow analysis drawings demonstrating shadow impacts at dates prescribed by the City of Portland Technical Manual, section 10 and represented at the times of 9AM, noon and 3PM.

From this analysis it is observed that in nearly all dates/times studied, the new shadows cast by campus buildings largely remain on or within the property line, or on adjacent buffer spaces of the I-295 right of way to the West or the Maine Central Railroad and roof of Maine Yacht Center to the East. It is only in the lowest sun angle scenario of 9AM December 21st that some new shadow from the parking garage reaches residential properties in the East Deering neighborhood. This situation ends by 9:45AM.

Plantings on the property have been chosen for their tolerance to periodic shadow coverage and no adverse effects are anticipated to the growth of vegetation in these spaces. As noted in the wind and heat (thermal comfort) discussion below, some shadows on the north side of the building facing the round have been shown to benefit occupant comfort during the summer.

Noise

The City of Portland Land Use Code Section 6.8.9, Table 6-G, gives maximum permissible sound levels based on the zoning category of an area. For the zones surrounding the project Site, based on the City of Portland Zoning Map the noise limits are as follows:

Table 3-3: Allowable Sound Levels in Zoning Areas

	Daytime/Evening (7 a.m. – 9 p.m.)	Night (9 p.m. – 7 a.m.)
Residential (R3, R5)	55 dBA	55 dBA
Other (IL, C54, B2, B5)	60 dBA	55 dBA

Noise levels due to mechanical equipment, including air source heat pumps, exhaust air handling units, dedicated outside air handing units, fans, and louvers, were calculated and compared to the standards in **Table 3-3**. With this regularly operating equipment, noise at the property lines does not exceed city guidelines. The level is generally within the ambient noise at the Site and would not contribute to significantly raising the ambient level. The existing ambient noise is primarily composed of highway traffic noise and was measured to be 50-55 dBA at the eastern edge of the project Site.

With the current configuration, the noise levels from the smoke exhaust fans or the generator separately do not exceed code levels at the property line. While the fans and generator raise the noise level, they are only used for emergencies and testing.

Wind & Heat (Thermal Comfort)

The design team performed a thermal comfort analysis considering a combination of wind, solar radiation and feel temperature to understand how best to provide a comfortable microclimate. These findings informed the programming of outdoor spaces as well as the planting strategy that can mitigate uncomfortable heat scenarios. The analysis found that in summer months the edges of the Round are generally well-shaded by the buildings, which, along with the calmer winds in the warmer months, will provide a comfortable space for occupants. However, there is more solar exposure further away from the building. This pointed to more active uses along the promenade as well as the lawn areas of the Round. The spaces along the Southern end of the Learning, Research, and Collaboration Building, including the pier, have more solar exposure. This can help counteract the cooler, faster wind speeds coming off the water that may be occasionally experienced in the summer.

Glare

Preventative measures against solar reflected glare are implemented throughout the campus. Specular reflections from concave façades can, in some cases, concentrate reflected solar radiation to produce extreme heat, which can damage skin, foliage, and plastics at the focal point. In order to understand and mitigate these effects, the design team conducted a solar reflected glare study of the Learning, Research, and Collaboration Building to assess the building's glazed areas. Reflected solar irradiance does not exceed 2500 W/m2 (232 W/ft2) at any time during the year on a plane facing the glare source at ground level, except for small portion of the concave west façade of the Learning, Research, and Collaboration Building. This area was found to create a cusp singularity in late afternoons, with potential intensities occurring from April to September. Through simulations, it was determined that mitigation strategies can prevent focusing effects and keep visitors safe and comfortable. At the ground plane where the focusing is most intense, a landscape solution will restrict access to mitigate the glare and heat risk.

Light Pollution and Lighting

The campus lighting designs comply with all safety and comfort requirements and minimize impact to the night sky in accordance with light pollution reduction standards in the most current editions of ANSI/ASHRAE/IESNA 90.1-2007. The goals of the site lighting are to provide a safe nighttime environment, meet all applicable code requirements, support site navigation and wayfinding, enhance the visual coherence of the campus, and avoid light pollution wherever possible.

As defined by the International Dark Sky Association, together with the Illuminating Engineering Society, the site lighting design will take into consideration the Five Principles for Responsible Outdoor Lighting:

- Useful: All light shall have a clear purpose
- Targeted: Light shall be directed only to where needed
- Low Light Levels: Light shall be no brighter than necessary
- Controlled: Light shall be used only when it is useful
- Color: Use warmer color lights where possible

The site lighting will not exceed the luminaire backlight and glare ratings BUG rating method, as defined in IES TM-15-11, to avoid light trespassing to nearby properties and to avoid upward light into the night sky.

The design intent for the Correlated Color Temperature (CCT) is to respect the light pollution principal "color" of using a warm color temperature. The site lighting across the campus shall be 3000K. Refer to attached site lighting plan, photometrics and cutsheets.

Bird Conservancy

Bird safety design will be implemented in the project. Design of exterior building envelopes will be developed in conjunction with the American Bird Conservancy and Cornell Ornithology Lab standards to mitigate bird strikes to the extent practicable. The project also complies with the Bird Friendly Materials Bill, which defines materials with a maximum threat factor of 25 or below as being “bird friendly” and mandates that these must be used on 90% of a façade up mandates above grade. Non-bird friendly materials are limited to 10 ft^2 within any 100 ft^2 area within this region. This provision applies to both new buildings and renovations of existing buildings when the façade is being replaced.

The façade design employs the following bird friendly design strategies:

- Differentiating between texture, color and opacity to fragment reflections and reduce transparency.
- Utilizing surface treatments, etching, fritting, UV patterning or opaque patterned glass to reduce transparency.
- Using glass with external reflectivity below 15%.
- Using interior shades and occupancy sensors to minimize internal illumination which would be visible and attractive to birds.

3.3.8 Neighborhood Integration (8.5.7.I)

Northeastern University and IDEALS have maintained regular contact with neighbors before and following the IDP and IOZ approval, through informal channels such as personal meetings, site visits, calls, and emails,

and through formal channels including Neighborhood Forums and the formation of the Community Advisory Group (CAG). Through all of these channels, neighbors and interested parties have been engaged through regular communication where their views and suggestions have been solicited. Sam Reiche is serving as the community contact for IDEALS and Margaret Angell for Northeastern University, with additional resources from their respective institutions.

IDEALS and Northeastern hold Neighborhood Forums at least quarterly (throughout 2023, the forums have been held to bi-monthly). These forums are held in the community center in East Deering and are open to any neighbor or interested individual. At these meetings, the university and development team provide updates on the operations of the Institute and the progress with the development.

In October, Northeastern launched the CAG to establish a group for the regular discussion of how to maximize the positive social and economic impact of the Institute. In addition, the CAG will draw on the experience of its members to work through challenges and opportunities presented by the development of the new campus. The open sharing of information and perspectives is intended to foster constructive problem-solving and build community around the new Roux Campus.

The CAG is comprised of representatives from key stakeholder groups from across the city. This will be a dynamic group, with membership from the following constituencies, listed below.

- Bicycle and pedestrian
- Business community
- Education
- Higher education
- Neighborhood
- East Deering neighborhood
- East Deering Neighborhood for Responsible Development
- Front Street area neighborhood
- Friends of Payson Park
- Portland Housing Authority Washington Gardens
- Portland Housing Authority Front Street
- Portland Harbor
- Portland Public School System
- Presumpscot School
- Public Transit
- Rail
- Recreation, parks, and trails
- Sustainability
- Transportation

Although a few seats have proved challenging to fill, the response from these groups has been positive and enthusiastic about the opportunity to participate. The CAG held its first meeting in October and will hold meetings quarterly going forward.

Given the long-term role of the CAG, the first task will be to develop a Charter to outline the terms of engagement, including purpose, work scope and structure. As plans unfold for the Roux Campus, and its doors are opened, the CAG will be instrumental in helping to capitalize on the opportunities for Portland.

A detailed project-specific Construction Management Plan (CMP) was developed for Phase 1 and uploaded under separate cover. The CMP was developed based on the following principles outlined in the IDP:

- Open and transparent communication
- One-on-one conversations whenever possible
- Multiple channels to give and receive information
- Timely sharing of plans and considerations
- Receptivity and response to input
- Respect for affected parties

Northeastern University and IDEALS are committed to communicating early and often with neighbors and interested parties. Existing communication platforms: in-person meetings and calls; website; www.rouxcampusportland.org; and Neighborhood Forums will be supplemented with an interactive website and dedicated construction webpage, and a hotline to ensure the public has easy access to timely and accurate information.

3.3.9 Historic Preservation (8.5.7.J)

As previously noted in Section 2.2.2, Bean Building has been designated as a local historic landmark and exterior renovations require Historic Preservation Board review. It should be noted that the Bean Building is exempt from Subsection 14.6.4(E)(2) for review of development within 100 feet of a landmark.

Phase 1 also includes development of a new pier on the footprint of the former Codfish Building pier. Per Section 8.5.7.J.2., the new pier shall include interpretive elements that convey the history and significance of the Codfish Building on top of or within the surface of the pier. While Historic Preservation Board review is not required for demolition of the Codfish Building or construction of the new pier, review and approval of these interpretive elements is required and will be submitted to the Board for review. A summary of the approach is provided below. Additional information regarding Historic Preservation is included in Section 8.5.

The commemoration of the history and significance of the Codfish Building consists of a sequence of connected elements that give visitors multiple perspectives on the building in the context of the site. Moving beyond a single plaque, a whole commemorative pathway leverages the public spaces around the Codfish Building at the pier principally, but also spreading to adjacent plazas and the Promenade to tell a more holistic, comprehensive story of the Building.

The following interpretive elements are envisioned, as shown on **Figure 3-24:**

1. **Railroad Track & Cart Stop** are historic rails and railroad elements that are flush to grade and level to adjacent paving where they are part of the pedestrian surface. Tracks and the cart stop may be exposed in areas of planting or emerging from the hillside slope safely away from pedestrian circulation zones but easily visible.

2. **Bean Pots & Retort Baskets** are repurposed pieces of historic equipment from inside the Bean Building. These ae connected to the industrial process of the Codfish Building and the entire site and will be in lower pier plaza and have a potential reuse as fire pit, table, or seasonal planter. The pots and baskets will be on fixed or lockable casters to remain safely in an intended location.

3. **Granite Interpretive Post** is in Pier Plaza. It will be made of salvaged granite stone from the existing shoreline and repurposed as an interpretive marker with an overall map of the path and the historic elements and commemorative messaging.

4. **Mooring Bollards & Cleats** are salvaged dockside elements from the former pier and will be reused as traffic calming devices separating pedestrian areas from bicycle areas where visitors can safely touch and interact with the artifacts. Bollards and cleats will not be used for current marine service functions.

5. **Pier Decking Inlays** will occur as commemorative metal strips arranged between the light poles to match the Codfish Building footprint and structural system. The strips contain flush text or graphics conveying the Codfish Building's history.

6. **Pier Light Poles** will be arranged in a layout to match the Codfish Building's footprint and structural system. Small interpretive panels at eye level are mounted to poles and provide commemorate signage for the Codfish Building.

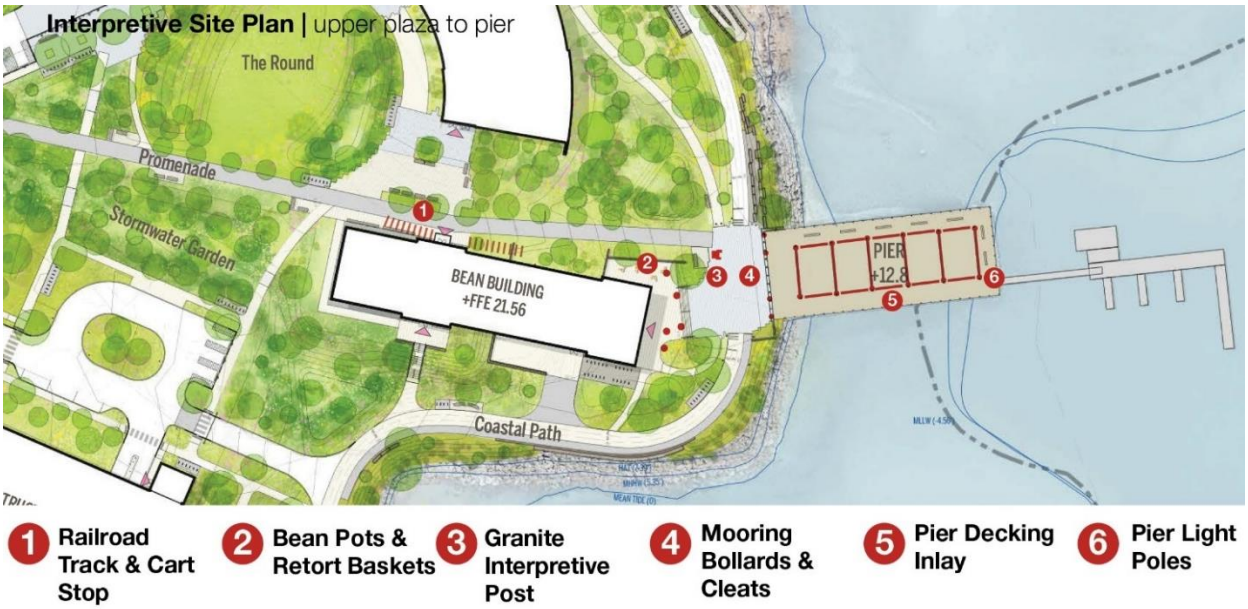


Figure 3-24: Codfish Building Interpretive Elements

3.4 Inclusionary Zoning

The project is required to comply with the City of Portland's Inclusionary Zoning requirements for each phase of development. The Inclusionary Zoning requirements include providing 25% workforce housing for residential developments with 10 or more units, and one low-income rental unit for every 28 hotel rooms. The proposed Phase 1 development does not include residential or hotel units; therefore, this standard is not applicable.

3.5 Waiver Requests

We are requesting the following waivers as a part of the Site Plan process.

- Stormwater Flooding Standard – Per MaineDEP Chapter 500 Stormwater Standards Section 4.F(3), a project is eligible for a waiver from the Flooding Standard if it discharges to a coastal wetland or a major river segment. As described in our Stormwater Management report, the Site discharges directly to Casco Bay, part of a tidal body of water, via the outfall discharge.

- Parking Lot and Parking Space Design – Per City of Portland Technical Manual Section 1.10, standard parking spaces shall be 9 feet by 18 feet. We respectfully request approval of spaces in the parking garage as dimensioned on the plans, which have been designed per industry standards for parking space and drive aisle dimensions. Standard spaces in the parking garage will be 8′-6″x18′-0″ and the 33 compact spaces will be 8′-6″x16′-0″. All parking spaces and aisles exterior to the parking garage meet City standards.
- Sidewalk Material – Per City of Portland Technical Manual Appendix A, the sidewalk and driveway apron material standard for Sherwood Street is asphalt. We respectfully request a waiver of this requirement to utilize concrete as the sidewalk material for Sherwood Street. The existing sidewalk on Veranda Street from the intersection with Sherwood Street is currently concrete. We are also planning to utilize concrete sidewalk within the project Site. The use of concrete for the sidewalk on Sherwood Street will provide consistency with adjacent off-site and on-site sidewalks.

3.6 Evidence of Financial Capability

We have included a copy of a letter verifying the Applicant's financial capacity to undertake the project.

3.7 Evidence of Technical Capacity

The project team includes the following partners completing various engineering, landscape architecture, and architectural components of the project. The project team is also supported by a number of other professional firms providing support with survey, structural design, geotechnical design, mechanical/electrical/plumbing design, and other disciplines. Copies of resumes and information on other members of the project team can be provided upon request.

- **Woodard & Curran (W&C)**, a Portland-based firm, has provided engineering services to the public and private sector for over 40 years, including permitting, civil/site engineering, stormwater, and construction management services. W&C has completed projects for colleges, universities, and healthcare institutions that build strong, sustainable infrastructure and environmental programs serving both their business needs and the communities that make them so vibrant. With extensive experience in design and permitting for site development projects, W&C has completed many projects within the City of Portland.
- **Stephen Stimson Associates**, STIMSON is a landscape architecture firm based in Cambridge and Princeton, Massachusetts and is comprised of an urban and rural landscape architecture studio, a working farm, and a plant nursery. STIMSON is a female, minority led partnership between Lauren and Stephen Stimson with 30 staff and 5 principals. The studio was conceived in 1992 by Stephen Stimson, who was born on a 10th generation dairy farm in New England. A devotion to craft, and a simple, agrarian-minded approach to design is the mainstay of the firm's work.
- **Cambridge Seven Associates (C7),** is an architecture firm based in Cambridge, Massachusetts, with a staff of 60 people, including registered architects, planners, LEED Accredited Professionals, exhibit, and graphic designers. Since 1962, they have provided clients with provocative yet sensitive designs by recognizing and acting upon the unique opportunities inherent in every project. C7 has received dozens of awards, including the prestigious National AIA Firm Award, and is internationally acclaimed for its innovative work in architecture, urban design, transportation, planning, graphic design, exhibition, and interiors.

- **Bruner/Cott Architects,** is a 35-person historic preservation architecture firm located in Boston, Massachusetts. Their leadership team brings a broad, integrated perspective to design, giving depth to each of their practice areas. Bruner/Cott's work has been recognized for award-winning design from preservation to adaptive reuse and new construction, with a focus on educational and cultural institutions. Bruner/Cott partners with private developers for residential and commercial buildings. Bruner/Cott is known for creativity in inventing new solutions to complex programs and as design leaders for historic renewal and contemporary design in the context of urban revitalization and institutional re-invention.

3.8 Section Attachments

- FEMA Map
- Financial Capacity Letter

3.9 Attachments Provided as Separate Files

The following materials referenced in this section of the report have been uploaded under separate cover for review.

3.9.1 Drawings

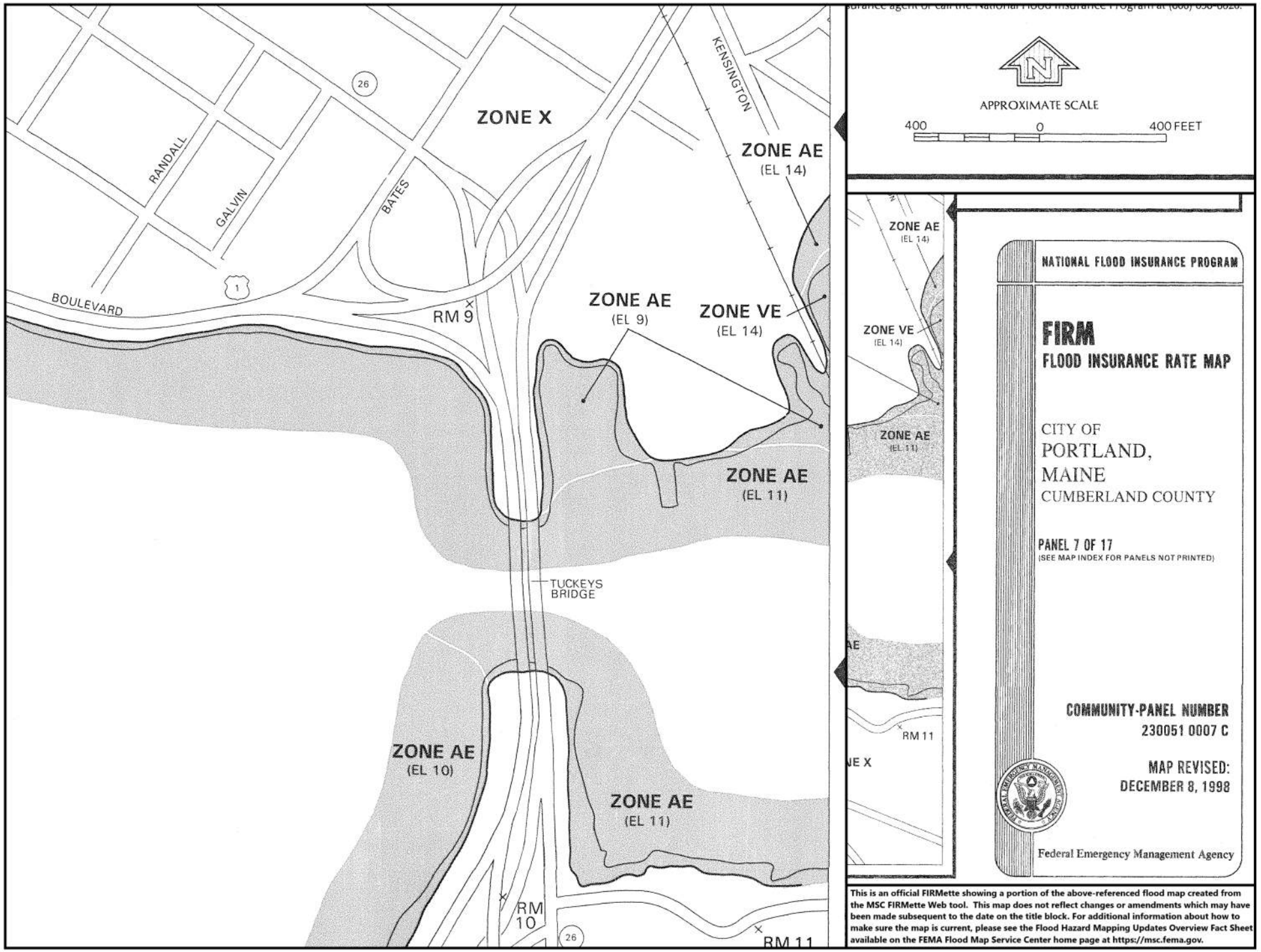
- Average Grade and Building Height Diagrams
- Boundary & Topographic Surveys
- Civil, Landscape, & Architecture Design Plans
- Site Lighting and Photometrics Plans
- Shadow Study

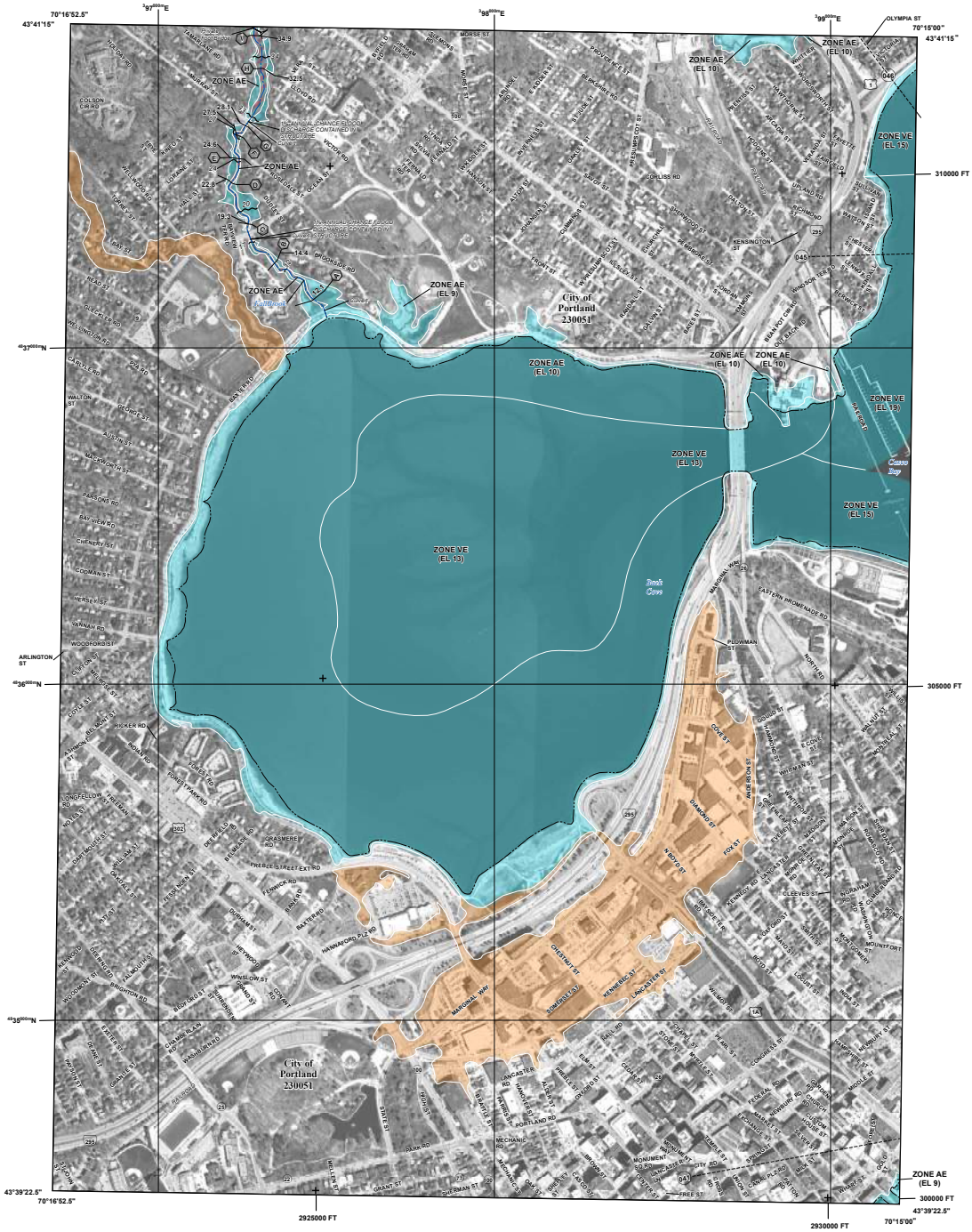
3.9.2 Documents

- Application Checklist
- Zoning Assessment Table
- Waiver Table
- Campus Sustainability Charter

3.9.3 Construction Management Plan

A draft Construction Management Plan has been prepared for the proposed development. It should be noted that the constructability of future phases of development has been considered.


ZONE X
ZONE AE
(EL 14)
ZONE AE
(EL 9)
ZONE VE
(EL 14)
ZONE AE
(EL 11)
ZONE AE
(EL 10)
ZONE AE
(EL 11)
RANDALL
GALVIN
BATES
KENSINGTON
BOULEVARD
RM 9
TUCKEYS
BRIDGE
RM
10
RM 11
26
1
APPROXIMATE SCALE
400
0
400 FEET
NATIONAL FLOOD INSURANCE PROGRAM
FIRM
FLOOD INSURANCE RATE MAP
CITY OF
PORTLAND,
MAINE
CUMBERLAND COUNTY
PANEL 7 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)
COMMUNITY-PANEL NUMBER
230051 0007 C
MAP REVISED:
DECEMBER 8, 1998
Federal Emergency Management Agency
This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at https://msc.fema.gov.



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTP://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE) *Zone A,V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES

- 18.2 / 17.5 Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM provided in digital format by State of Maine, Maine office of GIS (MeGIS). This information was derived from MeGIS, dated 2012.

The map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and FDTs may reflect stream channel distances that differ from what is shown on the map.

SCALE

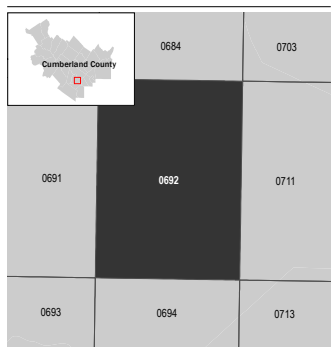
Map Projection:
NAD 1983 UTM Zone 19N;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

CUMBERLAND COUNTY, MAINE

All Jurisdictions

PANEL 0692 OF 0837

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
PORTLAND, CITY OF	230051	0692	F

REVISED PRELIMINARY 4/14/2017

VERSION NUMBER 2.3.2.1

MAP NUMBER 23005C0692F

EFFECTIVE DATE

Northeastern

October 25, 2023

Ms. Denise Cameron
Woodard and Curran
12 Mountfort Street
Portland, ME. 04101

Dear Ms. Cameron:

Northeastern University expects phase 1 of the Roux Campus project to cost approximately $470 million dollars.

To fund the project, the University will use a mix of philanthropic resources (the majority of which are already pledged) and debt.

Thank you.

Sincerely,

Thomas Nedell
Senior Vice President for Finance and Treasurer

Office of the Senior Vice President Finance

177 Huntington Ave.
360 Huntington Ave.
Boston, MA 02115

617.373.2240
fax 617.373.4728

finance.northeastern.edu

Portland, Maine Yes. Life's good here.

Planning & Urban Development Department

ZONING ANALYSIS Relevant Zone(s) B5

See narrative for dimensional analysis related to Shoreland Overlay Zone and Institutional Overlay Zone

All Projects:

	Required	Proposed	
Lot Size	NA		
Area Per Dwelling Unit	NA		
Minimum Street Frontage	NA		
Front Yard Minimum	NA		
Front Yard Maximum	NA		
Rear Yard	NA		
Yard Right	NA		
Yard Left	NA		
Side Street Setback	NA		
Step Back	per IOZ	See Narrative	Section 3
Maximum Lot Coverage	NA		
Minimum Lot Coverage	NA		
Maximum Height	per IOZ	See Narrative	Section 3
Open Space	per IOZ	See Narrative	Section 3
Maximum Impervious Area	NA		
Pavement Setback	NA		
Floor Area Ratio	NA		
Off Street Parking Spaces	NA		
Loading Bays	NA		
Other 1	NA		
Other 2	NA		
Other 3	NA		

Planned Residential Unit Developments (PRUD) Requirements Not Applicable (NA)

	Required	Proposed
Minimum Lot Size		
Minimum Lot Area per Dwelling		
Maximum # Units per Building		
Maximum Building Length		
Maximum Accessory Building Length		
Minimum Setbacks		
Minimum Building Separation		
Minimum Open Space		

Affordable Housing Density Bonuses (if applicable) Not Applicable (NA)

	Bonus Increase or Decrease	Maximum Allowable With Bonus	Proposed
Density			
Height			
Setback Reduction			
Recreation Space			
Maximum Accessory Building Length			
Minimum Setbacks			
Minimum Building Separation			
Minimum Open Space			
Explanatory Text 1 (optional):			
Explanatory Text 2 (optional):			
Explanatory Text 3 (optional):			

Standard to be Waived: Cite Ordinance or Technical Manual Standard	**Cite Standard Language:** Cite specific language of applicable Ordinance or Technical Manual Standard	**Waiver Being Sought:** Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	**Justification for Waiver:** Address specific waiver criteria, if applicable, and document reasons for the waiver request.
City of Portland Technical Manual Section 1 - Transportation Systems - subsection 1.10 Parking Lot and Parking Space Design	Parking spaces shall meet the following dimensional requirements: Standard parking space: 9 feet wide by 18 feet long, except that low turnover parking spaces, such as those used by residents or employees, may be designed with a width of 8', 6" and considered a	Requesting approval of spaces within the parking garage as dimensioned on the plans sized at 8'6" width	The parking garage has been designed in accordance with industry standards for parking space and drive aisle dimensions. The parking lot dimensions prescribed in the Technical Standards are not efficient when laying out structured parking
City of Portland Technical Manual Section 5 - Stormwater Management Standards and Maine DEP Chapter 500 Stormwater Management Section IV.	...provide the following submission items...Flooding Standard: Subcatchment plans with flow paths, full hydrology computations/model output of pre- and post-development conditions, summary of pre- and post-development flow rates, and a written request	Requesting approval of a waiver of the Flooding Standard	As described in our Stormwater Management report, our site discharges directly to Casco Bay, part of a tidal body of water, via the outfall discharge.
City of Portland Technical Manual Appendix 1 Sidewalk Materials Policy	Per the Materials Policy map in Appendix 1, the sidewalk material standard for Sherwood street is asphalt	Requesting a waiver of the material policy for Sherwood Street to allow for use of concrete instead of asphalt.	Sherwood Street provides a connection from Veranda Street to the project site. Existing sidewalks on Veranda Street and proposed sidewalks in the site are both made of concrete. Concrete on Sherwood Street would provide for a continuous

4. EVIDENCE OF RIGHT, TITLE & INTEREST

4.1 Right, Title & Interest

The Project will occur on parcels of land identified by the City as Map 447 Lot A001 and Lot A002 and owned by IDEALS. IDEALS is in the process of transferring ownership of the parcel to Northeastern University, as documented by the Purchase and Sale Agreement attached to this Section. Conveyance of the property to Northeastern University will occur subsequent to Site Plan approval and prior to application for a building permit. A copy of the City parcel maps is also attached for reference.

4.2 Easements & Other Burdens

Existing easement's locations and descriptions are reflected on the survey drawings, uploaded under separate cover.

4.3 Section Attachments

- Purchase and Sale Agreement
- City Parcel Maps

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EXECUTION VERSION

AGREEMENT FOR THE PURCHASE AND SALE OF REAL ESTATE

THIS AGREEMENT is effective as of October 23, 2023 by and between **NORTHEASTERN UNIVERSITY**, a Massachusetts non-profit corporation with an address of 360 Huntington Avenue, Boston, Massachusetts 02115 ("Buyer"), and **THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES**, a Maine non-profit corporation with an address of 100 Commercial Street, Portland, Maine 04101 ("Seller").

RECITALS

WHEREAS, in furtherance and fulfillment of that certain Memorandum of Understanding, dated July 27, 2022 by and between Buyer and Seller (the "MOU"), the Seller desires to sell, transfer and convey to Buyer a certain parcel of land, together with the improvements thereon, located on the easterly side of Interstate 295 and the southerly side of Sherwood Street in the City of Portland, County of Cumberland and State of Maine (the "Campus") as more specifically described herein; and

WHEREAS, the MOU and further agreements by and among Buyer, Seller, and David and Barbara Roux (the "Rouxs") envision that Buyer will develop the Campus for the creation of a graduate institute (the "Institute"):

- instructing students in the fields of artificial intelligence, digital science, data visualization, computational medicine, genomics and life sciences and project management, and develop content and pedagogy therefor,
- conducting research in the fields described above, among others, and
- encouraging innovation and entrepreneurialism among new and established companies deploying the above-mentioned skills and technologies,

WHEREAS, the buyer has agreed to develop the Campus as the permanent home of the Institute with other supporting infrastructure to encourage learning, collaboration, innovation and other progress, and

WHEREAS, it is the intent of the Seller and the Rouxs that the Campus will, over time, become a force for education, research, collaboration and entrepreneurialism meaningful to the 21st century economy, innovation and job creation.

WITNESSETH AS FOLLOWS:

1. PURCHASE AND SALE. Seller agrees to sell and Buyer agrees to buy, on the terms and conditions hereinafter set forth, approximately thirteen (13) acres of land and buildings generally situated at 1 Bean Pot Circle, Portland, Maine together with all improvements that may at the time of closing be thereon (except as specified below) and all rights and easements appurtenant thereto, which parcel is more particularly bounded and referenced by the City of Portland Assessor's Office as Map 447-A-001-001 and 447-A-001-002 and as more fully described on **Exhibit A** attached hereto, being the same premises described in a Quitclaim Deed

DocuSign Envelope ID: 93BEB8D2-0DE3-4F1B-A064-562E6257362F

with Covenant from B&G Foods North America, Inc. to Seller, dated March 23, 2022 and recorded in the Cumberland County Registry of Deeds in Book 39282, Page 151 together with and including all abutting or adjacent tidal flats, intertidal lands, and related rights in, to and under any submerged lands easements or leases between Seller and/or any predecessor of Seller with the State of Maine (together the "Property"). The following shall also be delivered and conveyed to Buyer at Closing hereunder:

A. Conveyance of tangible personal property, if any via Bill of Sale.

B. Conveyance of intangible personal property, if any, associated with the Property, to the extent owned by Seller, by Bill of Sale and Assignment.

C. Assignment and Assumption of the Maine Yacht Center lease (the "MYC Lease") of a portion of the Property, in form and substance reasonably acceptable to Buyer.

D. Conveyance/Assignment and Assumption of Submerged Land Easement, which requires notice to the Maine State Bureau of Parks and Lands.

E. Assignment and Assumption of the following MDEP Permits if in effect at the time (for which Buyer shall seek MDEP consent):

i. Maine Department of Environmental Protection Air Emission License A-77-71-M-R(SM)

ii. Maine Department of Environmental Protection Maine Pollutant Discharge Elimination System (MDEPDES) Permit #ME0001741

iii. Maine Waste Discharge License (WDL) License #W000980-5R-H-R.

iv. NRPA Permit (*if any, currently in process*)

(collectively, the "MDEP Permits")

F. Assignment and Assumption of the following City of Portland and/or State permits and approvals:

i. Demolition permit

ii. Any site plan approval and/or building or construction permits

iii. MDOT permits including Traffic Movement Permit

iv. any other issued or pending state, municipal or federal permits or permit applications

(collectively, with the MDEP Permits, the "Governmental Permits")

G. Assignment and Assumption of the construction and development contracts and agreements described on **Exhibit B** (the "Development Contracts").

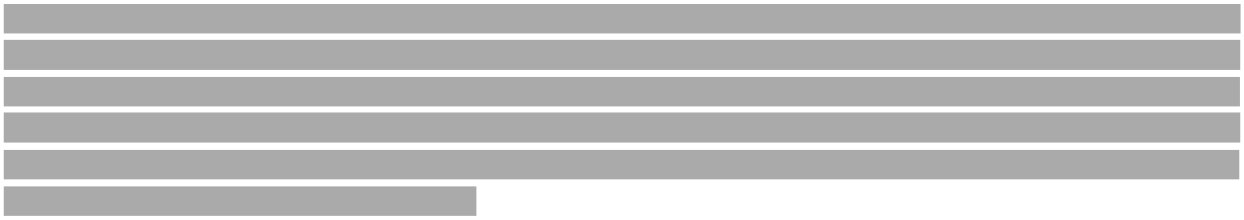
H. Assignment of any and all warranties relating to any completed contracts for construction or demolition of any of the improvements upon the Campus (the "Construction Warranties"), if any.

I. Assignment of any and all studies, reports, engineering, surveys, appraisals, or other such reports or studies, to the extent assignable (collectively, the "Studies and Reports"), and, if and to the extent requested by Buyer, delivery of reliance letters with respect to such Studies and Reports in a form reasonably acceptable to Buyer. Seller agrees to seek consent to such assignments and any required reliance letters from the professionals or vendors providing the Studies and Reports.

2. OFFER AND ACCEPTANCE. The execution of this Agreement by Buyer represents an offer to Seller on the terms and conditions set forth herein. This offer shall be open for acceptance by Seller until 4:00 p.m. Portland, Maine time on October 23, 2023 unless extended by mutual agreement of Buyer and Seller. Seller's acceptance of this offer shall be evidenced by Seller delivering an executed copy of this Agreement to Buyer at the address set forth in Section 14 below on or before the expiration of this offer. If this offer is not accepted by Seller prior to its expiration, this offer shall automatically expire and this Agreement shall be null and void and of no further force and effect.

3. CONSIDERATION. The consideration for the transfer of the Property is in furtherance and fulfillment of the MOU and the performance under such further agreements by and among Buyer and Seller for Buyer's development of the Property as the site of the Institute for the purposes of instructing students, conducting research, and supporting entrepreneurialism in the fields of artificial intelligence, digital science, data visualization, computational medicine, genomics and life sciences and project management, and develop content and pedagogy therefor, and developing the Property to serve as the permanent home of the Institute with other supporting infrastructure. At closing hereunder, however, the parties shall adjust for any pro-rations and any other payments referenced herein. Except as specified in this Agreement or in any other agreement among the parties including the Rouxs, both Buyer and Seller shall bear their own expenses in connection with the performance of their obligations hereunder. Buyer agrees to pay and Seller agrees to accept One Dollar ($1.00) and other valuable consideration as the Purchase Price for the Property.

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4. TITLE. Seller shall convey the Property to Buyer at the closing in fee simple with good, marketable and insurable title, free and clear of liens and encumbrances and other matters of record, except as disclosed in Buyer's Title Insurance Policy # OP 04921177 ME issued by CATIC (the "Title Insurer"), dated March 24, 2022, a copy of which has been provided to Seller (the "Title Policy"). Seller shall deliver the Property free and clear of any leases or occupancies except as otherwise provided herein. Notwithstanding the foregoing, during the period commencing on the date hereof and continuing for a period of thirty (30 days (the "Inspection Period"), Buyer shall have right to review the title and to make any objections to the title in writing to Seller. Upon receipt of Buyer's title objections, Seller shall have a period of up to thirty (30) days to either (i) resolve the title objections to the reasonable satisfaction of Buyer; (ii) or to propose affirmative title insurance coverage addressing any such title objection that the Title Insurer is willing to provide, including an agreement to continue to provide such affirmative coverage to subsequent grantees and mortgagees; or (iii) to refuse to address such title objection, in which case Buyer may elect to terminate this Agreement, or Buyer may elect to close notwithstanding the title objection.

5. CLOSING. The transfer of title and closing hereunder shall take place at the offices of Bernstein, Shur, Sawyer and Nelson, 100 Middle Street, Portland, Maine, no later than ten days prior to Buyer's application for a building permit for the Buyer's initial phase of construction of the Institute is submitted to the City of Portland (the "Closing Date") or at such earlier date and location as Buyer and Seller shall mutually agree in advance and in writing. Buyer shall have the right to request a closing at any time prior to its application for a building permit, provided that Buyer has satisfied the remaining obligations of Buyer under this Agreement, other than such obligations that Seller has agreed to waive in writing. At the closing,

(a) Seller shall execute and/or deliver to Buyer:

i. a Quitclaim Deed with Covenant to the Property, in accordance with the Short Form Deeds Act, 33 M.R.S.A. § 761 et seq., (the "Deed"),

ii. a Quitclaim with Covenant Bill of Sale conveying the personal property to be conveyed to Buyer as set forth in Section 1.A. above;

iii. all keys, access cards, security codes and similar items to the Property in Seller's possession;

iv. the originals of all permits and licenses relating to the Property, if any, in Seller's possession;

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v. such documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Buyer's acquisition and financing of the Property, including without limitation a Certificate of Non-Foreign Status (as required by Internal Revenue Service regulations), an affidavit regarding underground storage tanks (as required by Maine Law), a surface/subsurface waste disposal system certificate (if applicable), applicable Maine State REW forms and satisfactory evidence of Seller's existence, authority to convey the Property; and

vi. One or more Assignment and Assumption Agreements signed by Seller to assign to Buyer all of Seller's rights in and to the Maine Yacht Center Lease; the Governmental Permits, the Studies and Reports, the Construction Warranties and the Development Contracts; together with any reliance letters with respect to the Studies and Reports requested by Buyer.

(b) Buyer shall execute and/or deliver to Seller:

i. the purchase price;

ii. evidence that the buyer's Board of Trustees has voted affirmatively to proceed with Phase 1 of the Campus development project (the "Project") and has committed sufficient financial resources to fund Phase 1 of the Project which shall include all work reasonably necessary for the construction of one or more learning, research and collaboration buildings and supporting parking and public infrastructure, construction of a new pier, and renovation of the exterior of the existing historic landmarked Bean Building as shall be further described in the initial Site Plan application (as the same shall be jointly submitted by the parties hereto) as approved by the City of Portland (the contents of which – as approved by the City -- shall be referred to herein as "Phase 1"). Such financial resources may be from various sources including bond financing, Buyer's own resources, pledges and other philanthropic giving and such financial resources as may be available to Buyer over the course of the construction of Phase 1 of the Project as opposed to being fully available at the time of closing;

iii. One or more Assignment and Assumption Agreements signed by Buyer to enable Buyer to assume all of Seller's rights in and to the Maine Yacht Center Lease; the Governmental Permits, the Studies and Reports, the Construction Warranties and the Development Contracts; and

iv. such other documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Seller's disposition of the Property.

Unless this Agreement is extended by mutual agreement of the parties, if the Closing does not occur for any reason by December 31, 2024, then this Agreement shall automatically terminate and be of

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no further force and effect and all obligations of the parties shall cease other than those specifically identified herein as surviving such termination.

6. RISK OF LOSS, DAMAGE AND INSURANCE.

(a) All risk of loss to the Property prior to the closing shall be borne by Seller. Seller shall keep the Property fully insured against fire and other extended coverage risks until the closing and shall name Buyer as an additional insured as Buyer's interest may appear.

(b) In the event that, prior to the closing, the improvements which are part of the Property are destroyed or, in the opinion of Buyer, substantially damaged, Buyer may either (i) terminate this Agreement, or (ii) accept the insurance proceeds payable by reason of such damage or destruction and close this transaction notwithstanding the same. If any part of the Property is damaged by fire or other casualty and Buyer does not elect to terminate this Agreement pursuant to this Section, then Seller and Buyer shall perform their respective obligations under this Agreement and in the event of a closing, Seller shall (x) deliver to Buyer at the Closing any insurance proceeds or condemnation awards received by Seller in respect of or allocable to the Property; and (y) assign to Buyer all of Seller's interest in and to any insurance proceeds and/or condemnation awards allocable to the Property which have not yet been received by Seller on that date; and (z) refrain from accepting or agreeing upon the amount of any payment of any proceeds or awards without Buyer's prior written consent. Notwithstanding the above, Buyer acknowledges that Seller is in the process of abating and demolishing all of the facilities on the site except for the so-called "Cannery" or "Bean Building"

7. INSPECTION/DELIVERY OF DOCUMENTS; AS-IS CONDITION. Reasonably promptly after this Agreement becomes effective, Seller shall deliver to Buyer copies of all of the Studies and Reports in Seller's possession or control to the extent not already provided to Buyer. With reasonable notice which shall be a minimum of three business days, Seller hereby grants Buyer or its agents the right to enter upon or in any part of the Property at all reasonable times and from time to time prior to the closing in order to inspect the Property, conduct surveys, soil tests, engineering and environmental testing and studies and to do such things as are reasonably necessary with respect to its due diligence, acquisition and development of the Property, provided, however, that Buyer's obligations to close hereunder shall not be conditioned upon the results of such due diligence other than as set forth below.

Buyer has commenced its review of the Studies and Reports, including environmental site assessments (ESAs) performed prior to the date hereof and accepts the Property in its as-is condition except as specifically set forth herein. Notwithstanding the foregoing, Seller shall not, after the date hereof, suffer or allow the occurrence of any further event(s) which would create, constitute, or be considered a recognized environmental condition (REC) under any qualified Phase I ESA without prompt and complete remediation or abatement, or else Seller shall be considered in default hereof. Furthermore, if Seller's title to the Property is further encumbered by any matter or means after the date hereof and such further encumbrance is not cleared prior to Closing, Seller shall be in default hereof. The foregoing is not a consent or permission to further encumber the title and Seller specifically agrees it shall not further encumber the title to the Property nor permit any mortgage, lien, claim, or charge to accrue which shall affect Seller's title.

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Further notwithstanding the foregoing, the parties acknowledge that the environmental site assessments conducted by or for Buyer or for which Buyer has been provided were conducted before certain demolition activities on the site that were performed by or for Seller. Buyer shall have the right to conduct further or updated ESAs and to review any remediation activities undertaken by Seller or its agents or contractors since the date of the ESAs conducted by or for Buyer. In the event that such further or updated ESAs reveal any RECs not previously disclosed to Buyer, Buyer shall have the right to terminate this Agreement or to require that further conditions be satisfied by Seller prior to closing.

Except as set forth in this Agreement, the Property will be conveyed "as is" at the time of closing and Seller disclaims all representations and warranties from Seller to Buyer other than any limited representations set forth herein. Buyer will indemnify Seller with respect to any environmental liabilities associated with the Property that may be discovered or arise post-closing, regardless of when the action(s) leading to such liabilities occurred. The foregoing sentence shall survive Closing under this Agreement. Seller will assign any environmental indemnification agreements it obtained from the Seller's grantor to Buyer, if any, with the right of the Buyer to enforce the indemnification obligations contained in any such agreements to the extent permitted therein.

8. CONDITIONS TO BUYER'S OBLIGATIONS TO PERFORM. The Buyer's obligation to perform hereunder and to close on the purchase of the Property are conditional upon the following matters:

(a) Buyer's obligation is conditional upon the Buyer's Board of Trustees approval of the Buyer's acquisition of the Property and the obligations of the Buyer under this Agreement.

(b) Buyer's obligation is conditional upon Buyer's satisfaction with its inspection of the Property during the Inspection Period as more fully set forth in Section 7 of this Agreement.

9. SELLER'S CONTINUATION OF CONSTRUCTION ACTIVITIES PRIOR TO CLOSING. Seller is currently conducting demolition, environmental remediation and site work at the Property. Seller has provided Buyer with copies of all of the plans, specifications, contracts and scope of work being performed by Seller or its agents or contractors at the Property at the time of execution hereof. Seller shall continue to perform such work in accordance with such contracts. To the extent that any such plans, specifications or contracts are modified or supplemented following the execution of this Agreement (the "Construction Modifications"), or to the extent that any additional contracts are to be entered into by Seller prior to the closing (the "New Contracts"), Seller shall endeavor to provide Buyer with notice thereof as soon as practicable, and Buyer shall have the right to comment upon and participate in any discussions regarding the scope and timing of such work; provided, however, that the notice contemplated by this provision shall be deemed satisfied if an agent, employee, or representative of Buyer is present with Seller (whether in person, telephonically, or by email) in conversations, meetings and other communications involving such Construction Modifications or New Contracts. Moreover, notwithstanding the notice provisions set forth in Section 16(b) below, the notice contemplated by this Section 9 may also be made to

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other designated representatives of Buyer involved in the construction activities via telephone in addition to, or in lieu of, any of the other manners of providing notice outlined in Section 9.

10. POSSESSION OF THE PROPERTY. The Property shall be delivered to the Buyer at the time of the closing free and clear of all tenancies or occupancies by any person or entity, unless otherwise agreed herein. The Property shall also be reasonably free and clear of all trash and debris, and free and clear of any and all of Seller's personal property and equipment, except as set forth herein.

11. REPRESENTATIONS AND WARRANTIES OF SELLER. Seller represents and warrants to Buyer that the following are true as of the date of this Agreement and will be true as of the closing:

(a) Seller is duly organized and in good standing under the laws of the State of Maine, with full capacity, power and authority to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(b) The execution and delivery of this Agreement and the performance by Seller of its obligations hereunder are within the lawful power of Seller, have been duly authorized and approved by all necessary actions on behalf of Seller, and will not conflict with, or result in a breach of any of the terms, covenants and provisions of: (i) Seller's Articles of Incorporation or By-Laws; (ii) any judgment, writ, injunction, regulation, ruling, directive or decree of any court of governmental authority; or (iii) any agreement or instrument to which Seller is a party or by which Seller is bound;

(c) The person executing this Agreement on behalf of Seller is duly authorized to do so and to bind Seller to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(d) No consent, approval, order or authorization of any court or other governmental entity is required to be obtained by Seller in connection with the execution and delivery of this Agreement or the performance hereof by Seller;

(e) There are no litigation, liens, judgments, violations, or proceedings pending, or to the best of Seller's knowledge, threatened against or relating to the Property nor does Seller know or have reasonable grounds to know of any basis for any such action, or of any governmental investigation relating to the Property;

(f) There is no pending, or to the best of Seller's knowledge, threatened action or proceeding (including, but not limited to, any condemnation or eminent domain action or proceeding) before any court, governmental agency or arbitrator relating to or arising out of Seller's ownership of the Property or any portion thereof, or which may adversely affect Seller's ability to perform its obligations under this Agreement, or which may affect the Property or any portion thereof;

(g) Seller is not a "foreign person" within the meaning of § 1445 of the Internal Revenue Code;

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(h) To the best of Seller's knowledge, no work has been performed or is in progress at, and no materials have been furnished to the Property or any portion thereof which may give rise to mechanic's, materialmen's or other liens against the Property or any portion thereof except as may arise in connection with Seller's further obligations as specifically contemplated by this Agreement; and

(i) All outstanding bills and/or accounts payable concerning the Property are either paid or will be paid prior to or at the time of closing unless otherwise agreed by the parties in writing.

12. REPRESENTATIONS AND WARRANTIES OF BUYER. Buyer represents and warrants to Seller that the following are true as of the date of this Agreement and will be true as of the closing:

(a) Buyer is duly organized and in good standing under the laws of the Commonwealth of Massachusetts, with full capacity, power and authority to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(b) The execution and delivery of this Agreement and the performance by Buyer of its obligations hereunder are within the lawful power of Buyer, have been duly authorized and approved by all necessary actions on behalf of Buyer, and will not conflict with, or result in a breach of any of the terms, covenants and provisions of: (i) Buyer's Articles of Incorporation or Bylaws; (ii) any judgment, writ, injunction, regulation, ruling, directive or decree of any court of governmental authority; or (iii) any agreement or instrument to which Buyer is a party or by which Buyer is bound;

(c) The person executing this Agreement on behalf of Seller is duly authorized to do so and to bind Seller to enter into and fully perform the obligations and transactions contemplated by this Agreement; and

(d) No consent, approval, order or authorization of any court or other governmental entity is required to be obtained by Buyer in connection with the execution and delivery of this Agreement or the performance hereof by Buyer.

13. DEFAULT AND REMEDIES. In the event that either Buyer or Seller defaults in the performance of its obligations hereunder, the non-defaulting party may elect to terminate this Agreement by written notice, or seek specific performance of the defaulting party's obligations.

14. BROKERAGE. The parties agree that no broker has been involved in this transaction.

15. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

(a) Real estate taxes, assessments, rentals, common area maintenance charges, fuel oil, and utilities shall be prorated as of the date of closing based upon amounts thereof actually paid or received (as the case may be) as of this date.

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(b) The Maine real estate transfer tax (if applicable) shall be paid by Seller and Buyer in accordance with 36 M.R.S.A. § 4641-A.

(c) The recording fee for the deed of conveyance will be paid by Buyer.

(d) A portion of the purchase price shall be withheld at the closing by Buyer if required by 36 M.R.S.A. § 5250-A unless Seller furnishes to Buyer an affidavit stating, under penalty of perjury, that Seller is a resident of Maine or that the transfer is otherwise exempt from withholding tax.

16. MISCELLANEOUS.

(a) Time. Time is of the essence of this Agreement.

(b) Notices. Any notices required or permitted to be given under this Agreement shall be sufficient if in writing and if sent: (i) by first class mail, postage prepaid, registered or certified, return receipt requested; (ii) by hand delivery; (iii) by FedEx, or similar overnight express mail service, prepaid; or (iv) electronic mail ("e-mail") or by facsimile ("Fax") transmission, each to the addresses and/or Fax numbers listed below:

TO SELLER:
Charles E. Hewett
IDEALS
100 Commercial Street
Portland, ME 04101
chuck.hewett@ideals.org

WITH A COPY TO:
Helen S. Coburn, Esq.
Bernstein Shur
100 Middle Street, PO Box 9729
Portland, ME 04104-5029
hcoburn@bernsteinshur.com

TO BUYER:
Northeastern University
Planning, Real Estate and Facilities
360 Huntington Avenue, 216-201
Boston, MA 02115
Attention: Kathy Spiegelman
Email: k.spiegelman@northeastern.edu

WITH A COPY TO:
Northeastern University
Office of the General Counsel
360 Huntington Avenue, Suite 301

DocuSign Envelope ID: 93BEB8D2-0DE3-4F1B-A064-562E6257362F

Boston, MA 02115
Attention: Michael Glover
Email: m.glover@northeastern.edu

All such communication shall be deemed made upon the earlier of (3) business days following deposit with the U.S. Mail or the date of receipt as disclosed on the return receipt (if sent by registered or certified mail), or upon delivery (if hand delivered), or upon delivery as indicated on the proof of delivery (if sent via FedEx or similar overnight express mail service), or if sent via email with proof of receipt by the primary addressee, effective upon the day sent if received prior to 3:00 p.m. local time or the next business day if received thereafter. With respect to any of the above-referenced methods of delivery, rejection or other refusal to accept or the inability to deliver because of a change of address of which no notice was given shall be deemed to be receipt of the notice sent. Either party may change its address for purposes of this subparagraph by giving the other party notice of the new address in the manner described herein.

(c) Binding Effect/Assignment. This Agreement shall not become a binding contract until signed by both parties and that fact has been communicated to all parties or their agents. This Agreement will inure to the benefit of and bind the respective heirs, successors, personal representatives and assigns of the parties hereto and may be cancelled, modified or amended only by a writing executed by the parties hereto or their legal representatives.

(d) Construction. This Agreement and the Exhibits hereto set forth the entire agreement between the parties, and there are no other agreements or understandings between them related to the subject matter hereof. As used in this Agreement, the singular number shall include the plural, the plural the singular, and the use of one gender shall be deemed applicable to all genders. This Agreement shall be governed by and construed in accordance with the laws of Maine. All representations, warranties, covenants and indemnities made by either party herein shall survive the closing. If any provision of this Agreement is determined to be invalid or unenforceable, it shall not affect the validity or enforcement of the remaining provisions hereof. In the event of any dispute under this Agreement; prior to any litigation, the parties hereto shall first submit the matter to mediation and shall undertake good faith efforts to resolve any such dispute. In the event that a dispute hereunder is not resolved by mediation, the parties agree to submit any litigation to enforce this Agreement to the jurisdiction of the United States District Court for the District of Maine.

(e) Counterparts/Electronic Signatures. This Agreement may be simultaneously executed in any number of counterparts, each of which when so executed and delivered shall be an original, but such counterparts shall constitute one and the same instrument. This Agreement may be signed electronically and such shall be treated as original signatures.

(f) Attorney's Fees. If any legal action (including without limitation mediation and arbitration) is brought or compelled by either party to enforce any provisions of this Agreement, the prevailing party shall be entitled to recover from the other party its reasonable attorneys' and paralegals' fees and court costs, subject to and limited by the provisions of the Default and Remedies section of this Agreement.

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(g) Effective Date. The Effective Date of this Agreement shall be deemed to be the date first set forth above in this Agreement, provided that if no date is filled in, the Effective Date shall be the last date of the signature of either Buyer or Seller.

[*Signature Page Follows*]

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IN WITNESS WHEREOF, Seller and Buyer have executed this Agreement under seal as of the dates indicated above.

SELLER

THE INSTITUTE FOR DIGITAL ENGINEERING AND LIFE SCIENCES

DocuSigned by:
Charles E. Hewett
4BD10666DAF9434...

By: Charles E. Hewett
Its: Executive Director
Date: October 23, 2023

BUYER

NORTHEASTERN UNIVERSITY

DocuSigned by:
Thomas E. Nedell
FF682479C14A4DA...

By: Thomas E. Nedell
Its: Senior Vice President & Treasurer
Date: October 23, 2023

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EXHIBIT A
[*Legal Description*]

A certain parcel of land, together with the improvements thereon, located on the easterly sideline of Interstate 295 and the southerly sideline of Sherwood Street in the City of Portland, County of Cumberland and State of Maine being further described as follows:

Beginning at a 6-inch by 6-inch granite monument found inscribed “ECJ #356” marking the southerly sideline of Sherwood Street westerly sideline of the Canadian National Railroad and further described as the most northeasterly corner of described parcel;

THENCE, S 23-36-55 E, along said Railroad 316.33 feet to a 6-inch by 6-inch granite monument found inscribed "ECJ 356";

THENCE, S 23-36-55 E, along said Railroad, 526.90 feet, to a 4-inch by 4-inch granite monument with a drill hole;

THENCE, S 23-36-55 E, along said Railroad, 745 feet, more or less to the low water mark of the Casco Bay,

THENCE, in a general westerly direction along said low water line about 1,685 feet to a point on the easterly sideline of Interstate 295;

THENCE, N 2-23-50 W, along said sideline, 48 feet, more or less to a point;

THENCE, S 87-30-10 W, along said sideline, 30.00 feet to a point;

THENCE, N 2-23-50 W, along said sideline, 61.46 feet to a drill hole found, said drill hole lying on a tie course of S 73-07-39 W, 878.87 feet from the previous mentioned 4-inch by 4-inch granite monument with a drill hole;

THENCE, N 2-23-50 W, along said sideline, 237.87 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 89-44-34 E, along said sideline, 1.05 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 6-28-53 E, along said sideline, 122.88 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 0-24-30 E, along said sideline, 88.91 feet to a 4-inch by 4-inch granite monument found inscribed "ECJ #509";

THENCE, N 24-48-04 E, along said sideline, 60.29 feet to a 6-inch by 6-inch granite highway monument;

THENCE, N 31-29-16 W, along said sideline, 31.96 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 3-26-49 W, along said sideline, 111.10 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 8-40-57 E, along said sideline, 89.05 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 23-15-05 E, along said sideline, 66.28 feet to a 4-inch by 4-inch granite monument Inscribed "ECJ #509";

THENCE, N 34-47-28 E, along said sideline, 96.68 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 25-25-29 E, along said sideline, 160.02 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 23-37-03 E, along said sideline, 63.03 feet to a 4-inch by 4-inch granite

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monument inscribed "ECJ #509";

THENCE, N 39-23-04 E, along said sideline, 6.72 feet to a 6-inch by 6-inch granite monument found inscribed "ECJ #509";

THENCE, N 55-32-30 W, along said sideline, 11.67 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 34-47-50 E, along said sideline, 117.04 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 34-43-38 E, along said sideline, 15.02 feet to a 5/8 inch re-bar found capped "ECJ #509" marking the southerly sideline of Sherwood Street;

THENCE, S 55-12-08 E, along said Sherwood Street, 288.60 feet to the point of beginning.

The foregoing description was prepared based on the Survey prepared by OEST Associates, Inc. dated February, 1999 and last revised February 26, 1999 recorded in in the Cumberland County Registry of Deeds in Plan Book 199, Page 159.

Alternate Legal Description [recent survey; grant to be without covenant of title]:

All right, title and interest in and to the following described lot or parcel of land, together with the buildings and improvements thereon, located in the City of Portland, County of Cumberland, State of Maine, which description is based on a ALTA/NSPS Land Title Survey prepared by VHB, dated June 30, 2021, last revised February 28, 2022, and Seller makes no representations or warranties as to the accuracy of said property description:

Beginning at a granite bound found at the intersection of the southerly sideline of Sherwood Street and the westerly sideline of land now or formerly of the state of Maine as described in the Cumberland County Registry of Deeds in Book 25500, Page 215, and Book 10924, Page 91 being formerly owned by the St. Lawrence & Atlantic Railroad Company, in part, and the Canadian National Railway Company, in part;

THENCE along the westerly sideline of land of the State of Maine South 23°38’41” East for a distance of 316.33 feet to a granite bound found;

THENCE continuing along land of the State of Maine South 23°34’45” East for a distance of 526.95 feet to a granite bound found;

THENCE continuing along the land of the State of Maine South 23°34’45” East for a distance of 745 feet, more or less to the low water mark of Casco Bay,

THENCE in a generally westerly direction along the low water line about 1,720 feet, more or less, to a point in the easterly sideline of Interstate 295;

THENCE along the easterly sideline of Interstate 295 the following courses and distances:

North 2°23’38” West for a distance of 48 feet, more or less to a point;

South 87°36’22” West for a distance of 30.00 feet to a point;

North 2°23’38 West for a distance of 61.46 feet to a point being located South 73°07’57” West at a distance of 878.66 feet from a granite bound found on the westerly sideline of land now or formerly of the State of Maine;

North 2°23’38 West for a distance of 237.87 feet to a point;

North 89°44’46” East for a distance of 1.05 feet to a rebar found;

North 6°29’05” East for a distance of 122.88 feet to a point;

North 0°24’42: East for a distance of 88.91 feet to a granite bound found;

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North 24°48’16 East for a distance of 60.29 feet to a granite bound found;
North 31°29’04” West for a distance of 31.96 feet to a point;
North 3°26’37” West for a distance of 111.10 feet to a point;
North 8°41’09” East for a distance of 89.05 feet to a point;
North 23°15’17” East for a distance of 66.28 feet to point;
North 34°47’40” East for a distance of 96.68 feet to a granite bound found;
North 25°25’41” East for a distance of 160.02 feet to a point;
North 23°37’15” East for a distance of 63.03 feet to a point;
North 39°23’16” East for a distance of 6.72 feet to a point;
North 55°32’18” West for a distance of 11.67 feet to a point;
North 34°48’02” East for a distance of 117.04 feet to a granite bound found;
North 34°43’50” East for a distance of 15.02 feet to a rebar found at the southerly sideline of Sherwood Street;

THENCE departing from the easterly sideline of Interstate 295 and running along the southerly sideline of Sherwood Street South 55°12’19” East for a distance of 288.59 feet to the point of beginning.

Meaning and intending to convey the same premises described in a Quitclaim Deed with Covenant from B&G Foods North America, Inc. to The Initiative for Digital Engineering and Life Sciences dated March 23, 2022 and recorded in the Cumberland County Registry of Deeds in Book 39282, Page 151.

The above described property shall be conveyed subject to the encumbrances listed as items 1-14 on Exhibit A of the Quitclaim Deed with Covenant from The Pillsbury Company to Heritage Acquisition Corp. dated March 15, 1999 and recorded in the Cumberland County Registry of Deeds in Book 14616, at Page 50 and the rights and easements granted by Heritage Acquisition Corp. to Central Maine Power Company and Verizon New England, Inc. by instrument dated February 7, 2006 and recorded in the Cumberland County Registry of Deeds in Book 24049, Page 189.

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EXHIBIT B
[*Development Contracts*]

1. Design Agreement by and between Bruner/Cott and The Initial for Digital Engineering and Life Sciences ("IDEALS") (*in negotiation; near final form*)

2. Design Agreement by and between CambridgeSeven and IDEALS (*in negotiation; near final form)*

3. Construction Management Agreement, by and between IDEALS and Consigli Construction Co., Inc. dated January 17, 2023

4. Cooperative Agreement by and between the Maine DOT ("MDOT") and IDEALS, dated as of January 18, 2023

5. MDOT Temporary Access Road Rights Agreement by and between MDOT and IDEALS, dated as of March 30, 2023

6. License Agreement with the City of Portland Fire Department by and between the City of Portland and IDEALS dated May 24, 2023

7. License Agreement with the City of Portland Fire Department by and between the City of Portland and IDEALS dated August 2, 2022

8. IDEALS Boiler Purchase Agreement by and between IDEALS and Maine Plywood USA, LLC dated June 19, 2023

9. Consultant Services Agreement, by and between IDEALS and MacRostie Historic Advisors

10. Consultant Services Agreement, by and between IDEALS and Thorton Tomasetti

11. Consultant Services Agreement, by and between IDEALS and Tsoi Kobus Design

12. Consultant Services Agreement by and between IDEALS and Vanasse Hangen Brustlin

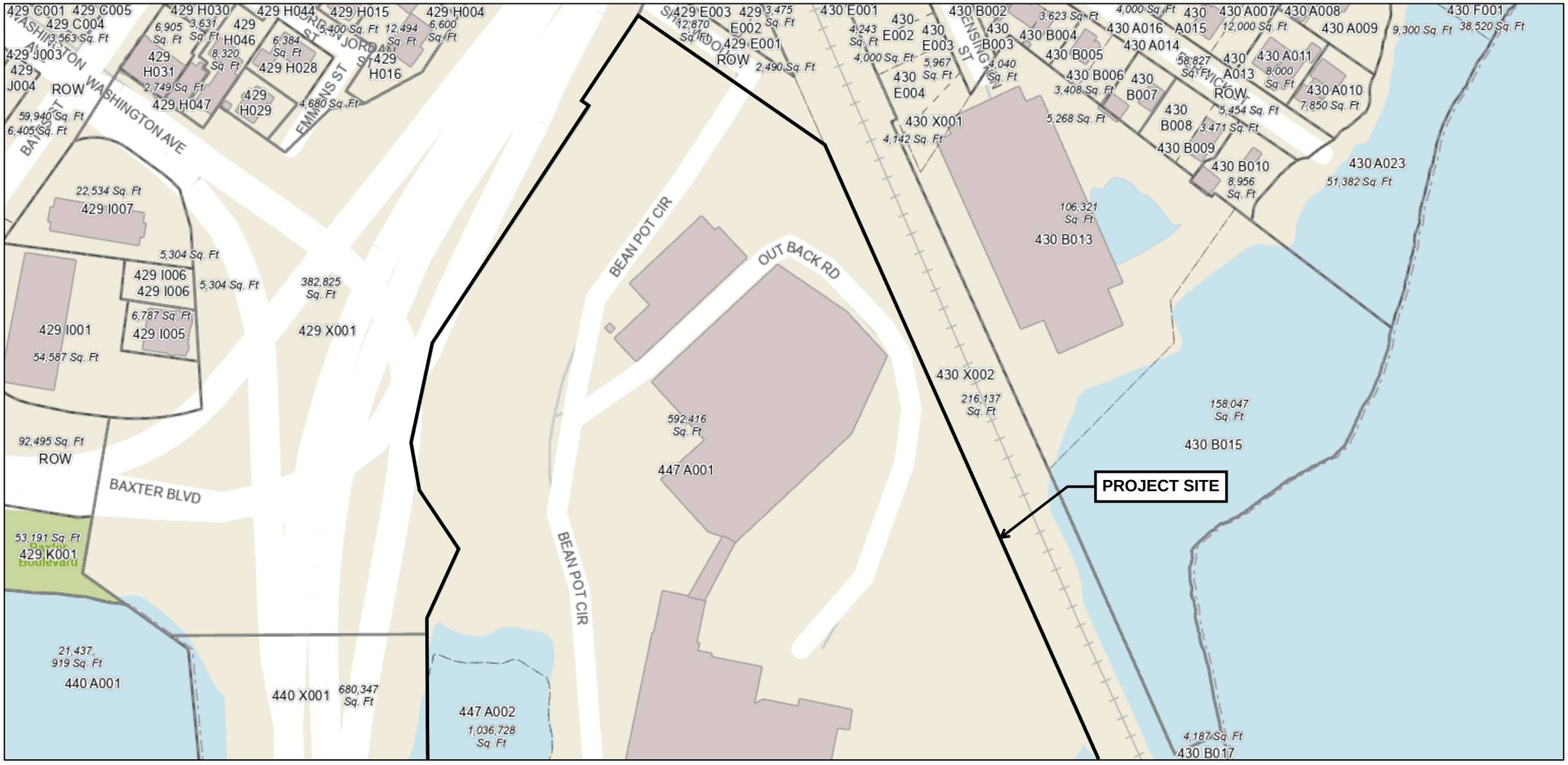
13. Consultant Services Agreement, by and between IDEALS and Woodard & Curran

14. Consultant Services Agreement, by and between IDEALS and Power Engineers

15. Consultant Services Agreement, by and between IDEALS and SW Cole Engineering

16. Consultant Services Agreement, by and between IDEALS and Stephen Stimson Associates

ArcGIS Web Map



8/10/2023, 11:07:21 AM

parcels

Tax

Conveyance

1:1,514

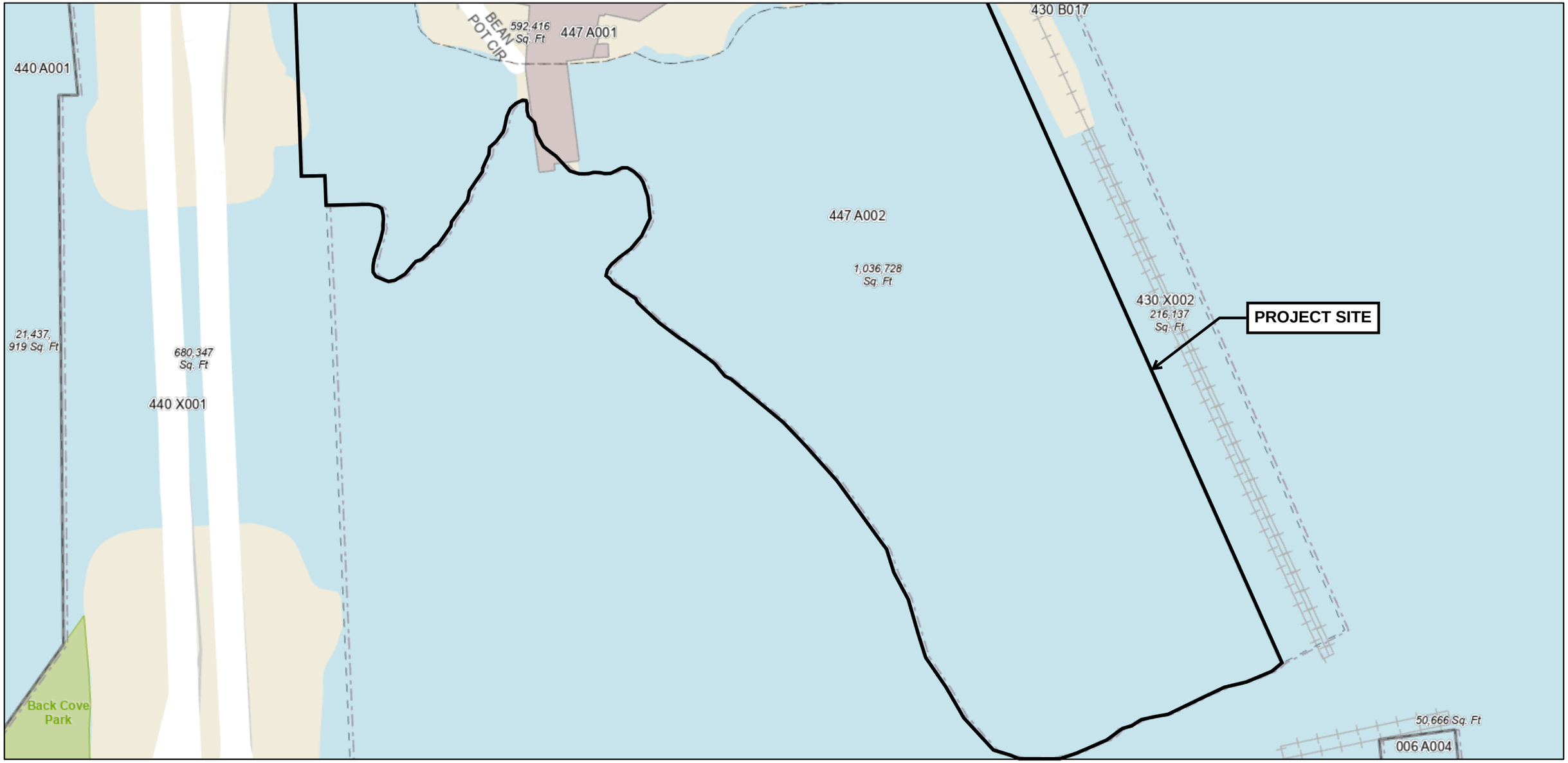
0 0.01 0.03 0.06 mi

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City of Portland, DPS

Web AppBuilder for ArcGIS
City of Portland, Maine

ArcGIS Web Map



8/10/2023, 11:00:00 AM

parcels

Tax

Conveyance

1:1,514

0 0.01 0.03 0.06 mi

0 0.03 0.06 0.11 km

City of Portland, DPS

Web AppBuilder for ArcGIS
City of Portland, Maine

5. TRANSPORTATION STANDARDS (14.6.1)

The transportation infrastructure associated with the campus will be designed in compliance with Section 1, Transportation Systems and Street Design Standards, of the City of Portland Technical Manual as described in the following Sections. Each of the internal driveways on the Site will be designed consistent with the standards to accommodate vehicles, bicycles, and pedestrians in a safe manner. Additional information is provided in the attached memorandum prepared by VHB.

5.1 Access and Circulation (8.5.7.E.3 and 8.5.7.E.5)

Bike and Pedestrian

Bike and pedestrian circulation and amenities are foundational to the design of the campus. Consistent with the campus IDP, Phase 1 includes a 12-ft wide campus "Promenade" prioritizing pedestrian access through the center of campus, connecting the upland campus to the pier and waterfront. A 12-ft wide coastal path includes seating, amenities, and supports access to the waterfront. A perimeter access loop will provide circulation for bikes and pedestrians. These major organizing features will be complemented by supporting pathways that enhance pedestrian connectivity and circulation.



Figure 5-1: Bike Amenities and Circulation

Vehicular access is provided via proposed driveways for drop-off, parking maintenance, delivery, and emergency access to building loading zones. Additional emergency access is provided along the waterfront bike/ped trail. The design team has met with the Portland Police Department and Fire Department during development of this plan in consideration of emergency access. **Figure 5-2** provides a summary of emergency access route.

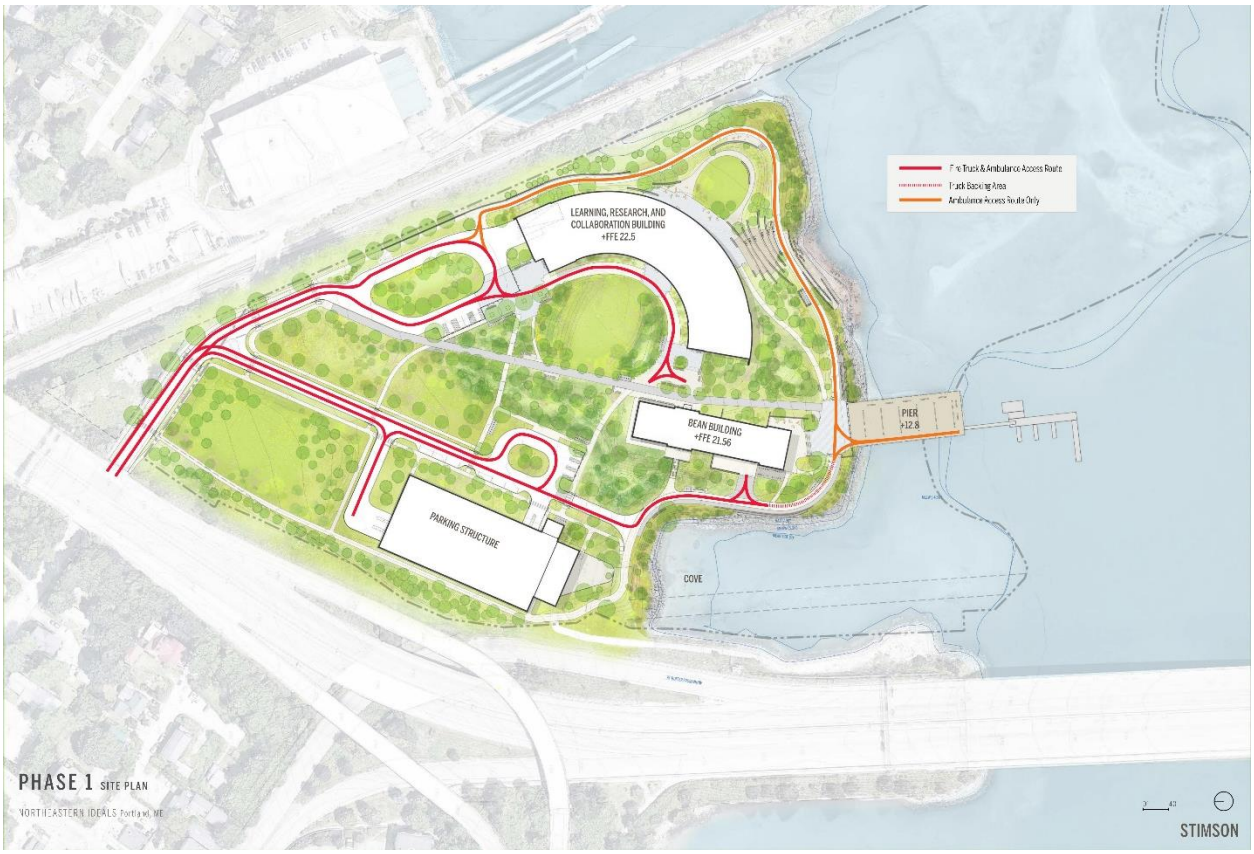


Figure 5-2: Emergency Access Routes

Sherwood Street Curb and Sidewalks

The project will also include improvements to the infrastructure on Sherwood Street to bring it into compliance with the Technical Manual Section 1. Little of the alignment is anticipated to change on Sherwood Street. Existing driveways will be restored according to the table in section 1.5.1 of the Technical Manual unless otherwise approved by Portland Department of Public Works.

The Applicant understands that infrastructure to support pedestrian and bicycle facilities are critical to the success of the campus. This project will add one public crosswalk across Sherwood Street at Veranda and a bicycle or shared-use lane will be added (as part of the Sherwood Street reconstruction).

Loading and Servicing

Loading and trash removal will be addressed in each of the buildings throughout the Site with designated spaces to accommodate deliveries and storage. A loading dock with internal roll-off waste container(s) is located in the service bay at the north side of the Learning, Research, and Collaboration Building, near the terminus of the vehicular turn around. The Bean Building will have a service entrance at the lower level of the west facade. Waste removal from the Bean Building will be managed through maneuverable roller containers, screened by a retaining wall shown near the service entrance and accessed by service vehicles occasionally via the coastal pathway.

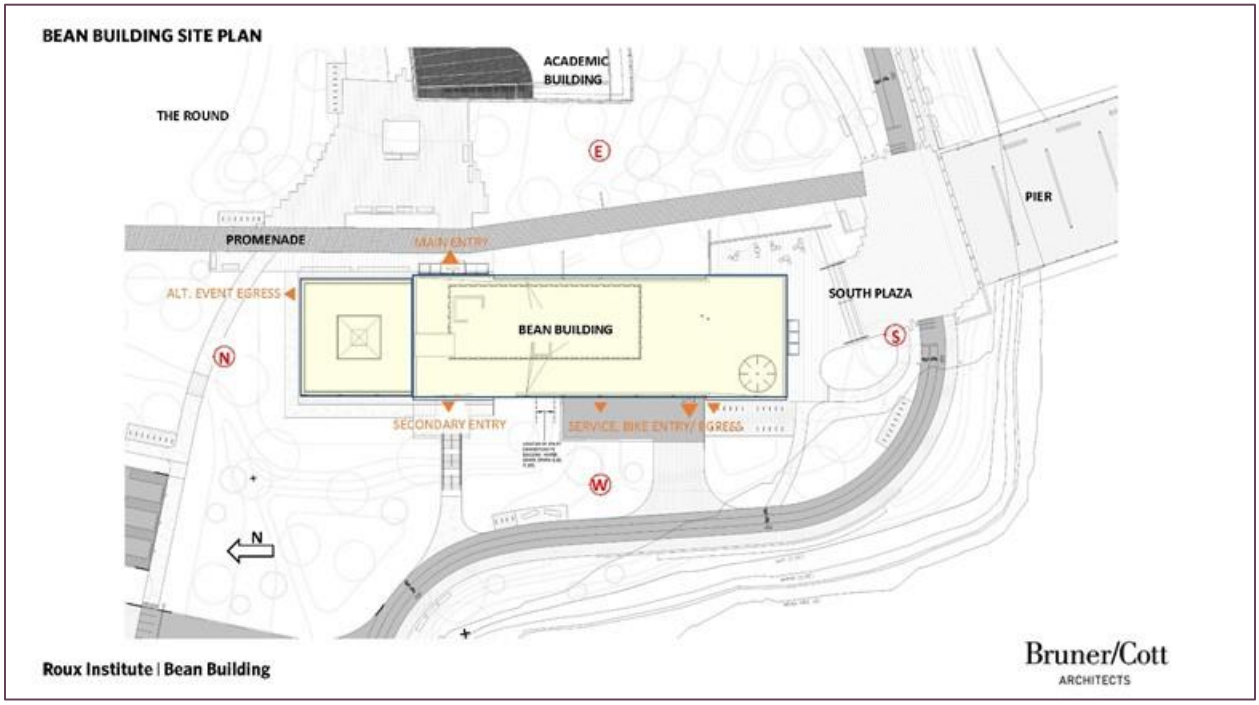


Figure 5-3: Bean Building Service Access

5.2 Public Transit Access

The campus is located along two existing public transit routes, METRO Route 7 and METRO Routes 9A/9B. There are no existing transit shelters within ¼ mile of the Site. Consistent with 14.6.1 (C), a transit shelter will be provided on-site that will connect to the public sidewalk system (which will also be improved providing sidewalks along both sides of Sherwood Street).

5.3 Parking (8.5.7.E.4)

Vehicular Parking

Northeastern University is committed to building off-street parking on campus in accordance with the technical requirements of this Code. A parking demand study has been prepared as part of the Site's Transportation Demand Management (TDM) plan.

Snow Storage

Snow storage areas will not encroach on areas designed to meet minimum parking requirements or on pedestrian walkways and will not be located where they would adversely impact the functionality of stormwater management systems.

Electric Vehicle (EV) Charging

The garage to be constructed with this project will include electric vehicle charging equipment. The applicant has performed an EV parking demand study to determine the final count of chargers, their power, and number of EV-ready spaces. A copy of the study is attached to this section.

Bicycle Parking

All bicycle parking will be in accordance with the parking requirements of this Land Use Code and the Transportation Systems and Street design standards of the Technical Manual. The location and style of racks will conform with the specifications in Section 1.12. Both outdoor and secured indoor bicycle parking will be available on campus. The following table summarizes compliance with bicycle parking space requirements.

Table 5-1: Bicycle Parking

	Provided
Interior Bicycle Parking in Garage	66
Exterior Secure Bicycle Parking	100
Total:	166

Furthermore, additional interior bicycle parking is anticipated to be included in the Bean Building once fit-out of the space is completed. Exterior bicycle parking will be distributed throughout campus, adjacent to points of interest and arrival, as demonstrated by **Figure 5-4**.

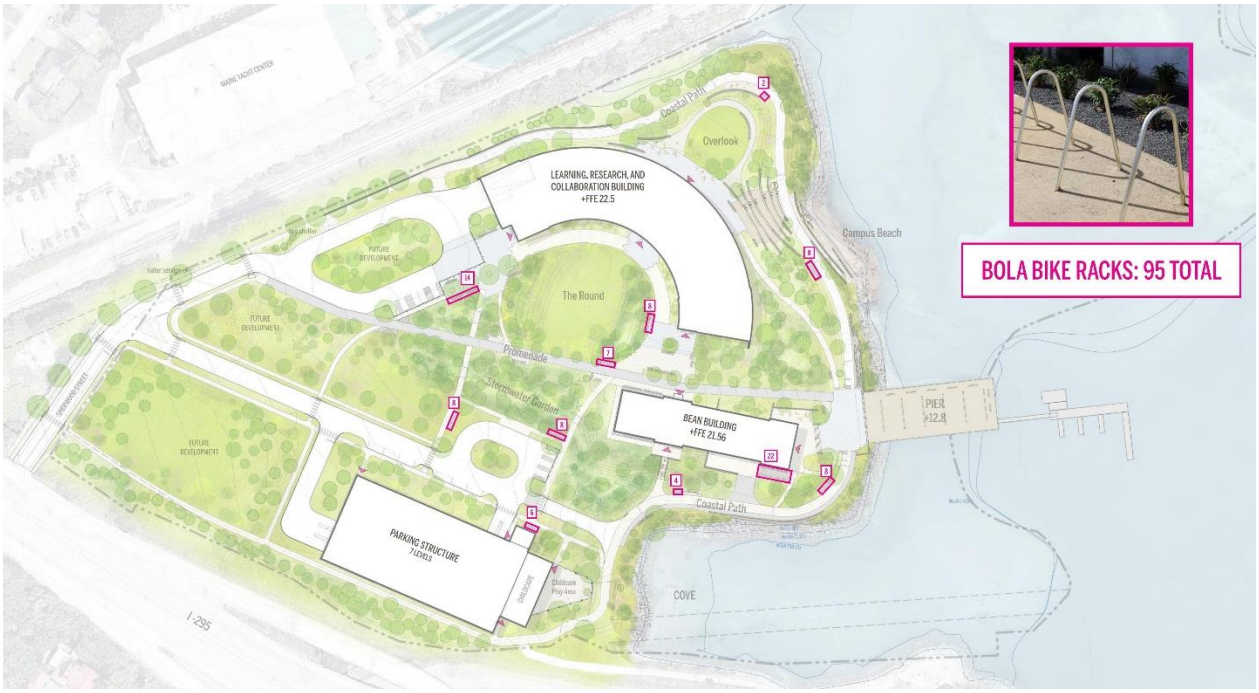


Figure 5-4: Exterior Bicycle Parking

5.4 Transportation Demand Management (8.5.7.E.1)

A TDM Plan was developed by VHB for Phase 1. This report will be uploaded separately to the Documents folder. The goal of the TDM Plan is to reduce parking demand and single occupancy vehicles. The TDM Plan includes parking, mode share, trip reduction strategies targets and a data collection plan.

5.5 Traffic Movement Permit (8.5.7.E.2)

This project will capture all vehicle loading/unloading and parking on-site. There will be a single access at the end of Sherwood Street with all internal circulation occurring off public streets. There will be separated pedestrian facilities, including a new sidewalk or shared use path along Sherwood Street. The incremental traffic volumes are under review by the Maine Department of Transportation as part of the Traffic Movement Permit process. A copy of the TMP permit approval will be provided upon receipt.

5.6 Section Attachments

- Supplemental Transportation Memorandum, prepared by VHB

5.7 Attachments Provided as Separate Files

The following materials referenced by this section of the report have been uploaded under separate cover for review.

- TDM Plan
- EV Parking Demand Study

Memorandum

To: Chuck Hewett
Sam Reiche

Date: November 7, 2023

Project #: 58570.00

From: Jennifer Conley, PE, PTOE

Re: Roux Institute at Northeastern University
Site Plan Transportation standards

The Roux Institute at Northeastern University is submitting a Phase 1 site plan application with the City of Portland. This memorandum is a supporting document that addresses the required Transportation Standards outlined in the city's Portland Plan in Section 14.6 Site Plan Review Standards.

Impact on Surrounding Street Systems (14.6.1(A))

Circulation

Vehicle loading/unloading and parking will occur on-site. A single vehicular access point to the site will be provided via Sherwood Street with all internal circulation occurring off public streets. The project will provide continuous sidewalks and bicycle accommodation on both sides of Sherwood Street. A crosswalk will be implemented across Sherwood Street at Veranda Street. Once on the site, pedestrian facilities will connect site uses and points along the waterfront. Improvements to pedestrian connections will increase walkability for the site.

Trip Generation

The incremental traffic volumes associated with the proposed project (trip generation) have been estimated as part of the Traffic Movement Permit (TMP) application that is being submitted to MaineDOT and are presented below. Any substantial congestion increases to public streets that may be identified through the MaineDOT TMP process will be mitigated with off-site improvements coordinated with MaineDOT and the City of Portland.

The student population is modeled using rates developed for the existing Roux Institute at Northeastern University Fore Street campus (100 Fore Street). Other proposed land uses and user populations are modeled using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*.

For each land use and user population, trip generation was calculated for a weekday (full 24-hour period). This proposed development has disparate user populations whose trips will peak at different times of day. To accurately quantify this activity, 24-hour distributions for each user population were overlaid to identify the overall time and magnitude of the campus' peak times.

Trip rates developed specifically for the Roux Institute at Northeastern University were developed for students and faculty, affiliated users, special events and staff.

The following assumptions were made regarding the student population:

- 43% of student enrollment travels to campus each day.[1]

[1] January 2023 student survey

› 40% are daytime students and 60% are evening students.[2]

To determine the spread of student arrivals and departures throughout the day, a door count was conducted at the 100 Fore Street building on October 3rd, 2023.

The unadjusted ITE vehicle trip generation was calculated for the weekday AM and PM peak hours for the remainder of the land uses on site as presented in Table 1.

Table 1 Total Unadjusted Person Trips

Land Use	AM Peak Hour			PM Peak Hour		
	Enter	Exit	Total	Enter	Exit	Total
Graduate students	134	0	**134**	282	161	**443**
Affiliated Users	20	0	**20**	0	40	**40**
Faculty, Staff, and Researchers[1]	8	0	**8**	16	9	**25**
Special Events	15	0	**15**	50	15	**65**
Academic Café	15	13	**28**	44	29	**73**
General Office[2]	103	24	**127**	29	114	**143**
Day care	13	13	**26**	17	19	**36**
Total	**308**	**50**	**358**	**438**	**387**	**825**

1 Students and staff in instructional or other student-facing roles (25% of total) were assigned to the student time-of-day distribution.
2 ITE Trip Generation Manual, 11th Edition LUC 710 General Office (Embedded Startups, Staff, and Researchers, and Signature Partners.

The Roux Institute at Northeastern University is anticipating that a significant portion of the peak hour trips presented in Table 1 will be made by alternative travel modes such as walking, biking, and transit and is expected to have internally captured trips for supporting uses (such as the café and day care). The total adjusted trip generation for the project is shown in Table 2. For a more detailed analysis of the trip generation breakdown for time-of-day distribution, internal capture, and mode share, please refer to the TMP application.

[2] Split provided by Northeastern University based on enrollment records and projections

Table 2 Total Adjusted Trips

Land Use	AM Peak Hour All Trips	AM Peak Hour Internal Trips	AM Peak Hour Transit Trips	AM Peak Hour Bike/Ped Trips	AM Peak Hour Vehicle Trips	PM Peak Hour All Trips	PM Peak Hour Internal Trips	PM Peak Hour Transit Trips	PM Peak Hour Bike/Ped Trips	PM Peak Hour Vehicle Trips
Graduate students	134	9	13	13	100	443	51	39	39	314
Affiliated Users	20	0	1	1	18	40	0	2	2	36
Faculty, Staff, and Researchers[1]	8	0	0	1	7	25	0	1	2	22
Special Events	15	0	1	1	14	65	0	3	3	59
Academic Café	28	28	0	0	0	73	73	0	0	0
General Office[2]	127	34	5	5	84	143	64	4	4	70
Day care	27	10	1	1	15	36	14	1	1	20
Total	**359**	**82**	**20**	**20**	**237**	**825**	**202**	**51**	**51**	**521**

1 Students and staff in instructional or other student-facing roles (25% of total) were assigned to the student time-of-day distribution.

During the TMP scoping meeting process, The City of Portland and MaineDOT will outline the requirements for the Traffic Impact Study and as stated above, any substantial congestion increases to public streets anticipated in the permit process will be mitigated with off-site improvements coordinated with MaineDOT and the City of Portland.

Access and Circulation (14.6.1(B))

The Roux Institute at Northeastern University shall provide safe and reasonable access and internal circulation for all users in accommodation with the standards outlined in the Technical Manual. Figures 1-2 below shows an illustrative site plan as well as a diagram showing bicycle, pedestrian, and transit accommodations internal to the site.

Memorandum

Figure 1 Illustrative Site Plan



As shown in Figure 2, a multiuse path will be constructed around the entire campus connecting to Sherwood Street that will serve bicyclists and pedestrians. In addition, multiple exterior bicycle parking locations are planned throughout the site, interior bicycle storage will be provided in the garage, and a bikeshare location and transit shelter are also proposed.

Memorandum

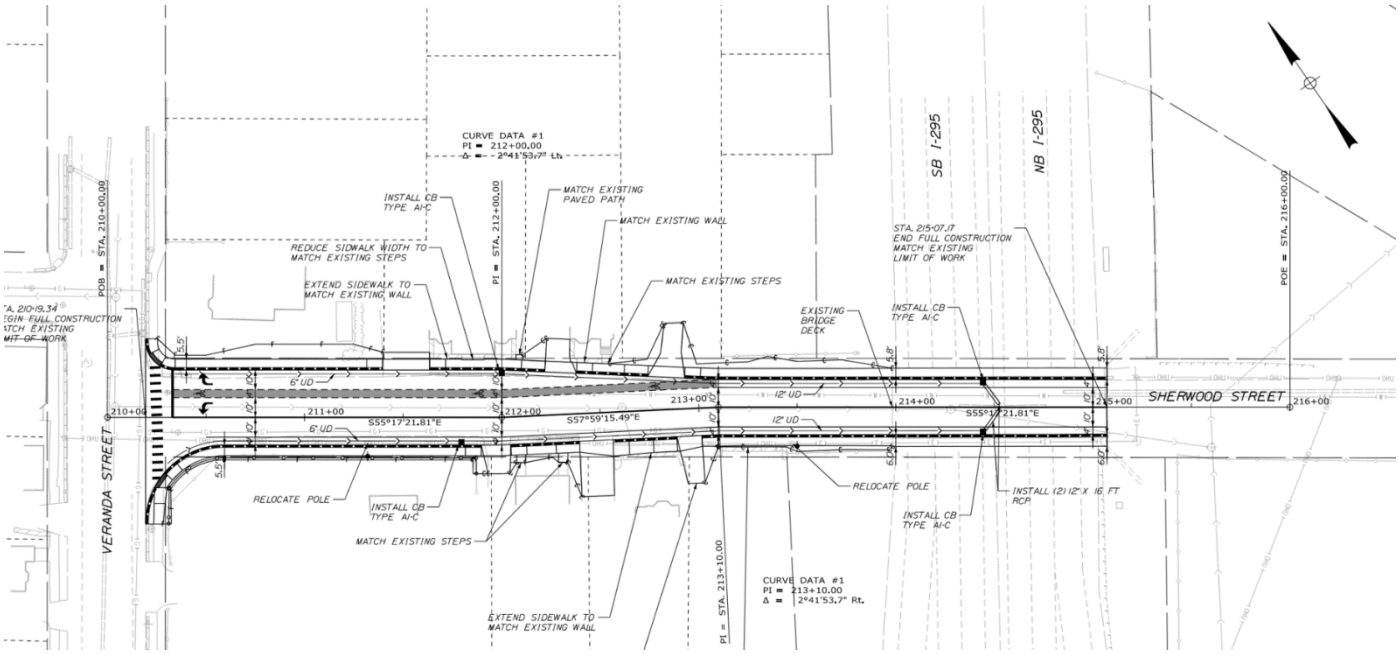
Figure 2 Alternative Modes of Transportation Accommodations



As part of the site plan application the shared use path around the site will connect into a reconstructed Sherwood Street. As shown in Figure 3, the redesign of Sherwood Street will include a bike lane and new sidewalks on each side of the street connecting to Veranda Street.

Memorandum

Figure 3 Sherwood Street Improvements



All public paths, sidewalks, and ADA ramps will be designed and consistent with requirements in the Technical Manual.

Public Transit (14.6.1(C))

The Roux campus is located within short walking distance of two existing public transit routes, METRO Route 7 and METRO Routes 9A/9B and there are no existing transit shelters within ¼ mile of the site. Consistent with 14.6.1 (C), a transit shelter will be provided on site that will connect to the public sidewalk system (which will also be improved providing sidewalks along both sides of Sherwood Street). The Roux Institute is working with METRO for service to be provided into the site.

The Roux Institute is committed to working with Portland METRO to support increased transit opportunities to and from the campus area. These factors, in addition to a Transportation Management Plan (TDM), will reduce auto mode share at the site.

METRO Route 7 and METRO Routes 9A/9B provide direct connections to the peninsula, North Deering, and Falmouth. With a transfer at any of the Downtown Transfer Centers, riders can reach the rest of the Portland and Greater Portland Region.

Buses run continuously throughout the day, readily accommodating the varied schedules of students and other campus users. METRO BREEZ express bus service to Yarmouth, Falmouth, and Brunswick and the Husky Line to

Westbrook and Gorham establish a regional footprint for transit service. Ten local and express routes connect the campus to most of the Portland area with no more than one transfer.

In addition, the Roux Institute at Northeastern University will promote and incentivize transit use by subsidizing transit passes for students, staff, and faculty.

Off-Street Parking (14.6.1(D))

Vehicular Parking

The Roux Institute at Northeastern University is committed to building off-street parking in accordance with the technical requirements. Parking space and aisle designs will meet specifications in the Technical Manual.

A parking demand study has been prepared, determining the capacity needed to accommodate long-term enrollment growth and other development on site. For opening, the peak demand on campus is anticipated to be 561 parking spaces. If the auto mode share remains as high as estimated at opening, demand would grow to 882. However, the Roux Institute proposes a full TDM program as described in the TDM Plan and anticipates that full occupancy parking will be accommodated in the proposed phase 1 parking. The parking garage has been designed to accommodate 708 parking spaces, however for the first phase, 16 of those vehicular parking spaces will be used to accommodate parking for bicycles and the remaining 692 spaces will be used for vehicular parking.

Bicycle Parking

All bicycle parking will be in accordance with the parking requirements of this Land Use Code and the Transportation Systems and Street design standards of the Technical Manual. As indicated above, there will be 66 parking spaces for bicycles in the garage. In addition, there will be another 100 exterior parking spaces provided around the site. Potential locations are shown in Figure 2.

Snow Storage

Snow storage areas and an acceptable snow removal plan will be provided with site plan review. Snow storage areas will not encroach on areas designed to meet minimum parking requirements or on pedestrian walkways and will not be located where they would adversely impact the functionality of stormwater management systems. Landscaping in designated snow storage areas will be such that it can withstand the snow pile.

Electric Vehicle (EV) charging

An EV demand study has been conducted to determine EV requirements. During opening year (2027) there will be a demand of 24 EV spaces and planning for a potential demand of 62 EV spaces by 2032. A formal EV Demand Study has been submitted to the City of Portland separate from this application.

Transportation Demand Management (TDM) (14.6.1(E))

A TDM plan has been drafted in accordance with Technical Manual Section 1 requirements and is submitted as separate document in this application.

November 13, 2023

Mr. Stephen Landry, PE
State Traffic Engineer MaineDOT
16 State House Station
Augusta, Maine 04333

Re: Application for Traffic Movement Permit
The Roux Institute at Northeastern University
Portland, Maine

Dear Stephen,

On behalf of IDEALS and The Roux Institute at Northeastern University (applicant), VHB is pleased to submit this Traffic Movement Permit Application for the development located at the former B&M Baked Beans property, 1 Beanpot Circle, Portland, ME 04103.

We have attached the following information in support of this application:

- Sections 1-6
- Signed Application Form
- Notice of Intent to File
- List of Abutters
- $500 application fee

We look forward to scheduling a Scoping Meeting in the near future.

Very truly yours,

Jennifer Conley, PE, PTOE
Director, Transportation Systems
Jconley@vhb.com

Engineers | Scientists | Planners | Designers

500 Southborough Drive
Suite 105B
South Portland, Maine 04106
P 207.889.3150
F 207.253.5596

Northeastern

October 25, 2023

Sam Reiche
Chief Operating Officer and Head of Real Estate
Initiative for Digital Engineering and Life Sciences (IDEALS)
100 Commercial Street, Suite 40
Portland, Maine 04101

Dear Sam:

Northeastern University is preparing plans for the first phase of development at the Roux Institute, located at 1 Bean Pot Circle in Portland Maine. Northeastern University is authorizing the Initiative for Digital Engineering and Life Sciences (IDEALS) and Woodard & Curran, Inc., to assist in the preparation of land-use permit applications for this project. IDEALS and Woodard & Curran are authorized as our agent to represent Northeastern University in addressing questions on the plans and applications for this project.

Sincerely,

Thomas E. Nedell,
Senior Vice President for Finance and Treasurer

Office of the Senior Vice President Finance

177 Huntington Ave.
360 Huntington Ave.
Boston, MA 02115

617.373.2240
fax 617.373.4728

finance.northeastern.edu

Department of Transportation
Traffic Engineering Division
16 State House Station
Augusta, Maine 04333
Telephone: 207-624-3600

FOR MDOT USE
ID #

Total Fees:

Date: Received

****

PERMIT APPLICATION - TRAFFIC
TRAFFIC MOVEMENT PERMIT, 23 M.R.S.A. § 704 - A

Please type or print:

This application is for:

Traffic 100-200 PCE's	____
Traffic 100-200 PCE's (Expedited)	____
Traffic 200+ PCE's	_X_

Name of Applicant: Northeastern University

Address: 360 Huntington Avenue, Boston, MA 02115 Telephone: 617-594-6092

Name of local contact or agent: Catherine Walsh

Address: 360 Huntington Avenue, Boston, MA 02115 Telephone: 617-594-6092

Name and type of development: The development consists of a 238,000 square foot Learning, Research, and Collaboration building accommodating 3,123 graduate students, 100 affiliated users, 150 person special events, and an 8,000 square foot café. It will also open with a 58,000 square foot Bean Building accommodating 300 faculty, staff, and researchers, 100 employee embedded startups, and 64 employee signature partners. There will also be a 50-child daycare.

Location of development including road, street, or nearest route number: The site is located at 1 Beanpot Circle bounded by Sherwood Street to the north.

City/~~Town/Plantation~~: Portland, County: Cumberland, Tax Map # 447, Lot # A001001

Do you want a consolidated review with DEP pursuant to 23 M.R.S.A. § 704-A (7)? Yes ____ No __X__

Was this development started prior to obtaining a traffic permit? No

Is the project located in an area designated as a growth area (as defined in M.R.S.A. title 30 - A, chapter 187)? Yes ____ No _____

Is this project located within a compact area of an urban compact municipality? Yes __X__No _____

Is this development or any portion of the site currently subject to state or municipal enforcement action? None Known

Existing DEP or MDOT permit number (if applicable): None Known

Name(s) of DOT staff person(s) contacted concerning this application: _____

_____

Name(s) of DOT staff person(s) present at the scoping meeting for 200+ applications: N/A_____

CERTIFICATION

The traffic engineer responsible for preparing this application and/or attaching pertinent site and traffic information hereto, by signing below, certifies that the application for traffic approval is complete and accurate to the best of his/her knowledge.

Signature: _____ Re/Cert/Lic No.: Maine PE #15652

Name (print): Jennifer Conley_____

Date: 11/13/2023_____



If the signature below is not the applicant's signature, attach letter of agent authorization signed by applicant.

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

Sam Reiche, COO, IDEALS — 11/13/23

Signature of Applicants Agent — Date

NOTICE OF INTENT TO FILE
Traffic Movement Permit

Please take notice that

The Roux Institute at Northeastern University
100 Commercial Street
Portland, ME 04101

is intending to file a Traffic Movement Permit application with the Maine Department of Transportation pursuant to the provisions of 23 M.R.S.A. § 704 – A on or about November 13, 2023.

The application is for the development of a 238,000 square foot Learning, Research, and Collaboration building accommodating 3,123 graduate students, 100 affiliated users, 150 person special events, and an 8,000 square foot café. It will also open with a 58,000 square foot Bean Building accommodating 300 faculty, staff, and researchers, 100 employee embedded startups, and 64 employee signature partners. There will also be a 50-child daycare. The project is forecast to generate 358 AM peak hour and 825 PM peak hour trip ends based on ITE Trip Generation, 11th edition for ancillary uses and existing arrival patterns/badge swipes and anticipated populations for academic uses. Each of the uses described are anticipated to be constructed in 2025 and 2026 and occupied by 2027.

at the following location:

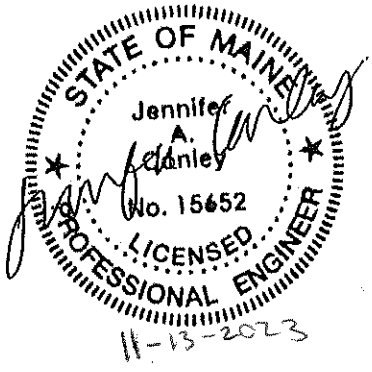
The site is located at 1 Beanpot Circle bounded by Sherwood Street to the north, I-295 to the west, and MaineDOT Railroad Right of Way to the east.

Any interested party may request in writing to participate in the MaineDOT scoping meeting for the subject project no later than 20 days after the application is found by the Department to be complete and is accepted for processing. Requests shall be sent to the State Traffic Engineer, 16 State House Station, Augusta, ME 04333. Public comments on the application pertaining to either congestion or safety will be accepted throughout the processing of the application.

The application will be filed for public inspection at the Department of Transportation Region office in Scarborough (Region 1) during normal working hours. Addresses may be found at the following website: https://www.maine.gov/mdot/about/regions/. A copy of the application may also be seen at the municipal offices in Portland, Maine.

Written public comments concerning congestion or safety only, may be sent to the Department of Transportation, State Traffic Engineer, 16 State House Station, Augusta, Maine 04333.

Jennifer Conley, PE, PTOE
VHB, Inc.



ABUTTERS LIST

Parcel ID	Property Location	Owner	Owner Address	Owner City	Owner State	Owner Zip
429 G001001	65 KENSINGTON ST	MAINE YACHT CENTER LLC	100 KENSINGTON ST	PORTLAND	ME	04103
429 E001001	43 SHERWOOD ST	STATE OF MAINE	N/A	AUGUSTA	ME	04333
429 E008001	73 SHERWOOD ST	STATE OF MAINE	N/A	AUGUSTA	ME	04333
429 H004001	78 SHERWOOD ST	STATE OF MAINE	N/A	AUGUSTA	ME	04333
429 H003001	80 SHERWOOD ST	BRENNAN JOSEPH & KRISTIN BRENNAN JTS	80 SHERWOOD ST	PORTLAND	ME	04103
429 D005001	81 SHERWOOD ST	CARLING GABRIEL BEN & JULIE ANN CARLING JTS	81 SHERWOOD ST	PORTLAND	ME	04103
429 H002001	82 SHERWOOD ST	FITZGERALD RYAN	988 SAWYER ST	SOUTH PORTLAND	ME	04106
429 D004001	87 SHERWOOD ST	87-89 SHERWOOD STREET LLC	4 COUNTRY LN	FALMOUTH	ME	04105

ArcGIS Web Map



11/3/2023, 9:51:17 AM

tax_parcels parcels

Tax

Tax

Conveyance

1:2,850

0 0.02 0.04 0.09 mi

0 0.04 0.07 0.15 km

City of Portland, DPS

Web AppBuilder for ArcGIS

City of Portland, Maine



The Roux Institute at Northeastern University

Traffic Movement Permit (TMP) Application – 2032

PREPARED FOR

Roux Institute at Northeastern University / IDEALS
100 Commercial Street
Portland, ME 04101

PREPARED BY

500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150

NOVEMBER 2023

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1

Section 1: Site and Traffic Information

1.A Site Description and Site Plan

The Roux Institute at Northeastern University is a graduate education and research institution temporarily operating at 100 Fore Street in the Old Port neighborhood. The development proposed in this application is a relocation of the Institute to the former B&M Baked Beans site at 1 Beanpot Circle. In its permanent waterfront location in East Deering, the Roux Institute at Northeastern University will continue to provide educational, research, and collaborative programs in areas including artificial intelligence, computer and data sciences, digital engineering, advanced life sciences, and medicine. The Roux Institute at Northeastern University offers post-graduate degrees and certifications, conducts research, assists start-ups, and partners with private, public and non-profit organizations and is proposing to redevelop the B&M Baked Beans facility to establish a permanent campus.

Vehicles can access the site via a single entry and exit point. All vehicles will travel through the intersection of Veranda and Sherwood Streets and under the I-295 underpass to access the site. Other key routes near the site are Interstate 295, US Route 1 (Veranda Street), Washington Avenue, and Baxter Boulevard. Since the former factory buildings are not operational, no trip generation credit for existing use will be taken. The site, which is completely within the City of Portland, is identified by the following parcel number:

- 447 A001001

The site and boundary surveys and proposed site plan are included in Attachment 1A.

1.B Existing and Proposed Site Uses

The following describes the existing and proposed uses:

Existing Uses

The site was previously occupied by B&M Baked Beans. The parcel was zoned I-M (industrial) and had a trip pattern typical of shift work. The factory has been closed since 2021 while the site awaits redevelopment. As the site is currently vacant, no trip credit for existing uses will be taken.

Proposed Site Uses

The Roux Institute at Northeastern University intends to develop a dynamic, mixed-use campus that contributes to the East Deering neighborhood without encroaching on it.

The campus will be anchored by the 238,000 square foot Learning, Research, and Collaboration building housing most of the academic programs. It will also open with the 58,000 square foot Bean Building housing a start-up incubator program. By 2032, the campus plans to accommodate 3,123 graduate students in addition to the ancillary uses shown in Table 1. The campus will also have dining and an on-site day care center for children of students and staff. In addition to its academic offerings, the campus will benefit the community by providing open space along the waterfront, active transportation accommodations throughout the site, job creation, innovation space, and will contribute to economic growth.

Table 1 Proposed Uses

Program Component		2032 Build-Out
Roux Institute at Northeastern University	Graduate students	3,123 students
	Faculty, Staff, and Researchers	300 staff
	Embedded startup	100 staff
	Signature Partners	64 staff
	Affiliated Users	100 visitors
	Special Events (daily)	150 attendees
Day care center		50 Children
Academic Café		8,000 sf

The campus will open with a 708-space parking structure (vehicular capacity of 692 and bicycle capacity of 66 in opening year). All on-site parking will be paid parking, and a parking office will be created to manage permitting and enforcement for the campus. Parking costs and regulations may vary between categories of users (students, staff, faculty, visitors, etc.). Parking will be shared by all uses, not assigned to programs or buildings.

1.C Regional Mapping

Site location maps showing the development area is included in Attachment 1B.

The proposed Roux Campus is located within Portland's East Deering neighborhood with proximity to both residential and commercial areas and I-295.

The site is directly north of downtown Portland, bounded by I-295, Sherwood Street, and Casco Bay.

1.D Proposed Uses in the Study Area

Projects that have been approved but are not yet occupied as well as projects that have applied for approval are required to be included in the predevelopment traffic volumes.

- Front Street Housing Redevelopment
- Winchester Woods Apartments

1.E Trip Generation

Trip generation estimates for the Project are based on the 2032 development program presented in Table 2. The student population is modeled based on anticipated population profiles and existing entries and exits at the Fore Street site. Other uses and users are modeled using the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*.

For each use, trip generation was calculated for a weekday (full 24-hour period). This development has disparate uses whose trips will peak at different times of day. To accurately describe this profile, 24-hour distributions for each use were overlaid to identify the time and magnitude of the campus' peak times. Table 2 lists the method used for each use's rate and time of day distribution.

Table 2 Development Program by Land Use

Category	Unit	ITE Land Use Code[1]
Graduate students	Students	*Non-ITE (see narrative)*
Faculty, Staff, and Researchers[2]	Employees	*710 General Office*
Embedded startups	Employees	*710 General Office*
Signature Partners	Employees	*710 General Office*
Affiliated Users	Daily Visitors	*Non-ITE (see narrative)*
Special Events	Daily Attendees	*Non-ITE (see narrative)*
Day care	Children	*565 Day Care Center*
Academic Café	Gross floor area	*932 High-Turnover Restaurant*

1 ITE Trip Generation Manual, 11th Edition

2 Staff in instructional or other student-facing roles (25% of total) were assigned to the student time-of-day distribution.

Site-Specific Trip Rates

Trip rates developed specifically for the Roux Institute at Northeastern University were developed for students, affiliated users, and special events. 25% of staff will also follow the student distribution.

Based on data at the existing facility, and future enrollment projections, the following factors were used to develop the population distribution.

- 43% of student enrollment travels to campus each day.[1]
- 40% are daytime students and 60% are evening students.[2]

To determine the spread of student arrivals and departures throughout the day, a door count was conducted at the 100 Fore Street building on October 3rd, 2023. This count was converted to the time-of-day distribution shown in Table 3.

Table 3 Academic Trips – Time of Day Distribution

	Day Students		Night Students	
Time	In	Out	In	Out
7:00 AM	10%			
8:00 AM	25%			
9:00 AM	20%			
10:00 AM	25%			
11:00 AM	20%			
12:00 PM				
1:00 PM				
2:00 PM		10%		
3:00 PM		25%		
4:00 PM		30%	20%	
5:00 PM		30%	35%	
6:00 PM		5%	20%	15%
7:00 PM			10%	15%
8:00 PM			10%	15%
9:00 PM			5%	35%
10:00 PM				20%
Total	100%	100%	100%	100%

Site-specific trip profiles were also developed for special events and affiliated users (miscellaneous visitors not captured in other categories). These profiles are shown in Table 4.

[1] January 2023 student survey

[2] Split provided by Northeastern University based on enrollment records and projections

Table 4 Affiliated User and Special Event Distribution

	Affiliated Users 25 persons/day		Special Events – Day 25 persons/day		Special Events – Lunch 25 persons/day		Special Events – Night 100 persons/day	
	In	Out	In	Out	In	Out	In	Out
7:00 am	10%		20%					
8:00 am	20%		60%					
9:00 am	40%		20%					
10:00 am	20%							
11:00 am	10%				80%			
12:00 pm					20%			
1:00 pm						20%		
2:00 pm						80%		
3:00 pm		10%						
4:00 pm		20%		20%			10%	
5:00 pm		40%		60%			50%	
6:00 pm		20%		20%			40%	20%
7:00 pm		10%						50%
8:00 pm								30%

The profiles provided were applied to the number of people in each population anticipated to be on campus in a given day. The unadjusted ITE trip generation was calculated for the remaining uses on the campus. The resulting person trip generation for the weekday AM and PM peak hours is presented in Table 5.

Table 5 Total Unadjusted Trips

Land Use	AM Peak Hour			PM Peak Hour		
	Origin (Exiting)	Destination (Entering)	Total	Origin (Exiting)	Destination (Entering)	Total
Graduate students	134	0	**134**	282	161	**443**
Bean Building[1]	103	24	**127**	29	114	**143**
Faculty, Staff, and Researchers[2]	8	0	**8**	16	9	**25**
Affiliated Users	20	0	**20**	0	40	**40**
Special Events	15	0	**15**	50	15	**65**
Day care	13	13	**26**	17	19	**36**
Academic Café	15	13	**28**	44	29	**73**
Total	**308**	**50**	**358**	**438**	**387**	**825**

1 ITE Trip Generation Manual, 11th Edition LUC 710 General Office (Embedded Startups, Faculty, Staff, and Researchers, and Signature Partners.

2 Staff in instructional or other student-facing roles (25% of total) were assigned to the student time-of-day distribution.

Internal Capture

Dining and child care are planned to be developed as ancillary services for the student and employee population. Apart from their own employees, they will not generally attract external trips. To account for this and the crossover between student and office populations (typically students involved with an on-site startup), targeted internal capture reductions were calculated for these specific cases.

Calculations for internal trips were made on the following assumptions:

- 100% of trips to/from the cafeteria are internal, made by either students or staff
- 80% of trips exiting the day care in the AM are to another on site use, and 80% of trips entering the day care in the PM originate on-site
- 10% of the office/lab/startup workforce are students who will combine trips

Table 6 and Table 7 show the resulting internal trip counts.

Table 6 Pedestrian Trips Between Uses, AM Peak Hour

			Total Entering Destination					
			134	20	15	103	13	15
			Students	Affiliated Users	Special Events	Office	Day Care Center	Cafeteria
Total Exit Origin	0	Students						
	0	Affiliated Users						
	0	Special Events						
	24	Office	2					15
	13	Day Care Center				10		
	13	Cafeteria	6			7		

Table 7 Pedestrian Trips Between Uses, PM Peak Hour

			Total Entering Destination					
			282	0	50	29	17	44
			Students	Affiliated Users	Special Events	Office	Day Care Center	Cafeteria
Total Exit Origin	161	Students				3		22
	40	Affiliated Users						
	15	Special Events						
	114	Office	11				14	22
	19	Day Care Center						
	29	Cafeteria	14			15		

Mode Share

The Roux Institute at Northeastern University is anticipating significant percentages of trips to campus will be made by alternative modes (walking, biking, and transit). During the Institutional Development Plan (IDP) process, Ideals and the Roux Institute set aspirational goals for the mode shares associated with the build out of the site. The initial phase will include academic space, business partners, a startup incubator, day care, and a café.

Anticipated future infrastructure investments, including off-street connections, will significantly increase the appeal of biking and walking to campus. The site will also be well-served by transit. The site plan includes a bus stop and layover area, and the applicant is in discussions with Metro to reduce headways and other improvements to transit in the area.

Understanding that some of these improvements are contingent on grant awards and other external factors, the applicant has elected to calculate trips conservatively in this permit. As a result, the auto mode share used for permitting is higher than the goals set out in the IDP and internally. These shares will be more realistic in the campus' first years and likely shift more towards alternative modes as those options continue to improve.

For this permit, trips have been calculated with a 90% auto mode share, 5% transit, and 5% walk/bike for all users except students, which are calculated with an 80/10/10 split.

Peak Hour Trips

After applying the site-specific or ITE person trip profiles outlined above and adjusting for mode share and internal capture, a 24-hour trip generation profile was created for the campus. As shown in Table 8, the peak volume of external vehicle trips occurs from 8:00-9:00 in the morning and 5:00-6:00 pm in the evening. Detailed calculations are provided in Attachment 1C.

Table 8 Peak Hour Trips

Use	AM Peak Hour					PM Peak Hour				
	All Trips	Internal Trips	Transit Trips	Bike/Ped Trips	Vehicle Trips	All Trips	Internal Trips	Transit Trips	Bike/Ped Trips	Vehicle Trips
Students	134	9	13	13	100	443	51	39	39	314
Affiliated Users	20	0	1	1	18	40	0	2	2	36
Special Events	15	0	1	1	14	65	0	3	3	59
Office	127	34	5	5	84	143	64	4	4	70
Faculty[1]	8	0	0	1	7	25	0	1	2	22
Day Care	27	10	1	1	15	36	14	1	1	20
Café	28	28	0	0	0	73	73	0	0	0
Total	**359**	**82**	**20**	**20**	**237**	**825**	**202**	**51**	**51**	**521**

1. Portion of staff/faculty that follow the student distribution

1.F Trip Distribution

Multiple sources of commuting data were consulted to generate a trip distribution pattern for the site. The initial distribution was developed based on US Census Journey to Work data for the City of Portland. Towns were divided into 9 zones based on their likely routing to the campus. This was compared to a roster of student and employee home addresses from the Fall 2023 semester, which found comparable results and supported using the Journey to Work data set. The distribution and routing is shown below in Table 9.

Table 9 Trip Distribution

Zone	% of Commuters	Routing
I-295 Points North	14%	I-295 to Exit 8
I-95 Points North	3%	Exit 53 to ME-100 to Washington Ave
ME-26/100 Points North/West	8%	Washington Ave
US-302 Points North/West	8%	US-302 to Read St to Ocean Ave to Washington Ave
ME-25 Points West	1%	25B-Warren-Forest-Read-Ocean-Washington
I-295 Points South	51%	Entering: 75% to Exit 8 / 25% to Exit 9. Exiting: 50%/50%.
Baxter Blvd	5%	Baxter to Bates to Veranda
US-1 North	7%	Via Martin's Point Bridge
Presumpscot/Rt 9	3%	Presumpscot to Sherwood

1.G Trip Assignment

Using the distribution described above, external vehicle trips were routed through the road network. All vehicle trips are anticipated to start or end at the end of Sherwood Street. New vehicle trips were assigned according to the routing listed in the previous section. The resulting trip assignment is shown in Attachment 1D.

1.H Attachments

Attachment 1A – Site Survey, Proposed Site Plan

Attachment 1B – Site Location Map

Attachment 1C – Trip Generation Calculations

Attachment 1D - Trip Distribution and Project Generated Trips Figures

Attachment 1A

Site Survey

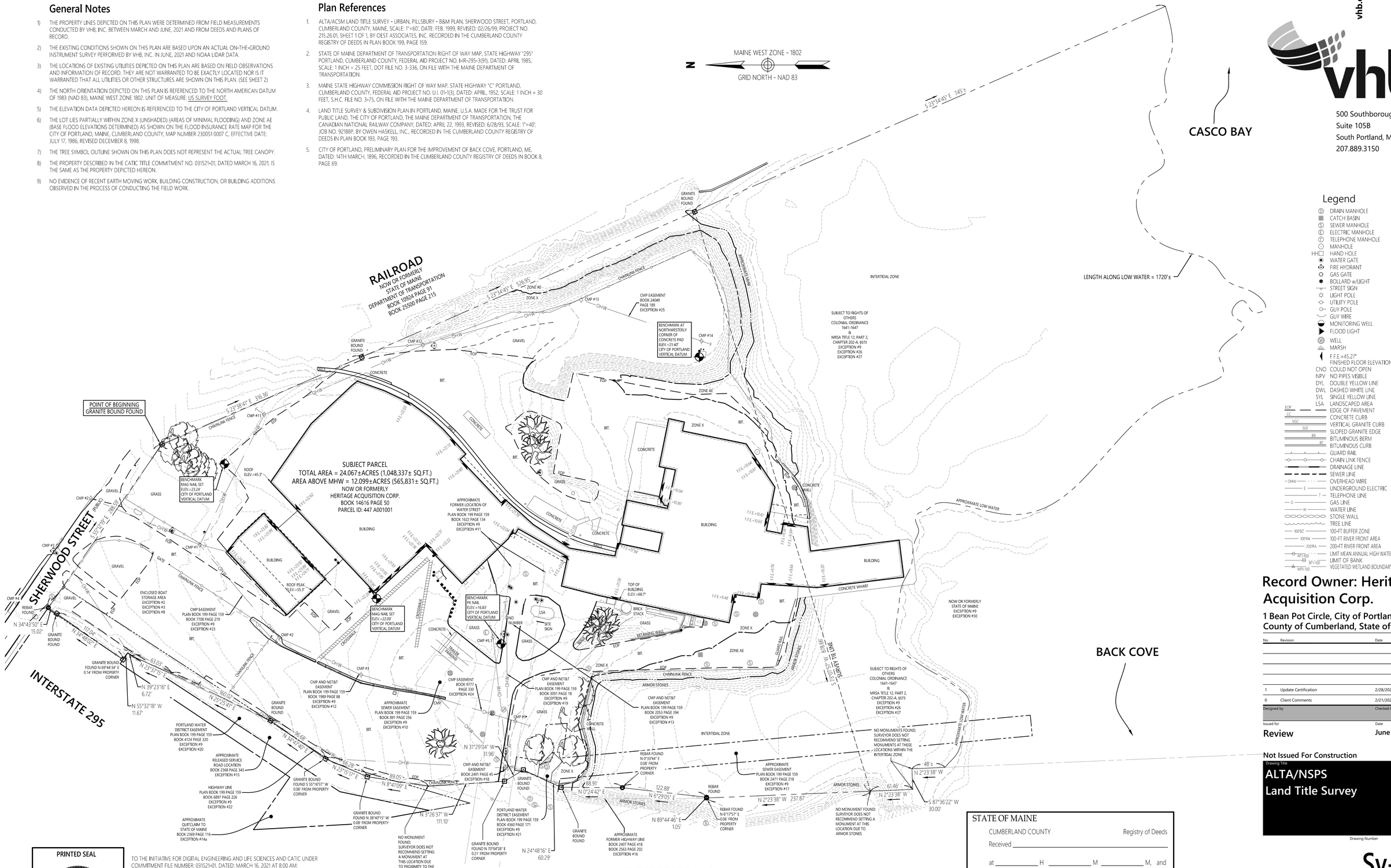
Proposed Site Plan

General Notes

1) THE PROPERTY LINES DEPICTED ON THIS PLAN WERE DETERMINED FROM FIELD MEASUREMENTS CONDUCTED BY VHB, INC. BETWEEN MARCH AND JUNE, 2021 AND FROM DEEDS AND PLANS OF RECORD.
2) THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB, INC. IN JUNE, 2021 AND NOAA LIDAR DATA.
3) THE LOCATIONS OF EXISTING UTILITIES DEPICTED ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN. (SEE SHEET 2)
4) THE NORTH ORIENTATION DEPICTED ON THIS PLAN IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), MAINE WEST ZONE 1802. UNIT OF MEASURE: US SURVEY FOOT.
5) THE ELEVATION DATA DEPICTED HEREON IS REFERENCED TO THE CITY OF PORTLAND VERTICAL DATUM.
6) THE LOT LIES PARTIALLY WITHIN ZONE X (UNSHADED) (AREAS OF MINIMAL FLOODING) AND ZONE AE (BASE FLOOD ELEVATIONS DETERMINED) AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE CITY OF PORTLAND, MAINE, CUMBERLAND COUNTY, MAP NUMBER 230051 0007 C, EFFECTIVE DATE: JULY 17, 1986, REVISED DECEMBER 8, 1998.
7) THE TREE SYMBOL OUTLINE SHOWN ON THIS PLAN DOES NOT REPRESENT THE ACTUAL TREE CANOPY.
8) THE PROPERTY DESCRIBED IN THE CATIC TITLE COMMITMENT NO. 031521-01, DATED MARCH 16, 2021, IS THE SAME AS THE PROPERTY DEPICTED HEREON.
9) NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELD WORK.

Plan References

1. ALTA/ACSM LAND TITLE SURVEY - URBAN, PILLSBURY - B&M PLAN. SHERWOOD STREET, PORTLAND, CUMBERLAND COUNTY, MAINE, SCALE: 1"=60', DATE: FEB. 1999, REVISED: 02/26/99, PROJECT NO. 215.26.01, SHEET 1 OF 1, BY OEST ASSOCIATES, INC. RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 199, PAGE 159.
2. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, STATE HIGHWAY "295" PORTLAND, CUMBERLAND COUNTY, FEDERAL AID PROJECT NO. I-IR-295-3(91), DATED: APRIL 1985, SCALE: 1 INCH = 25 FEET, DOT FILE NO. 3-336, ON FILE WITH THE MAINE DEPARTMENT OF TRANSPORTATION.
3. MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP, STATE HIGHWAY "C" PORTLAND, CUMBERLAND COUNTY, FEDERAL AID PROJECT NO. U.I. 01-1(3), DATED: APRIL, 1952, SCALE: 1 INCH = 30 FEET, S.H.C. FILE NO. 3-75, ON FILE WITH THE MAINE DEPARTMENT OF TRANSPORTATION.
4. LAND TITLE SURVEY & SUBDIVISION PLAN IN PORTLAND, MAINE, U.S.A. MADE FOR THE TRUST FOR PUBLIC LAND, THE CITY OF PORTLAND, THE MAINE DEPARTMENT OF TRANSPORTATION, THE CANADIAN NATIONAL RAILWAY COMPANY, DATED: APRIL 22, 1993, REVISED: 6/28/93, SCALE: 1"=40', JOB NO. 92188P, BY OWEN HASKELL, INC., RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 193, PAGE 193.
5. CITY OF PORTLAND, PRELIMINARY PLAN FOR THE IMPROVEMENT OF BACK COVE, PORTLAND, ME, DATED: 14TH MARCH, 1896, RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 8, PAGE 69.



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Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HH□ HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- BOLLARD w/LIGHT
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- MONITORING WELL
- FLOOD LIGHT
- (W) WELL
- MARSH
- F.F.E.=45.27' FINISHED FLOOR ELEVATION
- CNO COULD NOT OPEN
- NPV NO PIPES VISIBLE
- DYL DOUBLE YELLOW LINE
- DWL DASHED WHITE LINE
- SYL SINGLE YELLOW LINE
- LSA LANDSCAPED AREA
- EOP EDGE OF PAVEMENT
- CC CONCRETE CURB
- VGC VERTICAL GRANITE CURB
- SGE SLOPED GRANITE EDGE
- BB BITUMINOUS BERM
- BC BITUMINOUS CURB
- GUARD RAIL
- CHAIN LINK FENCE
- DRAINAGE LINE
- SEWER LINE
- OHW OVERHEAD WIRE
- E UNDERGROUND ELECTRIC
- T TELEPHONE LINE
- G GAS LINE
- W WATER LINE
- STONE WALL
- TREE LINE
- 100'BZ 100-FT BUFFER ZONE
- 100'RA 100-FT RIVER FRONT AREA
- 200'RA 200-FT RIVER FRONT AREA
- AHW-100 LIMIT MEAN ANNUAL HIGH WATER
- BH-100 LIMIT OF BANK
- WFT-100 VEGETATED WETLAND BOUNDARY

Record Owner: Heritage Acquisition Corp.

1 Bean Pot Circle, City of Portland
County of Cumberland, State of Maine

No.	Revision	Date	Appvd.
1	Update Certification	2/28/2022	JSG
0	Client Comments	2/21/2022	JSG

Designed by | Checked by

Issued for: **Review** — Date: **June 30, 2021**

Not Issued For Construction

Drawing Title: **ALTA/NSPS Land Title Survey**

Drawing Number: **Sv-1**

Sheet 1 of 3

Project Number: **58570.00**

PRINTED SEAL

STATE OF MAINE — JEFFREY SHERMAN GREINER — 2539 — PROFESSIONAL LAND SURVEYOR

TO THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES AND CATIC UNDER COMMITMENT FILE NUMBER: 031521-01, DATED: MARCH 16, 2021 AT 8:00 AM:

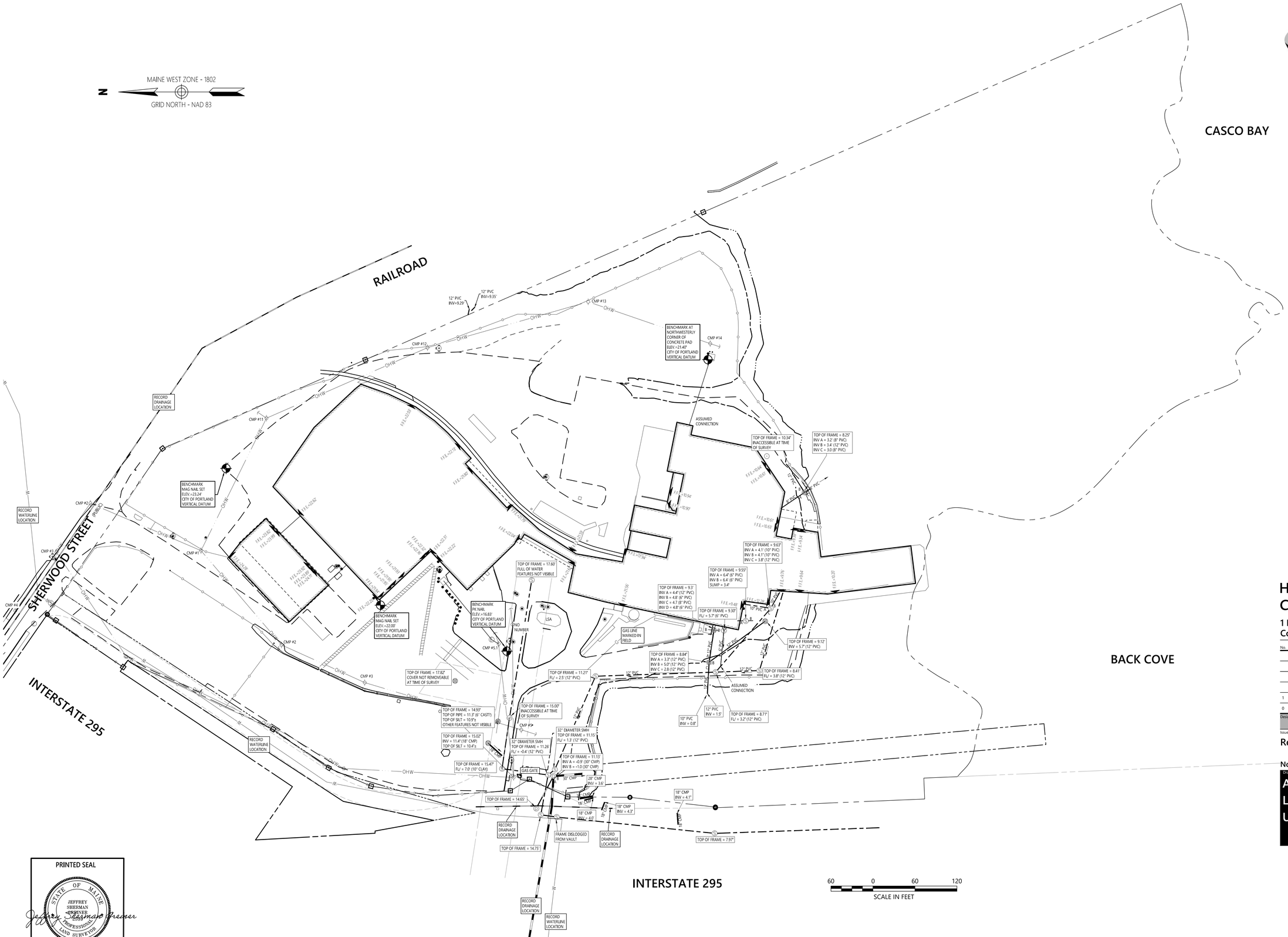
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 6, 7(c), 8, 13, 16, AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED IN JUNE, 2021.

BY Jeffrey Sherman Greiner 2/28/2022
JEFFREY SHERMAN GREINER, P.L.S. #2539 DATE

STATE OF MAINE
CUMBERLAND COUNTY Registry of Deeds
Received _____
at _____ H _____ M _____ M, and
recorded in Book _____ Page _____
ATTEST:
_____ Registrar

Record Owner
HERITAGE ACQUISITION CORP.
4 GATEHOUSE DR. SUITE 110
PARSIPPANY, NJ 07054
PARCEL ID: 447 A001001
BOOK 14616 PAGE 50

Saved Monday, February 28, 2022 10:15:02 AM JGREINER Plotted Monday, February 28, 2022 10:17:10 AM Jeffrey Greiner



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- DRAIN MANHOLE
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- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
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- HH HAND HOLE
- WATER GATE
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- SGE SLOPED GRANITE EDGE
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Heritage Acquisition Corp.

1 Bean Pot Circle, City of Portland
County of Cumberland, State of Maine

No.	Revision	Date	Appvd.
1	Update Certification	2/28/2022	JSG
0	Client Comments	2/21/2022	JSG

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Issued for: **Review** | Date: **June 30, 2021**

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ALTA/NSPS Land Title Survey Utility Compilation

Drawing Number
Sv-2

Sheet 2 of 3

Project Number
58570.00

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STATE OF MAINE
JEFFREY SHERMAN GREINER
2358
REGISTERED PROFESSIONAL LAND SURVEYOR
Jeffrey Sherman Greiner
2/28/2022

Saved Monday, February 28, 2022 10:15:02 AM JGREINER Plotted Monday, February 28, 2022 10:16:26 AM Jeffrey Greiner

Record Parcel Description

BEGINNING AT A 6-INCH BY 6-INCH GRANITE MONUMENT FOUND INSCRIBED "ECJ #356" MARKING THE SOUTHERLY SIDELINE OF SHERWOOD STREET WESTERLY SIDELINE OF SAID CANADIAN NATIONAL RAILROAD AND FURTHER DESCRIBED AS THE MOST NORTHEASTERLY CORNER OF DESCRIBED PARCEL;

THENCE, S 23-36-55 E, ALONG SAID RAILROAD 316.33 FEET TO A 6-LNCH BY 6-LNCH GRANITE MONUMENT FOUND INSCRIBED "ECJ 356";

THENCE, S 23-36-55 E, ALONG SAID RAILROAD, 526.90 FEET, TO A 4-INCH BY 4-INCH GRANITE MONUMENT WITH A DRILL HOLE;

THENCE, S 23-36-55 E, ALONG SAID RAILROAD, 745 FEET, MORE OR LESS TO THE LOW WATER MARK OF THE CASCO BAY;

THENCE, IN A GENERAL WESTERLY DIRECTION ALONG SAID LOW WATER LINE ABOUT 1,685 FEET TO A POINT ON THE EASTERLY SIDELINE OF INTERSTATE 295;

THENCE, N 2-23-50 W, ALONG SAID SIDELINE, 48 FEET, MORE OR LESS TO A POINT;

THENCE, S 87-30-10 W, ALONG SAID SIDELINE, 30.00 FEET TO A POINT;

THENCE, N 2-23-50 W, ALONG SAID SIDELINE, 61.46 FEET TO A DRILL HOLE FOUND, SAID DRILL HOLE LYING ON A TIE COURSE OF S 73-07-39 W, 878.87 FEET FROM THE PREVIOUS MENTIONED 4-INCH BY 4-INCH GRANITE MONUMENT WITH A DRILL HOLE;

THENCE, N 2-23-50 W, ALONG SAID SIDELINE, 237.87 FEET TO A 5/8 INCH RE-BAR FOUND CAPPED "ECJ #509";

THENCE, N 89-44-34 E, ALONG SAID SIDELINE, 1.05 FEET TO A 5/8 INCH RE-BAR FOUND CAPPED "ECJ #509";

THENCE, N 6-28-53 E, ALONG SAID SIDELINE, 122.88 FEET TO A 5/8 INCH RE-BAR FOUND CAPPED "ECJ #509";

THENCE, N 0-24-30 E, ALONG SAID SIDELINE, 88.91 FEET TO A 4-INCH BY 4-INCH GRANITE MONUMENT FOUND INSCRIBED "ECJ #509";

THENCE, N 24-48-04 E, ALONG SAID SIDELINE, 60.29 FEET TO A 6-INCH BY 6-INCH GRANITE HIGHWAY MONUMENT;

THENCE, N 31-29-16 W, ALONG SAID SIDELINE, 31.96 FEET TO A 4-INCH BY 4-INCH GRANITE MONUMENT INSCRIBED "ECJ #509";

THENCE, N 3-26-49 W, ALONG SAID SIDELINE, 111.10 FEET TO A 5/8 INCH RE-BAR FOUND CAPPED "ECJ #509";

THENCE, N 8-40-57 E, ALONG SAID SIDELINE, 89.05 FEET TO A 4-INCH BY 4-INCH GRANITE MONUMENT INSCRIBED "ECJ #509";

THENCE, N 23-15-05 E, ALONG SAID SIDELINE, 66.28 FEET TO A 4-INCH BY 4-LNCH GRANITE MONUMENT INSCRIBED "ECJ #509";

THENCE, N 34-47-28 E, ALONG SAID SIDELINE, 96.68 FEET TO A 4-LNCH BY 4-LNCH GRANITE MONUMENT INSCRIBED "ECJ #509";

THENCE, N 25-25-29 E, ALONG SAID SIDELINE, 160.02 FEET TO A 5/8 INCH RE-BAR FOUND CAPPED "ECJ #509";

THENCE, N 23-37-03 E, ALONG SAID SIDELINE, 63.03 FEET TO A 4-INCH BY 4-INCH GRANITE MONUMENT INSCRIBED "ECJ #509";

THENCE, N 39-23-04 E, ALONG SAID SIDELINE, 6.72 FEET TO A 6-INCH BY 6-INCH GRANITE MONUMENT FOUND INSCRIBED "ECJ #509";

THENCE, N 55-32-30 W, ALONG SAID SIDELINE, 11.67 FEET TO A 4-INCH BY 4-INCH GRANITE MONUMENT INSCRIBED "ECJ #509";

THENCE, N 34-47-50 E, ALONG SAID SIDELINE, 117.04 FEET TO A 4-INCH BY 4-INCH GRANITE MONUMENT INSCRIBED "ECJ #509";

THENCE, N 34-43-38 E, ALONG SAID SIDELINE, 15.02 FEET TO A 5/8 INCH RE-BAR FOUND CAPPED "ECJ #509" MARKING THE SOUTHERLY SIDELINE OF SHERWOOD STREET;

THENCE, S 55-12-08 E, ALONG SAID SHERWOOD STREET, 288.60 FEET TO THE POINT OF BEGINNING.

As-Surveyed Parcel Description

BEGINNING AT A GRANITE BOUND FOUND AT THE INTERSECTION OF THE SOUTHERLY SIDELINE OF SHERWOOD STREET AND THE WESTERLY SIDELINE OF LAND NOW OR FORMERLY OF THE STATE OF MAINE AS DESCRIBED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 25500, PAGE 215, AND BOOK 10924, PAGE 91 BEING FORMERLY OWNED BY THE ST. LAWRENCE & ATLANTIC RAILROAD COMPANY, IN PART, AND THE CANADIAN NATIONAL RAILWAY COMPANY, IN PART;

THENCE ALONG THE WESTERLY SIDELINE OF LAND OF THE STATE OF MAINE SOUTH 23°38'41" EAST FOR A DISTANCE OF 316.36 FEET TO A GRANITE BOUND FOUND;

THENCE CONTINUING ALONG LAND OF THE STATE OF MAINE SOUTH 23°34'45" EAST FOR A DISTANCE OF 526.95 FEET TO A GRANITE BOUND FOUND;

THENCE CONTINUING ALONG THE LAND OF THE STATE OF MAINE SOUTH 23°34'45" EAST FOR A DISTANCE OF 745 FEET, MORE OR LESS TO THE LOW WATER MARK OF CASCO BAY;

THENCE IN A GENERALLY WESTERLY DIRECTION ALONG THE LOW WATER LINE 1,720 FEET, MORE OR LESS, TO A POINT IN THE EASTERLY SIDELINE OF INTERSTATE 295;

THENCE ALONG THE EASTERLY SIDELINE OF INTERSTATE 295 THE FOLLOWING COURSES AND DISTANCES:

NORTH 2°23'38" WEST FOR A DISTANCE OF 48 FEET, MORE OR LESS TO A POINT;

SOUTH 87°36'22" WEST FOR A DISTANCE OF 30.00 FEET TO A POINT;

NORTH 2°23'38" WEST FOR A DISTANCE OF 61.46 FEET TO A POINT BEING LOCATED SOUTH 73°07'57" WEST AT A DISTANCE OF 878.66 FEET FROM A GRANITE BOUND FOUND ON THE WESTERLY SIDELINE OF LAND NOW OR FORMERLY OF THE STATE OF MAINE;

NORTH 2°23'38" WEST FOR A DISTANCE OF 237.87 FEET TO A POINT;

NORTH 89°44'46" EAST FOR A DISTANCE OF 1.05 FEET TO A REBAR FOUND;

NORTH 6°29'05" EAST FOR A DISTANCE OF 122.88 FEET TO A POINT;

NORTH 0°24'42" EAST FOR A DISTANCE OF 88.91 FEET TO A GRANITE BOUND FOUND;

NORTH 24°48'16" EAST FOR A DISTANCE OF 60.29 FEET TO A GRANITE BOUND FOUND;

NORTH 31°29'04" WEST FOR A DISTANCE OF 31.96 FEET TO A POINT;

NORTH 3°26'37" WEST FOR A DISTANCE OF 111.10 FEET TO A POINT;

NORTH 8°41'09" EAST FOR A DISTANCE OF 89.05 FEET TO A POINT;

NORTH 23°15'17" EAST FOR A DISTANCE OF 66.28 FEET TO A POINT;

NORTH 34°47'40" EAST FOR A DISTANCE OF 96.68 FEET TO A GRANITE BOUND FOUND;

NORTH 25°25'41" EAST FOR A DISTANCE OF 160.02 FEET TO A POINT;

NORTH 23°37'15" EAST FOR A DISTANCE OF 63.03 FEET TO A POINT;

NORTH 39°23'16" EAST FOR A DISTANCE OF 6.72 FEET TO A POINT;

NORTH 55°32'18" WEST FOR A DISTANCE OF 11.67 FEET TO A POINT;

NORTH 34°48'02" EAST FOR A DISTANCE OF 117.04 FEET TO A GRANITE BOUND FOUND;

NORTH 34°43'50" EAST FOR A DISTANCE OF 15.02 FEET TO A REBAR FOUND AT THE SOUTHERLY SIDELINE OF SHERWOOD STREET;

THENCE DEPARTING FROM THE EASTERLY SIDELINE OF INTERSTATE 295 AND RUNNING ALONG THE SOUTHERLY SIDELINE OF SHERWOOD STREET SOUTH 55°12'19" EAST FOR A DISTANCE OF 288.59 FEET TO THE POINT OF BEGINNING.

SAID AS-SURVEYED PARCEL CONTAINS A TOTAL AREA OF APPROXIMATELY 24.067 ACRES, MORE OR LESS (1,048,337 SQUARE FEET, MORE OR LESS), WITH AN AREA ABOVE MEAN HIGH WATER OF APPROXIMATELY 12.099 ACRES, MORE OR LESS (565,831 SQUARE FEET, MORE OR LESS).

Title Notes

REFERENCE SHOULD BE MADE TO CATIC
ALTA COMMITMENT FOR TITLE INSURANCE
FILE NO. 031521-01 DATE OF MARCH 16, 2021 AT 8:00 AM.

1. ANY DEFECT, LIEN, ENCUMBRANCE, ADVERSE CLAIM, OR OTHER MATTER THAT APPEARS FOR THE FIRST TIME IN THE PUBLIC RECORDS OR IS CREATED, ATTACHES, OR IS DISCLOSED BETWEEN THE COMMITMENT DATE AND THE DATE ON WHICH ALL OF THE SCHEDULE B, PART I--REQUIREMENTS ARE MET.
   NOT SURVEY RELATED

2. RIGHTS OR CLAIMS OF PERSONS IN POSSESSION, OTHER THAN THE INSURED, WHICH ARE NOT SHOWN BY THE PUBLIC RECORDS.
   NOT SURVEY RELATED

3. ANY EASEMENTS OR CLAIMS OF EASEMENTS NOT SHOWN BY THE PUBLIC RECORDS, BOUNDARY LINE DISPUTES, OVERLAPS, ENCROACHMENTS, TITLE TO FILLED LANDS (IF ANY) AND ALL OTHER FACTS WHICH AN ACCURATE SURVEY AND INSPECTION OF THE LAND WOULD DISCLOSE AND WHICH ARE NOT SHOWN BY THE PUBLIC RECORDS. WHEN THE POLICY ISSUED IS ON A FORM HAVING A REVISION DATE OF 6-17-06, THIS EXCEPTION ALSO REFERS TO ALL THOSE MATTERS DESCRIBED IN COVERED RISK 2(C).
   NOTED ON PLAN

4. UNRECORDED MECHANICS' LIENS.
   NOT SURVEY RELATED

5. REAL ESTATE TAXES, MUNICIPAL ASSESSMENTS AND PRIVATE ASSOCIATION ASSESSMENTS, IF ANY, INCLUDING LIENS AND ASSESSMENTS, NOT YET DUE AND PAYABLE.
   NOT SURVEY RELATED

6. THE EXACT ACREAGE OR SQUARE FOOTAGE OF THE LAND WILL NOT BE INSURED.
   NOTED ON PLAN

7. TITLE TO AND RIGHTS OF THE PUBLIC AND OTHERS ENTITLED THERETO IN AND TO THOSE PORTIONS OF THE INSURED PREMISES LYING WITHIN THE BOUNDS OF ADJACENT STREETS, ROADS AND WAYS.
   NOTED ON PLAN

8. RIGHTS OF THE TENANTS IN POSSESSION AT WILL OR UNDER UNRECORDED LEASES.
   NOTED ON PLAN

9. SUCH STATE OF FACTS INCLUDING NOTES DISCLOSED ON PLAN ENTITLED "ALTA/ACSM LAND TITLE SURVEY - URBAN, PILLSBURY - B&M PLANT, SHERWOOD STREET, PORTLAND, CUMBERLAND COUNTY, MAINE FOR B&G FOODS - PILLSBURY COMPANY BY OEST ASSOCIATES, INC. DATED FEBRUARY, 1999 LAST REVISED FEBRUARY 26, 1999, RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 199, PAGE 159.
   PERTINENT INFORMATION ON REFERENCED PLAN DEPICTED HEREON

10. RIGHTS AND EASEMENT SET FORTH IN EASEMENT DEED FROM BURNHAM & MORRILL COMPANY TO SARAH JORDAN AND ISABELLE JORDAN SAUNDERS DATED APRIL 18, 1912 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 891, PAGE 256.
    NOTED ON PLAN

11. AGREEMENT BY AND BETWEEN THE CITY OF PORTLAND AND BURNHAM AND MORRILL COMPANY DATED SEPTEMBER 16, 1940 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 1622, PAGE 134.
    NOTED ON PLAN

12. RIGHTS AND EASEMENTS GRANTED BY BURNHAM & MORRILL COMPANY TO CENTRAL MAINE POWER COMPANY AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY BY INSTRUMENT DATED JULY 14, 1948 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 1989, PAGE 88.
    NOTED ON PLAN

13. RIGHTS AND EASEMENTS GRANTED BY BURNHAM & MORRILL COMPANY TO CENTRAL MAINE POWER COMPANY AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY BY INSTRUMENT DATED JULY 5, 1951 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 2053, PAGE 394.
    NOTED ON PLAN

14. NOTICE OF TAKING BY THE MAINE STATE HIGHWAY COMMISSION DATED AUGUST 12, 1953 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 2146, PAGE 400, AS AFFECTED BY:
    a. QUITCLAIM DEED WITH COVENANT GRANTED BY BURNHAM AND MORRILL COMPANY TO THE STATE OF MAINE DATED JULY 17, 1957 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 2369, PAGE 116.
       NON-LOCUS; NOTED ON PLAN

15. RELEASE FROM THE STATE OF MAINE TO BURNHAM & MORRILL COMPANY DATED AUGUST 7, 1957 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 2368, PAGE 345.
    NOTED ON PLAN

16. LAYOUT AND NOTICE OF TAKING BY THE MAINE STATE HIGHWAY COMMISSION DATED APRIL 30, 1958 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 2407, PAGE 418 AND RELATED RECEIPT OF CONFIRMATION OF TAKING BY BURNHAM & MORRILL COMPANY TO THE STATE OF MAINE DATED SEPTEMBER 11, 1960 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 2563, PAGE 202.
    NOTED ON PLAN

17. EASEMENT DEED GRANTED BY BURNHAM & MORRILL CO. TO THE CITY OF PORTLAND DATED MAY 6, 1959 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 2471, PAGE 218.
    NOTED ON PLAN

18. RIGHTS AND EASEMENTS GRANTED BY BURNHAM & MORRILL COMPANY TO CENTRAL MAINE POWER COMPANY AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY BY INSTRUMENT DATED MAY 1, 1959 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 2491, PAGE 45.
    NOTED ON PLAN

19. RIGHTS AND EASEMENTS GRANTED BY GEORGE C. SEYBOLT, MELVILLE CHAPIN, AND RICHARD P. CHAPMAN, TRUSTEES UNDER A DECLARATION OF TRUST DATED MAY 31, 1966 TO CENTRAL MAINE POWER COMPANY AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY BY INSTRUMENT DATED MARCH 4, 1969 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 3091, PAGE 18.
    NOTED ON PLAN

20. RIGHTS, EASEMENTS, TERMS AND CONDITIONS SET FORTH IN EASEMENT DEED GRANTED BY GEORGE C. SEYBOLT, MELVILLE CHAPIN, AND RICHARD CHAPMAN, TRUSTEES UNDER A DECLARATION OF TRUST FOR THE BENEFIT OF WILLIAM UNDERWOOD COMPANY DATED MAY 31, 1966, TO PORTLAND WATER DISTRICT DATED OCTOBER 26, 1977 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 4124, PAGE 320.
    NOTED ON PLAN

21. RIGHTS, EASEMENTS, TERMS AND CONDITIONS SET FORTH IN EASEMENT DEED FROM GEORGE C. SEYBOLT, MELVILLE CHAPIN, AND RICHARD CHAPMAN, TRUSTEES UNDER A DECLARATION OF TRUST FOR THE BENEFIT OF WILLIAM UNDERWOOD COMPANY DATED MAY 31, 1966 TO PORTLAND WATER DISTRICT DATED DECEMBER 20, 1978 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 4360, PAGE 171.
    NOTED ON PLAN

22. NOTICE OF LAYOUT AND TAKING BY THE STATE OF MAINE BY ITS DEPARTMENT OF TRANSPORTATION DATED SEPTEMBER 3, 1985 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 6897, PAGE 226.
    NOTED ON PLAN

23. RIGHTS AND EASEMENT GRANTED BY BURNHAM & MORRILL CO. A DIVISION OF PET INC. TO CENTRAL MAINE POWER COMPANY BY INSTRUMENT DATED OCTOBER 31, 1986 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 7708, PAGE 219.
    NOTED ON PLAN

24. RIGHTS AND EASEMENTS GRANTED BY P.E.T. INCORPORATED TO CENTRAL MAINE POWER COMPANY AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY, BY INSTRUMENT DATED OCTOBER 22, 1991 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 9777, PAGE 330.
    NOTED ON PLAN

25. RIGHTS AND EASEMENTS GRANTED BY HERITAGE ACQUISITION CORP. TO CENTRAL MAINE POWER COMPANY AND VERIZON NEW ENGLAND, INC. BY INSTRUMENT DATED FEBRUARY 7, 2006 AND RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 24049, PAGE 189.
    NOTED ON PLAN

26. TITLE TO AND THE RIGHTS OF OTHERS IN AND TO THE LAND LYING BELOW THE MEAN HIGH WATER MARK.
    NOTED ON PLAN

27. RIGHTS OF THE PUBLIC UNDER THE COLONIAL ORDINANCE OF 1641-1647 AND THE FEDERAL NAVIGATIONAL SERVITUDE TO THAT PORTION OF THE PREMISES THAT LIES BELOW THE HIGH WATER MARK.
    NOTED ON PLAN

28. CLAIMS THAT SOME PORTION OF SAID LAND HAS BEEN CREATED BY ARTIFICIAL MEANS, OR HAS ACCRETED TO SUCH PORTION SO CREATED.
    NOT SURVEY RELATED

29. CLAIMS THAT SOME PORTION OF SAID LAND HAS BEEN BROUGHT WITHIN THE BOUNDARIES THEREOF BY AVULSIVE MOVEMENT OR HAS BEEN FORMED BY ACCRETION TO ANY SUCH PORTION.
    NOT SURVEY RELATED

30. OWNERSHIP RIGHTS OF THE STATE OF MAINE IN SO MUCH OF THE PREMISES AS LIES BELOW THE MEAN LOW WATER MARK AS SHOWN ON THE PLAN.
    NOTED ON PLAN

31. TERMS AND PROVISIONS CREATING A PORTION OF THE INSURED ESTATE AS EVIDENCED BY A SUBMERGED LANDS LEASE BY AND BETWEEN THE BUREAU OF PARKS AND LAND, AS AGENCY FOR THE STATE OF MAINE DEPARTMENT OF CONSERVATION, AS LANDLORD AND HERITAGE ACQUISITION CORPORATION, AS TENANT, DATED MARCH 29, 2006.
    UNABLE TO PLOT

vhb.com
vhb
500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150

Heritage Acquisition Corp.

1 Bean Pot Circle, City of Portland
County of Cumberland, State of Maine

No.	Revision	Date	Appvd.
1	Update Certification	2/28/2022	JSG
0	Client Comments	2/21/2022	JSG

Designed by | Checked by

Issued for: **Review**
Date: **June 30, 2021**

Not Issued For Construction

Drawing Title:
ALTA/NSPS Land Title Survey Descriptions & Title Notes

Drawing Number:
Sv-3

Sheet 3 of 3

Project Number:
58570.00

Saved Monday, February 28, 2022 10:15:02 AM JGRENER Plotted Monday, February 28, 2022 10:15:52 AM Jeffrey Grelner

NOTES:
1. SEE LANDSCAPE PLANS FOR SITE SURFACE MATERIAL ASSOCIATED WITH LANDSCAPED AREAS, PATIOS, AND NON-BITUMINOUS WALKWAYS & ROADWAYS, PLANTING PLANS AND SITE FURNISHINGS.
2. UTILITY AND DRAINAGE STRUCTURES NOT SHOWN FOR CLARITY, SEE GRADING AND DRAINAGE AND UTILITY PLAN FOR MORE INFORMATION.
3. REFER TO SHEET C-304 FOR LINE AND CURVE LAYOUT DATA.

REFER TO CIVIL PLANS BY VHB FOR SHERWOOD STREET DESIGN
CONCRETE SIDEWALK, TYP.
PEDESTRIAN RAMP, TYP.
BIKE LANE STRIPING PER CITY OF PORTLAND TECHNICAL MANUAL
DOUBLE YELLOW CENTERLINE STRIPE, TYP.
FLUSH GRANITE CURB, TYP.
CROSSWALK, TYP.
VERTICAL GRANITE CURB, TYP.
PWD SEWER EASEMENT
STOP SIGN, TYP.
STOP BAR, TYP.
LIMIT OF WORK
PROPERTY BOUNDARY, TYP.
4" LOAM & SEED, TYP.
SIDEWALK RAMP DETECTABLE WARNING, TYP.
STOP SIGN, TYP.
STOP BAR, TYP.
CONCRETE PAD, TYP.
CONCRETE SIDEWALK, TYP.
PWD SEWER EASEMENT
BITUMINOUS PAVEMENT, TYP.
TIPDOWN, TYP.
FLUSH GRANITE CURB, TYP.
STOP BAR, TYP.
STOP SIGN, TYP.
VEHICULAR PRECAST CONCRETE PAVERS, TYP. SEE LANDSCAPE PLANS
TREE, TYP. SEE LANDSCAPE PLANS
DO NOT ENTER SIGN, TYP.
5'X8' STANDARD PAD-MOUNTED BUS SHELTER (2) MIN 2'-8" OPENING FOR EACH
ONE WAY AND ROUNDABOUT SIGN, TYP.
TIMBER GUARDRAIL, TYP. SEE LANDSCAPE PLANS
4" LOAM & SEED, TYP.
ARCHITECTURAL CONCRETE RETAINING WALL, SEE STRUCTURAL PLANS
VEHICULAR ASPHALT PAVING, TYP. SEE LANDSCAPE PLANS
ACCESSIBLE PARKING SPACE, TYP.
ONE WAY SIGN, TYP.
4" LOAM & SEED, TYP.
CURB STOP, TYP.
ACCESSIBLE PARKING SPACE SIGN (MUTCD R7-8), TYP. AT MARKED ACCESSIBLE SPACES
MOUNTABLE GRANITE CURB, TYP.
BIKE RACK, TYP. SEE LANDSCAPE PLANS
PARKING GARAGE
MATCHLINE SEE INSET A, SHT. C-303
MATCHLINE SEE SHEET C-102
MATCHLINE SEE SHEET C-102

BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED PROFESSIONAL ENGINEER

Stamp

Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	1"=20'

Drawing Title
SITE LAYOUT PLAN - 1

C-101

MATCHLINE SEE SHEET C-101

MATCHLINE SEE SHEET C-101

PARKING GARAGE

DAY CARE CENTER

BEAN BUILDING

LEARNING RESEARCH & COLLABORATION BUILDING

MATCHLINE SEE INSET A, SHT. C-303

MATCHLINE SEE INSET B, SHT. C-303

DO NOT ENTER SIGN, TYP.

ONE WAY AND ROUNDABOUT SIGN, TYP.

ONE WAY SIGN, TYP.

PEDESTRIAN RAMP, TYP.

CROSSWALK, TYP.

AUTHORIZED VEHICLES ONLY SIGN, TYP.

ACCESSIBLE PARKING SPACE, TYP.

ACCESSIBLE PARKING SPACE SIGN (MUTCD R7-8), TYP. AT MARKED ACCESSIBLE SPACES

SIDEWALK RAMP DETECTABLE WARNING, TYP.

VEHICULAR GATE WITH KNOX LOCKBOX, TYP.

CURB STOP, TYP.

FLUSH GRANITE CURB, TYP.

VERTICAL GRANITE CURB, TYP.

BITUMINOUS PAVEMENT, TYP.

CONCRETE SIDEWALK, TYP.

TIPDOWN, TYP.

PEDESTRIAN GATE, TYP.

FENCE, TYP.

PWD SEWER EASEMENT

BENCH, TYP. SEE LANDSCAPE PLANS

BOLLARD, TYP. SEE LANDSCAPE PLANS

GRANITE COBBLESTONE PAVERS, TYP. SEE LANDSCAPE PLANS

TREE, TYP. SEE LANDSCAPE PLANS

VEHICULAR CONCRETE PAVEMENT, TYP. SEE LANDSCAPE PLANS

4" LOAM & SEED, TYP.

BIKE RACK, TYP. SEE LANDSCAPE PLANS

VEHICULAR GRANITE PAVERS, TYP. SEE LANDSCAPE PLANS

STAIR, TYP. SEE LANDSCAPE PLANS

STONE RETAINING WALL, TYP. SEE LANDSCAPE PLANS

VEHICULAR GRANITE PAVERS, TYP. SEE LANDSCAPE PLANS

VEHICULAR PRECAST CONCRETE PAVERS, TYP. SEE LANDSCAPE PLANS

ROOF OVERHANG

SEE LANDSCAPE PLANS FOR ROOF LANDSCAPING

RAMP TO LOADING DOCK

MOUNTABLE GRANITE CURB, TYP.

VEHICULAR ASPHALT PAVING, TYP. SEE LANDSCAPE PLANS

TIMBER GUARDRAIL, TYP., SEE LANDSCAPE PLANS

ARCHITECTURAL CONCRETE RETAINING WALL, TYP.

ROOF OVERHANG, TYP.

PROPERTY BOUNDARY, TYP.

LIMIT OF WORK, TYP.

SEE LANDSCAPE PLAN FOR MORE DETAIL ON SURFACE MATERIALS

ARCHITECTURAL CONCRETE RETAINING WALL, TYP. SEE LANDSCAPE PLANS

APPROXIMATE FLOOD ZONE LINE BY ELEVATION (EL. 9)

APPROXIMATE FEMA FLOOD ZONE LINE

APPROXIMATE FLOOD ZONE LINE BY ELEVATION

EXISTING PIERS

ZONE AE (EL. 9)

INTERTIDAL ZONE

MEAN TIDE (0)

MEAN HIGH WATER (9.30')

MEAN HIGH WATER (9.30') BY MODEL

MHW (7.39')

NOTES:
1. REFER TO SHEET C-101 FOR GENERAL SITE LAYOUT PLAN NOTES.
2. REFER TO SHEET C-304 FOR LINE AND CURVE LAYOUT DATA.

20' 0 20' 40'
BAR SCALE
1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED
PROFESSIONAL ENGINEER

Stamp

Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	1"=20'

Drawing Title
SITE LAYOUT PLAN - 2

C-102

Attachment 1B

Site Location Map

SITE LOCATION MAP



The Maine Department of Transportation provides this publication for information only. Reliance upon this information is at user risk. It is subject to revision and may be incomplete depending upon changing conditions. The Department assumes no liability if injuries or damages result from this information. This map is not intended to support emergency dispatch.

0.1 Miles

1 inch = 0.08 miles

Date: 11/3/2023
Time: 9:09:53 AM

Attachment 1C

Trip Generation Calculations

Trip Generation - Opening + 5 Years program

Total Site generated trips (not accounting for internal, pass-by, or diverted trips)

Site Land Uses and Descriptions				WEEKDAY 24-HOUR TRIP GENERATION								HOURLY TRIP GENERATION																							
				average				regression		# trips																											
Code	Land Use	Size	Unit	# studies	Avg Rate	Std Dev.	Total by Avg	r^2	total by Eq'n	Method Chosen	Total Trips	Dir	12am	1am	2am	3am	4am	5am	6am	7am	**8am**	9am	10am	11am	12pm	1pm	2pm	3pm	4pm	**5pm**	6pm	7pm	8pm	9pm	10pm	11pm
	Graduate Students	3123																																	
	AM Users, Daily On Campus	537								Custom	1074	Enter	0	0	0	0	0	0	0	54	**134**	107	134	107	0	0	0	0	161	**282**	161	81	81	40	0	0
	PM Users, Daily On Campus	806								Custom	1611	Exit	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	54	134	161	**161**	148	121	121	282	161	0
												Enter	0	0	0	0	0	0	0	10	**20**	40	20	10	0	0	0	0	0	**0**	0	0	0	0	0	0
	Affiliated Users	100								Custom	200	Exit	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	10	20	**40**	20	10	0	0	0	0
	Special Events	150																																	
	Workday Events	25								Custom	50																									
	Lunch Events	25								Custom	50	Enter	0	0	0	0	0	0	0	5	**15**	5	0	20	5	0	0	0	10	**50**	40	0	0	0	0	0
	Night Events	100								Custom	200	Exit	0	0	0	0	0	0	0	0	**0**	0	0	0	0	5	20	0	5	**15**	25	50	30	0	0	0
710	General Office																																		
	Embedded Startups	100	Employees																																
	Faculty, staff, and researchers	225	Employees									Enter	1	0	0	0	1	3	35	98	**103**	45	40	43	73	65	60	53	39	**29**	12	6	5	4	2	3
	Signature Partners	64	Employees	52	3.33	1.44	1295	0.86	1440	regression	1440	Exit	1	1	0	1	1	1	4	14	**24**	32	43	74	73	48	47	60	109	**114**	19	17	9	12	15	2
												Enter	0	0	0	0	0	0	0	3	**8**	6	8	6	0	0	0	0	9	**16**	9	5	5	2	0	0
	Academic Faculty		:mployees							Custom	150	Exit	0	0	0	0	0	0	0	0	**0**	0	0	0	0	0	3	8	9	**9**	8	7	7	16	9	0
												Enter	0	0	0	0	0	1	6	20	**13**	6	3	3	2	3	4	8	14	**17**	2	0	0	0	0	0
565	Day Care Center	50	Child Capacity	14	4.09	1.21	205	0.72	225	average	205	Exit	0	0	0	0	0	0	4	17	**13**	5	3	3	3	3	5	7	14	**19**	7	0	0	0	0	0
												Enter	2	0	1	1	1	3	7	12	**15**	17	24	52	53	28	17	14	27	**44**	43	31	18	11	6	2
932	High Turnover (Sit-Down) Restaurant	8	1k sf GFA	50	107.20	66.72	858	n/a	n/a	average	858	Exit	3	1	1	2	1	1	4	8	**13**	15	19	30	53	48	22	17	17	**29**	37	39	30	21	12	6
												total	7	2	2	3	5	9	60	240	**359**	277	293	348	262	200	231	311	595	**825**	532	366	306	387	206	13
												enter	3	0	1	1	2	7	48	201	**308**	226	228	241	134	96	81	74	260	**437**	268	122	109	57	8	5
												exit	4	2	1	2	3	2	12	39	**51**	51	65	106	128	104	150	236	336	**387**	264	244	197	330	198	8

Trip Generation - Opening + 5 Years program

Total Site generated trips (not accounting for internal, pass-by, or diverted tr

Site Land Uses and Descriptions			
Code	Land Use	Size	Unit
	Graduate Students	3123	
	AM Users, Daily On Campus	537	
	PM Users, Daily On Campus	806	
	Affiliated Users	100	
	Special Events	150	
	Workday Events	25	
	Lunch Events	25	
	Night Events	100	
710	General Office		
	Embedded Startups	100	Employees
	Faculty, staff, and researchers	225	Employees
	Signature Partners	64	Employees
	Academic Faculty	75	Employees
565	Day Care Center	50	Child Capacity
932	High Turnover (Sit-Down) Restaurant	8	1k sf GFA

AM PEAK HOUR DETAIL									
AM PEAK HOUR	8am		Auto		Transit		Bike/Walk	
All Trips	On-Site Ped Trips	External Trips	Mode Share	Trips	Mode Share	Trips	Mode Share	Trips
134	**9**	**125**	**80%**	**100**	**10%**	**13**	**10%**	**13**
0	0	**0**	80%	**0**	10%	**0**	10%	0
20	**0**	**20**	90%	**18**	5%	**1**	5%	**1**
0	0	**0**	90%	**0**	5%	**0**	5%	0
15	**0**	**15**	90%	**14**	5%	**1**	5%	**1**
0	0	**0**	90%	**0**	5%	**0**	5%	0
103	**17**	**86**	**90%**	**77**	**5%**	**4**	**5%**	**4**
24	17	**7**	90%	**7**	5%	**0**	5%	0
8	**0**	**8**	**90%**	**7**	**5%**	**0**	**5%**	**0**
0	0	**0**	90%	**0**	5%	**0**	5%	0
13	**0**	**13**	90%	**12**	5%	**1**	5%	**1**
13	10	**3**	90%	**2**	5%	**0**	5%	0
15	**15**	**0**	90%	**0**	5%	**0**	5%	**0**
13	13	**0**	90%	**0**	5%	**0**	5%	0

PM PEAK HOUR DETAIL									
PM PEAK HOUR	5pm		Auto		Transit		Bike/Walk	
All Trips	On-Site Ped Trips	External Trips	Mode Share	Trips	Mode Share	Trips	Mode Share	Trips
282	**26**	**256**	**80%**	**205**	**10%**	**26**	**10%**	**26**
161	25	**136**	80%	109	10%	14	10%	14
0	**0**	**0**	90%	**0**	5%	**0**	5%	**0**
40	0	**40**	90%	36	5%	2	5%	2
50	**0**	**50**	90%	**45**	5%	**3**	5%	**3**
15	0	**15**	90%	14	5%	1	5%	1
29	**17**	**11**	**90%**	**10**	**5%**	**1**	**5%**	**1**
114	47	**67**	90%	60	5%	3	5%	3
16	**0**	**16**	**90%**	**14**	**5%**	**1**	**5%**	**1**
9	0	**9**	90%	8	5%	0	5%	0
17	**14**	**3**	90%	**3**	5%	**0**	5%	**0**
19	0	**19**	90%	17	5%	1	5%	1
44	**44**	**0**	90%	**0**	5%	**0**	5%	**0**
29	29	**0**	90%	0	5%	0	5%	0

AM Peak Hour (8am)					
All Trips	On-Site Ped	Bike/Ped	Transit	Vehicle	
308	41	20	20	227	Enter
51	41	0	0	10	Exit
359	82	20	20	237	Total

PM Peak Hour (5pm)					
All Trips	On-Site Ped	Bike/Ped	Transit	Vehicle	
437	101	30	30	276	Enter
388	101	21	21	245	Exit
825	202	51	51	521	Total

AM PEAK HOUR ON-SITE PED

1. Origin/Destination Pairs Calculated as a % of Trips Entering Destination Use

Origin ↓ \ Destination →	Students	Affiliated Users	Special Events	Office	Day Care Center	Cafeteria
Students						0%
Affiliated Users						
Special Events						
Office						100%
Day Care Center						
Cafeteria						

2. Origin/Destination Pairs Calculated as a % of Trips Exiting Origin Use

Origin ↓ \ Destination →	Students	Affiliated Users	Special Events	Office	Day Care Center	Cafeteria
Students						
Affiliated Users						
Special Events						
Office	10%					
Day Care Center				80%		
Cafeteria	50%			50%		

PM PEAK HOUR ON-SITE PED

1. Origin/Destination Pairs Calculated as a % of Trips Entering Destination Use

Origin ↓ \ Destination →	Students	Affiliated Users	Special Events	Office	Day Care Center	Cafeteria
Students				10%		50%
Affiliated Users						
Special Events						
Office					80%	50%
Day Care Center						
Cafeteria						

2. Origin/Destination Pairs Calculated as a % of Trips Exiting Origin Use

Origin ↓ \ Destination →	Students	Affiliated Users	Special Events	Office	Day Care Center	Cafeteria
Students						
Affiliated Users						
Special Events						
Office	10%					
Day Care Center						
Cafeteria	50%			50%		

CALCULATED ON-SITE PED TRIPS

AM PEAK HOUR

Total Exit	Origin ↓ \ Destination →	Total Entering: 134 Students	20 Affiliated Users	15 Special Events	103 Office	13 Day Care Center	15 Cafeteria
0	Students						
0	Affiliated Users						
0	Special Events						
24	Office	2					15
13	Day Care Center				10		
13	Cafeteria	7			7		

PM PEAK HOUR

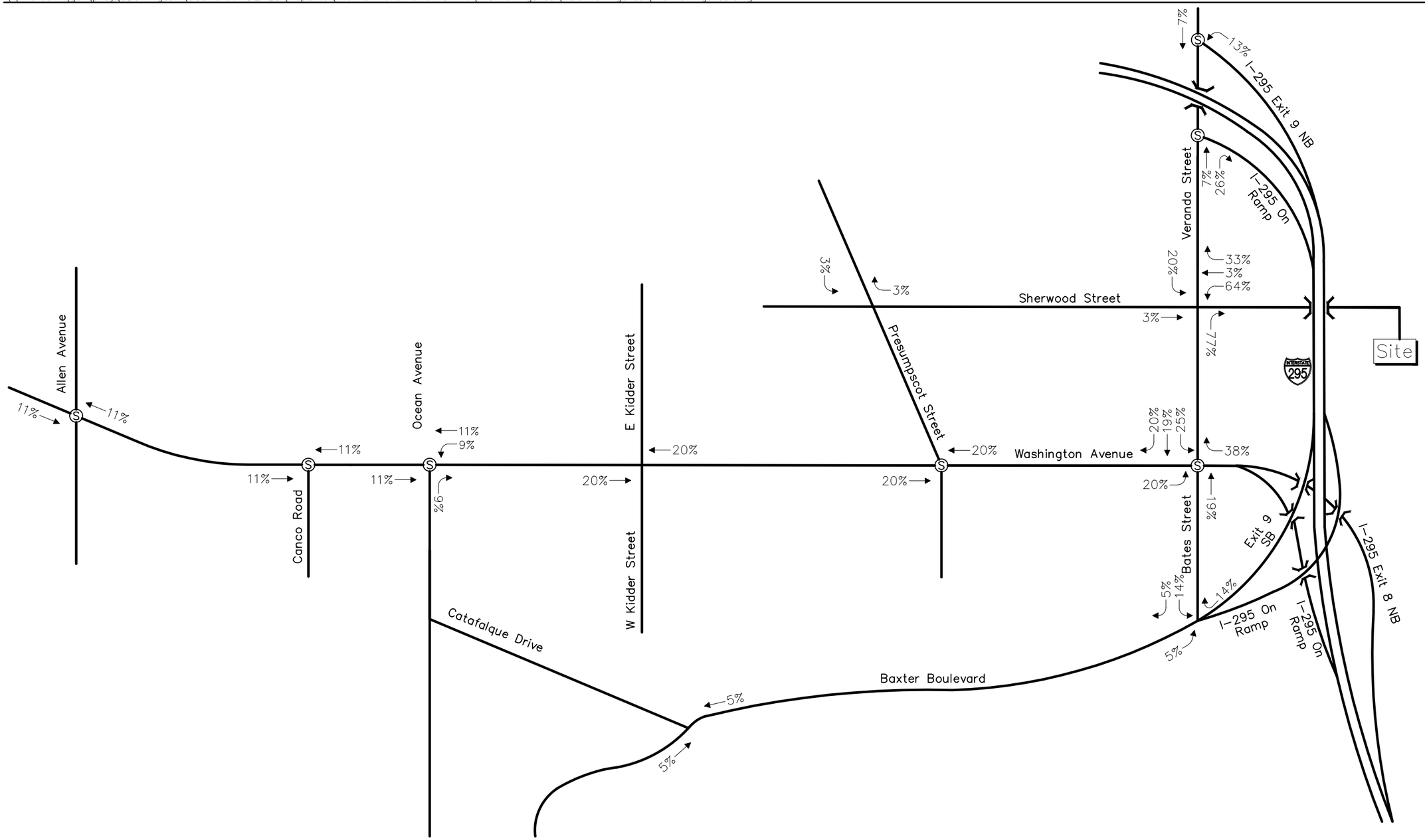
Total Exit	Origin ↓ \ Destination →	Total Entering: 282 Students	0 Affiliated Users	50 Special Events	29 Office	17 Day Care Center	44 Cafeteria
161	Students				3		22
40	Affiliated Users						
15	Special Events						
114	Office	11				14	22
19	Day Care Center						
29	Cafeteria	15			15		

Hourly Distribution of Entering and Exiting Trips, as a % of 24-hour trips

Land Use or User	Students (Day Users)		Students (Night Users)		Affiliated Users		Special Events (Day)		Special Events (Lunch)		Special Events (Night)		Day Care		General Office		Cafeteria	
ITE or Custom	Custom		Custom		Custom		Custom		Custom		Custom		ITE 565		ITE 710		ITE 932	
Time	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting	Entering	Exiting
12:00 - 1:00 AM															0.2%	0.1%	0.4%	0.7%
1:00 - 2:00 AM															0.0%	0.1%	0.1%	0.3%
2:00 - 3:00 AM															0.0%	0.0%	0.3%	0.2%
3:00 - 4:00 AM															0.0%	0.1%	0.2%	0.4%
4:00 - 5:00 AM															0.2%	0.2%	0.2%	0.3%
5:00 - 6:00 AM													1.0%	0.2%	0.4%	0.1%	0.7%	0.2%
6:00 - 7:00 AM													6.3%	4.3%	4.8%	0.5%	1.7%	0.9%
7:00 - 8:00 AM	10.0%				10.0%		20.0%						19.5%	16.3%	13.6%	2.0%	2.7%	1.8%
8:00 - 9:00 AM	25.0%				20.0%		60.0%						13.2%	12.8%	14.3%	3.4%	3.4%	3.1%
9:00 - 10:00 AM	20.0%				40.0%		20.0%						5.4%	4.6%	6.3%	4.4%	4.0%	3.4%
10:00 - 11:00 AM	25.0%				20.0%								2.6%	2.9%	5.5%	6.0%	5.5%	4.4%
11:00 - 12:00 PM	20.0%				10.0%				80.0%				2.6%	2.6%	6.0%	10.3%	12.1%	6.9%
12:00 - 1:00 PM									20.0%				2.1%	2.6%	10.2%	10.1%	12.4%	12.3%
1:00 - 2:00 PM										20.0%			3.0%	3.2%	9.0%	6.6%	6.5%	11.2%
2:00 - 3:00 PM		10.0%								80.0%			4.1%	4.5%	8.3%	6.5%	4.0%	5.1%
3:00 - 4:00 PM		25.0%				10.0%							7.5%	6.9%	7.3%	8.4%	3.3%	4.0%
4:00 - 5:00 PM		30.0%	20.0%			20.0%		20.0%			10.0%		13.6%	14.0%	5.4%	15.2%	6.2%	3.9%
5:00 - 6:00 PM		30.0%	35.0%			40.0%		60.0%			50.0%		16.7%	18.7%	4.0%	15.8%	10.2%	6.8%
6:00 - 7:00 PM		5.0%	20.0%	15.0%		20.0%		20.0%			40.0%	20.0%	2.4%	6.4%	1.7%	2.6%	10.1%	8.7%
7:00 - 8:00 PM			10.0%	15.0%		10.0%						50.0%			0.9%	2.3%	7.2%	9.2%
8:00 - 9:00 PM			10.0%	15.0%								30.0%			0.7%	1.3%	4.3%	7.1%
9:00 - 10:00 PM			5.0%	35.0%											0.5%	1.6%	2.6%	4.8%
10:00 - 11:00 PM				20.0%											0.3%	2.1%	1.4%	2.9%
11:00 - 12:00 AM															0.4%	0.3%	0.5%	1.4%

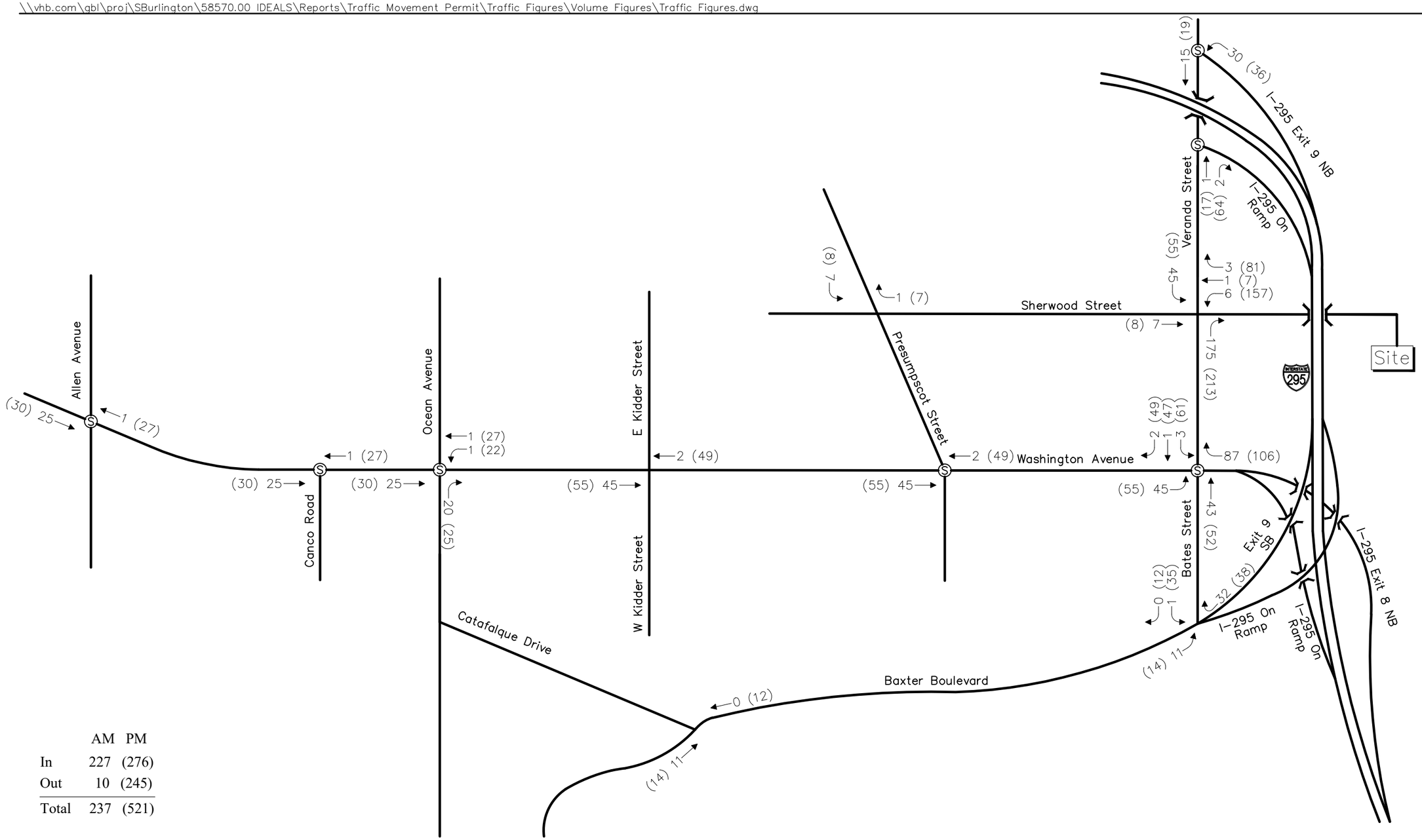
Attachment 1D

Trip Distribution
Project Generated Trips
Figures



Not to Scale

Figure 1
Trip Distribution



	AM	PM
In	227	(276)
Out	10	(245)
Total	237	(521)

Not to Scale

Figure 2
Site Generated Trips

2

Section 2: Traffic Crashes

2.A Crash Summary Data

VHB obtained the crash data from MaineDOT for the period 2020-2022, the most recent three-year period available.

In order to evaluate whether a location has a crash problem, MaineDOT uses two criteria to define a High Crash Location (HCL). Both criteria must be met in order to be classified as an HCL.

1. A critical rate factor (CRF) of 1.00 or more for a three-year period. A CRF compares the actual crash rate to the rate for similar intersections in the state. A CRF of less than 1.00 indicated a rate of less than average and:
2. A minimum of eight crashes over the same three-year period

Based on the crash data provided by MaineDOT, there are four HCLs in the site vicinity.

The crash information for the intersections in the site vicinity is provided in Attachment 2.

Table 5 High Crash Locations

Location	Total (CRF)	Crash Severity		
		Fatal	Injury	PDO
Ocean Ave from Catafalque Dr to Washington Ave	9 (1.90)	0	1	7
Washington Ave from Galvin St to Bates St	8 (1.15)	0	3	5
Washington Ave from Presumpscot St to Cummings	9 (1.15)	0	2	6
Washington Ave from Ocean Ave to Byfield Rd	12 (1.59)	0	3	9

It is important to note that the intersection of Veranda Street / I-295 SB Ramp / Wordsworth Street (Node 60334) is also identified as an HCL during the 2020-2022 period with a total of 10 crashes and a CRF of 4.75. This intersection was part of The Veranda Plan and has been recently reconstructed. MaineDOT has informed VHB that an HCL diagram will not be provided for this intersection until all crashes are current for 2023-2025.

Locations that experienced 8 or more crashes however are not considered high crash locations are listed below:

Intersections:

- Bates Street / Veranda Street / Washington Aveune (17 Crashes / CRF = 0.52)
- Ocean Avenue / Washington Avenue (21 Crashes / CRF = 0.82)
- Presumpscot Street / Washington Avenue (16 Crashes / CRF = 0.57)

Although these locations are not considered high crash locations, they are all located in the projected study area and will be further investigated in the Traffic Impact Study.

2.B Bicycle and Pedestrian Crashes

There have been 8 crashes involving bicycles and 0 crashes involving pedestrians in the past three years in the vicinity of the site. Five of the bicycle crashes were located at intersections, 2 were located at a driveway, and one was on a straight road.

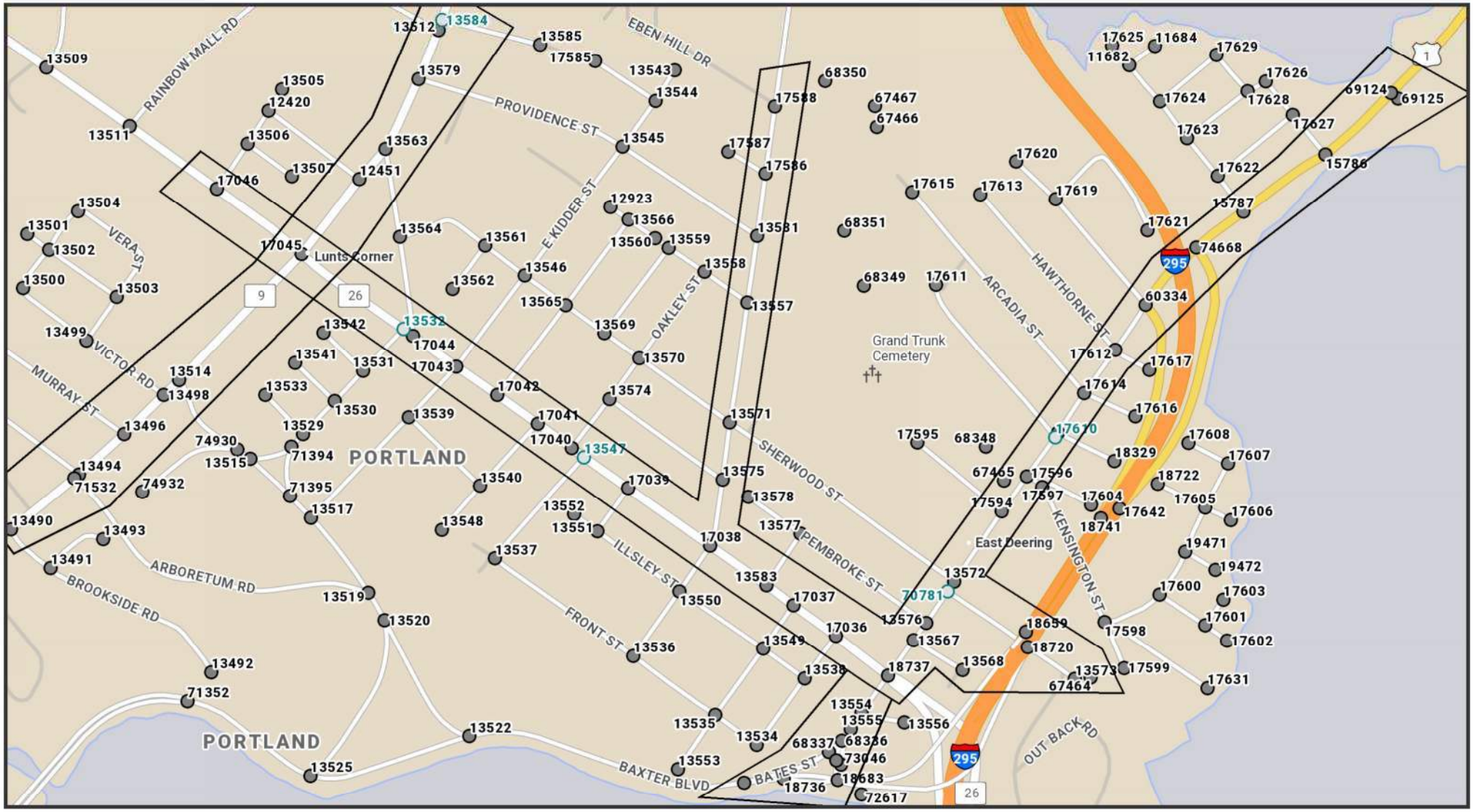
2.C Attachments

Attachment 2A – Node Map, Crash Summary Report, HCL Diagrams

Attachment 2A

Node Map
Crash Summary Report
HCL Diagrams

The Roux Institute at Northeastern University



The Maine Department of Transportation provides this publication for information only. Reliance upon this information is at user risk. It is subject to revision and may be incomplete depending upon changing conditions. The Department assumes no liability if injuries or damages result from this information. This map is not intended to support emergency dispatch.

0.25 Miles

1 inch = 0.18 miles

Date: 6/1/2023
Time: 11:57:52 AM

LEGEND

LRAP_SEGMENTS_2

RURAL-SA-FC5 | URBAN-TW | RURAL-TW | WCSH | AGREEMENT | URBAN-STW | RURAL-STW | URBAN-SH | NO VALUE | RURAL-SH | RURAL-SA-FC6 | URBAN-SA

LRAP_SEGMENTS_2

RURAL-SA-FC5 | URBAN-TW | RURAL-TW | WCSH | NO VALUE | RURAL-SH | RURAL-SA-FC6 | URBAN-SA | AGREEMENT | URBAN-STW | RURAL-STW | URBAN-SH

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ Crash Summary I ☐ Section Detail ☑ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 Summary

REPORT DESCRIPTION

Portland
Washington Ave., Veranda St., Ocean Ave, Presumpscot St. Area

REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

Route: **0026X**	Start Node: **18737**	Start Offset: **0**	☐ **Exclude First Node**
	End Node: **17046**	End Offset: **0**	☐ **Exclude Last Node**
Route: **0009X**	Start Node: **13490**	Start Offset: **0**	☐ **Exclude First Node**
	End Node: **17045**	End Offset: **0**	☑ **Exclude Last Node**
Route: **0009X**	Start Node: **17045**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **13584**	End Offset: **0**	☐ **Exclude Last Node**
Route: **0560753**	Start Node: **18737**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **60334**	End Offset: **0**	☑ **Exclude Last Node**
Route: **0001S**	Start Node: **74668**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **60334**	End Offset: **0**	☐ **Exclude Last Node**
Route: **0001X**	Start Node: **74668**	Start Offset: **0**	☐ **Exclude First Node**
	End Node: **69124**	End Offset: **0**	☐ **Exclude Last Node**
Route: **0560037**	Start Node: **18737**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **18683**	End Offset: **0**	☑ **Exclude Last Node**
Route: **3200512**	Start Node: **68336**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **17592**	End Offset: **0**	☐ **Exclude Last Node**
Route: **3201021**	Start Node: **17592**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **18736**	End Offset: **0**	☐ **Exclude Last Node**
Route: **3201022**	Start Node: **18736**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **18683**	End Offset: **0**	☐ **Exclude Last Node**
Route: **3209819**	Start Node: **18683**	Start Offset: **0**	☑ **Exclude First Node**

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ **Crash Summary I** ☐ **Section Detail** ☑ **Crash Summary II** ☐ **1320 Public** ☐ **1320 Private** ☐ **1320 Summary**

REPORT DESCRIPTION

Portland
Washington Ave., Veranda St., Ocean Ave, Presumpscot St. Area

REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

	End Node: **13555**	End Offset: **0**	☑ **Exclude Last Node**
Route: **0560599**	Start Node: **17038**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **17588**	End Offset: **0**	☐ **Exclude Last Node**
Route: **3209966**	Start Node: **70781**	Start Offset: **0**	☑ **Exclude First Node**
	End Node: **13573**	End Offset: **0**	☐ **Exclude Last Node**

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
13583	0026X - 1.35	Int of CHURCHILL ST WASHINGTON AV	2	7	0	0	1	1	5	28.6	8.854	0.26	0.27	0.96
												Statewide Crash Rate:	0.12	
P17044	0026X - 1.75	Int of MORSE ST WASHINGTON AV	2	3	0	0	0	1	2	33.3	6.970	0.14	0.29	0.00
												Statewide Crash Rate:	0.12	
18737	0026X - 1.21	Int of BATES ST VERANDA ST WASH AV SB WASHINGTO	9	17	0	0	1	2	13	18.8	11.095	0.51	0.98	0.52
												Statewide Crash Rate:	0.64	
17039	0026X - 1.50	Int of CUMMINGS ST WASHINGTON AV	2	2	0	0	1	0	1	50.0	6.933	0.10	0.29	0.00
												Statewide Crash Rate:	0.12	
17043	0026X - 1.70	Int of E KIDDER ST W KIDDER ST WASHINGTON AV	2	7	0	1	0	3	3	57.1	6.975	0.33	0.29	1.15
												Statewide Crash Rate:	0.12	
P17040	0026X - 1.56	Int of OAKLEY ST WASHINGTON AV	2	3	0	0	0	1	2	33.3	6.761	0.15	0.29	0.00
												Statewide Crash Rate:	0.12	
17045	0026X - 1.88	Int of OCEAN AV WASHINGTON AV	9	21	0	0	1	3	16	20.0	8.242	0.85	1.03	0.82
												Statewide Crash Rate:	0.64	
A13532	0026X - 1.76	Int of FERNALD ST WASHINGTON AV	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
												Statewide Crash Rate:	0.12	
17036	0026X - 1.27	Int of GALVIN ST WASHINGTON AV	2	6	0	1	0	1	4	33.3	8.966	0.22	0.27	0.00
												Statewide Crash Rate:	0.12	
17041	0026X - 1.60	Int of ALTON ST WASHINGTON AV	2	0	0	0	0	0	0	0.0	6.553	0.00	0.30	0.00
												Statewide Crash Rate:	0.12	
17038	0026X - 1.41	Int of PRESUMPSCOT ST W PRESUMPSCOT ST WASHIN(	9	16	0	0	1	1	14	12.5	9.185	0.58	1.01	0.57
												Statewide Crash Rate:	0.64	
A13547	0026X - 1.55	Int of JOHANSEN ST, WASHINGTON AV	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
												Statewide Crash Rate:	0.12	
17046	0026X - 1.98	Int of BYFIELD RD WASHINGTON AV	2	0	0	0	0	0	0	0.0	5.974	0.00	0.30	0.00
												Statewide Crash Rate:	0.12	
17037	0026X - 1.32	Int of RANDALL ST WASHINGTON AV	2	7	0	0	0	5	2	71.4	9.002	0.26	0.27	0.95
												Statewide Crash Rate:	0.12	
17042	0026X - 1.65	Int of INVERNESS ST WASHINGTON AV	2	0	0	0	0	0	0	0.0	6.698	0.00	0.29	0.00
												Statewide Crash Rate:	0.12	
13494	0009X - 64.09	Int of OCEAN AV ROSEDALE ST	2	1	0	0	0	1	0	100.0	3.047	0.11	0.36	0.00
												Statewide Crash Rate:	0.12	
13496	0009X - 64.15	Int of MURRAY ST OCEAN AV	2	1	0	0	1	0	0	100.0	2.855	0.12	0.37	0.00
												Statewide Crash Rate:	0.12	
13514	0009X - 64.22	Int of OCEAN AV PAYSON PARK DR	2	1	0	0	0	0	1	0.0	3.372	0.10	0.35	0.00
												Statewide Crash Rate:	0.12	
13498	0009X - 64.20	Int of OCEAN AV VICTOR RD	2	0	0	0	0	0	0	0.0	2.844	0.00	0.37	0.00
												Statewide Crash Rate:	0.12	
13490	0009X - 64	Int of BROOKSIDE RD OCEAN AV	2	0	0	0	0	0	0	0.0	2.517	0.00	0.38	0.00
												Statewide Crash Rate:	0.12	
71532	0009X - 64.08	Int of ARBORETUM RD OCEAN AV	2	3	0	0	0	1	2	33.3	2.844	0.35	0.37	0.00
												Statewide Crash Rate:	0.12	
13579	0009X - 64.58	Int of OCEAN AV PROVIDENCE ST	2	1	0	0	0	0	1	0.0	1.632	0.20	0.42	0.00
												Statewide Crash Rate:	0.12	

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
P13512	0009X - 64.63	Int of OCEAN AV RAINBOW MALL RD	2	2	0	0	0	0	2	0.0	1.311	0.51	0.44	1.15
												Statewide Crash Rate:	0.12	
13563	0009X - 64.51	Int of MORSE ST OCEAN AV	2	2	0	0	0	1	1	50.0	1.649	0.40	0.42	0.00
												Statewide Crash Rate:	0.12	
A13584	0009X - 64.64	Int of GRAFTON ST OCEAN AV	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
												Statewide Crash Rate:	0.12	
12451	0009X - 64.47	Int of OCEAN AV, SLEMONS ST	2	0	0	0	0	0	0	0.0	1.500	0.00	0.43	0.00
												Statewide Crash Rate:	0.12	
P13572	0560753 - 0.11	Int of SHERWOOD ST VERANDA ST	2	0	0	0	0	0	0	0.0	1.890	0.00	0.41	0.00
												Statewide Crash Rate:	0.12	
13576	0560753 - 0.06	Int of PEMBROKE ST VERANDA ST	2	0	0	0	0	0	0	0.0	1.782	0.00	0.41	0.00
												Statewide Crash Rate:	0.12	
13567	0560753 - 0.04	Int of JORDAN ST, VERANDA ST	2	0	0	0	0	0	0	0.0	1.795	0.00	0.41	0.00
												Statewide Crash Rate:	0.12	
A17610	0560753 - 0.28	Int of HODGINS ST VERANDA ST	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
												Statewide Crash Rate:	0.12	
17612	0560753 - 0.38	Int of FAYETTE ST HAWTHORNE ST VERANDA ST	2	0	0	0	0	0	0	0.0	1.558	0.00	0.43	0.00
												Statewide Crash Rate:	0.12	
17594	0560753 - 0.19	Int of DALTON ST VERANDA ST	2	0	0	0	0	0	0	0.0	1.457	0.00	0.43	0.00
												Statewide Crash Rate:	0.12	
17614	0560753 - 0.33	Int of ARCADIA ST FAIRFIELD ST VERANDA ST	2	1	0	0	0	1	0	100.0	1.677	0.20	0.42	0.00
												Statewide Crash Rate:	0.12	
P17609	0560753 - 0.29	Int of UPLAND AV, VERANDA ST	2	0	0	0	0	0	0	0.0	1.739	0.00	0.41	0.00
												Statewide Crash Rate:	0.12	
A70781	0560753 - 0.10	Int of SHERWOOD ST VERANDA ST	2	0	0	0	0	0	0	0.0	0.000	0.00	0.00	0.00
												Statewide Crash Rate:	0.12	
17596	0560753 - 0.23	Int of KENSINGTON ST VERANDA ST	2	1	0	0	0	1	0	100.0	1.671	0.20	0.42	0.00
												Statewide Crash Rate:	0.12	
60334	0001S - 16.35	Int of RAMP ON FROM VERANDA ST VERANDA ST WORD	2	10	1	1	0	4	4	60.0	2.010	1.66	0.35	4.75
												Statewide Crash Rate:	0.10	
15786	0001X - 52.42	Int of OREGON ST VERANDA ST	2	2	0	0	0	1	1	50.0	4.144	0.16	0.33	0.00
												Statewide Crash Rate:	0.12	
15787	0001X - 52.33	Int of OLYMPIA ST VERANDA ST	2	2	0	0	0	0	2	0.0	3.044	0.22	0.36	0.00
												Statewide Crash Rate:	0.12	
69124	0001X - 52.50	Int of ENT TO MARTINS POINT VERANDA ST	9	2	0	0	1	0	1	50.0	4.875	0.14	1.14	0.00
												Statewide Crash Rate:	0.64	
74668	0001X - 52.27	Int of US 1 NB VERANDA ST	2	0	0	0	0	0	0	0.0	5.103	0.00	0.28	0.00
												Statewide Crash Rate:	0.10	
13554	0560037 - 0.04	Int of BATES CT BATES ST	2	0	0	0	0	0	0	0.0	2.461	0.00	0.38	0.00
												Statewide Crash Rate:	0.12	
13555	0560037 - 0.06	Non Int BATES ST	2	0	0	0	0	0	0	0.0	2.223	0.00	0.39	0.00
												Statewide Crash Rate:	0.12	
68336	0560037 - 0.07	Int of BATES ST BATES ST CUT	2	0	0	0	0	0	0	0.0	1.167	0.00	0.45	0.00
												Statewide Crash Rate:	0.12	

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
68338	0560037 - 0.09	Int of BATES ST RD INV 3209820	2	0	0	0	0	0	0	0.0	0.251	0.00	0.48	0.00
												Statewide Crash Rate:	0.12	
17592	3200512 - 0.10	Int of BATES ST CUT BAXTER BLVD CHAS LORING HWY	2	2	0	0	0	0	2	0.0	3.696	0.18	0.34	0.00
												Statewide Crash Rate:	0.12	
68337	3200512 - 0.02	Int of BATES ST CUT RD INV 3209820	2	0	0	0	0	0	0	0.0	0.920	0.00	0.48	0.00
												Statewide Crash Rate:	0.12	
18736	3201021 - 2.10	Int of CHAS LORING HWY CHAS LORING SB US 1 NB	2	0	0	0	0	0	0	0.0	1.830	0.00	0.41	0.00
												Statewide Crash Rate:	0.12	
18683	3201022 - 0.05	Int of BATES ST CHAS LORING SB US 1 NB	2	4	0	0	0	0	4	0.0	2.699	0.49	0.32	1.52
												Statewide Crash Rate:	0.10	
73046	3209819 - 0.02	Non Int BATES ST	2	0	0	0	0	0	0	0.0	1.043	0.00	0.46	0.00
												Statewide Crash Rate:	0.12	
13575	0560599 - 0.18	Int of PRESUMPSCOT ST SAVOY ST	2	0	0	0	0	0	0	0.0	2.558	0.00	0.38	0.00
												Statewide Crash Rate:	0.12	
13571	0560599 - 0.23	Int of PRESUMPSCOT ST SHERWOOD ST	2	5	0	0	0	0	5	0.0	2.735	0.61	0.37	1.64
												Statewide Crash Rate:	0.12	
17588	0560599 - 0.52	Non Int PRESUMPSCOT ST	2	0	0	0	0	0	0	0.0	1.686	0.00	0.42	0.00
												Statewide Crash Rate:	0.12	
17586	0560599 - 0.46	Int of GRAFTON ST PRESUMPSCOT ST	2	0	0	0	0	0	0	0.0	1.838	0.00	0.41	0.00
												Statewide Crash Rate:	0.12	
13581	0560599 - 0.40	Int of PRESUMPSCOT ST PROVIDENCE ST	2	1	0	0	0	0	1	0.0	2.153	0.15	0.39	0.00
												Statewide Crash Rate:	0.12	
13557	0560599 - 0.34	Int of BERKSHIRE RD PRESUMPSCOT ST	2	0	0	0	0	0	0	0.0	2.301	0.00	0.39	0.00
												Statewide Crash Rate:	0.12	
13573	3209966 - 0.14	End of SHERWOOD ST	2	0	0	0	0	0	0	0.0	0.035	0.00	-1.92	0.00
												Statewide Crash Rate:	0.12	
Study Years:	3.00	**NODE TOTALS:**		130	1	3	7	28	89	30.0	188.120	0.23	0.26	0.89

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
17036	18737	3123985	0 - 0.06	0026X - 1.21	0.06	2	8	0	0	2	1	5	37.5	0.00532	501.51	435.38	1.15
Int of GALVIN ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
17036	17037	3120740	0 - 0.05	0026X - 1.27	0.05	2	4	0	0	0	1	3	25.0	0.00450	296.57	454.10	0.00
Int of GALVIN ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
13583	17037	3123939	0 - 0.03	0026X - 1.32	0.03	2	5	0	0	0	0	5	0.0	0.00267	624.59	519.22	1.20
Int of CHURCHILL ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
13583	17038	3130464	0 - 0.06	0026X - 1.35	0.06	2	4	0	0	0	1	3	25.0	0.00524	254.42	436.96	0.00
Int of CHURCHILL ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
17038	17039	3129290	0 - 0.09	0026X - 1.41	0.09	2	9	0	0	1	1	6	25.0	0.00625	480.15	418.41	1.15
Int of PRESUMPSCOT ST W PRESUMPSCOT ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
13547	17039	188353	0 - 0.05	0026X - 1.50	0.05	2	3	0	1	0	1	1	66.7	0.00344	290.66	486.20	0.00
Int of JOHANSEN ST, WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
13547	17040	3130189	0 - 0.01	0026X - 1.55	0.01	2	0	0	0	0	0	0	0.0	0.00067	0.00	726.09	0.00
Int of JOHANSEN ST, WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
17040	17041	3122273	0 - 0.04	0026X - 1.56	0.04	2	2	0	0	0	0	2	0.0	0.00258	258.86	524.02	0.00
Int of OAKLEY ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
17041	17042	3117949	0 - 0.05	0026X - 1.60	0.05	2	1	0	0	0	0	1	0.0	0.00331	100.74	491.11	0.00
Int of ALTON ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
17042	17043	3117950	0 - 0.05	0026X - 1.65	0.05	2	0	0	0	0	0	0	0.0	0.00335	0.00	489.59	0.00
Int of INVERNESS ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
17043	17044	3122274	0 - 0.05	0026X - 1.70	0.05	2	1	0	0	0	0	1	0.0	0.00350	95.33	484.17	0.00
Int of E KIDDER ST W KIDDER ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
13532	17044	3123712	0 - 0.01	0026X - 1.75	0.01	2	0	0	0	0	0	0	0.0	0.00068	0.00	724.31	0.00
Int of FERNALD ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
13532	17045	3120381	0 - 0.12	0026X - 1.76	0.12	2	7	0	0	1	1	5	28.6	0.00795	293.67	394.95	0.74
Int of FERNALD ST WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
17045	17046	3122275	0 - 0.10	0026X - 1.88	0.10	2	12	0	0	1	2	9	25.0	0.00594	673.57	423.65	1.59
Int of OCEAN AV WASHINGTON AV				ST RTE 26											Statewide Crash Rate: 187.47		
13490	71532	4047222	0 - 0.08	0009X - 64	0.08	2	0	0	0	0	0	0	0.0	0.00195	0.00	490.54	0.00
Int of BROOKSIDE RD OCEAN AV				ST RTE 9											Statewide Crash Rate: 155.59		
71532	13494	4047090	0 - 0.01	0009X - 64.08	0.01	2	0	0	0	0	0	0	0.0	0.00033	0.00	671.81	0.00
Int of ARBORETUM RD OCEAN AV				ST RTE 9											Statewide Crash Rate: 155.59		
13494	13496	3118903	0 - 0.06	0009X - 64.09	0.06	2	0	0	0	0	0	0	0.0	0.00165	0.00	511.05	0.00
Int of OCEAN AV ROSEDALE ST				ST RTE 9											Statewide Crash Rate: 155.59		
13496	13498	3131557	0 - 0.05	0009X - 64.15	0.05	2	2	0	0	0	1	1	50.0	0.00139	479.39	533.21	0.00
Int of MURRAY ST OCEAN AV				ST RTE 9											Statewide Crash Rate: 155.59		
13498	13514	188273	0 - 0.02	0009X - 64.20	0.02	2	0	0	0	0	0	0	0.0	0.00054	0.00	644.44	0.00
Int of OCEAN AV VICTOR RD				ST RTE 9											Statewide Crash Rate: 155.59		

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
13514	17045	3131558	0 - 0.16	0009X - 64.22	0.16	2	9	0	0	0	1	7	12.5	0.00385	779.51	411.32	1.90
Int of OCEAN AV PAYSON PARK DR				ST RTE 9											Statewide Crash Rate: 155.59		
12451	17045	3119184	0 - 0.09	0009X - 64.38	0.09	2	0	0	0	0	0	0	0.0	0.00137	0.00	535.47	0.00
Int of OCEAN AV, SLEMONS ST				ST RTE 9											Statewide Crash Rate: 155.59		
12451	13563	3119183	0 - 0.04	0009X - 64.47	0.04	2	0	0	0	0	0	0	0.0	0.00058	0.00	639.34	0.00
Int of OCEAN AV, SLEMONS ST				ST RTE 9											Statewide Crash Rate: 155.59		
13563	13579	3131561	0 - 0.07	0009X - 64.51	0.07	2	0	0	0	0	0	0	0.0	0.00114	0.00	558.28	0.00
Int of MORSE ST OCEAN AV				ST RTE 9											Statewide Crash Rate: 155.59		
13512	13579	3122200	0 - 0.05	0009X - 64.58	0.05	2	2	0	0	0	0	2	0.0	0.00076	872.45	608.59	1.43
Int of OCEAN AV RAINBOW MALL RD				ST RTE 9											Statewide Crash Rate: 155.59		
13512	13584	188291	0 - 0.01	0009X - 64.63	0.01	2	0	0	0	0	0	0	0.0	0.00016	0.00	584.63	0.00
Int of OCEAN AV RAINBOW MALL RD				ST RTE 9											Statewide Crash Rate: 155.59		
13567	18737	3106268	0 - 0.04	0560753 - 0	0.04	2	1	0	0	0	0	1	0.0	0.00070	475.65	618.54	0.00
Int of JORDAN ST, VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
13567	13576	188382	0 - 0.02	0560753 - 0.04	0.02	2	0	0	0	0	0	0	0.0	0.00037	0.00	669.99	0.00
Int of JORDAN ST, VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
70781	13576	3936420	0 - 0.04	0560753 - 0.06	0.04	2	1	0	0	0	0	1	0.0	0.00067	495.79	623.15	0.00
Int of SHERWOOD ST VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
13572	70781	3936419	0 - 0.01	0560753 - 0.10	0.01	2	0	0	0	0	0	0	0.0	0.00018	0.00	618.07	0.00
Int of SHERWOOD ST VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
13572	17594	3123938	0 - 0.08	0560753 - 0.11	0.08	2	1	0	0	1	0	0	100.0	0.00119	280.27	553.39	0.00
Int of SHERWOOD ST VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
17594	17596	193314	0 - 0.04	0560753 - 0.19	0.04	2	0	0	0	0	0	0	0.0	0.00056	0.00	642.12	0.00
Int of DALTON ST VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
17596	17610	3106608	0 - 0.05	0560753 - 0.23	0.05	2	0	0	0	0	0	0	0.0	0.00086	0.00	594.58	0.00
Int of KENSINGTON ST VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
17609	17610	3106609	0 - 0.01	0560753 - 0.28	0.01	2	0	0	0	0	0	0	0.0	0.00016	0.00	588.07	0.00
Int of UPLAND AV, VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
17609	17614	3130048	0 - 0.04	0560753 - 0.29	0.04	2	0	0	0	0	0	0	0.0	0.00064	0.00	627.67	0.00
Int of UPLAND AV, VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
17612	17614	3122281	0 - 0.05	0560753 - 0.33	0.05	2	0	0	0	0	0	0	0.0	0.00076	0.00	609.48	0.00
Int of FAYETTE ST HAWTHORNE ST VERANDA ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
60334	17612	5402045	0 - 0.02	0560753 - 0.38	0.02	2	0	0	0	0	0	0	0.0	0.00029	0.00	670.69	0.00
Int of RAMP ON FROM VERANDA ST VERANDA ST WORDSWORTH ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
60334	17612	5402045	0.02 - 0.05	0560753 - 0.38	0.03	2	1	0	0	0	0	0	0.0	0.00044	754.25	660.92	1.14
Int of RAMP ON FROM VERANDA ST VERANDA ST WORDSWORTH ST				RD INV 05 60753											Statewide Crash Rate: 155.59		
74668	60334	5402069	0 - 0.04	0001S - 16.28	0.04	2	0	0	0	0	0	0	0.0	0.00095	0.00	581.51	0.00
Int of US 1 NB VERANDA ST				US 1 SB											Statewide Crash Rate: 155.59		

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
74668	60334	5402069	0.04 - 0.07	0001S - 16.32	0.03	2	0	0	0	0	0	0	0.0	0.00072	0.00	616.20	0.00
Int of US 1 NB VERANDA ST				US 1 SB											Statewide Crash Rate: 155.59		
15787	74668	5402070	0 - 0.06	0001X - 52.27	0.06	2	1	0	0	0	0	1	0.0	0.00181	184.49	499.79	0.00
Int of OLYMPIA ST VERANDA ST				US 1											Statewide Crash Rate: 155.59		
15786	15787	5402071	0 - 0.09	0001X - 52.33	0.09	2	0	0	0	0	0	0	0.0	0.00260	0.00	455.53	0.00
Int of OREGON ST VERANDA ST				US 1											Statewide Crash Rate: 155.59		
69124	15786	3509045	0 - 0.08	0001X - 52.42	0.08	2	0	0	0	0	0	0	0.0	0.00423	0.00	401.36	0.00
Int of ENT TO MARTINS POINT VERANDA ST				US 1											Statewide Crash Rate: 155.59		
13554	18737	3131559	0 - 0.04	0560037 - 0	0.04	2	0	0	0	0	0	0	0.0	0.00095	0.00	581.88	0.00
Int of BATES CT BATES ST				RD INV 05 60037											Statewide Crash Rate: 155.59		
13554	13555	3139091	0 - 0.02	0560037 - 0.04	0.02	2	0	0	0	0	0	0	0.0	0.00047	0.00	656.39	0.00
Int of BATES CT BATES ST				RD INV 05 60037											Statewide Crash Rate: 155.59		
13555	68336	3503103	0 - 0.01	0560037 - 0.06	0.01	2	0	0	0	0	0	0	0.0	0.00012	0.00	444.66	0.00
Non Int BATES ST				RD INV 05 60037											Statewide Crash Rate: 155.59		
68336	68338	3503129	0 - 0.02	0560037 - 0.07	0.02	2	0	0	0	0	0	0	0.0	0.00005	0.00	-577.91	0.00
Int of BATES ST BATES ST CUT				RD INV 05 60037											Statewide Crash Rate: 155.59		
68338	18683	3503130	0 - 0.02	0560037 - 0.09	0.02	2	0	0	0	0	0	0	0.0	0.00005	0.00	-548.10	0.00
Int of BATES ST RD INV 3209820				RD INV 05 60037											Statewide Crash Rate: 155.59		
68336	68337	3503127	0 - 0.02	3200512 - 0	0.02	2	0	0	0	0	0	0	0.0	0.00018	0.00	617.37	0.00
Int of BATES ST BATES ST CUT				RD INV 3200512											Statewide Crash Rate: 155.59		
68337	17592	3503128	0 - 0.08	3200512 - 0.02	0.08	2	0	0	0	0	0	0	0.0	0.00075	0.00	611.15	0.00
Int of BATES ST CUT RD INV 3209820				RD INV 3200512											Statewide Crash Rate: 155.59		
17592	18736	3119268	0 - 0.04	3201021 - 2.06	0.04	2	0	0	0	0	0	0	0.0	0.00092	0.00	586.34	0.00
Int of BATES ST CUT BAXTER BLVD CHAS LORING HWY				RD INV 3201021											Statewide Crash Rate: 155.59		
18683	18736	2074332	0 - 0.05	3201022 - 0	0.05	2	1	0	0	1	0	0	100.0	0.00081	413.42	602.21	0.00
Int of BATES ST CHAS LORING SB US 1 NB				RD INV 3201022											Statewide Crash Rate: 155.59		
18683	73046	4352985	0 - 0.02	3209819 - 0	0.02	2	0	0	0	0	0	0	0.0	0.00021	0.00	641.04	0.00
Int of BATES ST CHAS LORING SB US 1 NB				RD INV 3209819											Statewide Crash Rate: 155.59		
73046	13555	4352986	0 - 0.04	3209819 - 0.02	0.04	2	0	0	0	0	0	0	0.0	0.00042	0.00	664.36	0.00
Non Int BATES ST				RD INV 3209819											Statewide Crash Rate: 155.59		
13575	17038	3106271	0 - 0.06	0560599 - 0.12	0.06	2	4	0	0	0	0	4	0.0	0.00153	872.25	521.05	1.67
Int of PRESUMPSCOT ST SAVOY ST				RD INV 05 60599											Statewide Crash Rate: 155.59		
13571	13575	3106269	0 - 0.05	0560599 - 0.18	0.05	2	0	0	0	0	0	0	0.0	0.00125	0.00	546.99	0.00
Int of PRESUMPSCOT ST SHERWOOD ST				RD INV 05 60599											Statewide Crash Rate: 155.59		
13557	13571	3106267	0 - 0.11	0560599 - 0.23	0.11	2	4	0	0	0	0	4	0.0	0.00246	541.65	461.79	1.17
Int of BERKSHIRE RD PRESUMPSCOT ST				RD INV 05 60599											Statewide Crash Rate: 155.59		
13557	13581	3131560	0 - 0.06	0560599 - 0.34	0.06	2	0	0	0	0	0	0	0.0	0.00138	0.00	534.42	0.00
Int of BERKSHIRE RD PRESUMPSCOT ST				RD INV 05 60599											Statewide Crash Rate: 155.59		
13581	17586	3106272	0 - 0.06	0560599 - 0.40	0.06	2	2	0	0	0	1	1	50.0	0.00115	580.83	557.96	1.04
Int of PRESUMPSCOT ST PROVIDENCE ST				RD INV 05 60599											Statewide Crash Rate: 155.59		

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
17586	17588	3106607	0 - 0.06	0560599 - 0.46	0.06	2	2	0	0	0	0	2	0.0	0.00101	658.90	574.08	1.15
Int of GRAFTON ST PRESUMPSCOT ST				RD INV 05 60599											Statewide Crash Rate: 155.59		
70781	13573	5080143	0 - 0.14	3209966 - 0	0.14	2	1	0	0	0	0	1	0.0	0.00010	3433.24	1378.74	2.49
Int of SHERWOOD ST VERANDA ST				RD INV3209966											Statewide Crash Rate: 334.56		
Study Years:	3.00			**Section Totals:**	3.04		88	0	1	7	11	66	21.6	0.10002	293.28	233.67	1.26
				Grand Totals:	3.04		218	1	4	14	39	155	26.6	0.10002	726.52	338.49	2.15

Crash Summary

Section Details														
Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
17036	18737	3123985	0 - 0.06	0026X - 1.21	8	0	0	2	1	5	2022-31026	10/26/2022	1.22	PD
											2020-19629	08/18/2020	1.23	PD
											2022-10613	03/31/2022	1.23	PD
											2021-30654	11/08/2021	1.23	PD
											2020-16740	06/20/2020	1.24	PD
											2021-7801	03/28/2021	1.25	B
											2022-6794	02/27/2022	1.25	C
											2021-24542	09/15/2021	1.26	B
17036	17037	3120740	0 - 0.05	0026X - 1.27	4	0	0	0	1	3	2022-11713	04/26/2022	1.29	PD
											2020-570	01/08/2020	1.29	PD
											2022-19241	07/08/2022	1.29	PD
											2021-10548	05/02/2021	1.31	C
13583	17037	3123939	0 - 0.03	0026X - 1.32	5	0	0	0	0	5	2021-23522	09/05/2021	1.33	PD
											2020-24631	10/14/2020	1.34	PD
											2022-18638	07/05/2022	1.34	PD
											2021-27480	10/13/2021	1.34	PD
											2021-35328	12/14/2021	1.34	PD
13583	17038	3130464	0 - 0.06	0026X - 1.35	4	0	0	0	1	3	2020-8325	03/17/2020	1.38	PD
											2021-1283	01/08/2021	1.39	PD
											2021-14548	06/13/2021	1.40	C
											2022-95	01/04/2022	1.40	PD
17038	17039	3129290	0 - 0.09	0026X - 1.41	9	0	0	1	1	6	2020-5795	01/24/2020	1.43	PD
											2021-5642	03/02/2021	1.44	PD
											2021-28981	10/26/2021	1.44	PD
											2021-3581	02/09/2021	1.45	PD
											2022-19230	07/09/2022	1.46	B
											2022-31358	10/28/2022	1.46	C
											2020-577	01/08/2020	1.46	PD
											2022-37357	12/15/2022	1.48	
											2022-15896	06/08/2022	1.48	PD
13547	17039	188353	0 - 0.05	0026X - 1.50	3	0	1	0	1	1	2022-20681	07/23/2022	1.52	C
											2022-26880	09/16/2022	1.53	A
											2021-31682	11/12/2021	1.53	PD

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
13547	17040	3130189	0 - 0.01	0026X - 1.55	0	0	0	0	0	0				
17040	17041	3122273	0 - 0.04	0026X - 1.56	2	0	0	0	0	2	2021-33246	11/24/2021	1.57	PD
											2021-10804	04/12/2021	1.59	PD
17041	17042	3117949	0 - 0.05	0026X - 1.60	1	0	0	0	0	1	2022-24535	08/27/2022	1.64	PD
17042	17043	3117950	0 - 0.05	0026X - 1.65	0	0	0	0	0	0				
17043	17044	3122274	0 - 0.05	0026X - 1.70	1	0	0	0	0	1	2020-1425	01/15/2020	1.74	PD
13532	17044	3123712	0 - 0.01	0026X - 1.75	0	0	0	0	0	0				
13532	17045	3120381	0 - 0.12	0026X - 1.76	7	0	0	1	1	5	2020-3007	01/26/2020	1.79	PD
											2020-19019	08/10/2020	1.80	PD
											2022-26242	09/15/2022	1.83	C
											2021-27342	10/08/2021	1.83	PD
											2020-15032	06/25/2020	1.84	PD
											2022-8648	03/16/2022	1.85	B
											2021-2870	01/27/2021	1.87	PD
17045	17046	3122275	0 - 0.10	0026X - 1.88	12	0	0	1	2	9	2020-22434	09/19/2020	1.89	PD
											2021-11755	05/17/2021	1.89	PD
											2021-21220	08/13/2021	1.91	C
											2020-27004	11/05/2020	1.91	PD
											2020-19456	08/17/2020	1.91	PD
											2022-22921	08/14/2022	1.91	PD
											2022-34236	11/15/2022	1.91	PD
											2020-284	01/04/2020	1.91	PD
											2022-12824	05/06/2022	1.91	PD
											2021-17026	06/21/2021	1.92	PD
											2020-13567	06/08/2020	1.93	C
											2020-30644	12/07/2020	1.97	B
13490	71532	4047222	0 - 0.08	0009X - 64	0	0	0	0	0	0				
71532	13494	4047090	0 - 0.01	0009X - 64.08	0	0	0	0	0	0				
13494	13496	3118903	0 - 0.06	0009X - 64.09	0	0	0	0	0	0				
13496	13498	3131557	0 - 0.05	0009X - 64.15	2	0	0	0	1	1	2021-28907	10/25/2021	64.17	C
											2021-32647	11/23/2021	64.19	PD
13498	13514	188273	0 - 0.02	0009X - 64.20	0	0	0	0	0	0				

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
13514	17045	3131558	0 - 0.16	0009X - 64.22	9	0	0	0	1	7	2022-3208	01/31/2022	64.26	PD
											2022-26088	09/14/2022	64.35	PD
											2021-19301	07/27/2021	64.35	PD
											2021-16501	07/01/2021	64.35	PD
											2022-31649	09/23/2022	64.35	PD
											2021-21370	08/09/2021	64.37	
											2021-7238	03/20/2021	64.37	C
											2022-14394	05/26/2022	64.37	PD
											2022-4712	02/10/2022	64.37	PD
12451	17045	3119184	0 - 0.09	0009X - 64.38	0	0	0	0	0	0				
12451	13563	3119183	0 - 0.04	0009X - 64.47	0	0	0	0	0	0				
13563	13579	3131561	0 - 0.07	0009X - 64.51	0	0	0	0	0	0				
13512	13579	3122200	0 - 0.05	0009X - 64.58	2	0	0	0	0	2	2021-7927	03/29/2021	64.59	PD
											2021-10696	05/04/2021	64.60	PD
13512	13584	188291	0 - 0.01	0009X - 64.63	0	0	0	0	0	0				
13567	18737	3106268	0 - 0.04	0560753 - 0	1	0	0	0	0	1	2020-4178	02/06/2020	0.03	PD
13567	13576	188382	0 - 0.02	0560753 - 0.04	0	0	0	0	0	0				
70781	13576	3936420	0 - 0.04	0560753 - 0.06	1	0	0	0	0	1	2022-21589	08/01/2022	0.08	PD
13572	70781	3936419	0 - 0.01	0560753 - 0.10	0	0	0	0	0	0				
13572	17594	3123938	0 - 0.08	0560753 - 0.11	1	0	0	1	0	0	2021-30986	11/10/2021	0.16	B
17594	17596	193314	0 - 0.04	0560753 - 0.19	0	0	0	0	0	0				
17596	17610	3106608	0 - 0.05	0560753 - 0.23	0	0	0	0	0	0				
17609	17610	3106609	0 - 0.01	0560753 - 0.28	0	0	0	0	0	0				
17609	17614	3130048	0 - 0.04	0560753 - 0.29	0	0	0	0	0	0				
17612	17614	3122281	0 - 0.05	0560753 - 0.33	0	0	0	0	0	0				
60334	17612	5402045	0 - 0.02	0560753 - 0.38	0	0	0	0	0	0				
60334	17612	5402045	0.02 - 0.05	0560753 - 0.38	1	0	0	0	0	0	2022-30998	10/27/2022	0.40	
74668	60334	5402069	0.04 - 0.07	0001S - 16.28	0	0	0	0	0	0				
74668	60334	5402069	0 - 0.04	0001S - 16.28	0	0	0	0	0	0				
15787	74668	5402070	0 - 0.06	0001X - 52.27	1	0	0	0	0	1	2021-29118	10/26/2021	52.28	PD
15786	15787	5402071	0 - 0.09	0001X - 52.33	0	0	0	0	0	0				
69124	15786	3509045	0 - 0.08	0001X - 52.42	0	0	0	0	0	0				
13554	18737	3131559	0 - 0.04	0560037 - 0	0	0	0	0	0	0				
13554	13555	3139091	0 - 0.02	0560037 - 0.04	0	0	0	0	0	0				
13555	68336	3503103	0 - 0.01	0560037 - 0.06	0	0	0	0	0	0				
68336	68338	3503129	0 - 0.02	0560037 - 0.07	0	0	0	0	0	0				
68338	18683	3503130	0 - 0.02	0560037 - 0.09	0	0	0	0	0	0				

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
68336	68337	3503127	0 - 0.02	3200512 - 0	0	0	0	0	0	0				
68337	17592	3503128	0 - 0.08	3200512 - 0.02	0	0	0	0	0	0				
17592	18736	3119268	0 - 0.04	3201021 - 2.06	0	0	0	0	0	0				
18683	18736	2074332	0 - 0.05	3201022 - 0	1	0	0	1	0	0	2020-23256	09/29/2020	0.01	B
18683	73046	4352985	0 - 0.02	3209819 - 0	0	0	0	0	0	0				
73046	13555	4352986	0 - 0.04	3209819 - 0.02	0	0	0	0	0	0				
13575	17038	3106271	0 - 0.06	0560599 - 0.12	4	0	0	0	0	4	2020-2143	01/17/2020	0.12	PD
											2020-26110	10/30/2020	0.15	PD
											2021-20907	08/12/2021	0.15	PD
											2021-4517	02/20/2021	0.15	PD
13571	13575	3106269	0 - 0.05	0560599 - 0.18	0	0	0	0	0	0				
13557	13571	3106267	0 - 0.11	0560599 - 0.23	4	0	0	0	0	4	2020-474	01/07/2020	0.28	PD
											2022-34548	11/22/2022	0.31	PD
											2022-30031	10/19/2022	0.31	PD
											2021-23912	09/09/2021	0.33	PD
13557	13581	3131560	0 - 0.06	0560599 - 0.34	0	0	0	0	0	0				
13581	17586	3106272	0 - 0.06	0560599 - 0.40	2	0	0	0	1	1	2022-37245	12/14/2022	0.43	PD
											2022-21108	07/27/2022	0.44	C
17586	17588	3106607	0 - 0.06	0560599 - 0.46	2	0	0	0	0	2	2021-3209	02/06/2021	0.48	PD
											2020-19666	08/19/2020	0.48	PD
70781	13573	5080143	0 - 0.14	3209966 - 0	1	0	0	0	0	1	2020-8326	03/17/2020	0.02	PD
				Totals:	88	0	1	7	11	66				

Crash Summary II - Characteristics

Crashes by Day and Hour

	AM												PM												
	Hour of Day																								
Day Of Week	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Un**	**Tot**
SUNDAY	1	0	0	0	0	0	0	0	1	2	0	3	1	1	3	1	1	2	3	0	2	0	0	0	0	21
MONDAY	0	0	0	0	0	0	1	1	4	2	2	2	1	3	4	2	3	2	0	0	1	0	0	0	0	28
TUESDAY	0	0	0	0	0	0	4	3	0	1	4	3	3	4	2	4	3	5	4	2	1	0	0	1	0	44
WEDNESDAY	0	0	0	0	0	0	2	1	5	1	0	2	8	3	3	3	4	5	1	1	0	1	0	1	0	41
THURSDAY	1	0	0	1	1	0	1	3	3	2	2	0	0	2	3	3	0	5	0	1	1	0	1	0	0	30
FRIDAY	0	0	0	0	0	0	0	2	6	0	1	3	0	0	1	5	3	3	3	2	0	0	1	0	0	30
SATURDAY	0	0	0	0	1	0	0	0	0	2	2	2	1	3	3	3	2	1	1	0	1	1	1	0	0	24
Totals	2	0	0	1	2	0	8	10	19	10	11	15	14	16	19	21	16	23	12	6	6	2	3	2	0	**218**

Vehicle Counts by Type

Unit Type	Total
1-Passenger Car	211
2-(Sport) Utility Vehicle	131
3-Passenger Van	3
4-Cargo Van (10K lbs or Less)	4
5-Pickup	38
6-Motor Home	0
7-School Bus	1
8-Transit Bus	0
9-Motor Coach	0
10-Other Bus	0
11-Motorcycle	1
12-Moped	1
13-Low Speed Vehicle	0
14-Autocycle	0
15-Experimental	0
16-Other Light Trucks (10,000 lbs or Less)	2
17-Medium/Heavy Trucks (More than 10,000 lbs)	13
18-ATV - (4 wheel)	0
20-ATV - (2 wheel)	0
21-Snowmobile	0
22-Pedestrian	0

Unit Type	Total
23-Bicyclist	8
24-Witness	33
25-Other	8
26-Construction	1
27-Farm Vehicle	0
28-Horse and Buggy	0
Total	**455**

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	24	160	7	0	0	0	191
Ran Off Roadway	5	0	0	0	0	0	5
Failed to Yield Right-of-Way	59	4	0	0	0	0	63
Ran Red Light	3	0	0	0	0	0	3
Ran Stop Sign	5	0	0	0	0	0	5
Disregarded Other Traffic Sign	2	0	0	0	0	0	2
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	3	3	0	0	0	0	6
Drove Too Fast For Conditions	4	0	0	0	0	0	4
Improper Turn	4	0	0	0	0	0	4
Improper Backing	4	2	0	0	0	0	6
Improper Passing	5	1	0	0	0	0	6
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	53	4	0	0	0	0	57
Failed to Keep in Proper Lane	15	0	0	0	0	0	15
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	6	0	0	0	0	0	6
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	1	0	0	0	0	0	1
Over-Correcting/Over-Steering	3	0	0	0	0	0	3
Other Contributing Action	9	5	0	0	0	0	14
Unknown	1	1	0	0	0	0	2
Total	**206**	**180**	**7**	**0**	**0**	**0**	**393**

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	193	176	7	0	0	8	384
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	1	0	0	0	0	0	1
Ill (Sick)	1	0	0	0	0	0	1
Asleep or Fatigued	1	0	0	0	0	0	1
Under the Influence of Medications/Drugs/Alcohol	3	0	0	0	0	0	3
Other	2	4	0	0	0	0	6
Total	**201**	**180**	**7**	**0**	**0**	**8**	**396**

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	1	0	0	0	0	1
10-14	0	0	0	0	0	0
15-19	34	0	0	0	0	34
20-24	44	0	0	0	0	44
25-29	45	0	0	0	0	45
30-39	87	0	0	0	0	87
40-49	70	0	0	0	0	70
50-59	40	0	0	0	0	40
60-69	41	0	0	0	0	41
70-79	21	0	0	0	0	21
80-Over	9	0	0	0	0	9
Unknown	22	8	0	0	0	30
Total	**414**	**8**	**0**	**0**	**0**	**422**

Crash Summary II - Characteristics

Most Harmful Event

Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	1	38-Other Fixed Object (wall, building, tunnel, etc.)	1
2-Fire / Explosion	0	39-Unknown	15
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	**Total**	**407**
6-Fell / Jumped from Motor Vehicle	1		
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	1		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	373		
14-Parked Motor Vehicle	8		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	1		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	0		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	1		
31-Tree (Standing)	1		
32-Utility Pole / Light Support	4		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Injury Data

Severity Code	Injury Crashes	Number Of Injuries
K	1	1
A	4	4
B	14	19
C	39	58
PD	155	0
Total	**213**	**82**

Road Character

Road Grade	Total
1-Level	185
2-On Grade	33
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
Total	**218**

Traffic Control Devices

Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	74
2-Traffic Signals (Flashing)	2
3-Advisory/Warning Sign	2
4-Stop Signs - All Approaches	1
5-Stop Signs - Other	29
6-Yield Sign	3
7-Curve Warning Sign	1
8-Officer, Flagman, School Patrol	2
9-School Bus Stop Arm	0
10-School Zone Sign	1
11-R.R. Crossing Device	0
12-No Passing Zone	1
13-None	101
14-Other	1
Total	**218**

Light

Light Condition	Total
1-Daylight	173
2-Dawn	3
3-Dusk	3
4-Dark - Lighted	39
5-Dark - Not Lighted	0
6-Dark - Unknown Lighting	0
7-Unknown	0
Total	**218**

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2020	2021	2022	Total
JANUARY	13	4	7	24
FEBRUARY	7	9	5	21
MARCH	6	5	6	17
APRIL	3	4	1	8
MAY	3	5	7	15
JUNE	8	7	2	17
JULY	9	6	8	23
AUGUST	9	5	7	21
SEPTEMBER	7	5	6	18
OCTOBER	10	10	7	27
NOVEMBER	1	6	6	13
DECEMBER	4	4	6	14
Total	**80**	**70**	**68**	**218**

Report is limited to the last 10 years of data.

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	38	0	19	44	0	3	0	0	0	0	0	0	0	0	104
Head-on - Sideswipe	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3
Intersection Movement	0	0	22	26	0	31	0	0	0	0	0	0	0	0	79
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	8	0	5	6	0	1	0	0	0	0	0	0	0	0	20
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	1	0	2	3	0	2	0	0	0	0	0	0	0	0	8
Other	3	0	0	1	0	0	0	0	0	0	0	0	0	0	4
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**52**	**0**	**49**	**80**	**0**	**37**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**218**

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	23	0	0	0	0	0	0	0	0	0	1	24
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	2	0	0	0	0	0	0	0	0	0	0	2
Daylight	118	2	0	0	0	0	0	1	0	0	8	129
Dusk	2	0	0	0	0	0	0	0	0	0	0	2
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Cloudy												
Dark - Lighted	2	0	0	0	0	0	0	0	0	0	2	4
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	1	1
Daylight	23	0	0	0	0	0	0	0	0	0	5	28
Dusk	0	0	0	0	0	0	0	0	0	0	1	1
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	1	0	0	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	7	7
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	1	0	0	12	13
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	3	0	0	0	3
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	1	0	0	1	2
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**171**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**38**	**218**

H. C. L.
CRASH COLLISION DIAGRAM
DATA PACKAGE

COUNTY: **CUMBERLAND** TOWN: **PORTLAND**

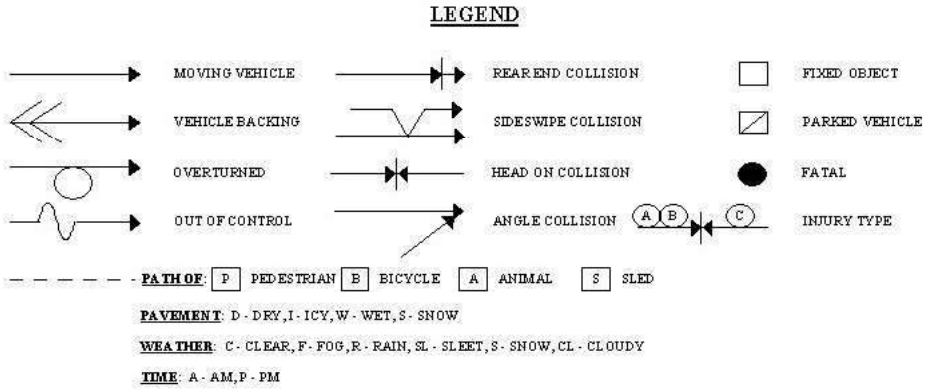
LOW NODE: **13514** HIGH NODE: **17045** REGION: **1** U/R: **URBAN**

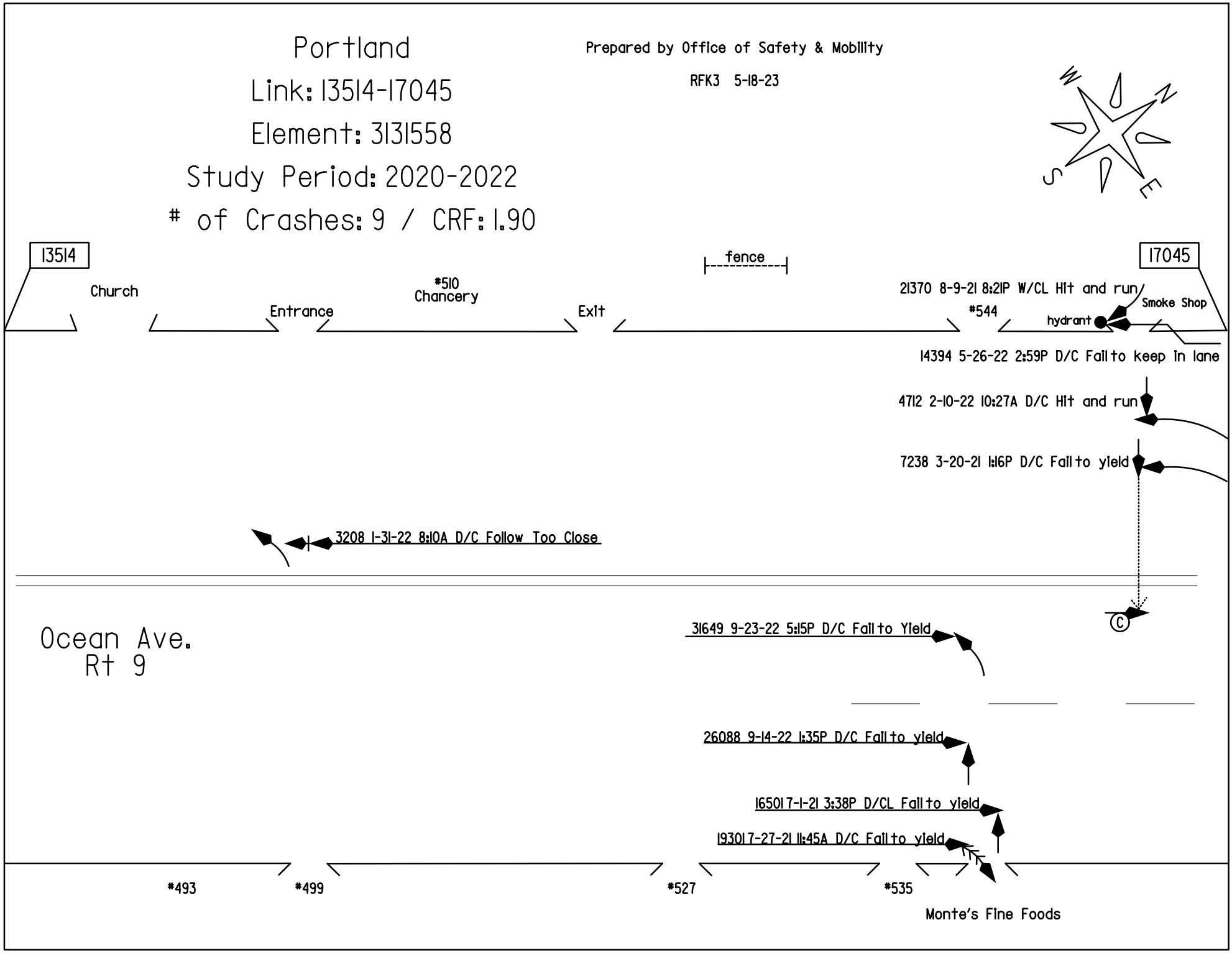
DESCRIPTION: **Ocean Ave from Catafalque Dr to Washington Ave**

RTE # / RD #: **0009X** DATE DRAWN: **5/18/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020** STUDY TO: **12/31/2022**

CRASH RATE: **779.51** CRF: **1.9** % INJURY: **11.1** TOTAL CRASHES: **9**




Portland
Link: 13514-17045
Element: 3131558
Study Period: 2020-2022
# of Crashes: 9 / CRF: 1.90
Prepared by Office of Safety & Mobility
RFK3 5-18-23
W
N
S
E
13514
17045
Church
Entrance
#510
Chancery
Exit
fence
21370 8-9-21 8:21P W/CL Hit and run
#544
Smoke Shop
hydrant
14394 5-26-22 2:59P D/C Fail to keep in lane
4712 2-10-22 10:27A D/C Hit and run
7238 3-20-21 1:16P D/C Fail to yield
3208 1-31-22 8:10A D/C Follow Too Close
Ocean Ave.
Rt 9
31649 9-23-22 5:15P D/C Fail to Yield
26088 9-14-22 1:35P D/C Fail to yield
16501 7-1-21 3:38P D/CL Fail to yield
19301 7-27-21 11:45A D/C Fail to yield
#493
#499
#527
#535
Monte's Fine Foods

H. C. L.
CRASH COLLISION DIAGRAM
DATA PACKAGE

COUNTY: **CUMBERLAND** TOWN: **PORTLAND**

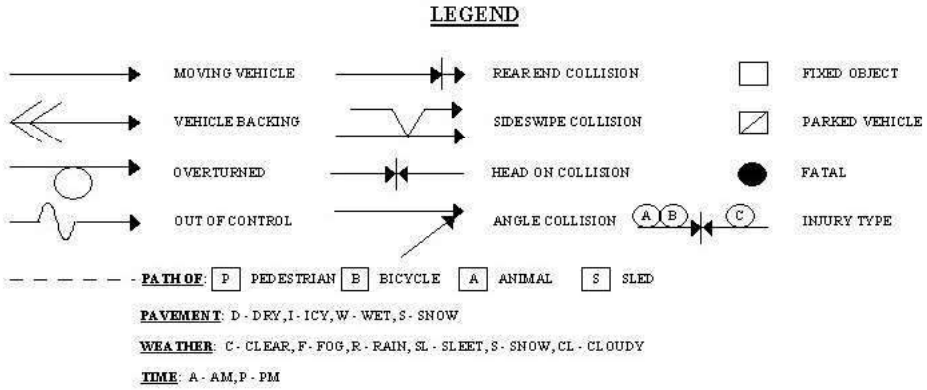
LOW NODE: **17036** HIGH NODE: **18737** REGION: **1** U/R: **URBAN**

DESCRIPTION: **Washington Ave from Galvin St to Bates St**

RTE # / RD #: **0026X** DATE DRAWN: **5/12/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020** STUDY TO: **12/31/2022**

CRASH RATE: **501.51** CRF: **1.15** % INJURY: **37.5** TOTAL CRASHES: **8**



Prepared by Office of Safety & Mobility

RFK3 5-12-23

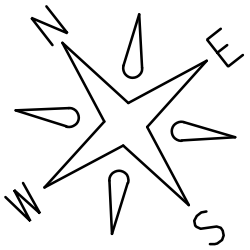
Portland

Link: 17036-18737

Element: 3123985

Study Period: 2020-2022

of Crashes: 8 / CRF: 1.15



17036

Driveway #521

18737

pole (B) 7801 3-28-21 9:00A D/CL Sick

6794 2-27-22 2:33P D/C Reckless driving (C)(C)(C)

19629 8-18-20 4:25P D/C Fail to Yield

30654 11-8-21 5:18P D/C Fail to Yield

31026 10-26-22 12:27P W/R Fail to yield

(B) 24542 9-15-21 12:21P D/CL Follow too close
laid down moped

10613 3-31-22 5:32P D/CL Fail to Yield

16740 6-20-20 10:30P D/C Hit and run

Washington Ave. (Rte. 26)

Driveway

Driveway

H. C. L.
CRASH COLLISION DIAGRAM
DATA PACKAGE

COUNTY: **CUMBERLAND** TOWN: **PORTLAND**

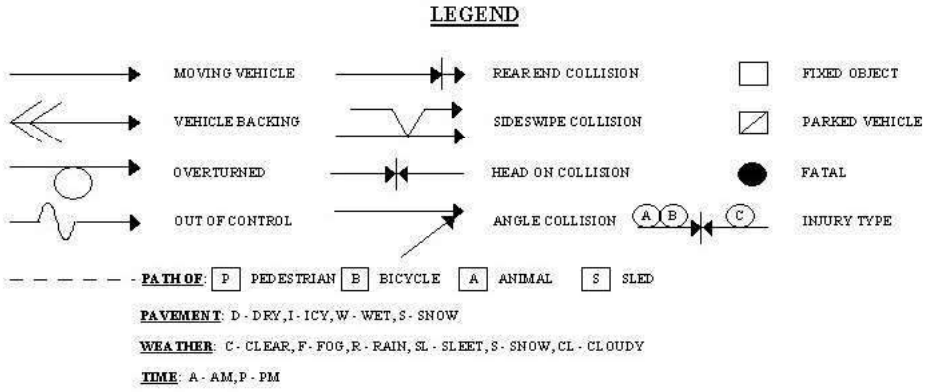
LOW NODE: **17038** HIGH NODE: **17039** REGION: **1** U/R: **URBAN**

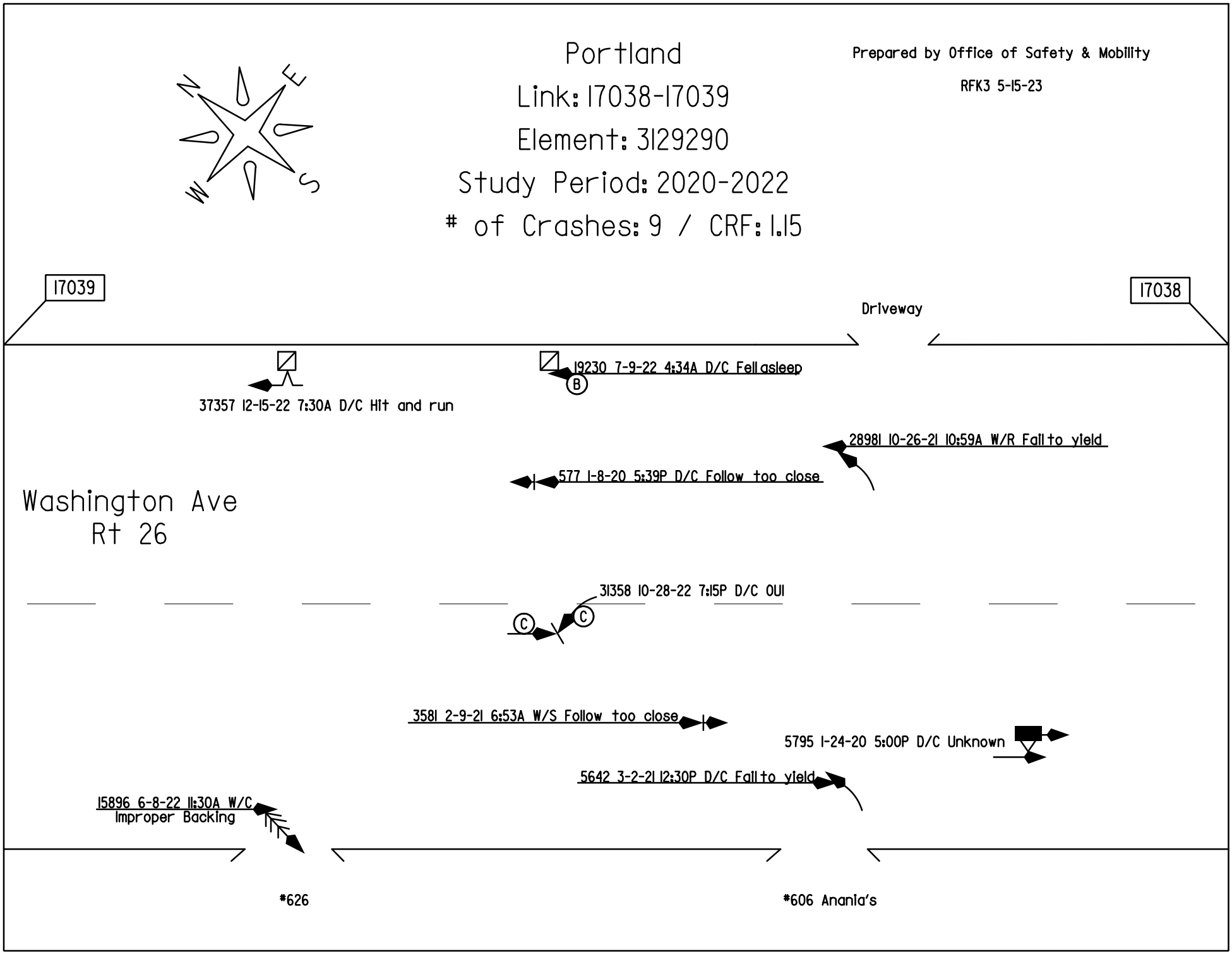
DESCRIPTION: **Washington Ave from Presumpscot St to Cummings**

RTE # / RD #: **0026X** DATE DRAWN: **5/15/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020** STUDY TO: **12/31/2022**

CRASH RATE: **480.15** CRF: **1.15** % INJURY: **22.2** TOTAL CRASHES: **9**




Portland
Link: 17038-17039
Element: 3129290
Study Period: 2020-2022
# of Crashes: 9 / CRF: 1.15
Prepared by Office of Safety & Mobility
RFK3 5-15-23
17039
17038
Driveway
37357 12-15-22 7:30A D/C Hit and run
19230 7-9-22 4:34A D/C Fellasleep
B
28981 10-26-21 10:59A W/R Fail to yield
577 1-8-20 5:39P D/C Follow too close
Washington Ave
Rt 26
31358 10-28-22 7:15P D/C OUI
C
C
3581 2-9-21 6:53A W/S Follow too close
5795 1-24-20 5:00P D/C Unknown
5642 3-2-21 12:30P D/C Fail to yield
15896 6-8-22 11:30A W/C
Improper Backing
#626
#606 Anania's

H. C. L.
CRASH COLLISION DIAGRAM
DATA PACKAGE

COUNTY: **CUMBERLAND** TOWN: **PORTLAND**

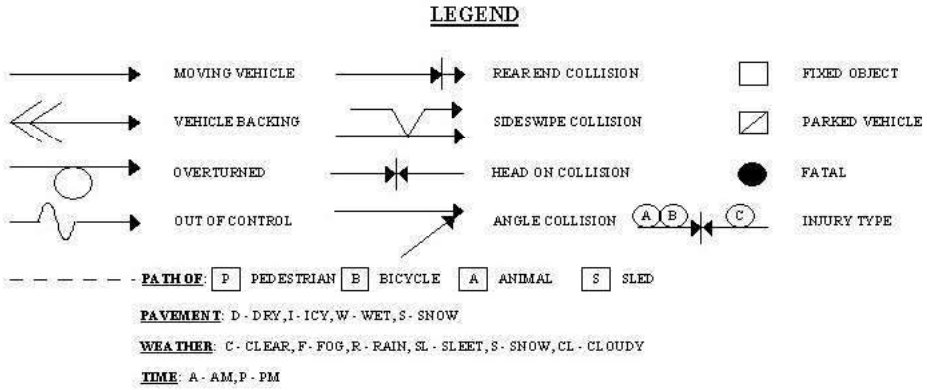
LOW NODE: **17045** HIGH NODE: **17046** REGION: **1** U/R: **URBAN**

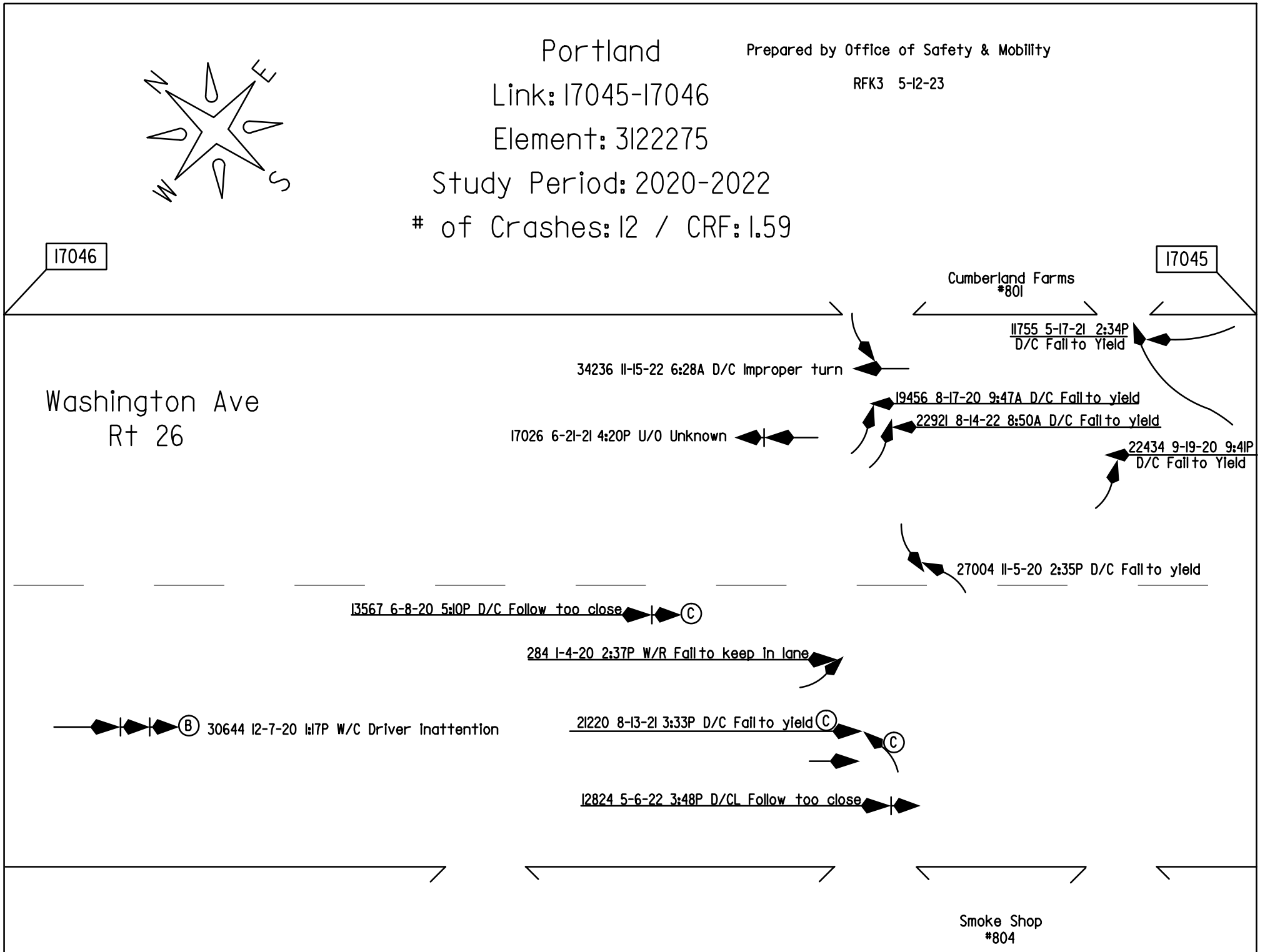
DESCRIPTION: **Washington Ave from Ocean Ave to Byfield Rd**

RTE # / RD #: **0026X** DATE DRAWN: **5/12/2023** DRAWN BY: **BOB K**

STUDY FROM: **1/1/2020** STUDY TO: **12/31/2022**

CRASH RATE: **673.57** CRF: **1.59** % INJURY: **25** TOTAL CRASHES: **12**




Portland
Link: 17045-17046
Element: 3122275
Study Period: 2020-2022
# of Crashes: 12 / CRF: 1.59
Prepared by Office of Safety & Mobility
RFK3 5-12-23
17046
17045
Cumberland Farms
#801
11755 5-17-21 2:34P
D/C Fail to Yield
34236 11-15-22 6:28A D/C Improper turn
19456 8-17-20 9:47A D/C Fail to yield
22921 8-14-22 8:50A D/C Fail to yield
17026 6-21-21 4:20P U/O Unknown
22434 9-19-20 9:41P
D/C Fail to Yield
Washington Ave
Rt 26
27004 11-5-20 2:35P D/C Fail to yield
13567 6-8-20 5:10P D/C Follow too close
C
284 1-4-20 2:37P W/R Fail to keep in lane
B
30644 12-7-20 1:17P W/C Driver Inattention
21220 8-13-21 3:33P D/C Fail to yield
C
C
12824 5-6-22 3:48P D/CL Follow too close
Smoke Shop
#804

3

Section 3: Development Entrances and Exits

3.A Entrance and Exit Locations

The site is located in the East Deering neighborhood of Portland, bounded by I-295, Sherwood Street, and Casco Bay. The site will be accessed directly off Sherwood Street into the proposed campus. All driveway locations are illustrated on the site plans as attachments to Section 1.

There are currently no existing bicycle accommodations on Sherwood Street, and incomplete sidewalks on Sherwood Street leading into the site. The Roux Institute is committed to improving Sherwood Street to accommodate bicycles and pedestrians in separate facilities (i.e. bike lanes and sidewalk) where possible with potential shared accommodations through the limited cross section under the I-295 bridge.

3.B Plan View

Attachment 1A shows the proposed site plan. As shown, the primary entrance to the site is via the end of Sherwood Street.

3.C Stopping Sight Distances

Since access to the site is an extension of Sherwood Street, sight lines are not applicable as vehicles enter and exit the site.

3.D Entrance/Exit Compliance with Design Requirements

Entrances and exits were designed to meet all the criteria specified in the City of Portland's Standard Details and Drawings.

4

Section 4: Title, Right, or Interest

4.A Evidence of Title, Right, or Interest

The proposed development is located on properties owned by the Applicant and identified as the following:

- 1 Beanpot Circle – 447 A001001

Attached are copies of the deeds associated with the property as well as a purchase and sales agreement between IDEALS and Northeastern University.

4.B Attachments

Attachment 4A Deed and Purchase and Sale Agreement

Attachment 4A

Deed and Purchase and Sale Agreement

[Execution Copy]

AGREEMENT FOR THE PURCHASE AND SALE OF REAL ESTATE

THIS AGREEMENT is effective as of August 30, 2021, by and between **B&G Foods North America, Inc.**, a Delaware Corporation (successor to **Heritage Acquisition Corp.**, herein "Heritage"**)** having a mailing address of 4 Gatehall Drive, Suite 110, Parsippany, New Jersey 07054 ("Seller") and **The Institute for Digital Engineering And Life Sciences**, a Maine non-profit corporation with an address of 100 Commercial Street, Portland, Maine 04101("Buyer"), WHO AGREE AS FOLLOWS:

WITNESSETH AS FOLLOWS:

1. PURCHASE AND SALE. Seller agrees to sell and Buyer agrees to buy, on the terms and conditions hereinafter set forth, approximately 13 acres of land and buildings generally situated at 1 Bean Pot Circle, Portland, Maine, together with all improvements thereon (except as specified below) and all rights and easements appurtenant thereto, which parcel is more particularly referenced by the City of Portland Assessor's Office as Map 447 Lot A001 and Lot A002 (although there is no separate assessed value or tax bill for Lot A-002) and described in certain deeds to Heritage recorded in the Cumberland County Registry of Deeds in Book 14616, at Page 50 and 14616, at Page 57, together with and including all of Seller's interest in abutting or adjacent tidal flats, intertidal lands, and State of Maine Submerged Lands Lease No. 0637-L-34 (together the "Property"). A survey purporting to show the Property as it existed in February of 1999 is recorded in said Registry in Plan Book 199, Page 159.

2. NO CONTINGENCIES. Prior to execution of the Agreement Buyer has completed such due diligence investigations relating the Property as it determined in is discretion to be desirable and it is expressly understood and acknowledged by Buyer that this Agreement and Buyer's obligations hereunder are not contingent or conditioned upon any further due diligence or other investigations. It is also expressly understood and acknowledged by Buyer that this Agreement and Buyer's obligations hereunder are not contingent or conditioned upon obtaining any zoning changes or any governmental permits or approvals or upon obtaining a commitment for or closing any financing for any portion of the Purchaser Price or for any costs to be incurred by Buyer after the Closing.

3. PURCHASE PRICE. Subject to any adjustments and prorations hereinafter described, Buyer agrees to pay for the Property the sum of [redacted] Dollars and 00/100 ($[redacted]) (the "Purchase Price"), payable as follows:

(a) Deposit. The sum of [redacted] Dollars ($[redacted]) as a deposit (the "Deposit") shall be paid to Seller directly within one (1) business day of Seller's acceptance hereof and held in escrow by Seller, which Deposit shall be credited towards the Purchase Price at the closing. The Deposit shall be non-refundable except in the case of Seller's default hereunder.

(b) Closing. The balance of the Purchase Price, [redacted] Dollars ($[redacted]), as adjusted for pro-rations and any other payments referenced herein, shall be paid to Seller at the closing in immediately available funds by a wire transfer to Seller (in accordance with wiring instructions provided to Buyer in writing within a reasonable time prior to the time of closing).

4. TITLE. Seller shall convey the Property to Buyer at the closing in fee simple with good, marketable and insurable title, free and clear of liens and encumbrances and other matters of record except as disclosed in Buyer's Title Commitment issued by Monument Title Company as agent for CATIC, Commitment No. 031521-01 dated March 16, 2021, a copy of which has been provided to Seller. Seller shall deliver the Property free and clear of any leases or occupancies except as otherwise provided herein.

5. CLOSING. Buyer acknowledges the need for the Seller to continue operations at the Property for a period following the date hereof and that Seller will need an additional period after operations cease to remove equipment and perform its other obligations under Section 7 hereof. The Closing Date shall be set forth in a notice to Buyer from Seller based on its schedule for ceasing operations and completing such obligations, provided however, that the closing shall take place in any event at the offices of Bernstein, Shur, Sawyer and Nelson, 100 Middle Street, Portland, Maine, no later than December 31, 2021 (the "Closing Date") or at such earlier or later date and location as Buyer and Seller shall mutually agree in advance and in writing. At the closing, Seller shall execute and/or deliver to Buyer, against payment of the purchase price: (a) a Quitclaim Deed with Covenant to the Property, in accordance with the Short Form Deeds Act, 33 M.R.S.A. § 761 et seq., (the "Deed"), (b) all keys, access cards, security codes and similar items to the Property in Seller's possession and (c) a Bill of Sale (without warranty) for five (5) large steel bean pots of the size and type historically used for the cooking of baked beans (the "Bean Pots"). Seller further agrees to execute and deliver to or cause to be delivered to Buyer and/or its designees at the closing such documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Buyer's acquisition of the Property, including without limitation a Certificate of Non-Foreign Status (as required by Internal Revenue Service regulations), an affidavit regarding underground storage tanks (as required by Maine Law), applicable Maine State REW forms and satisfactory evidence of Seller's existence and authority to convey the Property. At the closing Seller and Buyer shall execute assignment and assumption agreements that transfer to Buyer, and pursuant to which Buyer assumes all obligations arising after the Closing Date under: (i) the State of Maine Submerged Lands Lease No. 0637-L-34, (ii) the Commercial Lease between Seller as Landlord and [redacted] as tenant relating to a portion of the Property, (iii) Maine Department of Environmental Protection Air Emission License A-77-71-M-R (SM) relating to the Property and (iv) Maine Department of Environmental Protection Maine Pollutant Discharge Elimination System Permit and Waste Discharge License ME0001741 W000980-5R-H-R relating to the Property. The documents to be executed and delivered at the closing as described in this Section are sometimes herein called the "Closing Documents."

6. RISK OF LOSS, DAMAGE AND INSURANCE.

(a) All risk of loss to the Property prior to the closing shall be borne by Seller. Seller shall keep the Property insured against fire and other extended coverage risks as currently insured until the closing and shall name Buyer as an additional insured as its interest may appear.

(b) In the event that, prior to the closing, any part of the Property is damaged by fire or other casualty, then Seller and Buyer shall perform their respective obligations under this Agreement and at closing, Seller shall (x) deliver to Buyer at the Closing any insurance proceeds or condemnation awards received by Seller in respect of or allocable to the Property less any amount for the cost repairs performed by Seller prior to Closing; and (y) assign to Buyer all of Seller's interest in and to any insurance proceeds and/or condemnation awards allocable to the Property which have not yet been received by Seller on that date less any amount for the cost repairs performed by Seller prior to Closing; and (z) refrain from accepting or agreeing upon the amount of any payment of any proceeds or awards without Buyer's prior written consent, which consent shall not be unreasonably withheld. Seller agrees that it shall limit any repairs to be paid from insurance proceeds to repairs needed to continue operations at the Property through the scheduled date for ceasing such operations and thereafter shall be limited to securing the damaged area.

7. PRE-CLOSING OBLIGATIONS.

(a) Although Buyer has completed all of its due diligence investigations, it may have reason for its architects, engineers and consultants to enter upon or in any part of the Property for purposes of taking measurements and similar actions needed to prepare plans for work to be done after the closing or to complete applications for permits and approvals related to such work. Seller agrees to reasonably grant permission to any such entry by Buyer's architects, engineers and consultants provided that (i) such entry will be scheduled in advance through Seller's representative and shall be subject to reasonable restrictions to prevent any interference with Seller's operations or the performance of the obligations set forth in this Section 7, (ii) Buyer shall indemnify and hold Seller harmless from and against any property damage or personal injury claim or any mechanics' lien against the Property that arises out of or in connection with such entry by Buyer's architects, engineers and consultants, and (iii) Buyer's architects, engineers and consultants entering the Property shall carry liability insurance in commercially reasonable amounts, naming Seller as an additional insured and certificates of such insurance in form satisfactory to Seller shall be delivered to Seller prior to any such entry.

(b) Buyer has already conducted due diligence of the Property including environmental site assessments (ESAs) prior to the date hereof and accepts the Property in its as-is condition except as specifically set forth herein. In the event that Seller obtains knowledge of any spill or release of hazardous materials on the Property that occurred after the date hereof and prior to the Closing Date it shall promptly notify Buyer and undertake any remedial actions related thereto that are required by applicable law and the Closing Date hereunder shall be extended to the extent reasonably necessary to complete any such remedial actions.

(c) Seller agrees to pay all contractors and other persons engaged by it to perform work on the Property between the date hereof and the Closing as necessary to prevent any mechanics' liens from being recorded against the Property pursuant to 10 M.R.S.A. §3251. If Seller's title to the Property is further encumbered, Seller shall promptly after obtaining knowledge of any such encumbrances take actions necessary to have such encumbrance released prior to closing, and the Closing Date hereunder shall be extended to the extent reasonably necessary to

obtain such release. The foregoing is not a consent or permission to further encumber the title and Seller specifically agrees it shall not voluntarily further encumber the title to the Property.

(d) Prior to closing Seller shall take all actions required by the federal Worker Adjustment and Retraining Notification Act of 1988 and 26 M.R.S.A. §625-B (together, the "Plant Closure Laws") with respect to the closing of Seller's operations at the Property and shall relocate or terminate the employment of all of its employees working at the Property. Seller shall be solely responsible, and Buyer shall have no obligations whatsoever for, any compensation, severance pay or other amounts payable to any current or former employee of Seller as a result to the closing of Seller's operations at the Property, whether under the Plant Closure Laws (or by reason of Seller's breach thereof), collective bargaining agreements or any applicable employee benefit plans (collectively, "Plant Closure Liabilities"). In the event that Buyer receives notice of the commencement of any action by any person who is not a party to this Agreement or an affiliate of a party claiming that Buyer is liable for any Plant Closure Liabilities due to the fact that Buyer is a successor owner of the Property ("Third Party Claims"), Buyer shall promptly notify Seller and Seller shall indemnify Buyer against any losses damages, costs or expenses (including reasonable attorneys' fees) arising from such Third Party Claims. The provisions of this Section 7(d) are solely for the benefit of Buyer, and nothing herein, express or implied, shall confer upon any employee or former employee of Seller or other person any rights or remedies of any nature whatsoever under or by reason of this this Section 7(d) and nothing contained herein shall be construed to establish, amend or modify any benefit plan, program, agreement or arrangement.

(e) Prior to Closing Seller shall remove all of its production equipment (other than the Bean Pots) and other personal property from the Property, including all trash and debris. At the closing Seller shall deliver possession of the Property to Buyer free and clear of all leases and tenancies other than the Lease to [redacted]. In the event that during the process of removing such personal property Seller discovers any plans, specifications or reports relating to the improvements on the Property that might be useful to Buyer in connection with the renovation or maintenance of such improvements, Seller shall deliver such materials to Buyer prior to the Closing.

(f) In the event that some specific portion of the Seller's obligations set forth in this Section 7 has not been completed as of the Closing Date (other than Section 7(d) which is addressed by the indemnification provision therein) and the parties are able to agree on the estimated cost of completing such uncompleted obligations, the parties may enter into an escrow agreement (the "Escrow Agreement") pursuant to which a portion of the Purchase Price equal to such estimated cost will be held in escrow by a mutually acceptable escrow agent as security for such completion after the Closing Date (the "Escrow Funds"). If the Seller and Buyer do not execute any such Escrow Agreement, the provisions set forth in Section 10(a) shall be applicable with respect to any such uncompleted obligations. Any such Escrow Agreement shall include provisions relating to the remedies available to the parties if the uncompleted obligations are not completed as set forth therein and for the payment to Seller of any unused balance of the Escrow Funds.

8. "AS IS" SALE; RELEASE OF CLAIMS.

(a) Except for Seller's representations and warranties set forth in Section 9, Seller makes no express or implied representation or warranty with respect to the Property, and Buyer agrees that except for Seller's representations set forth in Section 9, and Seller's covenants set forth in Section 7, Buyer is not relying on and has not relied on any statements, promises, information or representations made or furnished by Seller or by any real estate broker, agent or any other person representing or purporting to represent Seller but rather is relying solely on its own expertise and on the expertise of its consultants and on the inspections and investigations Buyer and its consultants have conducted.

(b) Buyer hereby acknowledges and agrees that the acceptance of the Deed and the other Closing Documents by Buyer shall be deemed to be full performance and discharge of every agreement and obligation on the part of Seller to be performed under this Agreement except those, if any, which are herein specifically stated to survive delivery of the Deed and the Closing Documents. No agreement or representation or warranty made in this Agreement by Seller will survive the Closing and the delivery of the Deed or Closing Documents, unless expressly provided otherwise, provided that for the avoidance of doubt, Seller is bound to perform its obligations under Section 7 hereof and Buyer's remedies with respect thereto will survive the Closing to the extent provided in Section 10(a).

(c) EXCEPT AS SPECIFICALLY SET FORTH TO THE CONTRARY IN THIS AGREEMENT, INCLUDING, BUT NOT LIMITED TO, SELLER'S OBLIGATIONS UNDER SECTION 7 HEREOF, BUYER AGREES (A) TO TAKE THE PROPERTY "AS IS, WHERE IS, WITH ALL FAULTS" AND (B) THAT NO REPRESENTATIONS OR WARRANTIES ARE MADE OR RESPONSIBILITIES ASSUMED BY SELLER AS TO THE CONDITION OF THE PROPERTY, AS TO THE TERMS OF ANY LEASES OR OTHER DOCUMENTS OR AS TO ANY INCOME, EXPENSE, OPERATION OR ANY OTHER MATTER OR THING AFFECTING OR RELATING TO THE PROPERTY, NOW OR ON THE CLOSING DATE. BUYER AGREES TO ACCEPT THE PROPERTY IN THE CONDITION EXISTING ON THE CLOSING DATE, SUBJECT TO ALL FAULTS OF EVERY KIND AND NATURE WHATSOEVER WHETHER LATENT OR PATENT AND WHETHER NOW OR HEREAFTER EXISTING. BUYER ACKNOWLEDGES THAT AS OF THE CLOSING DATE, BUYER WILL HAVE INSPECTED THE PROPERTY AND OBSERVED ITS PHYSICAL CHARACTERISTICS AND CONDITIONS AND WILL HAVE HAD THE OPPORTUNITY TO CONDUCT SUCH INVESTIGATIONS AND STUDIES ON OR OVER THE PROPERTY AND ADJACENT AREAS AS IT DEEMS NECESSARY AND, EXCEPT FOR THE EXCEPTED CLAIMS (AS DEFINED BELOW), HEREBY WAIVES ANY AND ALL OBJECTIONS TO OR COMPLAINTS REGARDING THE PROPERTY AND ITS CONDITION, INCLUDING, BUT NOT LIMITED TO, FEDERAL, STATE OR COMMON LAW-BASED ACTIONS AND ANY PRIVATE RIGHT OF ACTION UNDER STATE AND FEDERAL LAW TO WHICH THE PROPERTY IS OR MAY BE SUBJECT, INCLUDING, BUT NOT LIMITED TO, CLAIMS RELATING TO PHYSICAL CHARACTERISTICS AND EXISTING CONDITIONS, INCLUDING STRUCTURAL AND GEOLOGICAL CONDITIONS, SUBSURFACE SOIL AND WATER CONDITIONS, AND SOLID AND HAZARDOUS WASTE AND HAZARDOUS MATERIALS (AS DEFINED BELOW) ON, UNDER, ADJACENT TO OR OTHERWISE AFFECTING THE PROPERTY. BUYER

FURTHER ASSUMES THE RISK OF CHANGES IN APPLICABLE LAWS AND REGULATIONS RELATING TO PAST, PRESENT AND FUTURE ENVIRONMENTAL CONDITIONS ON THE PROPERTY AND THE RISK THAT ADVERSE PHYSICAL CHARACTERISTICS AND CONDITIONS, INCLUDING THE PRESENCE OF HAZARDOUS MATERIALS OR OTHER CONTAMINANTS, MAY NOT HAVE BEEN REVEALED BY ITS INVESTIGATION.

(d) Except with respect to the Seller's fraud, the Seller's representations set forth in Section 9, Buyer's remedies for defaults in Seller's obligations under Section 7 as described in Section 10(a), or as otherwise expressly provided in this Agreement, Buyer hereby fully and forever waives, and Seller hereby fully and forever disclaims and shall not be liable or bound in any manner by, any and all warranties, guarantees, promises, statements, representations or information of whatever type or kind with respect to the Property, whether express, implied or otherwise, including warranties of fitness for a particular purpose, tenantability, habitability or use. Buyer agrees that except for any Claims (as defined below) arising out of a breach of any of Seller's representations and warranties in Section 9 or the Closing Documents executed by Seller and any and all Claims for fraud by Seller ("Excepted Claims"), Buyer and anyone claiming by, through or under Buyer hereby waives its right to recover from and fully and irrevocably releases Seller and Seller's employees, officers, directors, trustees, shareholders, members, partners, representatives, agents, servants, attorneys, affiliates, parents, subsidiaries, successors and assigns ("Released Parties") from any and all claims, responsibility and/or liability that it may now have or hereafter acquire against any of the Released Parties for any and all costs, losses, claims, liabilities, damages, expenses, demands, debts, controversies, claims, actions or causes of actions (collectively, "Claims") arising from or related to the condition (including any construction defects, errors, omissions or other conditions, latent or otherwise, and the presence in the soil, air, structures and surface and subsurface waters of materials or substances that have been or may in the future be deemed to be Hazardous Materials or otherwise toxic, hazardous, undesirable or subject to regulation and that may need to be specifically treated, handled and/or removed from the Property under current or future federal, state and local laws, regulations or guidelines or common law), valuation, salability or utility of the Property, condition of title to the Property, compliance with any applicable federal, state or local law, rule or regulations or common law with respect to the Property, or the Property's suitability for any purposes whatsoever, and any information furnished by the Released Parties in connection with this Agreement. Buyer will indemnify Seller with respect to any environmental liabilities associated with the Property that may be discovered or arise post-closing, regardless of when the action(s) leading to such liabilities occurred.

(e) Seller and Buyer have agreed upon the Purchase Price relating to the Property and other provisions of this Agreement in contemplation and consideration of Buyer's agreeing to the provisions of this Section 8**,** which Section shall survive the closing and the delivery of the Deed and the Closing Documents.

9. REPRESENTATIONS AND WARRANTIES OF SELLER. Seller represents and warrants to Buyer that the following are true as of the date of this Agreement and will be true as of the closing:

(a) Seller is duly organized and in good standing under the laws of the State of Delaware, with full capacity, power and authority to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(b) The execution and delivery of this Agreement and the performance by Seller of its obligations hereunder are within Seller's corporate powers, and have been duly authorized and approved by all necessary actions on behalf of Seller and will not result in a breach of Sellers's articles of incorporation or bylaws, or any injunction, judgment, court order or agreement to which Seller is a party;

(c) The person executing this Agreement on behalf of Seller is duly authorized to do so and the person who will execute the Deed and the other Closing Documents on behalf of Seller will be duly authorized to do so;

(d) To the best of Seller's knowledge, no consent, approval, order or authorization of any court or other governmental entity is required to be obtained by Seller in connection with the execution and delivery of this Agreement or the performance hereof by Seller, other than (i) approvals by the Maine Department of Environmental Protection relating to the transfers of the Air Emission License and the Pollutant Discharge Elimination System Permit and Waste Discharge License relating to the Property and (ii) approval from the Maine Department of Agriculture, Conservation and Forestry relating to the transfer of the Submerged Lands Lease;

(e) There are no litigation, liens, judgments, violations, or proceedings pending, or to the best of Seller's knowledge, threatened in writing against or relating to the Property nor does Seller know or have reasonable grounds to know of any basis for any such action, or of any governmental investigation relating to the Property, and there is no other litigation pending or to the best of Seller's knowledge, threatened in writing against Seller, which if determined adversely would restrain the consummation of the transaction contemplated by this Agreement or would declare illegal, invalid or non-binding any of the obligations or covenants of Seller hereunder;

(f) Seller is not a "foreign person" within the meaning of §1445 of the Internal Revenue Code; and

(g) To the best of Seller's knowledge, there are no purchase options or rights of first refusal relating to any portion of the Property and there are no contracts or agreements between Seller and third parties relating to the Property (other than the Lease to [redacted]) which will be binding on Buyer after the Closing.

For purposes of this Agreement and any Closing Document executed by Seller the phrases "to the best of Seller's knowledge," or the "knowledge" of Seller, or words of similar import are used, they shall be deemed to refer to the actual knowledge of Bruce Wacha or Tyler Wallace, without any independent investigation. The provisions of this Section 9 shall survive the closing and the delivery of the Deed and the Closing Documents for a period of twelve (12) months.

10. DEFAULT AND REMEDIES.

(a) In the event that Seller defaults in the performance of its obligations under Section 7 hereof, Buyer may send Seller a default notice specifying such default at least five (5) days

prior to the scheduled Closing Date. Seller may respond to any such default notice by agreeing to cure such default in which case the Closing Date will be postponed for a period of time not to exceed thirty (30) days in order for Seller to perform such cure. If Seller fails to cure any default set forth in such notice prior to Closing, or if Seller fails to remove any mechanics' liens as required by Section 7(c) whether or not a default notice with respect thereto was given prior to Closing, Buyer's sole remedy shall be to pursue a claim against Seller for actual damages caused by such default including, without limitation, reasonable attorneys' fees, but excluding incidental or consequential damages, and Buyer's right to pursue such a damage claim for such defaults under Section 7 shall survive the closing and the delivery of the Deed and the Closing Documents for a period of twelve (12) months.

(b) In the event that Seller defaults in the performance of its obligation to convey the Property to Buyer hereunder, Buyer's sole remedy shall be to within sixty (60) days of when the Closing Date was to have occurred, to commence and diligently prosecute an action in the nature of specific performance. If such an action in the nature of specific performance is not so commenced within said time, or is unsuccessful, Seller shall refund the Deposit and upon payment of such refund the parties will be released from their obligations under this Agreement. Under no circumstances will Buyer have available to it any remedy that includes the termination of this Agreement or (except as provided in Section 10(a) above) an action at law or otherwise for damages.

(c) In the event that Buyer defaults in its obligation to close hereunder, Seller shall retain the Deposit, as full and complete liquidated damages in lieu of any other legal or equitable remedy, and this Agreement will terminate and neither party will be under any further obligation hereunder. The parties acknowledge that Seller's damages due from Buyer's default hereunder are difficult or impossible to ascertain and that the amount of the Deposit represents a reasonable estimate by both parties of Seller's damages.

11. OFF MARKET. Seller may not list or offer the Property for sale and shall not seek, accept, solicit or negotiate any third party offers for all or any portion of the Property while this Agreement is in effect. This Section does not limit Seller's right to sell its equipment or other personal property located at the Property to others.

12. BROKERAGE. The parties agree that no broker has been involved in this transaction other than Tony McDonald of The Boulos Company ("Broker") representing Buyer, and each agrees to indemnify the other from and against any damages, costs or expenses (including reasonable attorneys' fees) that the other party may suffer as a result of claims made or suits brought by any other broker, finder or agent in connection with this transaction, the obligated party hereunder to be the party whose conduct gives rise to such claims. This indemnity shall survive the closing and any termination of this Agreement. Buyer shall be responsible for and shall pay directly any commission owing to Broker.

13. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

(a) Real estate taxes, assessments, rentals, fuel oil, and utilities shall be prorated as of the date of closing based upon amounts thereof actually paid or received (as the case may be) as of the Closing Date.

(b) The Maine real estate transfer tax shall be paid by Seller and Buyer in accordance with 36 M.R.S.A. § 4641-A.

(c) The recording fee for the deed of conveyance will be paid by Buyer.

(d) A portion of the purchase price shall be withheld at the closing by Buyer if required by 36 M.R.S.A. § 5250-A unless Seller furnishes to Buyer an affidavit stating, under penalty of perjury, that Seller is a resident of Maine or that the transfer is otherwise exempt from withholding tax.

(e) If the parties enter into an Escrow Agreement as described in Section 7(e), a portion of the purchase price equal to the Escrow Funds will be paid to the escrow agent named therein.

14. MISCELLANEOUS.

(a) Time. Time is of the essence of this Agreement.

(b) Notices. Any notices required or permitted to be given under this Agreement shall be sufficient if in writing and if sent: (i) by first class mail, postage prepaid, registered or certified, return receipt requested; (ii) by hand delivery; (iii) by FedEx, or similar overnight express mail service, prepaid; or (iv) by electronic mail transmission, each to the addresses listed below:

TO SELLER: B&G Foods North America, Inc.
4 Gatehall Drive
Parsippany, NJ 07054
Attention: Mr. Bruce Wacha,
Executive Vice President and Chief Financial Officer
Email: Bruce.Wacha@bgfoods.com

WITH A COPY TO: B&G Foods North America, Inc.
4 Gatehall Drive
Parsippany, NJ 07054
Attention: General Counsel
Email: corporatesecretary@bgfoods.com

AND WITH A COPY TO: James C. Palmer, Esq.
Verrill Dana, LLP
One Portland Square
Portland, ME 04101-4054
Email: jpalmer@verrill-law.com

TO BUYER: Charles E Hewett, Chief Executive Officer
IDEALS
100 Commercial Street
Portland, ME 04101
chuck.hewett@ideals.org

WITH A COPY TO: James Broder, Esq.
Bernstein Shur
100 Middle Street
PO Box 9729
Portland, ME 04104-5029
jbroder@bernsteinshur.com

All such communication shall be deemed made upon the earlier of (3) business days following deposit with the U.S. Mail or the date of receipt as disclosed on the return receipt (if sent by registered or certified mail), or upon delivery (if hand delivered), or upon delivery as indicated on the proof of delivery (if sent via FedEx or similar overnight express mail service), or if sent via email with proof of receipt by the primary addressee, effective upon the day sent if received prior to 3:00 p.m. local time or the next business day if received thereafter. With respect to any of the above-referenced methods of delivery, rejection or other refusal to accept or the inability to deliver because of a change of address of which no notice was given shall be deemed to be receipt of the notice sent. Either party may change its address for purposes of this subparagraph by giving the other party notice of the new address in the manner described herein.

(c) Binding Effect/Assignment. This Agreement shall not become a binding contract until signed by both parties and that fact has been communicated to all parties or their agents. This Agreement will inure to the benefit of and bind the respective heirs, successors, personal representatives and assigns of the parties hereto and may be cancelled, modified or amended only by a writing executed by the parties hereto or their legal representatives. Buyer shall have the right to assign its interest hereunder to an entity formed and controlled by Buyer prior to closing, provided that any such assignment shall not release the assignor from any its obligations or liabilities hereunder.

(d) Construction. This Agreement sets forth the entire agreement between the parties, and there are no other agreements or understandings between them related to the subject matter hereof. Without limiting the forgoing, the Non-Binding Letter of Intent dated February 2, 2021 between Seller and Buyer is superseded hereby and neither party shall have any further rights, obligations or claims thereunder. As used in this Agreement, the singular number shall include the plural, the plural the singular, and the use of one gender shall be deemed applicable to all genders. This Agreement shall be governed by and construed in accordance with the laws of Maine. If any provision of this Agreement is determined to be invalid or unenforceable, it shall not affect the validity or enforcement of the remaining provisions hereof.

(e) Counterparts/Electronic Signatures. This Agreement may be simultaneously executed in any number of counterparts, each of which when so executed and delivered shall be an original, but such counterparts shall constitute one and the same instrument. This Agreement may be signed electronically and such shall be treated as original signatures.

(f) Attorney's Fees. If any legal action (including without limitation mediation and arbitration) is brought or compelled by either party to enforce any provisions of this Agreement, the prevailing party shall be entitled to recover from the other party its reasonable attorneys' and paralegals' fees and court costs, subject to and limited by the provisions of the Default and Remedies section of this Agreement.

(g) Effective Date. The Effective Date of this Agreement shall be deemed to be the date first set forth above in this Agreement, provided that if no date is filled in, the Effective Date shall be the last date of the signature of either Buyer or Seller.

[*Balance of page intentionally left blank]*

IN WITNESS WHEREOF, Seller and Buyer have executed this Agreement under seal as of the dates indicated above.

SELLER:

B&G Foods North America, Inc.

By: Bruce C Wacha
Print Name: Bruce C. Wacha
Title: Executive Vice President of Finance and Chief Financial Officer

Date: August 30, 2021

BUYER:

The Institute for Digital Engineering and Life Sciences (IDEALS)

By:_____
Print Name: Dr. Charles E. Hewett
Title: Executive Director

Date: August 30, 2021

IN WITNESS WHEREOF, Seller and Buyer have executed this Agreement under seal as of the dates indicated above.

SELLER:

B&G Foods North America, Inc.

By:_____
Print Name: Bruce C. Wacha
Title: Executive Vice President of Finance and Chief Financial Officer

Date: August 30, 2021

BUYER:

The Institute for Digital Engineering and Life Sciences (IDEALS)

By:_____
Print Name: Dr. Charles E. Hewett
Title: Executive Director

Date: August 30, 2021

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AGREEMENT FOR THE PURCHASE AND SALE OF REAL ESTATE

THIS AGREEMENT is effective as of October 23, 2023 by and between **NORTHEASTERN UNIVERSITY**, a Massachusetts non-profit corporation with an address of 360 Huntington Avenue, Boston, Massachusetts 02115 ("Buyer"), and **THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES**, a Maine non-profit corporation with an address of 100 Commercial Street, Portland, Maine 04101 ("Seller").

RECITALS

WHEREAS, in furtherance and fulfillment of that certain Memorandum of Understanding, dated July 27, 2022 by and between Buyer and Seller (the "MOU"), the Seller desires to sell, transfer and convey to Buyer a certain parcel of land, together with the improvements thereon, located on the easterly side of Interstate 295 and the southerly side of Sherwood Street in the City of Portland, County of Cumberland and State of Maine (the "Campus") as more specifically described herein; and

WHEREAS, the MOU and further agreements by and among Buyer, Seller, and David and Barbara Roux (the "Rouxs") envision that Buyer will develop the Campus for the creation of a graduate institute (the "Institute"):

- instructing students in the fields of artificial intelligence, digital science, data visualization, computational medicine, genomics and life sciences and project management, and develop content and pedagogy therefor,
- conducting research in the fields described above, among others, and
- encouraging innovation and entrepreneurialism among new and established companies deploying the above-mentioned skills and technologies,

WHEREAS, the buyer has agreed to develop the Campus as the permanent home of the Institute with other supporting infrastructure to encourage learning, collaboration, innovation and other progress, and

WHEREAS, it is the intent of the Seller and the Rouxs that the Campus will, over time, become a force for education, research, collaboration and entrepreneurialism meaningful to the 21st century economy, innovation and job creation.

WITNESSETH AS FOLLOWS:

1. PURCHASE AND SALE. Seller agrees to sell and Buyer agrees to buy, on the terms and conditions hereinafter set forth, approximately thirteen (13) acres of land and buildings generally situated at 1 Bean Pot Circle, Portland, Maine together with all improvements that may at the time of closing be thereon (except as specified below) and all rights and easements appurtenant thereto, which parcel is more particularly bounded and referenced by the City of Portland Assessor's Office as Map 447-A-001-001 and 447-A-001-002 and as more fully described on **Exhibit A** attached hereto, being the same premises described in a Quitclaim Deed

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with Covenant from B&G Foods North America, Inc. to Seller, dated March 23, 2022 and recorded in the Cumberland County Registry of Deeds in Book 39282, Page 151 together with and including all abutting or adjacent tidal flats, intertidal lands, and related rights in, to and under any submerged lands easements or leases between Seller and/or any predecessor of Seller with the State of Maine (together the "Property"). The following shall also be delivered and conveyed to Buyer at Closing hereunder:

A. Conveyance of tangible personal property, if any via Bill of Sale.

B. Conveyance of intangible personal property, if any, associated with the Property, to the extent owned by Seller, by Bill of Sale and Assignment.

C. Assignment and Assumption of the Maine Yacht Center lease (the "MYC Lease") of a portion of the Property, in form and substance reasonably acceptable to Buyer.

D. Conveyance/Assignment and Assumption of Submerged Land Easement, which requires notice to the Maine State Bureau of Parks and Lands.

E. Assignment and Assumption of the following MDEP Permits if in effect at the time (for which Buyer shall seek MDEP consent):

i. Maine Department of Environmental Protection Air Emission License A-77-71-M-R(SM)

ii. Maine Department of Environmental Protection Maine Pollutant Discharge Elimination System (MDEPDES) Permit #ME0001741

iii. Maine Waste Discharge License (WDL) License #W000980-5R-H-R.

iv. NRPA Permit (*if any, currently in process*)

(collectively, the "MDEP Permits")

F. Assignment and Assumption of the following City of Portland and/or State permits and approvals:

i. Demolition permit

ii. Any site plan approval and/or building or construction permits

iii. MDOT permits including Traffic Movement Permit

iv. any other issued or pending state, municipal or federal permits or permit applications

(collectively, with the MDEP Permits, the "Governmental Permits")

G. Assignment and Assumption of the construction and development contracts and agreements described on **Exhibit B** (the "Development Contracts").

H. Assignment of any and all warranties relating to any completed contracts for construction or demolition of any of the improvements upon the Campus (the "Construction Warranties"), if any.

I. Assignment of any and all studies, reports, engineering, surveys, appraisals, or other such reports or studies, to the extent assignable (collectively, the "Studies and Reports"), and, if and to the extent requested by Buyer, delivery of reliance letters with respect to such Studies and Reports in a form reasonably acceptable to Buyer. Seller agrees to seek consent to such assignments and any required reliance letters from the professionals or vendors providing the Studies and Reports.

2. OFFER AND ACCEPTANCE. The execution of this Agreement by Buyer represents an offer to Seller on the terms and conditions set forth herein. This offer shall be open for acceptance by Seller until 4:00 p.m. Portland, Maine time on October 23, 2023 unless extended by mutual agreement of Buyer and Seller. Seller's acceptance of this offer shall be evidenced by Seller delivering an executed copy of this Agreement to Buyer at the address set forth in Section 14 below on or before the expiration of this offer. If this offer is not accepted by Seller prior to its expiration, this offer shall automatically expire and this Agreement shall be null and void and of no further force and effect.

3. CONSIDERATION. The consideration for the transfer of the Property is in furtherance and fulfillment of the MOU and the performance under such further agreements by and among Buyer and Seller for Buyer's development of the Property as the site of the Institute for the purposes of instructing students, conducting research, and supporting entrepreneurialism in the fields of artificial intelligence, digital science, data visualization, computational medicine, genomics and life sciences and project management, and develop content and pedagogy therefor, and developing the Property to serve as the permanent home of the Institute with other supporting infrastructure. At closing hereunder, however, the parties shall adjust for any pro-rations and any other payments referenced herein. Except as specified in this Agreement or in any other agreement among the parties including the Rouxs, both Buyer and Seller shall bear their own expenses in connection with the performance of their obligations hereunder. Buyer agrees to pay and Seller agrees to accept One Dollar ($1.00) and other valuable consideration as the Purchase Price for the Property.

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[redacted]

4. TITLE. Seller shall convey the Property to Buyer at the closing in fee simple with good, marketable and insurable title, free and clear of liens and encumbrances and other matters of record, except as disclosed in Buyer's Title Insurance Policy # OP 04921177 ME issued by CATIC (the "Title Insurer"), dated March 24, 2022, a copy of which has been provided to Seller (the "Title Policy"). Seller shall deliver the Property free and clear of any leases or occupancies except as otherwise provided herein. Notwithstanding the foregoing, during the period commencing on the date hereof and continuing for a period of thirty (30 days (the "Inspection Period"), Buyer shall have right to review the title and to make any objections to the title in writing to Seller. Upon receipt of Buyer's title objections, Seller shall have a period of up to thirty (30) days to either (i) resolve the title objections to the reasonable satisfaction of Buyer; (ii) or to propose affirmative title insurance coverage addressing any such title objection that the Title Insurer is willing to provide, including an agreement to continue to provide such affirmative coverage to subsequent grantees and mortgagees; or (iii) to refuse to address such title objection, in which case Buyer may elect to terminate this Agreement, or Buyer may elect to close notwithstanding the title objection.

5. CLOSING. The transfer of title and closing hereunder shall take place at the offices of Bernstein, Shur, Sawyer and Nelson, 100 Middle Street, Portland, Maine, no later than ten days prior to Buyer's application for a building permit for the Buyer's initial phase of construction of the Institute is submitted to the City of Portland (the "Closing Date") or at such earlier date and location as Buyer and Seller shall mutually agree in advance and in writing. Buyer shall have the right to request a closing at any time prior to its application for a building permit, provided that Buyer has satisfied the remaining obligations of Buyer under this Agreement, other than such obligations that Seller has agreed to waive in writing. At the closing,

(a) Seller shall execute and/or deliver to Buyer:

i. a Quitclaim Deed with Covenant to the Property, in accordance with the Short Form Deeds Act, 33 M.R.S.A. § 761 et seq., (the "Deed"),

ii. a Quitclaim with Covenant Bill of Sale conveying the personal property to be conveyed to Buyer as set forth in Section 1.A. above;

iii. all keys, access cards, security codes and similar items to the Property in Seller's possession;

iv. the originals of all permits and licenses relating to the Property, if any, in Seller's possession;

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v. such documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Buyer's acquisition and financing of the Property, including without limitation a Certificate of Non-Foreign Status (as required by Internal Revenue Service regulations), an affidavit regarding underground storage tanks (as required by Maine Law), a surface/subsurface waste disposal system certificate (if applicable), applicable Maine State REW forms and satisfactory evidence of Seller's existence, authority to convey the Property; and

vi. One or more Assignment and Assumption Agreements signed by Seller to assign to Buyer all of Seller's rights in and to the Maine Yacht Center Lease; the Governmental Permits, the Studies and Reports, the Construction Warranties and the Development Contracts; together with any reliance letters with respect to the Studies and Reports requested by Buyer.

(b) Buyer shall execute and/or deliver to Seller:

i. the purchase price;

ii. evidence that the buyer's Board of Trustees has voted affirmatively to proceed with Phase 1 of the Campus development project (the "Project") and has committed sufficient financial resources to fund Phase 1 of the Project which shall include all work reasonably necessary for the construction of one or more learning, research and collaboration buildings and supporting parking and public infrastructure, construction of a new pier, and renovation of the exterior of the existing historic landmarked Bean Building as shall be further described in the initial Site Plan application (as the same shall be jointly submitted by the parties hereto) as approved by the City of Portland (the contents of which – as approved by the City -- shall be referred to herein as "Phase 1"). Such financial resources may be from various sources including bond financing, Buyer's own resources, pledges and other philanthropic giving and such financial resources as may be available to Buyer over the course of the construction of Phase 1 of the Project as opposed to being fully available at the time of closing;

iii. One or more Assignment and Assumption Agreements signed by Buyer to enable Buyer to assume all of Seller's rights in and to the Maine Yacht Center Lease; the Governmental Permits, the Studies and Reports, the Construction Warranties and the Development Contracts; and

iv. such other documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Seller's disposition of the Property.

Unless this Agreement is extended by mutual agreement of the parties, if the Closing does not occur for any reason by December 31, 2024, then this Agreement shall automatically terminate and be of

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no further force and effect and all obligations of the parties shall cease other than those specifically identified herein as surviving such termination.

6. RISK OF LOSS, DAMAGE AND INSURANCE.

(a) All risk of loss to the Property prior to the closing shall be borne by Seller. Seller shall keep the Property fully insured against fire and other extended coverage risks until the closing and shall name Buyer as an additional insured as Buyer's interest may appear.

(b) In the event that, prior to the closing, the improvements which are part of the Property are destroyed or, in the opinion of Buyer, substantially damaged, Buyer may either (i) terminate this Agreement, or (ii) accept the insurance proceeds payable by reason of such damage or destruction and close this transaction notwithstanding the same. If any part of the Property is damaged by fire or other casualty and Buyer does not elect to terminate this Agreement pursuant to this Section, then Seller and Buyer shall perform their respective obligations under this Agreement and in the event of a closing, Seller shall (x) deliver to Buyer at the Closing any insurance proceeds or condemnation awards received by Seller in respect of or allocable to the Property; and (y) assign to Buyer all of Seller's interest in and to any insurance proceeds and/or condemnation awards allocable to the Property which have not yet been received by Seller on that date; and (z) refrain from accepting or agreeing upon the amount of any payment of any proceeds or awards without Buyer's prior written consent. Notwithstanding the above, Buyer acknowledges that Seller is in the process of abating and demolishing all of the facilities on the site except for the so-called "Cannery" or "Bean Building"

7. INSPECTION/DELIVERY OF DOCUMENTS; AS-IS CONDITION. Reasonably promptly after this Agreement becomes effective, Seller shall deliver to Buyer copies of all of the Studies and Reports in Seller's possession or control to the extent not already provided to Buyer. With reasonable notice which shall be a minimum of three business days, Seller hereby grants Buyer or its agents the right to enter upon or in any part of the Property at all reasonable times and from time to time prior to the closing in order to inspect the Property, conduct surveys, soil tests, engineering and environmental testing and studies and to do such things as are reasonably necessary with respect to its due diligence, acquisition and development of the Property, provided, however, that Buyer's obligations to close hereunder shall not be conditioned upon the results of such due diligence other than as set forth below.

Buyer has commenced its review of the Studies and Reports, including environmental site assessments (ESAs) performed prior to the date hereof and accepts the Property in its as-is condition except as specifically set forth herein. Notwithstanding the foregoing, Seller shall not, after the date hereof, suffer or allow the occurrence of any further event(s) which would create, constitute, or be considered a recognized environmental condition (REC) under any qualified Phase I ESA without prompt and complete remediation or abatement, or else Seller shall be considered in default hereof. Furthermore, if Seller's title to the Property is further encumbered by any matter or means after the date hereof and such further encumbrance is not cleared prior to Closing, Seller shall be in default hereof. The foregoing is not a consent or permission to further encumber the title and Seller specifically agrees it shall not further encumber the title to the Property nor permit any mortgage, lien, claim, or charge to accrue which shall affect Seller's title.

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Further notwithstanding the foregoing, the parties acknowledge that the environmental site assessments conducted by or for Buyer or for which Buyer has been provided were conducted before certain demolition activities on the site that were performed by or for Seller. Buyer shall have the right to conduct further or updated ESAs and to review any remediation activities undertaken by Seller or its agents or contractors since the date of the ESAs conducted by or for Buyer. In the event that such further or updated ESAs reveal any RECs not previously disclosed to Buyer, Buyer shall have the right to terminate this Agreement or to require that further conditions be satisfied by Seller prior to closing.

Except as set forth in this Agreement, the Property will be conveyed "as is" at the time of closing and Seller disclaims all representations and warranties from Seller to Buyer other than any limited representations set forth herein. Buyer will indemnify Seller with respect to any environmental liabilities associated with the Property that may be discovered or arise post-closing, regardless of when the action(s) leading to such liabilities occurred. The foregoing sentence shall survive Closing under this Agreement. Seller will assign any environmental indemnification agreements it obtained from the Seller's grantor to Buyer, if any, with the right of the Buyer to enforce the indemnification obligations contained in any such agreements to the extent permitted therein.

8. CONDITIONS TO BUYER'S OBLIGATIONS TO PERFORM. The Buyer's obligation to perform hereunder and to close on the purchase of the Property are conditional upon the following matters:

(a) Buyer's obligation is conditional upon the Buyer's Board of Trustees approval of the Buyer's acquisition of the Property and the obligations of the Buyer under this Agreement.

(b) Buyer's obligation is conditional upon Buyer's satisfaction with its inspection of the Property during the Inspection Period as more fully set forth in Section 7 of this Agreement.

9. SELLER'S CONTINUATION OF CONSTRUCTION ACTIVITIES PRIOR TO CLOSING. Seller is currently conducting demolition, environmental remediation and site work at the Property. Seller has provided Buyer with copies of all of the plans, specifications, contracts and scope of work being performed by Seller or its agents or contractors at the Property at the time of execution hereof. Seller shall continue to perform such work in accordance with such contracts. To the extent that any such plans, specifications or contracts are modified or supplemented following the execution of this Agreement (the "Construction Modifications"), or to the extent that any additional contracts are to be entered into by Seller prior to the closing (the "New Contracts"), Seller shall endeavor to provide Buyer with notice thereof as soon as practicable, and Buyer shall have the right to comment upon and participate in any discussions regarding the scope and timing of such work; provided, however, that the notice contemplated by this provision shall be deemed satisfied if an agent, employee, or representative of Buyer is present with Seller (whether in person, telephonically, or by email) in conversations, meetings and other communications involving such Construction Modifications or New Contracts. Moreover, notwithstanding the notice provisions set forth in Section 16(b) below, the notice contemplated by this Section 9 may also be made to

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other designated representatives of Buyer involved in the construction activities via telephone in addition to, or in lieu of, any of the other manners of providing notice outlined in Section 9.

10. POSSESSION OF THE PROPERTY. The Property shall be delivered to the Buyer at the time of the closing free and clear of all tenancies or occupancies by any person or entity, unless otherwise agreed herein. The Property shall also be reasonably free and clear of all trash and debris, and free and clear of any and all of Seller's personal property and equipment, except as set forth herein.

11. REPRESENTATIONS AND WARRANTIES OF SELLER. Seller represents and warrants to Buyer that the following are true as of the date of this Agreement and will be true as of the closing:

(a) Seller is duly organized and in good standing under the laws of the State of Maine, with full capacity, power and authority to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(b) The execution and delivery of this Agreement and the performance by Seller of its obligations hereunder are within the lawful power of Seller, have been duly authorized and approved by all necessary actions on behalf of Seller, and will not conflict with, or result in a breach of any of the terms, covenants and provisions of: (i) Seller's Articles of Incorporation or By-Laws; (ii) any judgment, writ, injunction, regulation, ruling, directive or decree of any court of governmental authority; or (iii) any agreement or instrument to which Seller is a party or by which Seller is bound;

(c) The person executing this Agreement on behalf of Seller is duly authorized to do so and to bind Seller to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(d) No consent, approval, order or authorization of any court or other governmental entity is required to be obtained by Seller in connection with the execution and delivery of this Agreement or the performance hereof by Seller;

(e) There are no litigation, liens, judgments, violations, or proceedings pending, or to the best of Seller's knowledge, threatened against or relating to the Property nor does Seller know or have reasonable grounds to know of any basis for any such action, or of any governmental investigation relating to the Property;

(f) There is no pending, or to the best of Seller's knowledge, threatened action or proceeding (including, but not limited to, any condemnation or eminent domain action or proceeding) before any court, governmental agency or arbitrator relating to or arising out of Seller's ownership of the Property or any portion thereof, or which may adversely affect Seller's ability to perform its obligations under this Agreement, or which may affect the Property or any portion thereof;

(g) Seller is not a "foreign person" within the meaning of § 1445 of the Internal Revenue Code;

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(h) To the best of Seller's knowledge, no work has been performed or is in progress at, and no materials have been furnished to the Property or any portion thereof which may give rise to mechanic's, materialmen's or other liens against the Property or any portion thereof except as may arise in connection with Seller's further obligations as specifically contemplated by this Agreement; and

(i) All outstanding bills and/or accounts payable concerning the Property are either paid or will be paid prior to or at the time of closing unless otherwise agreed by the parties in writing.

12. REPRESENTATIONS AND WARRANTIES OF BUYER. Buyer represents and warrants to Seller that the following are true as of the date of this Agreement and will be true as of the closing:

(a) Buyer is duly organized and in good standing under the laws of the Commonwealth of Massachusetts, with full capacity, power and authority to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(b) The execution and delivery of this Agreement and the performance by Buyer of its obligations hereunder are within the lawful power of Buyer, have been duly authorized and approved by all necessary actions on behalf of Buyer, and will not conflict with, or result in a breach of any of the terms, covenants and provisions of: (i) Buyer's Articles of Incorporation or Bylaws; (ii) any judgment, writ, injunction, regulation, ruling, directive or decree of any court of governmental authority; or (iii) any agreement or instrument to which Buyer is a party or by which Buyer is bound;

(c) The person executing this Agreement on behalf of Seller is duly authorized to do so and to bind Seller to enter into and fully perform the obligations and transactions contemplated by this Agreement; and

(d) No consent, approval, order or authorization of any court or other governmental entity is required to be obtained by Buyer in connection with the execution and delivery of this Agreement or the performance hereof by Buyer.

13. DEFAULT AND REMEDIES. In the event that either Buyer or Seller defaults in the performance of its obligations hereunder, the non-defaulting party may elect to terminate this Agreement by written notice, or seek specific performance of the defaulting party's obligations.

14. BROKERAGE. The parties agree that no broker has been involved in this transaction.

15. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

(a) Real estate taxes, assessments, rentals, common area maintenance charges, fuel oil, and utilities shall be prorated as of the date of closing based upon amounts thereof actually paid or received (as the case may be) as of this date.

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(b) The Maine real estate transfer tax (if applicable) shall be paid by Seller and Buyer in accordance with 36 M.R.S.A. § 4641-A.

(c) The recording fee for the deed of conveyance will be paid by Buyer.

(d) A portion of the purchase price shall be withheld at the closing by Buyer if required by 36 M.R.S.A. § 5250-A unless Seller furnishes to Buyer an affidavit stating, under penalty of perjury, that Seller is a resident of Maine or that the transfer is otherwise exempt from withholding tax.

16. MISCELLANEOUS.

(a) Time. Time is of the essence of this Agreement.

(b) Notices. Any notices required or permitted to be given under this Agreement shall be sufficient if in writing and if sent: (i) by first class mail, postage prepaid, registered or certified, return receipt requested; (ii) by hand delivery; (iii) by FedEx, or similar overnight express mail service, prepaid; or (iv) electronic mail ("e-mail") or by facsimile ("Fax") transmission, each to the addresses and/or Fax numbers listed below:

TO SELLER:
Charles E. Hewett
IDEALS
100 Commercial Street
Portland, ME 04101
chuck.hewett@ideals.org

WITH A COPY TO:
Helen S. Coburn, Esq.
Bernstein Shur
100 Middle Street, PO Box 9729
Portland, ME 04104-5029
hcoburn@bernsteinshur.com

TO BUYER:
Northeastern University
Planning, Real Estate and Facilities
360 Huntington Avenue, 216-201
Boston, MA 02115
Attention: Kathy Spiegelman
Email: k.spiegelman@northeastern.edu

WITH A COPY TO:
Northeastern University
Office of the General Counsel
360 Huntington Avenue, Suite 301

DocuSign Envelope ID: 93BEB8D2-0DE3-4F1B-A064-562E6257362F

Boston, MA 02115
Attention: Michael Glover
Email: m.glover@northeastern.edu

All such communication shall be deemed made upon the earlier of (3) business days following deposit with the U.S. Mail or the date of receipt as disclosed on the return receipt (if sent by registered or certified mail), or upon delivery (if hand delivered), or upon delivery as indicated on the proof of delivery (if sent via FedEx or similar overnight express mail service), or if sent via email with proof of receipt by the primary addressee, effective upon the day sent if received prior to 3:00 p.m. local time or the next business day if received thereafter. With respect to any of the above-referenced methods of delivery, rejection or other refusal to accept or the inability to deliver because of a change of address of which no notice was given shall be deemed to be receipt of the notice sent. Either party may change its address for purposes of this subparagraph by giving the other party notice of the new address in the manner described herein.

(c) Binding Effect/Assignment. This Agreement shall not become a binding contract until signed by both parties and that fact has been communicated to all parties or their agents. This Agreement will inure to the benefit of and bind the respective heirs, successors, personal representatives and assigns of the parties hereto and may be cancelled, modified or amended only by a writing executed by the parties hereto or their legal representatives.

(d) Construction. This Agreement and the Exhibits hereto set forth the entire agreement between the parties, and there are no other agreements or understandings between them related to the subject matter hereof. As used in this Agreement, the singular number shall include the plural, the plural the singular, and the use of one gender shall be deemed applicable to all genders. This Agreement shall be governed by and construed in accordance with the laws of Maine. All representations, warranties, covenants and indemnities made by either party herein shall survive the closing. If any provision of this Agreement is determined to be invalid or unenforceable, it shall not affect the validity or enforcement of the remaining provisions hereof. In the event of any dispute under this Agreement; prior to any litigation, the parties hereto shall first submit the matter to mediation and shall undertake good faith efforts to resolve any such dispute. In the event that a dispute hereunder is not resolved by mediation, the parties agree to submit any litigation to enforce this Agreement to the jurisdiction of the United States District Court for the District of Maine.

(e) Counterparts/Electronic Signatures. This Agreement may be simultaneously executed in any number of counterparts, each of which when so executed and delivered shall be an original, but such counterparts shall constitute one and the same instrument. This Agreement may be signed electronically and such shall be treated as original signatures.

(f) Attorney's Fees. If any legal action (including without limitation mediation and arbitration) is brought or compelled by either party to enforce any provisions of this Agreement, the prevailing party shall be entitled to recover from the other party its reasonable attorneys' and paralegals' fees and court costs, subject to and limited by the provisions of the Default and Remedies section of this Agreement.

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(g) Effective Date. The Effective Date of this Agreement shall be deemed to be the date first set forth above in this Agreement, provided that if no date is filled in, the Effective Date shall be the last date of the signature of either Buyer or Seller.

[*Signature Page Follows*]

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IN WITNESS WHEREOF, Seller and Buyer have executed this Agreement under seal as of the dates indicated above.

SELLER

THE INSTITUTE FOR DIGITAL ENGINEERING AND LIFE SCIENCES

DocuSigned by:
Charles E. Hewett
4BD10668DAF9434...

By: Charles E. Hewett
Its: Executive Director
Date: October 23, 2023

BUYER

NORTHEASTERN UNIVERSITY

DocuSigned by:
Thomas E. Nedell
FF602479C14A4DA...

By: Thomas E. Nedell
Its: Senior Vice President & Treasurer
Date: October 23, 2023

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EXHIBIT A
[*Legal Description*]

A certain parcel of land, together with the improvements thereon, located on the easterly sideline of Interstate 295 and the southerly sideline of Sherwood Street in the City of Portland, County of Cumberland and State of Maine being further described as follows:

Beginning at a 6-inch by 6-inch granite monument found inscribed “ECJ #356” marking the southerly sideline of Sherwood Street westerly sideline of the Canadian National Railroad and further described as the most northeasterly corner of described parcel;

THENCE, S 23-36-55 E, along said Railroad 316.33 feet to a 6-inch by 6-inch granite monument found inscribed "ECJ 356";

THENCE, S 23-36-55 E, along said Railroad, 526.90 feet, to a 4-inch by 4-inch granite monument with a drill hole;

THENCE, S 23-36-55 E, along said Railroad, 745 feet, more or less to the low water mark of the Casco Bay,

THENCE, in a general westerly direction along said low water line about 1,685 feet to a point on the easterly sideline of Interstate 295;

THENCE, N 2-23-50 W, along said sideline, 48 feet, more or less to a point;

THENCE, S 87-30-10 W, along said sideline, 30.00 feet to a point;

THENCE, N 2-23-50 W, along said sideline, 61.46 feet to a drill hole found, said drill hole lying on a tie course of S 73-07-39 W, 878.87 feet from the previous mentioned 4-inch by 4-inch granite monument with a drill hole;

THENCE, N 2-23-50 W, along said sideline, 237.87 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 89-44-34 E, along said sideline, 1.05 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 6-28-53 E, along said sideline, 122.88 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 0-24-30 E, along said sideline, 88.91 feet to a 4-inch by 4-inch granite monument found inscribed "ECJ #509";

THENCE, N 24-48-04 E, along said sideline, 60.29 feet to a 6-inch by 6-inch granite highway monument;

THENCE, N 31-29-16 W, along said sideline, 31.96 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 3-26-49 W, along said sideline, 111.10 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 8-40-57 E, along said sideline, 89.05 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 23-15-05 E, along said sideline, 66.28 feet to a 4-inch by 4-inch granite monument Inscribed "ECJ #509";

THENCE, N 34-47-28 E, along said sideline, 96.68 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 25-25-29 E, along said sideline, 160.02 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 23-37-03 E, along said sideline, 63.03 feet to a 4-inch by 4-inch granite

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monument inscribed "ECJ #509";

THENCE, N 39-23-04 E, along said sideline, 6.72 feet to a 6-inch by 6-inch granite monument found inscribed "ECJ #509";

THENCE, N 55-32-30 W, along said sideline, 11.67 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 34-47-50 E, along said sideline, 117.04 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 34-43-38 E, along said sideline, 15.02 feet to a 5/8 inch re-bar found capped "ECJ #509" marking the southerly sideline of Sherwood Street;

THENCE, S 55-12-08 E, along said Sherwood Street, 288.60 feet to the point of beginning.

The foregoing description was prepared based on the Survey prepared by OEST Associates, Inc. dated February, 1999 and last revised February 26, 1999 recorded in in the Cumberland County Registry of Deeds in Plan Book 199, Page 159.

Alternate Legal Description [recent survey; grant to be without covenant of title]:

All right, title and interest in and to the following described lot or parcel of land, together with the buildings and improvements thereon, located in the City of Portland, County of Cumberland, State of Maine, which description is based on a ALTA/NSPS Land Title Survey prepared by VHB, dated June 30, 2021, last revised February 28, 2022, and Seller makes no representations or warranties as to the accuracy of said property description:

Beginning at a granite bound found at the intersection of the southerly sideline of Sherwood Street and the westerly sideline of land now or formerly of the state of Maine as described in the Cumberland County Registry of Deeds in Book 25500, Page 215, and Book 10924, Page 91 being formerly owned by the St. Lawrence & Atlantic Railroad Company, in part, and the Canadian National Railway Company, in part;

THENCE along the westerly sideline of land of the State of Maine South 23°38’41” East for a distance of 316.33 feet to a granite bound found;

THENCE continuing along land of the State of Maine South 23°34’45” East for a distance of 526.95 feet to a granite bound found;

THENCE continuing along the land of the State of Maine South 23°34’45” East for a distance of 745 feet, more or less to the low water mark of Casco Bay,

THENCE in a generally westerly direction along the low water line about 1,720 feet, more or less, to a point in the easterly sideline of Interstate 295;

THENCE along the easterly sideline of Interstate 295 the following courses and distances:

North 2°23’38” West for a distance of 48 feet, more or less to a point;

South 87°36’22” West for a distance of 30.00 feet to a point;

North 2°23’38 West for a distance of 61.46 feet to a point being located South 73°07’57” West at a distance of 878.66 feet from a granite bound found on the westerly sideline of land now or formerly of the State of Maine;

North 2°23’38 West for a distance of 237.87 feet to a point;

North 89°44’46” East for a distance of 1.05 feet to a rebar found;

North 6°29’05” East for a distance of 122.88 feet to a point;

North 0°24’42: East for a distance of 88.91 feet to a granite bound found;

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North 24°48’16 East for a distance of 60.29 feet to a granite bound found;
North 31°29’04” West for a distance of 31.96 feet to a point;
North 3°26’37” West for a distance of 111.10 feet to a point;
North 8°41’09” East for a distance of 89.05 feet to a point;
North 23°15’17” East for a distance of 66.28 feet to point;
North 34°47’40” East for a distance of 96.68 feet to a granite bound found;
North 25°25’41” East for a distance of 160.02 feet to a point;
North 23°37’15” East for a distance of 63.03 feet to a point;
North 39°23’16” East for a distance of 6.72 feet to a point;
North 55°32’18” West for a distance of 11.67 feet to a point;
North 34°48’02” East for a distance of 117.04 feet to a granite bound found;
North 34°43’50” East for a distance of 15.02 feet to a rebar found at the southerly sideline of Sherwood Street;

THENCE departing from the easterly sideline of Interstate 295 and running along the southerly sideline of Sherwood Street South 55°12’19” East for a distance of 288.59 feet to the point of beginning.

Meaning and intending to convey the same premises described in a Quitclaim Deed with Covenant from B&G Foods North America, Inc. to The Initiative for Digital Engineering and Life Sciences dated March 23, 2022 and recorded in the Cumberland County Registry of Deeds in Book 39282, Page 151.

The above described property shall be conveyed subject to the encumbrances listed as items 1-14 on Exhibit A of the Quitclaim Deed with Covenant from The Pillsbury Company to Heritage Acquisition Corp. dated March 15, 1999 and recorded in the Cumberland County Registry of Deeds in Book 14616, at Page 50 and the rights and easements granted by Heritage Acquisition Corp. to Central Maine Power Company and Verizon New England, Inc. by instrument dated February 7, 2006 and recorded in the Cumberland County Registry of Deeds in Book 24049, Page 189.

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EXHIBIT B
[*Development Contracts*]

1. Design Agreement by and between Bruner/Cott and The Initial for Digital Engineering and Life Sciences ("IDEALS") (*in negotiation; near final form*)

2. Design Agreement by and between CambridgeSeven and IDEALS (*in negotiation; near final form)*

3. Construction Management Agreement, by and between IDEALS and Consigli Construction Co., Inc. dated January 17, 2023

4. Cooperative Agreement by and between the Maine DOT ("MDOT") and IDEALS, dated as of January 18, 2023

5. MDOT Temporary Access Road Rights Agreement by and between MDOT and IDEALS, dated as of March 30, 2023

6. License Agreement with the City of Portland Fire Department by and between the City of Portland and IDEALS dated May 24, 2023

7. License Agreement with the City of Portland Fire Department by and between the City of Portland and IDEALS dated August 2, 2022

8. IDEALS Boiler Purchase Agreement by and between IDEALS and Maine Plywood USA, LLC dated June 19, 2023

9. Consultant Services Agreement, by and between IDEALS and MacRostie Historic Advisors

10. Consultant Services Agreement, by and between IDEALS and Thorton Tomasetti

11. Consultant Services Agreement, by and between IDEALS and Tsoi Kobus Design

12. Consultant Services Agreement by and between IDEALS and Vanasse Hangen Brustlin

13. Consultant Services Agreement, by and between IDEALS and Woodard & Curran

14. Consultant Services Agreement, by and between IDEALS and Power Engineers

15. Consultant Services Agreement, by and between IDEALS and SW Cole Engineering

16. Consultant Services Agreement, by and between IDEALS and Stephen Stimson Associates

5

Section 5: Public or Private Right-of-Way

5.A Public or Private Rights–of–Way

The site is proposed to be accessed as described in Section 3. Private on-site roadways will connect from the end of Sherwood Street to the proposed garage and drop-off areas. No additional public or private rights of way are proposed.

6

Section 6: Schedule

6.A Schedule

The opening year for the Roux Institute is anticipated to be 2027. The proposed uses are anticipated to be fully occupied in 2032.



The Roux Institute at Northeastern University

Transportation Demand Management Plan

PREPARED FOR

Roux Institute at Northeastern University / IDEALS
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Portland, ME 04101

PREPARED BY

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NOVEMBER 2023

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1

Introduction

Pursuant to Section 17.3 of the City of Portland Technical Manual, the Roux Institute at Northeastern University's Transportation Demand Management Plan (TDM) provides a cohesive approach to establish a targeted set of strategies aimed at reducing single occupancy vehicle trips to and from the proposed campus in Portland, Maine. The TDM plan describes how the Roux Institute at Northeastern University will provide information and education, enhance alternative transportation infrastrucutre and mobility, and incentivize students, faculty, and staff so that they use more sustainable, multimodal commuting options such as walking, bicycling, transit, carpooling and telecommuting. The Roux Institute at Northeastern University is committed to ongoing annual surveying to monitor the implementation and succcess of the TDM plan.

1.1 Program Summary and Project Status

In 2020, the Roux Institute at Northeastern University was launched to build expertise at the intersection of humans and technology. The campus is currently temporarily operating at 100 Fore Street but will be relocating to the redeveloped B&M Baked Beans facility. In its permanent waterfront location in East Deering, the Roux Institute at Northeastern University will continue to provide educational, research, and collaborative programs in areas including artificial intelligence, computer and data sciences, digital engineering, advanced life sciences, and medicine. The Roux Institute at Northeastern University offers post-graduate degrees and certifications, conducts research, assists start-ups, and partners with private, public and non-profit organizations. The mission of the Roux Institute at Northeastern University is *a vision to enable the creation of a synergistic technology and life science-driven economy and workforce, the Roux Institute at Northeastern University designs, curates, and integrates learning, research, and entrepreneurial solutions in collaboration with industry, academic institutions, and community organizations to catalyze talent development and economic impact throughout Maine*.

In February 2023, the Portland City Council approved the Institutional Overlay Zone for the campus at the old B&M Baked Beans site. The project team is currently embarking on the site plan review and public input process with the City of Portland, which includes the preparation and submission of a MaineDOT Traffic Movement Permit application. Permits are expected by the summer of 2024, when construction will begin, with an opening date in 2027. The campus will continue to grow over time in subsequent years and phases.

1.1.1 Existing Conditions

The Roux Institute at Northeastern University currently leases 84,000 sf of institutional space at 100 Fore Street adjacent to the East End neighborhood and near the waterfront in downtown Portland. In the fall of 2023, there were 665 enrolled students and 175 staff, researchers and faculty. There are currently 16 graduate programs in computer and data science, analytics, cloud software, cybersecurity, life sciences, and project management. To realize its full potential, the Roux Institute at Northeastern University is seeking to relocate its campus and expand in size as described in the following section.

1.1.2 Proposed Development Program

The campus will be anchored by a 238,000 square foot Learning, Research and Collaboration building and the 58,000 square foot Bean Building housing a start-up incubator program. By 2032, the campus plans to accommodate 3,123 graduate students in addition to supporting uses as shown in Table 1. An 8,000 square foot café and a day care center providing care for 50 children will be located on-site primarily for the families of students, staff, and faculty. In addition to its academic offerings, the campus will benefit the community by contributing to local economic growth and providing open space along the waterfront, active transportation accommodations throughout the site, job creation, and innovation space. The site plan is shown in Figure 1.

Table 1 Development Program

Program Component		2027 (Opening)	2032
Day care center		50 Children	50 Children
Academic Café		8,000 sf	8,000 sf
Roux Institute at Northeastern University	Graduate students	1,899 students	3,123 students
	Faculty, Staff, and Researchers[1]	225 staff	300 staff
	Embedded startup[1]	60 staff	100 staff
	JAX and Other Signature Partners[1]	55 staff	64 staff
	Affiliated Users[2]	35 visitors	100 visitors
	Special Events (daily)	150 attendees	150 attendees

1 All staff counts are in full-time equivalents.
2 Affiliated Users is a broad category for occasional visitors such as corporate learners, investors, donors, mentors, and neighbors.

The garage has been designed to accommodate 708 parking spaces. For this phase, 16 of those parking spaces will be used to accommodate parking for 66 bicycles and the remaining 692 parking spaces will be used to accommodate vehicular parking. In addition to the garage spaces, there will be 14 parking spaces provided at grade on the site. All on-site parking will be paid parking, and a parking office will be created to manage permitting and enforcement for the

campus. Parking costs and regulations may vary between categories of users (students, staff, faculty, visitors, etc.). Parking will be shared between uses within the campus only. This development will not rely on any on-street parking. The campus may include on-site car sharing, enabling travel to and from the site using other modes, with the comfort that vehicles are available if necessary. The TDM measures presented in this plan will be critical to maintaining the expected parking demand.

Figure 1 Proposed Site Plan



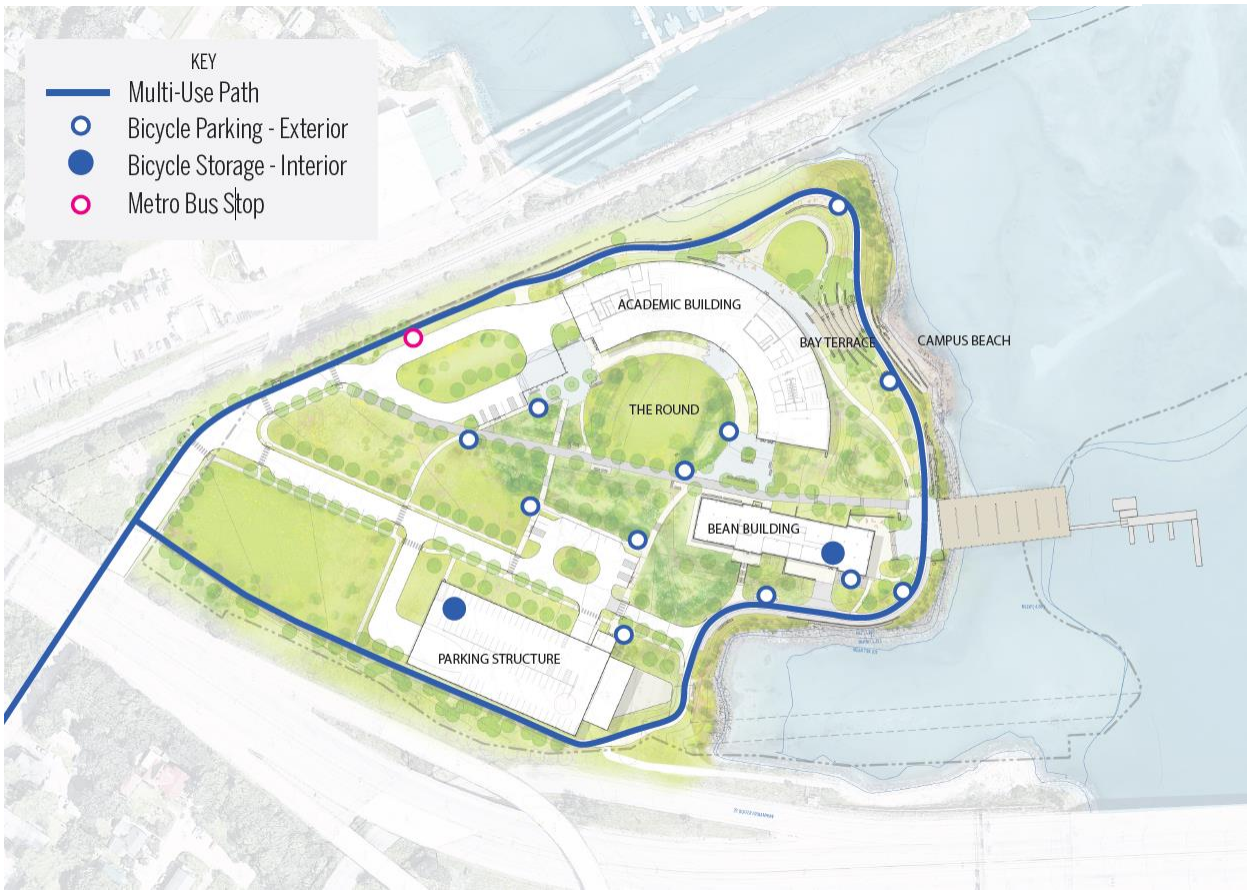
2

Mobility Context

For a TDM plan to be successful in shifting drive alone vehicle trips to transit, carpool, walk, and bicycle trips, it is essential to understand the multimodal transportation system surrounding the site. This section describes the existing transportation network challenges and future opportunities the Roux Institute at Northeastern University faces in redeveloping the site for their permanent campus.

The proposed waterfront site is located in East Deering adjacent to a marina and residential neighborhood comprising of single and multifamily homes as well as a commercial area which includes restaurants, bars, auto mechanics, and offices. I-295 runs along the western edge of the site, however the site will be well connected to the East Deering neighborhood, Back Cove, and the Portland Peninsula on the eastern promenade via vehicle, pedestrian, bicycle, transit and potential water taxi facilities. As shown in Figure 2, there are several promising opportunities to enhance and expand these transportation systems as part of the project to improve transportation mobility in and around the campus.

Figure 2 Campus Transportation Access



2.1 Vehicular Access and Circulation

A single vehicular access point to the site is provided via Sherwood Street at the intersection with Veranda Street through a 40-foot-wide highway underpass. Sherwood Street will continue to serve as vehicular access into and out of the campus in the future. The site is in close proximity to I-295, Route 1, Washington Avenue, and Baxter Boulevard. The traffic signal system along Washington Avenue is a traffic responsive system operating with high efficiency. Intersections of Washington Avenue at Veranda Street, at Presumpscot Street, and at Ocean Avenue are each signalized intersections.

2.2 Walking and the Pedestrian Environment

2.2.1 Existing Conditions

The surrounding East Deering neighborhood provides pedestrian amenities including sidewalks along Washington Avenue and Veranda Street. A sidewalk runs along the west side of Bates Street but narrows and is periodically blocked by utility poles. There is no sidewalk present on the east side of Bates Street. The Back Cove trail (multi-use path) runs along the Back Cove and Tukey's Bridge near the site. The main roadway access to the site is via Sherwood Street which consists of a 30-foot-wide roadway in a 40-foot wide right of way and includes non-continuous sidewalk segments mostly on the north side. The pedestrian connectivity to the Portland Peninsula is accessible from the Back Cove Trail across the west side of Tukey's Bridge. The sidewalk connecting from the intersection of Washington Avenue/Veranda Street is narrow and adjacent to vehicular traffic on the ramp to I-295. The sidewalk merges with the Back Cove Trail which adds bicycle and pedestrian demand to a narrow, shared use path over Tukey's Bridge. There is no existing direct connection to this shared use path from the campus.

2.2.2 Future Commitment

The Roux Institute at Northeastern University will improve pedestrian safety and connectivity to the East Deering neighborhood from the campus by providing continuous sidewalks on both sides of Sherwood Street. A crosswalk will be implemented across Sherwood Street at Veranda Street. Once on the site, pedestrian facilities will connect site uses and points along the waterfront. Improvements to pedestrian connections will increase walkability for the site.

2.2.3 Potential Future MaineDOT Infrastructure

The infrastructure described above will be constructed to allow for future connections to potential MaineDOT infrastructure. MaineDOT is contemplating a 14-16-foot-wide shared use path on a new bridge parallel to Tukey's Bridge on the east side that would provide a direct connection from the campus to the Portland Peninsula. In addition, a 10-foot-wide shared use path under Tukey's Bridge would improve pedestrian access to and from the campus to the Back Cove trail and for pedestrians traveling between East Deering and the Portland Peninsula using the future shared use path bridge. These new shared use paths would provide wider, safer, and more comfortable accommodations for pedestrians and improve connectivity.

2.3 Bicycling Environment and Facilities

2.3.1 Existing Conditions

Bicycle facilities are present in the East Deering neighborhood on Washington Avenue including buffered bike lanes north of Presumpscot Street and faded sharrows along Veranda Street. Bates Street provides a bike lane from Washington Avenue to Baxter Boulevard. The Back Cove trail (multi use path) runs along the Back Cove and Tukey's Bridge near the site. There are currently no bicycle facilities on Sherwood Street. Similar to the discussion above describing the pedestrian access across the shared use path on Tukey's Bridge, bicyclists must also use the narrow path to connect to the Portland Peninsula. Although this shared use path provides access to the Back Cove trail, it does not provide direct access to the campus. There are 8 public U-racks totaling 16 bicycle parking spaces located within the 970 Baxter Boulevard parking lot.

Walkscore.com rates East Deering with a Bikescore of 58/"Bikeable" indicating some bike infrastructure is present. The 15-minute bike shed zone from the campus is illustrated in Figure 3.

Figure 3 15 Minute Bike Shed Zone



2.3.2 Future Commitment

The Roux Institute at Northeastern University is dedicated to creating a safer, complete street along Sherwood Street to accommodate bicyclists into and out of the site by providing bicycle lanes. The campus will provide 166 bicycle parking spaces for students, staff, faculty and visitors. This quantity is more than triple the required amount of bicycle parking per the Portland Technical Manual. Shower and locker facilities will be provided for those commuters who bicycle to campus. The Roux Institute at Northeastern University will explore providing a Bike Fix-it Station for bike commuters and other visitors to the site.

2.3.3 Potential Future MaineDOT Infrastructure

The infrastructure described above will be constructed to allow for future constructed connections to potential MaineDOT infrastructure. MaineDOT is contemplating a 14-16 foot wide shared use path on a new bridge parallel to Tukey's Bridge on the east side that would provide a direct connection from the campus to the Portland Peninsula. In addition, a 10-foot-wide shared use path under Tukey's Bridge would improve bicycle access from the campus to the Back Cove trail and bicycle connectivity between East Deering and greater Portland.

2.3.4 Other Potential Future Infrastructure

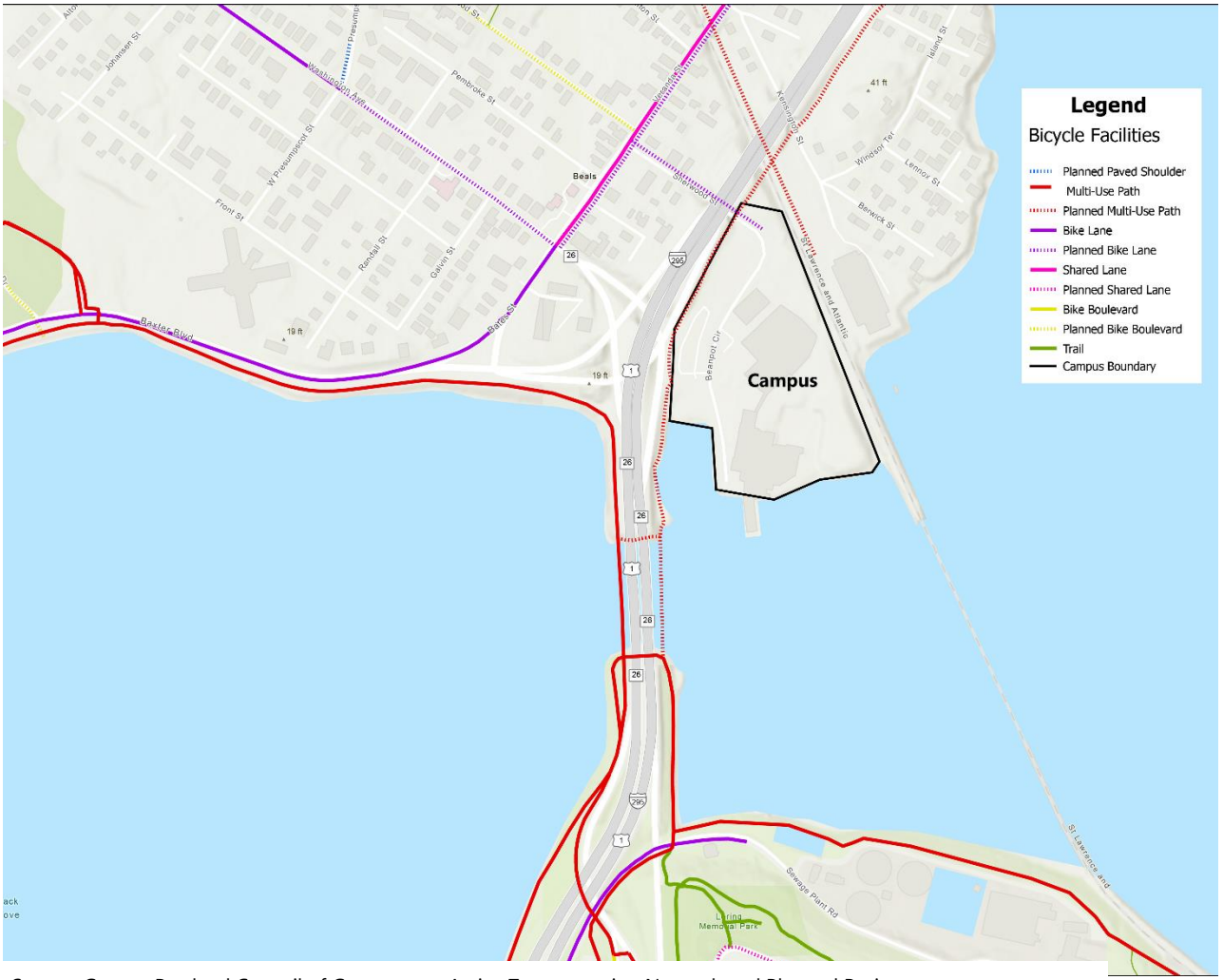
The City of Portland is currently working on the *Baxter Boulevard | Bates Street | Veranda Street Bikeway Project*[1] to implement buffered bicycle lanes on Veranda Street and a two-way bi-directional separated bike lane on Bates Street. Other potential opportunities for multi-use paths in the area include the Berlin Subdivision railroad right-of-way to points north ending at the Yarmouth Park and Ride on Exit 15 of I-295. Additionally, the Martin's Point Shared Use Path study considered a shared use path from Sherwood Street to the recently installed shared use path west of the Martin's Point Bridge starting at Wordsworth Street.

The City of Portland and Tandem Mobility have partnered to provide a bike share system in Portland. There are over 200 bicycles at over 40 stations predominately throughout the Portland peninsula. Pedal bikes and electric bikes are available by the minute and memberships are available on a monthly or yearly basis. There are currently no Portland BIKESHARE locations within the East Deering neighborhood in close proximity to the site, however there are a few on the East End across Tukey's Bridge. There is an opportunity to explore providing a new station on the campus which would expand the BIKESHARE network to the East Deering neighborhood.

Figure 4 presents the existing and potential future bicycle facilities surrounding the campus.

[1] Baxter Boulevard| Bates Street| Veranda Street Bikeway Project https://portland.civilspace.io/en/projects/better-bikeways-initiative

Figure 4 Existing and Potential Future Bicycle Facilities



Source: Greater Portland Council of Government Active Transportation Network and Planned Projects
https://gpcog.maps.arcgis.com/apps/View/index.html?appid=d5d7dbbc69534242b5fd4092c78f26e4

2.4 Public Transit

2.4.1 Existing Conditions

As shown in Figure 5, two bus lines currently stop near the campus: Metro Route 7 and Metro Routes 9A / 9B. Route 7 provides service between Portland and Falmouth with a stop at the Metro Pulse on the Peninsula as well as a stop near the campus at Veranda Street/Sherwood Street approximately a quarter of a mile from the center of the campus. Routes 9A/9B provide circular bus service between downtown Portland and North Deering with service running along Washington Avenue and Congress Street. Route 9A/9B stops on Washington Avenue near the site at Galvin Street and Veranda Street respectively which is under a half mile from the site. Bus transfers can be made at the Pulse and other stops on the Peninsula to reach the rest of Portland and several outlying towns.

Buses run continuously throughout the day, readily accommodating the varied schedules of students and other campus users. Metro BREEZ express bus service to Yarmouth, Freeport, and Brunswick and the Husky Line to Westbrook and Gorham establish a regional footprint for transit service. Ten local and express routes connect the campus to most of the Portland area with no more than one transfer.

The monthly ridership on Metro Route 7 is one of the lowest in the Metro system. In 2021, on an average weekday, there were 2521 boardings on Route 7. Each bus has the capacity of approximately 30 people and the bus runs 13 times per weekday inbound and outbound or a monthly capacity of approximately 7800 boardings, which leaves plenty of capacity on Route 7 to accommodate site related traffic.

In addition to the local Metro system, the Portland Transportation Center (PTC) in Thompson's Point provides regional bus and train service. Concord Coach Lines runs bus service from Portland to Boston, Massachusetts, Logan International Airport, and New York City as well as points north of Portland. The Amtrak Downeaster provides train service between Brunswick and Boston with a stop in Portland. Greyhound provides bus service between East Bayside in Portland and Boston, Massachusetts.

Figure 5 Public Transit Access



2.4.2 Future Opportunities

Metro is contemplating improvements to the transit system throughout Portland. In addition, the Roux Institute at Northeastern University is working with Metro to consider site specific transit accommodation for an on-campus bus stop that would connect the Roux Institute at Northeastern University to other key locations across the City, including housing, additional transportation connections, and partner organizations. The Roux Institute at Northeastern is also working with Metro and MaineDOT to identify park and ride locations where Roux students, faculty and staff can park and use Metro to travel to the site.

2.4.2.1 Transit Together Plan

In January 2023, The Portland Area Comprehensive Transportation System (PACTS) Policy Board approved the Transit Together Plan[2]. As of August 27, 2023, this plan enabled changes to Route 9 to provide more consistent 30-minute headways from 6am to 6pm on weekdays and from about 8am to 6pm on Saturdays. Route 9B will run one hour later in the evening.

In the Spring of 2024, Metro plans to make improvements to Route 7 by extending the route to the Portland Jetport via Congress Street with improved frequency and hours of operation.

[2] Transit Together - https://gpmetro.org/1644/Transit-Together---Route-and-Schedule-Ch

Frequency for Route 7 will improve from 60 to 30 minutes Monday through Saturday and services will be provided until 10pm or 11pm. The Falmouth loops will be eliminated, and Route 7 will use the Shaw's parking lot in Falmouth to turnaround. In conjunction, Route 5 service to the Jetport and Hutchins Drive will be discontinued to improve travel time between Portland and the Maine Mall. In addition, microtransit service will be implemented in east Falmouth. Microtransit riders within the zone will be able to request a ride using a smartphone app or phone call. These changes significantly increase the frequency and daily service to the campus.

2.4.2.2 Other Metro Opportunities

Metro is in the preliminary planning stages of studying how to extend Route 7 service along US Route 1 to Yarmouth. This extension could provide a bus route for campus commuters, with parking at the MaineDOT Exit 15 Park and Ride in Yarmouth.

The Roux Institute at Northeastern University is working with Metro to improve the quality and frequency of transit connections to the campus. Reduction of headways, modification of Route 5 or Route 7 to make a stop at the campus, and construction of a transit stop and turnaround on the campus, are all under consideration to further the convenience of transit for commuting to and from campus. The Roux Institute at Northeastern University will promote and incentivize transit use by subsidizing transit passes for students, staff, and faculty.

2.5 Ride-Hailing

In addition to driving, transit, walking, bicycling, and carpooling, commuters have the option of using ride hailing services such as Uber, Lyft and/or traditional taxis. Although these services result in vehicle trips to and from the campus, they reduce the parking demand and allow for less vehicle ownership and more flexibility with commute mode choices.

2.6 Current Parking Policies

Parking is currently provided to staff, faculty and embedded partners at $50 per month, per spot. There are 176 parking spaces allocated for the Roux Institute at Northeastern University in the on-site garage. Embedded partners and employees who opt out of monthly parking pay $1/hour to park in the garage. Parking for visitors is also provided via a public rate of $5/hour and in adjacent, paid parking lots. Students of the Roux Institute at Northeastern University are not currently charged to park on-site but will be at the future campus.

2.7 Existing TDM Efforts

As part of this TDM plan, the Roux Institute at Northeastern University plans to bolster its current TDM efforts for the permanent campus proposed in East Deering. However, they are currently implementing TDM strategies on the existing campus at 100 Fore Street to help reduce drive alone trips:

- Appointed a transportation coordinator who surveys students, faculty and staff to develop an understanding about mode choice.

- Subsidizing transit passes for faculty, staff and students. Posting transit related information in highly visible areas on site. Providing information on transportation commuting options including transit on the Roux Institute at Northeastern University's website.
- Offering convenient, hybrid course formats that blend online and on-site learning thus reducing the demand for commuting.
- Charging staff, faculty and embedded partners $50 per month per parking space.

3

TDM Coordinator

The Roux Institute at Northeastern University will designate a TDM coordinator to oversee the administration of the TDM plan and the annual surveying and reporting process.

The Roux Institute at Northeastern University plans to follow industry best practice by appointing a campus-wide transportation coordinator. The TDM Coordinator will collect data on the TDM progress to ensure it evolves as the site develops. Once the site is operational, the TDM Coordinator will conduct a transportation survey for students, staff, and faculty to establish a baseline for future drive alone mode share reduction goals. They will also collect and disseminate information (including non-automobile travel options) on-site and organize outreach events and campaigns to encourage TDM participation. The TDM Coordinator will promote alternative transportation choices to educate those commuting to and from the campus and coordinate the implementation of TDM strategies to reduce single occupancy vehicle (SOV) trips. In addition, the TDM Coordinator will work with the City of Portland, Metro, GoMaine, car share, and bike share programs to improve non-SOV mode shares. The responsibilities of the TDM Coordinator include the following:

- Promote alternative transportation choices to students, staff, faculty, and visitors to reduce single occupant vehicles (SOV) trips.
- Coordinate the implementation of TDM strategies with students, staff, and faculty and conduct orientations to educate those commuting to and from the campus regarding their transportation options.
- Monitor bike rack usage and make recommendations as needed to accommodate potential growing demand.
- Coordinate with the City of Portland, Metro, GoMaine, car share and bike share, and other potential partners to improve access to non-SOV modes.
- Conduct annual Transportation Monitoring and activities necessary to measure the effectiveness of the TDM program in achieving the mode share reduction target.
- Administer and review TDM surveys on a yearly basis.

- Complete the standard City of Portland TDM Reporting Form, which will summarize how effective the various strategies have been, mode share data based on the surveys and program success and barriers.
- File annual TDM reports by May 15th of each year with the City of Portland.

The TDM Coordinator will be the primary point of contact for students, staff, and faculty regarding the TDM plan. The TDM Coordinator will develop strategies and incentives for students, staff, faculty, and visitors where applicable. The TDM Coordinator will also collaborate with commuters prior to when they start to inform them of the robust network of alternative mode choices available to them.

4

Baseline TDM Data

Baseline travel demand and supply data for the campus has been quantified for the Traffic Movement Permit (TMP) Application being submitted to MaineDOT as part of the site plan review process. Baseline data includes estimated mode split, future trip generation estimates, and proposed parking supply and future demand estimates. Reviewing survey data and how the existing students, faculty and staff are currently commuting to campus, and how they expect to commute to the proposed campus, provides insight to which alternative modes may have the greatest potential to reduce drive alone trips.

4.1 Modal Split

4.1.1 Roux Institute at Northeastern University Transportation Survey

The Roux Institute at Northeastern University conducted transportation surveys on a quarterly basis throughout 2022 and 2023 which collected responses from students, staff, and faculty at the existing 100 Fore Street campus. The survey asked how the respondents commuted to campus and then how they imagine they will commute to the new campus in East Deering. The results of the survey mode share data are presented in Table 2. It is important to note that the data collected slightly varied throughout the time of year. Additionally, the Roux Institute at Northeastern University is an evolving, growing Institute currently in a temporary location and this data is only representative of a portion of students, staff and faculty. Based on feedback collected from the survey, it is anticipated that transit and bicycle trips will increase, walk trips will decrease, and drive trips will slightly decrease due to the proposed campus location and existing transportation system in East Deering. The Roux Institute at Northeastern University will continue to survey on a quarterly basis and make adjustments as circumstances evolve.

Table 2 Transportation Survey Mode Split Data

	Existing Commute at 100 Fore Street		
	August 2022	April 2022	January 2023
Drive	77%	72%	73%
Transit	4%	3%	4%
Walk	13%	16%	19%
Bike	6%	7%	4%
Other	0%	2%	0%

4.1.2 Traffic Movement Permit Mode Split Data

In addition to the data collected as part of the transportation surveys, expected mode share splits assumed in the Traffic Movement Permit (TMP) by land use are also provided in Table 3. The TMP mode splits are slightly more conservative in terms of analyzing vehicular traffic impact on the study area intersections. As additional bicycle and pedestrian connections are constructed in future years, it is likely that those mode shares will increase.

Table 3 TMP Mode Split

Population	Drive	Transit	Walk/Bike
Students	80%	10%	10%
All Other Populations	90%	5%	5%

Source: TMP indicates mode share assumptions presented in the Traffic Movement Permit

4.2 Trip Generation

As part of the TMP application, a trip generation analysis was conducted based on the 2032 development program presented in Table 1 using Institute of Transportation Engineers (ITE) publication, Trip Generation 11th edition as well as a custom trip generation methodology for the academic use of the site. The following assumptions were made to estimate student trip generation based on data from the campus:

- 43% of student enrollment are present on campus each day.
- 40% are daytime students and 60% are evening students.

Mode shares that were previously presented in Table 3, and applicable on site, internal capture trip rates were applied to the trip generation estimate to determine the external vehicle, pedestrian and walk trips as well as transit trips. The resulting estimated trip generation for the campus is presented in Table 4. The campus is expected to generate 237 morning and 521 evening peak hour vehicle trips, 20 morning and 51 evening peak hour transit trips, and 20 morning and 51 evening peak hour pedestrian and bicycle trips.

Table 4 Trip Generation

	Vehicle Trips	Transit Trips	Ped/Bike Trips
AM Peak Hour			
In	227	20	20
Out	10	0	0
Total	237	20	20
PM Peak Hour			
In	276	30	30
Out	245	21	21
Total	521	51	51

Source: Trip Generation Analysis presented in the Traffic Movement Permit

4.3 Proposed Parking Supply/Demand

A parking analysis was performed to estimate parking demand for the Roux Institute at Northeastern University. It was determined that parking demand peaks during the overlap between day and night users. Based on travel patterns of existing daytime and night students, the future enrollment will result in a peak demand of 561 spaces in the opening year and if the auto mode share stays as high as outlined in the TMP, 881 spaces in 2032.

The Roux Institute at Northeastern University is planning on providing parking on campus in a proposed parking garage designed to accommodate 708 parking spaces. For the first phase 16 of those parking spaces will be used to accommodate parking for 66 bicycles and the remaining 692 parking spaces will be used to accommodate vehicular parking. In addition to the garage spaces, there will be 14 parking spaces provided at grade on site. Since it is not feasible to construct parking garage levels during different phases of development, the parking garage will be constructed in 2027 to accommodate future demand. However, each interim phase will use only the number of parking spaces allocated based on that phase program.

In order to help mitigate the amount of vehicular traffic traveling to the campus, The Roux Institute at Northeastern University is actively exploring opportunities for satellite parking spots at existing park and ride locations within a short commute to the campus via tying into nearby transit routes or a Northeastern University-owned shuttle service.

To ensure parking usage in the structured garage does not exceed the permitted supply for each phase of development, the Roux Institute at Northeastern University will collect annual parking data to determine the number of vehicles parked throughout the day and evening. The TDM coordinator will obtain gate data for in, out, and occupancy counts on an hourly basis during the spring to coincide with the annual survey week. Moving into the future, the TDM coordinator will be working to reduce the automobile mode share to the site so that the garage is able to accommodate campus growth with that parking supply.

5

TDM Mode Split Targets

The TDM plan establishes short-term (3-5 year) and long-term modal split targets.

The TDM mode split target includes goals for reducing vehicle trips and increasing multimodal trips. Based on the future transportation system the campus will be supported by and TDM measures that will be implemented, the short and long-term targets that are proposed as part of this TDM plan are presented in Table 5. The mode share goals are within range of the City's *One Climate Future* document that sets a Key Transportation Milestone that by 2035, 26% of trips in the city will use alternative transportation modes, (up from 12%)[3]. The long-term goals are based on mode splits presented as part of the approved Institutional Development Plan for the Roux Institute at Northeastern University. The Roux Institute at Northeastern University is committed to implementing the TDM strategies presented in the following Section 6 to work towards achieving these mode split targets. The targets will be reviewed and updated based upon the annual TDM reporting process.

Table 5 Drive Mode Split Targets

Population	Mode Split Targets	
	Short-term (3-5 Years)	Long-term
Students	80%	70%
All Other Populations	90%	80%

[3] https://www.oneclimatefuture.org/wp-content/uploads/2021/02/OneClimateFuture_FinalJan2021_Downsized.pdf

6

Mode Split Target Strategies

The TDM plan includes a set of strategies aimed at achieving the TDM goals described above. The strategies are targeted to students, staff, and faculty traveling to and from the campus in East Deering. The Roux Institute at Northeastern University is committed to enhancing the multimodal transportation systems around the campus including providing improved pedestrian and bicycle facilities and transit access/service.

As part of the quarterly transportation survey, the Roux Institute at Northeastern University gathered data on which TDM strategies would more likely encourage students, staff, and faculty to commute differently to the proposed campus. The feedback indicates that Roux Institute at Northeastern University commuters are most likely to shift to a different mode share when showers, lockers and bike storage is available, there is a credit system for sustainable commuting, a bus route is provided from downtown, a park and go is available and bike share is available for commuters. Additional open-ended comments were provided and are also reflected in the TDM strategies presented in this section.

Table 6 below presents the strategies that the Roux Institute at Northeastern University is committed to fulfilling which are grouped into three main categories: Infrastructure/Transit/Mobility Improvements and Contributions; Incentives; and Information/Education/Marketing. These commitments include timelines for implementation. Table 7 provides a list of potential strategies the Roux Institute at Northeastern University is considering implementing in a future phase of the project.

Table 6 TDM Strategies – Commitments			Timeline Years	
Category	**Strategy**	**Targeted User/Group**	**Short-term (0-2 Years)**	**Long-Term (2+ Years)**
Investments				
Public Transit Access	Work with Metro to provide a new transit stop on campus. The transit stop will include a shelter and provide real-time bus information as well as a turnaround area on site.	Students/Staff/Faculty/Visitors	Implement	
Public Transit Access	Subsidize the purchase of student and staff/faculty bus passes.	Students/Staff/Faculty	Implement	
Bicycle Access	Secured bicycle parking will be provided via 100 exterior and 66 interior spaces. This equates to over 3 times the City of Portland Land Use Code parking requirements totaling 166 bicycle spaces. This equates to over 3 times the required amount of bicycle parking.	Students/Staff/Faculty/Visitors	Implement	Continue to monitor and provide additional bicycle parking if demand increases.
Bicycle Access	Improve Sherwood Street by providing bicycle lanes.	Students/Staff/Faculty/Visitors	Implement Sherwood Street bicycle lanes.	
Bicycle Access	Provide on-site showers and lockers	Students/Staff/Faculty	Implement	
Pedestrian Access	Improve the pedestrian network by providing new sidewalks along Sherwood Street and a new crosswalk across Sherwood Street at Veranda Street.	Students/Staff/Faculty/Visitors	Implement Sherwood Street improvements.	
Constrained Parking	Parking on-site will be constrained to a parking garage designed to accommodate 708 parking spaces (only 692 to be used for vehicular parking and 16 for 66 bicycle parking spaces) in addition to 14 at-grade parking spaces.	Students/Staff/Faculty	Implement	Ongoing parking management as long-term phasing is completed.
Water Access/Marine Feature	Build a modern pier over the footprint of the current pier, in order to accommodate water shuttles and taxis.	Students/Staff/Faculty/Visitors		Implement
Incentives				
Flexible Work and/or On-line Learning	Provide a hybrid course format that allows online and on-site learning.	Students/Staff/Faculty	Implement	
Flexible Work and/or On-line Learning	Flexible scheduling (ability to start-stop some class hours outside of peak travel periods, e.g.)	Students/Staff/Faculty	Implement	
Parking Pricing	Parking charge for students, staff/faculty (unbundled parking costs - not included with tuition and not provided as a benefit to staff/faculty)	Students/Staff/Faculty	Implement	
Transit Incentives	Pre-tax transit pass purchasing for employees.	Staff/Faculty	Implement	
Preferential Parking	Prioritize parking for carpools.	Students/Staff/Faculty	Implement	
	Carpools will receive reduced price parking.	Students/Staff/Faculty	Implement	
Programmatic Incentives	Join the Emergency Ride Home program through the GOMAINE program.	Students/Staff/Faculty	Implement	
Electric Vehicle Parking	Monitor EV parking demand study and increase the chargers, their power, and number of EV-ready spaces as demand dictates.	Students/Staff/Faculty/Visitors		Monitor usage and provide additional EV charging infrastructure as needed.
Information/Education/Marketing				
Education on Travel Choices	Join GOMAINE. Encourage staff/faculty to join Go Maine & Record “green trips”.	Students/Staff/Faculty	Implement	
Education on Travel Choices	Provide a website that will present travel choices to campus available to students/staff/faculty with links to resources. Information on bicycling routes, bicycle parking infrastructure, and walking infrastructure will be provided on the website	Students/Staff/Faculty/visitors	Implement	
Education on Travel Choices	The TDM coordinator will send out organizational emails promoting alternative modes/TDM program to staff/faculty and students.	Students/Staff/Faculty	Implement	
Education on Travel Choices	The TDM coordinator will facilitate carpools by maintaining a database of interested parties; commuters will be matched with others who live near them or can access a park and ride location along their route. The Roux Institute at Northeastern University will also participate in the Maine DOT/Maine Turnpike Authority GOMAINE, which facilitates carpools across nearby sites and provides participants with rewards for carpooling	Students/Staff/Faculty	Implement	
Education on Travel Choices	The TDM coordinator will provide new students, staff, and faculty with orientation packets describing non drive-alone commutes and incentives.	Students/Staff/Faculty	Implement	
Education on Travel Choices	Provide transit maps and schedules on-campus.	Students/Staff/Faculty/Visitors	Implement	
Education on Travel Choices	Provide a real-time electronic screen displaying transit information – ‘Next Bus’ at bus stop.	Students/Staff/Faculty/Visitors	Implement	

Table 6 TDM Strategies – Commitments			Timeline Years	
Category	**Strategy**	**Targeted User/Group**	**Short-term (0-2 Years)**	**Long-Term (2+ Years)**
Future Investments				
Bicycle Access	Consider installing a bike repair station	Students/Staff/Faculty/Visitors	Investigate	Implement
Bicycle Access	Consider providing electric bike charging	Students/Staff/Faculty/Visitors		Investigate through surveys to determine if this would be effective and used.
Portland BIKESHARE	Investigate establishing a new BIKESHARE station on campus. Currently, there are no BIKESHARE stations located in East Deering.	Students/Staff/Faculty/Visitors	Investigate	Implement as demand dictates
Car Share	Explore providing one car share vehicle on campus.	Students/Staff/Faculty		Provide car share parking as future program is developed.

7

Monitoring and Reporting Plan

Program monitoring and reporting are important components of a successful TDM program because they provide a quantitative benchmark of the program's effectiveness in reducing single occupancy vehicle trips and resulting parking demand over time. The monitoring process provides feedback on whether progress toward the TDM targets is being made. The TDM Coordinator will use the information gathered through the monitoring plan to direct the ongoing implementation of the TDM program, allowing for adjustments and the introduction of new strategies.

The TDM Coordinator will be responsible for monitoring the efficacy of the TDM plan and making adjustments to the plan as needed to achieve modal split targets.

An annual survey will be administered to gather data for student, staff, and faculty commuting characteristics. Surveys provide a qualitative understanding of how well TDM program elements are working. This survey will ask respondents how they commuted to campus for the last five days and will provide a comprehensive list of mode share choices. Additional information including vehicle ownership, parking costs, and mode share barriers and incentives will also be collected. Parking utilization count data will be obtained annually to support the monitoring process. The TDM Coordinator will obtain data to quantify the hourly in, out, and number of parked vehicles in the garage. This data will help to establish the resulting parking demand for the enrollment at that time.

Should additional data such as bicycle parking counts or other TDM tracking efforts be needed to support the monitoring effort, additional data will be collected. This might include the following data needs:

- Should bicycle parking utilization counts be needed to support the monitoring process, the number of bicycles parked on campus will be tracked. This data will be reviewed for trends in

bicycle usage over time to determine if bicycle parking is adequate and meets the needs of the bicyclists.

› The TDM Coordinator will work with Metro to track the transit usage of commuters via the pass program implemented. The data for the same time period as outlined above in the surveys will be obtained and reviewed.

The results of monitoring effort will be reported to the City of Portland on an annual basis by May 15th using the standard reporting tools provided by the city.

6. ENVIRONMENTAL QUALITY STANDARDS (14.6.2)

Under pre-development conditions, the Site is approximately 70% impervious with approximately 9 acres of building roofs, parking areas, and loading dock space. At the time of this submission, IDEALS completed a permitted demolition of existing buildings whose footprints have been temporarily stabilized until construction commences as a result of Site Plan approval. Minimal shoreline buffer is present at the Site, with pavement extending right up to the armored embankment along much of the shoreline. Low areas on the Site are only 1-foot above Highest Astronomical Tide.

In recognition of existing vulnerabilities and future sea level rise, resiliency will be key to the campus. The redevelopment will raise interior site grades, soften landscapes to reduce impervious area, and incorporate infrastructure improvements to create a flood resilient landscape. Compliance with the City of Portland's Land Use Code Section 14.6.2 Environmental Quality Standards is described in the following sections.

6.1 Preservation of Significant Natural Features

Immediately adjacent to this highly developed Site are natural resource areas including: an estuarine intertidal emergent marsh located east of the Site near the rail corridor; coastal wetlands for all areas below highest annual tide; tidal waterfowl and wading bird habitat, and blue mussel habitat. A wetland delineation investigation, including a functions & values assessment was conducted by scientists at FB Environmental in June of 2023, and is summarized in the report attached to this section. Portions of the Site are delineated as Special Flood Hazard Areas according to FEMA's Flood Insurance Rate Map (FIRM).

The attached Official Species List identifies the northern long-eared bat (endangered species), roseate tern (endangered species) and monarch butterfly (candidate species) in association with the project area; however, there are no critical habitat areas located within the project area. Based on US Fish & Wildlife information, the northern long-eared bat typically lives in caves during the winter months, and in trees larger than three inches in diameter during the summer, with migration between these two habitats in the spring and the fall. Tree clearing will be conducted between August and May to avoid impacts to long-ear bats. Applicable permitted tree clearing dates for the project will be confirmed with regulatory agencies during final design. It is not anticipated that the proposed development will have a negative impact on the northern long-eared bat, roseate tern, or monarch butterfly.

6.2 Landscape Preservation

Please refer to Section 3.3.7. While the areas adjacent to the Site contain significant natural features as described above, the area within property lines of the campus has been highly developed throughout its history. As such no significant vegetation or natural resources exist on the Site that will be preserved in the landscape design. Rather the focus of the implementation will be on the region's ecology, geology, and habitats.

6.3 Site Landscaping & Buffers

The project landscaping complies with the City of Portland Technical Manual 14.6.2 C with the frequency and size of plantings adjacent to property lines. In addition, a vegetated roof is proposed on the west wing of the Learning, Research, and Collaboration Building. Loading, servicing areas, trash and recycling areas are screened from view of public sidewalks, streets, and adjacent properties. Surface parking lots likewise

comply with the provisions of this section with the use of landscape islands. Please refer to Section 3.3.7 for additional site landscaping information.

6.4 Water Quality, Stormwater Management & Erosion Control

The project must comply with the water quality, stormwater management, and erosion control standards identified by the City of Portland in the Land Use Chapter of the Code of Ordinances, as well as the MaineDEP Chapter 500 Stormwater Standards associated with Site Location of Development Act Permit requirements. The Stormwater Management Plan included with this application demonstrates that the proposed development meets the applicable standards.

For a Site that had previously seen no stormwater quality or quantity treatment or management other than some limited collection systems, the proposed stormwater management system will reduce the impact of stormwater on surrounding resources. The proposed stormwater management system has been designed to adequately capture, convey, and treat stormwater runoff, as demonstrated in the Stormwater Management Report uploaded under separate cover. The project will not result in the flooding of adjacent lots or City property.

Additionally, the project is not located within the watershed of an Urban Impaired Stream and is not anticipated to pose a risk of groundwater contamination during or after construction. Erosion and sediment control measures are described in the attached Stormwater Management Plan and detailed in the drawings.

6.5 Section Attachments

- Wetland Delineation Report
- Official Species List

6.6 Attachments Provided as Separate Files

The following materials referenced by this section of the report have been uploaded under separate cover for review.

- Stormwater Management Report

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Denise Cameron
Project Manager | Senior Principal
Woodard & Curran
41 Hutchins Drive
Portland, ME 04102

June 27, 2023

Subject: Roux Institute – Wetland Delineation

Dear Denise,

As requested by Woodard & Curran, FB Environmental Associates (FBE) delineated wetlands and watercourses and conducted a wetland functions and values assessment at a site in Portland, Maine. The site is intended to be the permanent home of the Roux Institute, a graduate education and research facility, under the Initiative for Digital Engineering & Life Sciences (IDEALS). The specific Survey Area consists of a 14-acre parcel situated in Portland's East End at the mouth of Back Cove. The attached map depicts the location of the parcel, formerly known as the B&M property.

Fieldwork was conducted on 6 June 2023, by FBE's Ecological Services Division Lead and Senior Wetland Scientist Kevin Ryan and Wetland Scientist Sarah Large. Wetlands were identified and delineated in accordance with the 1987 US Army Corps of Engineers (USACE) Wetland Delineation Manual[1] using the methods described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0.[2] Copies of completed wetland determination data forms are included with this report. All wetlands and watercourses were classified using the US Fish and Wildlife Service (USFWS) Classification of Wetlands and Deepwater Habitats of the United States.[3]

Wetland Delineation Methods

Wetland boundaries are marked in the field using pink flagging emblazoned with the words "WETLAND DELINEATION." Boundaries of wetlands delineated during the field survey are geo-located using a sub-meter accuracy GPS unit (EOS Arrow-100). The collected GPS data are then used to create a wetland delineation map.

In Maine, Wetlands of Special Significance (WoSS) are regulated by the Maine Department of Environmental Protection (DEP) under Chapter 310 of the Maine Natural Resources Protection Act. All coastal wetlands and great ponds (inland bodies of water >10 acres in size) are classified as WoSS. In addition, a freshwater wetland may be considered one of special significance if it: (1) contains a natural community that is critically imperiled or imperiled as defined by the Maine Natural Areas Program; (2) contains significant wildlife habitat; (3) is located within 250 feet of a coastal wetland; (4) is located within 250 feet of a great pond; (5) contains at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation[4], or open water; (6) is inundated with floodwater during a 100-year flood event based on flood insurance

[1] Environmental Laboratory. (1987). Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1. Vicksburg, MS: US Army Engineer Waterways Experiment Station.
[2] U.S. Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
[3] Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. *Classification of wetlands and deepwater habitats of the United States*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 131pp.
[4] Cowardin et al. [1979] defines emergent hydrophyte (i.e., emergent marsh vegetation) as "…rooted herbaceous angiosperms, ferns, and fern allies that grow in wet soil, stand erect during most or all of the growing season, and may be periodically to permanently flooded at the base, but do not tolerate prolonged inundation of the entire plant").

maps; (7) contains peatlands; or (8) is located within 25 feet of a river, stream, or brook. The Survey Area was assessed for WoSS.

Wetland Functions and Values Assessment Methods

FBE conducted the wetland functional assessment pursuant to the approach described by the Army Corps Highway Methodology Workbook Supplement: Wetland Functions and Values (US ACOE, 1995). In this "Descriptive Approach" to function assessment, prior to determining what functions and values are principal and why, evaluators first determine if particular functions and values are present and then if they are "principal". Functions and values are considered "principal" if they are an important physical component of a wetland ecosystem (function only), and/or are considered of special value to society, from a local, regional, and/or national perspective. When making determinations regarding a wetland, evaluators are encouraged to determine whether the wetland has the potential to serve these functions and values.

Functions are self-sustaining properties of a wetland ecosystem that exist in the absence of society and result from both living and non-living components of a specific wetland resource. These include all processes necessary for the self-maintenance of the wetland ecosystem, such as primary productivity and nutrient cycling, among others. Therefore, functions relate to the ecological significance of wetland properties without regard to subjective human values.

Values are benefits that derive from one or more functions and the physical characteristics associated with a wetland. Most wetlands have corresponding societal values. The value of a particular wetland function, or combination of functions, is based on human judgment of the worth, merit, quality, or importance attributed to those functions.

The 13 functions and values associated with a wetland functional assessment are described below:

1. *Groundwater Recharge/Discharge*: The potential for the wetland to serve as a groundwater recharge and/or discharge area. This function refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.
2. *Floodflow Alteration (Storage & Desynchronization)*: The effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events and the gradual release of floodwaters. This function adds to the stability of the wetland ecosystem or its buffering characteristics and provides social or economic value relative to erosion and/or flood prone areas.
3. *Fish and Shellfish Habitat*: The effectiveness of seasonal or permanent watercourses associated with the wetland to provide fish and shellfish habitat.
4. *Sediment/Toxicant/Pathogen Retention*: The ability of the wetland to reduce or prevent degradation of water quality. This function relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands, or upstream erosive wetland areas.
5. *Nutrient Removal/Retention/Transformation*: The ability of the wetland to act as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.
6. *Production Export*: The effectiveness of the wetland to produce food or usable products for man or other living organisms.
7. *Sediment/Shoreline Stabilization*: The effectiveness of the wetland in stabilizing stream banks and shorelines against erosion.
8. *Wildlife Habitat*: The effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and wetland edges. Both resident and migrating species are considered.

9. *Recreation*: The suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities.
10. *Educational/Scientific Value*: The suitability of the wetland as a site for an "outdoor classroom," or as a location for scientific study or research.
11. *Uniqueness/Heritage*: The effectiveness of the wetland or its associated waterbodies to provide certain unique values, including archaeological sites, critical habitat for endangered species, its overall health and appearance, its role in the ecological system of the area, or its relative importance as a typical wetland class for the geographic location.
12. *Visual Quality/Aesthetics*: The visual and aesthetic quality or usefulness of the wetland.
13. *Endangered Species Habitat*: The suitability of the wetland to support threatened or endangered species.

Site Description

The site is composed of approximately 14-acres of previously developed land bounded by Casco Bay to the south and east, Portland's Back Cove to the west, I-295 to the northwest, and the former Grand Trunk Railway rail grade to the northeast. The site was home to the B&M Baked Beans plant that operated at the site from 1913 to circa 2022. The factory buildings occupy roughly half of the parcel[5], with parking lots accounting for an additional third. The remaining sixth of the property is composed of manicured lawn, trees and shrubs, and a small linear wetland running north-south along the eastern property boundary with the railroad grade.

Soils at the site consist primarily of urban fill. An elevated plateau-like area is present between the factory buildings and the wetland complex/ravine to the east.

Wetlands and Watercourses

FBE identified one contiguous wetland within the Survey Area which contains several wetland classes. Areas immediately adjacent to the site are regularly flooded estuarine intertidal wetlands with a predominantly mud substrate (E2US3N). Areas mapped beyond this wetland type are classified as estuarine subtidal (E1UBL) as the substrate remains inundated at low tide.

The wetland complex at the site is coastal and therefore meets the criteria to be deemed Wetland of Special Significance by DEP.

Wetland A - E2US3N Section

The western end of the shoreline at the site, extending east to the pier, meets the classification of a regularly flooded estuarine intertidal unconsolidated shore wetland with a mud substrate (E2US3N). The area is a mudflat that is bordered by riprap on all sides. The wetland has been altered by the development present on and adjacent to the site. Rockweed (*Ascophyllum nodosum*), a seaweed common to sheltered shores and coves, is present within the wetland attached to riprap and on rocks within the mudflat.

Wetland A – E2US1N Section

East of the pier, the characteristics of Wetland A differ in terms of substrate and meets the classification of a regularly flooded estuarine intertidal unconsolidated shore wetland with a cobble-gravel substrate (E2US1N). The predominantly cobble-gravel substrate of this section of the wetland is strewn with old, weathered bricks and other historic construction debris. The land area immediately east of the pier is bounded by a stone retaining wall; beyond it to the east, the shoreline is lined with rocks of various sizes ranging from pebbles to boulders.

Wetland A – E2EM1N Section

The channelized section of Wetland A on the eastern boundary of the property is an estuarine intertidal emergent marsh system with persistent vegetation (E2EM1N) situated in a ravine that is regularly flooded. This portion of the wetland has a variety of native and nonnative invasive shrubs growing along the banks. Native shrubs observed

[5] The buildings were in the process of being demolished during the course of the field investigation.

in proximity to the wetland included willows (*Salix* sp.), staghorn sumac (*Rhus hirta*), and cherry trees (*Prunus* sp.). Nonnative plants observed include black locust trees (*Robina pseudoacacia*) and cultivated apple trees (*Malus pumila*). Non-native, invasive plants observed consisted of Morrow's honeysuckle (*Lonicera morrowii*), Japanese knotweed (*Fallopia japonica*), and multiflora rosa (*Rosa multiflora*).

At the USACE plot within this section of the wetland, smooth cordgrass (*Spartina alterniflora*) is the dominant vegetation with Carolina sea-lavender (*Limonium carolinianum*) and common glasswort (*Salicornia depressa*) also present. Soil met the criteria for hydric soil indicators A11 – Depleted Below Dark Surface and F3 Depleted Matrix as the soil profile consisted of a dark surface layer of silty clay loam underlain by a depleted clay with prominent redoximorphic concentrations. Observed primary indicators of hydrology consisted of A1 – Surface Water, A2 – High Water Table, A3 – Saturation, and B9 – Water-Stained Leaves. Completed USACE Wetland Determination Data forms are attached to this letter.

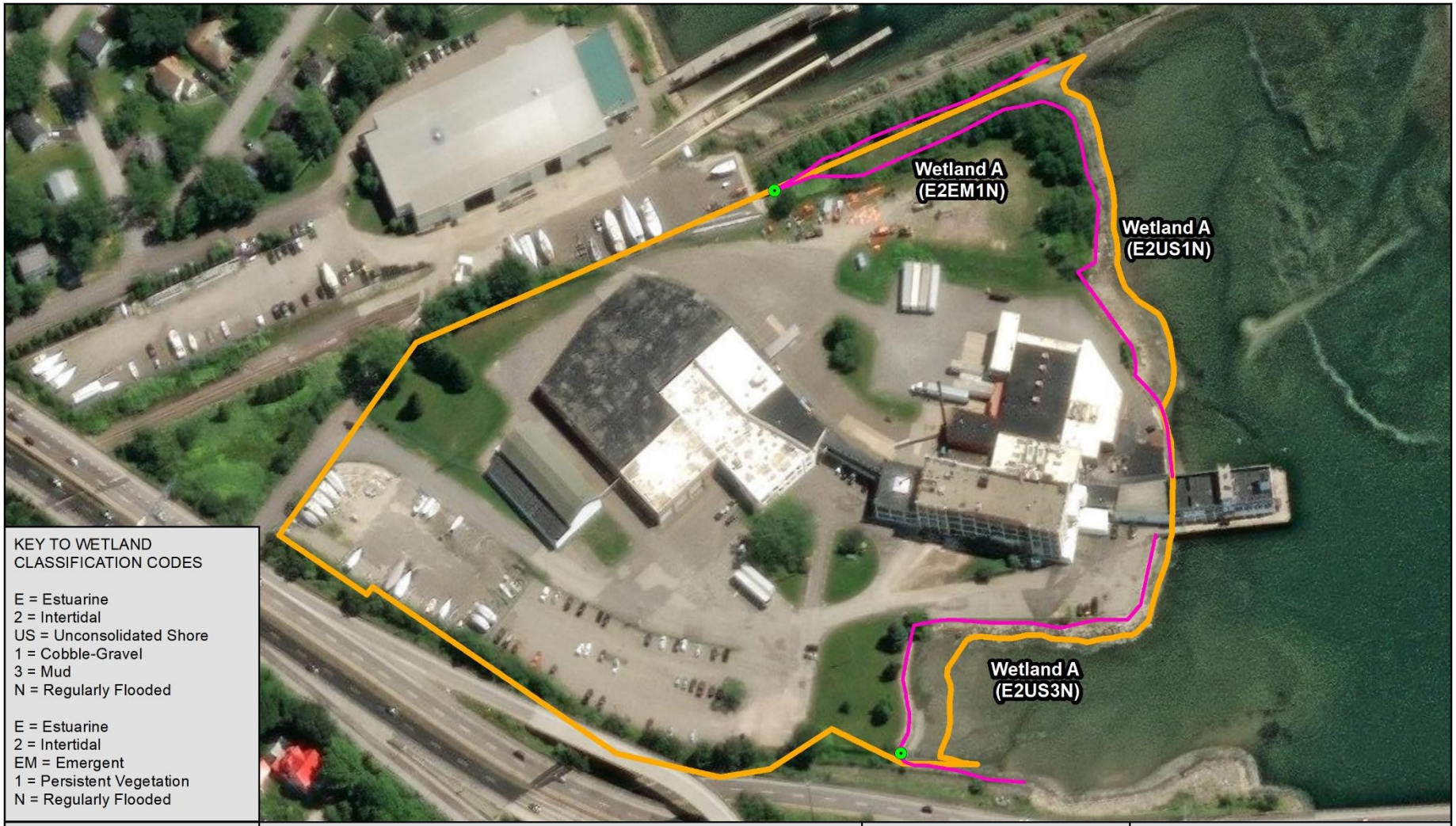
Functions and Values

Principal functions of Wetland A are Fish and Shellfish Habitat, Production Export, Wildlife Habitat, and Uniqueness/Heritage. Other functions and values that the wetland provides consist of Floodflow Alteration, Sediment/Toxicant Retention, Nutrient Removal, Sediment/Shoreline Stabilization, Recreation, Educational/Scientific Value, and Visual Quality/Aesthetics. A completed USACE Function and Value Evaluation Form is attached to this letter.

Thank you for the opportunity to assist Woodard & Curran with this project. Please do not hesitate to contact me if you have questions or need additional information.

Regards,

Kevin Ryan
Ecological Services Division Lead
FB Environmental Associates

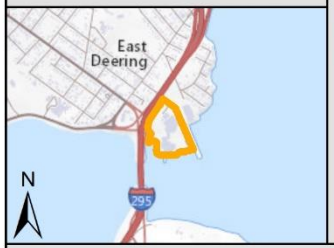


KEY TO WETLAND CLASSIFICATION CODES

E = Estuarine
2 = Intertidal
US = Unconsolidated Shore
1 = Cobble-Gravel
3 = Mud
N = Regularly Flooded

E = Estuarine
2 = Intertidal
EM = Emergent
1 = Persistent Vegetation
N = Regularly Flooded

LOCUS MAP



Survey Area
Wetland Boundary
Culvert

N E S W

FB environmental

0 100 200 Feet

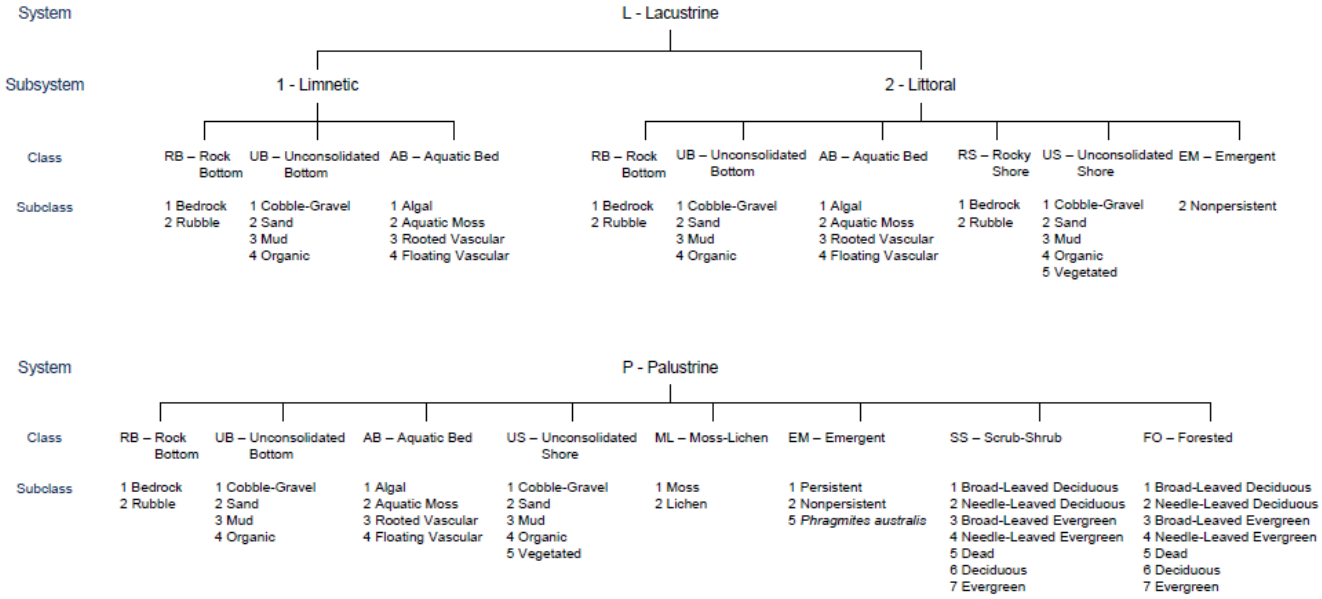
Initiative for Digital Engineering & Life Sciences
Roux Institute
Portland, Maine

Data Sources: Maine Geolibrary, ESRI, FBE
Coordinate System: NAD 1983 UTM Zone 19
Map created by K. Ryan on June 22, 2023

Notes: Wetlands were delineated by Kevin Ryan and Sarah Large in accordance with the 1987 US Army Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, v2.0. January 2012. Wetlands were classified using the Classification of Wetlands and Deepwater Habitats of the United States (USFWS, 1979).

Cowardin Wetland Classification System

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION

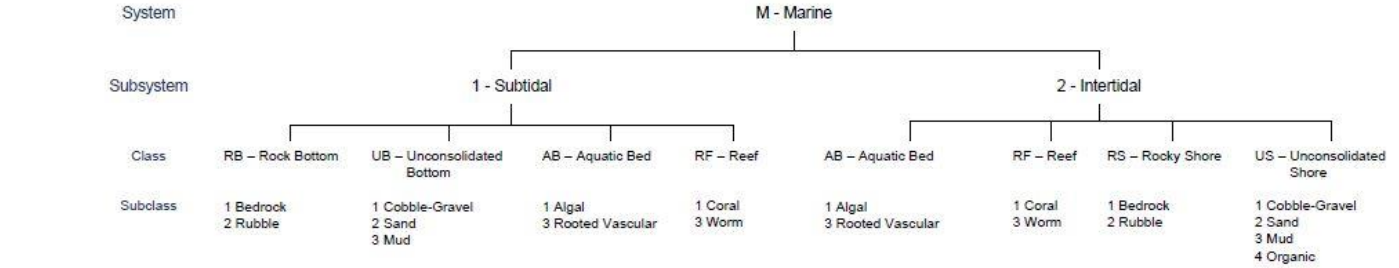


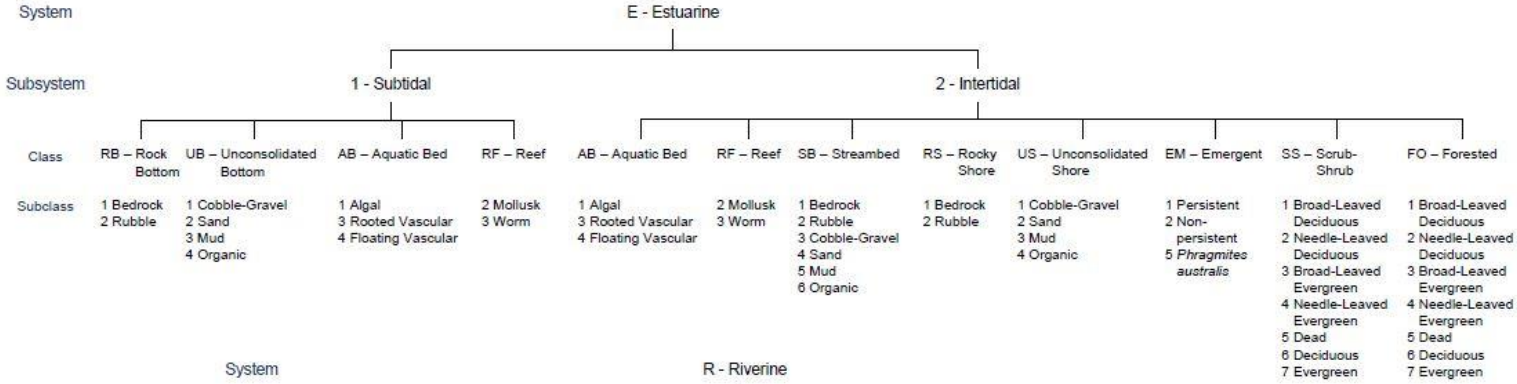
MODIFIERS

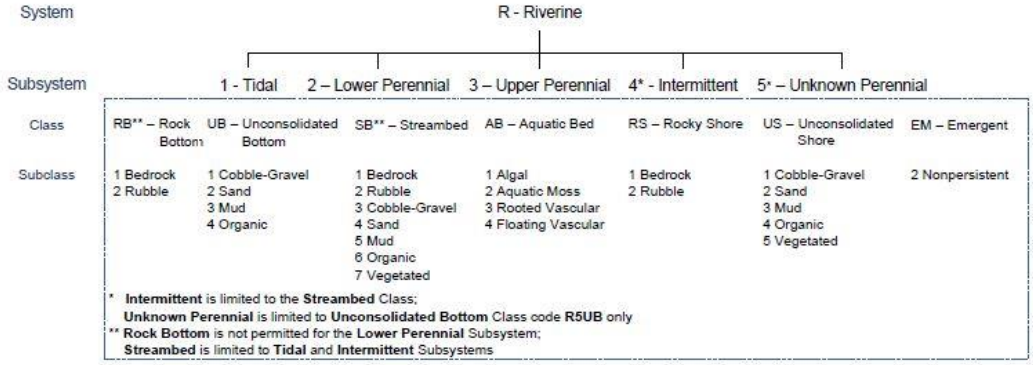
In order to more adequately describe the wetland and deepwater habitats, one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farmed modifier may also be applied to the ecological system.

Water Regime			Special Modifiers	Water Chemistry			Soil
Nontidal	**Saltwater Tidal**	**Freshwater Tidal**		**Coastal Halinity**	**Inland Salinity**	**pH Modifiers for all Fresh Water**	
A Temporarily Flooded	L Subtidal	S Temporarily Flooded-Tidal	b Beaver	1 Hyperhaline	7 Hypersaline	a Acid	g Organic
B Saturated	M Irregularly Exposed	R Seasonally Flooded-Tidal	d Partly Drained/Ditched	2 Euhaline	8 Eusaline	t Circumneutral	n Mineral
C Seasonally Flooded	N Regularly Flooded	T Semipermanently Flooded-Tidal	f Farmed	3 Mixohaline (Brackish)	9 Mixosaline	i Alkaline	
E Seasonally Flooded/ Saturated	P Irregularly Flooded	V Permanently Flooded-Tidal	h Diked/Impounded	4 Polyhaline	0 Fresh		
F Semipermanently Flooded			r Artificial	5 Mesohaline			
G Intermittently Exposed			s Spoil	6 Oligohaline			
H Permanently Flooded			x Excavated	0 Fresh			
J Intermittently Flooded							
K Artificially Flooded							

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION







Site Photographs



Photo 1. View south from the north end of Wetland A.



Photo 2. View north from the western boundary of Wetland A, towards the developed/manicured area.



Photo 3. The current pier acts as a dividing line between the muddy and cobble-gravel substrate sections of Wetland A.



Photo 4. Wetland A north of the pier has a cobble-gravel substrate strewn with old bricks.



Photo 5. View north of the emergent marsh section of Wetland A.



Photo 6. View south from the emergent marsh section of Wetland A.



Photo 7. Several small culverts drain to the west end of Wetland A.



Photo 8. View north of the emergent portion of Wetland A upon becoming inundated during the field investigation.

Completed Wetland Function-Value Evaluation Form

Wetland Function-Value Evaluation Form

Total area of wetland: n/a Human made?: No Is wetland part of a wildlife corridor?: No or a "habitat island"?: No

Adjacent land use: Industrial facility Distance to nearest roadway or other development: Immedeately adjacent

Dominant wetland systems present: Estuarine Contiguous undeveloped buffer zone present: No

Is the wetland a separate hydraulic system?: No If not, where does the wetland lie in the drainage basin?: Low - coastal

How many tributaries contribute to the wetland?: n/a Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D.: Wetland A

Latitude: 43.64235 Longitude: 70.279119

Prepared by: KR & SL Date: 6 June 2023

Wetland Impact:
Type: _____ Area: _____

Evaluation based on:
Office: Yes Field: Yes

Corps manual wetland delineation completed? Y: x N: _____

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	N			
Floodflow Alteration	Y	3,4,5,9,11		
Fish and Shellfish Habitat	Y	1,3,4	Y	Wetland is a coastal mudflat.
Sediment/Toxicant Retention	Y	1,2,4,7,8,9		
Nutrient Removal	Y	2,4,5,6,7		
Production Export	Y	1,4,6	Y	
Sediment/Shoreline Stabilization	Y	1,3,5,10,11		
Wildlife Habitat	Y	8,16,21	Y	Observed waterfowl and fish using wetland.
Recreation	Y	2,5,12		
Educational/Scientific Value	Y	2,5,14		
Uniqueness/Heritage	Y	1,13,14,17,19,20	Y	
Visual Quality/Aesthetics	Y	2,6,8,11,12		
ES Endangered Species Habitat				Unknown.
Other				

Notes:

* Refer to backup list of numbered considerations.

Completed Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: IDEALS - Roux Institute City/County: Portland/Cumberland Sampling Date: 6 June 23

Applicant/Owner: Woodard & Curran State: ME Sampling Point: A-1 (wet)

Investigator(s): Kevin Ryan and Sarah Large Section, Township, Range:

Landform (hillside, terrace, etc.): Coast Local relief (concave, convex, none): Concave Slope %: 1

Subregion (LRR or MLRA): LRR R Lat: Long: Datum:

Soil Map Unit Name: Cut and Fill NWI classification: Not mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes X	No	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 4
Water Table Present?	Yes X	No	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Plot becoming inundated by tide at time of data collection.

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VEGETATION – Use scientific names of plants.

Sampling Point: A-1 (wet)

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Spartina alterniflora*	50	Yes	OBL
2. *Limonium carolinianum*	10	No	OBL
3. *Salicornia depressa*	5	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	65 (A)		65 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

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SOIL Sampling Point: A-1 (wet)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 2.5/1	100					Loamy/Clayey	Silty clay loam
4-8	2.5Y 4/1	75	7.5YR 5/6	25	C	M	Loamy/Clayey	Prominent redox concentrations
8-16	2.5Y 4/1	60	7.5YR 5/6	40	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

US Army Corps of Engineers Northcentral and Northeast Region – Version 2.0

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: IDEALS - Roux Institute City/County: Portland/Cumberland Sampling Date: 6 June 23

Applicant/Owner: Woodard & Curran State: ME Sampling Point: A-1 (up)

Investigator(s): Kevin Ryan and Sarah Large Section, Township, Range:

Landform (hillside, terrace, etc.): Coast Local relief (concave, convex, none): Concave Slope %: 1

Subregion (LRR or MLRA): LRR R Lat: Long: Datum:

Soil Map Unit Name: Cut and Fill NWI classification: Not mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Plot is in manucured lawn just west of Wetland A

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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VEGETATION – Use scientific names of plants.

Sampling Point: A-1 (up)

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Picea abies*	10	Yes	UPL
2. *Thuja occidentalis*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *None*			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Trifolium repens*	30	Yes	FACU
2. *Achillea millefolium*	30	Yes	FACU
3. *Poa sp.*	30	Yes	
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	60	x 4 =	240
UPL species	10	x 5 =	50
Column Totals:	80 (A)		310 (B)

Prevalence Index = B/A = 3.88

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** X

Remarks: (Include photo numbers here or on a separate sheet.)
Plot is on manicured lawn.

US Army Corps of Engineers

Northcentral and Northeast Region – Version 2.0

SOIL Sampling Point A-1 (up)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	7.5YR 3/2	100					Loamy/Clayey	Sandy Loam
20-22	7.5YR 4/4	100					Loamy/Clayey	Sandy Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

US Army Corps of Engineers Northcentral and Northeast Region – Version 2.0

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
Phone: (207) 469-7300 Fax: (207) 902-1588

In Reply Refer To:
Project Code: 2023-0113655
Project Name: IDEALS Phase 1

October 30, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
(207) 469-7300

PROJECT SUMMARY

Project Code: 2023-0113655
Project Name: IDEALS Phase 1
Project Type: Acquisition of Lands
Project Description: Phase 1
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.67886365,-70.25460066402678,14z



Counties: Cumberland County, Maine

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

---

1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Roseate Tern *Sterna dougallii dougallii* Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Black Guillemot *Cepphus grylle* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10412	Breeds May 15 to Sep 10
Black Scoter *Melanitta nigra* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10413	Breeds elsewhere
Common Eider *Somateria mollissima* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10457	Breeds Jun 1 to Sep 30
Common Loon *gavia immer* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/4464	Breeds Apr 15 to Oct 31
Great Shearwater *Puffinus gravis* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/9634	Breeds elsewhere
Long-tailed Duck *Clangula hyemalis* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/7238	Breeds elsewhere
Razorbill *Alca torda* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10461	Breeds Jun 15 to Sep 10
Red Phalarope *Phalaropus fulicarius* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10469	Breeds elsewhere

NAME	BREEDING SEASON
Red-breasted Merganser *Mergus serrator* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10693	Breeds elsewhere
Red-throated Loon *Gavia stellata* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/9589	Breeds elsewhere
Ring-billed Gull *Larus delawarensis* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10468	Breeds elsewhere
Roseate Tern *Sterna dougallii* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10661	Breeds May 10 to Aug 31
Surf Scoter *Melanitta perspicillata* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10463	Breeds elsewhere
Thick-billed Murre *Uria lomvia* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10700	Breeds Apr 15 to Aug 15
White-winged Scoter *Melanitta fusca* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10462	Breeds elsewhere
Wilson's Storm-petrel *Oceanites oceanicus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10416	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

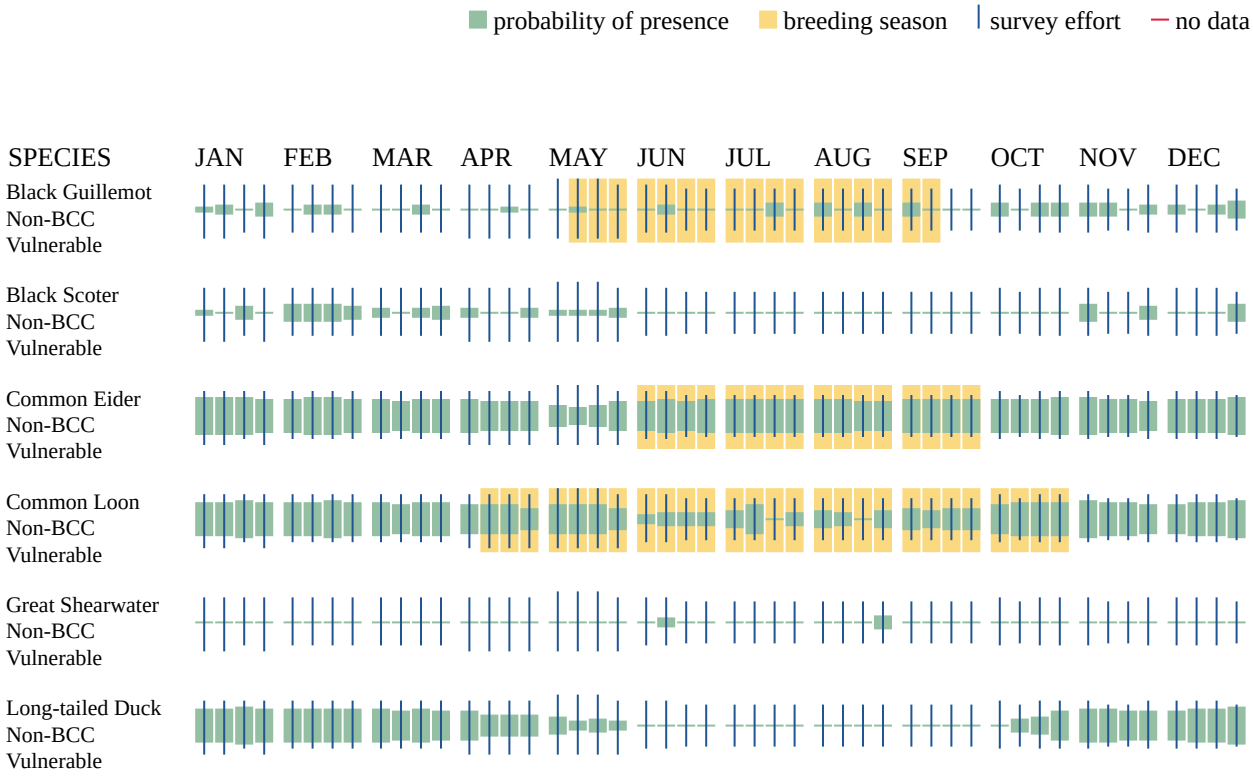
Probability of Presence (■)

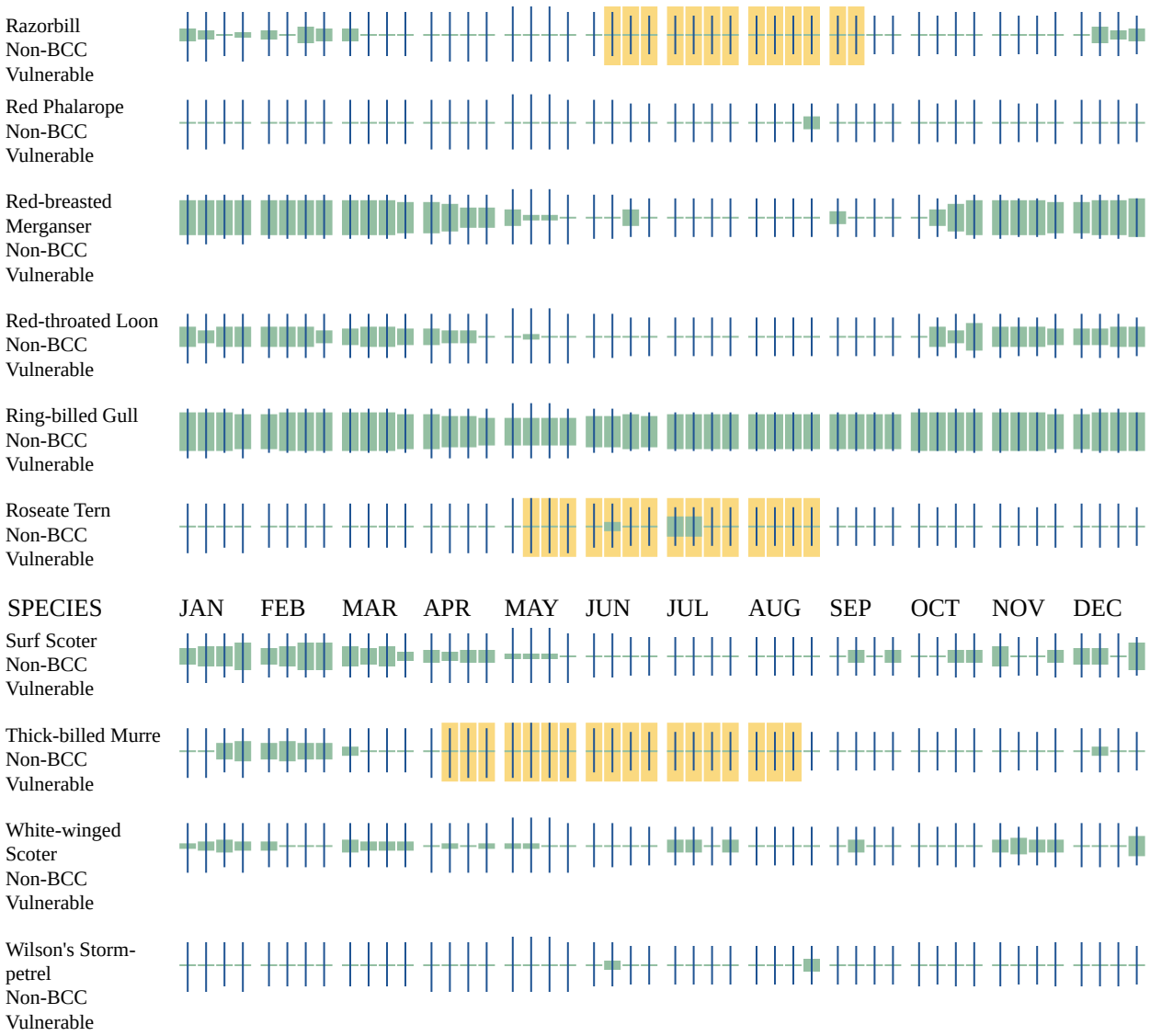
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

ESTUARINE AND MARINE WETLAND

- E2US2P
- E2US3N

ESTUARINE AND MARINE DEEPWATER

- E1UBL

IPAC USER CONTACT INFORMATION

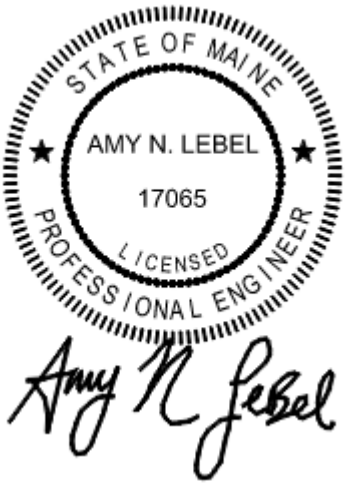
Agency: Private Entity
Name: Julianna Monts
Address: 41 Hutchins Drive
City: Portland
State: ME
Zip: 01402
Email jmonts@woodardcurran.com
Phone: 9175753387

Att. L

ROUX INSTITUTE AT NORTHEASTERN UNVERSITY

Stormwater Management Plan

1 Bean Pot Circle
Portland, ME



12 Mountfort Street
Floors 5 & 6
Portland, ME 04101
800.426.4262

woodardcurran.com

Prepared for
Initiative for Digital Engineering and Life Sciences (IDEALS)

October 2023

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1. INTRODUCTION & BACKGROUND

This narrative report is in support of a Major Site Plan Application and Site Location of Development (SLOD) Permit Application on behalf of Northeastern University (Applicant) and their agent, Initiative for Digital Engineering and Life Sciences (IDEALS), for development of the Roux Institute at Northeastern University campus located at 1 Bean Pot Circle in Portland, Maine (the Site). This Stormwater Management Plan (SWMP) describes existing site conditions, the proposed development, compliance with applicable stormwater standards, and inspection and maintenance requirements for the proposed stormwater system for Phase 1.

Phase 1 includes construction of a Learning, Research, and Collaboration Building, renovation of the Bean Building to create business incubator space, construction of a parking garage, development of a childcare facility, replacement of the pier, development of a coastal path, and other site improvements. The proposed Phase 1 project is designed with consideration to future development, with the interior-most and waterfront spaces being developed first to reduce impacts of construction of future phases. Likewise, the stormwater management system has been designed to ensure stormwater standards are met for the development during each phase, with consideration and capacity for full build-out of the Site to minimize future construction impacts.

The project is subject to stormwater management standards through the requirements of both the City of Portland Site Plan and the Maine DEP Site Location of Development permit applications. The following report demonstrates how the development of the Site meets the stormwater standards outlined in Section 5 of the City of Portland's Technical Manual and in the Maine DEP's Chapter 500.

2. EXISTING CONDITIONS

The Site is located within Portland's East Deering neighborhood, at the end of Sherwood Street, adjacent to Maine Yacht Services and near a residential area of single and multi-family homes (three-story apartment buildings) and a commercial node featuring restaurants, bars, automobile mechanics, and offices. While proximate to these areas, the Site is remarkably buffered; I-295 to the west, state-owned vacant parcels to the north, a disused rail corridor and marine business to the east, and Casco Bay to the south collectively surround the property.

The Site includes approximately 13 acres above mean higher high water (MHHW) line as well as an adjacent 11 acres of submerged lands. A survey of the Site was completed by VHB, Inc. (dated June 30, 2021 and July 17, 2023). Approximately 9 acres of land above the mean higher high water line are impervious (paved areas, building roofs, foundations, etc.). The remaining 4 acres of permeable area include lawn and approximately half an acre of vegetated non-lawn area adjacent to the rail corridor abutting the site to the east. No stormwater treatment systems exist on the Site.

The Site was occupied by residences and a lobster cannery prior to 1913, when Burnham & Morrill (B&M) relocated its food manufacturing operations to the Site from Franklin Street. Shortly thereafter, the flagship Cannery Building (Bean Building) was constructed, as well as the adjacent codfish building on the pier. The site was further improved with buildings and parking to support operations. Due to its industrial use, the site is surrounded by security fencing, and the interior and waterfront have historically been inaccessible to the public. Canning operations ceased in 2021.

On May 23, 2023, IDEALS received a demolition permit from the City, and commenced demolition of all existing buildings on the site, retaining only the Bean Building and the Codfish Building. The demolished building areas remain stabilized with perimeter erosion control measures, and for the purposes of evaluating the Site for stormwater permitting, these areas have been considered as impervious existing roof.

Topography of the Site generally slopes from north to south toward Casco Bay. Runoff from the Site drains via sheet flow in a southerly direction to a series of catch basins that ultimately discharge to Casco Bay. The highest elevations are near Sherwood Street, at elevation 28 +/-. The lowest grades are near the loading dock at the B&M Bean Building, at elevation 8.5 +/-. These low areas are only 1-foot above Highest Astronomical Tide.

3. PROPOSED DEVELOPMENT

The proposed development of Phase 1 and reconstruction of Sherwood Street will result in approximately 14.5-acres of disturbance and approximately 7.3-acres of impervious area, for a net decrease in impervious area of approximately 2.6-acres. Proposed work includes:

- Construction of the Learning, Research, and Collaboration Building;
- Renovation of the Bean Building;
- Construction of a parking garage;
- Development of a childcare facility;
- Replacement of the pier;
- Development of a coastal path; and
- Landscaping, utility, and site improvements.

The proposed drainage conveyance system in Phase 1 is comprised of a series of drainage swales, catch basins, area drains, field inlets, trench drains, hydrodynamic separators, outlet control structures, and drainage manholes, which ultimately discharge to Casco Bay via three outfalls. Stormwater treatment for the Site in Phase 1 is provided via bioretention basins and subsurface sand filters. The proposed stormwater management systems are discussed in further detail in the following sections.

Sherwood Street will also be reconstructed as part of this project from the intersection of Veranda Street, underneath the Interstate 295 overpass bridge and into the Site. The design of Sherwood Street from Veranda Street through the existing Interstate 295 overpass is shown on the roadway design drawings by VHB and the design beyond the overpass into the Site is shown on the design drawings by Woodard & Curran. Drainage from Sherwood Street is managed separately from the rest of the Site. Woodard & Curran met with City of Portland Public Works staff to discuss Sherwood Street and will be working with them to resolve how best to connect stormwater infrastructure within the reconstructed street.

The reconstruction of Sherwood Street results in an increase in impervious area of approximately 0.2 acres in the Sherwood Street right-of-way; therefore, Sherwood Street has been included in the stormwater treatment calculations for the Site. Limited space is available for treatment of stormwater in the Sherwood Street right-of-way. Woodard & Curran confirmed with City of Portland Public Works that Sherwood Street redeveloped area may be factored into on-site stormwater treatment calculations.

4. STORMWATER STANDARDS

The project is subject to the MaineDEP Chapter 500 and City of Portland Technical Manual Section 5 Stormwater Standards. The project is not located within the watershed of an Urban Impaired Stream and is therefore not subject to the Urban Impaired Stream Standard. The following sections describe the project's compliance with the applicable stormwater standards.

4.1 Basic Standard (Soil Erosion & Sediment Control)

A variety of erosion and sediment control measures will be utilized during construction, including but not limited to the following:

- Stabilized construction entrances;
- Up-gradient runoff diversion barriers;
- Downgradient sediment barriers;
- Catch basin inlet protection devices;
- Preservation and maintenance of vegetated areas to the maximum extent possible;
- Temporary stabilization of disturbed areas to be exposed for more than seven days;
- Permanent stabilization of final graded areas;
- Controls for fugitive dust, debris, and other materials; and
- Inspection of all measures until the Site is permanently stabilized.

Structural measures will be installed as shown on the design drawings. Details and specifications for these measures are included on the drawings. All measures will be implemented in accordance with the "Maine Erosion and Sedimentation Handbook for Construction: Best Management Practices", latest edition. All temporary measures will be installed prior to any earth-disturbing activities and will be removed upon permanent stabilization of the Site. The Contractor will be responsible for implementing and maintaining all erosion and sediment control measures in an effective operating condition during construction. Permanent erosion control measures will include vegetation and pavement. After construction, the Owner will be responsible for inspecting and maintaining the Site as described in Section 5 of this Report.

4.2 Flooding Standard (Stormwater Quantity)

Runoff from the proposed project will primarily discharge to the adjacent Casco Bay, which is a tidal waterbody, via either sheet flow or the on-site storm drain system. In accordance with Section 4.F(3) of the MaineDEP Chapter 500 Stormwater Standards, a project is eligible for a waiver from the Flooding Standard if it discharges to a coastal wetland or a major river segment. As noted in the description of the proposed development, the only portion of the Site that will not discharge directly to Casco Bay is the drainage from within Sherwood Street. We respectfully request a waiver from the Flooding Standard for the campus development.

4.3 General & Redevelopment Standards (Stormwater Quality)

The proposed project is subject to the redevelopment standards for stormwater quality from both the MaineDEP and the City of Portland. Calculations demonstrating compliance with stormwater quality standards are provided in Appendix B. A figure showing the area of redevelopment is included in Appendix C of this Report.

4.3.1 Maine DEP Redevelopment Standards

Calculations have been prepared in accordance with Section 4.C(2)(d) of the MaineDEP Chapter 500 Stormwater Standards to determine how much treatment is required for the proposed redevelopment project. The project has been evaluated as a "Site" project as it is required to obtain a Site Location of Development Permit. Based on the impact analysis calculations provided in Appendix B of this Report, it has been determined that the proposed project is required to provide treatment for 50% of the total redevelopment area. Figures showing existing and proposed pollutant ranking areas are provided in Appendix C. With the proposed stormwater management system, greater than 50% of the redevelopment area will be captured and treated. Runoff from proposed driveways, parking areas, building roofs, and interior impervious plazas was prioritized for treatment; figures showing redevelopment and treatment areas is provided in Appendix C.

4.3.2 City of Portland Redevelopment Standards

For redevelopment sites, per Section 5 of the City of Portland's Technical Manual, a minimum of 50% of the non-roof redeveloped impervious surface on a site must receive stormwater treatment. The calculations included in Appendix B show that greater than 50% of the non-roof redeveloped impervious surface on the Site will be treated by the proposed stormwater systems.

4.3.3 Proposed Treatment Systems

As previously described, stormwater systems will consist of bioretention basins and subsurface sand filters. The proposed stormwater systems have been designed based on Volume III of the DEP Stormwater BMP Manual; calculations demonstrating compliance with the BMP design requirements are provided in Appendix B and design details are provided on the drawings.

Three bioretention basins are proposed to treat stormwater from interior sidewalks, plaza and landscaped areas. Outlet control structures and emergency spillways are provided to manage runoff beyond the 1-inch water quality storm event.

The subsurface sand filters are comprised of proprietary R-Tank modules over sand filters. The R-Tank system has been designed to detain the water quality volume for the upgradient area. Diversion structures are provided upgradient of proposed subsurface sand filters to manage runoff beyond the 1-inch water quality storm event. We are coordinating with the manufacturer on the proposed subsurface sand filter design; a letter that demonstrates manufacturer review and approval of the design can be provided upon request.

The proposed design includes multiple best management practices to reduce sediment loading upgradient of the stormwater filtration systems, including deep sump catch basins, offline catch basin drainage design, sediment forebay, grass swales, hydrodynamic separators, and pretreatment rows. The sediment pretreatment devices have been sized in accordance with the Maine DEP BMP Manual for non-roof impervious drainage area. Sizing calculations are provided in Appendix B.

5. INSPECTION & MAINTENANCE REQUIREMENTS

General inspection and maintenance of stormwater systems will take place during and after construction. During construction, the Contractor will be responsible for inspecting and maintaining the Site, as described in Section 4.1 of this Report. Upon completion of construction, the property owner will be responsible for implementing the Inspection and Maintenance Plan for the proposed stormwater system, which is provided in Appendix A of this Report. A Stormwater Maintenance Agreement will also be provided and will be signed and recorded following approval.

APPENDIX A: STORMWATER INSPECTION & MAINTENANCE PLAN

STORMWATER INSPECTION & MAINTENANCE PLAN

The Roux Institute at Northeastern University Phase 1

Portland, Maine

General inspection and maintenance during and after construction must take place in accordance with the requirements outlined in Appendix B of the Maine Department of Environmental Protection (MaineDEP) Chapter 500 Rules. Upon completion of the project, the Owner will assume responsibility for overseeing the property, including the inspection and maintenance of the Site's stormwater drainage system and treatment measures outlined herein. A person with knowledge of stormwater management and erosion and sediment control, including the standards and conditions in the permit, shall conduct the inspections and perform maintenance of the facilities.

Inspection and maintenance activities will be performed per the attached checklist, schedule, and manufacturer guidelines; an example page of the BMP Maintenance Log that shall be kept on-site is also attached.

INSPECTION AND MAINTENANCE OF STORMWATER SYSTEMS

Trash, debris, and sediment shall be removed from storm drainage pipes and catch basins as needed on a semi-annual basis. In addition to the inspection and maintenance of stormwater systems, paved areas will be inspected annually each spring. These areas will be kept clean and clear through periodic sweeping and winter plowing as required. Inspections will also ensure pavement markings are repainted as needed to maintain proper traffic circulation. Paved areas will be plowed and sanded as often as necessary to maintain public safety. Periodic sweeping of pavement will reduce the amount of sediment available to enter the stormwater systems, in turn reducing the need to clean the stormwater systems.

Bioretention Basin

The bioretention basins should be inspected after major storms (one-inch storm or greater in 24 hours) in the first year to be sure they are functioning properly. Thereafter, the basins should be inspected at least once every six months to ensure that they are draining within 24 to 48 hours following a one-inch storm or greater. If the system drains too fast, an orifice may need to be added on the underdrain outlet. If ponding exceeds 48 hours, the top of the filter bed must be rototilled to reestablish the soil's filtration capacity. If ponding exceeds 72 hours, the top several inches of the filter shall be replaced with fresh material.

Debris and sediment buildup shall be removed from the basin as needed but at least annually and shall be disposed of in an acceptable manner. Any bare area or erosion rills shall be repaired with new filter media or sandy loam then mulched or seeded. Fertilization of the bioretention basin should be avoided unless absolutely necessary to establish vegetation. Harvesting and pruning of excessive growth will need to be done occasionally. Weeding to control unwanted or invasive plants may also be necessary. Mulch shall be replaced annually or as needed.

Subsurface Sand Filter

The subsurface sand filter should be inspected after every major storm in the first year to be sure it is functioning properly. Thereafter, the filter should be inspected at least once every six months to ensure that it is draining within 24 to 48 hours following a one-inch storm or greater. If the system drains too fast, an orifice may need to be added on the underdrain outlet or, if already present, may need to be modified. The sediment pretreatment systems should be cleaned when necessary. The proprietary subsurface detention

component of the sand filter (R-Tank modules) must be inspected and maintained per the manufacturer's guidelines, which are outlined in the attached guidance document.

Sediment Forebay

Debris and sediment buildup shall be removed from sediment forebays as needed but at least annually and shall be disposed of in an acceptable manner.

Grass Swale

Debris, sediment buildup, and woody vegetation shall be removed from the grass swales as needed but at least annually and shall be disposed of in an acceptable manner.

Hydrodynamic Separator

Hydrodynamic separators must be inspected and maintained per the manufacturer's guidelines. Sediment shall be removed at least annually and when sediment volume exceeds the sediment storage capacity of the device.

STORMWATER INSPECTION CHECKLIST

Inspection by: _____ Date: _____

Stormwater Feature	Condition						Comments
Vegetative cover	no bare spots, no evidence of rill erosion		some bare spots, some rill erosion		large bare areas, extensive erosion		
Drainage channels/swales	no erosion, channels clear		some erosion and siltation		major erosion, channels clogged		
Sediment Forebay	no siltation		some siltation		heavily silted in		
Sediment Forebay	inlet/outlet clear		some debris		completely blocked		
Hydrodynamic Separator*	no siltation		some siltation		heavily silted in		
Hydrodynamic Separator*	inlet/outlet clear		some debris		completely blocked		
Subsurface Drainage System	no siltation		some siltation		heavily silted in		
Subsurface Drainage System	no clogging/flooding		some clogging/flooding		heavy clogging/flooding		
Subsurface Drainage System	outlet free of erosion		some erosion at outlet		outlet heavily eroded		
Subsurface Drainage System	inlet/outlet clear		some debris		completely blocked		
Bioretention Basin	no siltation		some siltation		heavily silted in		
Bioretention Basin	side slopes free of erosion		some erosion on side slopes		side slopes heavily eroded		
Bioretention Basin	inlet free of erosion		some erosion at inlet		inlet heavily eroded		
Bioretention Basin	outlet clear		some debris		completely blocked		
Bioretention Basin	healthy/robust plant growth		plants unhealthy		plants dead or overgrown		
Bioretention Basin	drains in less than 24 hours		drains between 24 and 48 hours		ponding exceeds 48 hours		
Subsurface Sand Filter*	no siltation		some siltation		heavily silted in		
Subsurface Sand Filter*	no clogging/flooding		some clogging/flooding		heavy clogging/flooding		
Subsurface Sand Filter*	inlet/outlet clear		some debris		completely blocked		

**See attached manufacturer's guidelines for system maintenance and inspection.*

Recommended Actions: _____

_____

Actions Completed: _____ Date: _____

STORMWATER MANAGEMENT MAINTENANCE TASKS AND RECOMMENDED SCHEDULE

TASKS	SEDIMENT FOREBAY	HYDRODYNAMIC SEPARATOR	GRASS SWALES	BIORETENTION BASIN	OUTLET CONTROL STRUCTURE	SUBSURFACE SAND FILTER	STORM DRAIN PIPES	SCHEDULE
Inspect for sediment accumulation	X	X	X	X	X	X	X	Spring and Fall
Remove sediment accumulation	X	X	X	X	X	X	X	As needed
Clean debris	X	X	X	X	X	X	X	As needed
Inspect for erosion	X		X	X				As needed
Reestablish vegetation in erosion areas			X	X				Early spring
Replace mulch				X				Annually
Inspect structural elements during wet weather and compare to as-built plans	X	X		X	X	X	X	Annually
Keep records of all inspections and maintenance activities	X	X	X	X	X	X	X	Annually
Replace stone rip-rap	X						X	Every 3 – 5 years as needed
Make adjustments or replacements as determined by wet weather observations	X	X	X	X	X	X	X	As needed
Have a professional engineer perform emergency inspections upon identification of severe problems	X	X	X	X	X	X	X	As needed

R-TANK OPERATION, INSPECTION & MAINTENANCE

Operation

Your ACF R-Tank System has been designed to function in conjunction with the engineered drainage system on your site, the existing municipal infrastructure, and/or the existing soils and geography of the receiving watershed. Unless your site included certain unique and rare features, the operation of your R-Tank System will be driven by naturally occurring systems and will function autonomously. However, upholding a proper schedule of Inspection & Maintenance is critical to ensuring continued functionality and optimum performance of the system.

Inspection

Both the R-Tank and all stormwater pre-treatment features incorporated into your site must be inspected regularly. Inspection frequency for your system must be determined based on the contributing drainage area, but should never exceed one year between inspections (six months during the first year of operation).

Inspections may be required more frequently for pre-treatment systems. You should refer to the manufacturer requirements for the proper inspection schedule.

With the right equipment your inspection and measurements can be accomplished from the surface without physically entering any confined spaces. If your inspection does require confined space entry, you MUST follow all local/regional requirements as well as OSHA standards.

R-Tank Systems may incorporate Inspection Ports, Maintenance Ports, and/or adjoining manholes. Each of these features are easily accessed by removing the lid at the surface. With the cover removed, a visual inspection can be performed to identify sediment deposits within the structure. Using a flashlight, ALL access points should be examined to complete a thorough inspection.

Inspection Ports
Usually located centrally in the R-Tank System, these perforated columns are designed to give the user a base-line sediment depth across the system floor.

Maintenance Ports
Usually located near the inlet and outlet connections, you'll likely find deeper deposits of heavier sediments when compared to the Inspection Ports.

Manholes
Most systems will include at least two manholes - one at the inlet and another at the outlet. There may be more than one location where stormwater enters the system, which would result in additional manholes to inspect.

Bear in mind that these manholes often include a sump below the invert of the pipe connecting to the R-Tank. These sumps are designed to capture sediment before it reaches the R-Tank, and they should be kept clean to ensure they function properly. However, existence of sediment in the sump does NOT necessarily mean sediment has accumulated in the R-Tank.

After inspecting the bottom of the structure, use a mirror on a pole (or some other device) to check for sediment or debris in the pipe connecting to the R-Tank.

If sediment or debris is observed in any of these structures, you should determine the depth of the material. This is typically accomplished with a stadia rod, but you should determine the best way to obtain the measurement.

All observations and measurements should be recorded on an Inspection Log kept on file. We've included a form you can use at the end of this guideline.

Maintenance

The R-Tank System should be back-flushed once sediment accumulation has reached 6" or 15% of the total system height. Use the chart below as a guideline to determine the point at which maintenance is required on your system.

R-Tank Unit	Height	Max Sediment Dept
Mini	9.5"	1.5"
Single	17"	3"
Double	34"	5"
Triple	50"	6"
Quad	67"	6"
Pent	84"	6"

Before any maintenance is performed on your system, be sure to plug the outlet pipe to prevent contamination of the adjacent systems.

To back-flush the R-Tank, water is pumped into the system through the Maintenance Ports as rapidly as possible. Water should be pumped into ALL Maintenance Ports. The turbulent action of the water moving through the R-Tank will suspend sediments which may then be pumped out.

If your system includes an Outlet Structure, this will be the ideal location to pump contaminated water out of the system. However, removal of back-flush water may be accomplished through the Maintenance Ports, as well.

For systems with large footprints that would require extensive volumes of water to properly flush the system, you should consider performing your maintenance within 24 hours of a rain event. Stormwater entering the system will aid in the suspension of sediments and reduce the volume of water required to properly flush the system.

Once removed, sediment-laden water may be captured for disposal or pumped through a Dirtbag™ (if permitted by the locality).

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Step-By-Step Inspection & Maintenance Routine

1) **Inspection**
    a. Inspection Port
        i. Remove Cap
        ii. Use flashlight to detect sediment deposits
        iii. If present, measure sediment depth with stadia rod
        iv. Record results on Maintenance Log
        v. Replace Cap
    b. Maintenance Port/s
        i. Remove Cap
        ii. Use flashlight to detect sediment deposits
        iii. If present, measure sediment depth with stadia rod
        iv. Record results on Maintenance Log
        v. Replace Cap
        vi. Repeat for ALL Maintenance Ports
    c. Adjacent Manholes
        i. Remove Cover
        ii. Use flashlight to detect sediment deposits
        iii. If present, measure sediment depth with stadia rod, accounting for depth of sump (if present)
        iv. Inspect pipes connecting to R-Tank
        v. Record results on Maintenance Log
        vi. Replace Cover
        vii. Repeat for ALL Manholes that connect to the R-Tank

2) **Maintenance**
    a. Plug system outlet to prevent discharge of back-flush water
    b. Determine best location to pump out back-flush water
    c. Remove Cap from Maintenance Port
    d. Pump water as rapidly as possible (without over-topping port) into system until at least 1”
    of water covers system bottom
    e. Replace Cap
    f. Repeat at ALL Maintenance Ports
    g. Pump out back-flush water to complete back-flushing
    h. Vacuum all adjacent structures and any other structures or stormwater pre-treatment systems that require attention
    i. Sediment-laden water may be captured for disposal or pumped through a Dirtbag™.
    j. Replace any remaining Caps or Covers
    k. Record the back-flushing event in your Maintenance Log with any relevant specifics

R-Tank Maintenance Log

Site Name:_____

Location:_____

System Owner:_____

Company Responsible for Maintenance:_____

Contact:_____

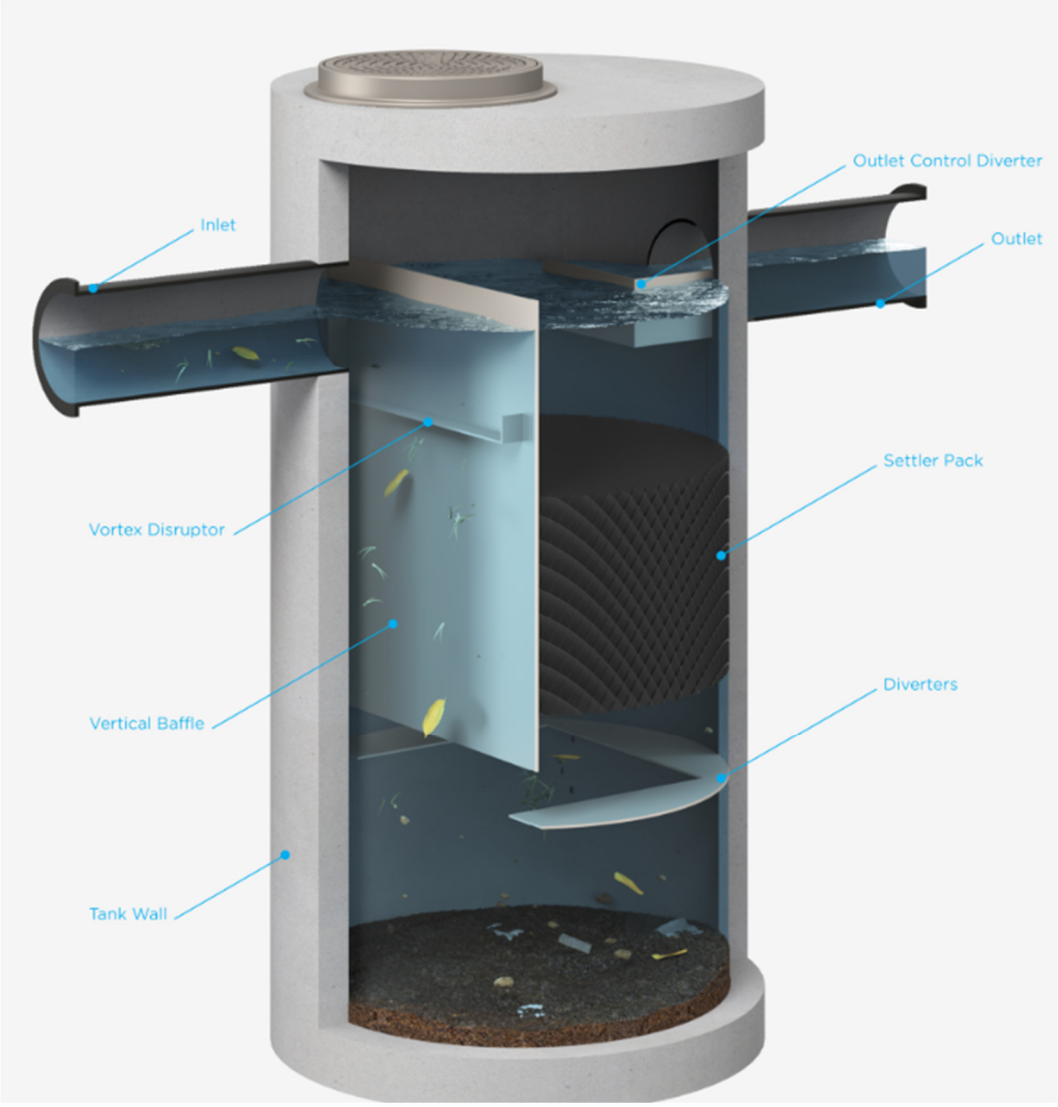
Phone Number:_____

Date	Location	Depth to Bottom	Depth to Sediment	Sediment Depth	Observations/Notes	Initials

StormTrap®

StormSettler®

StormSettler® Inspection and Maintenance Manual



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StormSettler® Manufacturer's Inspection and Maintenance Manual

The StormSettler treatment device, manufactured by StormTrap, is a hydrodynamic separating device designed to capture and store pollutants from stormwater. StormSettler's maintenance frequency is site dependent and routine inspections are recommended to ensure that the system is functioning as designed. Please contact your authorized StormTrap representative if you have questions regarding the inspection and maintenance of the StormSettler system.

Inspection Scheduling

StormSettler inspections are important to assess the condition of the system internals to ensure peak performance. The frequency of inspections and maintenance is dependent on site specific loading conditions and rainfall frequency. Within the first year of operation, it is recommended that the unit be inspected quarterly to determine the rate of pollutant accumulation in order to develop a more accurate maintenance schedule. Inspections should be performed during dry weather conditions when no flow is entering the system. StormSettler systems are recommended to be inspected whenever the upstream and downstream catch basins and stormwater pipes of the stormwater collection system are inspected or maintained. If checked on an annual basis, the inspection should be conducted before the stormwater season begins to ensure that the system is functioning properly for the upcoming storm season.

Inspection and Maintenance Equipment

The following equipment is recommended to have during inspections:

- StormSettler Inspection and Maintenance Manual and Inspection Checklist
- Flashlight

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1287 Windham Parkway
Romeoville, Illinois 60446

- Manhole hook/lifter or pry bar to lift the manhole cover
- Measuring device(s) of sufficient length to reach the bottom of the device's sump
- Proper personal protective equipment
- Adequate traffic control signage
- Pole with skimmer or net (optional for maintenance procedure)
- Vacuum truck or similar trailer mounted equipment (for maintenance procedure)

Inspection Procedure

Inspections should be done such that a sufficient time has lapsed since the most recent rain event to allow for a static water condition and rainfall is not anticipated to occur during the duration of the inspection procedure. StormSettler does not require entry into the system for inspection or maintenance; however, if entering the system is deemed necessary, it is prudent to note that prior to entry into any underground storm sewer or underground structure, appropriate OSHA and local safety regulations and guidelines should be followed.

To begin the inspection process, set up the necessary traffic control signage per local ordinances. Open all manhole covers using appropriate equipment and ensure the manhole covers are in a location that would not prohibit the inspection process. Visually inspect the system at all manhole access opening locations. During the visual inspection, ensure that all components are in working order. An inspection checklist is provided within this guide for ease and reference.

If any components are not in working order, contact your authorized StormTrap representative.

After the components are inspected, visually quantify the accumulation of trash, debris, and hydrocarbons within the system by using a measuring device such as a tape measure, grade stick, dipstick, etc. Measure and record the depth of trash, debris, and hydrocarbon

accumulation from the static water elevation (pipe elevation) to the average elevation of the trash and debris.

If sorbent materials are used for retention of hydrocarbons, the level of discoloration of the sorbent material should also be noted during the inspection process.

For sediment accumulation, utilize either a sludge sampler or a sediment pole to measure and document the amount of sediment accumulation. To determine the amount of sediment in the system with a sludge sampler, follow the manufacturer's instructions. If utilizing a sediment pole or similar device, first insert the pole to the top of the sediment layer and record the depth. Then, insert the pole to the bottom of the system and record the depth. The difference in the two measurements corresponds to the amount of sediment in the system. Alternatively, sediment depth can also be determined by taking a measurement from a known and consistent elevation (manhole frame, pipe invert, vertical baffle top, etc.) to the top of the sediment layer. That distance can then be compared to the measurement between the known elevation to the sump floor. The difference between these two measurements will correspond to the sediment layer depth.

After completion of the inspection process, ensure that manhole covers are replaced and securely seated in the manhole frame and remove traffic control signage.

StormSettler units can also be installed with remote monitoring technology that measures the current capacities within the system and reports the data to any internet capable device. If a remote monitoring device is used, proper maintenance of the device, such as replacement of batteries, cleaning sensor, etc. needs to be completed to ensure functionality of the remote monitoring technology.

If it is determined during the inspection process that the accumulation of trash and debris or sediment is at or near the capacities of the StormSettler device, maintenance should be performed to ensure performance is not impacted for subsequent storm events.

Maintenance Procedure

Maintenance should be done such that a sufficient time has lapsed since the most recent rain event to allow for a static water condition and rainfall is not anticipated to occur during the duration of the maintenance procedure.

To begin the maintenance process, set up the necessary traffic control signage per local ordinances. Open all manhole covers using appropriate equipment and ensure the manhole covers are in a location that would not prohibit the maintenance process.

Visually inspect the system at all manhole access opening locations. During the visual inspection, ensure that all components are undamaged. If any components are not in working order, contact your authorized StormTrap representative.

After the components are inspected, remove all accumulated trash, debris, and hydrocarbons stored on the surface of the water using the vacuum hose or pole with attached skimmer or net.

If sorbent materials are used, the materials may have to be moved to not impact pollutant removal. If significant discoloration of the sorbent material has occurred, simply remove the sorbent materials and replace upon completion of maintenance activities.

To remove sediment, insert the vacuum truck's hose on the inlet side of the vertical baffle into the sump. The system should be completely drained, and all sediment should be removed from the sump. For smaller diameter devices (3' or 4' units), a 6" or smaller vacuum hose diameter may be required for effective cleaning due to maneuverability constraints. If the vacuum truck that is being utilized has a hose diameter greater than 6", a smaller tube can be affixed to the boom hose with duct tape to improve maneuverability within the device.

If excessive sediment or debris buildup occurs within the device, components can be washed with sewer jetting equipment or a spray lance to remove stubborn materials. Particular

attention must be taken when spraying the settler pack. A wide spray nozzle is recommended around the settler pack to ensure there is no damage to the material.

After completion of the maintenance procedure, complete a post maintenance inspection to ensure that all components are in good condition. Ensure that manhole covers are replaced and securely seated in the manhole frame and remove traffic control signage. Dispose of all pollutants removed during maintenance per local, state, and federal guidelines and regulations.

Inspection and Maintenance Documentation

Proof of inspections and maintenance activities is the responsibility of the owner. All inspection and maintenance reports and any relevant data should be kept on site or at a location where they will be accessible in accordance with local requirements. It is a good practice to take time stamped photographs after every inspection and maintenance event to include within logs. It is also good practice to keep records of rainfall events between maintenance events and the weight of material removed, even if no report is required. Some municipalities may require inspection and maintenance reports be forwarded to the proper governmental permitting agency on an annual basis. Refer to your local regulations and ordinances for any additional maintenance requirements and schedules not contained herein. Inspections and maintenance activities should be performed to ensure performance is not impacted and the device performs as designed.

Inspection Items

- StormSettler Maintenance Manual and Inspection Checklist
- Flashlight
- Manhole hook/lifter or pry bar to lift the manhole cover
- Measuring device(s) of sufficient length to reach the bottom of the device's sump
- Proper personal protective equipment
- Adequate traffic control signage

Maintenance Items

- StormSettler Maintenance Manual and Inspection Checklist
- Flashlight
- Manhole hook/lifter or pry bar to lift the manhole cover
- Measuring device(s) of sufficient length to reach the bottom of the device's sump
- Proper personal protective equipment
- Adequate traffic control signage
- Pole with skimmer or net (optional for maintenance procedure)
- Vacuum truck or similar trailer mounted equipment (for maintenance procedure)

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StormTrap

StormSettler	StormSettler Inspection Checklist

Structure ID:		
Location/Address:		
Inspector Name:		Inspector Contact Information:
Date:	Time:	Weather Conditions:
Rain in the Last 48hrs:		If yes, list amount and timing:

*Do not enter underground chambers to inspect system unless Occupational Safety & Health Administration (OSHA) regulations for confined space entry are followed.
*Follow inspection and maintenance instructions provided by system manufacturer.
*Please circle the condition of each inspection item below. 1 being the worst and 5 being the best condition.

Inspection Item	Condition					Comment	Action Needed	
1.) Frames and Covers								
Accumulation of debris and/or sediment	1	2	3	4	5		Yes	No
Component(s) structural condition	1	2	3	4	5		Yes	No
2.) Inlet Pipe(s)								
Accumulation of debris and/or sediment	1	2	3	4	5		Yes	No
Component(s) structural condition	1	2	3	4	5		Yes	No
3.) Vortex Disruptor								
Accumulation of debris and/or sediment	1	2	3	4	5		Yes	No
Component(s) structural condition	1	2	3	4	5		Yes	No
4.) Verticle Baffle								
Accumulation of debris and/or sediment	1	2	3	4	5		Yes	No
Component(s) structural condition	1	2	3	4	5		Yes	No
5.) Enhanced Settling Pack								
Accumulation of debris and/or sediment	1	2	3	4	5		Yes	No
Component(s) structural condition	1	2	3	4	5		Yes	No
6.) Flow Modifiers								
Accumulation of debris and/or sediment	1	2	3	4	5		Yes	No
Component(s) structural condition	1	2	3	4	5		Yes	No

7.) Outlet Control Diverter								
Excessive accumulation of debris and/or sediment present	1	2	3	4	5		Yes	No
Component(s) structurally sound	1	2	3	4	5		Yes	No
8.) Outlet Pipe								
Accumulation of debris and/or sediment	1	2	3	4	5		Yes	No
Component(s) structurally sound	1	2	3	4	5		Yes	No
9.) Concrete Chamber								
Component(s) structural condition	1	2	3	4	5		Yes	No
10.) Sediment Storage Capacity								
Sediment storage capacity	1	2	3	4	5		Yes	No
Additional Notes:								
Wet Weather Inspection Needed:			Yes		No			
Maintenance Activities Needed:			Yes		No			

Stormwater BMP Maintenance Log

BMP Structure	Inspector	Date	Work Performed	Comments
Pavement Sweeping				
Grass Swales				
Area Drains				
Catch Basins				
Diversion Structures				
Riprap Sediment Forebay				
Hydrodynamic Separators				
Bioretention Basin 1				
Bioretention Basin 2				
Bioretention Basin 3				
Subsurface Sand Filter 1				
Subsurface Sand Filter 2				
Subsurface Sand Filter 3				
Subsurface Sand Filter 4				
Subsurface Sand Filter 5				
Subsurface Sand Filter 6				
Stormwater Outfalls				
Other				
Additional Comments:				

APPENDIX B: STORMWATER QUALITY CALCULATIONS

Woodard & Curran
12 MOUNTFORT STREET
PORTLAND, MAINE 04101

CLIENT: IDEALS
PROJECT: Phase 1 Development
CALCS BY: AL/LS
DATE: 10/27/2023
PROJECT NO.: 233482.00

Redevelopment Treatment Calculations - Per Section 4.C.2.d of the MaineDEP Chapter 500 Rules

Area of Redevelopment (acres) = 14.51

a. Existing Pollutant Impact

Land Use	Pollutant Ranking	Land Area (Ac.)	Impact
High Use Roads/Parking Lot	5	0.00	0.00
Other Roads/Medium Use Parking Lot	4	2.44	9.74
Other Parking Lots/Flat Asphalt Roofs/Industrial Roofs	3	6.35	19.04
Other Roofs/Landscaped Area/Paved Walkway	2	4.74	9.48
Non-grass Landscaping/Stormwater	1	0.99	0.99
Forest/Meadow	0	0.00	0.00
			39.25

b. Proposed Pollutant Impact

Land Use	Pollutant Ranking	Land Area (Ac.)	Impact
High Use Roads/Parking Lot	5	1.76	8.78
Other Roads/Medium Use Parking Lot	4	1.13	4.52
Other Parking Lots/Flat Asphalt Roofs/Industrial Roofs	3	0.04	0.12
Other Roofs/Landscaped Area/Paved Walkway	2	10.89	21.78
Non-grass Landscaping/Stormwater	1	0.69	0.69
Forest/Meadow	0	0.00	0.00
			35.89

c. Existing Impact/Total Redevelopment Acres

2.705

d. Proposed Impact/Total Redevelopment Acres

2.474

e. Item D Minus Item C

-0.23

Ranked Impact Change Due to Redevelopment	Percentage of Developed Area that Must be Treated
0.0 or less	0% (Stormwater projects)
	50% (Site projects)
≥ 0.0 to ≤ 1.0	60%
> 1.0 to ≤ 2.0	70%
> 2.0 to ≤ 3.0	80%
> 3.0	Same treatment level as for new development

Stormwater Treatment Summary	*Treatment Percentage*	*Treated Area (SF)*
Required	50.0%	316,023
Provided	50.1%	316,413

WQV Summary	*Subsurface Sand Filter 1*	*Subsurface Sand Filter 2*	*Subsurface Sand Filter 3*	*Subsurface Sand Filter 4*	*Subsurface Sand Filter 5*
Proposed Treated Area (SF)	55,818	39,804	92,040	5,637	42,990
WQV Required (CF)	3,795	2,866	6,561	445	3,552
WQV Provided (CF)	6,501	4,855	11,204	992	5,589

WQV Summary	*Subsurface Sand Filter 6*	*Bioretention Basin 1**	*Bioretention Basin 2*	*Bioretention Basin 3*
Proposed Treated Area (SF)	12,500	19,875	30,310	17,439
WQV Required (CF)	1,042	921	1,208	745
WQV Provided (CF)	1,798	921	1,225	784
**Bioretention Basin 1 volume is fixed by site constraints; proposed treated area is calculated based on the fixed basin volume*				

Redevelopment Treatment Calculations - Per Section 5 of the City of Portland Technical Manual

Area of non-roof, redeveloped impervious surface (acres) = 5.43

Area of non-roof, redeveloped impervious surface treated (acres) = 3.13 58% > 50% required

12 MOUNTFORT STREET
PORTLAND, MAINE 04101

CLIENT: IDEALS
PROJECT: Phase 1 Development
CALCS BY: AL/LS
DATE: 10/27/2023
PROJECT NO.: 233482.00

Sizing Calculations

Water Quality Volume for Subsurface System 1

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area =	38697	SF
Pervious Area =	17121	SF
WQV Required =	**3795**	CF
WQV Provided =	**6501**	CF

Surface Area = (5%*Impervious Area) + (2%*Pervious Area)

Filter Surface Area Required=	**2277**	SF
Filter Surface Area Provided=	**2738**	SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	38697	SF
Total Volume Required =	**49**	CF
Method: Hydrodynamic Separator, Riprap Sediment Forebay and Pretreatment Row		
Total Volume Provided =	**68**	CF

Water Quality Volume for Subsurface System 2

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area =	30793	SF
Pervious Area =	9011	SF
WQV Required =	**2866**	CF
WQV Provided =	**4855**	CF

Surface Area = (5%*Impervious Area) + (2%*Pervious Area)

Filter Surface Area Required=	**1720**	SF
Filter Surface Area Provided=	**2350**	SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	5139	SF
Total Volume Required =	**7**	CF
Method: Pretreatment Row		
Total Volume Provided =	**48**	CF

Water Quality Volume for Subsurface System 3

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area =	69858	SF
Pervious Area =	22182	SF
WQV Required =	**6561**	CF
WQV Provided =	**11204**	CF

Surface Area = (5%*Impervious Area) + (2%*Pervious Area)

Filter Surface Area Required=	**3937**	SF
Filter Surface Area Provided=	**4751**	SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	69858	SF
Total Volume Required =	**89**	CF
Method: Hydrodynamic Separator and Pretreatment Rows		
Total Volume Provided =	**109**	CF

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Sizing Calculations (cont.)

Water Quality Volume for Subsurface System 4

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area =	5148	SF
Pervious Area =	489	SF
WQV Required =	**445**	CF
WQV Provided =	**992**	CF

Surface Area = (5%*Impervious Area) + (2%*Pervious Area)

Filter Surface Area Required=	**267**	SF
Filter Surface Area Provided=	**466**	SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	1673	SF
Total Volume Required =	**2**	CF
Method: Pretreatment Row		
Total Volume Provided =	**8**	CF

Water Quality Volume for Subsurface System 5

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area =	42382	SF
Pervious Area =	608	SF
WQV Required =	**3552**	CF
WQV Provided =	**5589**	CF

Surface Area = (5%*Impervious Area) + (2%*Pervious Area)

Filter Surface Area Required=	**2131**	SF
Filter Surface Area Provided=	**2595**	SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	5160	SF
Total Volume Required =	**7**	CF
Method: Pretreatment Row		
Total Volume Provided =	**63**	CF

Water Quality Volume for Subsurface System 6

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area =	12500	SF
Pervious Area =	0	SF
WQV Required =	**1042**	CF
WQV Provided =	**1798**	CF

Surface Area = (5%*Impervious Area) + (2%*Pervious Area)

Filter Surface Area Required=	**625**	SF
Filter Surface Area Provided=	**879**	SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	0	SF
Total Volume Required =	**0**	CF
Method: Pretreatment Row		
Total Volume Provided =	**21**	CF

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CALCS BY: AL/LS
DATE: 10/27/2023
PROJECT NO.: 233482.00

Sizing Calculations (cont.)

Bioretention Basin 1 - Per Ch. 7.2 Vol. III MaineDEP Stormwater BMP Manual

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area* =	5175	SF	
Pervious Area* =	14700	SF	
Sum* =	0.46	ac.	< 1 ac.
WQV Required* =	**921**	CF	
WQV Depth =	6	in	</=6"
Soil Filter Void Space =	40	%	
WQV Storage (Ponding) =	658	CF	
WQV Storage (Soil)* =	263	CF	
WQV Storage (TOTAL) =	**921**	CF	

**Bioretention Basin 1 volume is fixed by site constraints; proposed treated area is calculated based on the fixed basin volume.*

Surface Area = (7%*Impervious Area) + (3%*Pervious Area)

Filter Surface Area Required (Total)=	**803**	SF	
Filter Surface Area Provided =	**1315**	SF	<2,000 SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	8535	SF	
Total Volume Required =	11	CF	
Method: Grass Swale			

Bioretention Basin 2 - Per Ch. 7.2 Vol. III MaineDEP Stormwater BMP Manual

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area =	3952	SF	
Pervious Area =	26358	SF	
Sum =	0.70	ac.	< 1 ac.
WQV Required =	**1208**	CF	
WQV Depth =	6	in	</=6"
Soil Filter Void Space =	40	%	
WQV Storage (Ponding) =	875	CF	
WQV Storage (Soil)* =	350	CF	
WQV Storage (TOTAL) =	**1225**	CF	

Surface Area = (7%*Impervious Area) + (3%*Pervious Area)

Filter Surface Area Required (Total)=	**1067**	SF	
Filter Surface Area Provided =	**1750**	SF	<2,000 SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	3952	SF	
Total Volume Required =	5	CF	
Method: Grass Swale			

Woodard & Curran
12 MOUNTFORT STREET
PORTLAND, MAINE 04101

CLIENT: IDEALS
PROJECT: Phase 1 Development
CALCS BY: AL/LS
DATE: 10/27/2023
PROJECT NO.: 233482.00

Sizing Calculations (cont.)

Bioretention Basin 3 - Per Ch. 7.2 Vol. III MaineDEP Stormwater BMP Manual

WQV = (1" * Impervious Area) + (0.4" * Pervious Area)

Impervious Area =	3278	SF	
Pervious Area =	14161	SF	
Sum =	0.40	ac.	< 1 ac.
WQV Required =	**745**	CF	
WQV Depth =	6	in	</=6"
Soil Filter Void Space =	40	%	
WQV Storage (Ponding) =	560	CF	
WQV Storage (Soil)* =	224	CF	
WQV Storage (TOTAL) =	**784**	CF	

Surface Area = (7%*Impervious Area) + (3%*Pervious Area)

Filter Surface Area Required (Total)=	**654**	SF	
Filter Surface Area Provided =	**1120**	SF	<2,000 SF

Sediment Pre-treatment = (55.6 CF/Acre) * (acres of non-roof impervious)

Non-Roof Impervious Area (total) =	3278	SF	
Total Volume Required =	4	CF	
Method: Grass Swale			

APPENDIX C: FIGURES

MATCHLINE

MATCHLINE

REDEVELOPMENT AREA

LEGEND

- POLLUTANT RANKING 5
- POLLUTANT RANKING 4
- POLLUTANT RANKING 3
- POLLUTANT RANKING 2
- POLLUTANT RANKING 1
- POLLUTANT RANKING 0

BAR SCALE
1" = 40'
CHECK GRAPHIC SCALE BEFORE USING

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED
PROFESSIONAL ENGINEER

Stamp

Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	1"=40'

Drawing Title

EXISTING SITE IMPACT ANALYSIS

FIG. A

MATCHLINE

REDEVELOPMENT AREA

MATCHLINE

REDEVELOPMENT AREA

LEGEND

- POLLUTANT RANKING 5
- POLLUTANT RANKING 4
- POLLUTANT RANKING 3
- POLLUTANT RANKING 2
- POLLUTANT RANKING 1
- POLLUTANT RANKING 0

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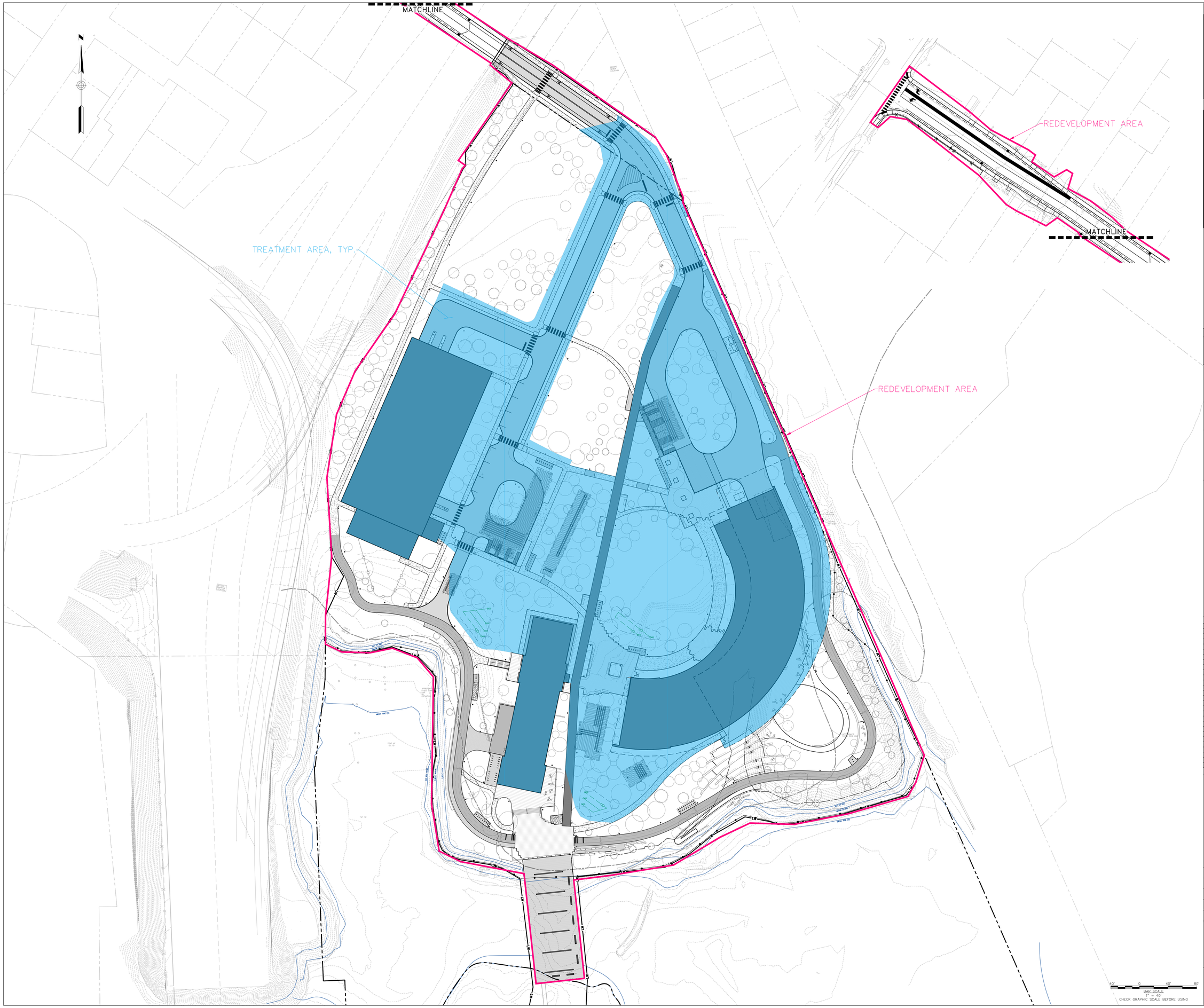
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Date	27 OCTOBER 2023
Scale	1"=40'

Drawing Title

PROPOSED SITE IMPACT ANALYSIS

FIG. B



IDEALS
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Roux Campus

The Roux Institute

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Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
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Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	1"=40'

Drawing Title

REDEVELOPMENT FIGURE

FIG. C



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Roux Campus

The Roux Institute

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Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

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LAND-USE PERMIT SET

TREATMENT AREA LEGEND

STORMWATER TREATMENT SYSTEM	LOCATION	DRAINAGE AREA
SAND FILTER #1	SF1	
SAND FILTER #2	SF2	
SAND FILTER #3	SF3	
SAND FILTER #4	SF4	
SAND FILTER #5	SF5	
SAND FILTER #6	SF6	
BIORETENTION #1	BR1	
BIORETENTION #2	BR2	
BIORETENTION #3	BR3	

40' 0 40' 80'
BAR SCALE
1" = 40'
CHECK GRAPHIC SCALE BEFORE USING

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED
PROFESSIONAL ENGINEER

Stamp

Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	1"=40'

Drawing Title

TREATMENT AREA FIGURE

FIG. D

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woodardcurran.com

Att. M

ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY

Site Location of Development

1 Bean Pot Circle
Portland, ME

Prepared for
Initiative for Digital Engineering and Life Sciences (IDEALS)
November 2023

12 Mountfort Street
Floors 5 & 6
Portland, ME 04101
800.426.4262

woodardcurran.com

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1. DEVELOPMENT DESCRIPTION

This narrative report is in support of a Site Location of Development (SLOD) Permit Application on behalf of Northeastern University (Applicant) and their agent, Initiative for Digital Engineering and Life Sciences (IDEALS), for development of the Roux Institute at Northeastern University campus located at 1 Bean Pot Circle in Portland, Maine (the Site). A letter authorizing IDEALS and Woodard & Curran to act as the agent on behalf of the Applicant is attached to this Section. It is our understanding that the MaineDEP has determined that the City of Portland has delegated review authority over this project.

1.1 OBJECTIVES & DETAILS

The proposed development is the first of multiple phases of the Roux Institute at Northeastern University Campus. As noted in the Site Plan Application, the Applicant developed a long-range plan for the institution, known as an Institutional Development Plan (IDP), as part of the Institutional Overlay Zone (IOZ) designation process for the campus. The City of Portland Planning Board approved the Roux Campus IDP on November 22, 2022, and the Portland City Council subsequently and unanimously approved the zoning map and text amendments to establish the IOZ regulatory framework and change the underlying zone to B-5 Mixed-Use Business on February 6, 2023.

Phase 1 includes construction of a Learning, Research, and Collaboration Building, renovation of the Bean Building to create business incubator space, construction of a parking garage, development of a childcare facility, replacement of the pier, development of a coastal path, and other site improvements. Meaningful public open space will be established in this first phase to ensure public access to this signature waterfront amenity. The area of disturbance for development of Phase 1 and reconstruction of Sherwood Street is approximately 14.5-acres and will include approximately 7.3-acres of impervious area. It should be noted that roof areas were considered fully impervious (as any rooftop landscaping systems do not infiltrate into the ground), and significant areas of landscaping and green roof are proposed.

The proposed Phase 1 project is designed with consideration to future development, with the interior-most and waterfront spaces being developed first to reduce impacts of construction of future phases. Likewise, the site utilities are designed with consideration and capacity for full build-out of the Site to minimize future construction impacts and enable utility access to occupied buildings during construction of future phases.

In addition to the SLOD permit, the proposed work requires the following permits:

- City of Portland Major Site Plan;
- City of Portland Historic Preservation Application for Certificate of Appropriateness;
- City of Portland Flood Hazard Development Permit;
- Portland Harbor Commissioners Marine Construction Permit;
- Maine DOT Traffic Movement Permit (TMP);

- Maine DEP NRPA Individual Permit;
- Army Corps of Engineers General Permit; and
- FAA Notice of Proposed Construction.

1.2 EXISTING FACILITIES

The Site is located within Portland's East Deering neighborhood, at the end of Sherwood Street, adjacent to Maine Yacht Services and near a residential area of single and multi-family homes (three-story apartment buildings) and a commercial node featuring restaurants, bars, automobile mechanics, and offices. While proximate to these areas, the Site is remarkably buffered; I-295 to the west, state-owned vacant parcels to the north, a disused rail corridor and marine business to the east, and Casco Bay to the south collectively surround the property.

The Site includes approximately 13 acres above mean higher high water (MHHW) line as well as an adjacent 11 acres of submerged lands. A survey of the Site was completed by VHB, Inc. (dated June 30, 2021 and July 17, 2023). Approximately 9 acres of land above the mean higher high water line are impervious (paved areas, building roofs, foundations, etc.). The remaining 4 acres of permeable area include lawn and approximately half an acre of vegetated non-lawn area adjacent to the rail corridor abutting the site to the east. No stormwater treatment systems exist on the Site.

The Site was occupied by residences and a lobster cannery prior to 1913, when Burnham & Morrill (B&M) relocated its food manufacturing operations to the Site from Franklin Street. Shortly thereafter, the flagship cannery building (Bean Building) was constructed, as well as the adjacent codfish building on the pier. The site was further improved with buildings and parking to support operations. Due to its industrial use, the site is surrounded by security fencing, and the interior and waterfront have historically been inaccessible to the public. Canning operations ceased in 2021.

On May 23, 2023, IDEALS received a demolition permit from the City, and commenced demolition of all existing buildings on the site, retaining only the Bean Building and the Codfish Building.

1.3 TOPOGRAPHIC MAP

A USGS topographic map showing the approximate location of the proposed development is attached to this Section for your reference. The proposed development is located within the Portland West Quadrangle.

1.4 CONSTRUCTION PLAN

The proposed development will be constructed in phases. Construction of Phase 1 is anticipated to begin in Spring 2024. Erosion and sediment control measures will be installed prior to any ground disturbing activities, as described in Section 14 of this Report. The Contractor will be required to provide a construction management plan for the project, subject to the review and approval of the City and Engineer.

The Site will be managed during construction to minimize impacts to the adjacent land uses. Maintaining access to adjacent properties and public facilities will be a priority. Traffic impacts to adjacent roadways, including Sherwood Street and Veranda Street, will be minimized during construction to the greatest extent possible. Traffic controls will consist of temporary signage and barriers where necessary to manage vehicle, pedestrian, and bicycle traffic and direct it safely around the construction area. Work affecting traffic circulation such as underground utility work and grading activities will be conducted during periods of low traffic to reduce potential impacts.

Below is the anticipated sequence of construction activities for major aspects of the development:

- Installation of erosion and sediment control measures and traffic control measures;
- Demolition and site preparation activities;
- Construction of utilities, stormwater management system, and roadway;
- Construction of buildings;
- Installation of landscaping and final surface materials; and
- Removal of erosion and sediment control measures.

1.5 DRAWINGS

Design drawings showing the proposed development are uploaded separately to ProjectDox.

1.6 LIST OF ATTACHMENTS

The following documents are attached to this Section:

- Agent Letter;
- Topographic Map; and
- Design Drawings (uploaded separately to ProjectDox).

Northeastern

October 25, 2023

Sam Reiche
Chief Operating Officer and Head of Real Estate
Initiative for Digital Engineering and Life Sciences (IDEALS)
100 Commercial Street, Suite 40
Portland, Maine 04101

Dear Sam:

Northeastern University is preparing plans for the first phase of development at the Roux Institute, located at 1 Bean Pot Circle in Portland Maine. Northeastern University is authorizing the Initiative for Digital Engineering and Life Sciences (IDEALS) and Woodard & Curran, Inc., to assist in the preparation of land-use permit applications for this project. IDEALS and Woodard & Curran are authorized as our agent to represent Northeastern University in addressing questions on the plans and applications for this project.

Sincerely,

Thomas E. Nedell,
Senior Vice President for Finance and Treasurer

Office of the Senior Vice President Finance

177 Huntington Ave.
360 Huntington Ave.
Boston, MA 02115

617.373.2240
fax 617.373.4728

finance.northeastern.edu



Woodard & Curran	Client Info: IDEALS ROUX INSTITUTE PHASE 1 1 BEAN POT CIRCLE PORTLAND, ME 04103	Job No: 0233482.00 Date: SEPT 2023 Scale: 1" = 24,000' Des by: JM Drn by: JM Chk by: AL	Drawing Title SITE LOCATION MAP	Drawing Number 0233482.00 Location Map

2. TITLE, RIGHT, OR INTEREST

2.1 RIGHT, TITLE & INTEREST

The Project will occur on parcels of land identified by the City as Map 447 Lot A001 and Lot A002 and owned by IDEALS. IDEALS is in the process of transferring ownership of the parcel to Northeastern University, as documented by the Purchase and Sale Agreement attached to this Section. Conveyance of the property to Northeastern University will occur subsequent to site plan approval and prior to application for a building permit. A copy of the City parcel maps is also attached for reference.

2.2 EASEMENTS & OTHER BURDENS

Existing easement's locations and descriptions are reflected on the survey drawings, uploaded under separate cover.

2.3 LIST OF ATTACHMENTS

- Purchase and Sale Agreement; and
- City Parcel Maps.

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EXECUTION VERSION

AGREEMENT FOR THE PURCHASE AND SALE OF REAL ESTATE

THIS AGREEMENT is effective as of October 23, 2023 by and between **NORTHEASTERN UNIVERSITY**, a Massachusetts non-profit corporation with an address of 360 Huntington Avenue, Boston, Massachusetts 02115 ("Buyer"), and **THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES**, a Maine non-profit corporation with an address of 100 Commercial Street, Portland, Maine 04101 ("Seller").

RECITALS

WHEREAS, in furtherance and fulfillment of that certain Memorandum of Understanding, dated July 27, 2022 by and between Buyer and Seller (the "MOU"), the Seller desires to sell, transfer and convey to Buyer a certain parcel of land, together with the improvements thereon, located on the easterly side of Interstate 295 and the southerly side of Sherwood Street in the City of Portland, County of Cumberland and State of Maine (the "Campus") as more specifically described herein; and

WHEREAS, the MOU and further agreements by and among Buyer, Seller, and David and Barbara Roux (the "Rouxs") envision that Buyer will develop the Campus for the creation of a graduate institute (the "Institute"):

- instructing students in the fields of artificial intelligence, digital science, data visualization, computational medicine, genomics and life sciences and project management, and develop content and pedagogy therefor,
- conducting research in the fields described above, among others, and
- encouraging innovation and entrepreneurialism among new and established companies deploying the above-mentioned skills and technologies,

WHEREAS, the buyer has agreed to develop the Campus as the permanent home of the Institute with other supporting infrastructure to encourage learning, collaboration, innovation and other progress, and

WHEREAS, it is the intent of the Seller and the Rouxs that the Campus will, over time, become a force for education, research, collaboration and entrepreneurialism meaningful to the 21st century economy, innovation and job creation.

WITNESSETH AS FOLLOWS:

1. PURCHASE AND SALE. Seller agrees to sell and Buyer agrees to buy, on the terms and conditions hereinafter set forth, approximately thirteen (13) acres of land and buildings generally situated at 1 Bean Pot Circle, Portland, Maine together with all improvements that may at the time of closing be thereon (except as specified below) and all rights and easements appurtenant thereto, which parcel is more particularly bounded and referenced by the City of Portland Assessor's Office as Map 447-A-001-001 and 447-A-001-002 and as more fully described on **Exhibit A** attached hereto, being the same premises described in a Quitclaim Deed

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with Covenant from B&G Foods North America, Inc. to Seller, dated March 23, 2022 and recorded in the Cumberland County Registry of Deeds in Book 39282, Page 151 together with and including all abutting or adjacent tidal flats, intertidal lands, and related rights in, to and under any submerged lands easements or leases between Seller and/or any predecessor of Seller with the State of Maine (together the "Property"). The following shall also be delivered and conveyed to Buyer at Closing hereunder:

A. Conveyance of tangible personal property, if any via Bill of Sale.

B. Conveyance of intangible personal property, if any, associated with the Property, to the extent owned by Seller, by Bill of Sale and Assignment.

C. Assignment and Assumption of the Maine Yacht Center lease (the "MYC Lease") of a portion of the Property, in form and substance reasonably acceptable to Buyer.

D. Conveyance/Assignment and Assumption of Submerged Land Easement, which requires notice to the Maine State Bureau of Parks and Lands.

E. Assignment and Assumption of the following MDEP Permits if in effect at the time (for which Buyer shall seek MDEP consent):

i. Maine Department of Environmental Protection Air Emission License A-77-71-M-R(SM)

ii. Maine Department of Environmental Protection Maine Pollutant Discharge Elimination System (MDEPDES) Permit #ME0001741

iii. Maine Waste Discharge License (WDL) License #W000980-5R-H-R.

iv. NRPA Permit (*if any, currently in process*)

(collectively, the "MDEP Permits")

F. Assignment and Assumption of the following City of Portland and/or State permits and approvals:

i. Demolition permit

ii. Any site plan approval and/or building or construction permits

iii. MDOT permits including Traffic Movement Permit

iv. any other issued or pending state, municipal or federal permits or permit applications

(collectively, with the MDEP Permits, the "Governmental Permits")

G. Assignment and Assumption of the construction and development contracts and agreements described on **Exhibit B** (the "Development Contracts").

H. Assignment of any and all warranties relating to any completed contracts for construction or demolition of any of the improvements upon the Campus (the "Construction Warranties"), if any.

I. Assignment of any and all studies, reports, engineering, surveys, appraisals, or other such reports or studies, to the extent assignable (collectively, the "Studies and Reports"), and, if and to the extent requested by Buyer, delivery of reliance letters with respect to such Studies and Reports in a form reasonably acceptable to Buyer. Seller agrees to seek consent to such assignments and any required reliance letters from the professionals or vendors providing the Studies and Reports.

2. OFFER AND ACCEPTANCE. The execution of this Agreement by Buyer represents an offer to Seller on the terms and conditions set forth herein. This offer shall be open for acceptance by Seller until 4:00 p.m. Portland, Maine time on October 23, 2023 unless extended by mutual agreement of Buyer and Seller. Seller's acceptance of this offer shall be evidenced by Seller delivering an executed copy of this Agreement to Buyer at the address set forth in Section 14 below on or before the expiration of this offer. If this offer is not accepted by Seller prior to its expiration, this offer shall automatically expire and this Agreement shall be null and void and of no further force and effect.

3. CONSIDERATION. The consideration for the transfer of the Property is in furtherance and fulfillment of the MOU and the performance under such further agreements by and among Buyer and Seller for Buyer's development of the Property as the site of the Institute for the purposes of instructing students, conducting research, and supporting entrepreneurialism in the fields of artificial intelligence, digital science, data visualization, computational medicine, genomics and life sciences and project management, and develop content and pedagogy therefor, and developing the Property to serve as the permanent home of the Institute with other supporting infrastructure. At closing hereunder, however, the parties shall adjust for any pro-rations and any other payments referenced herein. Except as specified in this Agreement or in any other agreement among the parties including the Rouxs, both Buyer and Seller shall bear their own expenses in connection with the performance of their obligations hereunder. Buyer agrees to pay and Seller agrees to accept One Dollar ($1.00) and other valuable consideration as the Purchase Price for the Property.

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[redacted]

4. TITLE. Seller shall convey the Property to Buyer at the closing in fee simple with good, marketable and insurable title, free and clear of liens and encumbrances and other matters of record, except as disclosed in Buyer's Title Insurance Policy # OP 04921177 ME issued by CATIC (the "Title Insurer"), dated March 24, 2022, a copy of which has been provided to Seller (the "Title Policy"). Seller shall deliver the Property free and clear of any leases or occupancies except as otherwise provided herein. Notwithstanding the foregoing, during the period commencing on the date hereof and continuing for a period of thirty (30 days (the "Inspection Period"), Buyer shall have right to review the title and to make any objections to the title in writing to Seller. Upon receipt of Buyer's title objections, Seller shall have a period of up to thirty (30) days to either (i) resolve the title objections to the reasonable satisfaction of Buyer; (ii) or to propose affirmative title insurance coverage addressing any such title objection that the Title Insurer is willing to provide, including an agreement to continue to provide such affirmative coverage to subsequent grantees and mortgagees; or (iii) to refuse to address such title objection, in which case Buyer may elect to terminate this Agreement, or Buyer may elect to close notwithstanding the title objection.

5. CLOSING. The transfer of title and closing hereunder shall take place at the offices of Bernstein, Shur, Sawyer and Nelson, 100 Middle Street, Portland, Maine, no later than ten days prior to Buyer's application for a building permit for the Buyer's initial phase of construction of the Institute is submitted to the City of Portland (the "Closing Date") or at such earlier date and location as Buyer and Seller shall mutually agree in advance and in writing. Buyer shall have the right to request a closing at any time prior to its application for a building permit, provided that Buyer has satisfied the remaining obligations of Buyer under this Agreement, other than such obligations that Seller has agreed to waive in writing. At the closing,

(a) Seller shall execute and/or deliver to Buyer:

i. a Quitclaim Deed with Covenant to the Property, in accordance with the Short Form Deeds Act, 33 M.R.S.A. § 761 et seq., (the "Deed"),

ii. a Quitclaim with Covenant Bill of Sale conveying the personal property to be conveyed to Buyer as set forth in Section 1.A. above;

iii. all keys, access cards, security codes and similar items to the Property in Seller's possession;

iv. the originals of all permits and licenses relating to the Property, if any, in Seller's possession;

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v. such documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Buyer's acquisition and financing of the Property, including without limitation a Certificate of Non-Foreign Status (as required by Internal Revenue Service regulations), an affidavit regarding underground storage tanks (as required by Maine Law), a surface/subsurface waste disposal system certificate (if applicable), applicable Maine State REW forms and satisfactory evidence of Seller's existence, authority to convey the Property; and

vi. One or more Assignment and Assumption Agreements signed by Seller to assign to Buyer all of Seller's rights in and to the Maine Yacht Center Lease; the Governmental Permits, the Studies and Reports, the Construction Warranties and the Development Contracts; together with any reliance letters with respect to the Studies and Reports requested by Buyer.

(b) Buyer shall execute and/or deliver to Seller:

i. the purchase price;

ii. evidence that the buyer's Board of Trustees has voted affirmatively to proceed with Phase 1 of the Campus development project (the "Project") and has committed sufficient financial resources to fund Phase 1 of the Project which shall include all work reasonably necessary for the construction of one or more learning, research and collaboration buildings and supporting parking and public infrastructure, construction of a new pier, and renovation of the exterior of the existing historic landmarked Bean Building as shall be further described in the initial Site Plan application (as the same shall be jointly submitted by the parties hereto) as approved by the City of Portland (the contents of which – as approved by the City -- shall be referred to herein as "Phase 1"). Such financial resources may be from various sources including bond financing, Buyer's own resources, pledges and other philanthropic giving and such financial resources as may be available to Buyer over the course of the construction of Phase 1 of the Project as opposed to being fully available at the time of closing;

iii. One or more Assignment and Assumption Agreements signed by Buyer to enable Buyer to assume all of Seller's rights in and to the Maine Yacht Center Lease; the Governmental Permits, the Studies and Reports, the Construction Warranties and the Development Contracts; and

iv. such other documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Seller's disposition of the Property.

Unless this Agreement is extended by mutual agreement of the parties, if the Closing does not occur for any reason by December 31, 2024, then this Agreement shall automatically terminate and be of

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no further force and effect and all obligations of the parties shall cease other than those specifically identified herein as surviving such termination.

6. RISK OF LOSS, DAMAGE AND INSURANCE.

(a) All risk of loss to the Property prior to the closing shall be borne by Seller. Seller shall keep the Property fully insured against fire and other extended coverage risks until the closing and shall name Buyer as an additional insured as Buyer's interest may appear.

(b) In the event that, prior to the closing, the improvements which are part of the Property are destroyed or, in the opinion of Buyer, substantially damaged, Buyer may either (i) terminate this Agreement, or (ii) accept the insurance proceeds payable by reason of such damage or destruction and close this transaction notwithstanding the same. If any part of the Property is damaged by fire or other casualty and Buyer does not elect to terminate this Agreement pursuant to this Section, then Seller and Buyer shall perform their respective obligations under this Agreement and in the event of a closing, Seller shall (x) deliver to Buyer at the Closing any insurance proceeds or condemnation awards received by Seller in respect of or allocable to the Property; and (y) assign to Buyer all of Seller's interest in and to any insurance proceeds and/or condemnation awards allocable to the Property which have not yet been received by Seller on that date; and (z) refrain from accepting or agreeing upon the amount of any payment of any proceeds or awards without Buyer's prior written consent. Notwithstanding the above, Buyer acknowledges that Seller is in the process of abating and demolishing all of the facilities on the site except for the so-called "Cannery" or "Bean Building"

7. INSPECTION/DELIVERY OF DOCUMENTS; AS-IS CONDITION. Reasonably promptly after this Agreement becomes effective, Seller shall deliver to Buyer copies of all of the Studies and Reports in Seller's possession or control to the extent not already provided to Buyer. With reasonable notice which shall be a minimum of three business days, Seller hereby grants Buyer or its agents the right to enter upon or in any part of the Property at all reasonable times and from time to time prior to the closing in order to inspect the Property, conduct surveys, soil tests, engineering and environmental testing and studies and to do such things as are reasonably necessary with respect to its due diligence, acquisition and development of the Property, provided, however, that Buyer's obligations to close hereunder shall not be conditioned upon the results of such due diligence other than as set forth below.

Buyer has commenced its review of the Studies and Reports, including environmental site assessments (ESAs) performed prior to the date hereof and accepts the Property in its as-is condition except as specifically set forth herein. Notwithstanding the foregoing, Seller shall not, after the date hereof, suffer or allow the occurrence of any further event(s) which would create, constitute, or be considered a recognized environmental condition (REC) under any qualified Phase I ESA without prompt and complete remediation or abatement, or else Seller shall be considered in default hereof. Furthermore, if Seller's title to the Property is further encumbered by any matter or means after the date hereof and such further encumbrance is not cleared prior to Closing, Seller shall be in default hereof. The foregoing is not a consent or permission to further encumber the title and Seller specifically agrees it shall not further encumber the title to the Property nor permit any mortgage, lien, claim, or charge to accrue which shall affect Seller's title.

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Further notwithstanding the foregoing, the parties acknowledge that the environmental site assessments conducted by or for Buyer or for which Buyer has been provided were conducted before certain demolition activities on the site that were performed by or for Seller. Buyer shall have the right to conduct further or updated ESAs and to review any remediation activities undertaken by Seller or its agents or contractors since the date of the ESAs conducted by or for Buyer. In the event that such further or updated ESAs reveal any RECs not previously disclosed to Buyer, Buyer shall have the right to terminate this Agreement or to require that further conditions be satisfied by Seller prior to closing.

Except as set forth in this Agreement, the Property will be conveyed "as is" at the time of closing and Seller disclaims all representations and warranties from Seller to Buyer other than any limited representations set forth herein. Buyer will indemnify Seller with respect to any environmental liabilities associated with the Property that may be discovered or arise post-closing, regardless of when the action(s) leading to such liabilities occurred. The foregoing sentence shall survive Closing under this Agreement. Seller will assign any environmental indemnification agreements it obtained from the Seller's grantor to Buyer, if any, with the right of the Buyer to enforce the indemnification obligations contained in any such agreements to the extent permitted therein.

8. CONDITIONS TO BUYER'S OBLIGATIONS TO PERFORM. The Buyer's obligation to perform hereunder and to close on the purchase of the Property are conditional upon the following matters:

(a) Buyer's obligation is conditional upon the Buyer's Board of Trustees approval of the Buyer's acquisition of the Property and the obligations of the Buyer under this Agreement.

(b) Buyer's obligation is conditional upon Buyer's satisfaction with its inspection of the Property during the Inspection Period as more fully set forth in Section 7 of this Agreement.

9. SELLER'S CONTINUATION OF CONSTRUCTION ACTIVITIES PRIOR TO CLOSING. Seller is currently conducting demolition, environmental remediation and site work at the Property. Seller has provided Buyer with copies of all of the plans, specifications, contracts and scope of work being performed by Seller or its agents or contractors at the Property at the time of execution hereof. Seller shall continue to perform such work in accordance with such contracts. To the extent that any such plans, specifications or contracts are modified or supplemented following the execution of this Agreement (the "Construction Modifications"), or to the extent that any additional contracts are to be entered into by Seller prior to the closing (the "New Contracts"), Seller shall endeavor to provide Buyer with notice thereof as soon as practicable, and Buyer shall have the right to comment upon and participate in any discussions regarding the scope and timing of such work; provided, however, that the notice contemplated by this provision shall be deemed satisfied if an agent, employee, or representative of Buyer is present with Seller (whether in person, telephonically, or by email) in conversations, meetings and other communications involving such Construction Modifications or New Contracts. Moreover, notwithstanding the notice provisions set forth in Section 16(b) below, the notice contemplated by this Section 9 may also be made to

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other designated representatives of Buyer involved in the construction activities via telephone in addition to, or in lieu of, any of the other manners of providing notice outlined in Section 9.

10. POSSESSION OF THE PROPERTY. The Property shall be delivered to the Buyer at the time of the closing free and clear of all tenancies or occupancies by any person or entity, unless otherwise agreed herein. The Property shall also be reasonably free and clear of all trash and debris, and free and clear of any and all of Seller's personal property and equipment, except as set forth herein.

11. REPRESENTATIONS AND WARRANTIES OF SELLER. Seller represents and warrants to Buyer that the following are true as of the date of this Agreement and will be true as of the closing:

(a) Seller is duly organized and in good standing under the laws of the State of Maine, with full capacity, power and authority to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(b) The execution and delivery of this Agreement and the performance by Seller of its obligations hereunder are within the lawful power of Seller, have been duly authorized and approved by all necessary actions on behalf of Seller, and will not conflict with, or result in a breach of any of the terms, covenants and provisions of: (i) Seller's Articles of Incorporation or By-Laws; (ii) any judgment, writ, injunction, regulation, ruling, directive or decree of any court of governmental authority; or (iii) any agreement or instrument to which Seller is a party or by which Seller is bound;

(c) The person executing this Agreement on behalf of Seller is duly authorized to do so and to bind Seller to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(d) No consent, approval, order or authorization of any court or other governmental entity is required to be obtained by Seller in connection with the execution and delivery of this Agreement or the performance hereof by Seller;

(e) There are no litigation, liens, judgments, violations, or proceedings pending, or to the best of Seller's knowledge, threatened against or relating to the Property nor does Seller know or have reasonable grounds to know of any basis for any such action, or of any governmental investigation relating to the Property;

(f) There is no pending, or to the best of Seller's knowledge, threatened action or proceeding (including, but not limited to, any condemnation or eminent domain action or proceeding) before any court, governmental agency or arbitrator relating to or arising out of Seller's ownership of the Property or any portion thereof, or which may adversely affect Seller's ability to perform its obligations under this Agreement, or which may affect the Property or any portion thereof;

(g) Seller is not a "foreign person" within the meaning of § 1445 of the Internal Revenue Code;

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(h) To the best of Seller's knowledge, no work has been performed or is in progress at, and no materials have been furnished to the Property or any portion thereof which may give rise to mechanic's, materialmen's or other liens against the Property or any portion thereof except as may arise in connection with Seller's further obligations as specifically contemplated by this Agreement; and

(i) All outstanding bills and/or accounts payable concerning the Property are either paid or will be paid prior to or at the time of closing unless otherwise agreed by the parties in writing.

12. REPRESENTATIONS AND WARRANTIES OF BUYER. Buyer represents and warrants to Seller that the following are true as of the date of this Agreement and will be true as of the closing:

(a) Buyer is duly organized and in good standing under the laws of the Commonwealth of Massachusetts, with full capacity, power and authority to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(b) The execution and delivery of this Agreement and the performance by Buyer of its obligations hereunder are within the lawful power of Buyer, have been duly authorized and approved by all necessary actions on behalf of Buyer, and will not conflict with, or result in a breach of any of the terms, covenants and provisions of: (i) Buyer's Articles of Incorporation or Bylaws; (ii) any judgment, writ, injunction, regulation, ruling, directive or decree of any court of governmental authority; or (iii) any agreement or instrument to which Buyer is a party or by which Buyer is bound;

(c) The person executing this Agreement on behalf of Seller is duly authorized to do so and to bind Seller to enter into and fully perform the obligations and transactions contemplated by this Agreement; and

(d) No consent, approval, order or authorization of any court or other governmental entity is required to be obtained by Buyer in connection with the execution and delivery of this Agreement or the performance hereof by Buyer.

13. DEFAULT AND REMEDIES. In the event that either Buyer or Seller defaults in the performance of its obligations hereunder, the non-defaulting party may elect to terminate this Agreement by written notice, or seek specific performance of the defaulting party's obligations.

14. BROKERAGE. The parties agree that no broker has been involved in this transaction.

15. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

(a) Real estate taxes, assessments, rentals, common area maintenance charges, fuel oil, and utilities shall be prorated as of the date of closing based upon amounts thereof actually paid or received (as the case may be) as of this date.

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(b) The Maine real estate transfer tax (if applicable) shall be paid by Seller and Buyer in accordance with 36 M.R.S.A. § 4641-A.

(c) The recording fee for the deed of conveyance will be paid by Buyer.

(d) A portion of the purchase price shall be withheld at the closing by Buyer if required by 36 M.R.S.A. § 5250-A unless Seller furnishes to Buyer an affidavit stating, under penalty of perjury, that Seller is a resident of Maine or that the transfer is otherwise exempt from withholding tax.

16. MISCELLANEOUS.

(a) Time. Time is of the essence of this Agreement.

(b) Notices. Any notices required or permitted to be given under this Agreement shall be sufficient if in writing and if sent: (i) by first class mail, postage prepaid, registered or certified, return receipt requested; (ii) by hand delivery; (iii) by FedEx, or similar overnight express mail service, prepaid; or (iv) electronic mail ("e-mail") or by facsimile ("Fax") transmission, each to the addresses and/or Fax numbers listed below:

TO SELLER:
Charles E. Hewett
IDEALS
100 Commercial Street
Portland, ME 04101
chuck.hewett@ideals.org

WITH A COPY TO:
Helen S. Coburn, Esq.
Bernstein Shur
100 Middle Street, PO Box 9729
Portland, ME 04104-5029
hcoburn@bernsteinshur.com

TO BUYER:
Northeastern University
Planning, Real Estate and Facilities
360 Huntington Avenue, 216-201
Boston, MA 02115
Attention: Kathy Spiegelman
Email: k.spiegelman@northeastern.edu

WITH A COPY TO:
Northeastern University
Office of the General Counsel
360 Huntington Avenue, Suite 301

DocuSign Envelope ID: 93BEB8D2-0DE3-4F1B-A064-562E6257362F

Boston, MA 02115
Attention: Michael Glover
Email: m.glover@northeastern.edu

All such communication shall be deemed made upon the earlier of (3) business days following deposit with the U.S. Mail or the date of receipt as disclosed on the return receipt (if sent by registered or certified mail), or upon delivery (if hand delivered), or upon delivery as indicated on the proof of delivery (if sent via FedEx or similar overnight express mail service), or if sent via email with proof of receipt by the primary addressee, effective upon the day sent if received prior to 3:00 p.m. local time or the next business day if received thereafter. With respect to any of the above-referenced methods of delivery, rejection or other refusal to accept or the inability to deliver because of a change of address of which no notice was given shall be deemed to be receipt of the notice sent. Either party may change its address for purposes of this subparagraph by giving the other party notice of the new address in the manner described herein.

(c) Binding Effect/Assignment. This Agreement shall not become a binding contract until signed by both parties and that fact has been communicated to all parties or their agents. This Agreement will inure to the benefit of and bind the respective heirs, successors, personal representatives and assigns of the parties hereto and may be cancelled, modified or amended only by a writing executed by the parties hereto or their legal representatives.

(d) Construction. This Agreement and the Exhibits hereto set forth the entire agreement between the parties, and there are no other agreements or understandings between them related to the subject matter hereof. As used in this Agreement, the singular number shall include the plural, the plural the singular, and the use of one gender shall be deemed applicable to all genders. This Agreement shall be governed by and construed in accordance with the laws of Maine. All representations, warranties, covenants and indemnities made by either party herein shall survive the closing. If any provision of this Agreement is determined to be invalid or unenforceable, it shall not affect the validity or enforcement of the remaining provisions hereof. In the event of any dispute under this Agreement; prior to any litigation, the parties hereto shall first submit the matter to mediation and shall undertake good faith efforts to resolve any such dispute. In the event that a dispute hereunder is not resolved by mediation, the parties agree to submit any litigation to enforce this Agreement to the jurisdiction of the United States District Court for the District of Maine.

(e) Counterparts/Electronic Signatures. This Agreement may be simultaneously executed in any number of counterparts, each of which when so executed and delivered shall be an original, but such counterparts shall constitute one and the same instrument. This Agreement may be signed electronically and such shall be treated as original signatures.

(f) Attorney's Fees. If any legal action (including without limitation mediation and arbitration) is brought or compelled by either party to enforce any provisions of this Agreement, the prevailing party shall be entitled to recover from the other party its reasonable attorneys' and paralegals' fees and court costs, subject to and limited by the provisions of the Default and Remedies section of this Agreement.

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(g) Effective Date. The Effective Date of this Agreement shall be deemed to be the date first set forth above in this Agreement, provided that if no date is filled in, the Effective Date shall be the last date of the signature of either Buyer or Seller.

[*Signature Page Follows*]

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IN WITNESS WHEREOF, Seller and Buyer have executed this Agreement under seal as of the dates indicated above.

SELLER

THE INSTITUTE FOR DIGITAL ENGINEERING AND LIFE SCIENCES

DocuSigned by:
Charles E. Hewett
4BD10666DAF9434...

By: Charles E. Hewett
Its: Executive Director
Date: October 23, 2023

BUYER

NORTHEASTERN UNIVERSITY

DocuSigned by:
Thomas E. Nedell
FF682479C14A4DA...

By: Thomas E. Nedell
Its: Senior Vice President & Treasurer
Date: October 23, 2023

DocuSign Envelope ID: 93BEB8D2-0DE3-4F1B-A064-562E6257362F

EXHIBIT A
[*Legal Description*]

A certain parcel of land, together with the improvements thereon, located on the easterly sideline of Interstate 295 and the southerly sideline of Sherwood Street in the City of Portland, County of Cumberland and State of Maine being further described as follows:

Beginning at a 6-inch by 6-inch granite monument found inscribed “ECJ #356” marking the southerly sideline of Sherwood Street westerly sideline of the Canadian National Railroad and further described as the most northeasterly corner of described parcel;

THENCE, S 23-36-55 E, along said Railroad 316.33 feet to a 6-inch by 6-inch granite monument found inscribed "ECJ 356";

THENCE, S 23-36-55 E, along said Railroad, 526.90 feet, to a 4-inch by 4-inch granite monument with a drill hole;

THENCE, S 23-36-55 E, along said Railroad, 745 feet, more or less to the low water mark of the Casco Bay,

THENCE, in a general westerly direction along said low water line about 1,685 feet to a point on the easterly sideline of Interstate 295;

THENCE, N 2-23-50 W, along said sideline, 48 feet, more or less to a point;

THENCE, S 87-30-10 W, along said sideline, 30.00 feet to a point;

THENCE, N 2-23-50 W, along said sideline, 61.46 feet to a drill hole found, said drill hole lying on a tie course of S 73-07-39 W, 878.87 feet from the previous mentioned 4-inch by 4-inch granite monument with a drill hole;

THENCE, N 2-23-50 W, along said sideline, 237.87 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 89-44-34 E, along said sideline, 1.05 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 6-28-53 E, along said sideline, 122.88 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 0-24-30 E, along said sideline, 88.91 feet to a 4-inch by 4-inch granite monument found inscribed "ECJ #509";

THENCE, N 24-48-04 E, along said sideline, 60.29 feet to a 6-inch by 6-inch granite highway monument;

THENCE, N 31-29-16 W, along said sideline, 31.96 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 3-26-49 W, along said sideline, 111.10 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 8-40-57 E, along said sideline, 89.05 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 23-15-05 E, along said sideline, 66.28 feet to a 4-inch by 4-inch granite monument Inscribed "ECJ #509";

THENCE, N 34-47-28 E, along said sideline, 96.68 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 25-25-29 E, along said sideline, 160.02 feet to a 5/8 inch re-bar found capped "ECJ #509";

THENCE, N 23-37-03 E, along said sideline, 63.03 feet to a 4-inch by 4-inch granite

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monument inscribed "ECJ #509";

THENCE, N 39-23-04 E, along said sideline, 6.72 feet to a 6-inch by 6-inch granite monument found inscribed "ECJ #509";

THENCE, N 55-32-30 W, along said sideline, 11.67 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 34-47-50 E, along said sideline, 117.04 feet to a 4-inch by 4-inch granite monument inscribed "ECJ #509";

THENCE, N 34-43-38 E, along said sideline, 15.02 feet to a 5/8 inch re-bar found capped "ECJ #509" marking the southerly sideline of Sherwood Street;

THENCE, S 55-12-08 E, along said Sherwood Street, 288.60 feet to the point of beginning.

The foregoing description was prepared based on the Survey prepared by OEST Associates, Inc. dated February, 1999 and last revised February 26, 1999 recorded in in the Cumberland County Registry of Deeds in Plan Book 199, Page 159.

Alternate Legal Description [recent survey; grant to be without covenant of title]:

All right, title and interest in and to the following described lot or parcel of land, together with the buildings and improvements thereon, located in the City of Portland, County of Cumberland, State of Maine, which description is based on a ALTA/NSPS Land Title Survey prepared by VHB, dated June 30, 2021, last revised February 28, 2022, and Seller makes no representations or warranties as to the accuracy of said property description:

Beginning at a granite bound found at the intersection of the southerly sideline of Sherwood Street and the westerly sideline of land now or formerly of the state of Maine as described in the Cumberland County Registry of Deeds in Book 25500, Page 215, and Book 10924, Page 91 being formerly owned by the St. Lawrence & Atlantic Railroad Company, in part, and the Canadian National Railway Company, in part;

THENCE along the westerly sideline of land of the State of Maine South 23°38’41” East for a distance of 316.33 feet to a granite bound found;

THENCE continuing along land of the State of Maine South 23°34’45” East for a distance of 526.95 feet to a granite bound found;

THENCE continuing along the land of the State of Maine South 23°34’45” East for a distance of 745 feet, more or less to the low water mark of Casco Bay,

THENCE in a generally westerly direction along the low water line about 1,720 feet, more or less, to a point in the easterly sideline of Interstate 295;

THENCE along the easterly sideline of Interstate 295 the following courses and distances:

North 2°23’38” West for a distance of 48 feet, more or less to a point;

South 87°36’22” West for a distance of 30.00 feet to a point;

North 2°23’38 West for a distance of 61.46 feet to a point being located South 73°07’57” West at a distance of 878.66 feet from a granite bound found on the westerly sideline of land now or formerly of the State of Maine;

North 2°23’38 West for a distance of 237.87 feet to a point;

North 89°44’46” East for a distance of 1.05 feet to a rebar found;

North 6°29’05” East for a distance of 122.88 feet to a point;

North 0°24’42: East for a distance of 88.91 feet to a granite bound found;

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North 24°48’16 East for a distance of 60.29 feet to a granite bound found;
North 31°29’04” West for a distance of 31.96 feet to a point;
North 3°26’37” West for a distance of 111.10 feet to a point;
North 8°41’09” East for a distance of 89.05 feet to a point;
North 23°15’17” East for a distance of 66.28 feet to point;
North 34°47’40” East for a distance of 96.68 feet to a granite bound found;
North 25°25’41” East for a distance of 160.02 feet to a point;
North 23°37’15” East for a distance of 63.03 feet to a point;
North 39°23’16” East for a distance of 6.72 feet to a point;
North 55°32’18” West for a distance of 11.67 feet to a point;
North 34°48’02” East for a distance of 117.04 feet to a granite bound found;
North 34°43’50” East for a distance of 15.02 feet to a rebar found at the southerly sideline of Sherwood Street;

THENCE departing from the easterly sideline of Interstate 295 and running along the southerly sideline of Sherwood Street South 55°12’19” East for a distance of 288.59 feet to the point of beginning.

Meaning and intending to convey the same premises described in a Quitclaim Deed with Covenant from B&G Foods North America, Inc. to The Initiative for Digital Engineering and Life Sciences dated March 23, 2022 and recorded in the Cumberland County Registry of Deeds in Book 39282, Page 151.

The above described property shall be conveyed subject to the encumbrances listed as items 1-14 on Exhibit A of the Quitclaim Deed with Covenant from The Pillsbury Company to Heritage Acquisition Corp. dated March 15, 1999 and recorded in the Cumberland County Registry of Deeds in Book 14616, at Page 50 and the rights and easements granted by Heritage Acquisition Corp. to Central Maine Power Company and Verizon New England, Inc. by instrument dated February 7, 2006 and recorded in the Cumberland County Registry of Deeds in Book 24049, Page 189.

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EXHIBIT B
[*Development Contracts*]

1. Design Agreement by and between Bruner/Cott and The Initial for Digital Engineering and Life Sciences ("IDEALS") (*in negotiation; near final form*)

2. Design Agreement by and between CambridgeSeven and IDEALS (*in negotiation; near final form)*

3. Construction Management Agreement, by and between IDEALS and Consigli Construction Co., Inc. dated January 17, 2023

4. Cooperative Agreement by and between the Maine DOT ("MDOT") and IDEALS, dated as of January 18, 2023

5. MDOT Temporary Access Road Rights Agreement by and between MDOT and IDEALS, dated as of March 30, 2023

6. License Agreement with the City of Portland Fire Department by and between the City of Portland and IDEALS dated May 24, 2023

7. License Agreement with the City of Portland Fire Department by and between the City of Portland and IDEALS dated August 2, 2022

8. IDEALS Boiler Purchase Agreement by and between IDEALS and Maine Plywood USA, LLC dated June 19, 2023

9. Consultant Services Agreement, by and between IDEALS and MacRostie Historic Advisors

10. Consultant Services Agreement, by and between IDEALS and Thorton Tomasetti

11. Consultant Services Agreement, by and between IDEALS and Tsoi Kobus Design

12. Consultant Services Agreement by and between IDEALS and Vanasse Hangen Brustlin

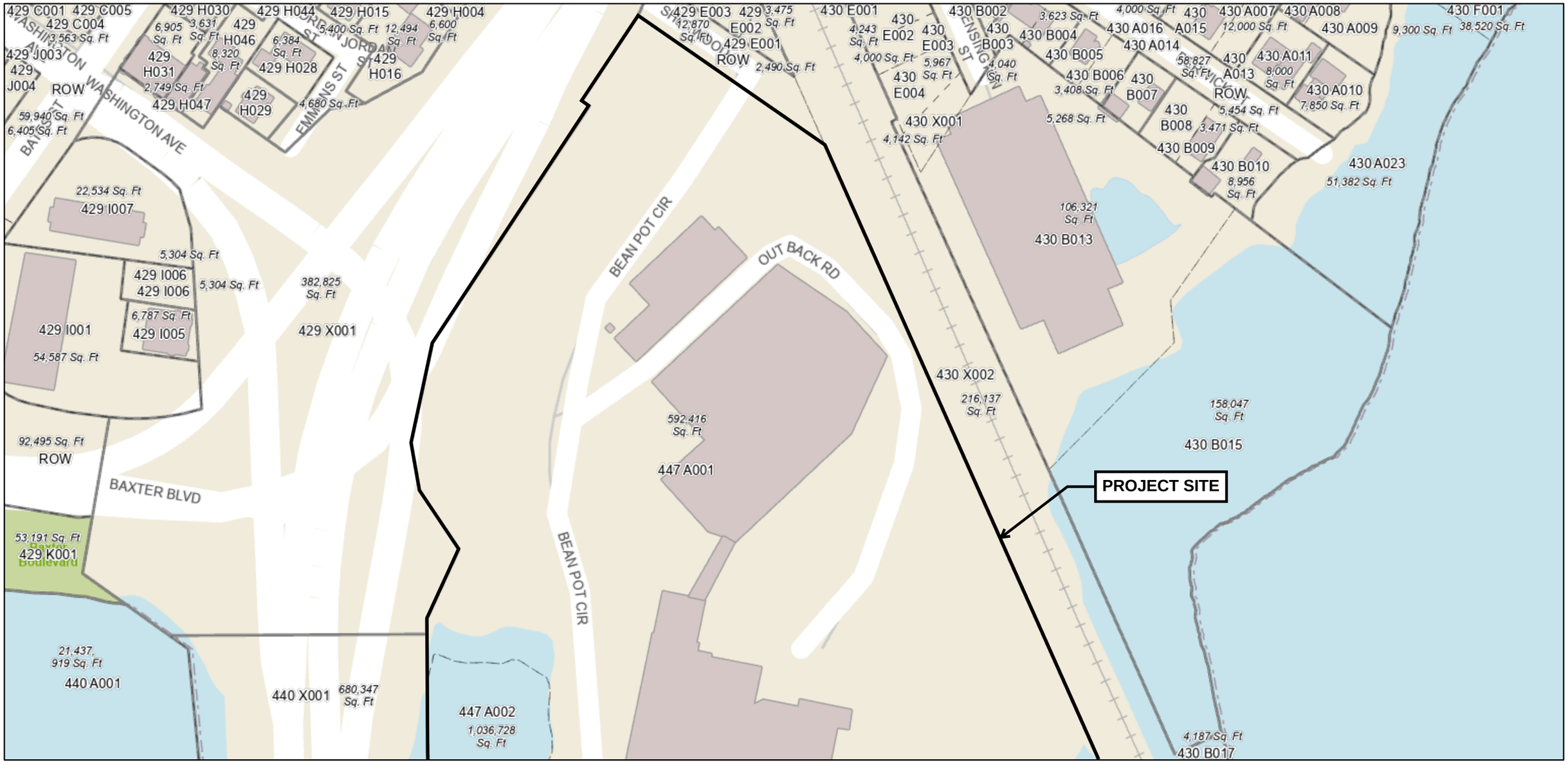
13. Consultant Services Agreement, by and between IDEALS and Woodard & Curran

14. Consultant Services Agreement, by and between IDEALS and Power Engineers

15. Consultant Services Agreement, by and between IDEALS and SW Cole Engineering

16. Consultant Services Agreement, by and between IDEALS and Stephen Stimson Associates

ArcGIS Web Map



8/10/2023, 11:07:21 AM

parcels

Tax

Conveyance

1:1,514

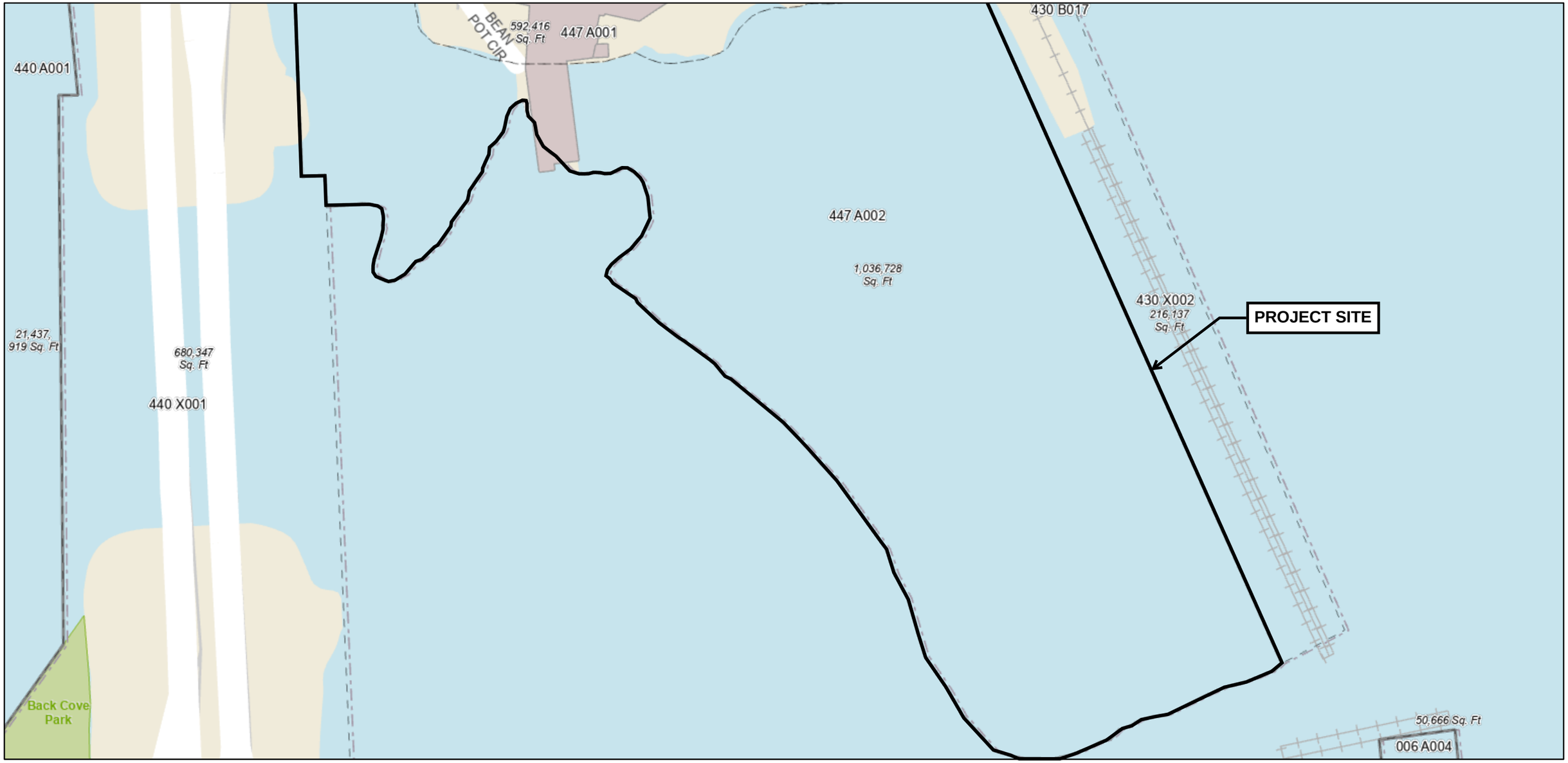
0 0.01 0.03 0.06 mi

0 0.03 0.06 0.11 km

City of Portland, DPS

Web AppBuilder for ArcGIS
City of Portland, Maine

ArcGIS Web Map



8/10/2023, 11:00:00 AM

parcels

Tax

Conveyance

1:1,514

0 0.01 0.03 0.06 mi

0 0.03 0.06 0.11 km

City of Portland, DPS

Web AppBuilder for ArcGIS
City of Portland, Maine

3. FINANCIAL CAPACITY

A copy of a letter verifying the Applicant's financial capacity to undertake the project is attached to this Section.

3.1 LIST OF ATTACHMENTS

- Financial Capacity Letter.

Northeastern

October 25, 2023

Ms. Denise Cameron
Woodard and Curran
12 Mountfort Street
Portland, ME. 04101

Dear Ms. Cameron:

Northeastern University expects phase 1 of the Roux Campus project to cost approximately $470 million dollars.

To fund the project, the University will use a mix of philanthropic resources (the majority of which are already pledged) and debt.

Thank you.

Sincerely,

Thomas Nedell
Senior Vice President for Finance and Treasurer

Office of the Senior Vice President Finance

177 Huntington Ave.
360 Huntington Ave.
Boston, MA 02115

617.373.2240
fax 617.373.4728

finance.northeastern.edu

4. TECHNICAL ABILITY

The project team includes the following partners completing various engineering, landscape architecture, and architectural components of the project. The project team is also supported by a number of other professional firms providing support with survey, structural design, geotechnical design, mechanical/electrical/plumbing design, and other disciplines. Copies of resumes and information on other members of the project team can be provided upon request.

Woodard & Curran (W&C), a Portland-based firm, has provided engineering services to the public and private sector for over 40 years, including permitting, civil/site engineering, stormwater, and construction management services. W&C has completed projects for colleges, universities, and healthcare institutions that build strong, sustainable infrastructure and environmental programs serving both their business needs and the communities that make them so vibrant. With extensive experience in design and permitting for site development projects, W&C has completed many projects within the City of Portland.

Stephen Stimson Associates, STIMSON is a landscape architecture firm based in Cambridge and Princeton, Massachusetts and is comprised of an urban and rural landscape architecture studio, a working farm, and a plant nursery. STIMSON is a female, minority led partnership between Lauren and Stephen Stimson with 30 staff and 5 principals. The studio was conceived in 1992 by Stephen Stimson, who was born on a 10th generation dairy farm in New England. A devotion to craft, and a simple, agrarian-minded approach to design is the mainstay of the firm's work.

Cambridge Seven Associates (C7), is an architecture firm based in Cambridge, Massachusetts, with a staff of 60 people, including registered architects, planners, LEED Accredited Professionals, exhibit, and graphic designers. Since 1962, they have provided clients with provocative yet sensitive designs by recognizing and acting upon the unique opportunities inherent in every project. C7 has received dozens of awards, including the prestigious National AIA Firm Award, and is internationally acclaimed for its innovative work in architecture, urban design, transportation, planning, graphic design, exhibition and interiors.

Bruner/Cott Architects, is a 35-person historic preservation architecture firm located in Boston, Massachusetts. Their leadership team brings a broad, integrated perspective to design, giving depth to each of their practice areas. Bruner/Cott's work has been recognized for award-winning design from preservation to adaptive reuse and new construction, with a focus on educational and cultural institutions. Bruner/Cott partners with private developers for residential and commercial buildings. Bruner/Cott is known for creativity in inventing new solutions to complex programs and as design leaders for historic renewal and contemporary design in the context of urban revitalization and institutional re-invention.

5. NOISE

HVAC and primary mechanical equipment will be located and screened to mitigate noise impacts. Noise associated with the proposed development will not exceed regulated levels and is not anticipated to negatively impact surrounding development in its urban setting. Noise and vibration associated with the proposed development will not exceed regulated levels.

Notwithstanding the existing buffers to the Site, there will be noise impacts as a result of construction activities. Construction activities will be limited to the hours permitted by the City. For those noise events that are above the regular background level, advance notifications will be provided using email and webpage communication mechanisms. The City of Portland Noise Ordinance will be followed.

6. VISUAL QUALITY & SCENIC CHARACTER

As further described in the City of Portland Site Plan Application for the proposed development, the architecture and landscaping have been designed to be consistent with the scenic character of the surrounding area. A Certificate of Appropriateness will also be obtained from the City of Portland Historic Preservation Board. It is not anticipated that the proposed development will result in any negative visual impacts.

7. WILDLIFE & FISHERIES

Immediately adjacent to this highly developed site are natural resource areas including: an estuarine intertidal emergent marsh located east of the site near the rail corridor; coastal wetlands for all areas below highest annual tide; tidal waterfowl and wading bird habitat, and blue mussel habitat. A wetland delineation investigation, including a functions & values assessment, was conducted by scientists at FB Environmental in June of 2023, and is summarized in the report attached to this section.

The attached Official Species List identifies the northern long-eared bat (endangered species), roseate tern (endangered species) and monarch butterfly (candidate species) in association with the project area; however, there are no critical habitat areas located within the project area. Based on US Fish & Wildlife information, the northern long-eared bat typically lives in caves during the winter months, and in trees larger than three inches in diameter during the summer, with migration between these two habitats in the spring and the fall. Tree clearing will be conducted between August and May to avoid impacts to long-ear bats. Applicable permitted tree clearing dates for the project will be confirmed with regulatory agencies during final design.

A letter was sent to the Maine Department of Inland Fisheries and Wildlife (MDIFW) requesting information regarding any known threatened or endangered species or critical habitat relative to the project area; a copy of the review request letter is attached to this Section. It is not anticipated that the proposed development will have a negative impact on the northern long-eared bat, roseate tern, or monarch butterfly.

7.1 LIST OF ATTACHMENTS

- Wetland Delineation Report;
- Official Species List; and
- MDIFW Environmental Review Request Letter.

FB environmental

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207-221-6699
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Denise Cameron
Project Manager | Senior Principal
Woodard & Curran
41 Hutchins Drive
Portland, ME 04102

June 27, 2023

Subject: Roux Institute – Wetland Delineation

Dear Denise,

As requested by Woodard & Curran, FB Environmental Associates (FBE) delineated wetlands and watercourses and conducted a wetland functions and values assessment at a site in Portland, Maine. The site is intended to be the permanent home of the Roux Institute, a graduate education and research facility, under the Initiative for Digital Engineering & Life Sciences (IDEALS). The specific Survey Area consists of a 14-acre parcel situated in Portland's East End at the mouth of Back Cove. The attached map depicts the location of the parcel, formerly known as the B&M property.

Fieldwork was conducted on 6 June 2023, by FBE's Ecological Services Division Lead and Senior Wetland Scientist Kevin Ryan and Wetland Scientist Sarah Large. Wetlands were identified and delineated in accordance with the 1987 US Army Corps of Engineers (USACE) Wetland Delineation Manual[1] using the methods described in the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0.[2] Copies of completed wetland determination data forms are included with this report. All wetlands and watercourses were classified using the US Fish and Wildlife Service (USFWS) Classification of Wetlands and Deepwater Habitats of the United States.[3]

Wetland Delineation Methods

Wetland boundaries are marked in the field using pink flagging emblazoned with the words "WETLAND DELINEATION." Boundaries of wetlands delineated during the field survey are geo-located using a sub-meter accuracy GPS unit (EOS Arrow-100). The collected GPS data are then used to create a wetland delineation map.

In Maine, Wetlands of Special Significance (WoSS) are regulated by the Maine Department of Environmental Protection (DEP) under Chapter 310 of the Maine Natural Resources Protection Act. All coastal wetlands and great ponds (inland bodies of water >10 acres in size) are classified as WoSS. In addition, a freshwater wetland may be considered one of special significance if it: (1) contains a natural community that is critically imperiled or imperiled as defined by the Maine Natural Areas Program; (2) contains significant wildlife habitat; (3) is located within 250 feet of a coastal wetland; (4) is located within 250 feet of a great pond; (5) contains at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation[4], or open water; (6) is inundated with floodwater during a 100-year flood event based on flood insurance

[1] Environmental Laboratory. (1987). Corps of Engineers Wetlands Delineation Manual. Wetlands Research Program Technical Report Y-87-1. Vicksburg, MS: US Army Engineer Waterways Experiment Station.
[2] U.S. Army Corps of Engineers. 2012. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, C. V. Noble, and J. F. Berkowitz. ERDC/EL TR-12-1. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
[3] Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. *Classification of wetlands and deepwater habitats of the United States*. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. 131pp.
[4] Cowardin et al. [1979] defines emergent hydrophyte (i.e., emergent marsh vegetation) as "…rooted herbaceous angiosperms, ferns, and fern allies that grow in wet soil, stand erect during most or all of the growing season, and may be periodically to permanently flooded at the base, but do not tolerate prolonged inundation of the entire plant").

maps; (7) contains peatlands; or (8) is located within 25 feet of a river, stream, or brook. The Survey Area was assessed for WoSS.

Wetland Functions and Values Assessment Methods

FBE conducted the wetland functional assessment pursuant to the approach described by the Army Corps Highway Methodology Workbook Supplement: Wetland Functions and Values (US ACOE, 1995). In this "Descriptive Approach" to function assessment, prior to determining what functions and values are principal and why, evaluators first determine if particular functions and values are present and then if they are "principal". Functions and values are considered "principal" if they are an important physical component of a wetland ecosystem (function only), and/or are considered of special value to society, from a local, regional, and/or national perspective. When making determinations regarding a wetland, evaluators are encouraged to determine whether the wetland has the potential to serve these functions and values.

Functions are self-sustaining properties of a wetland ecosystem that exist in the absence of society and result from both living and non-living components of a specific wetland resource. These include all processes necessary for the self-maintenance of the wetland ecosystem, such as primary productivity and nutrient cycling, among others. Therefore, functions relate to the ecological significance of wetland properties without regard to subjective human values.

Values are benefits that derive from one or more functions and the physical characteristics associated with a wetland. Most wetlands have corresponding societal values. The value of a particular wetland function, or combination of functions, is based on human judgment of the worth, merit, quality, or importance attributed to those functions.

The 13 functions and values associated with a wetland functional assessment are described below:

1. *Groundwater Recharge/Discharge*: The potential for the wetland to serve as a groundwater recharge and/or discharge area. This function refers to the fundamental interaction between wetlands and aquifers, regardless of the size or importance of either.
2. *Floodflow Alteration (Storage & Desynchronization)*: The effectiveness of the wetland in reducing flood damage by attenuation of floodwaters for prolonged periods following precipitation events and the gradual release of floodwaters. This function adds to the stability of the wetland ecosystem or its buffering characteristics and provides social or economic value relative to erosion and/or flood prone areas.
3. *Fish and Shellfish Habitat*: The effectiveness of seasonal or permanent watercourses associated with the wetland to provide fish and shellfish habitat.
4. *Sediment/Toxicant/Pathogen Retention*: The ability of the wetland to reduce or prevent degradation of water quality. This function relates to the effectiveness of the wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands, or upstream erosive wetland areas.
5. *Nutrient Removal/Retention/Transformation*: The ability of the wetland to act as a trap for nutrients in runoff water from surrounding uplands or contiguous wetlands and the ability of the wetland to process these nutrients into other forms or trophic levels. One aspect of this function is to prevent ill effects of nutrients entering aquifers or surface waters such as ponds, lakes, streams, rivers, or estuaries.
6. *Production Export*: The effectiveness of the wetland to produce food or usable products for man or other living organisms.
7. *Sediment/Shoreline Stabilization*: The effectiveness of the wetland in stabilizing stream banks and shorelines against erosion.
8. *Wildlife Habitat*: The effectiveness of the wetland to provide habitat for various types and populations of animals typically associated with wetlands and wetland edges. Both resident and migrating species are considered.

9. *Recreation*: The suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities.
10. *Educational/Scientific Value*: The suitability of the wetland as a site for an "outdoor classroom," or as a location for scientific study or research.
11. *Uniqueness/Heritage*: The effectiveness of the wetland or its associated waterbodies to provide certain unique values, including archaeological sites, critical habitat for endangered species, its overall health and appearance, its role in the ecological system of the area, or its relative importance as a typical wetland class for the geographic location.
12. *Visual Quality/Aesthetics*: The visual and aesthetic quality or usefulness of the wetland.
13. *Endangered Species Habitat*: The suitability of the wetland to support threatened or endangered species.

Site Description

The site is composed of approximately 14-acres of previously developed land bounded by Casco Bay to the south and east, Portland's Back Cove to the west, I-295 to the northwest, and the former Grand Trunk Railway rail grade to the northeast. The site was home to the B&M Baked Beans plant that operated at the site from 1913 to circa 2022. The factory buildings occupy roughly half of the parcel[5], with parking lots accounting for an additional third. The remaining sixth of the property is composed of manicured lawn, trees and shrubs, and a small linear wetland running north-south along the eastern property boundary with the railroad grade.

Soils at the site consist primarily of urban fill. An elevated plateau-like area is present between the factory buildings and the wetland complex/ravine to the east.

Wetlands and Watercourses

FBE identified one contiguous wetland within the Survey Area which contains several wetland classes. Areas immediately adjacent to the site are regularly flooded estuarine intertidal wetlands with a predominantly mud substrate (E2US3N). Areas mapped beyond this wetland type are classified as estuarine subtidal (E1UBL) as the substrate remains inundated at low tide.

The wetland complex at the site is coastal and therefore meets the criteria to be deemed Wetland of Special Significance by DEP.

Wetland A - E2US3N Section

The western end of the shoreline at the site, extending east to the pier, meets the classification of a regularly flooded estuarine intertidal unconsolidated shore wetland with a mud substrate (E2US3N). The area is a mudflat that is bordered by riprap on all sides. The wetland has been altered by the development present on and adjacent to the site. Rockweed (*Ascophyllum nodosum*), a seaweed common to sheltered shores and coves, is present within the wetland attached to riprap and on rocks within the mudflat.

Wetland A – E2US1N Section

East of the pier, the characteristics of Wetland A differ in terms of substrate and meets the classification of a regularly flooded estuarine intertidal unconsolidated shore wetland with a cobble-gravel substrate (E2US1N). The predominantly cobble-gravel substrate of this section of the wetland is strewn with old, weathered bricks and other historic construction debris. The land area immediately east of the pier is bounded by a stone retaining wall; beyond it to the east, the shoreline is lined with rocks of various sizes ranging from pebbles to boulders.

Wetland A – E2EM1N Section

The channelized section of Wetland A on the eastern boundary of the property is an estuarine intertidal emergent marsh system with persistent vegetation (E2EM1N) situated in a ravine that is regularly flooded. This portion of the wetland has a variety of native and nonnative invasive shrubs growing along the banks. Native shrubs observed

[5] The buildings were in the process of being demolished during the course of the field investigation.

in proximity to the wetland included willows (*Salix* sp.), staghorn sumac (*Rhus hirta*), and cherry trees (*Prunus* sp.). Nonnative plants observed include black locust trees (*Robina pseudoacacia*) and cultivated apple trees (*Malus pumila*). Non-native, invasive plants observed consisted of Morrow's honeysuckle (*Lonicera morrowii*), Japanese knotweed (*Fallopia japonica*), and multiflora rosa (*Rosa multiflora*).

At the USACE plot within this section of the wetland, smooth cordgrass (*Spartina alterniflora*) is the dominant vegetation with Carolina sea-lavender (*Limonium carolinianum*) and common glasswort (*Salicornia depressa*) also present. Soil met the criteria for hydric soil indicators A11 – Depleted Below Dark Surface and F3 Depleted Matrix as the soil profile consisted of a dark surface layer of silty clay loam underlain by a depleted clay with prominent redoximorphic concentrations. Observed primary indicators of hydrology consisted of A1 – Surface Water, A2 – High Water Table, A3 – Saturation, and B9 – Water-Stained Leaves. Completed USACE Wetland Determination Data forms are attached to this letter.

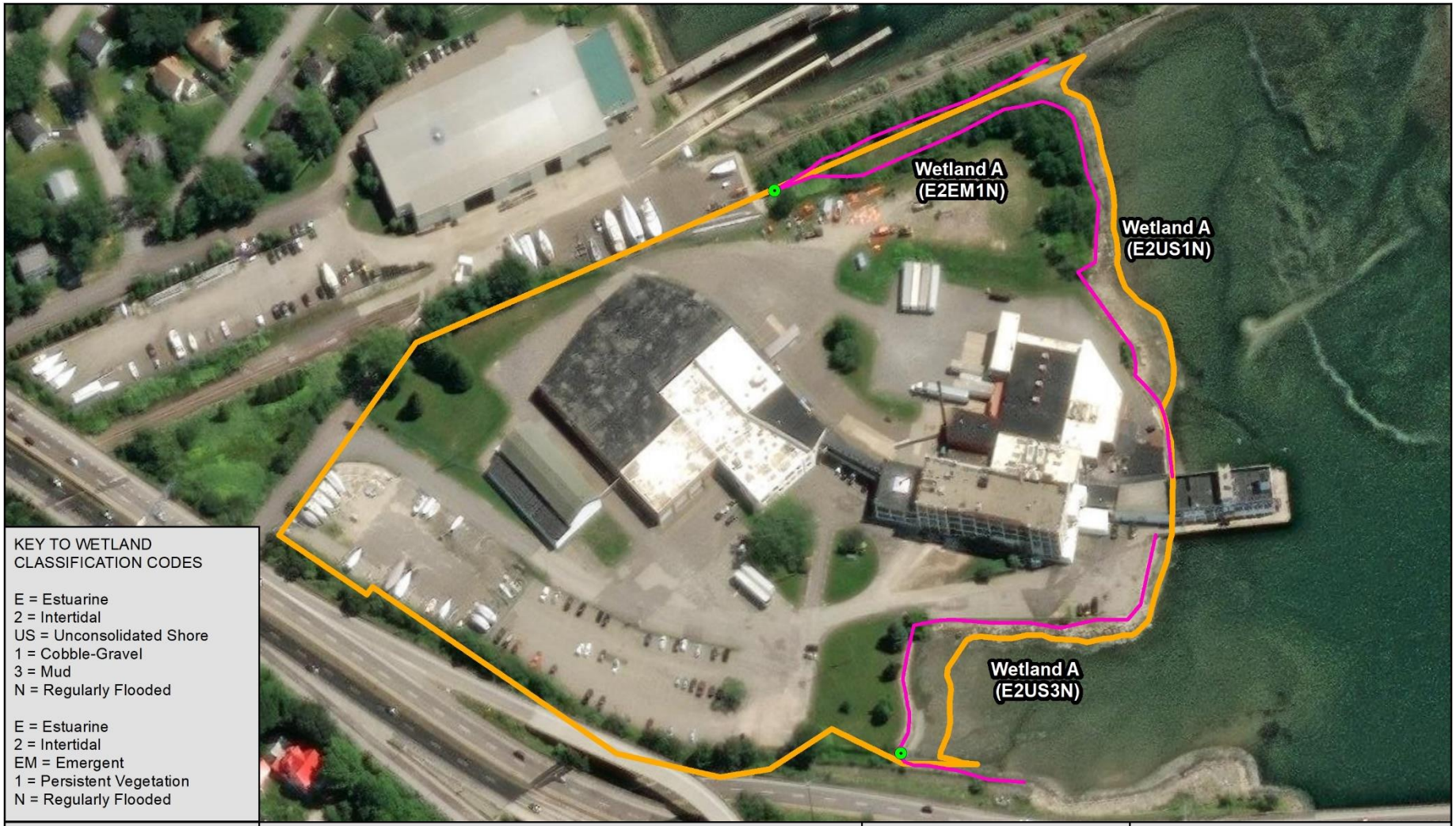
Functions and Values

Principal functions of Wetland A are Fish and Shellfish Habitat, Production Export, Wildlife Habitat, and Uniqueness/Heritage. Other functions and values that the wetland provides consist of Floodflow Alteration, Sediment/Toxicant Retention, Nutrient Removal, Sediment/Shoreline Stabilization, Recreation, Educational/Scientific Value, and Visual Quality/Aesthetics. A completed USACE Function and Value Evaluation Form is attached to this letter.

Thank you for the opportunity to assist Woodard & Curran with this project. Please do not hesitate to contact me if you have questions or need additional information.

Regards,

Kevin Ryan
Ecological Services Division Lead
FB Environmental Associates

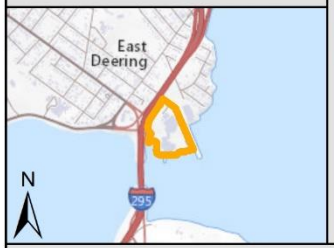


KEY TO WETLAND CLASSIFICATION CODES

E = Estuarine
2 = Intertidal
US = Unconsolidated Shore
1 = Cobble-Gravel
3 = Mud
N = Regularly Flooded

E = Estuarine
2 = Intertidal
EM = Emergent
1 = Persistent Vegetation
N = Regularly Flooded

LOCUS MAP



Survey Area
Wetland Boundary
Culvert

N E S W

FB environmental

0 100 200 Feet

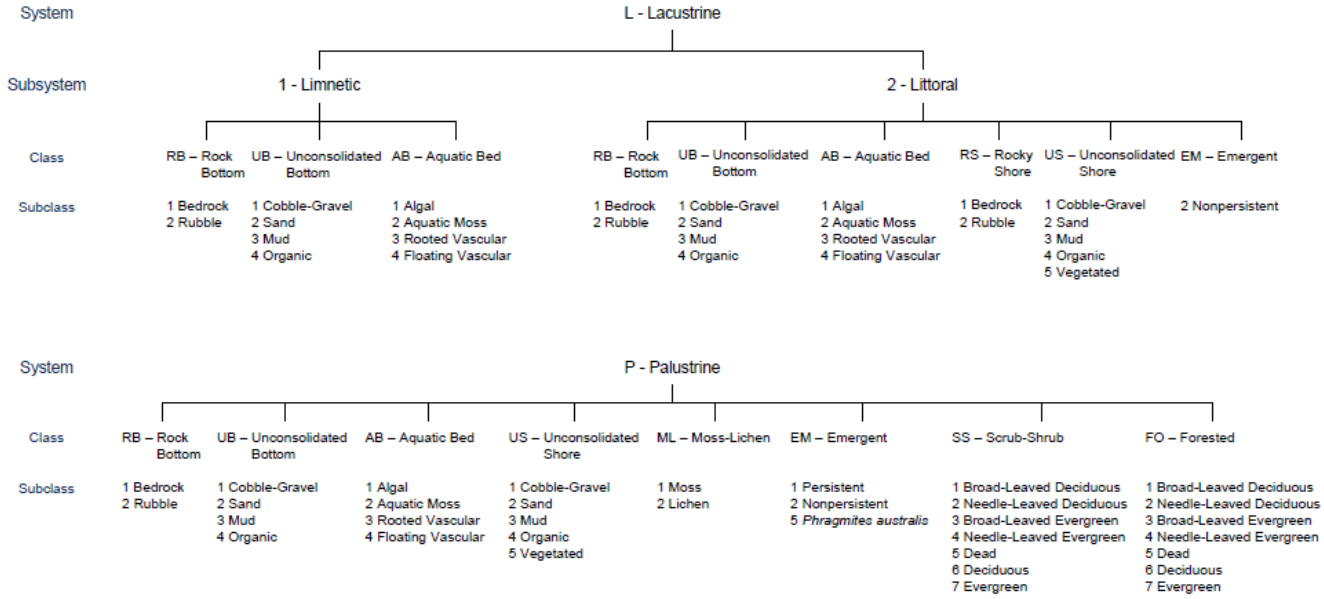
Initiative for Digital Engineering & Life Sciences
Roux Institute
Portland, Maine

Data Sources: Maine Geolibrary, ESRI, FBE
Coordinate System: NAD 1983 UTM Zone 19
Map created by K. Ryan on June 22, 2023

Notes: Wetlands were delineated by Kevin Ryan and Sarah Large in accordance with the 1987 US Army Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, v2.0. January 2012. Wetlands were classified using the Classification of Wetlands and Deepwater Habitats of the United States (USFWS, 1979).

Cowardin Wetland Classification System

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION

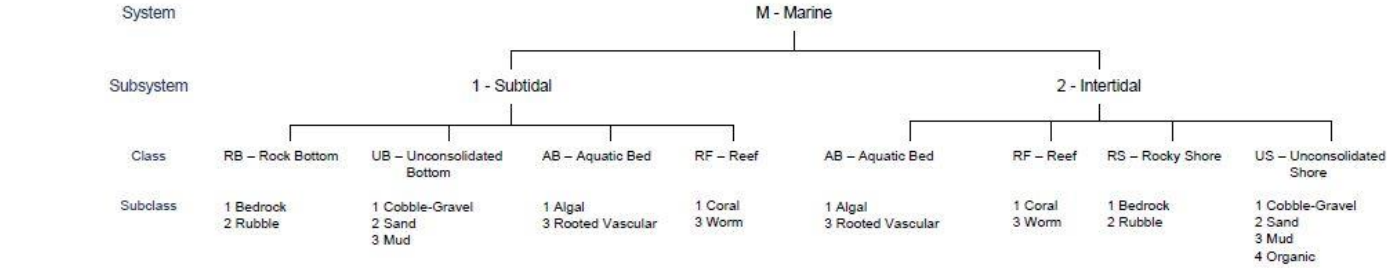


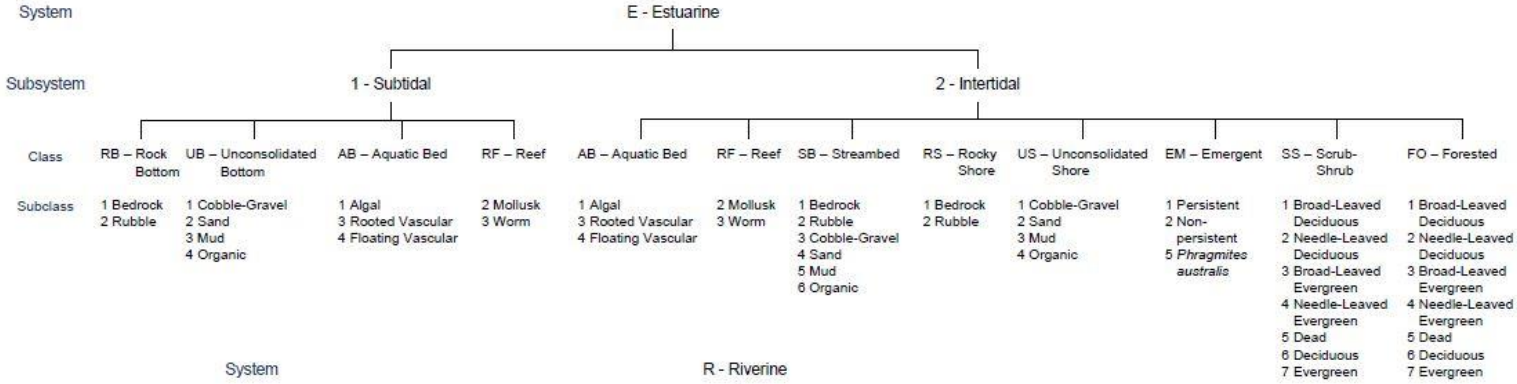
MODIFIERS

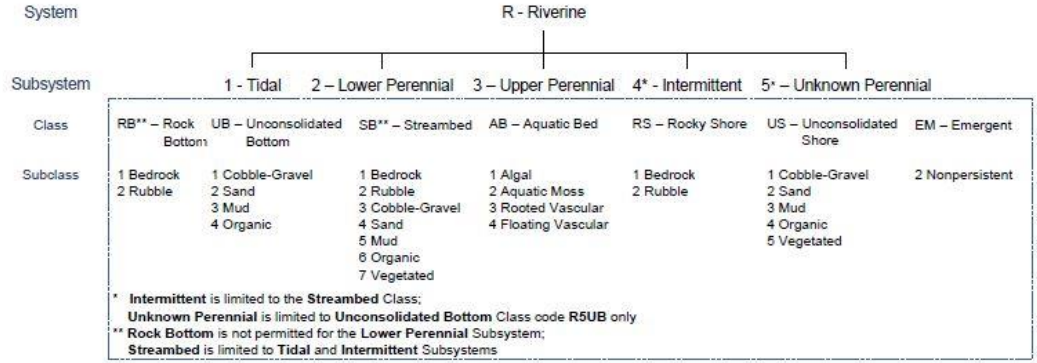
In order to more adequately describe the wetland and deepwater habitats, one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farmed modifier may also be applied to the ecological system.

Water Regime			Special Modifiers	Water Chemistry			Soil
Nontidal	**Saltwater Tidal**	**Freshwater Tidal**		**Coastal Halinity**	**Inland Salinity**	**pH Modifiers for all Fresh Water**	
A Temporarily Flooded	L Subtidal	S Temporarily Flooded-Tidal	b Beaver	1 Hyperhaline	7 Hypersaline	a Acid	g Organic
B Saturated	M Irregularly Exposed	R Seasonally Flooded-Tidal	d Partly Drained/Ditched	2 Euhaline	8 Eusaline	t Circumneutral	n Mineral
C Seasonally Flooded	N Regularly Flooded	T Semipermanently Flooded-Tidal	f Farmed	3 Mixohaline (Brackish)	9 Mixosaline	i Alkaline	
E Seasonally Flooded/ Saturated	P Irregularly Flooded	V Permanently Flooded-Tidal	h Diked/Impounded	4 Polyhaline	0 Fresh		
F Semipermanently Flooded			r Artificial	5 Mesohaline			
G Intermittently Exposed			s Spoil	6 Oligohaline			
H Permanently Flooded			x Excavated	0 Fresh			
J Intermittently Flooded							
K Artificially Flooded							

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION







Site Photographs



Photo 1. View south from the north end of Wetland A.



Photo 2. View north from the western boundary of Wetland A, towards the developed/manicured area.



Photo 3. The current pier acts as a dividing line between the muddy and cobble-gravel substrate sections of Wetland A.



Photo 4. Wetland A north of the pier has a cobble-gravel substrate strewn with old bricks.



Photo 5. View north of the emergent marsh section of Wetland A.



Photo 6. View south from the emergent marsh section of Wetland A.



Photo 7. Several small culverts drain to the west end of Wetland A.



Photo 8. View north of the emergent portion of Wetland A upon becoming inundated during the field investigation.

Completed Wetland Function-Value Evaluation Form

Wetland Function-Value Evaluation Form

Total area of wetland: n/a Human made?: No Is wetland part of a wildlife corridor?: No or a "habitat island"?: No

Adjacent land use: Industrial facility Distance to nearest roadway or other development: Immedeately adjacent

Dominant wetland systems present: Estuarine Contiguous undeveloped buffer zone present: No

Is the wetland a separate hydraulic system?: No If not, where does the wetland lie in the drainage basin?: Low - coastal

How many tributaries contribute to the wetland?: n/a Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D.: Wetland A

Latitude: 43.64235 Longitude: 70.279119

Prepared by: KR & SL Date: 6 June 2023

Wetland Impact:
Type: _____ Area: _____

Evaluation based on:
Office: Yes Field: Yes

Corps manual wetland delineation completed? Y: x N: _____

Function/Value	Suitability Y / N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	N			
Floodflow Alteration	Y	3,4,5,9,11		
Fish and Shellfish Habitat	Y	1,3,4	Y	Wetland is a coastal mudflat.
Sediment/Toxicant Retention	Y	1,2,4,7,8,9		
Nutrient Removal	Y	2,4,5,6,7		
Production Export	Y	1,4,6	Y	
Sediment/Shoreline Stabilization	Y	1,3,5,10,11		
Wildlife Habitat	Y	8,16,21	Y	Observed waterfowl and fish using wetland.
Recreation	Y	2,5,12		
Educational/Scientific Value	Y	2,5,14		
Uniqueness/Heritage	Y	1,13,14,17,19,20	Y	
Visual Quality/Aesthetics	Y	2,6,8,11,12		
ES Endangered Species Habitat				Unknown.
Other				

Notes:

* Refer to backup list of numbered considerations.

Completed Wetland Determination Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: IDEALS - Roux Institute City/County: Portland/Cumberland Sampling Date: 6 June 23

Applicant/Owner: Woodard & Curran State: ME Sampling Point: A-1 (wet)

Investigator(s): Kevin Ryan and Sarah Large Section, Township, Range:

Landform (hillside, terrace, etc.): Coast Local relief (concave, convex, none): Concave Slope %: 1

Subregion (LRR or MLRA): LRR R Lat: Long: Datum:

Soil Map Unit Name: Cut and Fill NWI classification: Not mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No	**Is the Sampled Area within a Wetland?** Yes X No
Hydric Soil Present?	Yes X	No	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes X	No	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- X Surface Water (A1)
- X High Water Table (A2)
- X Saturation (A3)
- Water Marks (B1)
- Sediment Deposits (B2)
- Drift Deposits (B3)
- Algal Mat or Crust (B4)
- Iron Deposits (B5)
- Inundation Visible on Aerial Imagery (B7)
- Sparsely Vegetated Concave Surface (B8)
- X Water-Stained Leaves (B9)
- Aquatic Fauna (B13)
- Marl Deposits (B15)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres on Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- Surface Soil Cracks (B6)
- Drainage Patterns (B10)
- Moss Trim Lines (B16)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Stunted or Stressed Plants (D1)
- X Geomorphic Position (D2)
- Shallow Aquitard (D3)
- X Microtopographic Relief (D4)
- X FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes X	No	Depth (inches): 4
Water Table Present?	Yes X	No	Depth (inches): 0
Saturation Present? (includes capillary fringe)	Yes X	No	Depth (inches): 0

Wetland Hydrology Present? Yes X No

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Plot becoming inundated by tide at time of data collection.

US Army Corps of Engineers Northcentral and Northeast Region – Version 2.0

VEGETATION – Use scientific names of plants.

Sampling Point: A-1 (wet)

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Sapling/Shrub Stratum (Plot size: 15)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	=Total Cover		
Herb Stratum (Plot size: 5)			
1. *Spartina alterniflora*	50	Yes	OBL
2. *Limonium carolinianum*	10	No	OBL
3. *Salicornia depressa*	5	No	OBL
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	65 =Total Cover		
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
	=Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	65	x 1 =	65
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	65 (A)		65 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

X 1 - Rapid Test for Hydrophytic Vegetation

X 2 - Dominance Test is >50%

X 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** X **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

US Army Corps of Engineers

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SOIL Sampling Point A-1 (wet)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-4	7.5YR 2.5/1	100					Loamy/Clayey	Silty clay loam
4-8	2.5Y 4/1	75	7.5YR 5/6	25	C	M	Loamy/Clayey	Prominent redox concentrations
8-16	2.5Y 4/1	60	7.5YR 5/6	40	C	M	Loamy/Clayey	Prominent redox concentrations

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- X Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ High Chroma Sands (S11) (**LRR K, L**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- X Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) (**LRR K, L**)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

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WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: IDEALS - Roux Institute City/County: Portland/Cumberland Sampling Date: 6 June 23

Applicant/Owner: Woodard & Curran State: ME Sampling Point: A-1 (up)

Investigator(s): Kevin Ryan and Sarah Large Section, Township, Range:

Landform (hillside, terrace, etc.): Coast Local relief (concave, convex, none): Concave Slope %: 1

Subregion (LRR or MLRA): LRR R Lat: Long: Datum:

Soil Map Unit Name: Cut and Fill NWI classification: Not mapped

Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)

Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____

Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	**Is the Sampled Area within a Wetland?** Yes ____ No X
Hydric Soil Present?	Yes ____	No X	If yes, optional Wetland Site ID:
Wetland Hydrology Present?	Yes ____	No X	

Remarks: (Explain alternative procedures here or in a separate report.)
Plot is in manucured lawn just west of Wetland A

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ____	No X	Depth (inches): ____
Water Table Present?	Yes ____	No X	Depth (inches): ____
Saturation Present? (includes capillary fringe)	Yes ____	No X	Depth (inches): ____

Wetland Hydrology Present? Yes ____ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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VEGETATION – Use scientific names of plants.

Sampling Point: A-1 (up)

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. *Picea abies*	10	Yes	UPL
2. *Thuja occidentalis*	10	Yes	FACW
3.			
4.			
5.			
6.			
7.			
	20	=Total Cover	
Sapling/Shrub Stratum (Plot size: 15)			
1. *None*			
2.			
3.			
4.			
5.			
6.			
7.			
		=Total Cover	
Herb Stratum (Plot size: 5)			
1. *Trifolium repens*	30	Yes	FACU
2. *Achillea millefolium*	30	Yes	FACU
3. *Poa sp.*	30	Yes	
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	=Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		=Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 20.0% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	10	x 2 =	20
FAC species	0	x 3 =	0
FACU species	60	x 4 =	240
UPL species	10	x 5 =	50
Column Totals:	80 (A)		310 (B)

Prevalence Index = B/A = 3.88

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

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Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No X

Remarks: (Include photo numbers here or on a separate sheet.)
Plot is on manicured lawn.

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SOIL

Sampling Point A-1 (up)

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth	Matrix		Redox Features					
(inches)	Color (moist)	%	Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	7.5YR 3/2	100					Loamy/Clayey	Sandy Loam
20-22	7.5YR 4/4	100					Loamy/Clayey	Sandy Loam

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
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Indicators for Problematic Hydric Soils[3]:

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- ___ Very Shallow Dark Surface (F22)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: None

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

This data form is revised from Northcentral and Northeast Regional Supplement Version 2.0 to include the NRCS Field Indicators of Hydric Soils, Version 7.0, 2015 Errata. (http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_051293.docx)

US Army Corps of Engineers — Northcentral and Northeast Region – Version 2.0

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
Phone: (207) 469-7300 Fax: (207) 902-1588

In Reply Refer To:
Project Code: 2023-0113655
Project Name: IDEALS Phase 1

October 30, 2023

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2)(c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf

Migratory Birds: In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see https://www.fws.gov/program/migratory-bird-permit/what-we-do.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see https://www.fws.gov/library/collections/threats-birds.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive For information regarding the implementation of Executive Order 13186, please visit https://www.fws.gov/partner/council-conservation-migratory-birds.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Bald & Golden Eagles
- Migratory Birds
- Wetlands

OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Maine Ecological Services Field Office
P. O. Box A
East Orland, ME 04431
(207) 469-7300

PROJECT SUMMARY

Project Code: 2023-0113655
Project Name: IDEALS Phase 1
Project Type: Acquisition of Lands
Project Description: Phase 1
Project Location:

The approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/@43.67886365,-70.25460066402678,14z



Counties: Cumberland County, Maine

ENDANGERED SPECIES ACT SPECIES

There is a total of 3 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries[1], as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

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1. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

MAMMALS

NAME	STATUS
Northern Long-eared Bat *Myotis septentrionalis* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045	Endangered

BIRDS

NAME	STATUS
Roseate Tern *Sterna dougallii dougallii* Population: Northeast U.S. nesting population No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2083	Endangered

INSECTS

NAME	STATUS
Monarch Butterfly *Danaus plexippus* No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

BALD & GOLDEN EAGLES

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act[1] and the Migratory Bird Treaty Act[2].

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats[3], should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Bald and Golden Eagle Protection Act of 1940.
2. The Migratory Birds Treaty Act of 1918.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

THERE ARE NO BALD AND GOLDEN EAGLES WITHIN THE VICINITY OF YOUR PROJECT AREA.

MIGRATORY BIRDS

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats[3] should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

---

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Black Guillemot *Cepphus grylle* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10412	Breeds May 15 to Sep 10
Black Scoter *Melanitta nigra* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10413	Breeds elsewhere
Common Eider *Somateria mollissima* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10457	Breeds Jun 1 to Sep 30
Common Loon *gavia immer* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/4464	Breeds Apr 15 to Oct 31
Great Shearwater *Puffinus gravis* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/9634	Breeds elsewhere
Long-tailed Duck *Clangula hyemalis* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/7238	Breeds elsewhere
Razorbill *Alca torda* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10461	Breeds Jun 15 to Sep 10
Red Phalarope *Phalaropus fulicarius* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10469	Breeds elsewhere

NAME	BREEDING SEASON
Red-breasted Merganser *Mergus serrator* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10693	Breeds elsewhere
Red-throated Loon *Gavia stellata* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/9589	Breeds elsewhere
Ring-billed Gull *Larus delawarensis* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10468	Breeds elsewhere
Roseate Tern *Sterna dougallii* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10661	Breeds May 10 to Aug 31
Surf Scoter *Melanitta perspicillata* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10463	Breeds elsewhere
Thick-billed Murre *Uria lomvia* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10700	Breeds Apr 15 to Aug 15
White-winged Scoter *Melanitta fusca* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10462	Breeds elsewhere
Wilson's Storm-petrel *Oceanites oceanicus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/10416	Breeds elsewhere

PROBABILITY OF PRESENCE SUMMARY

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read the supplemental information and specifically the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

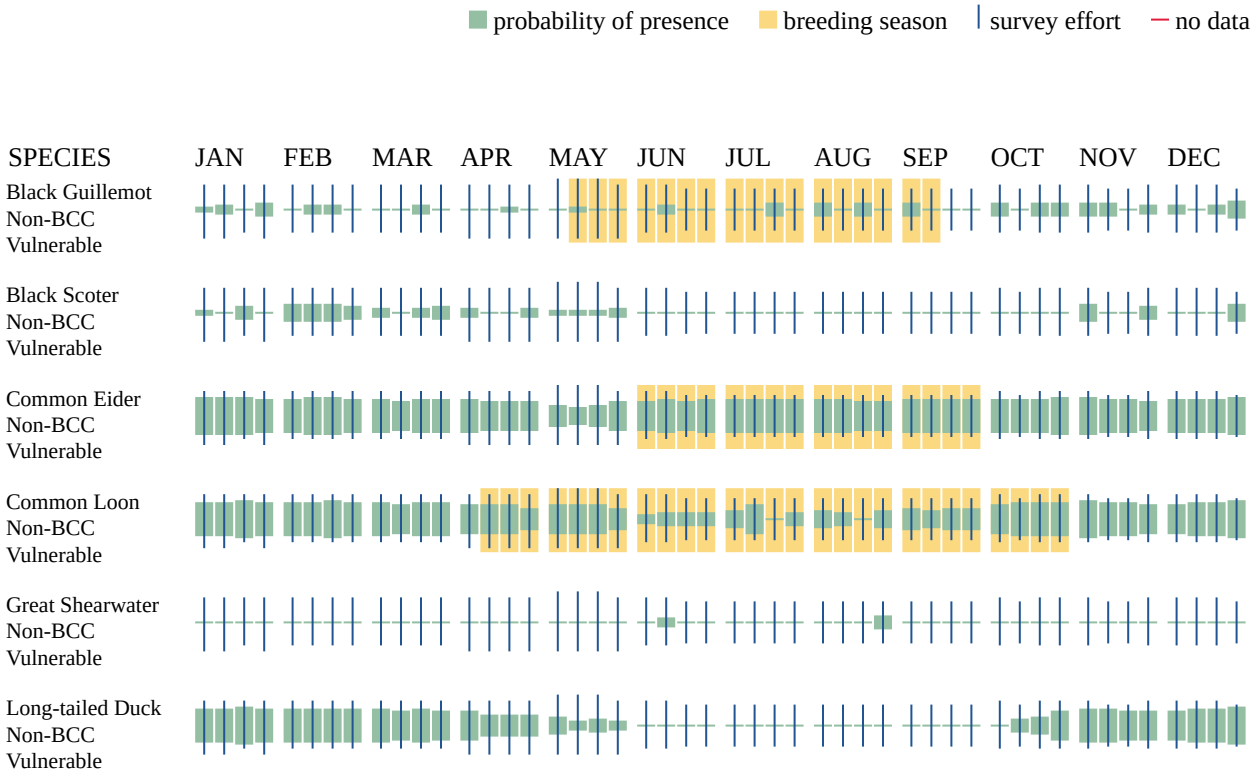
Probability of Presence (■)

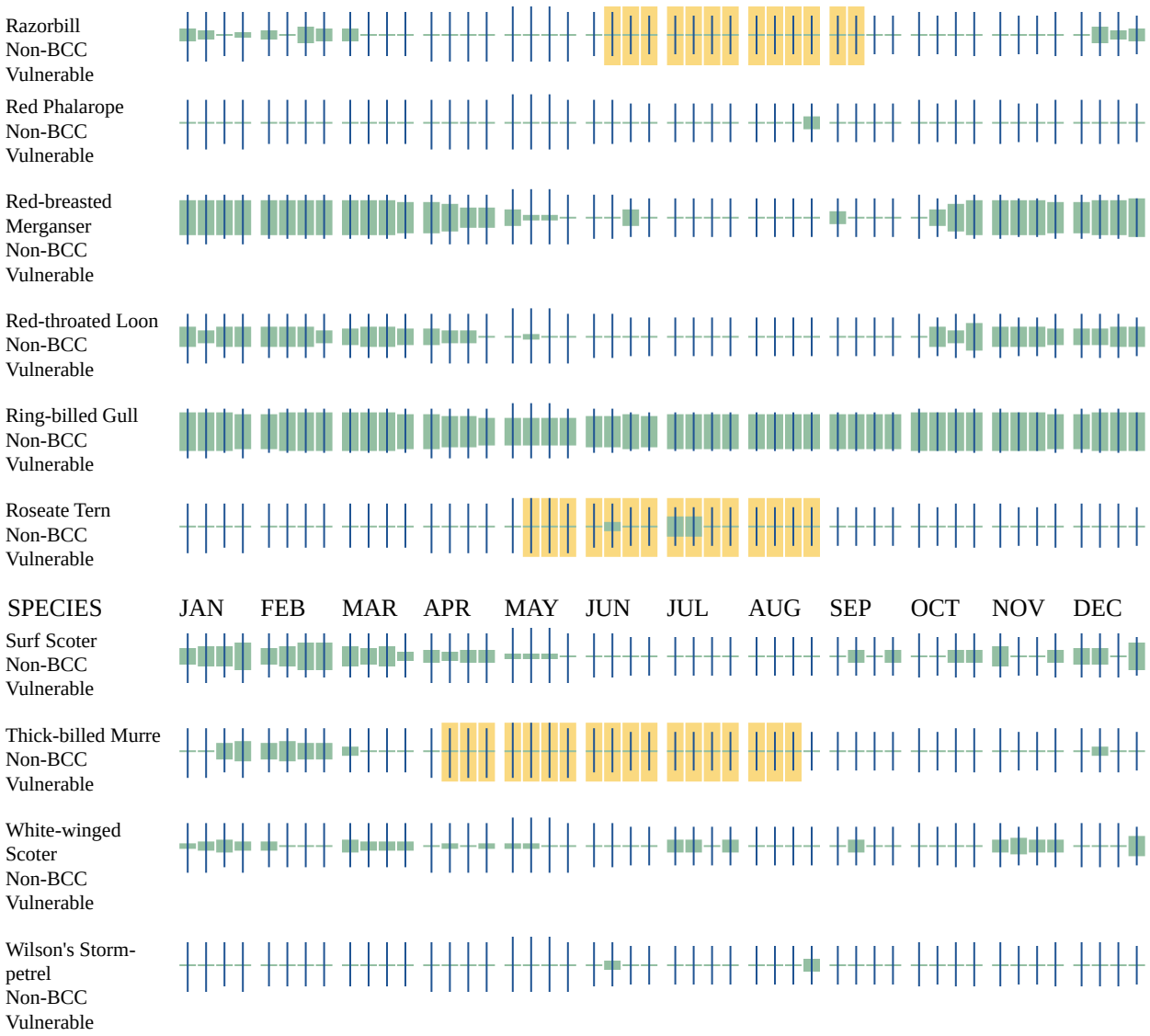
Green bars; the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during that week of the year.

Breeding Season (■)
Yellow bars; liberal estimate of the timeframe inside which the bird breeds across its entire range.

Survey Effort (|)
Vertical black lines; the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data (–)
A week is marked as having no data if there were no survey events for that week.





Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

WETLANDS

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

ESTUARINE AND MARINE WETLAND

- E2US2P
- E2US3N

ESTUARINE AND MARINE DEEPWATER

- E1UBL

IPAC USER CONTACT INFORMATION

Agency: Private Entity
Name: Julianna Monts
Address: 41 Hutchins Drive
City: Portland
State: ME
Zip: 01402
Email jmonts@woodardcurran.com
Phone: 9175753387

12 Mountfort Street
Portland, Maine 04101
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

November 2023

Maine Department of Inland Fisheries and Wildlife
41 State House Station
Augusta, ME 04333

RE: The Roux Institute at Northeastern University Phase 1 – Environmental Review Request

To Whom It May Concern:

Northeastern University and their agent, Initiative for Digital Engineering and Life Sciences (IDEALS), propose to develop a mixed-use post-graduate campus at 1 Bean Pot Circle in Portland, Maine. The project site was formerly owned by Burnham & Morrill (B&M) and previously developed for industrial food manufacturing operations. The site is primarily impervious and comprised of buildings, parking, and driveways, with vegetation along the site perimeter and waterfront. To enable future phases of development, abatement and demolition of existing industrial buildings has commenced. The proposed work for Phase 1 includes the construction of the Learning, Research, and Collaboration Building, renovation of the Bean Building, construction of a parking garage, development of a childcare facility, replacement of the pier, development of a coastal path, and other site improvements.

The proposed work will require a Maine Department of Environmental Protection Site Location of Development Permit, which requires coordination with the Maine Department of Inland Fisheries and Wildlife. On behalf of Northeastern University and IDEALS, we are requesting a review of the project area for any known threatened or endangered species or critical habitat. A Site Location Map and Overall Site Plan have been attached for your reference.

We appreciate your review of this project. If you have any questions regarding this information or the proposed project, please do not hesitate to contact me at 207-558-3841 or alebel@woodardcurran.com. Thank you for your assistance.

Sincerely,

WOODARD & CURRAN

Amy N LeBel

Amy LeBel, P.E.
Project Engineer

Enclosures: Site Location Map
Overall Site Plan

8. HISTORIC SITES

The proposed development will not adversely affect any historic sites, historic structures or archaeological sites. The Site was occupied by residences and a lobster cannery prior to 1913, when Burnham & Morrill (B&M) relocated its food manufacturing operations to the Site from Franklin Street. Shortly thereafter, the flagship Cannery Building (Bean Building) was constructed, as well as the adjacent codfish building on the pier. The site was further improved with buildings and parking to support operations. Canning operations ceased in 2021.

In 2022, IDEALS submitted a nomination to the City's Historic Preservation Board to designate the Bean Building as a local landmark. The five-story 1913 Bean Building was designated as a landmark by the City Council on October 17, 2022. During the Historic Preservation process, it was determined that the existing Codfish Building and pier were unsalvageable and will be demolished. This development Application proposes construction of a new pier in its place.

On May 23, 2023, IDEALS received a demolition permit from the City and commenced demolition of all existing buildings on the Site, retaining only the Bean Building and the Codfish Building.

An application will be submitted to the City of Portland Historic Preservation Board for improvements to the Cannery Building and interpretive elements on the new pier to honor the former Codfish Building.

The demolition of the Codfish Building and construction of the pier will require a Natural Resources Protection Act (NRPA) permit from the Maine Department of Environmental Protection. We will be coordinating with Maine Historic Preservation Commission (MHPC) in connection with the NRPA permit and will provide the City with relevant findings by MHPC regarding historic sites, structures or archaeological sites.

9. UNUSUAL NATURAL AREAS

The Site has been previously developed and there are no known unusual natural areas. A letter was sent to the Maine Natural Areas Program (MNAP) requesting a review of the Site relative to rare and exemplary botanical features; a copy of the review request letter is attached to this Section.

9.1 LIST OF ATTACHMENTS

- MNAP Site Review Request Letter.

12 Mountfort Street
Portland, Maine 04101
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

November 2023

Maine Natural Areas Program
177 State House Station
Augusta, ME 04333-0177

RE: The Roux Institute at Northeastern University Phase 1 – Site Review Request

To Whom It May Concern:

Northeastern University and their agent, Initiative for Digital Engineering and Life Sciences (IDEALS), propose to develop a mixed-use post-graduate campus at 1 Bean Pot Circle in Portland, Maine. The project site was formerly owned by Burnham & Morrill (B&M) and previously developed for industrial food manufacturing operations. The site is primarily impervious and comprised of buildings, parking, and driveways, with vegetation along the site perimeter and waterfront. To enable future phases of development, abatement and demolition of existing industrial buildings has commenced. The proposed work for Phase 1 includes the construction of the Learning, Research, and Collaboration Building, renovation of the Bean Building, construction of a parking garage, development of a childcare facility, replacement of the pier, development of a coastal path, and other site improvements.

The proposed work will require a Maine Department of Environmental Protection Site Location of Development Permit, which requires coordination with the Maine Natural Areas Program. On behalf of Northeastern University and IDEALS, we are requesting information on rare and exemplary botanical features in the project area. A site location map has been attached for your reference.

We appreciate your review of this project. If you have any questions regarding this information or the proposed project, please do not hesitate to contact me at 207-558-3841 or alebel@woodardcurran.com. Thank you for your assistance.

Sincerely,

WOODARD & CURRAN

Amy N LeBel

Amy LeBel, P.E.
Project Engineer

Enclosure: Site Location Map

10. BUFFERS

The Site has been previously developed. There are no existing or proposed buffer strips. However, Interstate I-295 borders the project to the west and will act as a buffer to the Site. Existing buffers of plantings at property lines will be maintained or replaced where appropriate.

11. SOILS

Copies of the United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey are attached to this Section for your reference. Environmental assessments of the Site have been conducted and a soil management plan has been developed for the Site.

11.1 LIST OF ATTACHMENTS

- United States Department of Agriculture Natural Resources Conservation Service Web Soil Survey.



Map Scale: 1:2,840 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 19, Aug 30, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BuB	Lamoine silt loam, 3 to 8 percent slopes	0.9	4.5%
Cu	Cut and fill land	15.9	77.8%
W	Water	3.6	17.7%
Totals for Area of Interest		**20.4**	**100.0%**

12. STORMWATER MANAGEMENT

The Stormwater Management Plan describes the proposed stormwater management measures for the project, as shown on the design drawings uploaded to ProjectDox. A USGS map and a soils map are attached to Section 1 and Section 11 of this Report, respectively.

For a site that had previously seen no stormwater quality or quantity treatment or management other than some limited collection systems, the proposed stormwater management system will reduce the impact of stormwater on surrounding resources. The proposed stormwater management system has been designed to adequately capture, convey, and treat stormwater runoff, as demonstrated in the Stormwater Management Report uploaded under separate cover.

12.1 LIST OF ATTACHMENTS

- Stormwater Management Plan (Bound Separately).

13. URBAN IMPAIRED STREAM

The proposed development is not located within the watershed of an Urban Impaired Stream; the Urban Impaired Stream Standard does not apply.

14. BASIC STANDARD

The proposed development is adjacent to Casco Bay; there are no other known protected resources associated with the Site. As shown in the soil survey attached to Section 11 of this Report, the Site is comprised primarily of urban fill. The Soil Erosion and Sediment Control Plan and compliance with the Basic Standard is described in the Stormwater Management provided as part of Section 12 of this Report.

During construction, the Contractor will be responsible for conducting inspections in accordance with the attached *Stormwater Erosion & Sediment Control Inspection Report Form* (or equivalent). Inspections shall be performed at least once a week, as well as before and after storm events. A person with knowledge of stormwater management and erosion and sediment control, including the standards and conditions of the permit approvals, shall conduct the inspections and perform maintenance of the facilities. If maintenance or modifications are necessary, implementation will be completed within seven days and prior to any rainfall event. After construction, the Owner will be responsible for inspecting and maintaining the Site's stormwater system.

14.1 LIST OF ATTACHMENTS

- Erosion & Sediment Control Inspection Report Form.

EROSION & SEDIMENT CONTROL
INSPECTION REPORT FORM

Inspectors: Date: ___ / ___ / _____

_____ of _____ (Project Owner)
_____ of _____ (Contractor)
_____ of _____
_____ of _____

Storm Event? ☐ Yes ☐ No Rainfall Amount _____ Storm Duration _____ hours

Visual Observations of Activity and Site Conditions:

Disturbed Soil Areas:

Storage Of Soils:

Sediment & Erosion Control Measures:

Construction Site Entrance:

Surface Stabilization:

Corrective Action Taken:

Attachments (if any):

Signature:

Name Title Date

15. GROUNDWATER

The proposed development is not located within a Significant Sand and Gravel Aquifer; as previously noted, the Site is comprised primarily of urban fill. The proposed development will not infiltrate or extract groundwater. It is not anticipated that the proposed development will result in any impacts to groundwater.

16. WATER SUPPLY

The proposed development will be provided with both fire protection water service and domestic water service as shown on the drawings via a private water system that will connect to the public water main on Sherwood Street. Woodard & Curran is working directly with the Portland Water District to determine the appropriate design for this work. The ability to serve documentation for Phase 1 will be provided upon receipt.

17. WASTEWATER DISPOSAL

The proposed development will be provided with sanitary sewer service as shown in the drawings. The private sanitary sewer system will flow via gravity to the public sewer along the I-295 corridor, similar to existing conditions. The proposed development will include kitchens and parking garages; grease traps and oil/water separators will be provided as shown in the drawings. A Wastewater Capacity Application has been submitted to Public Works, and a copy of the City's determination of ability to serve will be provided upon receipt.

18. SOLID WASTE

18.1 SOLID WASTE

Adequate provisions for recycling and solid waste disposal have been made. All solid waste materials and recyclables generated by the proposed development will be transported and disposed of or recycled in accordance with applicable laws and regulations. Solid waste will be managed in full accordance with all applicable laws and regulations.

18.2 CONSTRUCTION & DEMOLITION DEBRIS

The proposed development will generate construction waste and demolition debris (CDD). The Contractor will be responsible for properly disposing of the CDD. The Contractor will be responsible for handling, managing, and disposing of all waste generated by construction in accordance with the Maine Solid Waste Management Regulations and all other applicable local, state, and federal regulations.

18.3 SPECIAL & HAZARDOUS WASTE

Environmental assessments of the Site have been conducted and a soil management plan has been developed for the Site. Hazardous building materials of the existing structures will be appropriately managed during the remaining demolition and upcoming renovation activities.

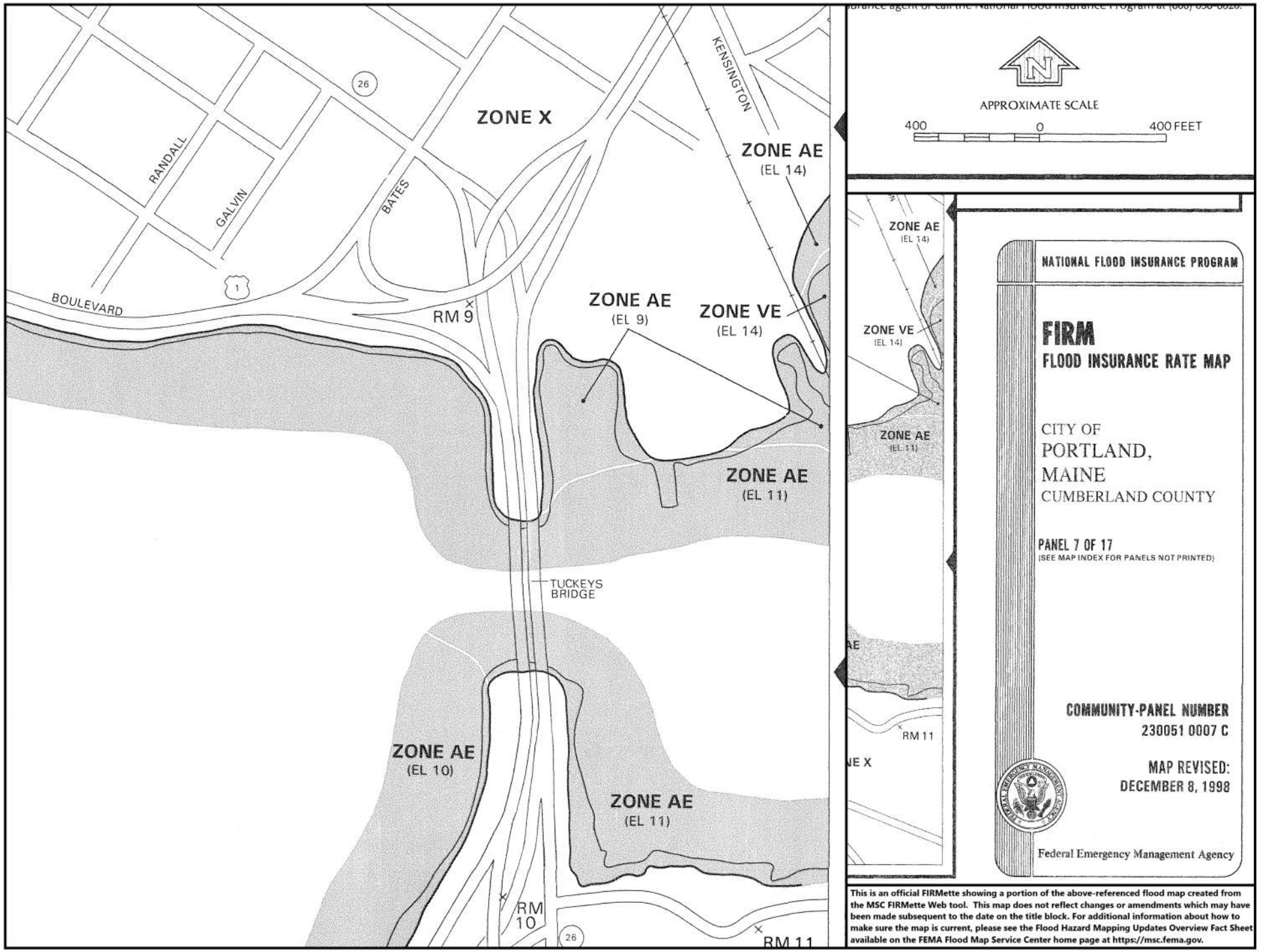
The Learning, Research, and Collaboration Building contains lab spaces which will use controlled, code-compliant quantities of hazardous materials for research purposes. The strategy related to the storage and use of hazardous materials within the building consists of compartmentalization into multiple control areas per the building code and laboratory units per NFPA 45. Chemical quantities throughout will be maintained below Maximum Allowable Quantities allowed for this construction type and use group. Centralized storage and waste rooms are included in the base building design for tenant storage of flammable and combustible liquids as well as other hazardous chemicals (corrosives, toxics, etc.) to facilitate shipping/receiving. The rooms are compliant with the requirements of quantity, separation, mechanical ventilation, explosion control, fire protection and secondary containment. Laboratory areas will be used for educational, research, and development purposes involving the storage and use of hazardous chemicals and are compliant with the following sections: quantity, container size, separation, mechanical ventilation, fire protection, floor openings and egress.

19. FLOODING

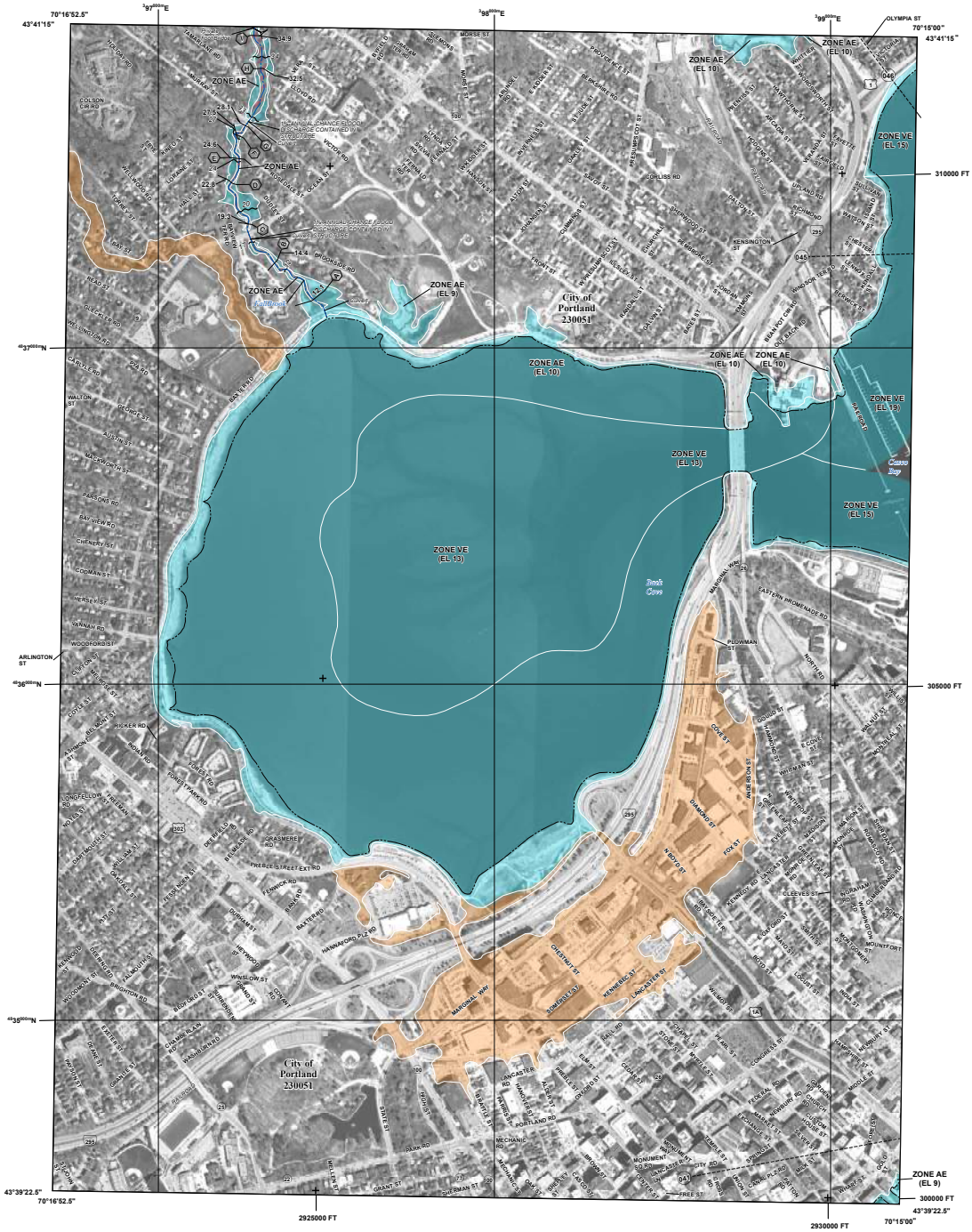
Portions of the Site are delineated as Special Flood Hazard Areas according to FEMA's Flood Insurance Rate Map (FIRM), attached to this Section. An application for a Flood Hazard Development Permit is being submitted to the City of Portland. The proposed development will not cause or increase flooding or cause an unreasonable flood hazard to any adjacent structures. The flood zones are located along the southern portions of the proposed development, as shown on the Design Drawings.

19.1 LIST OF ATTACHMENTS

- FEMA Flood Insurance Rate Map.



This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at https://msc.fema.gov.



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT

HTTP://MSC.FEMA.GOV

SPECIAL FLOOD HAZARD AREAS

OTHER AREAS OF FLOOD HAZARD

OTHER AREAS

GENERAL STRUCTURES

OTHER FEATURES

NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at http://msc.fema.gov. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

To determine if flood insurance is available in this community, contact your Insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Basemap information shown on this FIRM provided in digital format by State of Maine, Maine office of GIS (MeGIS). This information was derived from MeGIS, dated 2012.

The map reflects more detailed and up-to-date stream channel configurations than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and FDTs may reflect stream channel distances that differ from what is shown on the map.

SCALE

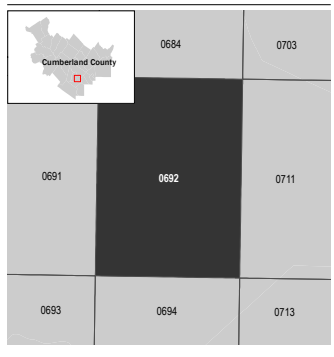
Map Projection:
NAD 1983 UTM Zone 19N;
Western Hemisphere; Vertical Datum: NAVD 88

1 inch = 500 feet 1:6,000

0 500 1,000 2,000 Feet

0 125 250 500 Meters

PANEL LOCATOR



FEMA

National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM

FLOOD INSURANCE RATE MAP

CUMBERLAND COUNTY, MAINE

All Jurisdictions

PANEL 0692 OF 0837

FEMA

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
PORTLAND, CITY OF	230051	0692	F

REVISED PRELIMINARY 4/14/2017

VERSION NUMBER 2.3.2.1

MAP NUMBER 23005C0692F

EFFECTIVE DATE

20. BLASTING

S.W. Cole Engineering, Inc., the geotechnical engineer for the project, has confirmed that based on investigations completed to date, no blasting is anticipated for this project.

21. AIR EMISSIONS

No significant air emissions are anticipated for the project. Permitting for emergency generators will be completed prior to issuance of building permits.

22. ODORS

The proposed development will not involve any processes that emit significant odors; this Section is not applicable.

23. WATER VAPOR

The proposed development will not use water for any processes that would emit water vapor; this Section is not applicable.

24. SUNLIGHT

The proposed development will not block access to sunlight for any structures utilizing solar energy; this Section is not applicable.

25. NOTICES

The City of Portland has Delegated Review Authority for this application; as such, it is our understanding that the public notice requirements associated with MaineDEP Site Law do not apply.

Woodard & Curran

woodardcurran.com

Roux LRC, Bean Building, Site & Future Development Charter

	Commitment	Applicability	Strategies
Code mandated items			
Energy	Design the building to achieve the energy requirements of IECC 2021 (ASHRAE 90.1-2019).	All buildings	Meet code applicable at time of permitting.
Responsible Materials	Specify, at a minimum, PFAS free carpet, rugs, and fabrics to align with the State of Maine's PFAS ban.	All buildings	Utilize PFAS free carpets.
Occupant Experience	Provide mechanical or mixed mode ventilation to all residential units.	All buildings	Provide ERVs or other energy efficient ventilation systems to each regularly occupied space.
	Commitment	**Applicability**	**Strategies**
Energy			
	Eliminate on-site fossil fuels in building HVAC and Food service.	All buildings	All electric mechanical systems utilizing efficient equipment such as ASHPs and energy recovery ventilators.
		All buildings	Eliminate the combustion of fossil fuels on-site except for emergency backup power and non-permanently installed equipment.
		All buildings	All electric domestic hot water.
	Provide infrastructure for future PV installation.	All buildings	Identify location for future PV equipment in building. Provide conduit from roof to central electrical room.
	Design the building to be 30% better than ASHRAE 90.1-2019 and 15% of roof area dedicated for PV.	The LRC	Utilize geothermal HVAC system and on/off site PV to achieve aggressive energy targets for project.
Embodied Carbon			
	Reuse existing historic building.	Bean Building	Efficient engineering to optimize material selection.
	Advocate for Environmental Product Declarations (EPDs) for all concrete used on the project.	All buildings	Design and construction team to work with suppliers and request EPDs are generated. Availability of EPDs will be included in procurement decisions.
	Perform a whole building life cycle analysis (LCA) to study carbon conservation measures.	All Buildings	Quantify the embodied carbon of project by completing an LCA.
	Reduce the embodied carbon of structural materials in the building by 15% from a typical design. Demonstrate a reduction of at least 10% for building embodied carbon.	The LRC	Utilize Mass Timber for a portion of building .
		The LRC	Utilize interior materials with lower than average carbon footprint.
Responsible Materials			
	Source wood products from Maine forests and/or sustainably managed forests or salvaged/reclaimed wood suppliers.	All buildings	Wood products sourced from sustainable managed forests will be prioritized. Wood sourcing considerations will be included in procurement decisions.
		All buildings	Utilize Maine products to the maximum extent possible. Wood sourcing considerations will be included in procurement decisions.
	Advocate for the removal of PFAS chemicals in other targeted product categories.	Bean Building	Team to identify targeted categories. PFAS content will be included in procurement decisions.
	In coordination with the contractor, identify key materials to procure from the state of Maine.	All buildings	Team to identify targeted categories. Sourcing availability content will be included in procurement decisions.
	Divert at least 50% of no-hazardous construction and demolition waste from the landfill.	All buildings	Source separate construction and demolition waste.
		All buildings	Include requirements in contract with waste hauler.
		Site areas	Identify opportunities for reuse/salvage of existing materials.
	Target Red List free finishes in targeted spaces.	The LRC	Classrooms and offices will target red list free flooring, ceilings, and furniture.
	Use best practices for bird friendly design.	The LRC	Include bird safe glass and design measures to reduce bird strike hazards.

Water			
	Reduce indoor water use from 25% from a code baseline building.	All buildings	Select high efficiency, low flow plumbing fixtures for all spaces with lower then code flow rates.
		Public spaces	Maximize the use of urinals while providing gender inclusive restrooms.
	Maximize the use of native and drought tolerant landscape plants.	Associated Site areas	Landscaping to be primarily drought tolerant native woody, perennial, or meadow mix plants requiring minimal irrigation after establishment and during severe/extended drought events.
	Stormwater Management in accordance with Maine Department of Environmental Protection Best Management Practices Manual and City of Portland Technical Manual.	Site Areas	Incorporate Low Impact Development Design Strategies and Stormwater Quality Treatment Systems.
	Prohibit the use of all synthetic pesticides and fertilizers for the operation and maintenance of landscape and agriculture through Integrated pest management (IPM)conducted as part of an overall Plant Health Care Program for the Roux site.	Site Areas	Consideration will be given, during the initial site design, to plants that require fewer chemical inputs for both establishment and long-term maintenance needs. This includes anticipated needs that will likely arise as the landscape itself evolves and matures.
Occupant Experience & Equity			
	Optimize natural daylight and mitigate glare.	All buildings	Provide shades or curtains at all regularly occupied spaces which face east, west, or south.
	Incorporate biophilic design principles.	All buildings	Use of natural materials.
		The LRC & Bean Buildings	Create cultural and ecological connections to place - art and signage.
	Use the building to educate building and site users.	The LRC & Bean Buildings	Incorporate signage that tells about sustainability features of building.
	Provide amenities to support public access.	All buildings	Provide drinking fountains and/or bottle fillers.
		All buildings	Provide publicly accessible restrooms adjacent to public spaces.
		Site Areas	Provide bike/pedestrian paths.
		Site Areas	Provide benches.
		Site Areas	Provide site wayfinding.
	Provide Gender inclusive restrooms.	All buildings	Provide gender inclusive restrooms in public areas.
	Provide lactation rooms.	The LRC & Bean Buildings	Provide a designated lactation room with a locking door, sink, changing table, comfortable seating, lighting control and electrical outlets.
Transportation			
	Conduct study of EV charging needs. Provide required EV capacity to meet anticipated demand.	Campus	Work with city to determine appropriate approach to EV charging strategy and identify percentage of day one EV charging stations and future infrastructure requirements.
		Site Areas	Provide EV charging to meet demand identified in coordination with PV requirements approved by city.
		Site Areas	Annually evaluate the EV charging capacity needs by the campus.
	Integrate quality/ secure bicycle storage into the site design and provide shower facilities.	Residential buildings	Provide at least one bike storage space per four units.
		The LRC & Bean Buildings	Provide secure bicycle storage.
		Bean Building	Provide shower facilities for bike commuters.
		Site Areas	Provide Portland Bike Share stations.
		Site Areas	Provide quality and dispersed bike parking for site users near each building.
	In collaboration with the surrounding community, work to improve multi-modal transportation to the Roux Site.	Community	Maximize non single occupancy vehicle transportation to the site, by charging for parking, working with Metro and/or shuttle services to efficiently connect the site to key city locations, encourage bike and pedestrian access, and enabling water taxi service.

Resilience			
	Incorporate near-term future-projected climate change data (2050s) in design of mechanical, electrical, and plumbing systems and/or components on a regular replacement cycle. Incorporate long-term future-projected climate change data (2100+) in the design of the building and infrastructure, including flood resistant materials below the 2100 sea level rise design flood elevation and elevate critical infrastructure above this elevation.	All New buildings	All critical building infrastructure shall be located above the design flood elevation (DFE) of 22.5ft NAVD88.
		All buildings	Review the extreme heat projections with MEP consultant for consideration of future cooling degree days. Allow additional cooling and heating capacity. Utilize weather shift model anticipating conditions in year 2050 for calculations.
	Prepare emergency action plan and provide appropriate level of backup power to support life safety. Incorporate campus-wide emergency preparedness planning to enhance overall resilience of the campus/site community.	The LRC & Bean Buildings	Provide emergency generator with capacity to support essential operations such as research requirements in addition to life safety for 48 hours.
		Student Housing	Developer to provide emergency generator with capacity to support operations including food service and life safety for 48 hours.
		All buildings	Provide campus wide emergency preparedness plan and coordinate with local jurisdictions.
		All other	Provide emergency generator.

7. PUBLIC INFRASTRUCTURE AND SAFETY STANDARDS (14.6.3)

Compliance with the City of Portland's Land Use Code Section 14.6.3 Public Infrastructure and Safety Standards is described in the following sections.

7.1 Public Safety and Fire Prevention

Provisions for public safety have been incorporated into the design of site visibility, access, and security. Adequate emergency vehicle access is provided via Sherwood Street and internal driveways. The consulting team has met with Portland Fire Department and Police Department during development of the design drawings and will continue to coordinate site design in consideration of public safety and emergency access.

7.1.1 Portland Fire Department Site Review Checklist

The items in the Portland Fire Department Site Review Checklist are addressed as follows:

- Name, address, and telephone number of applicant:
  - Northeastern University, c/o Catherine Walsh
    - 360 Huntington Ave 216-201, Boston, MA 02115
    - (617) 594-6092
- Name, address, telephone number of agent:
  - IDEALS, c/o Sam Reiche
    - 100 Commercial Street, Suite 400, Portland, ME 04101
    - (207) 939-6308
- Name, address, telephone number of architect:
  - The Learning, Research & Collaboration Building
    - Cambridge Seven Associates, c/o Patti Intrieri
    - 1050 Massachusetts Avenue, Cambridge, MA 02138
    - (617) 797-2603
  - The Bean Building
    - Bruner/Cott & Associates, c/o Greg Russell
    - 225 Friend St, Suite 701, Boston, MA 02114
    - (781) 354-2411
- Proposed uses of any structures [NFPA and IBC classification]:

  The proposed uses for Phase 1 are consistent with the IOZ regulatory framework, and include development of a Post Secondary School, with associated laboratory, research, office space, and café'; restoration of the historic Bean Building to allow for creation of business incubator space; parking structure and childcare facility. All buildings will be designed in accordance with the following codes:

- Upcoming Maine Uniform Building and Energy Code (MUBEC) Section 4 which is an amended version of the 2021 International Building Code (IBC).
- City of Portland Building Code, as adopted by City of Portland Code of Ordinances Chapter 6, Article II.
- Life Safety: 2018 Edition of NFPA 101, Life Safety Code (LSC) as adopted and amended by the Rules of the State Fire Marshal and City of Portland Code of Ordinances Chapter 10 Article I.
- Fire: 2018 Edition of NFPA 1, Fire Code as adopted by the Rules of the State Fire Marshal and the City of Portland Code of Ordinances Chapter 10 Article II.
- Electrical: 2020 NFPA 70, National Electric Code.
- Elevator: Maine Elevator & Tramway Rules & Laws, an amended version of the ASME A.17.1, Safety Code Fore Elevators and Escalators.
- Energy Code: 2021 International Energy Conservation Code (IECC), including City of Portland Stretch Energy Code requirements.
- Mechanical: 2021 International Mechanical Code (IMC).
- Plumbing: Maine State Plumbing Code (MSPC) based on 2021 Uniform Plumbing Code/
- Accessibility Regulations: 2017 ICC A117.1, Accessible and Usable Buildings and Facilities and the 2010 ADA Standards for Accessible Design.
- Other Various National Fire Protection Association (NFPA) codes and standards as referenced by the codes listed above.

  Life Safety Plans and IBC Classification details will be provided prior to submission of a building permit.

- Learning, Research, and Collaboration Building has the following occupancies:
  - Group B/Business
  - Group A-2/Assembly
  - Group A-3/Assembly
  - Group S-1/Storage

- Bean Building has the following occupancies:
  - Group B/Business
  - Group A-3/Assembly
  - Group S-1/Storage

- Parking Garage has the following occupancies.
  - Group S-2/Storage

- Childcare has the following occupancies:
  - Group E/Daycare or Group I-4/Daycare

- Square footage of all structures [total and per story]:

- The square footage of all structures is provided on the architectural plans.

- Elevations of all structures:
  - The elevations of all structures are provided on the architectural plans.
- Proposed fire protection of all structures:
  - All structures shall be sprinkled.
- Hydrant locations:
  - Hydrant locations are shown on the Utility Plan.
- Water main size and location:
  - Watermain locations and sizes are shown on the Utility Plan.
- Access to all structures:
  - Emergency access to structures and waterfront are reflected in Section 5, **Figure 5-2**.
- A code summary shall be included referencing NFPA 1 and all fire department technical standards:
  - The buildings will be compliant with requirements of NFPA 101: Uniform Fire Code. Automatic sprinkler systems and fire alarms will be provided as required by Use and Occupancy types.

7.2 Availability and Adequate Capacity of Public Utilities

The proposed development will be serviced by public water, sewer, and electric utilities. B&M's facilities required utility infrastructure sized appropriately for industrial use. Fortunately, this sizing translates well to redevelopment of the Site by Northeastern University. Locations of proposed utility services are shown on the Utility Plan included in the Design Drawings.

7.2.1 Water

Domestic and fire protection services are provided by Portland Water District's (PWD) infrastructure at Sherwood Street. The public water mains nearest to the Site are 8-inch and 12-inch, consisting of ductile iron and cast iron. The Site is and will continue to be serviced by a combined domestic / fire protection loop.

The proposed development will be provided with both fire protection water service and domestic water service as shown on the drawings via a private water system that will connect to the public water main on Sherwood Street. Woodard & Curran is working directly with the Portland Water District to determine the appropriate design for this work. The ability to serve documentation for Phase 1 will be provided upon receipt.

7.2.2 Sewer

Wastewater will continue to discharge to a gravity public sewer along the I-295 corridor. Downstream of the service connection, public sewer transitions from 15-inch to 48-inch reinforced concrete gravity line conveying combined storm and sanitary sewer from the East Deering neighborhood west of I-295. The 48-

inch combined sewer transitions to a 3-barrel (two 18-inch and one 30-inch) siphon along Tukey's bridge and discharges through a pumping station prior to treatment at the East End Wastewater Treatment Facility.

Wastewater is conveyed across a portion of the Site near Sherwood Street and I-295 from properties to the northeast (Lennox, Berwick, and Kensington Streets) via an easement benefiting PWD. This easement will remain in place unless otherwise approved by PWD.

The proposed development will be provided with sanitary sewer service as shown in the drawings. The private sanitary sewer system will flow via gravity to the public sewer along the I-295 corridor, similar to existing conditions. The proposed development will include kitchens and parking garages; grease traps and oil/water separators will be provided as shown in the drawings. A Wastewater Capacity Application has been submitted to Public Works, and a copy of the City's determination of ability to serve will be provided upon receipt.

7.2.3 Gas

No natural gas use is proposed for the campus. Unitil currently provides natural gas service to the Site via a 6-inch diameter service. The existing gas service will be selectively demolished and decommissioned consistent with Unitil's standards.

7.2.4 Electric and Telecommunications

Central Maine Power provides electric power via an overhead 12.47kV 3-phase distribution system to the Site. The facility has two main secondary metered services. Fiber-optic internet is located along Veranda Street and Sherwood Street. The proposed development will utilize underground electric and telecommunication services. Proposed electrical and telecommunications infrastructure is shown on the Utility Plan. Energy-saving technologies will be incorporated into building and campus design to reduce electricity consumption and advance sustainability goals. The design of the electric service is being coordinated with Central Maine Power (CMP). Final electric layouts will be provided to CMP for their review and an ability to serve determination will be provided upon receipt.

7.2.5 Solid Waste

Adequate provisions for recycling and solid waste disposal have been made. All solid waste materials and recyclables generated by the proposed development will be transported and disposed of or recycled in accordance with applicable laws and regulations. Solid waste will be managed in full accordance with all applicable laws and regulations.

7.2.6 Construction & Demolition Debris

The proposed development will generate construction waste and demolition debris (CDD). The Contractor will be responsible for properly disposing of the CDD. The Contractor will be responsible for handling, managing, and disposing of all waste generated by construction in accordance with the Maine Solid Waste Management Regulations and all other applicable local, state, and federal regulations.

7.2.7 Special & Hazardous Waste

Environmental assessments of the Site have been conducted and a soil management plan has been developed for the Site. Hazardous building materials of the existing structures will be appropriately managed during the remaining demolition and upcoming renovation activities.

The Learning, Research, and Collaboration Building contains lab spaces which will use controlled, code-compliant quantities of hazardous materials for research purposes. The strategy related to the storage and use of hazardous materials within the building consists of compartmentalization into multiple control areas per the building code and laboratory units per NFPA 45. Chemical quantities throughout will be maintained below Maximum Allowable Quantities allowed for this construction type and use group. Centralized storage and waste rooms are included in the base building design for tenant storage of flammable and combustible liquids as well as other hazardous chemicals (corrosives, toxics, etc.) to facilitate shipping/receiving. The rooms are compliant with the requirements of quantity, separation, mechanical ventilation, explosion control, fire protection and secondary containment. Laboratory areas will be used for educational, research, and development purposes involving the storage and use of hazardous chemicals and are compliant with the following sections: quantity, container size, separation, mechanical ventilation, fire protection, floor openings and egress.

7.3 Section Attachments

- PWD Ability to Serve Request Letter
- Wastewater Capacity Application

12 Mountfort Street
Portland, Maine 04101
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

November 2023

MEANS Group
Portland Water District
225 Douglass Street
Portland, ME 04104

Re: The Roux Institute at Northeastern University Ph. 1 - Request for Evidence of Ability to Serve

To Whom It May Concern:

On behalf of Northeastern University and their agent, the Initiative for Digital Engineering and Life Sciences (IDEALS), Woodard & Curran is submitting this request for initial confirmation of ability to serve for use in permitting for Phase 1 of development at 1 Bean Pot Circle in Portland, Maine. The proposed work includes the construction of the Learning, Research, and Collaboration Building, renovation of the Bean Building, construction of a parking garage, development of a childcare facility, replacement of the pier, development of a coastal path, and other site improvements. Woodard & Curran will continue to work with Portland Water District for final approval.

Upon completion, this phase of the proposed site development is anticipated to require 36,700 gallons of water per day. This estimate is based on the preliminary design of the buildings. The table below summarizes B&M historic water demand and demand estimates for future phasing.

Utility*	B&M Historic Demand Reference	Phase 1 (0-5yrs)	Phase 2 (0-5yrs)	Phase 3 (10-20yrs)	Phase 4 (20+ yrs)
Water (gpd)	153,000	36,700	86,700	127,400	190,800

**Based upon preliminary load demand calculations provided by ARUP dated July 19, 2023*

The attached utility plan shows the proposed water utility locations. The existing water main in Sherwood Street is 12" and is fed from both the north and west. The campus will be served by a private water main, connected at the easternmost existing 12"x12" service tee. The private water service will extend to the Learning, Research, and Collaboration Building, Bean Building, childcare facility, pier, and parking garage for Phase 1. Future phases may extend off this service or be fed directly from Sherwood Street. A meter pit will be provided on-site near the Sherwood Street property boundary, with a Reduced Pressure Zone (RPZ) valve assembly located in nearby landscape after the meter pit. The RPZ will require an enclosure (such as a 40" wide x 144" deep x 90" tall Safe-T-Cover). The meter and RPZ can also be in an above ground structure/building.

We are submitting a Major Site Plan Application to the City of Portland Planning Department for approval and will appreciate documentation regarding the City's ability to provide water service for the proposed development. Please let us know if any additional information is required to evaluate the service capacity for the site or if you have any questions on our proposed layout. We appreciate your assistance. Please do not hesitate to contact me at 207-558-3841 or alebel@woodardcurran.com.

Sincerely,

WOODARD & CURRAN

Amy LeBel, P.E.
Project Engineer

Enclosure: Utility Plan

12 Mountfort Street
Portland, Maine 04101
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

November 2023

ATTN: Bradley Roland, P.E.
Department of Public Works
212 Canco Road
Portland, ME 04103

Re: The Roux Institute at Northeastern University Ph. 1 – Request for Evidence of Ability to Serve

Dear Mr. Roland:

On behalf of Northeastern University and their agent, the Initiative for Digital Engineering and Life Sciences (IDEALS), Woodard & Curran is submitting this request for initial confirmation of ability to serve for use in permitting for Phase 1 of development at 1 Bean Pot Circle in Portland, Maine. The proposed work includes the construction of the Learning, Research, and Collaboration Building, renovation of the Bean Building, construction of a parking garage, development of a childcare facility, replacement of the pier, development of a coastal path, and other site improvements. Woodard & Curran will continue to work with the Department of Public Works for final approval.

Upon completion, the proposed Phase 1 is anticipated to discharge 33,400 gallons of wastewater per day. This estimate is based on the preliminary design of the buildings. We do not anticipate changes that would result in significant increases but will notify the City if design development results in any major changes. The table below summarizes B&M historic wastewater demand and demand estimates for future phasing.

Utility*	B&M Historic Demand Reference	Phase 1 (0-5yrs)	Phase 2 (0-5yrs)	Phase 3 (10-20yrs)	Phase 4 (20+ yrs)
Wastewater (gpd)	90,000	33,400	78,800	115,800	173,400

**Based upon preliminary load demand calculations provided by ARUP dated July 19, 2023.*

Please refer to the enclosed Utility Plan for the location and size of proposed utility service connections. All connections proposed as part of this project will connect to the City's sewer via private site services similar to existing conditions. A grease trap is proposed external to the Learning, Research, and Collaboration Building to manage flow from the anticipated kitchen space. Oil/water separators are proposed for internal components of the parking garage as well as the loading dock area of the Learning, Research, and Collaboration Building. All wastewater will exit the site via a gravity sewer connection previously installed along the I-295 corridor.

We are submitting a Major Site Plan Application to the City of Portland Planning Department for approval and will appreciate documentation regarding the City's ability to collect wastewater from the proposed development. Please let us know if any additional information is required to evaluate the service capacity for the site. We appreciate your assistance. If you have any questions or require any additional information, please do not hesitate to contact me at 207-558-3841 or alebel@woodardcurran.com.

Sincerely,

WOODARD & CURRAN



Amy LeBel, P.E.
Project Engineer

Enclosures: Utility Plan
Wastewater Application
Demand Calculations
Locus Plan

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Portland Dept. of Public Works -
Water Resources
55 Portland Street,
Portland, Maine 04101-2991

Bradley Roland, P.E.
Water Resources Division
Department of Public Works
55 Portland Street
Portland, ME 04103

Date: **November 2023**

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: **1 Bean Pot Circle**

Chart Block Lot Number: **447 A001 & A002**

Proposed Use: **Mixed Use Development**
Previous Use: **Industrial**
Existing Sanitary Flows: **0** GPD
Existing Process Flows: **0** GPD
Description and location of City sewer that is to receive the proposed building sewer lateral.

Proposed on-site sewer main

Site Category		
	Commercial *(see part 4 below)*	X
	Industrial *(complete part 5 below)*	
	Governmental	
	Residential	X
	Other *(specify)*	X

Clearly, indicate the proposed connections, on the submitted plans.

2. Please, Submit Contact Information.

City Planner's Name: **TBD** Phone: _____
Owner/Developer Name: **Initiative for Digital Engineering and Life Sciences, c/o Sam Reiche**
Owner/Developer Address: **100 Commercial Street, Suite 400, Portland, ME 04101**
Phone: **(207) 939-6308** Fax: **N/A** E-mail: **sam.reiche@ideals.org**
Engineering Consultant Name: **Woodard & Curran**
Engineering Consultant Address: **12 Mountfort Street, Portland, ME 04101**
Phone: **(207) 558-3841** Fax: **N/A** E-mail: **alebel@woodardcurran.com**

Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review.

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: **33,400 GPD**
Peaking Factor/ Peak Times: _____
Specify the source of design guidelines: *(i.e.* _ *"Handbook of Subsurface Wastewater Disposal in Maine,"*
"Plumbers and Pipe Fitters Calculation Manual," _ *Portland Water District Records,* _ *Other (specify)*
ASPE Plumbing Engineering Design Handbook, Volume 2, Table 8-7: Typical Wastewater flows from Commercial Sources Waste Water
State of Maine 10-144 CMR 241 Table 4C: Design Flows for Other Facilities

Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet.

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values:
Size of External Grease Interceptor:
Retention Time:
Peaking Factor/ Peak Times:

Complete grease trap needs are TBD and are anticipated to be located within building restaurant spaces. As final design layout progresses, more information can be provided.

Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet.

5. Please, Submit Industrial Process Wastewater Flow Calculations **N/A**

Estimated Industrial Process Wastewater Flows Generated: _____ GPD
Do you currently hold Federal or State discharge permits? Yes ____ No ____
Is the process wastewater termed categorical under CFR 40? Yes ____ No ____
OSHA Standard Industrial Code (SIC): *(http://www.osha.gov/oshstats/sicser.html)*
Peaking Factor/Peak Process Times: _____

Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps.

Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided, or attached, as a separate sheet.

8. SITE DESIGN STANDARDS (14.6.4)

Compliance with the City of Portland's Land Use Code Section 14.6.4 Site Design Standards is described in the following sections.

8.1 Massing, ventilation, and wind impact

The allowable building heights on the campus are informed by the historic location and prominence of the Bean Building, the desire to create substantial public open space while meeting all programmatic goals for the Roux Institute at Northeastern University, resilient building design, and potential shadow and other impacts to neighboring properties. As discussed in Section 3.3, the proposed buildings meet the massing and height requirements specified in the IOZ Regulatory Framework.

8.2 Shadows

As described in Section 3.3, heights and massing of buildings have been designed to minimize shadow impacts to neighbors and avoid negative impacts to existing public open spaces. Shadow study drawings have been provided for reference.

8.3 Snow and ice loading

Buildings have been designed to prevent snow and ice from accumulating and falling onto abutting properties and publicly accessible areas and pathways.

8.4 View corridors

The project is not located in the limits of the *Downtown Vision View Corridor Protection Plan*; therefore, this standard does not apply.

8.5 Historic Resources

A more extensive description of Site history and the preservation of the Bean Building may be found in the Landmark Designation Report for the Burnham & Morrill Company Cannery by Heritage Consulting and Essex Preservation Consulting, dated June 2022.

Due to the designation of the Bean Building as a Historic Landmark, exterior renovation of the building requires review by the Historic Preservation Board. We will work with the Planning Department on the required historic preservation review concurrent with the Site Plan process. Bruner/Cott Architects, a historic preservation architecture firm, is leading the design of the Bean Building restoration in coordination with the Historic Preservation Board. Narratives regarding the restoration and rehabilitation of this historic resource are attached to this Section.

8.6 Exterior Lighting

Proposed exterior lighting is shown on the drawings. A lighting schedule, cut sheets, and photometric plan are provided as referenced in Section 3.

8.7 Noise and Vibration

Refer to Section 3.3.7

8.8 Signage and Wayfinding

Sign permit applications will be submitted under separate cover. The size, scale, proportions, design, materials, placement, quantity and source and intensity of illumination shall be designed to complement and enhance the architectural attributes of the proposed buildings. The primary vehicular and pedestrian entrance is from Sherwood Street. Consideration has been put into wayfinding to facilitate bike, pedestrian, and mass transit.

The campus signage creates a strong sense of arrival and welcome while reinforcing the identity of the Roux Institute at Northeastern University, in the context of the campus landscape, and to provide clear and concise vehicular wayfinding to the buildings' drop-off areas and service entrances, parking, and the childcare center, with flexibility for additional/modified messaging for future development. The sign program also provides for pedestrian orientation and wayfinding at key locations and decision points, along with directional signs to manage bike and walking circulation along paths and trails.

The design intent is for the sign structures to reflect and reinforce the campus's sense of place and identity through their forms, materials, colors, and finishes, utilizing aluminum construction with durable painted and natural finishes, installed with reinforced concrete footings. Granite is utilized as a base element in the gateway, and internal and external illumination is provided as needed for key wayfinding elements such as the vehicular directional sign, gateway, parking wayfinding, and pedestrian orientation kiosks. In this way, the materials of the signs are consistent with the site and building materials.

8.9 Heat and Glare

Refer to Section 3.3.3

8.10 Section Attachments

- Historic Preservation of the Bean Building

Roux Institute Bean Building Restoration and Rehabilitation
Bruner/Cott Architects
11/13/2023

Project Site

The “Bean Building” occupies the site of the former Burnham & Morrill Baked Bean production factory and cannery at 1 Beanpot Circle, Portland Maine. The cannery is located on a peninsula bounded to the west and north by I-295 and to the east and south by the waters of the Casco Bay. The site abuts the Berlin Subdivision of the Grand Trunk Railroad, now owned by the State of Maine, to the northeast. The site originally incorporated a railroad spur that allowed the cannery to receive dried beans from Canada.

The existing Project Site includes the concrete and brick masonry cannery (the “Bean Building”), an asphalt parking lot, and a pier in Casco Bay supporting the “Codfish Building.” The Bean Building has four stories containing approximately 51,000 square feet of occupiable space. The west elevation that faces I-295 is especially visible from the highway bridge and B&M company signage and Christmas lighting have made it an informal landmark to people leaving and entering Portland from the north.

Architecture and Historic Designation

The main building of the B&M Baked Bean factory complex, designed by Burnham & Higgins in 1913, is an early example of the “daylight factory” building typology. Daylight factories were a particular architectural style in the early twentieth century consisting of a concrete structural framework and large windows that allowed for air and natural light above brick spandrel panels. This style of building suited the operation of production lines better than previous mill construction, because its reinforced concrete frame allowed for large interior spaces, could carry extreme live loads, and freed the perimeter walls to be filled with glass to allow natural light to penetrate deep into the production spaces. The internal concrete structure consisted of an innovative four-way reinforcement system, with rebar placed orthogonally to the typical column grid as well as at two diagonal directions rotated at 45 degrees from the grid.

The rectangular Bean Building is characterized by its concrete frame exposed on the exterior. The façade is composed of large windows and brick spandrel panels and substantial concrete sills within the structural framework. The base and cornice are decorated with minor projections of cut brick patterns on concrete surfaces. A 2-story portion of the building at the north façade, which originally held offices for the production facility, is topped by a large skylight. In addition to its 2-story/4-story volume, the building is notable for its horizontal concrete banding at each floor level, with the beams expressed as they run continuously around the building’s perimeter. At the cornice, there is brick parapet infill above the roof and decorative brick detailing at the tops of the concrete columns. Dimensionally, the column bay spacing in the building is typically 18’-0”, but there are three bays at either end of the 4-story volume with 12’-0” spacing on the exterior even though the interior column spacing remains at 18’-0.”

The Bean Building has received certification for historic preservation by the city of Portland, Maine.

Work to date with Historic Planning Board

Bruner/Cott Architects and IDEALS met on site with Evan Schueckler and Robert Wiener from the City of Portland on September 7 to initiate and establish an on-going working relationship with the City of Portland. The purpose of the meeting was to introduce the Roux campus project to the City of Portland Historic Preservation Staff via a site walk around all sides of the Bean Building and a subsequent PowerPoint presentation and discussion of design strategies for the Bean Building.

Historic Preservation staff agreed with BCA's overall approach of replicating the historic window sizes and muntin patterns where the current window, sill, and brick infill pattern exist. They also agreed with BCA's overall approach of locating decidedly new interventions where there is no longer built fabric. BCA and IDEALS will review comments from City of Portland staff and present updated designs at a future workshop with the board.

Planned Project

The former industrial site will be repurposed as a high-tech hub for learning, research, and collaboration as part of the Roux Institute of Northeastern University. The "Bean Building" of the original B&M site will be saved and renovated into an innovation space for the development of new businesses and technologies. A new 230,000 sf academic building, designed by Cambridge Seven Associates, will be situated at the northeast corner of the site. Its west façade will face the Bean Building across a tree-lined pedestrian promenade and shared plaza. The existing pier and Codfish Building will be demolished and replaced by a new pier, raised above the historic flood level, on the existing footprint.

Proposed Exterior Scope of Work

The exterior rehabilitation of the Bean Building is planned to include the following scope:

- Replace existing roofing
- Install new rooftop mechanical units and screen enclosure
- Repair existing exterior brick
- Repair and repaint existing exterior concrete frame
- Replace all windows and doors with new energy-efficient windows and doors with profiles to closely match the original 1913 design.
- Install new floor-to-header glazing in areas of the framework where the original construction has been lost
- Install new doors and glazing at the plaza on the south façade facing the new pier
- Remove the concrete steps at the west façade doorway to correspond to new site circulation
- Existing west façade entry door to be replaced with profiles to match existing
- New entry doors installed on east façade and north facade

Later industrial additions to the Bean Building have been demolished. The original concrete and brick exterior will be restored where it remains intact. Areas of reconstruction and construction of a new design will take place in damaged areas depending upon the significance of their placement and the extent of past alteration. Their design will help tell the story of the building's unique history.

Roof

The existing roof will be recovered with new weather-resistant roofing. A rooftop mechanical screen will be installed at the 4-story portion of the building to house the new mechanical units. The existing seasonal tree lighting display will be rebuilt with a permanent installation. The 2-story building roof has a later addition wooden structure above the original structural slab. This will be demolished back to the original concrete structure. New roofing will be installed, and the existing skylight will be restored or rebuilt to match its historic design that incorporated vertical windows.

Exterior Walls

The existing exterior concrete and brickwork has been surveyed and is found to be significantly damaged, especially on the east façade. The west façade facing Tukey's Bridge is largely intact, with the north and south facades in varying condition. Restoration work will focus on the north, east, and south facades; the east façade will receive the most consideration for rebuilding severely damaged areas to receive glazing assemblies that do not replicate the original, lost fenestration. Generally, where the original sills and spandrels survive, they will be repaired.

Windows and Doors

All existing windows and doors will be replaced by new energy efficient glazing in compliance with Portland's new energy code (IEEC 2021). Where appropriately preserved openings exist, the existing windows will be replaced with new windows to match the historic pane sizes and profiles of mullions and sash elements. Where openings have been inappropriately modified or damaged over time, new floor to header modern glazing may be installed.

West façade entry

The existing west façade entry will be repaired or replaced and deemphasized as a primary entryway.

New East façade entry

A new entry will be constructed on the east façade facing the proposed Academic Building.

South façade Pier Plaza

New doors and glazing will be installed at the lower level of the south façade to face the proposed public plaza and the new pier.

Pier & Interpretive Work

The existing Codfish Building and pier have been surveyed and found to be in unsalvageable condition as determined by the PHPB and City Council when the Bean Building received its landmark designation. They are to be demolished and replaced by a new raised pier on the footprint of the original. IDEALS, Northeastern, and the design team will work with PHPB to develop an interpretive approach for historic content connected to the new pier.

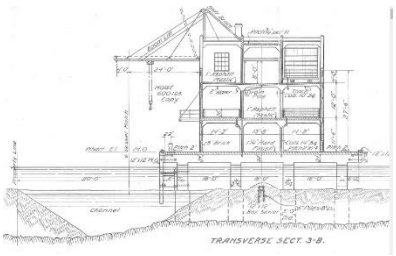
The overarching theme of the Burnham & Morrill complex interpretive installations will be the innovative development of factory-based food preservation, packaging, and mass distribution that originated in Portland and brought about an advanced architecture, called the Daylight Factory in 1913 for the main cannery building and the smaller building for handling seafood on the associated pier. The interpretive elements will include salvaged artifacts to highlight the connection between freight rail and sea-going vessels at the site in the landscape, and an explanation of what historically occupied the area of the new pier. These will occupy several different locations in the vicinity of the Bean Building, the plaza at the south end of the building, and on the pier itself.

The following elements relate specifically to interpretation of the original Codfish Pier:

- An orientation marker showing the appearance of the original pier and its building can terminate the promenade when it reaches the pier.
- Visitors to the new pier will see light posts placed to indicate the location of the original Codfish building.
- Artifacts associated with the pier's connection to sea-going vessels mark the transition from land to water.
- Metal strips enumerating the codfish operation follow column lines of the original structure.

As design develops further, PHPB will be able to see detailed proposals for integrating historic artifacts and explanatory materials into specific locations.









Historic photo circa 1920s



Historic photo circa 1940s



Existing conditions- west façade



Existing conditions- south façade



Existing conditions- east façade



Existing conditions- north façade



Existing conditions- north facade



Existing pier and Codfish Building

9. COMPREHENSIVE PLAN

The proposed development is consistent with the City's Comprehensive Plan and the goals of the Institutional Overlay Zone unanimously approved by the Portland City Council in February 2023. The proposed campus includes adaptive re-use of the B&M Bean Building, facilitates public interaction with the waterfront, creates a new walkable core of diverse settings, and bolsters economic opportunity in East Deering, the City of Portland, and beyond.

9.1 Consistency with Portland's Plan 2030

Portland's Plan 2030 focuses primarily on eight aspects of Portland's identity and performance: environment, waterfront, transportation, housing, recreation and open spaces, facilities, historic resources, and economy (see **Figure 9-1**). This first phase of the campus development advances several goals outlined in *Portland's Plan 2030*, as summarized by the following excerpts from the plan.

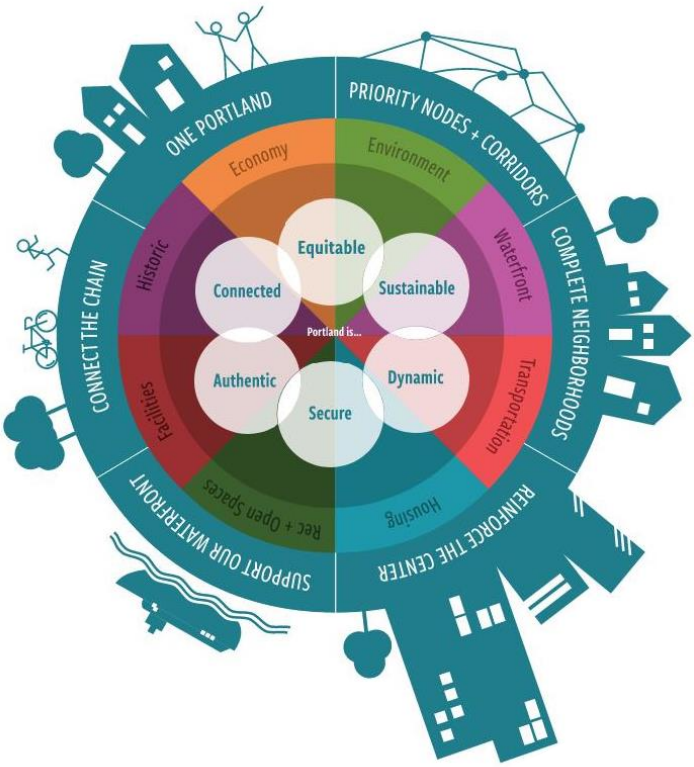


Figure 9-1: Structure of *Portland's Plan 2030*

Environment

"Adopt sustainable land use and transportation policies that support connectivity, walkable neighborhoods, and multi-modal transportation."

"Plan for the mitigation and redevelopment of brownfields to support productive uses and a healthier environment for residents."

Transportation

"Promote multi-modal accessibility, enabling residents and visitors of all ages and abilities to participate fully in the social and economic life of the community."

Recreation & Open Space

"Encourage physical and visual access to Portland's waterfront – Casco Bay, Back Cove, and the Stroudwater, Presumpscot, and Fore Rivers – as a "blueway" network and an extension of public space for local and regional recreation and transportation needs."

Historic Resources

"Stabilize and enhance historic areas of the city by ensuring quality investment in existing structures and compatible infill development."

"Ensure an appropriate balance of continuity and change as Portland grows and evolves."

Economy

"Support job creation and business growth through public initiatives and private, institutional, and regional partnerships."

"Develop programs that support industries with high-growth / high-value potential such as life sciences, food production, information technology, and marine-related industries."

"Modify ordinances and make strategic investments to better promote business development and job creation in priority areas."

"Ensure that the growth of Portland's educational, medical, and cultural institutions is integrated into Portland's urban fabric through the use of high-quality design, management of impacts, community partnerships, and innovative planning."

9.2 Consistency with One Climate Future

In 2020, the Cities of Portland and South Portland both adopted a collaborative sustainability and resilience plan: One Climate Future. The plan addresses many challenges, priorities, and strategies for responsible climate stewardship and mitigation of climate-related public health threats. It includes great specificity and is summarized by six general action items. The following are One Climate Future's "six big moves" and discussion of their relevance to Northeastern University's Portland Campus.

1. Build better buildings.

A new campus of higher education, research, and development deserves thoughtful design; it represents an opportunity to implement best practices for energy efficiency, healthy communities, human comfort, and interaction with the surrounding environment. As described in Section 3.3.7 the new buildings on campus will be created with sustainability and resilience top-of-mind. A sustainability charter has been

developed to guide this first phase of work and future campus development. A copy of the sustainability charter is uploaded under separate cover to the Documents folder.

2. Connect people to places, to opportunity.

Northeastern University provides opportunity through graduate education, research, and collaboration. The campus also provides new public open space and connections to the waterfront. As described in Section 5, Northeastern University supports public transportation networks so that the campus is accessible to all.

3. Power everything* with clean renewable electricity.

Electrification allows for appliances, buildings, and systems to support the shift to renewable energy in our power grid, without cementing a need for fossil fuels moving forward. Northeastern University's commitment to sustainability is further described in the charter uploaded under separate cover to the Documents folder.

4. Grow a circular economy.

Fostering technology knowledge and life-science research in Portland will diversify its economy and help prepare for the future. Northeastern University will strengthen the region through education, research, and collaboration with corporate and community partners; fueling progress through innovation.

5. Nourish ecosystems, which nourish us.

The redevelopment will soften landscapes to reduce impervious areas on-site. In addition, stormwater management systems and low-impact-development methodologies will be implemented as part of this first phase of work, resulting in improved water quality discharging into Casco Bay.

6. Build collaborative capacity to create this future.

The Northeastern University will develop technology and life science talent and position Mainers, new Mainers, and international students for financially stable and personally rewarding careers. The campus will connect budding talent with existing corporate and community partners, and thus create opportunity for fresh thinking and an innovative future.

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Construction Management Plan (CMP) for The Roux Institute at Northeastern University
Developed by: Consigli Construction Company
Developed: May 10, 2023 Updated: September 14, 2023

A. Construction Management Principles

All aspects of this Construction Management Plan are designed and intended to mitigate or minimize construction related impacts to public ways (The Streets of Sherwood and Veranda), surrounding neighborhood(s), and ongoing operations of the Maine Yacht Center and other abutters. Consigli Construction will work collaboratively with IDEALS, project consultants, subcontractors, and The City of Portland to ensure the most efficient and least disruptive construction project possible. This goal will be attained through detailed and consistent planning, coordination, execution and seamless communication with all parties and stakeholders.

B. Development and Review of Construction Management Plan

Consigli Construction will refine and update the Construction Management Plan throughout the course of the project as conditions change and to optimize the logistical and safety related measures being employed in the interest of public safety. The overriding goal is to eliminate or minimize adverse impacts to the construction site, surrounding areas and public ways by protecting the public, residents, construction personnel and property, while simultaneously ensuring pedestrian, Northeastern University, Maine Yacht Center, and other abutter activities can continue unabated and in a safe manner. Please refer to the attached Site Logistics Plans.

C. Performance Guarantees, Inspection Fees, Preconstruction Meeting, & Permits

Prior to scheduling a preconstruction meeting and the issuance of city required permits, IDEALS and Consigli Construction shall meet all general requirements and enforcement of Portland's Land Use Code.

Other permits, as applicable include:

Street Opening & Street Occupancy Permit: Construction activity in a public right-of-way (Sherwood Street) is controlled by Portland's Land Use Code. All required permits shall be obtained through the Department of Public Works and the requests shall conform with the approved construction management plan. Though still under design, the majority of new to existing utility connections to the project are anticipated to be on Sherwood Street. Temporary lane closures are anticipated during utility tie-in work. All temporary directional

signage and traffic control to be utilized during this work. It is also anticipated that sidewalk occupancy will be required for construction purposes on Sherwood Street. All required signage to be provided. The public bus stop located on Veranda Street is anticipated to be maintained through construction.

Blasting: Blasting is not required nor anticipated for this project. Mechanical means of removal of rock is anticipated in lieu of blasting.

Building Code: The project will employ the best practices, as applicable, of Chapter 33 Safeguards During Construction, from the International Building Code.

D. Construction Administration and Communication

IDEALS and Consigli Construction will implement a continuous communication strategy and program through preconstruction and the construction phases of the project, that will include neighborhood forums. The communication strategy is intended to ensure that all construction operations are performed in accordance with all agreements, ordinances, and special permits applicable to this project. IDEALS and Consigli Construction will work closely with the University, adjacent abutters, businesses, and will keep all parties regularly informed, as far in advance as possible, of scheduled work, particularly work anticipated to cause significant noise, vibrations, or dust. Consigli Construction will also prominently display appropriate signage indicating construction entrances and exits, pedestrian access around the site, and signage directing visitors to the construction field office. Site signage also includes Consigli Construction's 24 hours/day contact information. All temporary signage will be modified appropriately as conditions may change and will be removed at the conclusion of the project.

E. Construction Schedule

Construction is anticipated to commence in the summer of 2024 and be substantially complete by the summer of 2027 allowing student occupancy of the education building for the fall semester 2027. A detailed construction schedule is attached.

Work hours to follow City of Portland Sections 17-18, Construction Activities for Building Permit, and Section 25-129, Noise, dust, and debris. Work hours will generally be restricted to 7:00am – 7:00pm, Monday through Friday. In the event of Saturday or Sunday work, hours to be limited to 8:00am – 4:00pm. Any further off-hour work will be coordinated directly with the City.

Material deliveries will comply with normal work hours. This project is considering utilizing "just in time" delivery techniques with the intent that materials delivered to the site are promptly installed/put in place. Temporary storage locations will be off site.

F. Security & Public Safety

As depicted in the Site Logistics Plan, the entire project site will be enclosed by chain link construction fencing. Primary construction site accesses to be swinging gate entrances at the end of Sherwood Street with an emergency exit into the Maine Yacht Center. Gates will be secured during non-working hours and equipped with "Knox" boxes as required by the city.

Project work activities will be conducted in accordance with Consigli Construction and OSHA regulations and will further comply with all City of Portland and/or State of Maine safety related regulations. A comprehensive Fire Safety/Fire Dept Access and Fire Safety Plan (NFPA 241) will be developed in conjunction with a 3rd party consultant (Code Red), reviewed with the City of Portland prior to implementation as well as a project incident response process to be followed in the event of emergencies.

G. Construction Permitting and Traffic Control Plans

Construction Activity in Public Streets: To minimize impacts, disruption, and provide safe and efficient passage, Consigli Construction will implement best practices traffic control in compliance with all City of Portland requirements during the duration of the project. This includes signage, measures to mitigate idling construction related delivery traffic, construction service vehicles, traffic flaggers, temporary traffic flow modifications, signage & barriers at temporary partial street closings, and any other measures required to control work taking place in public ways. In instances where utility connection excavations may need to be left open overnight, measures including barriers, traffic/pedestrian signage, and other mandated requirements will be implemented.

Sewer and Stormwater: Sewer and stormwater water system connections (in addition to water and electrical connection) will be required. Most tie-in connections to existing services are anticipated to occur on Sherwood Street.

Traffic Control Plans: Construction activities that impact the existing public street system will be controlled to protect the safety of the construction workers, pedestrians, and the travelling public. In addition to utility connections, temporary lane closures of Sherwood Street are anticipated during the period of construction of street and utility improvements. Traffic control measures are described above and will be further articulated and elaborated upon for specific relevant activities and as part of street opening or street occupancy/sidewalk occupancy permitting.

H. Site Management and Controls

Consigli Construction will implement and manage a continuous program of containing soils onsite, public street cleaning and onsite dust control. Program to comply with City of Portland requirements and will include a tire wash at the construction exit, water trucks and water cannons (during demolition) to control dust, street sweeping equipment and other measures as required.

Trash dumpsters will be utilized onsite for regular removal of all construction related trash & debris. The site and building areas under construction will be kept orderly and as clean as possible throughout the construction period.

Noise and vibration will be maintained at minimal levels and measured.

Snow plowing and surface treatment of the project site within the limits of construction will be the responsibility of Consigli Construction.

I. Erosion Control and Preservation of Trees

Prior to commencement of construction activities, erosion and sedimentation controls as contained in the approved erosion and sedimentation control plan shall be installed. These controls are currently in place and shall be inspected regularly and maintained on a consistent basis.

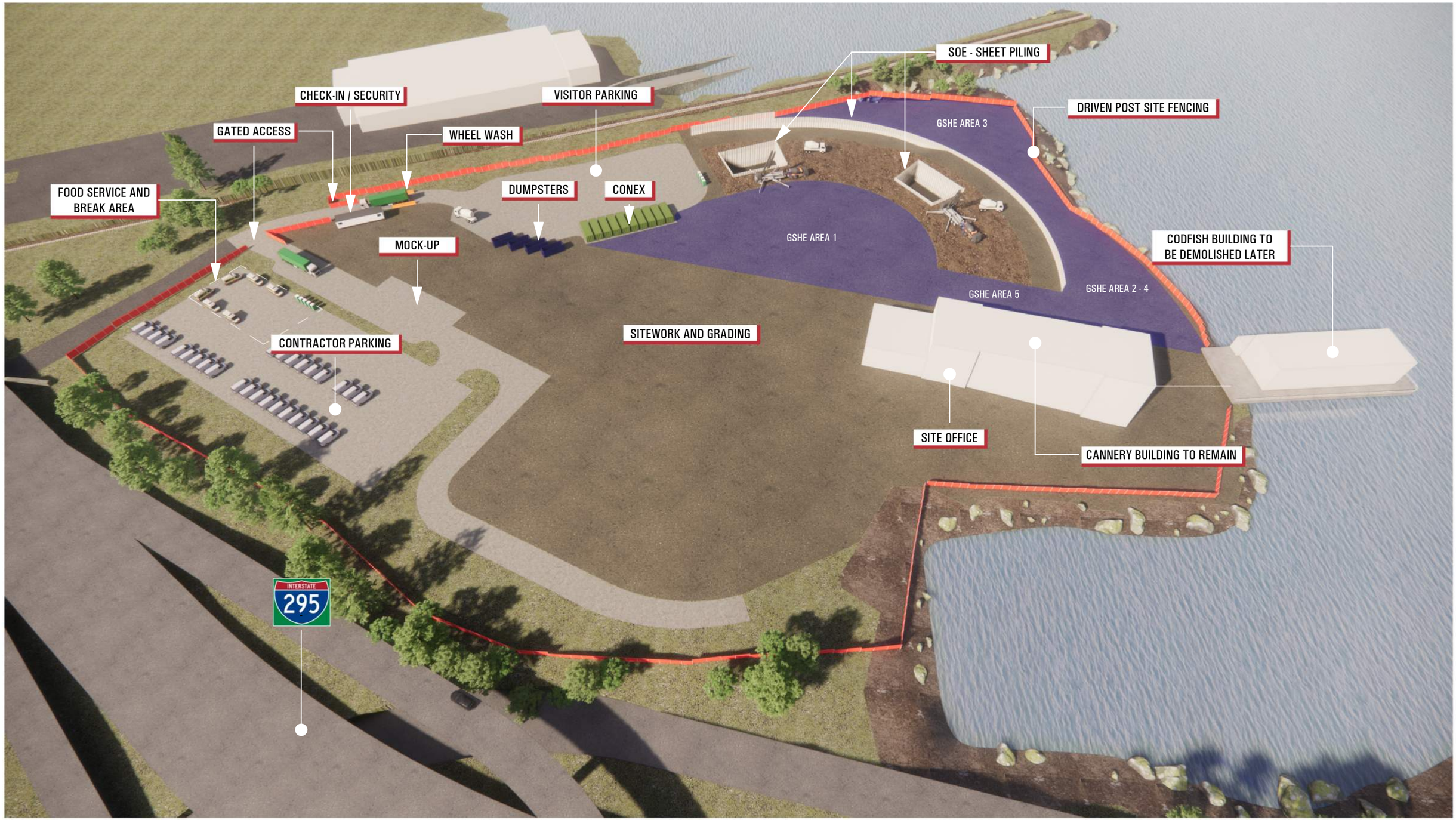
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J. Construction Staging Area

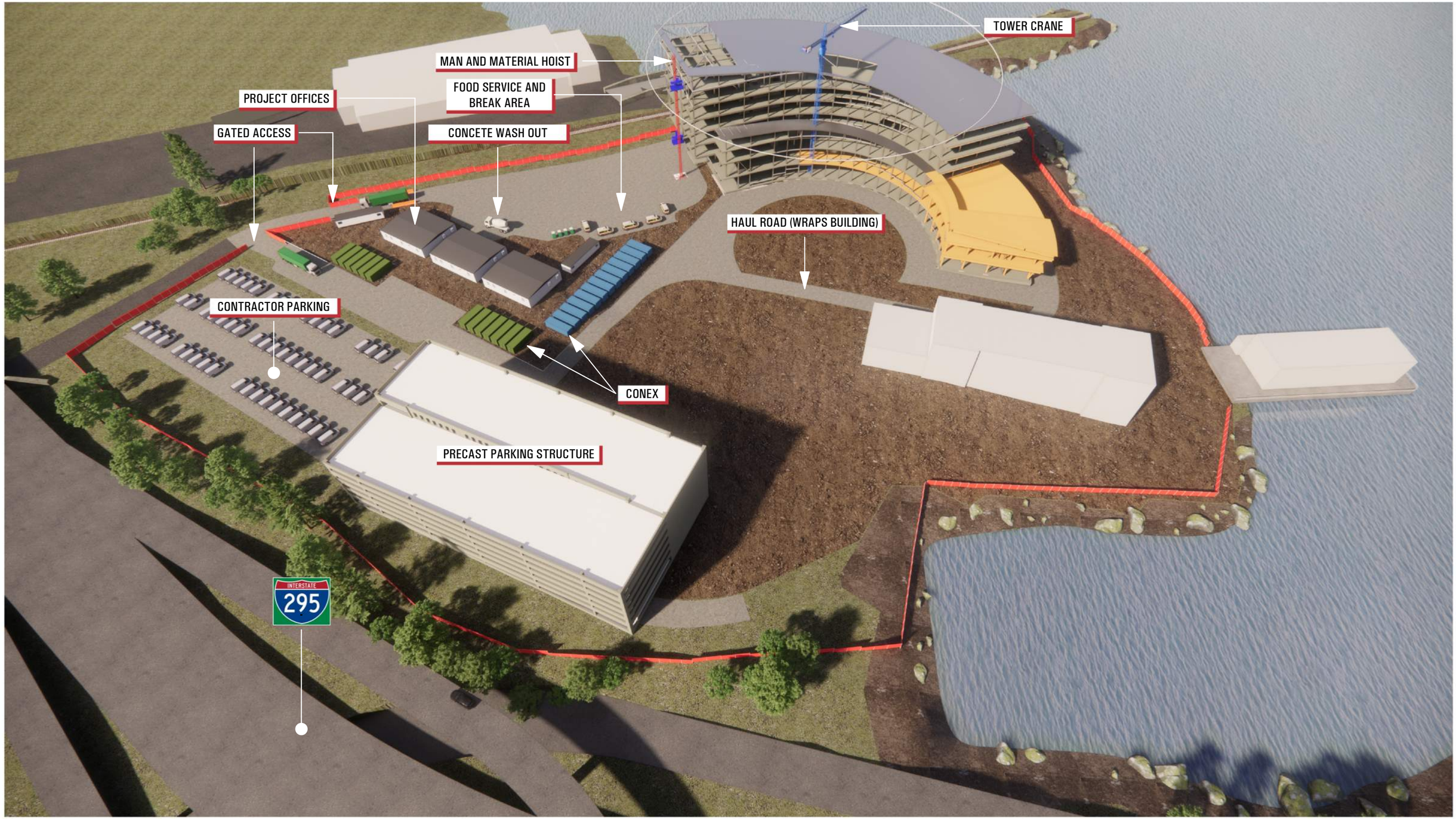
Refer to Site Logistics Plan for anticipated locations of temporary site office and storage trailers and material staging and storage areas. Dumpster locations to be dependent on optimal locations based on activities. Truck wheel washing stations to be located at entry/exit points to the site.

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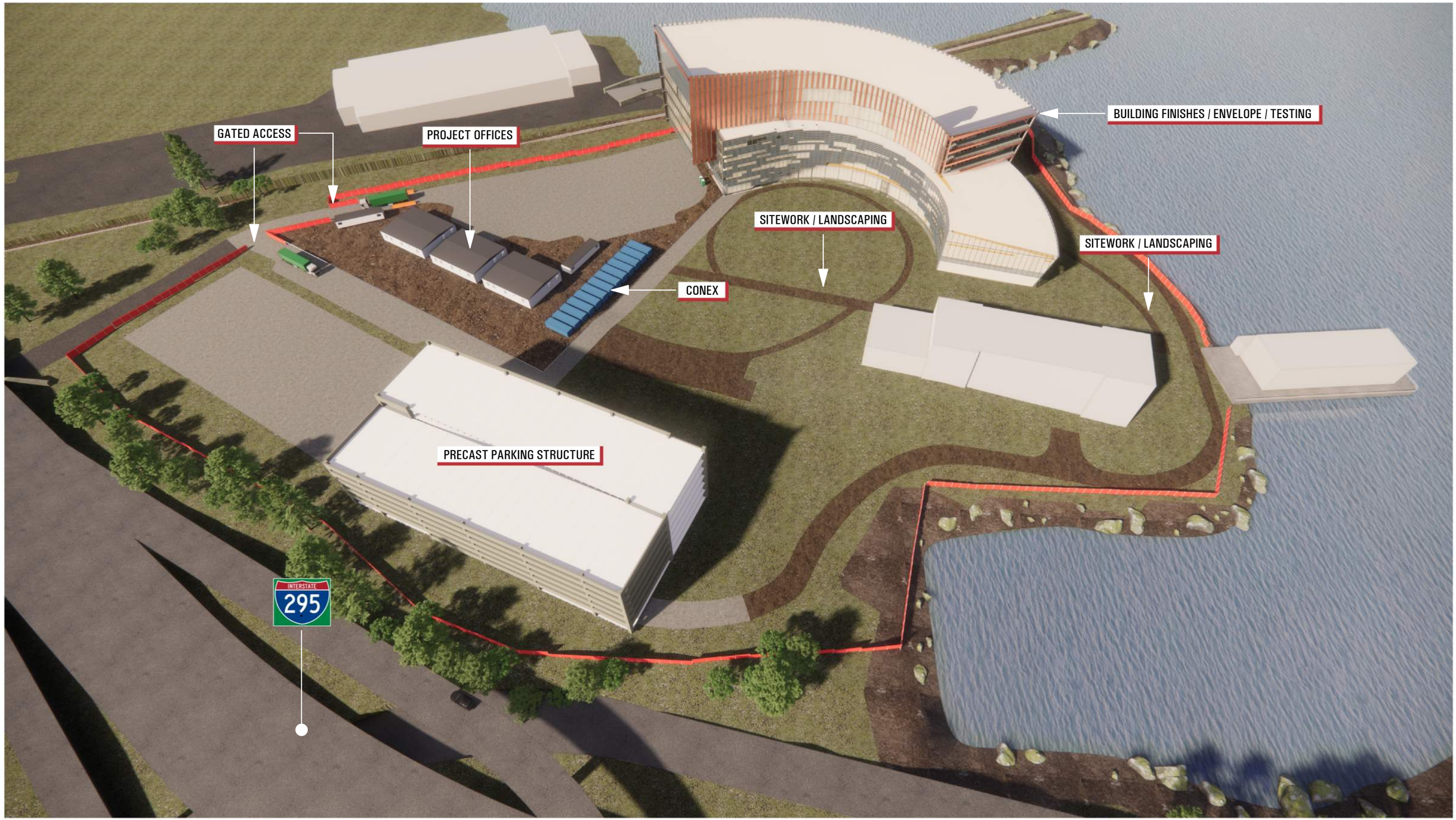
SITEWORK / FOUNDATION



STRUCTURE / FIT-UP



FINISHES / SITEWORK / COMMISSIONING



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Construction Management Plan (CMP) for The Roux Institute at Northeastern University
Developed by: Consigli Construction Company
Developed: May 10, 2023 Updated: January 25, 2024

A. Construction Management Principles

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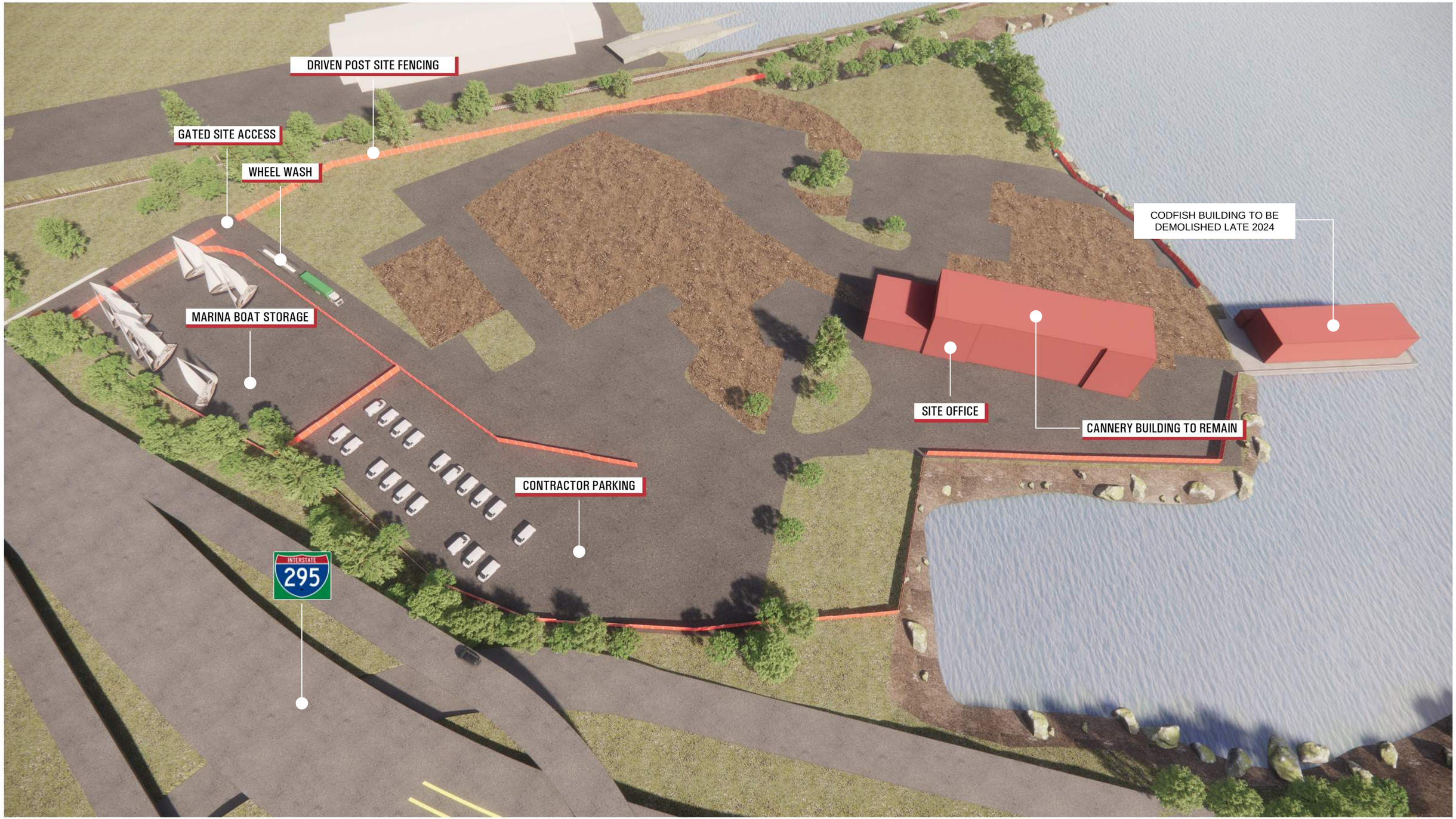
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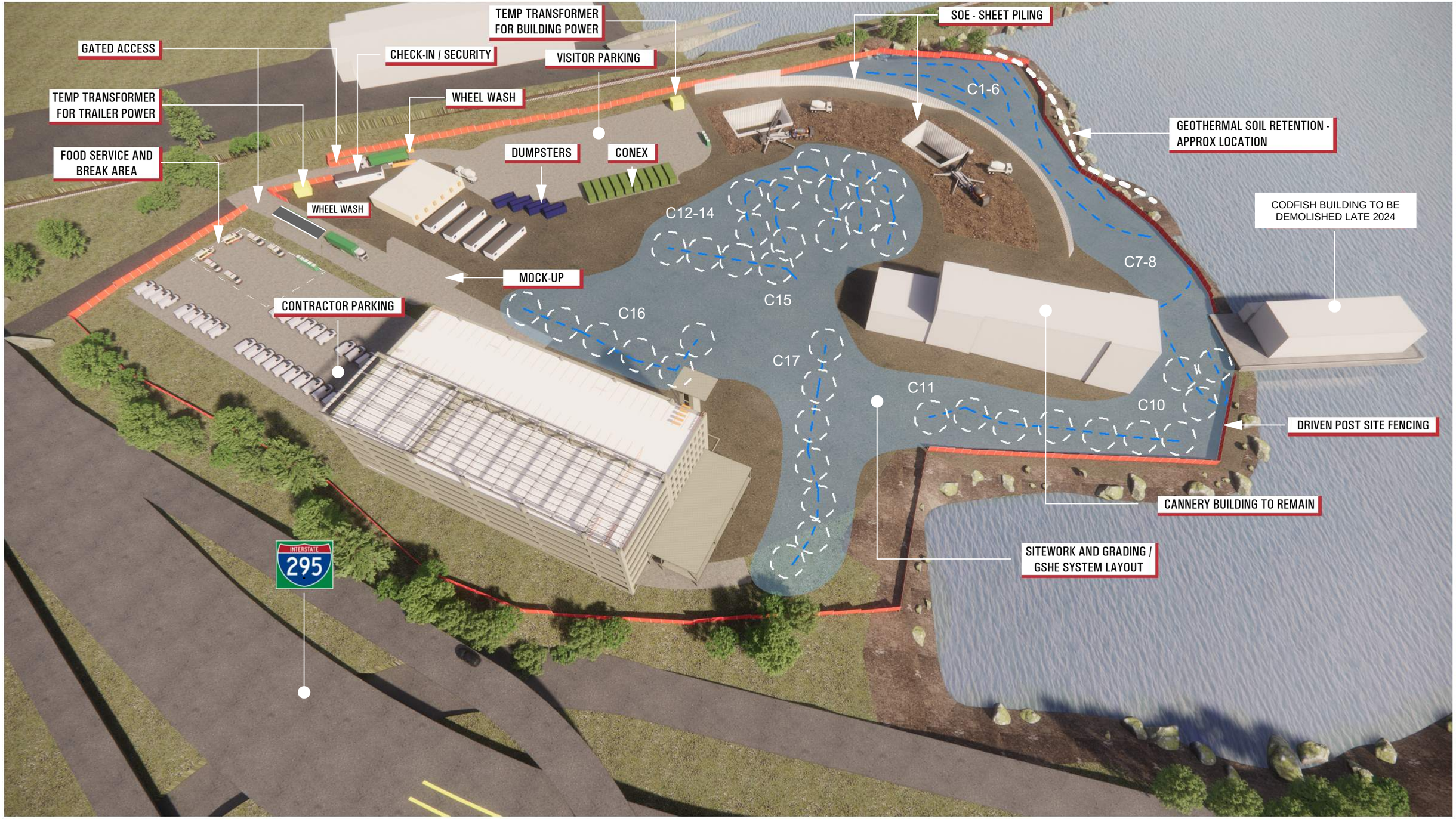
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POST-DEMO

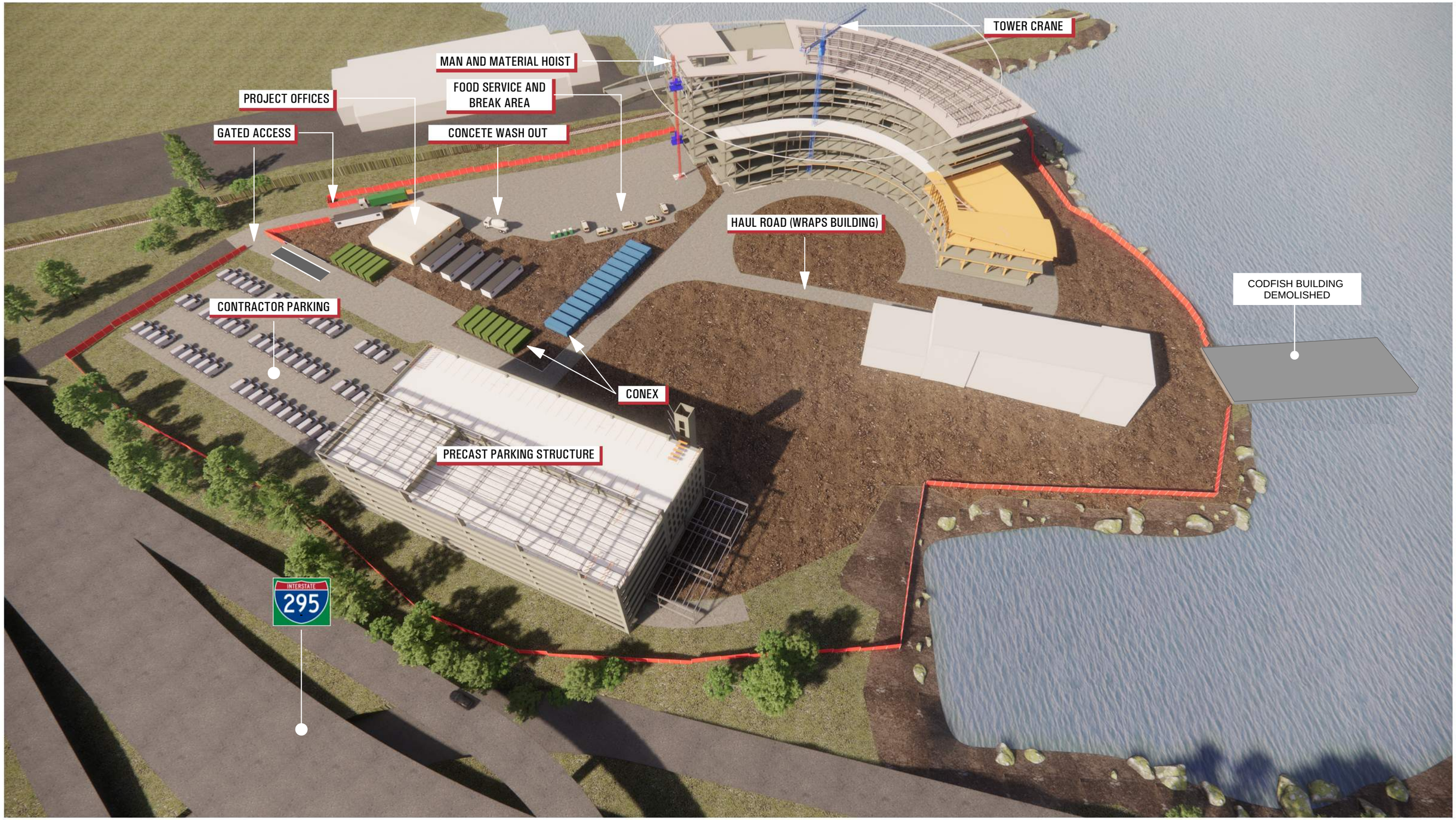


SITEWORK / FOUNDATION

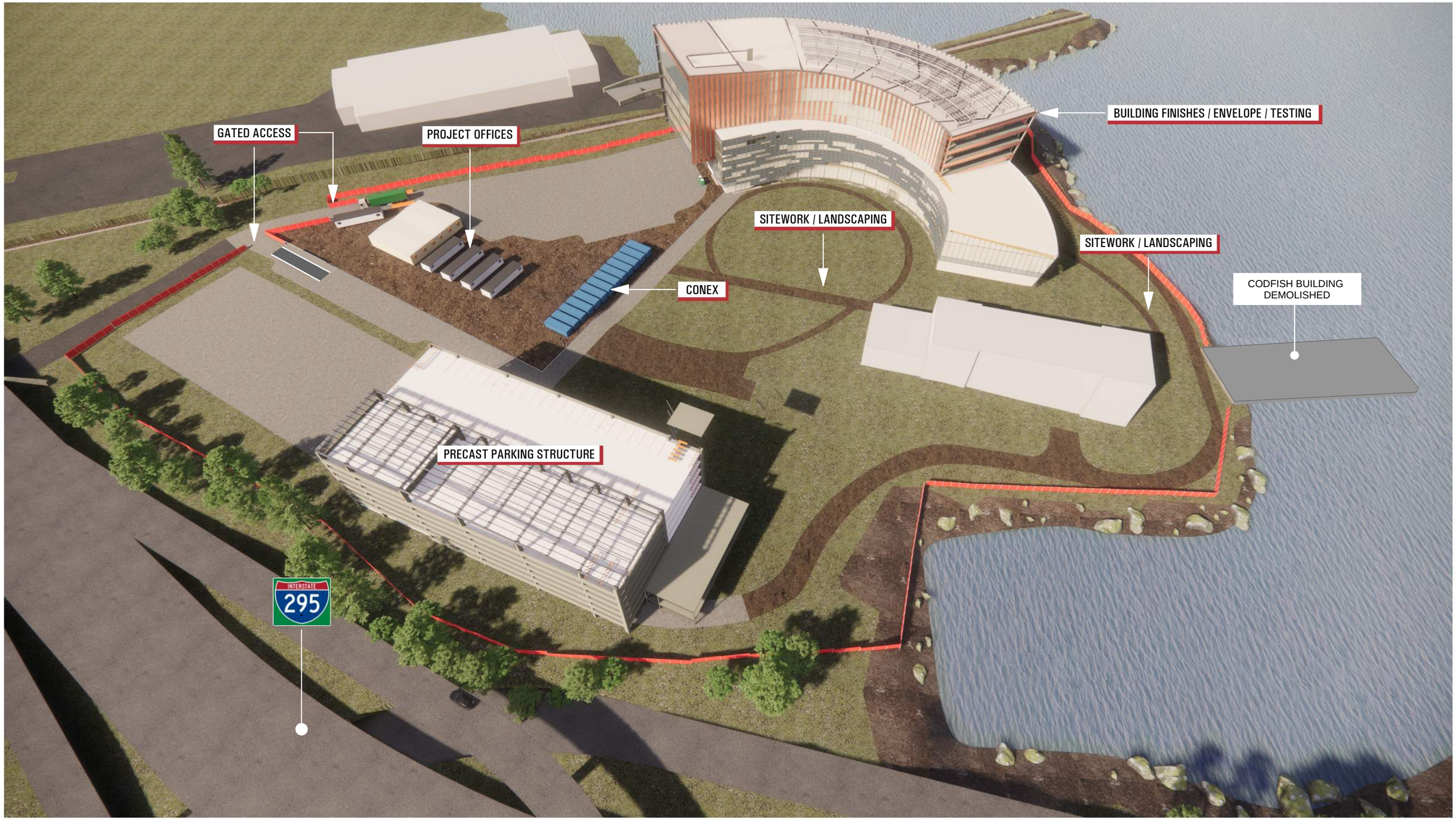


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STRUCTURE / FIT-UP



FINISHES / SITEWORK / COMMISSIONING



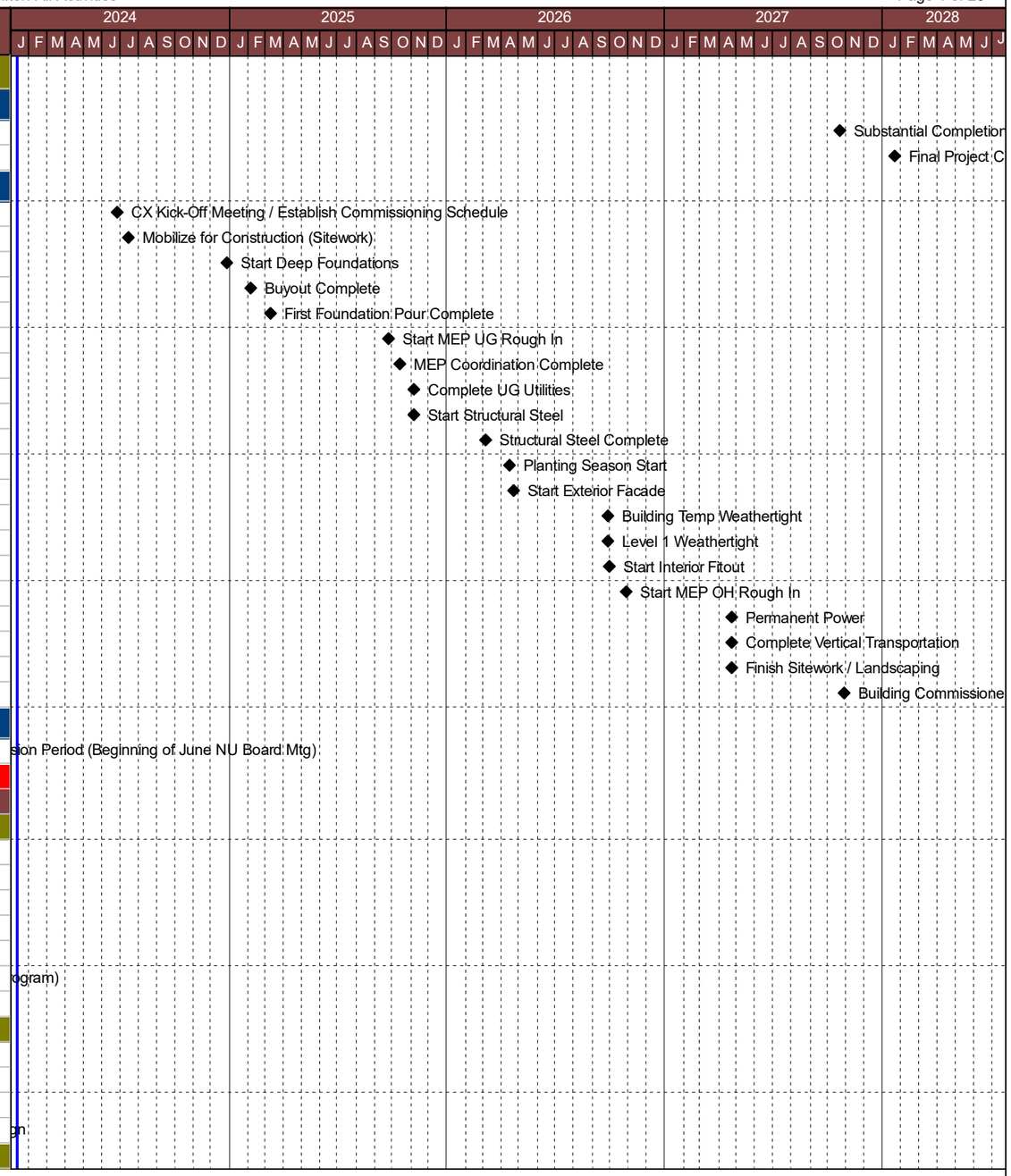
TRUCKING DELIVERY ROUTE (7AM - 5PM)



TRUCKING DELIVERY ROUTE (7AM - 5PM)



Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
IDEALS - Roux Institute at Northeastern					
Contract Milestones					
A7910	Substantial Completion	0	0		22-Oct-27*
A8170	Final Project Completion	0	0		21-Jan-28
Project Milestones					
A8220	CX Kick-Off Meeting / Establish Commissioning Schedule	0	0	26-Jun-24	
A7900	Mobilize for Construction (Sitework)	0	0		16-Jul-24
A8310	Start Deep Foundations	0	0	27-Dec-24	
A8240	Buyout Complete	0	0		05-Feb-25
A7920	First Foundation Pour Complete	0	0		11-Mar-25
A8190	Start MEP UG Rough In	0	0	25-Sep-25	
A8210	MEP Coordination Complete	0	0		14-Oct-25
A8260	Complete UG Utilities	0	0		06-Nov-25
A8200	Start Structural Steel	0	0	07-Nov-25	
A7930	Structural Steel Complete	0	0		06-Mar-26
A7960	Planting Season Start	0	0	15-Apr-26*	
A8230	Start Exterior Facade	0	0	23-Apr-26	
A7940	Building Temp Weathertight	0	0		28-Sep-26
A7950	Level 1 Weathertight	0	0		28-Sep-26
A8270	Start Interior Fitout	0	0	29-Sep-26	
A8250	Start MEP OH Rough In	0	0	28-Oct-26	
A8100	Permanent Power	0	0		22-Apr-27
A8290	Complete Vertical Transportation	0	0		22-Apr-27
A8300	Finish Sitework / Landscaping	0	0		22-Apr-27
A8280	Building Commissioned	0	0		29-Oct-27
Preconstruction					
A00616	Leadership Decision Period (Beginning of June NU Board Mtg)	110	0	10-Jan-23 A	12-Jun-23 A
Design					
Roux Institute & Site					
Space Programming Phase					
A00303	Initiation/Data Gathering	10	0	06-Sep-21 A	17-Sep-21 A
A00304	Benchmarking	10	0	20-Sep-21 A	01-Oct-21 A
A00305	Modular Space Standards	15	0	20-Sep-21 A	08-Oct-21 A
A00306	"Straw" Program	8	0	11-Oct-21 A	20-Oct-21 A
A00314	Preparation of Final Detailed Space Program	57	0	25-Nov-21 A	11-Feb-22 A
A00318	Complete Programming Deliverables (Publish Final Space Program)	0	0	11-Feb-22 A	
A00319	RI/NU Review and Approval	10	0	14-Feb-22 A	28-Feb-22 A
Concept Development					
A00488	Conceptual Design	75	0	28-Feb-22 A	10-Jun-22 A
A00492	Complete Conceptual Design Deliverables	0	0	23-May-22 A	
A00493	Cost Estimating by CM	10	0	23-May-22 A	06-Jun-22 A
A00491	IDEALS Review and Approval of Conceptual Design	10	0	23-May-22 A	06-Jun-22 A
Schematic Design					



Start Date 06-Sep-21
Finish Date 21-Jan-28
Data Date 12-Jan-24
Run Date 17-Jan-24 14:39
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Remaining Level of Effort
Actual Level of Effort
Actual Work
Remaining Work
Critical Remaining Work
Milestone

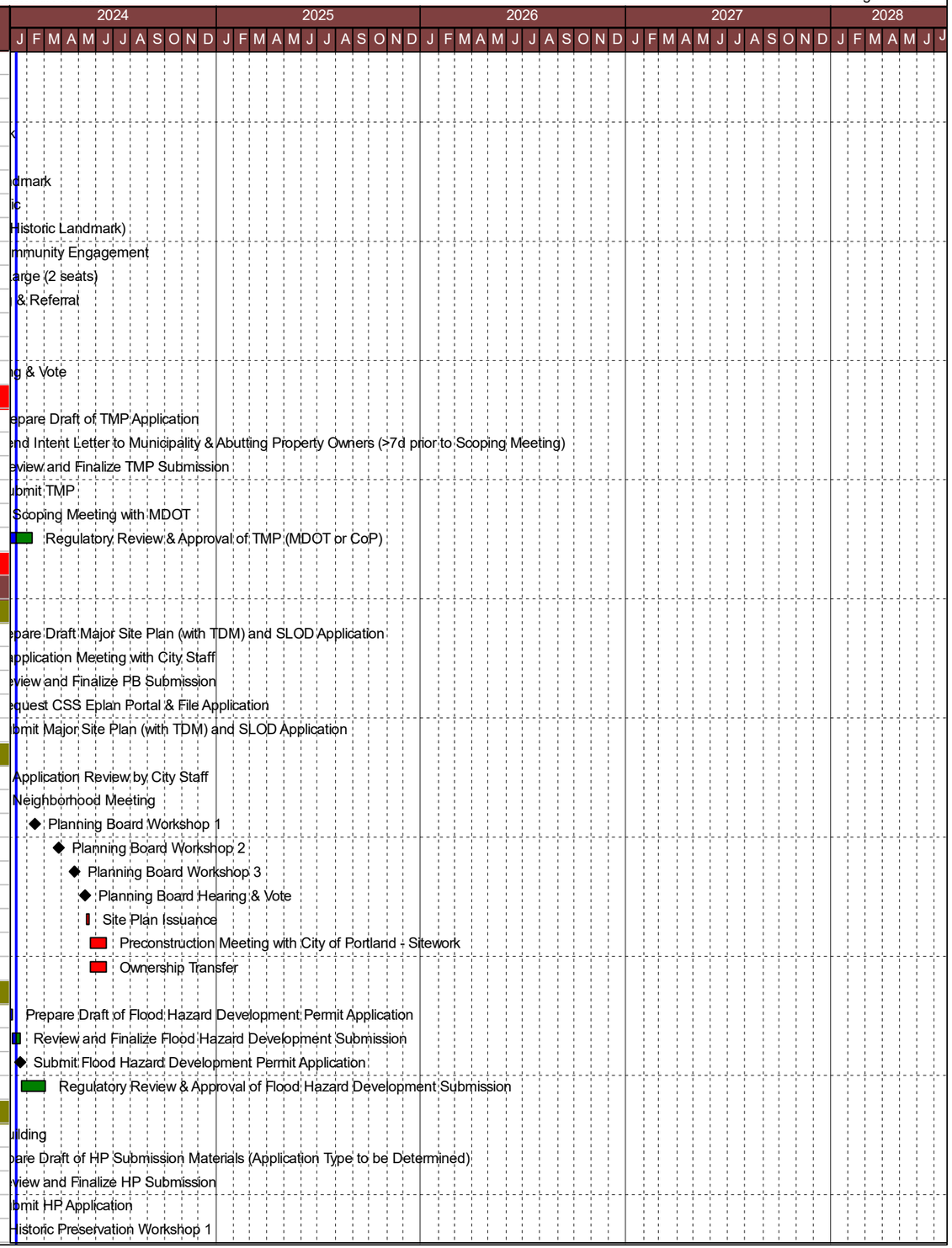
Consigli Construction Co., Inc.
IDEALS - Roux Institute at Northeastern
Project Schedule - Updated 12-Jan-24

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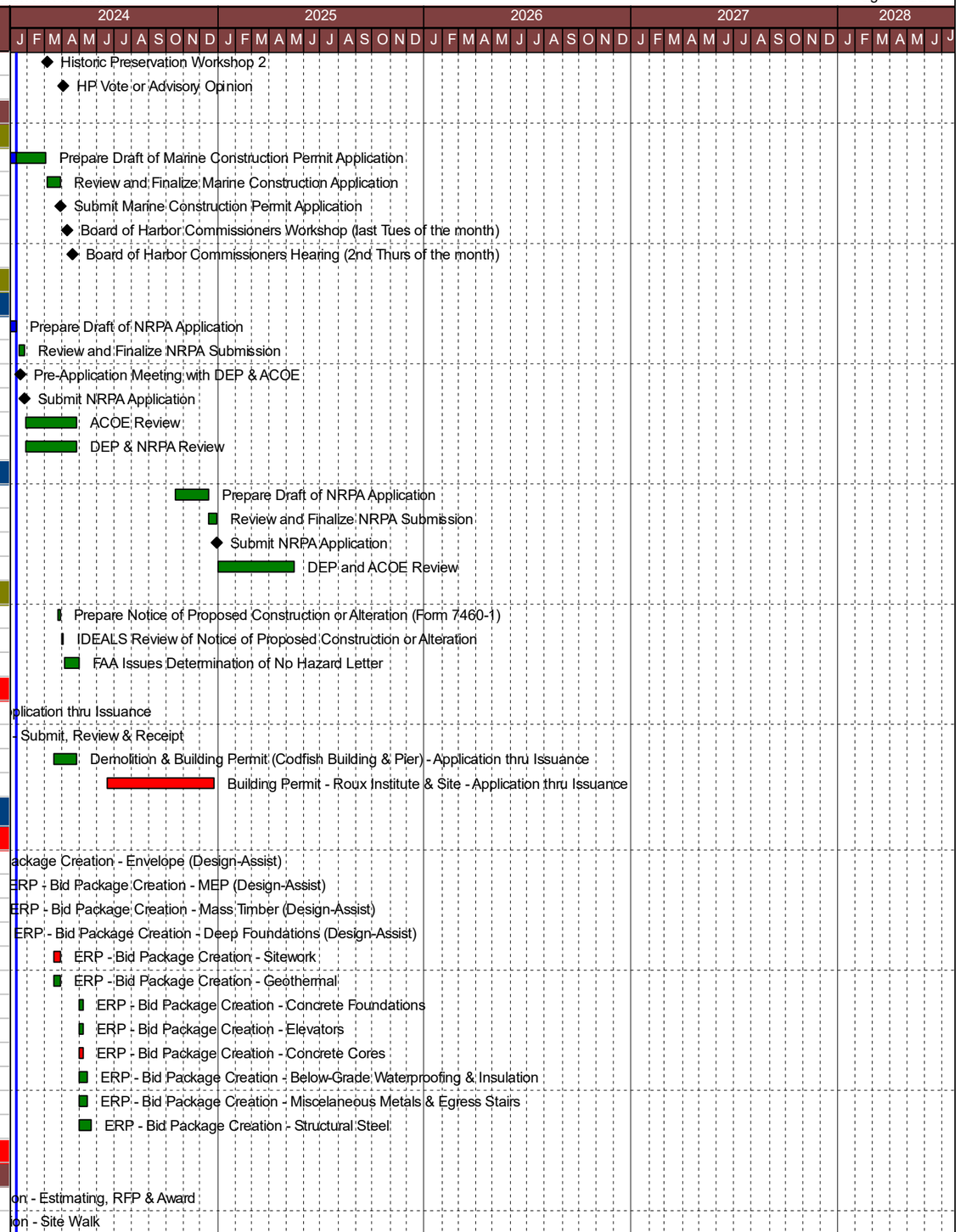
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A00324	Schematic Design	80	0	20-Jun-22 A	07-Oct-22 A
A00337	Cost Estimating by CM	40	0	26-Sep-22 A	18-Nov-22 A
A00338	Review and Adjustments	25	0	21-Nov-22 A	23-Dec-22 A
A00621	Complete Revised Schematic Design (230k GSF)	40	0	23-Jan-23 A	07-Apr-23 A
A00679	Cost Estimating Revised Schematic Design (230k GSF)	20	0	10-Apr-23 A	05-May-23 A
Design Development					
A00340	Design Development	91	0	13-Jun-23 A	20-Oct-23 A
A00371	Subcontractor DD Pricing	5	0	23-Oct-23 A	22-Nov-23 A
A00361	Issue 100% DD Estimating Package (CCC & Fennessy)	30	0	23-Oct-23 A	05-Dec-23 A
A00573	Owner Comments	0	0		03-Nov-23 A
A00563	DD Estimate Check & Approval	0	0		13-Nov-23 A
A00391	Reconciliation - DD Estimate	12	0	06-Dec-23 A	21-Dec-23 A
A00401	VE - DD Estimate	16	3	22-Dec-23 A	17-Jan-24
A00411	DD Design Finalization	5	5	18-Jan-24	24-Jan-24
A00381	DD Estimate Review & Approval	5	5	25-Jan-24	31-Jan-24
Site Plan Deliverables					
A00634	Site Plan Deliverable - Architecture	40	0	10-Apr-23 A	07-Nov-23 A
A00669	Site Plan Deliverable - Landscape	40	0	10-Apr-23 A	07-Nov-23 A
A00670	Site Plan Deliverable - Utilities	40	0	10-Apr-23 A	07-Nov-23 A
Sitework Design Deliverables					
A9230	Design Finalization - Sitework	89	44	23-Oct-23 A	15-Mar-24
Geothermal Design Deliverables					
A2030	Submit Test Well OAL	5	0	30-May-23 A	20-Jun-23 A
A2050	Owner Approve OAL	5	0	21-Jun-23 A	27-Jun-23 A
A2040	Procure Test Well Materials	20	0	28-Jun-23 A	29-Aug-23 A
A1780	Test Well Installation & Testing	46	0	30-Aug-23 A	03-Oct-23 A
A2060	Design Finalization - Geothermal	47	44	04-Oct-23 A	15-Mar-24
Construction Documents					
A00392	50% Constructions Documents / Permit Set	63	63	01-Feb-24	01-May-24
A00382	Construction Documents	105	105	01-Feb-24	01-Jul-24
A00402	Review & Approve 50% CDs / Permit Set	10	10	02-May-24	15-May-24
A00510	IDEALS Review & Approval of Construction Documents	19	19	02-Jul-24	29-Jul-24
Owner Procurement					
A8330	Owner Procure Envelope Commissioning Agent	14	0	13-Jun-23 A	06-Nov-23 A
A8340	Owner Procure MEP Commissioning Agent	14	0	13-Jun-23 A	30-Nov-23 A
Entitlements					
IOZ Change					
Prepare IOZ Application Materials (IDP and Regulatory Framework)					
A00250	Prepare Text Amendment Application to Add Institute Name	60	0	16-Sep-21 A	10-Dec-21 A
A00251	Prepare Text and Map Amendment Application	60	0	16-Sep-21 A	10-Dec-21 A
A00466	Submit Draft IOZ Application to IDEALS	1	0	08-Dec-21 A	13-Dec-21 A
A00418	IDEALS Review of Draft IOZ Submission	38	0	09-Dec-21 A	31-Jan-22 A
A00419	Address Comments from IDEALS and Finalize IOZ Submission	10	0	01-Feb-22 A	14-Feb-22 A
A00420	Request CSS Eplan Portal & File Application	5	0	15-Feb-22 A	21-Feb-22 A
A00469	Submit IOZ Application to City	0	0	21-Feb-22 A	
A00463	Application Review by City Staff	30	0	22-Feb-22 A	04-Apr-22 A
A00512	Submit Revised IOZ Application to City	0	0	02-Aug-22 A	
IOZ Public & Regulatory Meetings, Presentations, and Response to Comments					
A00255	IOZ Neighborhood Meeting 1 (Prior to submission of application)	1	0	18-Nov-21 A	18-Nov-21 A



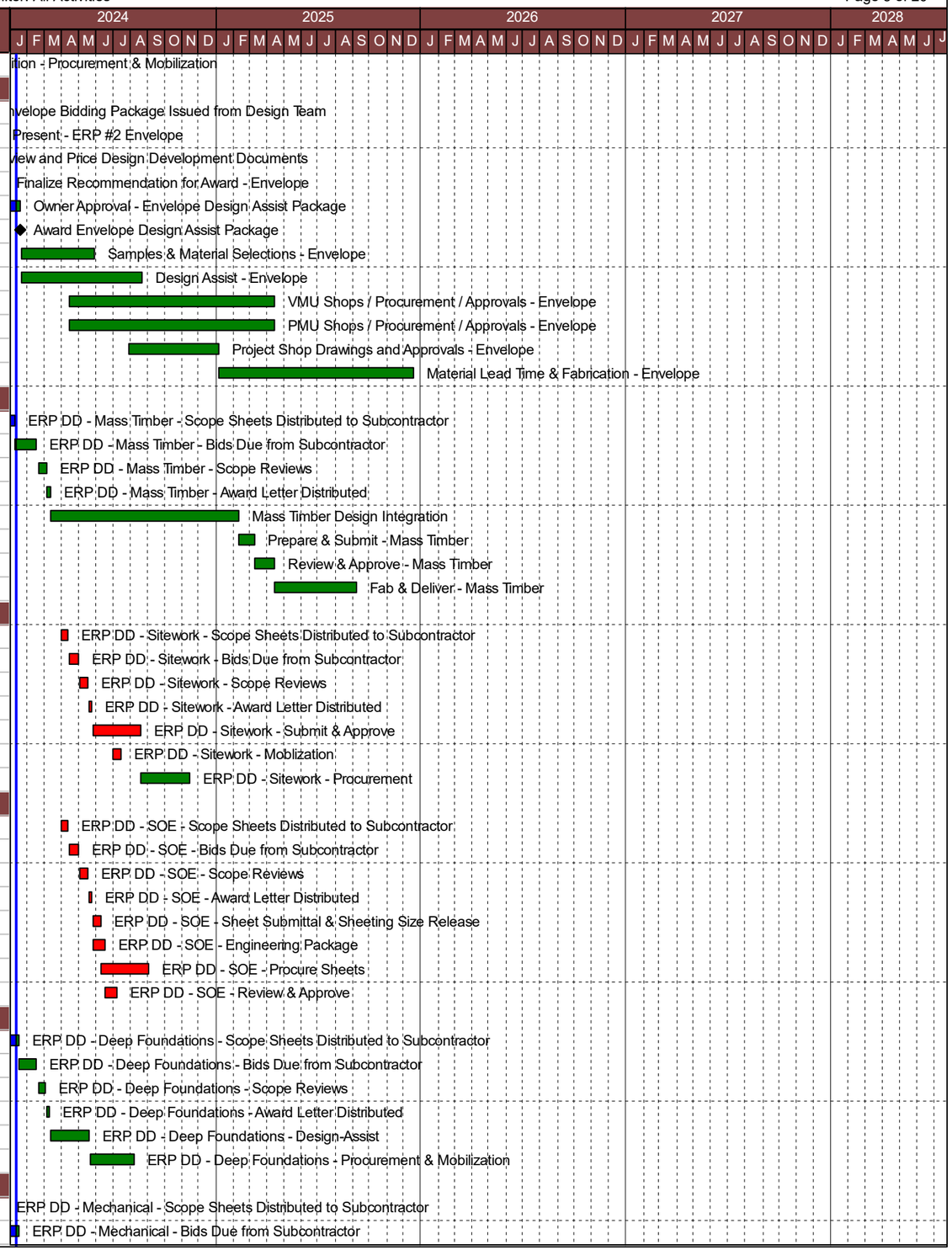
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A00254	Scoping/Preapplication Meeting with City Staff	1	0	01-Dec-21 A	03-Dec-21 A
A00256	IOZ Neighborhood Meeting 2 (Post submission)	0	0	04-Apr-22 A	
A00483	Pre Application Meeting with DEP and ACOE	0	0	05-Apr-22 A	
A00422	Historic Preservation Workshop 2 - Landmark	0	0	08-Aug-22 A	
A00424	IOZ Planning Board Workshop 2	0	0	09-Aug-22 A	
A00423	Historic Preservation Public Hearing - Landmark	0	0	07-Sep-22 A	
A00258	IOZ Planning Board Workshop 3 - Traffic	0	0	11-Oct-22 A	
A00519	City Council Approval of Designation (Historic Landmark)	0	0	19-Oct-22 A	
A00259	IOZ Planning Board Workshop 4 - Community Engagement	0	0	25-Oct-22 A	
A00580	November Election - District 3 & At-Large (2 seats)	0	0	08-Nov-22 A	
A00260	IOZ Planning Board Public Hearing & Referral	0	0	22-Nov-22 A	
A00261	City Council Workshop 1	0	0	09-Jan-23 A	
A00262	City Council First Reading	0	0	18-Jan-23 A	
A00502	City Council Second Reading & Vote	0	0	06-Feb-23 A	
Traffic Movement Permit (TMP)					
A00504	Prepare Draft of TMP Application	58	0	21-Apr-23 A	15-Nov-23 A
A00523	Send Intent Letter to Municipality & Abutting Property Owners (>7d prior to Scoping Meeting)	0	0		15-Nov-23 A
A00505	Review and Finalize TMP Submission	10	0	15-Nov-23 A	16-Nov-23 A
A00508	Submit TMP	0	0		17-Nov-23 A
A00522	Scoping Meeting with MDOT	0	0		13-Dec-23 A
A00509	Regulatory Review & Approval of TMP (MDOT or CoP)	39	20	14-Dec-23 A	09-Feb-24
Phase 1 Site Plan - Permits & Approvals					
City of Portland Permitting					
Site Plan - Prepare & Submit (W&C activity)					
A00269	Prepare Draft Major Site Plan (with TDM) and SLOD Application	40	0	21-Apr-23 A	07-Nov-23 A
A00272	Preapplication Meeting with City Staff	0	0		25-Oct-23 A
A00426	Review and Finalize PB Submission	10	0	08-Nov-23 A	13-Nov-23 A
A00427	Request CSS Eplan Portal & File Application	5	0	08-Nov-23 A	13-Nov-23 A
A00474	Submit Major Site Plan (with TDM) and SLOD Application	0	0		13-Nov-23 A
Application Review / PB Workshops / Approval					
A00465	Application Review by City Staff	50	0	14-Nov-23 A	13-Dec-23 A
A00273	Neighborhood Meeting	0	0		13-Dec-23 A
A00274	Planning Board Workshop 1	0	0		13-Feb-24
A00275	Planning Board Workshop 2	0	0		26-Mar-24
A00276	Planning Board Workshop 3	0	0		23-Apr-24
A00277	Planning Board Hearing & Vote	0	0		14-May-24
A00297	Site Plan Issuance	5	5	15-May-24	21-May-24
A00307	Preconstruction Meeting with City of Portland - Sitework	20	20	22-May-24	19-Jun-24
A00317	Ownership Transfer	20	20	22-May-24	19-Jun-24
Flood Hazard Development Permit					
A00279	Prepare Draft of Flood Hazard Development Permit Application	39	0	24-Apr-23 A	04-Jan-24 A
A00431	Review and Finalize Flood Hazard Development Submission	10	5	05-Jan-24 A	19-Jan-24
A00476	Submit Flood Hazard Development Permit Application	0	0		19-Jan-24
A00432	Regulatory Review & Approval of Flood Hazard Development Submission	30	30	22-Jan-24	04-Mar-24
Historic Preservation (incl. Section 106 Review)					
A00614	HP Landmark Designation of Bean Building	0	0	19-Oct-22 A	
A00436	Prepare Draft of HP Submission Materials (Application Type to be Determined)	39	0	24-Apr-23 A	27-Oct-23 A
A00438	Review and Finalize HP Submission	10	0	30-Oct-23 A	10-Nov-23 A
A00478	Submit HP Application	0	0		13-Nov-23 A
A00284	Historic Preservation Workshop 1	0	0		06-Dec-23 A



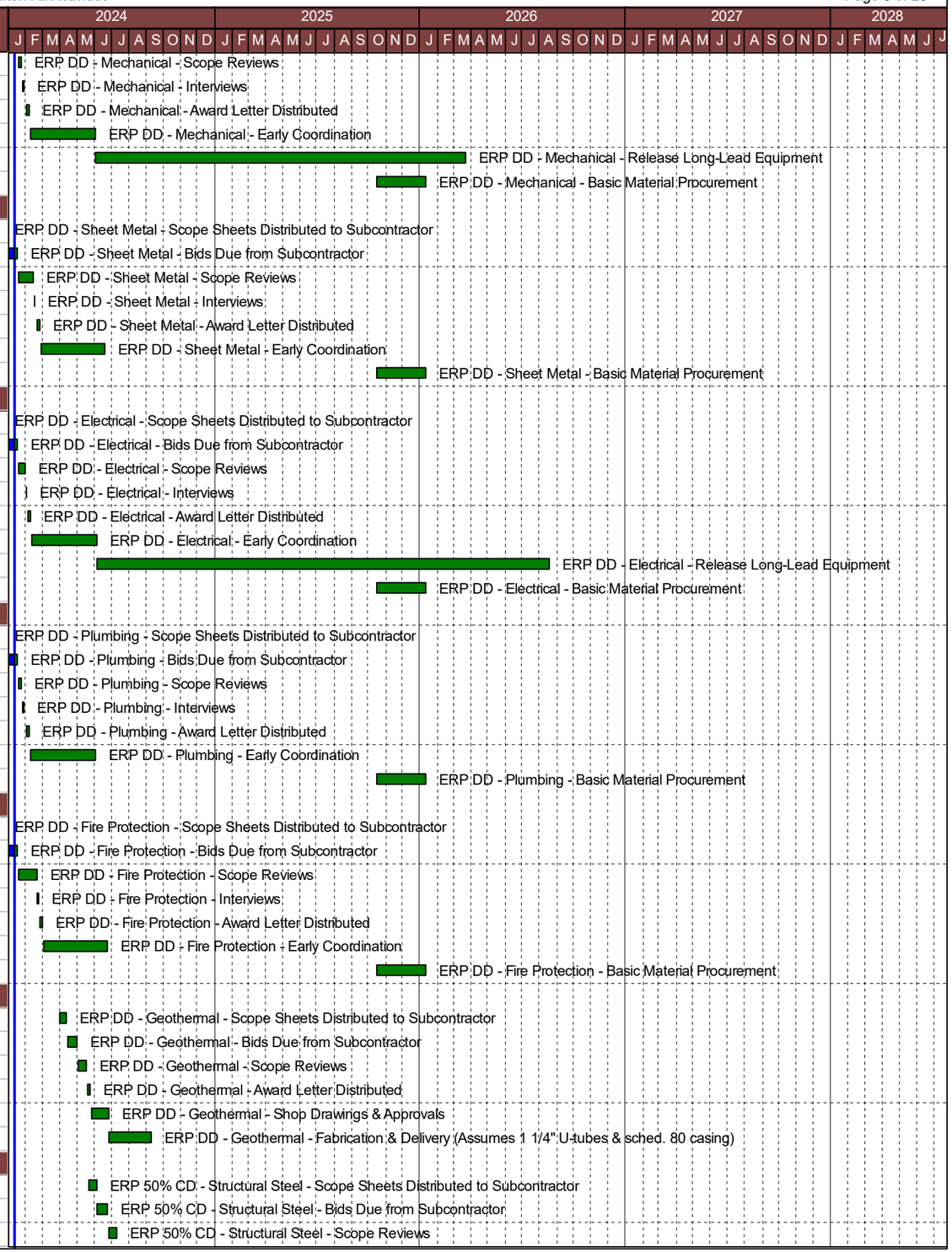
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A00285	Historic Preservation Workshop 2	0	0		06-Mar-24*
A00287	HP Vote or Advisory Opinion	0	0		03-Apr-24*
State & Federal Permitting					
Board of Harbor Commissioners Marine Construction Permit					
A00288	Prepare Draft of Marine Construction Permit Application	39	35	24-Apr-23 A	04-Mar-24
A00440	Review and Finalize Marine Construction Application	19	19	05-Mar-24	29-Mar-24
A00480	Submit Marine Construction Permit Application	0	0		29-Mar-24
A00441	Board of Harbor Commissioners Workshop (last Tues of the month)	0	0		09-Apr-24*
A00442	Board of Harbor Commissioners Hearing (2nd Thurs of the month)	0	0		19-Apr-24*
Natural Resources Permits					
Phase 1 (Shoreline Work & Pier/Codfish Bldg)					
A00555	Prepare Draft of NRPA Application	39	1	24-Apr-23 A	12-Jan-24
A00558	Review and Finalize NRPA Submission	9	9	16-Jan-24	26-Jan-24
A00569	Pre-Application Meeting with DEP & ACOE	0	0		18-Jan-24*
A00559	Submit NRPA Application	0	0		26-Jan-24
A00560	ACOE Review	63	63	29-Jan-24	26-Apr-24
A00570	DEP & NRPA Review	63	63	29-Jan-24	26-Apr-24
Phase 2 (Bike/Pedestrian Path @ Tukey's Bridge)					
A00293	Prepare Draft of NRPA Application	40	40	18-Oct-24	16-Dec-24
A00445	Review and Finalize NRPA Submission	10	10	17-Dec-24	31-Dec-24
A00482	Submit NRPA Application	0	0		31-Dec-24
A00446	DEP and ACOE Review	94	94	02-Jan-25	16-May-25
Federal Aviation Administration					
A00295	Prepare Notice of Proposed Construction or Alteration (Form 7460-1)	5	5	25-Mar-24	29-Mar-24
A00447	IDEALS Review of Notice of Proposed Construction or Alteration	4	4	01-Apr-24	04-Apr-24
A00448	FAA Issues Determination of No Hazard Letter	19	19	05-Apr-24	02-May-24
Building Permits					
A00620	Abatement Notification - Application thru Issuance	10	0	01-Feb-23 A	14-Feb-23 A
A00635	Demolition Permit - Submit, Review & Receipt	20	0	19-Apr-23 A	23-May-23 A
A00528	Demolition & Building Permit (Codfish Building & Pier) - Application thru Issuance	29	29	18-Mar-24	26-Apr-24
A00600	Building Permit - Roux Institute & Site - Application thru Issuance	130	130	20-Jun-24	26-Dec-24
Early Procurement					
ERP - Bid Package Creation					
A00617	ERP - Bid Package Creation - Envelope (Design-Assist)	15	0	11-Jul-23 A	31-Jul-23 A
A00626	ERP - Bid Package Creation - MEP (Design-Assist)	20	0	23-Oct-23 A	06-Dec-23 A
A00638	ERP - Bid Package Creation - Mass Timber (Design-Assist)	20	0	23-Oct-23 A	08-Dec-23 A
A00618	ERP - Bid Package Creation - Deep Foundations (Design-Assist)	10	0	23-Oct-23 A	15-Dec-23 A
A00664	ERP - Bid Package Creation - Sitework	10	10	18-Mar-24	29-Mar-24
A00636	ERP - Bid Package Creation - Geothermal	10	10	18-Mar-24	29-Mar-24
A00633	ERP - Bid Package Creation - Concrete Foundations	5	5	02-May-24	08-May-24
A00668	ERP - Bid Package Creation - Elevators	5	5	02-May-24	08-May-24
A00643	ERP - Bid Package Creation - Concrete Cores	5	5	02-May-24	08-May-24
A00728	ERP - Bid Package Creation - Below-Grade Waterproofing & Insulation	10	10	02-May-24	15-May-24
A00738	ERP - Bid Package Creation - Miscelaneous Metals & Egress Stairs	10	10	02-May-24	15-May-24
A00667	ERP - Bid Package Creation - Structural Steel	15	15	02-May-24	22-May-24
Early Release Packages - Issuance & Buyout					
ERP - Abatement & Demolition					
A00644	ERP - Abatement & Demolition - Estimating, RFP & Award	50	0	14-Nov-22 A	31-Jan-23 A
A00684	ERP - Abatement & Demolition - Site Walk	1	0	01-Feb-23 A	01-Feb-23 A



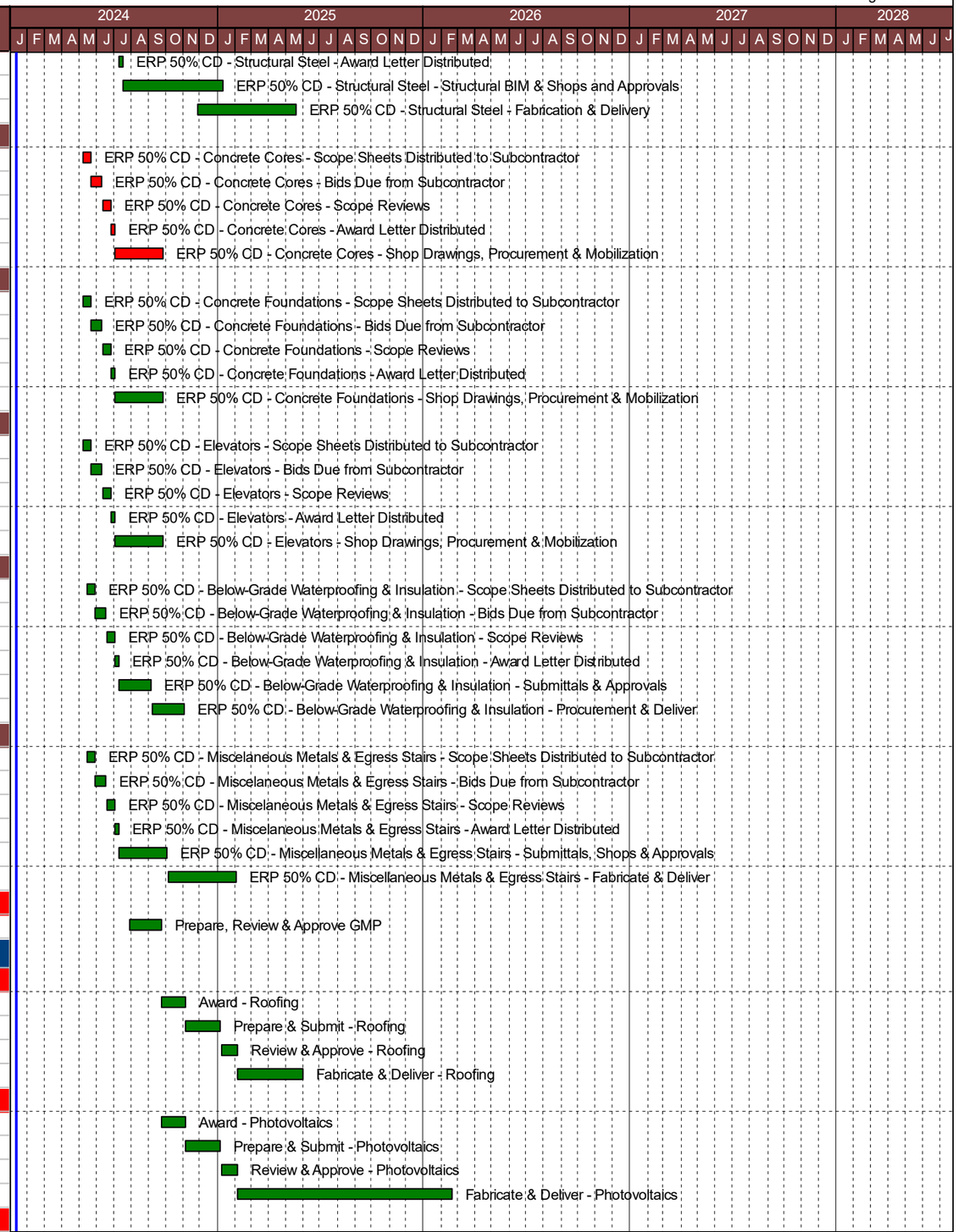
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A00642	ERP - Abatement & Demolition - Procurement & Mobilization	12	0	02-Feb-23 A	17-Feb-23 A
ERP - Envelope					
A1660	ERP #2 - Envelope Bidding Package Issued from Design Team	0	0		31-Jul-23 A
A1670	Price & Present - ERP #2 Envelope	49	0	31-Jul-23 A	18-Sep-23 A
A1900	Review and Price Design Development Documents	14	0	19-Sep-23 A	02-Nov-23 A
A2070	Finalize Recommendation for Award - Envelope	13	0	03-Nov-23 A	20-Dec-23 A
A1680	Owner Approval - Envelope Design Assist Package	19	5	21-Dec-23 A	19-Jan-24
A1690	Award Envelope Design Assist Package	0	0		19-Jan-24
A1710	Samples & Material Selections - Envelope	90	90	22-Jan-24	29-May-24
A1700	Design Assist - Envelope	150	150	22-Jan-24	22-Aug-24
A1720	VMU Shops / Procurement / Approvals - Envelope	250	250	16-Apr-24	14-Apr-25
A1730	PMU Shops / Procurement / Approvals - Envelope	250	250	16-Apr-24	14-Apr-25
A1740	Project Shop Drawings and Approvals - Envelope	110	110	29-Jul-24	06-Jan-25
A1750	Material Lead Time & Fabrication - Envelope	240	240	07-Jan-25	19-Dec-25
ERP DD - Design Assist - Mass Timber					
A8350	ERP DD - Mass Timber - Scope Sheets Distributed to Subcontractor	20	0	11-Dec-23 A	09-Jan-24 A
A8360	ERP DD - Mass Timber - Bids Due from Subcontractor	27	25	10-Jan-24 A	16-Feb-24
A8370	ERP DD - Mass Timber - Scope Reviews	11	11	20-Feb-24	05-Mar-24
A8380	ERP DD - Mass Timber - Award Letter Distributed	5	5	06-Mar-24	12-Mar-24
A1620	Mass Timber Design Integration	229	229	13-Mar-24	10-Feb-25
A1420	Prepare & Submit - Mass Timber	20	20	11-Feb-25	11-Mar-25
A1430	Review & Approve - Mass Timber	25	25	12-Mar-25	15-Apr-25
A1440	Fab & Deliver - Mass Timber	100	100	16-Apr-25	08-Sep-25
ERP DD - Sitework					
A00705	ERP DD - Sitework - Scope Sheets Distributed to Subcontractor	10	10	01-Apr-24	12-Apr-24
A00715	ERP DD - Sitework - Bids Due from Subcontractor	13	13	16-Apr-24	02-May-24
A00725	ERP DD - Sitework - Scope Reviews	11	11	03-May-24	17-May-24
A00625	ERP DD - Sitework - Award Letter Distributed	5	5	20-May-24	24-May-24
A00645	ERP DD - Sitework - Submit & Approve	60	60	28-May-24	20-Aug-24
A00653	ERP DD - Sitework - Moblization	10	10	02-Jul-24	16-Jul-24
A00623	ERP DD - Sitework - Procurement	60	60	21-Aug-24	15-Nov-24
ERP DD - SOE					
A8390	ERP DD - SOE - Scope Sheets Distributed to Subcontractor	10	10	01-Apr-24	12-Apr-24
A8400	ERP DD - SOE - Bids Due from Subcontractor	13	13	16-Apr-24	02-May-24
A8410	ERP DD - SOE - Scope Reviews	11	11	03-May-24	17-May-24
A8420	ERP DD - SOE - Award Letter Distributed	5	5	20-May-24	24-May-24
A00655	ERP DD - SOE - Sheet Submittal & Sheeting Size Release	10	10	28-May-24	10-Jun-24
A00685	ERP DD - SOE - Engineering Package	15	15	28-May-24	17-Jun-24
A00665	ERP DD - SOE - Procure Sheets	60	60	11-Jun-24	04-Sep-24
A00695	ERP DD - SOE - Review & Approve	15	15	18-Jun-24	09-Jul-24
ERP DD - Deep Foundations					
A8430	ERP DD - Deep Foundations - Scope Sheets Distributed to Subcontractor	19	2	18-Dec-23 A	16-Jan-24
A8440	ERP DD - Deep Foundations - Bids Due from Subcontractor	23	23	17-Jan-24	16-Feb-24
A8450	ERP DD - Deep Foundations - Scope Reviews	10	10	20-Feb-24	04-Mar-24
A8460	ERP DD - Deep Foundations - Award Letter Distributed	5	5	05-Mar-24	11-Mar-24
A00628	ERP DD - Deep Foundations - Design-Assist	50	50	12-Mar-24	21-May-24
A00629	ERP DD - Deep Foundations - Procurement & Mobilization	55	55	22-May-24	08-Aug-24
ERP DD - Mechanical					
A8510	ERP DD - Mechanical - Scope Sheets Distributed to Subcontractor	10	0	07-Dec-23 A	20-Dec-23 A
A8520	ERP DD - Mechanical - Bids Due from Subcontractor	17	3	21-Dec-23 A	17-Jan-24



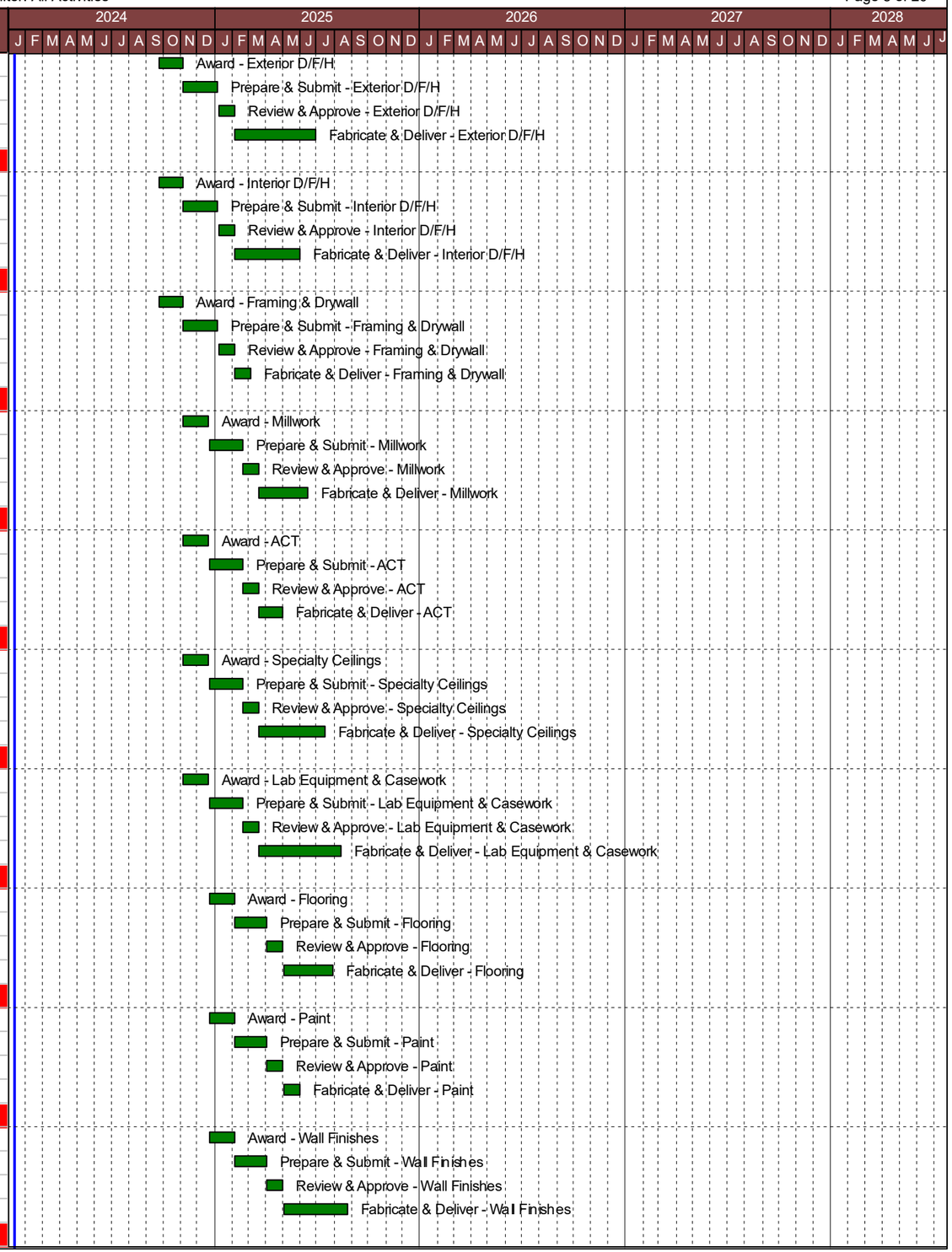
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A8530	ERP DD - Mechanical - Scope Reviews	5	5	18-Jan-24	24-Jan-24
A8940	ERP DD - Mechanical - Interviews	3	3	25-Jan-24	29-Jan-24
A8540	ERP DD - Mechanical - Award Letter Distributed	5	5	01-Feb-24	07-Feb-24
A00657	ERP DD - Mechanical - Early Coordination	80	80	08-Feb-24	03-Jun-24
A00661	ERP DD - Mechanical - Release Long-Lead Equipment	450	450	04-Jun-24	23-Mar-26
A00671	ERP DD - Mechanical - Basic Material Procurement	60	60	15-Oct-25	12-Jan-26
ERP DD - Sheet Metal					
A8970	ERP DD - Sheet Metal - Scope Sheets Distributed to Subcontractor	10	0	07-Dec-23 A	20-Dec-23 A
A8980	ERP DD - Sheet Metal - Bids Due from Subcontractor	17	3	21-Dec-23 A	17-Jan-24
A8990	ERP DD - Sheet Metal - Scope Reviews	20	20	18-Jan-24	14-Feb-24
A9010	ERP DD - Sheet Metal - Interviews	2	2	15-Feb-24	16-Feb-24
A8960	ERP DD - Sheet Metal - Award Letter Distributed	5	5	20-Feb-24	26-Feb-24
A8930	ERP DD - Sheet Metal - Early Coordination	80	80	27-Feb-24	19-Jun-24
A8950	ERP DD - Sheet Metal - Basic Material Procurement	60	60	15-Oct-25	12-Jan-26
ERP DD - Electrical					
A8830	ERP DD - Electrical - Scope Sheets Distributed to Subcontractor	10	0	07-Dec-23 A	20-Dec-23 A
A8840	ERP DD - Electrical - Bids Due from Subcontractor	17	3	21-Dec-23 A	17-Jan-24
A8850	ERP DD - Electrical - Scope Reviews	10	10	18-Jan-24	31-Jan-24
A9200	ERP DD - Electrical - Interviews	2	2	01-Feb-24	02-Feb-24
A8820	ERP DD - Electrical - Award Letter Distributed	5	5	05-Feb-24	09-Feb-24
A8790	ERP DD - Electrical - Early Coordination	80	80	12-Feb-24	05-Jun-24
A8800	ERP DD - Electrical - Release Long-Lead Equipment	550	550	06-Jun-24	17-Aug-26
A8810	ERP DD - Electrical - Basic Material Procurement	60	60	15-Oct-25	12-Jan-26
ERP DD - Plumbing					
A8900	ERP DD - Plumbing - Scope Sheets Distributed to Subcontractor	10	0	07-Dec-23 A	20-Dec-23 A
A8910	ERP DD - Plumbing - Bids Due from Subcontractor	17	3	21-Dec-23 A	17-Jan-24
A8920	ERP DD - Plumbing - Scope Reviews	5	5	18-Jan-24	24-Jan-24
A9210	ERP DD - Plumbing - Interviews	3	3	25-Jan-24	29-Jan-24
A8890	ERP DD - Plumbing - Award Letter Distributed	5	5	01-Feb-24	07-Feb-24
A8860	ERP DD - Plumbing - Early Coordination	80	80	08-Feb-24	03-Jun-24
A8880	ERP DD - Plumbing - Basic Material Procurement	60	60	15-Oct-25	12-Jan-26
ERP DD - Fire Protection					
A9040	ERP DD - Fire Protection - Scope Sheets Distributed to Subcontractor	10	0	07-Dec-23 A	20-Dec-23 A
A9050	ERP DD - Fire Protection - Bids Due from Subcontractor	17	3	21-Dec-23 A	17-Jan-24
A9060	ERP DD - Fire Protection - Scope Reviews	24	24	18-Jan-24	21-Feb-24
A9220	ERP DD - Fire Protection - Interviews	2	2	22-Feb-24	23-Feb-24
A9030	ERP DD - Fire Protection - Award Letter Distributed	5	5	26-Feb-24	01-Mar-24
A9000	ERP DD - Fire Protection - Early Coordination	80	80	04-Mar-24	25-Jun-24
A9020	ERP DD - Fire Protection - Basic Material Procurement	60	60	15-Oct-25	12-Jan-26
ERP DD - Geothermal					
A8470	ERP DD - Geothermal - Scope Sheets Distributed to Subcontractor	10	10	01-Apr-24	12-Apr-24
A8480	ERP DD - Geothermal - Bids Due from Subcontractor	13	13	16-Apr-24	02-May-24
A8490	ERP DD - Geothermal - Scope Reviews	11	11	03-May-24	17-May-24
A8500	ERP DD - Geothermal - Award Letter Distributed	5	5	20-May-24	24-May-24
A1800	ERP DD - Geothermal - Shop Drawings & Approvals	22	22	28-May-24	26-Jun-24
A1810	ERP DD - Geothermal - Fabrication & Delivery (Assumes 1 1/4" U-tubes & sched. 80 casing)	53	53	27-Jun-24	11-Sep-24
ERP 50% CD - Structural Steel					
A8550	ERP 50% CD - Structural Steel - Scope Sheets Distributed to Subcontractor	10	10	23-May-24	06-Jun-24
A8560	ERP 50% CD - Structural Steel - Bids Due from Subcontractor	13	13	07-Jun-24	25-Jun-24
A8570	ERP 50% CD - Structural Steel - Scope Reviews	11	11	26-Jun-24	11-Jul-24



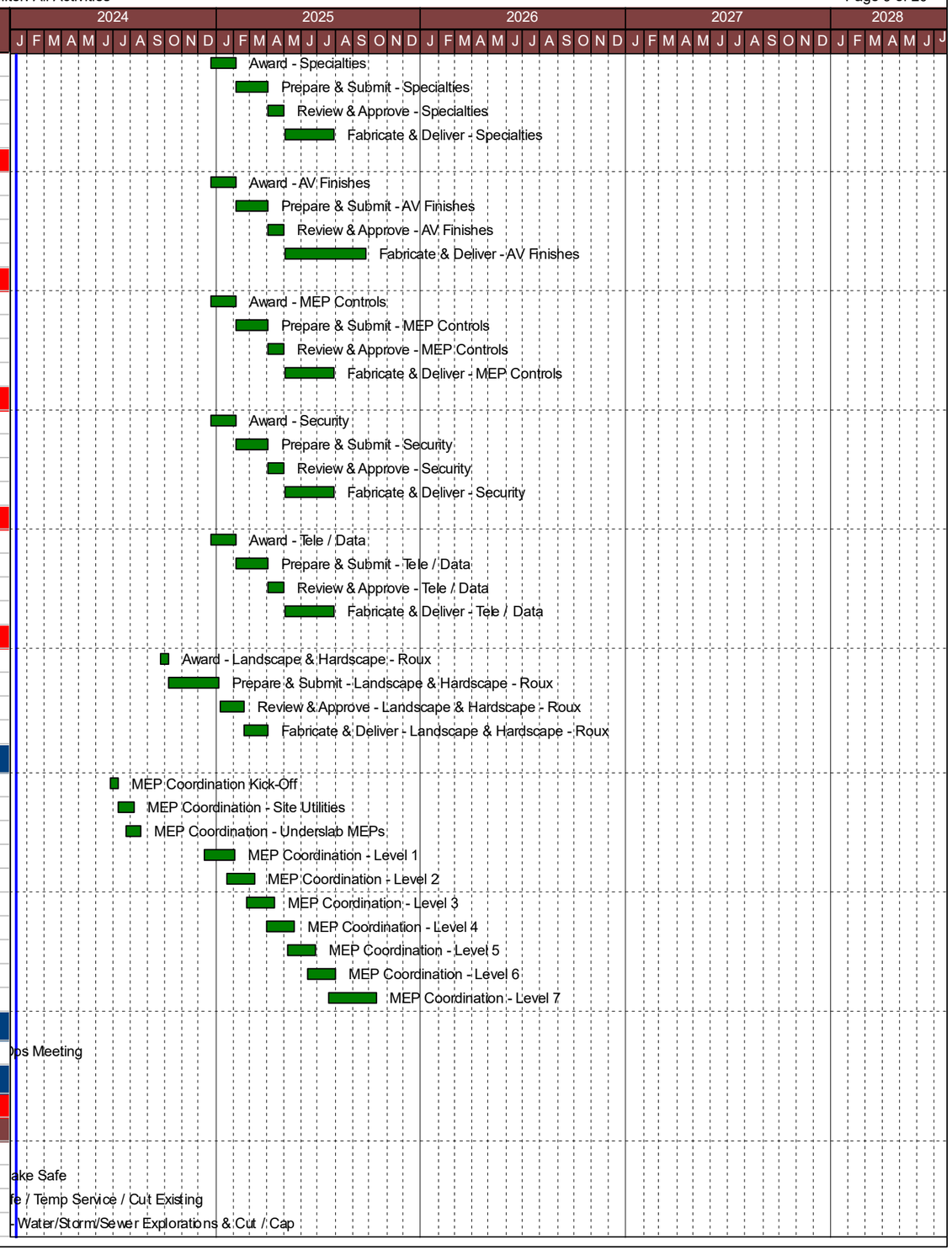
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A8580	ERP 50% CD - Structural Steel - Award Letter Distributed	5	5	12-Jul-24	18-Jul-24
A00630	ERP 50% CD - Structural Steel - Structural BIM & Shops and Approvals	120	120	19-Jul-24	10-Jan-25
A00654	ERP 50% CD - Structural Steel - Fabrication & Delivery	120	120	27-Nov-24	21-May-25
ERP 50% CD - Concrete Cores					
A8590	ERP 50% CD - Concrete Cores - Scope Sheets Distributed to Subcontractor	10	10	09-May-24	22-May-24
A8600	ERP 50% CD - Concrete Cores - Bids Due from Subcontractor	13	13	23-May-24	11-Jun-24
A8610	ERP 50% CD - Concrete Cores - Scope Reviews	11	11	12-Jun-24	26-Jun-24
A8620	ERP 50% CD - Concrete Cores - Award Letter Distributed	5	5	27-Jun-24	03-Jul-24
A1770	ERP 50% CD - Concrete Cores - Shop Drawings, Procurement & Mobilization	60	60	05-Jul-24	27-Sep-24
ERP 50% CD - Concrete Foundations					
A8630	ERP 50% CD - Concrete Foundations - Scope Sheets Distributed to Subcontractor	10	10	09-May-24	22-May-24
A8640	ERP 50% CD - Concrete Foundations - Bids Due from Subcontractor	13	13	23-May-24	11-Jun-24
A8650	ERP 50% CD - Concrete Foundations - Scope Reviews	11	11	12-Jun-24	26-Jun-24
A8660	ERP 50% CD - Concrete Foundations - Award Letter Distributed	5	5	27-Jun-24	03-Jul-24
A00662	ERP 50% CD - Concrete Foundations - Shop Drawings, Procurement & Mobilization	60	60	05-Jul-24	27-Sep-24
ERP 50% CD - Elevators					
A8670	ERP 50% CD - Elevators - Scope Sheets Distributed to Subcontractor	10	10	09-May-24	22-May-24
A8680	ERP 50% CD - Elevators - Bids Due from Subcontractor	13	13	23-May-24	11-Jun-24
A8690	ERP 50% CD - Elevators - Scope Reviews	11	11	12-Jun-24	26-Jun-24
A8700	ERP 50% CD - Elevators - Award Letter Distributed	5	5	27-Jun-24	03-Jul-24
A00676	ERP 50% CD - Elevators - Shop Drawings, Procurement & Mobilization	60	60	05-Jul-24	27-Sep-24
ERP 50% CD - Below-Grade Waterproofing & Insulation					
A8710	ERP 50% CD - Below-Grade Waterproofing & Insulation - Scope Sheets Distributed to Subcont	10	10	16-May-24	30-May-24
A8720	ERP 50% CD - Below-Grade Waterproofing & Insulation - Bids Due from Subcontractor	13	13	31-May-24	18-Jun-24
A8730	ERP 50% CD - Below-Grade Waterproofing & Insulation - Scope Reviews	11	11	19-Jun-24	03-Jul-24
A8740	ERP 50% CD - Below-Grade Waterproofing & Insulation - Award Letter Distributed	5	5	05-Jul-24	11-Jul-24
A3180	ERP 50% CD - Below-Grade Waterproofing & Insulation - Submittals & Approvals	40	40	12-Jul-24	06-Sep-24
A3190	ERP 50% CD - Below-Grade Waterproofing & Insulation - Procurement & Deliver	40	40	09-Sep-24	04-Nov-24
ERP 50% CD - Miscelaneous Metals & Egress Stairs					
A8750	ERP 50% CD - Miscelaneous Metals & Egress Stairs - Scope Sheets Distributed to Subcontrac	10	10	16-May-24	30-May-24
A8760	ERP 50% CD - Miscelaneous Metals & Egress Stairs - Bids Due from Subcontractor	13	13	31-May-24	18-Jun-24
A8770	ERP 50% CD - Miscelaneous Metals & Egress Stairs - Scope Reviews	11	11	19-Jun-24	03-Jul-24
A8780	ERP 50% CD - Miscelaneous Metals & Egress Stairs - Award Letter Distributed	5	5	05-Jul-24	11-Jul-24
A3210	ERP 50% CD - Miscellaneous Metals & Egress Stairs - Submittals, Shops & Approvals	60	60	12-Jul-24	04-Oct-24
A3220	ERP 50% CD - Miscellaneous Metals & Egress Stairs - Fabricate & Deliver	80	80	07-Oct-24	03-Feb-25
GMP - 100% CDs (placeholder for discussion)					
A00678	Prepare, Review & Approve GMP	40	40	30-Jul-24	24-Sep-24
GMP Procurement					
Roofing					
A3120	Award - Roofing	30	30	25-Sep-24	06-Nov-24
A2970	Prepare & Submit - Roofing	40	40	07-Nov-24	07-Jan-25
A2980	Review & Approve - Roofing	20	20	08-Jan-25	05-Feb-25
A2990	Fabricate & Deliver - Roofing	80	80	06-Feb-25	02-Jun-25
Photovoltaics					
A3160	Award - Photovoltaics	30	30	25-Sep-24	06-Nov-24
A3090	Prepare & Submit - Photovoltaics	40	40	07-Nov-24	07-Jan-25
A3100	Review & Approve - Photovoltaics	20	20	08-Jan-25	05-Feb-25
A3110	Fabricate & Deliver - Photovoltaics	260	260	06-Feb-25	20-Feb-26
Exterior D/F/H					



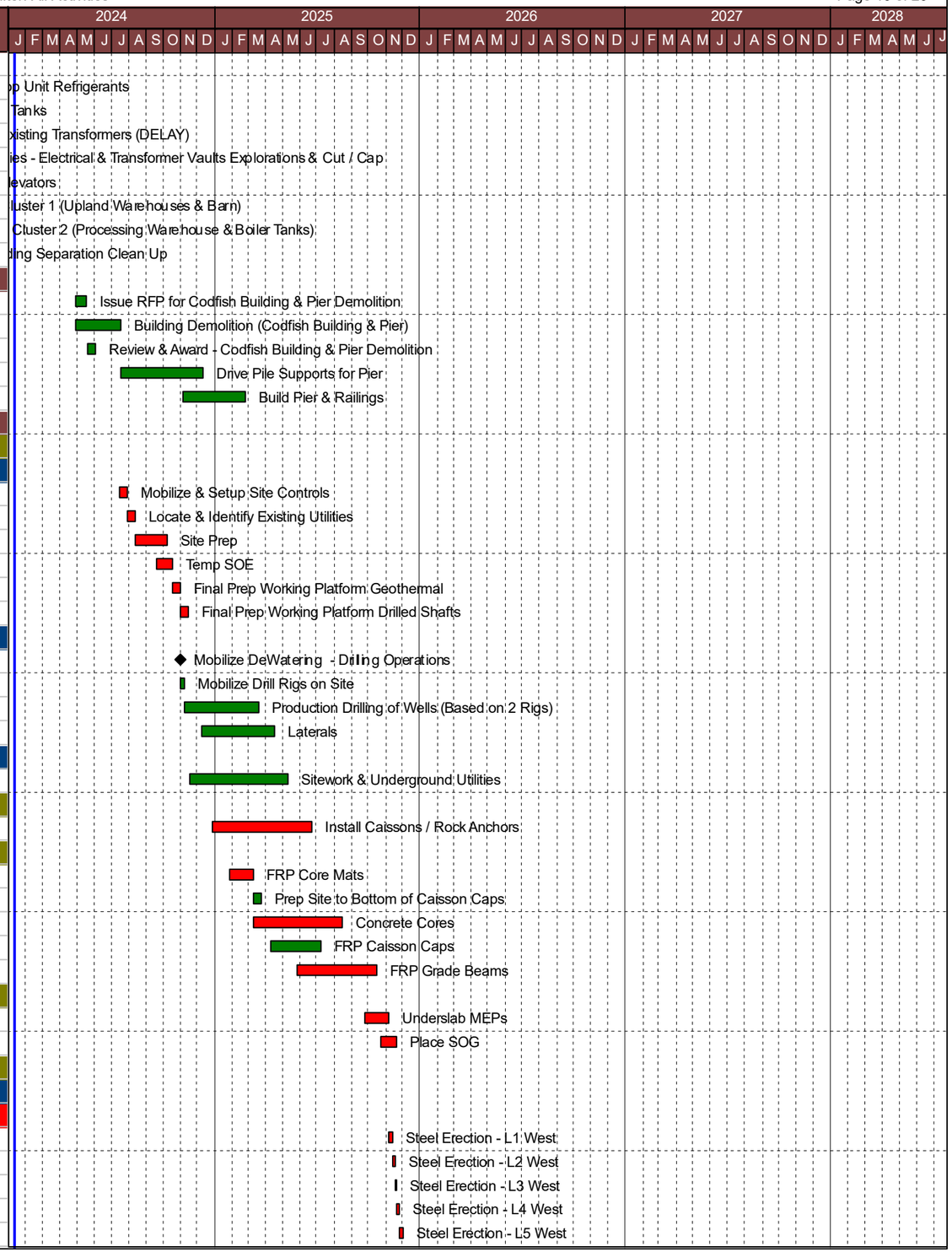
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A2390	Award - Exterior D/F/H	30	30	25-Sep-24	06-Nov-24
A2400	Prepare & Submit - Exterior D/F/H	40	40	07-Nov-24	07-Jan-25
A2410	Review & Approve - Exterior D/F/H	20	20	08-Jan-25	05-Feb-25
A2420	Fabricate & Deliver - Exterior D/F/H	100	100	06-Feb-25	30-Jun-25
Interior D/F/H					
A2430	Award - Interior D/F/H	30	30	25-Sep-24	06-Nov-24
A2440	Prepare & Submit - Interior D/F/H	40	40	07-Nov-24	07-Jan-25
A2450	Review & Approve - Interior D/F/H	20	20	08-Jan-25	05-Feb-25
A2460	Fabricate & Deliver - Interior D/F/H	80	80	06-Feb-25	02-Jun-25
Framing & Drywall					
A2470	Award - Framing & Drywall	30	30	25-Sep-24	06-Nov-24
A2480	Prepare & Submit - Framing & Drywall	40	40	07-Nov-24	07-Jan-25
A2490	Review & Approve - Framing & Drywall	20	20	08-Jan-25	05-Feb-25
A2500	Fabricate & Deliver - Framing & Drywall	20	20	06-Feb-25	06-Mar-25
Millwork					
A2510	Award - Millwork	30	30	07-Nov-24	20-Dec-24
A2520	Prepare & Submit - Millwork	40	40	23-Dec-24	20-Feb-25
A2530	Review & Approve - Millwork	20	20	21-Feb-25	20-Mar-25
A2540	Fabricate & Deliver - Millwork	60	60	21-Mar-25	16-Jun-25
ACT					
A3130	Award - ACT	30	30	07-Nov-24	20-Dec-24
A3000	Prepare & Submit - ACT	40	40	23-Dec-24	20-Feb-25
A3010	Review & Approve - ACT	20	20	21-Feb-25	20-Mar-25
A3020	Fabricate & Deliver - ACT	30	30	21-Mar-25	02-May-25
Specialty Ceilings					
A3140	Award - Specialty Ceilings	30	30	07-Nov-24	20-Dec-24
A3030	Prepare & Submit - Specialty Ceilings	40	40	23-Dec-24	20-Feb-25
A3040	Review & Approve - Specialty Ceilings	20	20	21-Feb-25	20-Mar-25
A3050	Fabricate & Deliver - Specialty Ceilings	80	80	21-Mar-25	15-Jul-25
Lab Equipment & Casework					
A3150	Award - Lab Equipment & Casework	30	30	07-Nov-24	20-Dec-24
A3060	Prepare & Submit - Lab Equipment & Casework	40	40	23-Dec-24	20-Feb-25
A3070	Review & Approve - Lab Equipment & Casework	20	20	21-Feb-25	20-Mar-25
A3080	Fabricate & Deliver - Lab Equipment & Casework	100	100	21-Mar-25	12-Aug-25
Flooring					
A2550	Award - Flooring	30	30	23-Dec-24	05-Feb-25
A2560	Prepare & Submit - Flooring	40	40	06-Feb-25	03-Apr-25
A2570	Review & Approve - Flooring	20	20	04-Apr-25	02-May-25
A2580	Fabricate & Deliver - Flooring	60	60	05-May-25	29-Jul-25
Paint					
A2590	Award - Paint	30	30	23-Dec-24	05-Feb-25
A2600	Prepare & Submit - Paint	40	40	06-Feb-25	03-Apr-25
A2610	Review & Approve - Paint	20	20	04-Apr-25	02-May-25
A2620	Fabricate & Deliver - Paint	20	20	05-May-25	02-Jun-25
Wall Finishes					
A2630	Award - Wall Finishes	30	30	23-Dec-24	05-Feb-25
A2640	Prepare & Submit - Wall Finishes	40	40	06-Feb-25	03-Apr-25
A2650	Review & Approve - Wall Finishes	20	20	04-Apr-25	02-May-25
A2660	Fabricate & Deliver - Wall Finishes	80	80	05-May-25	26-Aug-25
Specialties					



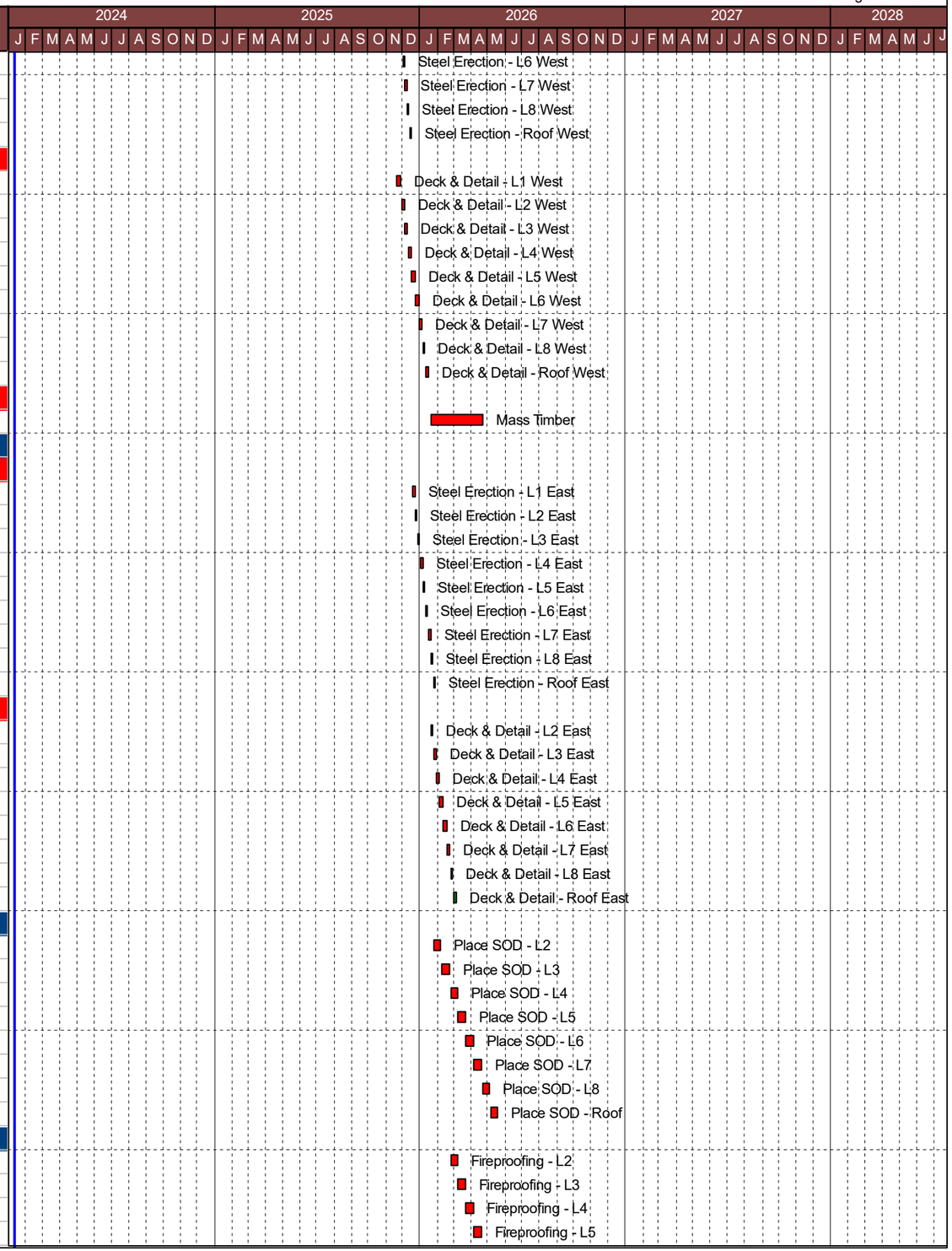
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A2670	Award - Specialties	30	30	23-Dec-24	05-Feb-25
A2680	Prepare & Submit - Specialties	40	40	06-Feb-25	03-Apr-25
A2690	Review & Approve - Specialties	20	20	04-Apr-25	02-May-25
A2700	Fabricate & Deliver - Specialties	60	60	05-May-25	29-Jul-25
AV Finishes					
A2710	Award - AV Finishes	30	30	23-Dec-24	05-Feb-25
A2720	Prepare & Submit - AV Finishes	40	40	06-Feb-25	03-Apr-25
A2730	Review & Approve - AV Finishes	20	20	04-Apr-25	02-May-25
A2740	Fabricate & Deliver - AV Finishes	100	100	05-May-25	24-Sep-25
MEP Controls					
A9080	Award - MEP Controls	30	30	23-Dec-24	05-Feb-25
A9090	Prepare & Submit - MEP Controls	40	40	06-Feb-25	03-Apr-25
A9100	Review & Approve - MEP Controls	20	20	04-Apr-25	02-May-25
A9110	Fabricate & Deliver - MEP Controls	60	60	05-May-25	29-Jul-25
Security					
A9120	Award - Security	30	30	23-Dec-24	05-Feb-25
A9130	Prepare & Submit - Security	40	40	06-Feb-25	03-Apr-25
A9140	Review & Approve - Security	20	20	04-Apr-25	02-May-25
A9150	Fabricate & Deliver - Security	60	60	05-May-25	29-Jul-25
Tele / Data					
A9160	Award - Tele / Data	30	30	23-Dec-24	05-Feb-25
A9170	Prepare & Submit - Tele / Data	40	40	06-Feb-25	03-Apr-25
A9180	Review & Approve - Tele / Data	20	20	04-Apr-25	02-May-25
A9190	Fabricate & Deliver - Tele / Data	60	60	05-May-25	29-Jul-25
Landscape & Hardscape					
A1860	Award - Landscape & Hardscape - Roux	10	10	25-Sep-24	08-Oct-24
A1870	Prepare & Submit - Landscape & Hardscape - Roux	60	60	09-Oct-24	07-Jan-25
A1880	Review & Approve - Landscape & Hardscape - Roux	30	30	08-Jan-25	20-Feb-25
A1890	Fabricate & Deliver - Landscape & Hardscape - Roux	30	30	21-Feb-25	03-Apr-25
MEP Coordination					
A2870	MEP Coordination Kick-Off	10	10	26-Jun-24	10-Jul-24
A2750	MEP Coordination - Site Utilities	20	20	11-Jul-24	07-Aug-24
A2760	MEP Coordination - Underslab MEPs	20	20	25-Jul-24	21-Aug-24
A2770	MEP Coordination - Level 1	35	35	12-Dec-24	03-Feb-25
A2780	MEP Coordination - Level 2	35	35	21-Jan-25	11-Mar-25
A2790	MEP Coordination - Level 3	35	35	26-Feb-25	15-Apr-25
A2800	MEP Coordination - Level 4	35	35	02-Apr-25	21-May-25
A2810	MEP Coordination - Level 5	35	35	08-May-25	26-Jun-25
A2820	MEP Coordination - Level 6	35	35	13-Jun-25	01-Aug-25
A2830	MEP Coordination - Level 7	60	60	21-Jul-25	14-Oct-25
Pre-Ops Meetings					
A1000	Demo & Abatement - Pre-Ops Meeting	0	0		15-Feb-23 A
Construction					
Roux Institute Building & Site					
Demo & Abatement					
A00619	Abatement	40	0	01-Mar-23 A	07-Apr-23 A
A00531	Plumbing Cut / Cap / Make Safe	15	0	06-Mar-23 A	23-Mar-23 A
A00521	Electrical Make Safe / Temp Service / Cut Existing	55	0	06-Mar-23 A	19-May-23 A
A00541	Underground Utilities - Water/Storm/Sewer Explorations & Cut / Cap	15	0	22-Mar-23 A	14-Apr-23 A



Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A00561	Boiler Demo	5	0	10-Apr-23 A	26-Apr-23 A
A00581	Decommission Rooftop Unit Refrigerants	2	0	13-Apr-23 A	14-Apr-23 A
A00591	Decommission Fuel Tanks	3	0	01-May-23 A	03-May-23 A
A00681	CMP Disconnect Existing Transformers (DELAY)	1	0	15-May-23 A	15-May-23 A
A00551	Underground Utilities - Electrical & Transformer Vaults Explorations & Cut / Cap	2	0	16-May-23 A	23-May-23 A
A00571	Decommission Elevators	3	0	05-Jun-23 A	05-Jun-23 A
A00601	Demolition - Cluster 1 (Upland Warehouses & Barn)	24	0	05-Jun-23 A	07-Jul-23 A
A00611	Demolition - Cluster 2 (Processing Warehouse & Boiler Tanks)	15	0	10-Jul-23 A	28-Jul-23 A
A00641	Bean Building Separation Clean Up	15	0	31-Jul-23 A	18-Aug-23 A
Pier & Codfish					
A00608	Issue RFP for Codfish Building & Pier Demolition	15	15	29-Apr-24	17-May-24
A00598	Building Demolition (Codfish Building & Pier)	57	57	29-Apr-24	18-Jul-24
A00748	Review & Award - Codfish Building & Pier Demolition	10	10	20-May-24	03-Jun-24
A00758	Drive Pile Supports for Pier	100	100	19-Jul-24	11-Dec-24
A00768	Build Pier & Railings	75	75	05-Nov-24	25-Feb-25
New Building Construction					
Enabling & Sitework					
Mobilization / Site Setup					
A2890	Mobilize & Setup Site Controls	10	10	17-Jul-24	30-Jul-24
A2900	Locate & Identify Existing Utilities	10	10	31-Jul-24	13-Aug-24
A2930	Site Prep	40	40	14-Aug-24	09-Oct-24
A2910	Temp SOE	20	20	19-Sep-24	17-Oct-24
A2920	Final Prep Working Platform Geothermal	10	10	18-Oct-24	31-Oct-24
A2940	Final Prep Working Platform Drilled Shafts	10	10	01-Nov-24	15-Nov-24
Geothermal					
A6370	Mobilize DeWatering - Drilling Operations	0	0	01-Nov-24	
A6380	Mobilize Drill Rigs on Site	5	5	01-Nov-24	07-Nov-24
A6390	Production Drilling of Wells (Based on 2 Rigs)	90	90	08-Nov-24	21-Mar-25
A6400	Laterals	90	90	10-Dec-24	18-Apr-25
Utilities					
A00651	Sitework & Underground Utilities	120	120	18-Nov-24	12-May-25
Deep Foundations					
A00648	Install Caissons / Rock Anchors	122	122	27-Dec-24	23-Jun-25
Foundations					
A00718	FRP Core Mats	30	30	28-Jan-25	11-Mar-25
A00698	Prep Site to Bottom of Caisson Caps	10	10	12-Mar-25	25-Mar-25
A00708	Concrete Cores	110	110	12-Mar-25	15-Aug-25
A00658	FRP Caisson Caps	60	60	11-Apr-25	08-Jul-25
A00688	FRP Grade Beams	100	100	27-May-25	16-Oct-25
SOG & Underslab MEPs					
A2950	Underslab MEPs	30	30	25-Sep-25	06-Nov-25
A2960	Place SOG	20	20	24-Oct-25	21-Nov-25
Superstructure					
West					
Steel Erection					
A6410	Steel Erection - L1 West	3	3	07-Nov-25	12-Nov-25
A6420	Steel Erection - L2 West	3	3	13-Nov-25	17-Nov-25
A6430	Steel Erection - L3 West	3	3	18-Nov-25	20-Nov-25
A6440	Steel Erection - L4 West	3	3	21-Nov-25	25-Nov-25
A6450	Steel Erection - L5 West	3	3	26-Nov-25	01-Dec-25



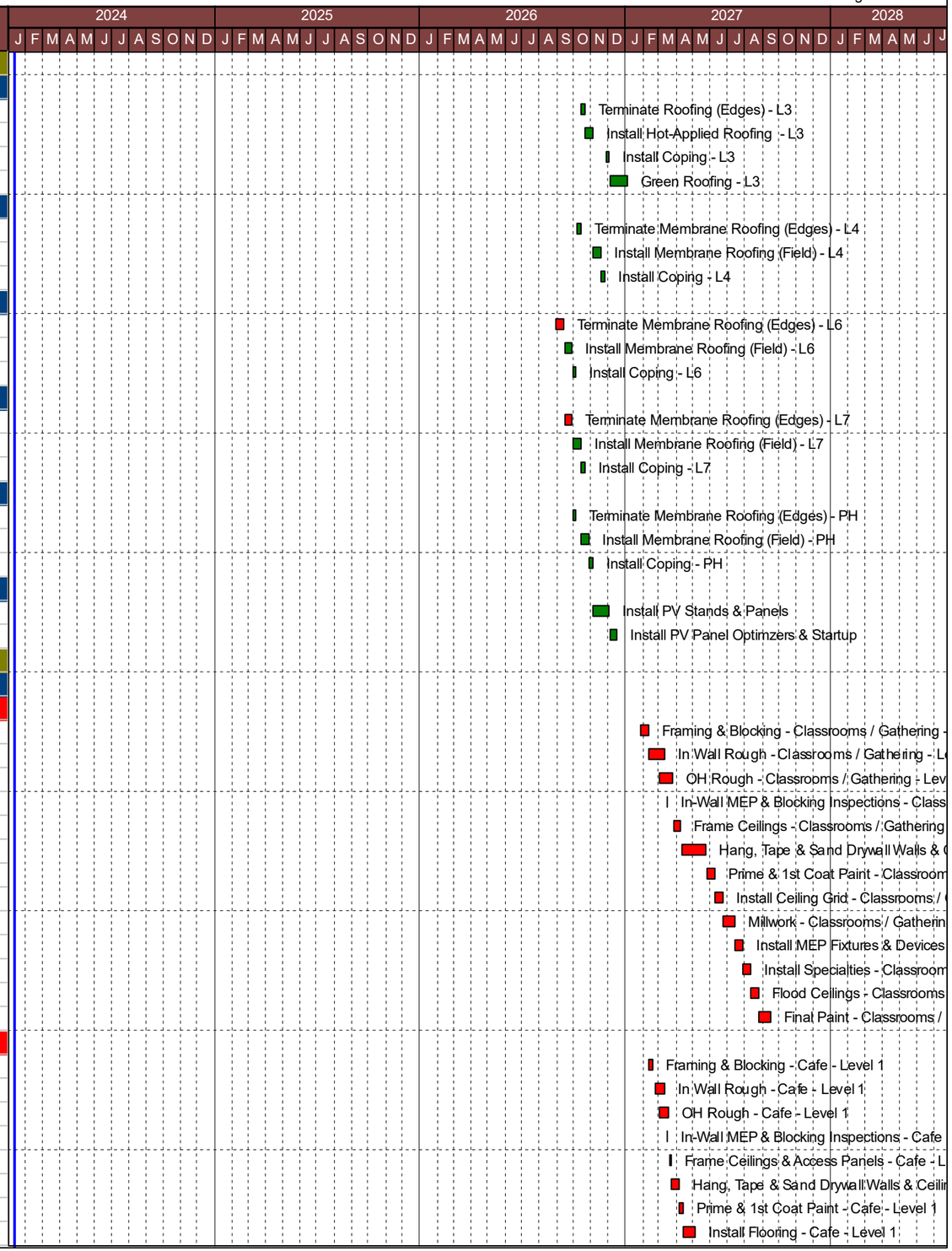
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A6460	Steel Erection - L6 West	3	3	02-Dec-25	04-Dec-25
A6470	Steel Erection - L7 West	3	3	05-Dec-25	09-Dec-25
A6480	Steel Erection - L8 West	3	3	10-Dec-25	12-Dec-25
A6490	Steel Erection - Roof West	3	3	15-Dec-25	17-Dec-25
Steel Deck & Detail					
A6500	Deck & Detail - L1 West	5	5	21-Nov-25	28-Nov-25
A6510	Deck & Detail - L2 West	4	4	01-Dec-25	04-Dec-25
A6520	Deck & Detail - L3 West	4	4	05-Dec-25	10-Dec-25
A6530	Deck & Detail - L4 West	4	4	11-Dec-25	16-Dec-25
A6540	Deck & Detail - L5 West	4	4	17-Dec-25	22-Dec-25
A6550	Deck & Detail - L6 West	4	4	23-Dec-25	29-Dec-25
A6560	Deck & Detail - L7 West	4	4	30-Dec-25	05-Jan-26
A6570	Deck & Detail - L8 West	4	4	06-Jan-26	09-Jan-26
A6580	Deck & Detail - Roof West	5	5	12-Jan-26	16-Jan-26
Mass Timber					
A3320	Mass Timber	65	65	20-Jan-26	22-Apr-26
East					
Steel Erection					
A6780	Steel Erection - L1 East	3	3	18-Dec-25	22-Dec-25
A6790	Steel Erection - L2 East	3	3	23-Dec-25	26-Dec-25
A6800	Steel Erection - L3 East	3	3	29-Dec-25	31-Dec-25
A6810	Steel Erection - L4 East	3	3	02-Jan-26	06-Jan-26
A6820	Steel Erection - L5 East	3	3	07-Jan-26	09-Jan-26
A6830	Steel Erection - L6 East	3	3	12-Jan-26	14-Jan-26
A6840	Steel Erection - L7 East	3	3	15-Jan-26	20-Jan-26
A6850	Steel Erection - L8 East	3	3	21-Jan-26	23-Jan-26
A6860	Steel Erection - Roof East	3	3	26-Jan-26	28-Jan-26
Steel Deck & Detail					
A6880	Deck & Detail - L2 East	4	4	20-Jan-26	23-Jan-26
A6890	Deck & Detail - L3 East	4	4	26-Jan-26	29-Jan-26
A6900	Deck & Detail - L4 East	4	4	30-Jan-26	04-Feb-26
A6910	Deck & Detail - L5 East	4	4	05-Feb-26	10-Feb-26
A6920	Deck & Detail - L6 East	4	4	11-Feb-26	17-Feb-26
A6930	Deck & Detail - L7 East	4	4	18-Feb-26	23-Feb-26
A6940	Deck & Detail - L8 East	4	4	24-Feb-26	27-Feb-26
A6950	Deck & Detail - Roof East	5	5	02-Mar-26	06-Mar-26
Slabs on Deck					
A6970	Place SOD - L2	10	10	26-Jan-26	06-Feb-26
A6980	Place SOD - L3	10	10	09-Feb-26	23-Feb-26
A6990	Place SOD - L4	10	10	24-Feb-26	09-Mar-26
A7000	Place SOD - L5	10	10	10-Mar-26	23-Mar-26
A7010	Place SOD - L6	10	10	24-Mar-26	06-Apr-26
A7020	Place SOD - L7	10	10	07-Apr-26	21-Apr-26
A7030	Place SOD - L8	10	10	22-Apr-26	05-May-26
A7040	Place SOD - Roof	10	10	06-May-26	19-May-26
Fireproofing					
A7060	Fireproofing - L2	10	10	24-Feb-26	09-Mar-26
A7070	Fireproofing - L3	10	10	10-Mar-26	23-Mar-26
A7080	Fireproofing - L4	10	10	24-Mar-26	06-Apr-26
A7090	Fireproofing - L5	10	10	07-Apr-26	21-Apr-26



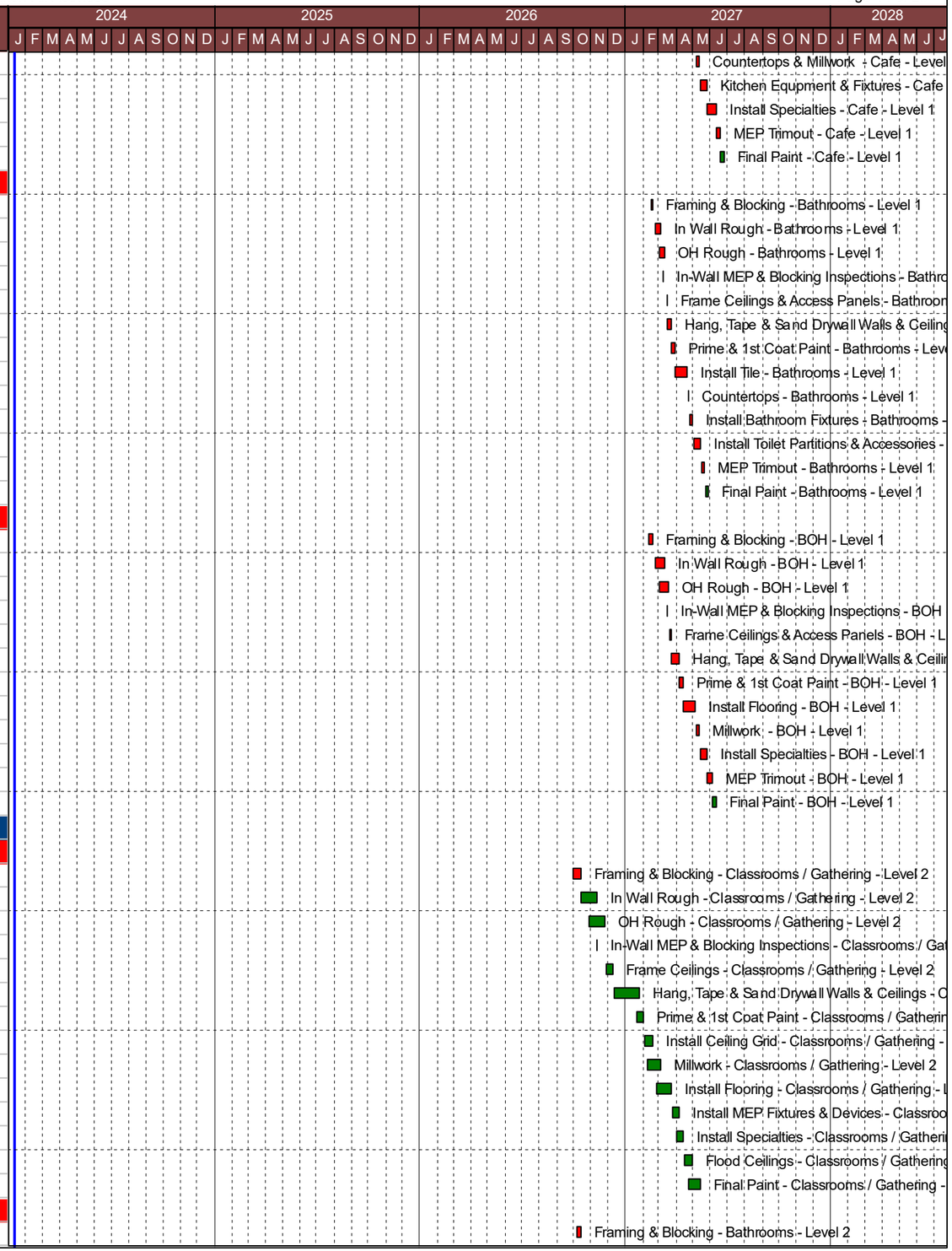
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A7100	Fireproofing - L6	10	10	22-Apr-26	05-May-26
A7110	Fireproofing - L7	10	10	06-May-26	19-May-26
A7120	Fireproofing - L8	10	10	20-May-26	03-Jun-26
A7130	Fireproofing - Roof	10	10	04-Jun-26	17-Jun-26
Facade					
Level 1					
A7140	Layout & Install Embeds - L1	8	8	07-Jan-26	16-Jan-26
A7150	Set Halfen Anchors - L1	15	15	10-Jul-26	30-Jul-26
A7160	Install Unitized CW - L1	10	10	15-Sep-26	28-Sep-26
A7170	Install Cassette Toggle System - L1	20	20	29-Sep-26	27-Oct-26
Level 2					
A7180	Layout & Install Embeds - L2	8	8	20-Jan-26	29-Jan-26
A7190	Set Halfen Anchors - L2	15	15	09-Feb-26	02-Mar-26
A7200	Install Unitized CW - L2	10	10	23-Apr-26	06-May-26
A7210	Install Cassette Toggle System - L2	10	10	07-May-26	20-May-26
A7220	Perimter Firesafing - L2	5	5	21-May-26	28-May-26
Level 3					
A7230	Layout & Install Embeds - L3	8	8	30-Jan-26	10-Feb-26
A7240	Set Halfen Anchors - L3	15	15	03-Mar-26	23-Mar-26
A7250	Install Unitized CW - L3	20	20	07-May-26	04-Jun-26
A7260	Install Cassette Toggle System - L3	10	10	05-Jun-26	18-Jun-26
A7270	Perimter Firesafing - L3	5	5	19-Jun-26	25-Jun-26
Level 4					
A7280	Layout & Install Embeds - L4	8	8	11-Feb-26	23-Feb-26
A7290	Set Halfen Anchors - L4	15	15	24-Mar-26	13-Apr-26
A7300	Install Unitized CW - L4	20	20	05-Jun-26	02-Jul-26
A7310	Install Cassette Toggle System - L4	5	5	06-Jul-26	10-Jul-26
A7320	Perimter Firesafing - L4	5	5	13-Jul-26	17-Jul-26
Level 5					
A7330	Layout & Install Embeds - L5	8	8	24-Feb-26	05-Mar-26
A7340	Set Halfen Anchors - L5	15	15	14-Apr-26	05-May-26
A7350	Install Unitized CW - L5	20	20	06-Jul-26	31-Jul-26
A7360	Install Cassette Toggle System - L5	5	5	03-Aug-26	07-Aug-26
A7370	Perimter Firesafing - L5	5	5	10-Aug-26	14-Aug-26
Level 6					
A7380	Layout & Install Embeds - L6	8	8	06-Mar-26	17-Mar-26
A7390	Set Halfen Anchors - L6	15	15	06-May-26	27-May-26
A7400	Install Unitized CW - L6	10	10	03-Aug-26	14-Aug-26
A7410	Install Cassette Toggle System - L6	5	5	17-Aug-26	21-Aug-26
A7420	Perimter Firesafing - L6	5	5	24-Aug-26	28-Aug-26
Level 7					
A7430	Layout & Install Embeds - L7	8	8	18-Mar-26	27-Mar-26
A7440	Set Halfen Anchors - L7	15	15	28-May-26	17-Jun-26
A7450	Install Unitized CW - L7	10	10	17-Aug-26	28-Aug-26
A7460	Perimter Firesafing - L7	5	5	31-Aug-26	04-Sep-26
Penthouse					
A7470	Layout & Install weld plates - PH	8	8	30-Mar-26	08-Apr-26
A7480	Set Halfen Anchors - PH	15	15	18-Jun-26	09-Jul-26
A7490	Install Unitized CW - PH	10	10	31-Aug-26	14-Sep-26
A7500	Install Vertical Rainscreen System - PH	10	10	15-Sep-26	28-Sep-26



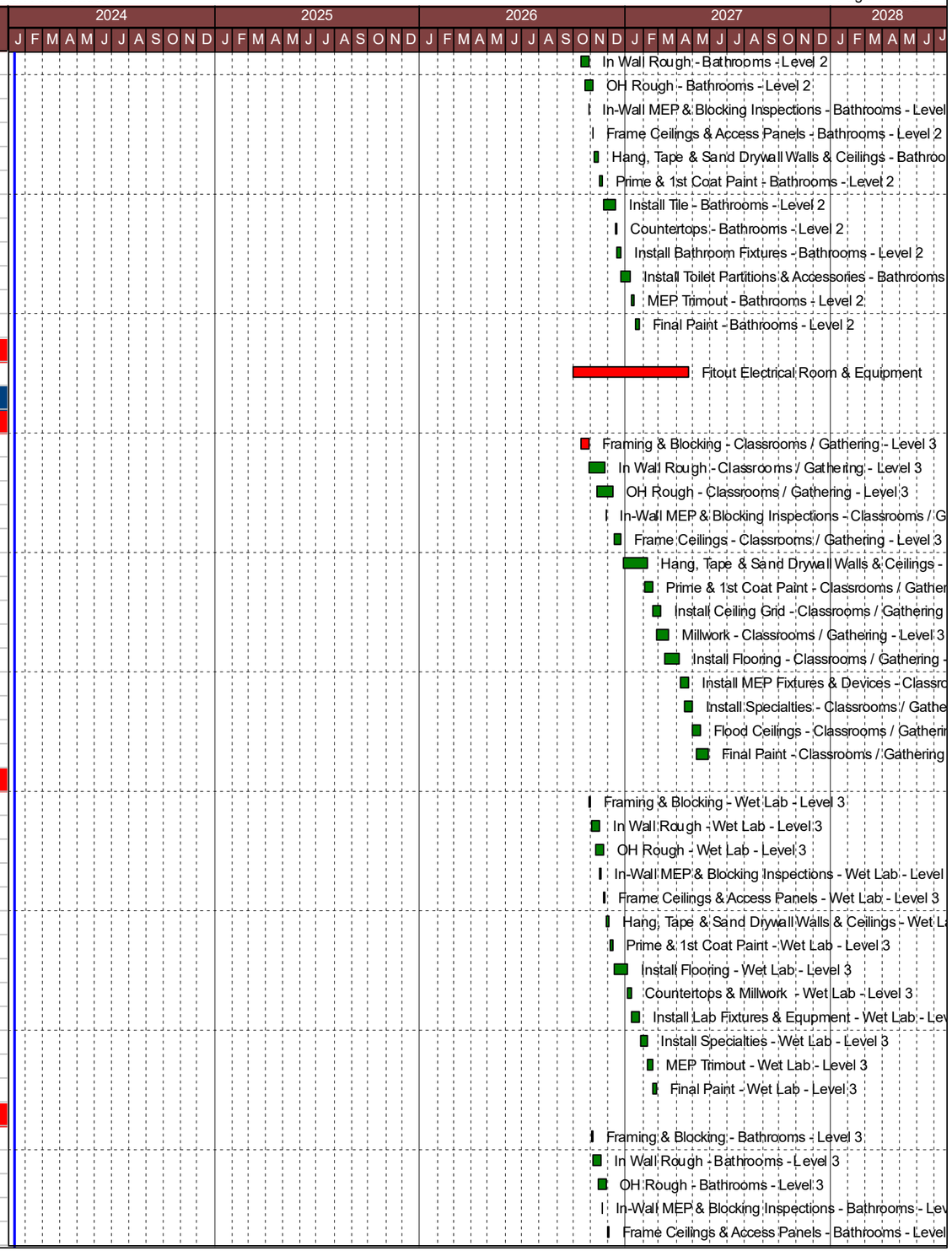
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
Roof					
Level 3					
A7520	Terminate Roofing (Edges) - L3	5	5	14-Oct-26	20-Oct-26
A7510	Install Hot-Applied Roofing - L3	10	10	21-Oct-26	03-Nov-26
A7530	Install Coping - L3	5	5	27-Nov-26	03-Dec-26
A7540	Green Roofing - L3	20	20	04-Dec-26	04-Jan-27
Level 4					
A7560	Terminate Membrane Roofing (Edges) - L4	5	5	06-Oct-26	13-Oct-26
A7550	Install Membrane Roofing (Field) - L4	10	10	04-Nov-26	18-Nov-26
A7570	Install Coping - L4	5	5	19-Nov-26	25-Nov-26
Level 6					
A7620	Terminate Membrane Roofing (Edges) - L6	10	10	31-Aug-26	14-Sep-26
A7610	Install Membrane Roofing (Field) - L6	10	10	15-Sep-26	28-Sep-26
A7630	Install Coping - L6	5	5	29-Sep-26	05-Oct-26
Level 7					
A7670	Terminate Membrane Roofing (Edges) - L7	10	10	15-Sep-26	28-Sep-26
A7660	Install Membrane Roofing (Field) - L7	10	10	29-Sep-26	13-Oct-26
A7680	Install Coping - L7	5	5	14-Oct-26	20-Oct-26
Penthouse					
A7720	Terminate Membrane Roofing (Edges) - PH	5	5	29-Sep-26	05-Oct-26
A7710	Install Membrane Roofing (Field) - PH	10	10	14-Oct-26	27-Oct-26
A7730	Install Coping - PH	5	5	28-Oct-26	03-Nov-26
PV					
A7740	Install PV Stands & Panels	20	20	04-Nov-26	03-Dec-26
A7750	Install PV Panel Optimzers & Startup	10	10	04-Dec-26	17-Dec-26
Interior Fitout					
Level 1					
Classrooms / Gathering					
A4540	Framing & Blocking - Classrooms / Gathering - Level 1	10	10	29-Jan-27	11-Feb-27
A4550	In Wall Rough - Classrooms / Gathering - Level 1	20	20	12-Feb-27	12-Mar-27
A4570	OH Rough - Classrooms / Gathering - Level 1	20	20	01-Mar-27	26-Mar-27
A4560	In-Wall MEP & Blocking Inspections - Classrooms / Gathering - Level 1	1	1	15-Mar-27	15-Mar-27
A4580	Frame Ceilings - Classrooms / Gathering - Level 1	10	10	29-Mar-27	09-Apr-27
A4590	Hang, Tape & Sand Drywall Walls & Ceilings - Classrooms / Gathering - Level 1	30	30	12-Apr-27	24-May-27
A4600	Prime & 1st Coat Paint - Classrooms / Gathering - Level 1	10	10	25-May-27	08-Jun-27
A4610	Install Ceiling Grid - Classrooms / Gathering - Level 1	10	10	09-Jun-27	22-Jun-27
A4620	Millwork - Classrooms / Gathering - Level 1	15	15	23-Jun-27	14-Jul-27
A4630	Install MEP Fixtures & Devices - Classrooms / Gathering - Level 1	10	10	15-Jul-27	28-Jul-27
A4640	Install Specialties - Classrooms / Gathering - Level 1	10	10	29-Jul-27	11-Aug-27
A4650	Flood Ceilings - Classrooms / Gathering - Level 1	10	10	12-Aug-27	25-Aug-27
A4660	Final Paint - Classrooms / Gathering - Level 1	15	15	26-Aug-27	16-Sep-27
Cafe					
A5950	Framing & Blocking - Cafe - Level 1	5	5	12-Feb-27	19-Feb-27
A5960	In Wall Rough - Cafe - Level 1	15	15	22-Feb-27	12-Mar-27
A5980	OH Rough - Cafe - Level 1	15	15	01-Mar-27	19-Mar-27
A5970	In-Wall MEP & Blocking Inspections - Cafe - Level 1	1	1	15-Mar-27	15-Mar-27
A5990	Frame Ceilings & Access Panels - Cafe - Level 1	2	2	22-Mar-27	23-Mar-27
A6000	Hang, Tape & Sand Drywall Walls & Ceilings - Cafe - Level 1	10	10	24-Mar-27	06-Apr-27
A6010	Prime & 1st Coat Paint - Cafe - Level 1	5	5	07-Apr-27	13-Apr-27
A6020	Install Flooring - Cafe - Level 1	15	15	14-Apr-27	05-May-27



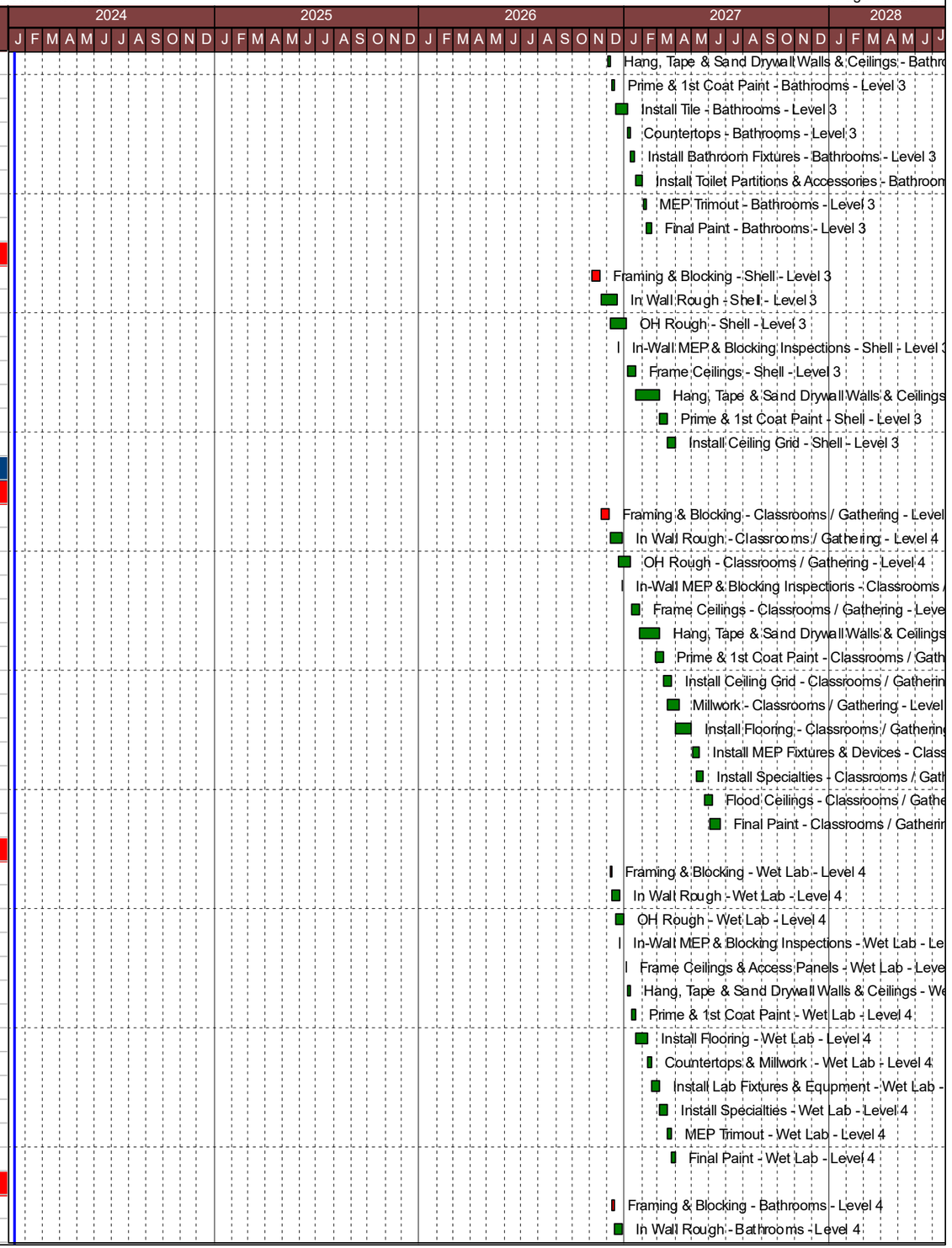
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A6030	Countertops & Millwork - Cafe - Level 1	5	5	06-May-27	12-May-27
A6040	Kitchen Equpment & Fixtures - Cafe - Level 1	10	10	13-May-27	26-May-27
A6050	Install Specialties - Cafe - Level 1	10	10	27-May-27	10-Jun-27
A6060	MEP Trimout - Cafe - Level 1	5	5	11-Jun-27	17-Jun-27
A6070	Final Paint - Cafe - Level 1	5	5	18-Jun-27	24-Jun-27
Bathrooms					
A3500	Framing & Blocking - Bathrooms - Level 1	3	3	17-Feb-27	19-Feb-27
A3510	In Wall Rough - Bathrooms - Level 1	10	10	22-Feb-27	05-Mar-27
A3520	OH Rough - Bathrooms - Level 1	10	10	01-Mar-27	12-Mar-27
A3650	In-Wall MEP & Blocking Inspections - Bathrooms - Level 1	1	1	08-Mar-27	08-Mar-27
A3640	Frame Ceilings & Access Panels - Bathrooms - Level 1	2	2	15-Mar-27	16-Mar-27
A3530	Hang, Tape & Sand Drywall Walls & Ceilings - Bathrooms - Level 1	5	5	17-Mar-27	23-Mar-27
A3550	Prime & 1st Coat Paint - Bathrooms - Level 1	5	5	24-Mar-27	30-Mar-27
A3560	Install Tile - Bathrooms - Level 1	15	15	31-Mar-27	21-Apr-27
A3880	Countertops - Bathrooms - Level 1	2	2	22-Apr-27	23-Apr-27
A3870	Install Bathroom Fixtures - Bathrooms - Level 1	5	5	26-Apr-27	30-Apr-27
A3570	Install Toilet Partitions & Accessories - Bathrooms - Level 1	10	10	03-May-27	14-May-27
A3580	MEP Trimout - Bathrooms - Level 1	5	5	17-May-27	21-May-27
A3590	Final Paint - Bathrooms - Level 1	5	5	24-May-27	28-May-27
Back of House					
A7760	Framing & Blocking - BOH - Level 1	5	5	12-Feb-27	19-Feb-27
A7770	In Wall Rough - BOH - Level 1	15	15	22-Feb-27	12-Mar-27
A7790	OH Rough - BOH - Level 1	15	15	01-Mar-27	19-Mar-27
A7780	In-Wall MEP & Blocking Inspections - BOH - Level 1	1	1	15-Mar-27	15-Mar-27
A7800	Frame Ceilings & Access Panels - BOH - Level 1	2	2	22-Mar-27	23-Mar-27
A7810	Hang, Tape & Sand Drywall Walls & Ceilings - BOH - Level 1	10	10	24-Mar-27	06-Apr-27
A7820	Prime & 1st Coat Paint - BOH - Level 1	5	5	07-Apr-27	13-Apr-27
A7830	Install Flooring - BOH - Level 1	15	15	14-Apr-27	05-May-27
A7840	Millwork - BOH - Level 1	5	5	06-May-27	12-May-27
A7860	Install Specialties - BOH - Level 1	10	10	13-May-27	26-May-27
A7870	MEP Trimout - BOH - Level 1	5	5	27-May-27	03-Jun-27
A7880	Final Paint - BOH - Level 1	5	5	04-Jun-27	10-Jun-27
Level 2					
Classrooms / Gathering					
A4670	Framing & Blocking - Classrooms / Gathering - Level 2	10	10	29-Sep-26	13-Oct-26
A4680	In Wall Rough - Classrooms / Gathering - Level 2	20	20	14-Oct-26	10-Nov-26
A4700	OH Rough - Classrooms / Gathering - Level 2	20	20	28-Oct-26	25-Nov-26
A4690	In-Wall MEP & Blocking Inspections - Classrooms / Gathering - Level 2	1	1	12-Nov-26	12-Nov-26
A4710	Frame Ceilings - Classrooms / Gathering - Level 2	10	10	27-Nov-26	10-Dec-26
A4720	Hang, Tape & Sand Drywall Walls & Ceilings - Classrooms / Gathering - Level 2	30	30	11-Dec-26	26-Jan-27
A4730	Prime & 1st Coat Paint - Classrooms / Gathering - Level 2	10	10	20-Jan-27	02-Feb-27
A4740	Install Ceiling Grid - Classrooms / Gathering - Level 2	10	10	03-Feb-27	17-Feb-27
A4750	Millwork - Classrooms / Gathering - Level 2	15	15	10-Feb-27	03-Mar-27
A4940	Install Flooring - Classrooms / Gathering - Level 2	20	20	25-Feb-27	24-Mar-27
A4760	Install MEP Fixtures & Devices - Classrooms / Gathering - Level 2	10	10	25-Mar-27	07-Apr-27
A4770	Install Specialties - Classrooms / Gathering - Level 2	10	10	01-Apr-27	14-Apr-27
A4780	Flood Ceilings - Classrooms / Gathering - Level 2	10	10	15-Apr-27	29-Apr-27
A4790	Final Paint - Classrooms / Gathering - Level 2	15	15	23-Apr-27	13-May-27
Bathrooms					
A3890	Framing & Blocking - Bathrooms - Level 2	3	3	08-Oct-26	13-Oct-26



Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A3900	In Wall Rough - Bathrooms - Level 2	10	10	14-Oct-26	27-Oct-26
A3920	OH Rough - Bathrooms - Level 2	10	10	21-Oct-26	03-Nov-26
A3910	In-Wall MEP & Blocking Inspections - Bathrooms - Level 2	1	1	28-Oct-26	28-Oct-26
A3930	Frame Ceilings & Access Panels - Bathrooms - Level 2	2	2	04-Nov-26	05-Nov-26
A3940	Hang, Tape & Sand Drywall Walls & Ceilings - Bathrooms - Level 2	5	5	06-Nov-26	13-Nov-26
A3950	Prime & 1st Coat Paint - Bathrooms - Level 2	5	5	16-Nov-26	20-Nov-26
A3960	Install Tile - Bathrooms - Level 2	15	15	23-Nov-26	14-Dec-26
A3970	Countertops - Bathrooms - Level 2	2	2	15-Dec-26	16-Dec-26
A3980	Install Bathroom Fixtures - Bathrooms - Level 2	5	5	17-Dec-26	23-Dec-26
A3990	Install Toilet Partitions & Accessories - Bathrooms - Level 2	10	10	24-Dec-26	08-Jan-27
A4000	MEP Trimout - Bathrooms - Level 2	5	5	11-Jan-27	15-Jan-27
A4010	Final Paint - Bathrooms - Level 2	5	5	19-Jan-27	25-Jan-27
Electrical Room					
A8090	Fitout Electrical Room & Equipment	140	140	29-Sep-26	22-Apr-27
Level 3					
Classrooms / Gathering					
A4800	Framing & Blocking - Classrooms / Gathering - Level 3	10	10	14-Oct-26	27-Oct-26
A4810	In Wall Rough - Classrooms / Gathering - Level 3	20	20	28-Oct-26	25-Nov-26
A4830	OH Rough - Classrooms / Gathering - Level 3	20	20	12-Nov-26	10-Dec-26
A4820	In-Wall MEP & Blocking Inspections - Classrooms / Gathering - Level 3	1	1	27-Nov-26	27-Nov-26
A4840	Frame Ceilings - Classrooms / Gathering - Level 3	10	10	11-Dec-26	24-Dec-26
A4850	Hang, Tape & Sand Drywall Walls & Ceilings - Classrooms / Gathering - Level 3	30	30	28-Dec-26	09-Feb-27
A4860	Prime & 1st Coat Paint - Classrooms / Gathering - Level 3	10	10	03-Feb-27	17-Feb-27
A4870	Install Ceiling Grid - Classrooms / Gathering - Level 3	10	10	18-Feb-27	03-Mar-27
A4880	Millwork - Classrooms / Gathering - Level 3	15	15	25-Feb-27	17-Mar-27
A4930	Install Flooring - Classrooms / Gathering - Level 3	20	20	11-Mar-27	07-Apr-27
A4890	Install MEP Fixtures & Devices - Classrooms / Gathering - Level 3	10	10	08-Apr-27	22-Apr-27
A4900	Install Specialties - Classrooms / Gathering - Level 3	10	10	15-Apr-27	29-Apr-27
A4910	Flood Ceilings - Classrooms / Gathering - Level 3	10	10	30-Apr-27	13-May-27
A4920	Final Paint - Classrooms / Gathering - Level 3	15	15	07-May-27	27-May-27
Wet Lab					
A5690	Framing & Blocking - Wet Lab - Level 3	3	3	28-Oct-26	30-Oct-26
A5700	In Wall Rough - Wet Lab - Level 3	10	10	02-Nov-26	16-Nov-26
A5720	OH Rough - Wet Lab - Level 3	10	10	09-Nov-26	23-Nov-26
A5710	In-Wall MEP & Blocking Inspections - Wet Lab - Level 3	1	1	17-Nov-26	17-Nov-26
A5730	Frame Ceilings & Access Panels - Wet Lab - Level 3	2	2	24-Nov-26	25-Nov-26
A5740	Hang, Tape & Sand Drywall Walls & Ceilings - Wet Lab - Level 3	5	5	27-Nov-26	03-Dec-26
A5750	Prime & 1st Coat Paint - Wet Lab - Level 3	5	5	04-Dec-26	10-Dec-26
A5760	Install Flooring - Wet Lab - Level 3	15	15	11-Dec-26	04-Jan-27
A5770	Countertops & Millwork - Wet Lab - Level 3	5	5	05-Jan-27	11-Jan-27
A5780	Install Lab Fixtures & Equpment - Wet Lab - Level 3	10	10	12-Jan-27	26-Jan-27
A5790	Install Specialties - Wet Lab - Level 3	10	10	27-Jan-27	09-Feb-27
A5800	MEP Trimout - Wet Lab - Level 3	5	5	10-Feb-27	17-Feb-27
A5810	Final Paint - Wet Lab - Level 3	5	5	18-Feb-27	24-Feb-27
Bathrooms					
A4020	Framing & Blocking - Bathrooms - Level 3	3	3	02-Nov-26	04-Nov-26
A4030	In Wall Rough - Bathrooms - Level 3	10	10	05-Nov-26	19-Nov-26
A4050	OH Rough - Bathrooms - Level 3	10	10	13-Nov-26	27-Nov-26
A4040	In-Wall MEP & Blocking Inspections - Bathrooms - Level 3	1	1	20-Nov-26	20-Nov-26
A4060	Frame Ceilings & Access Panels - Bathrooms - Level 3	2	2	30-Nov-26	01-Dec-26



Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A4070	Hang, Tape & Sand Drywall Walls & Ceilings - Bathrooms - Level 3	5	5	02-Dec-26	08-Dec-26
A4080	Prime & 1st Coat Paint - Bathrooms - Level 3	5	5	09-Dec-26	15-Dec-26
A4090	Install Tile - Bathrooms - Level 3	15	15	16-Dec-26	07-Jan-27
A4100	Countertops - Bathrooms - Level 3	2	2	08-Jan-27	11-Jan-27
A4110	Install Bathroom Fixtures - Bathrooms - Level 3	5	5	12-Jan-27	19-Jan-27
A4120	Install Toilet Partitions & Accessories - Bathrooms - Level 3	10	10	20-Jan-27	02-Feb-27
A4130	MEP Trimout - Bathrooms - Level 3	5	5	03-Feb-27	09-Feb-27
A4140	Final Paint - Bathrooms - Level 3	5	5	10-Feb-27	17-Feb-27
Shell					
A5370	Framing & Blocking - Shell - Level 3	10	10	05-Nov-26	19-Nov-26
A5380	In Wall Rough - Shell - Level 3	20	20	20-Nov-26	18-Dec-26
A5400	OH Rough - Shell - Level 3	20	20	07-Dec-26	05-Jan-27
A5390	In-Wall MEP & Blocking Inspections - Shell - Level 3	1	1	21-Dec-26	21-Dec-26
A5410	Frame Ceilings - Shell - Level 3	10	10	06-Jan-27	20-Jan-27
A5420	Hang, Tape & Sand Drywall Walls & Ceilings - Shell - Level 3	30	30	21-Jan-27	04-Mar-27
A5430	Prime & 1st Coat Paint - Shell - Level 3	10	10	05-Mar-27	18-Mar-27
A5440	Install Ceiling Grid - Shell - Level 3	10	10	19-Mar-27	01-Apr-27
Level 4					
Classrooms / Gathering					
A4950	Framing & Blocking - Classrooms / Gathering - Level 4	10	10	20-Nov-26	04-Dec-26
A4960	In Wall Rough - Classrooms / Gathering - Level 4	15	15	07-Dec-26	28-Dec-26
A4980	OH Rough - Classrooms / Gathering - Level 4	15	15	21-Dec-26	12-Jan-27
A4970	In-Wall MEP & Blocking Inspections - Classrooms / Gathering - Level 4	1	1	29-Dec-26	29-Dec-26
A4990	Frame Ceilings - Classrooms / Gathering - Level 4	10	10	13-Jan-27	27-Jan-27
A5000	Hang, Tape & Sand Drywall Walls & Ceilings - Classrooms / Gathering - Level 4	25	25	28-Jan-27	04-Mar-27
A5010	Prime & 1st Coat Paint - Classrooms / Gathering - Level 4	10	10	26-Feb-27	11-Mar-27
A5020	Install Ceiling Grid - Classrooms / Gathering - Level 4	10	10	12-Mar-27	25-Mar-27
A5030	Millwork - Classrooms / Gathering - Level 4	15	15	19-Mar-27	08-Apr-27
A5040	Install Flooring - Classrooms / Gathering - Level 4	20	20	02-Apr-27	30-Apr-27
A5050	Install MEP Fixtures & Devices - Classrooms / Gathering - Level 4	10	10	03-May-27	14-May-27
A5060	Install Specialties - Classrooms / Gathering - Level 4	10	10	10-May-27	21-May-27
A5070	Flood Ceilings - Classrooms / Gathering - Level 4	10	10	24-May-27	07-Jun-27
A5080	Final Paint - Classrooms / Gathering - Level 4	15	15	01-Jun-27	21-Jun-27
Wet Lab					
A5820	Framing & Blocking - Wet Lab - Level 4	3	3	07-Dec-26	09-Dec-26
A5830	In Wall Rough - Wet Lab - Level 4	10	10	10-Dec-26	23-Dec-26
A5850	OH Rough - Wet Lab - Level 4	10	10	17-Dec-26	31-Dec-26
A5840	In-Wall MEP & Blocking Inspections - Wet Lab - Level 4	1	1	24-Dec-26	24-Dec-26
A5860	Frame Ceilings & Access Panels - Wet Lab - Level 4	2	2	04-Jan-27	05-Jan-27
A5870	Hang, Tape & Sand Drywall Walls & Ceilings - Wet Lab - Level 4	5	5	06-Jan-27	12-Jan-27
A5880	Prime & 1st Coat Paint - Wet Lab - Level 4	5	5	13-Jan-27	20-Jan-27
A5890	Install Flooring - Wet Lab - Level 4	15	15	21-Jan-27	10-Feb-27
A5900	Countertops & Millwork - Wet Lab - Level 4	5	5	11-Feb-27	18-Feb-27
A5910	Install Lab Fixtures & Equpment - Wet Lab - Level 4	10	10	19-Feb-27	04-Mar-27
A5920	Install Specialties - Wet Lab - Level 4	10	10	05-Mar-27	18-Mar-27
A5930	MEP Trimout - Wet Lab - Level 4	5	5	19-Mar-27	25-Mar-27
A5940	Final Paint - Wet Lab - Level 4	5	5	26-Mar-27	01-Apr-27
Bathrooms					
A4150	Framing & Blocking - Bathrooms - Level 4	3	3	10-Dec-26	14-Dec-26
A4160	In Wall Rough - Bathrooms - Level 4	10	10	15-Dec-26	29-Dec-26



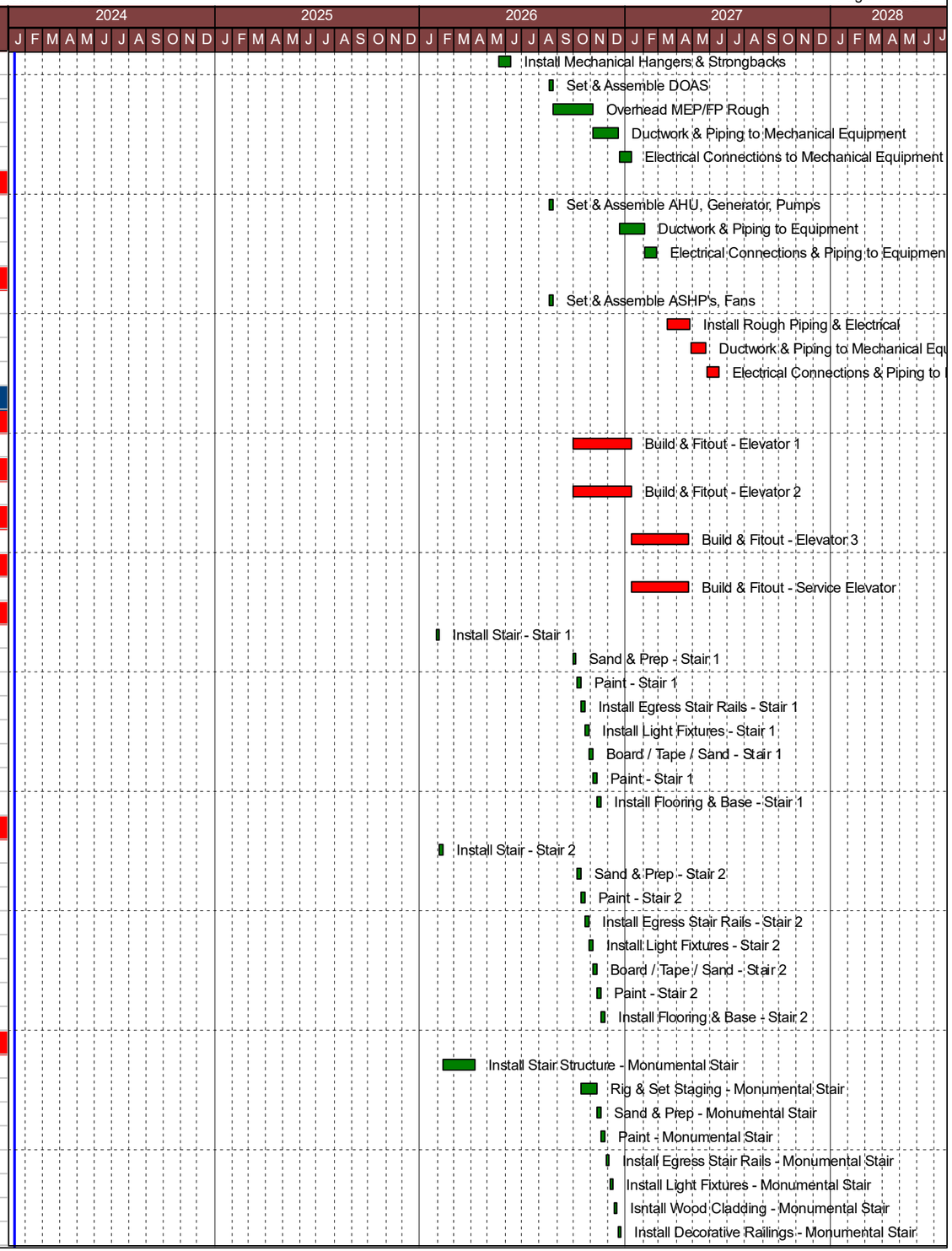
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A4180	OH Rough - Bathrooms - Level 4	10	10	22-Dec-26	06-Jan-27
A4170	In-Wall MEP & Blocking Inspections - Bathrooms - Level 4	1	1	30-Dec-26	30-Dec-26
A4190	Frame Ceilings & Access Panels - Bathrooms - Level 4	2	2	07-Jan-27	08-Jan-27
A4200	Hang, Tape & Sand Drywall Walls & Ceilings - Bathrooms - Level 4	5	5	11-Jan-27	15-Jan-27
A4210	Prime & 1st Coat Paint - Bathrooms - Level 4	5	5	19-Jan-27	25-Jan-27
A4220	Install Tile - Bathrooms - Level 4	15	15	26-Jan-27	16-Feb-27
A4230	Countertops - Bathrooms - Level 4	2	2	17-Feb-27	18-Feb-27
A4240	Install Bathroom Fixtures - Bathrooms - Level 4	5	5	19-Feb-27	25-Feb-27
A4250	Install Toilet Partitions & Accessories - Bathrooms - Level 4	10	10	26-Feb-27	11-Mar-27
A4260	MEP Trimout - Bathrooms - Level 4	5	5	12-Mar-27	18-Mar-27
A4270	Final Paint - Bathrooms - Level 4	5	5	19-Mar-27	25-Mar-27
Shell					
A5450	Framing & Blocking - Shell - Level 4	10	10	15-Dec-26	29-Dec-26
A5460	In Wall Rough - Shell - Level 4	20	20	30-Dec-26	28-Jan-27
A5480	OH Rough - Shell - Level 4	20	20	14-Jan-27	11-Feb-27
A5470	In-Wall MEP & Blocking Inspections - Shell - Level 4	1	1	29-Jan-27	29-Jan-27
A5490	Frame Ceilings - Shell - Level 4	10	10	12-Feb-27	26-Feb-27
A5500	Hang, Tape & Sand Drywall Walls & Ceilings - Shell - Level 4	30	30	01-Mar-27	09-Apr-27
A5510	Prime & 1st Coat Paint - Shell - Level 4	10	10	12-Apr-27	26-Apr-27
A5520	Install Ceiling Grid - Shell - Level 4	10	10	27-Apr-27	10-May-27
Level 5					
Classrooms / Gathering					
A5090	Framing & Blocking - Classrooms / Gathering - Level 5	10	10	30-Dec-26	13-Jan-27
A5100	In Wall Rough - Classrooms / Gathering - Level 5	15	15	14-Jan-27	04-Feb-27
A5120	OH Rough - Classrooms / Gathering - Level 5	15	15	29-Jan-27	19-Feb-27
A5110	In-Wall MEP & Blocking Inspections - Classrooms / Gathering - Level 5	1	1	05-Feb-27	05-Feb-27
A5130	Frame Ceilings - Classrooms / Gathering - Level 5	10	10	12-Feb-27	26-Feb-27
A5140	Hang, Tape & Sand Drywall Walls & Ceilings - Classrooms / Gathering - Level 5	25	25	22-Feb-27	26-Mar-27
A5150	Prime & 1st Coat Paint - Classrooms / Gathering - Level 5	10	10	22-Mar-27	02-Apr-27
A5160	Install Ceiling Grid - Classrooms / Gathering - Level 5	10	10	05-Apr-27	16-Apr-27
A5170	Millwork - Classrooms / Gathering - Level 5	15	15	12-Apr-27	03-May-27
A5180	Install Flooring - Classrooms / Gathering - Level 5	20	20	20-Apr-27	17-May-27
A5190	Install MEP Fixtures & Devices - Classrooms / Gathering - Level 5	10	10	11-May-27	24-May-27
A5200	Install Specialties - Classrooms / Gathering - Level 5	10	10	18-May-27	01-Jun-27
A5210	Flood Ceilings - Classrooms / Gathering - Level 5	10	10	25-May-27	08-Jun-27
A5220	Final Paint - Classrooms / Gathering - Level 5	15	15	02-Jun-27	22-Jun-27
Shell					
A5530	Framing & Blocking - Shell - Level 5	10	10	30-Dec-26	13-Jan-27
A5540	In Wall Rough - Shell - Level 5	20	20	14-Jan-27	11-Feb-27
A5560	OH Rough - Shell - Level 5	20	20	29-Jan-27	26-Feb-27
A5550	In-Wall MEP & Blocking Inspections - Shell - Level 5	1	1	12-Feb-27	12-Feb-27
A5570	Frame Ceilings - Shell - Level 5	10	10	01-Mar-27	12-Mar-27
A5580	Hang, Tape & Sand Drywall Walls & Ceilings - Shell - Level 5	30	30	15-Mar-27	26-Apr-27
A5590	Prime & 1st Coat Paint - Shell - Level 5	10	10	27-Apr-27	10-May-27
A5600	Install Ceiling Grid - Shell - Level 5	10	10	11-May-27	24-May-27
Bathrooms					
A4280	Framing & Blocking - Bathrooms - Level 5	3	3	11-Jan-27	13-Jan-27
A4290	In Wall Rough - Bathrooms - Level 5	10	10	14-Jan-27	28-Jan-27
A4310	OH Rough - Bathrooms - Level 5	10	10	22-Jan-27	04-Feb-27
A4300	In-Wall MEP & Blocking Inspections - Bathrooms - Level 5	1	1	29-Jan-27	29-Jan-27



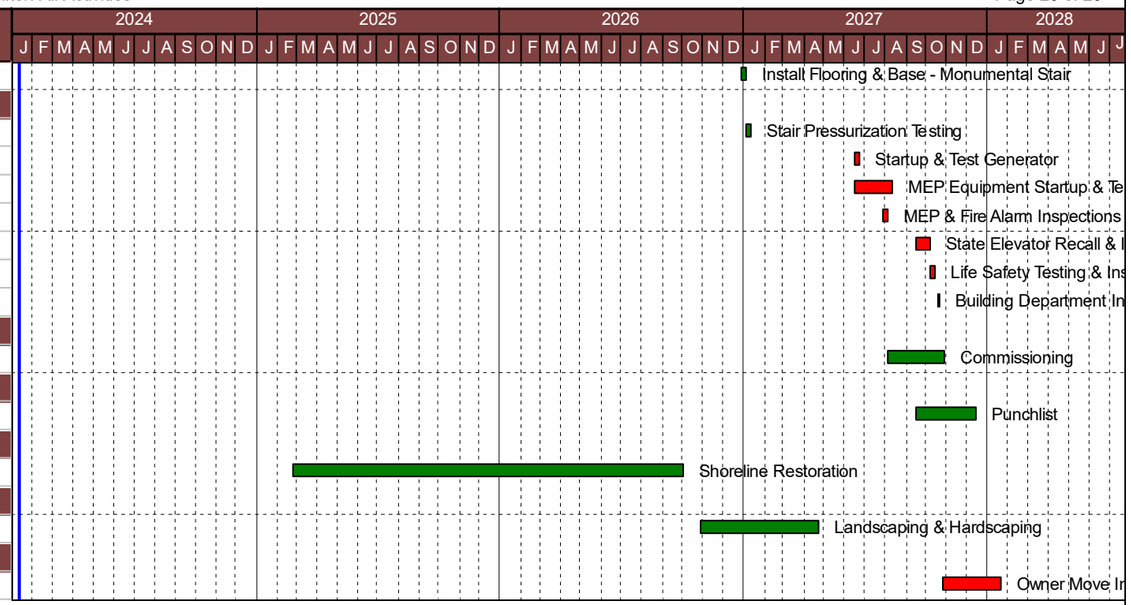
Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A4320	Frame Ceilings & Access Panels - Bathrooms - Level 5	2	2	05-Feb-27	08-Feb-27
A4330	Hang, Tape & Sand Drywall Walls & Ceilings - Bathrooms - Level 5	5	5	09-Feb-27	16-Feb-27
A4340	Prime & 1st Coat Paint - Bathrooms - Level 5	5	5	17-Feb-27	23-Feb-27
A4350	Install Tile - Bathrooms - Level 5	15	15	24-Feb-27	16-Mar-27
A4360	Countertops - Bathrooms - Level 5	2	2	17-Mar-27	18-Mar-27
A4370	Install Bathroom Fixtures - Bathrooms - Level 5	5	5	19-Mar-27	25-Mar-27
A4380	Install Toilet Partitions & Accessories - Bathrooms - Level 5	10	10	26-Mar-27	08-Apr-27
A4390	MEP Trimout - Bathrooms - Level 5	5	5	09-Apr-27	15-Apr-27
A4400	Final Paint - Bathrooms - Level 5	5	5	16-Apr-27	23-Apr-27
Level 6					
Classrooms / Gathering					
A5230	Framing & Blocking - Classrooms / Gathering - Level 6	10	10	14-Jan-27	28-Jan-27
A5240	In Wall Rough - Classrooms / Gathering - Level 6	15	15	29-Jan-27	19-Feb-27
A5260	OH Rough - Classrooms / Gathering - Level 6	15	15	12-Feb-27	05-Mar-27
A5250	In-Wall MEP & Blocking Inspections - Classrooms / Gathering - Level 6	1	1	22-Feb-27	22-Feb-27
A5270	Frame Ceilings - Classrooms / Gathering - Level 6	10	10	01-Mar-27	12-Mar-27
A5280	Hang, Tape & Sand Drywall Walls & Ceilings - Classrooms / Gathering - Level 6	25	25	08-Mar-27	09-Apr-27
A5290	Prime & 1st Coat Paint - Classrooms / Gathering - Level 6	10	10	05-Apr-27	16-Apr-27
A5300	Install Ceiling Grid - Classrooms / Gathering - Level 6	10	10	12-Apr-27	26-Apr-27
A5310	Millwork - Classrooms / Gathering - Level 6	15	15	20-Apr-27	10-May-27
A5320	Install Flooring - Classrooms / Gathering - Level 6	20	20	04-May-27	01-Jun-27
A5330	Install MEP Fixtures & Devices - Classrooms / Gathering - Level 6	10	10	25-May-27	08-Jun-27
A5340	Install Specialties - Classrooms / Gathering - Level 6	10	10	02-Jun-27	15-Jun-27
A5350	Flood Ceilings - Classrooms / Gathering - Level 6	10	10	09-Jun-27	22-Jun-27
A5360	Final Paint - Classrooms / Gathering - Level 6	15	15	16-Jun-27	07-Jul-27
Shell					
A5610	Framing & Blocking - Shell - Level 6	10	10	14-Jan-27	28-Jan-27
A5620	In Wall Rough - Shell - Level 6	20	20	29-Jan-27	26-Feb-27
A5640	OH Rough - Shell - Level 6	20	20	12-Feb-27	12-Mar-27
A5630	In-Wall MEP & Blocking Inspections - Shell - Level 6	1	1	01-Mar-27	01-Mar-27
A5650	Frame Ceilings - Shell - Level 6	10	10	15-Mar-27	26-Mar-27
A5660	Hang, Tape & Sand Drywall Walls & Ceilings - Shell - Level 6	30	30	29-Mar-27	10-May-27
A5670	Prime & 1st Coat Paint - Shell - Level 6	10	10	11-May-27	24-May-27
A5680	Install Ceiling Grid - Shell - Level 6	10	10	25-May-27	08-Jun-27
Bathrooms					
A4410	Framing & Blocking - Bathrooms - Level 6	3	3	26-Jan-27	28-Jan-27
A4420	In Wall Rough - Bathrooms - Level 6	10	10	29-Jan-27	11-Feb-27
A4440	OH Rough - Bathrooms - Level 6	10	10	05-Feb-27	19-Feb-27
A4430	In-Wall MEP & Blocking Inspections - Bathrooms - Level 6	1	1	12-Feb-27	12-Feb-27
A4450	Frame Ceilings & Access Panels - Bathrooms - Level 6	2	2	22-Feb-27	23-Feb-27
A4460	Hang, Tape & Sand Drywall Walls & Ceilings - Bathrooms - Level 6	5	5	24-Feb-27	02-Mar-27
A4470	Prime & 1st Coat Paint - Bathrooms - Level 6	5	5	03-Mar-27	09-Mar-27
A4480	Install Tile - Bathrooms - Level 6	15	15	10-Mar-27	30-Mar-27
A4490	Countertops - Bathrooms - Level 6	2	2	31-Mar-27	01-Apr-27
A4500	Install Bathroom Fixtures - Bathrooms - Level 6	5	5	02-Apr-27	08-Apr-27
A4510	Install Toilet Partitions & Accessories - Bathrooms - Level 6	10	10	09-Apr-27	23-Apr-27
A4520	MEP Trimout - Bathrooms - Level 6	5	5	26-Apr-27	30-Apr-27
A4530	Final Paint - Bathrooms - Level 6	5	5	03-May-27	07-May-27
Level 7 / Penthouse					
Mechanical					



Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A7970	Install Mechanical Hangers & Strongbacks	15	15	20-May-26	10-Jun-26
A7980	Set & Assemble DOAS	5	5	18-Aug-26	24-Aug-26
A7990	Overhead MEP/FP Rough	50	50	25-Aug-26	04-Nov-26
A8000	Ductwork & Piping to Mechanical Equipment	30	30	05-Nov-26	18-Dec-26
A8010	Electrical Connections to Mechanical Equipment	15	15	21-Dec-26	12-Jan-27
Mechanical Well					
A8020	Set & Assemble AHU, Generator, Pumps	5	5	18-Aug-26	24-Aug-26
A8030	Ductwork & Piping to Equipment	30	30	21-Dec-26	03-Feb-27
A8040	Electrical Connections & Piping to Equipment	15	15	04-Feb-27	25-Feb-27
ASHP Well					
A8050	Set & Assemble ASHP's, Fans	5	5	18-Aug-26	24-Aug-26
A8060	Install Rough Piping & Electrical	30	30	15-Mar-27	26-Apr-27
A8070	Ductwork & Piping to Mechanical Equipment	20	20	27-Apr-27	24-May-27
A8080	Electrical Connections & Piping to Equipment	15	15	25-May-27	15-Jun-27
Vertical Transportation					
Elevator 1					
A6080	Build & Fitout - Elevator 1	70	70	29-Sep-26	11-Jan-27
Elevator 2					
A6090	Build & Fitout - Elevator 2	70	70	29-Sep-26	11-Jan-27
Elevator 3					
A6100	Build & Fitout - Elevator 3	70	70	12-Jan-27	22-Apr-27
Service Elevator					
A6110	Build & Fitout - Service Elevator	70	70	12-Jan-27	22-Apr-27
Stair 1					
A6120	Install Stair - Stair 1	5	5	29-Jan-26	04-Feb-26
A6130	Sand & Prep - Stair 1	5	5	29-Sep-26	05-Oct-26
A6140	Paint - Stair 1	5	5	06-Oct-26	13-Oct-26
A6150	Install Egress Stair Rails - Stair 1	5	5	14-Oct-26	20-Oct-26
A6160	Install Light Fixtures - Stair 1	5	5	21-Oct-26	27-Oct-26
A6170	Board / Tape / Sand - Stair 1	5	5	28-Oct-26	03-Nov-26
A6180	Paint - Stair 1	5	5	04-Nov-26	10-Nov-26
A6190	Install Flooring & Base - Stair 1	5	5	12-Nov-26	18-Nov-26
Stair 2					
A6200	Install Stair - Stair 2	5	5	05-Feb-26	11-Feb-26
A6210	Sand & Prep - Stair 2	5	5	06-Oct-26	13-Oct-26
A6220	Paint - Stair 2	5	5	14-Oct-26	20-Oct-26
A6230	Install Egress Stair Rails - Stair 2	5	5	21-Oct-26	27-Oct-26
A6240	Install Light Fixtures - Stair 2	5	5	28-Oct-26	03-Nov-26
A6250	Board / Tape / Sand - Stair 2	5	5	04-Nov-26	10-Nov-26
A6260	Paint - Stair 2	5	5	12-Nov-26	18-Nov-26
A6270	Install Flooring & Base - Stair 2	5	5	19-Nov-26	25-Nov-26
Monumental Stairs					
A6280	Install Stair Structure - Monumental Stair	40	40	12-Feb-26	09-Apr-26
A6360	Rig & Set Staging - Monumental Stair	20	20	14-Oct-26	10-Nov-26
A6290	Sand & Prep - Monumental Stair	5	5	12-Nov-26	18-Nov-26
A6300	Paint - Monumental Stair	5	5	19-Nov-26	25-Nov-26
A6310	Install Egress Stair Rails - Monumental Stair	5	5	27-Nov-26	03-Dec-26
A6320	Install Light Fixtures - Monumental Stair	5	5	04-Dec-26	10-Dec-26
A6330	Isntall Wood Cladding - Monumental Stair	5	5	11-Dec-26	17-Dec-26
A6340	Install Decorative Railings - Monumental Stair	5	5	18-Dec-26	24-Dec-26



Activity ID	Activity Name	Orig Dur	Rem Dur	Start	Finish
A6350	Install Flooring & Base - Monumental Stair	5	5	28-Dec-26	04-Jan-27
Testing & Inspections					
A8140	Stair Pressurization Testing	5	5	05-Jan-27	11-Jan-27
A8160	Startup & Test Generator	5	5	16-Jun-27	22-Jun-27
A8320	MEP Equipment Startup & Testing	40	40	16-Jun-27	11-Aug-27
A8120	MEP & Fire Alarm Inspections	5	5	29-Jul-27	04-Aug-27
A8110	State Elevator Recall & Inspections	15	15	17-Sep-27	07-Oct-27
A8130	Life Safety Testing & Inspections	5	5	08-Oct-27	15-Oct-27
A8150	Building Department Inspections	5	5	18-Oct-27	22-Oct-27
Commissioning					
A7890	Commissioning	60	60	05-Aug-27	29-Oct-27
Punchlist					
A00652	Punchlist	60	60	17-Sep-27	14-Dec-27
Shoreline Restoration					
A8870	Shoreline Restoration	402	402	26-Feb-25	01-Oct-26
Landscaping & Site Finishes					
A8180	Landscaping & Hardscaping	120	120	28-Oct-26	22-Apr-27
Owner Move In					
A9070	Owner Move In	60	60	25-Oct-27	21-Jan-28



The Roux Institute
Northeastern University

Community Advisory Group (CAG)
The Roux Institute at Northeastern University
OCTOBER 30, 2023

Participants

CAG participants:
Tiffanie Bentley, Interim President, SMCC
Sarah Boltz, Teacher, Presumpscot Elementary School
Eamonn Dundon, Director of Advocacy, Portland Regional Chamber of Commerce
Jason Judd, Executive Director, Educate Maine
Cherie Juniwiecz, East Deering resident
Cheryl Leeman, East Deering Neighborhood Association
Sara Nadeau, Parent, Presumpscot Elementary School
Bill Needelman, Waterfront Coordinator, City of Portland, Maine
Jack Phillips, Executive Director, Portland Parks Conservancy
Angie Taylor, Principal, Presumpscot Elementary School
Mike Tremblay, Director of Transit Development, Greater Portland Metro
Steve Von Vogt, East Deering Neighborhood for Responsible Development

Northeastern University participants and guest speakers:
Margaret Angell, Head of Partnerships & Strategic Initiatives, The Roux Institute
Alicia Jalbert, Manager of Community Partnerships, The Roux Institute
Joe Regan, Director, City & Community Engagement, Northeastern University
Sam Reiche, Head of Operations & Real Estate, IDEALS
John Tobin, Vice President, City & Community Engagement, Northeastern University
Chris Mallett, Chief Administrative Officer, Roux Institute and Senior Vice Chancellor
Chrystina Russell, Managing Director, Strategic Initiatives, The Roux Institute
Mary Costigan, Attorney at Bernstein Shur Sawyer & Nelson
Timothy Mansfield, AIA, Principal Architect.

Meeting Recap & Notes

Margaret Angell began the meeting with welcome remarks and noted that three CAG members were not available to attend the first meeting.

- Emma Bond, Portland Bike/Ped Advocacy Committee
- Adilah Mohammed, The Third Place
- Aaron Townsend, Deputy Superintendent, Portland Public School

A moment of silence/reflection was held for those impacted by the Lewiston shootings. This was followed by a quick round of introductions where participants introduced themselves, the organization/community they represented, and what they hoped to achieve/learn from the meeting.

Margaret thanked those who helped her and the Roux team plan and organize this inaugural CAG meeting. Participants were welcome to offer comments feedback or ask further questions at any point during the meeting.

There were three key topics of discussion. It was acknowledged that not everyone in the room had the same level of knowledge or engagement with the Roux Institute, so to start, it was essential to provide an overview of Northeastern University's work and mission in the Portland area. This would be followed by an overview of the development plan for the new campus. Finally, the meeting's third topic is to discuss the CAG's role and the group's draft charter.

Overview of the Roux Institute

Presented by Margaret Angell and Alicia Jalbert

Margaret Angell delivered an overview of the Roux Institute, which was established in 2020 as a campus within Northeastern University's global network. The Roux Institute's primary purpose is to act as an "opportunity engine" within Maine through graduate education in high-growth fields (including generous scholarships for master's degrees and certificates), research, and entrepreneurship programs. Her presentation underscored the significant growth in the student population, the number of start-up companies launched in the Roux programs, and the expansion of business and industry partnerships at the Roux over the past three years. Margaret emphasized that Northeastern's pedagogy revolves around experiential education, illustrating this approach with an example of Roux students collaborating with L.L. Bean employees to address a retail analytics challenge faced by the company. She discussed the expected growth of the Institute, and after concluding her presentation, Margaret welcomed questions from the CAG, although none were posed at that moment.

Alicia Jalbert then continued the presentation by providing an overview of the Roux Institute's Community Partnerships. She detailed the University's commitment to leveraging its unique strengths across various core disciplines and assets to foster community partnerships aligned with Maine's 10-year Economic Plan. Alicia highlighted several examples of organizations that collaborate with Northeastern, including Educate Maine, Jobs for Maine Graduates, Knox County Health Clinic, Maine Math and Science Alliance, Portland Community Squash, Portland Public Schools, and The Third Place. Over the past year, the University has engaged with approximately 200 K-12 students, primarily from local and regional schools. Alicia spotlighted the Girls Who Code Camp as an illustration of the Roux's efforts to engage young students and inspire future careers in STEM (Science, Technology, Engineering, and Mathematics). She also informed the CAG about the Maine Black Professionals Network, which regularly hosts quarterly gatherings at the Roux Institute. These gatherings serve as opportunities for networking and learning about the various options available, such as graduate programming, partnership opportunities, residencies, and more.

Overview of the campus development plan and status update

Presentation by Tim Mansfield, and Sam Reiche

Tim Mansfield gave an overview of the proposed development at the former B&M site in East Deering, the site for the Roux permanent campus. This presentation included detailed renderings of Phase 1 of the site plan. Tim started his presentation by noting that the campus encompasses approximately 13 acres on a peninsula, with about 82% of the land covered by tarmac and buildings at purchase. The overarching objective is to revamp the area, restoring it to a more natural state with open spaces. The ongoing Bean Building restoration project includes the removal of old warehouse structures and rebuilding in the same footprint, focusing on creating a conservation exhibit. Additionally, plans for the waterfront area involve enhancing the pier and floating dock to expand waterfront activities.

The Bean Building's primary purpose will be supporting entrepreneurs, accelerators, and young companies, fostering collaboration with the academic building. This collaborative approach aligns with the broader educational ethos, emphasizing hands-on experience and practical learning. The academic building will be designed linearly to maximize the impact of its location, creating a keen sense of arrival on the peninsula. Lastly, a coastal pathway and bike path traverse the campus, enhancing accessibility and connectivity.
The Learning, Research & Collaboration Building (LRC (Learning, Research & Collaboration)) is designed to offer impressive views and connections while embracing the interior of the campus. It is situated right in the heart of the campus, referred to as "the round." The site's layout includes the main pedestrian pathway, offering access to the waterfront on the west side and a parking structure with childcare facilities on the north side. The campus will use stone, granite, brick, copper, and other materials that have traditionally defined the city. Special attention will be given to the granite detailing, inspired by the unique Bailey Island Bridge, one of only two such bridges in the world, crafted from Maine granite. The Bean Building is undergoing restoration and reintegration, focusing on blending the old and the new seamlessly.

The campus's landscaping is being meticulously designed by the talented landscape architect, Steven Stimpson, who understands the region's natural elements, including indigenous species that reflect the coastal environment. Sustainability is a core focus, with the West Wing planned to be a fully mass-timbered building. Mass timber involves using engineered, renewable wood, such as cross-laminated timber (CLT), for structural components like columns, beams, and decking, making it a sustainable choice for the future.
The pier's reconstruction in its existing footprint will incorporate elements that pay homage to the codfish building's history. The pier is envisioned as a flexible community gathering space, accommodating activities like kayaking and potential water taxis, reinvigorating engagement with the waterfront. The campus's new bike and footpath will encircle the entire area, bringing people back to the water's edge providing a healthy and scenic way to explore the peninsula.

Sam Reiche then provided a quick update on the permitting progress for the site. Over the past two years, and even more, we have been dedicated to zoning, which was successfully completed in February 2023. This zoning approval empowers us to proceed with the following stages. Presently, we are primarily focused on our site plan, which is nearly finalized. Sam informed the CAG that he and the Roux team have recently held a neighborhood forum with a presentation quite similar to this one, ensuring that the neighborhood and community stays informed about our progress. The aim is to maintain transparency and keep people well-informed. In the coming weeks, they plan to submit the site plan application to the city, and a formal neighborhood meeting, an essential part of the process, will follow this. During this neighborhood meeting, we anticipate more detailed questions, ideas, and discussions. This process will eventually lead to the "plan workshops," which could be a single session or several. These workshops are akin to what the University went through during the zoning process. This comprehensive public engagement aims to align everyone's expectations and incorporates aspects like historic preservation, environmental considerations, and traffic patterns.

It is crucial to note that the CAG meeting is separate from the site plan process. Still, it is something the Roux engaged in collaboratively with the city and the community. There are two ways for the CAG members to stay up to date. First, IDEALS and Roux host Neighborhood Forums at least every quarter (in 2023 it has been every two months). These forums allows us to maintain close communication with the community on campus development activities, share our progress, and hear ideas and feedback. Second, CAG members can sign up on the website to receive notifications for all Roux-related community meetings. The website

https://www.rouxcampusportland.org/roux-campus is the primary platform for announcements and information dissemination. Sam and his team share recordings of the Neighborhood Forum meetings and provide updates on construction activities and actively work to keep the community and the city well-informed. Furthermore, Sam and the Roux team hold numerous informal meetings, allowing us to discuss our plans and construction activities with interested neighbors and community members. CAG members are encouraged to sign up for regular updates, and the website is the central hub for detailed information.

Following the campus development presentation, which served as a grounding introduction to the Roux Institute at Northeastern University, Margaret opened the floor for questions, comments, or thoughts from CAG members.

Cherie Juniwiecz raised concerns and mentioned having a couple of questions. The first question pertains to the building's glass usage and a request for clarification on whether the glass was bird safe. The second question concerns the parking garage's size and its potential impact on the lighting for neighboring areas. In response, Tim Mansfield confirmed that the glass would be bird-safe and referred to a recent project he completed for Bowdoin College that used similar material. He acknowledges the importance of addressing the lighting concerns as part of the ongoing process. He emphasized the University's commitment to avoiding any adverse impact on the neighboring areas and ensuring safety.

Bill Needelman expressed curiosity about the pier's elevation and the criteria behind the elevation choice. Bill highlighted the importance of considering future sea-level rise and shared his interest in the decision-making process. In response, Tim and Sam elaborated on the site's elevation study and elevation adjustment to accommodate resilience. They mention the elevation target of 22.5 and the ongoing analysis considering factors like sea-level rise.

The conversation then shifts to transportation, with Eamonn Dundon inquiring about the discussion and commitments related to transitioning commuters to alternative modes of transportation. Tim and Sam underscored the overarching goal of reducing single-vehicle use, and ongoing discussions and planning for transportation.

The last part of the discussion pertained to zoning, with Mary Costigan explaining the process's origin and its collaborative nature involving the city and community. Mary mentioned that the B&M site was originally industrial-zoned and that zoning codes are instrumental in determining property use. To address this zoning designation, the city of Portland employs an "Institution Overlay Zone" (IOZ), an additional layer of zoning that requires more public involvement. This concept initially began with Maine Medical Center to assist institutions in planning ahead. Within the IOZ framework, institutional development plans must look 20 years into the future, while the current presentation only represents Phase One of the project.

Discussion of role of CAG and draft charter for the group

In the final segment of the agenda, Margaret Angell touched upon the Charter for the CAG. She highlighted how the CAG will play a significant role in fulfilling the Roux's commitment to public engagement within the Institutional Development Plan. This commitment entails two key aspects: neighborhood forums, which are quarterly (recently every two months) and are open to everyone, accessible via Zoom,with posted recordings. We encourage those working and living in the vicinity to spread the word and join these sessions. The meetings cover updates on both the Roux Institute's endeavors and the development process. The second component of our commitment involves the group assembled here, the CAG, comprising

representatives from various organizations. Margaret noted that they are actively seeking individuals from two entities, the Portland Housing Authority (covering Washington Gardens and Front St. development) and a sustainability representative, to be appointed. Recommendations for these roles are welcome.
The spirit of this commitment revolves around open dialogues and maximizing the institution's impact on the community. Margaret explained that the CAG will serve as a platform for open discussions and engagement with community members from different stakeholder groups, including exploring collaborations with fellow institutions. Suggestions for agenda items, ideas, or even proposals for presentations on specific topics are encouraged. The CAG's purpose will be to facilitate conversations and exchange ideas with relevant guests invited to meetings on specific subjects. Once we determine a suitable schedule, we will share dates for future meetings and make every effort to include a wide array of perspectives and voices, ensuring this is a meaningful and inclusive platform for community engagement.

Margaret also commented that the university remains open to edits and feedback for the Charter, emphasizing that the commitment embodies two fundamental principles: open dialogue and maximizing the university's impact on the Portland community. This encompasses various aspects, such as enhancing connections with schools and collaborating with the city's parks. CAG members are welcome to share their suggestions for agenda items and articulate how their work aligns with the university's mission. When we hold meetings on specific topics like K-12 engagement or parks, we will thoughtfully invite relevant guests to enrich our discussions.

Margaret encouraged any questions or comments at this stage. While dates for upcoming meetings are not yet set, we want to ensure they accommodate your schedules. We are considering Monday nights but can adapt the time if earlier starts are preferred. Concerning engaging parents from diverse linguistic backgrounds, we are looking into leveraging Northeastern University students to bridge language barriers, especially in the East Deering community, which is notably diverse. A query was raised about the top five languages spoken in Portland Public schools. The space at the Washington Garden Community Center has served as a meeting location, and Angie Taylor, Principal of Presumpscot school offered the school premises for a future meeting.

Furthermore, Chris Mallet suggested that the work of this group could inspire Northeastern teams to explore and act on ideas generated here and remarked if CAG members wish to use the Roux's current space, please reach out.

Next Steps & Looking Forward

- Margaret will share materials and set a date for the next meeting.
- In two months, an email will be dispatched to collect agenda items from the CAG.
- Your active engagement is essential, and we look forward to fruitful discussions and collaborations in the future.

The Roux Institute
Northeastern University

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCES (IDEALS) and THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY PROPOSED SITE PLAN FOR THE ROUX INSTITUTE CAMPUS

NEIGHBORHOOD MEETING
DECEMBER 13, 2023

The Neighborhood Meeting was held at the Washington Gardens Community Center, beginning at 5:00 pm and lasting approximately an hour and a quarter. Forty-six members of the public were in attendance, divided almost evenly between in person and online, as well as 20 representatives of IDEALS, Northeastern University, and their consultant team.

The public comments and questions are summarized below. The comment period followed a presentation by IDEALS and Northeastern regarding the proposed site plan and the latest updates from the Roux Institute. Major areas of interest included transportation, parking, alternative means of transport and future growth planned for the site.

- Is there an update on the future of the rail line?
- Will there be charging stations for e-bikes?
- What is the plan for Sherwood Street? Does it involve the removal of parking?
- Have you considered traffic cutting through Payson Park in your traffic study?
- What is the current and anticipated traffic volume?
- What types of energy systems will power the campus – will it be renewable?
- Will there be retail space?
- Commenter was concerned about traffic volumes and asked what happens if traffic is terrible.
- Who will pay for the required traffic improvements?
- What is the impact of the City's modifications to Veranda and Bates Street?
- Will there be snow removal from the bike lanes?
- Have you considered the Presumpscot Street shortcut?
- How are you projecting the campus to grown and how will that effect traffic?
- Have you considered sea level rise and resiliency?
- How were you able to demolish buildings before the site plan is approved?
- Why is the childcare facility located next to the garage with exhaust from vehicles?
- Where do you expect walkers on campus will be coming from? Will they drive there or walk there?
- How many parking spaces are you planning for and will you charge for parking?

- Suggestion: Please hire people to shovel the bus stops.
- Are there plans for a hotel in this site plan?
- Will the garage meet all of the future parking needs of the campus?
- Concern regarding affordable housing which is already scarce and the impact the project will have.
- What does the growth would look like in the next 5 years?

Adjourn 6:13

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

Neighborhood Meeting Sign-In Sheet

Wednesday, December 13, 2023

Washington Gardens Community Center - 66 Pembroke Street, Portland, ME 04103

IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Members of the Public in Attendance:

Name:	Email:
Bonnie McGarvey	bamcgarvey7711@yahoo.com
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Linda Davis	ldavis6820@gmail.com
Patrick Thornton	patrickdthornton@gmail
Ed Cunningham	cunninghamed57@gmail.com
Ben Carling	gbencarling@gmail.com
JAMY WENSMAN	22 Galvin St

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

Neighborhood Meeting Sign-In Sheet

Wednesday, December 13, 2023

Washington Gardens Community Center - 66 Pembroke Street, Portland, ME 04103

IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Members of the Public in Attendance:

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Pixie LaVallee	
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Tessa Anable	tessaanable@gmail.com
Marc LaMontagne	

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

Neighborhood Meeting Sign-In Sheet

Wednesday, December 13, 2023

Washington Gardens Community Center - 66 Pembroke Street, Portland, ME 04103

IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Members of the Public in Attendance:

Name:	Email:
[illegible]	
Colin Campbell	campbell13c2@gmail.com
Cheryl [illegible]	

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

Neighborhood Meeting Sign-In Sheet

Wednesday, December 13, 2023

Washington Gardens Community Center - 66 Pembroke Street, Portland, ME 04103

IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Developer and Consultant Team in Attendance:

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IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

Neighborhood Meeting Sign-In Sheet

Wednesday, December 13, 2023

Washington Gardens Community Center - 66 Pembroke Street, Portland, ME 04103

IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

Developer and Consultant Team in Attendance:

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Elizabeth Swain	elizabeth.swain@powereng.com

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

Neighborhood Meeting Sign-In Sheet

Wednesday, December 13, 2023

Washington Gardens Community Center - 66 Pembroke Street, Portland, ME 04103

IDEALS: Roux Campus 1 Bean Pot Circle, Portland, ME

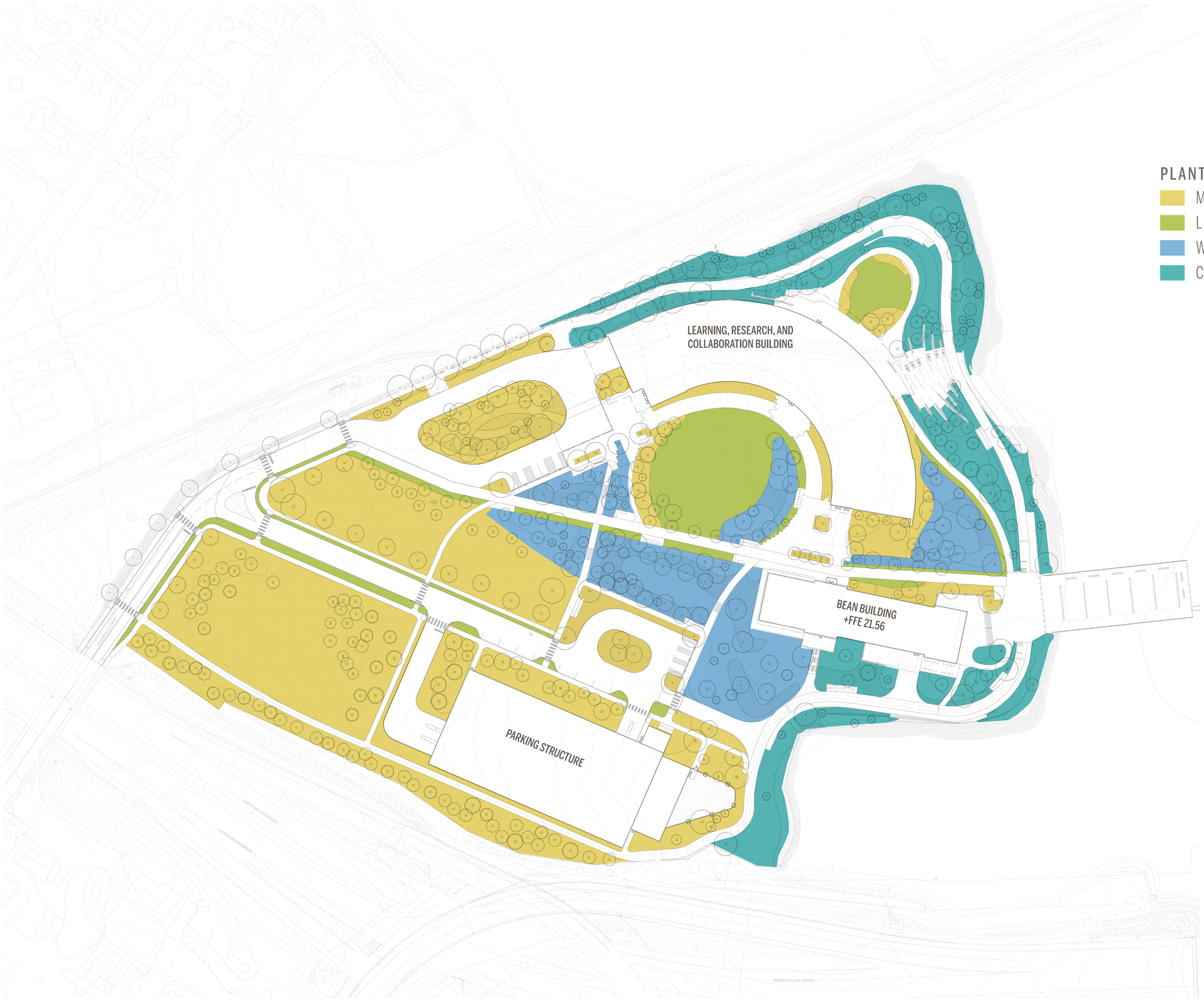
Developer and Consultant Team in Attendance:

Name:	Email:
Denise Cameron	dcameron@woodardcurran.com

On-line attendees
Roux Institute at Northeastern University Neighborhood Meeting
13-Dec-23

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Will Schultze	willschultze@gmail.com
Suzanne Sullivan	suzmsull@gmail.com
Christine Swasey	cswasey@hotmail.com
Jacqueline Valencia	J.valencia@northeastern.edu
elizabeth wise	elizabethmwise@gmail.com
Daniel Yamartino	dhyamartino@gmail.com

Att. U



PLANTING ZONES

- MEADOW
- LAWN
- WET MEADOW
- COASTAL

0' 40'

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

LAND-USE PERMIT SET

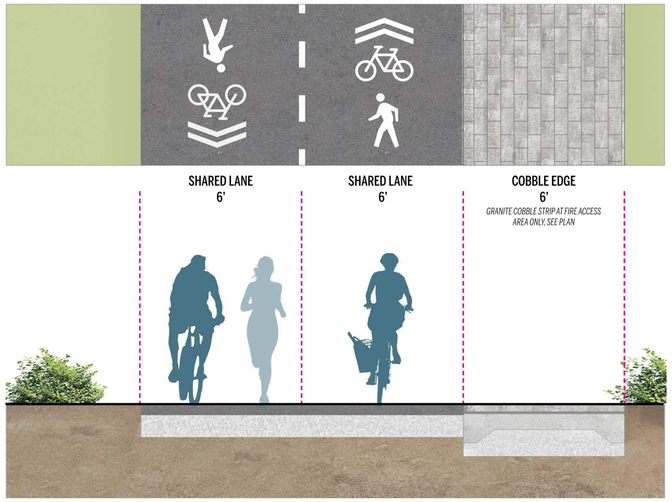
Number	Revision	Date
2	ADDENDUM NO. 2	11.17.2023

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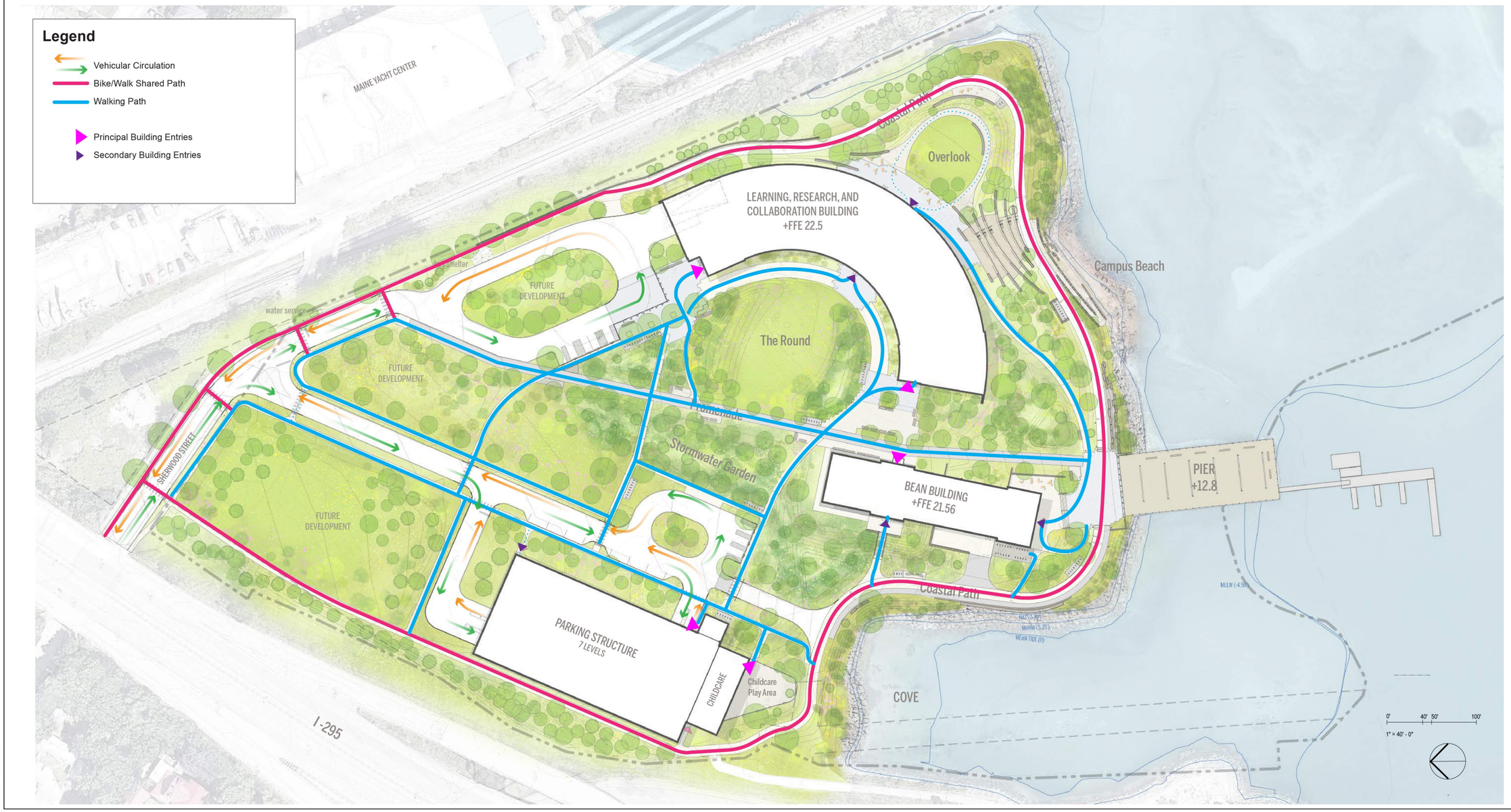
Job # 2202
Project THE ROUX INSTITUTE
Drawn By ZH SK JC MS Checked STIMSON
Date
Scale 1" = 40'
Drawing Title

PLANTING ZONE PLAN

Figure 3-14



BIKE PATH | TWO LANE SECTION



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A
B
KeyPlan

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Job #	2202
Project	THE ROUX INSTITUTE
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Checked	BC
Date	30 JANUARY 2024
Scale	

Drawing Title
Site Circulation Plan

Figure 3-17

2/1/2024 12:51:15 PM



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Number	Revision	Date
2	ADDENDUM NO. 2	11.17.2023

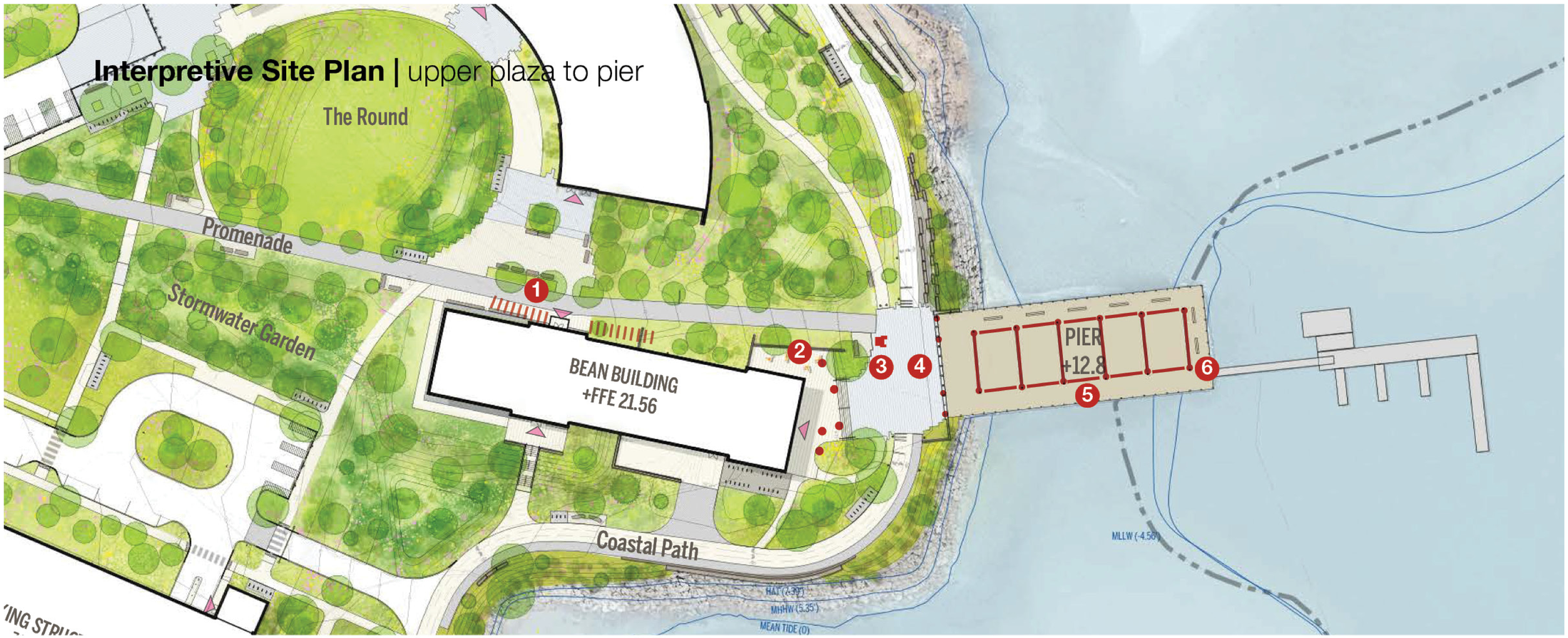
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Job # 2202
Project THE ROUX INSTITUTE
Drawn By ZH SK JC MS Checked STIMSON
Date
Scale 1" = 40'
Drawing Title

AREAS OF PUBLIC OPEN SPACE PLAN

Figure 3-18

Interpretive Site Plan | upper plaza to pier



1. Railroad Track & Cart Stop
2. Bean Pots & Retort Baskets
3. Granite Interpretive Post
4. Mooring Bollards & Cleats
5. Pier Decking Inlay
6. Pier Light Poles

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Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CM Checked BC
Date	30 JANUARY 2024
Scale	

Drawing Title
Codfish Building Interpretive Elements

Figure 3-24

2/1/2024 11:31:15 AM

Key

- Multi-Use Path
- Bicycle Parking - Exterior
- Bicycle Storage - Interior
- Metro Bus Stop
- Bikeshare

LEARNING, RESEARCH, AND COLLABORATION BUILDING

The Round

Campus Beach

BEAN BUILDING +FFE 21.56

PARKING STRUCTURE

MLLW (-4.58)

MHW (3.39')

MHHW (3.35')

MEAN TIDE (0)

75' BUFFER FROM MHHW

0' 40'

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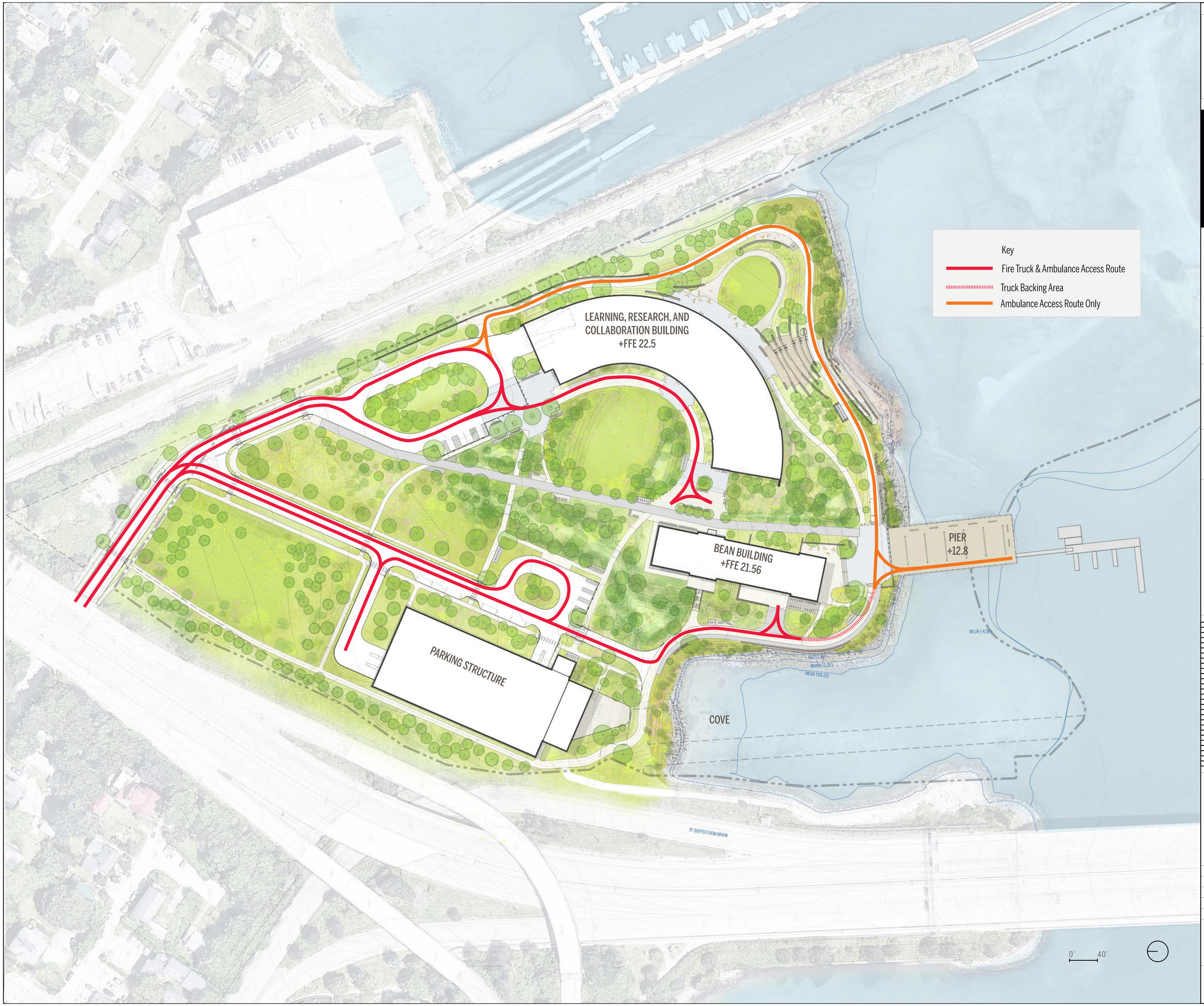
Stamp

Job #	2202		
Project	THE ROUX INSTITUTE		
Drawn By	ZH SK JC MS	Checked	STIMSON
Date			
Scale	1" = 40'		

Drawing Title

BIKE AMENITIES AND CIRCULATION

Figure 5-1



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2	ADDENDUM NO. 2	11.17.2023

Stamp

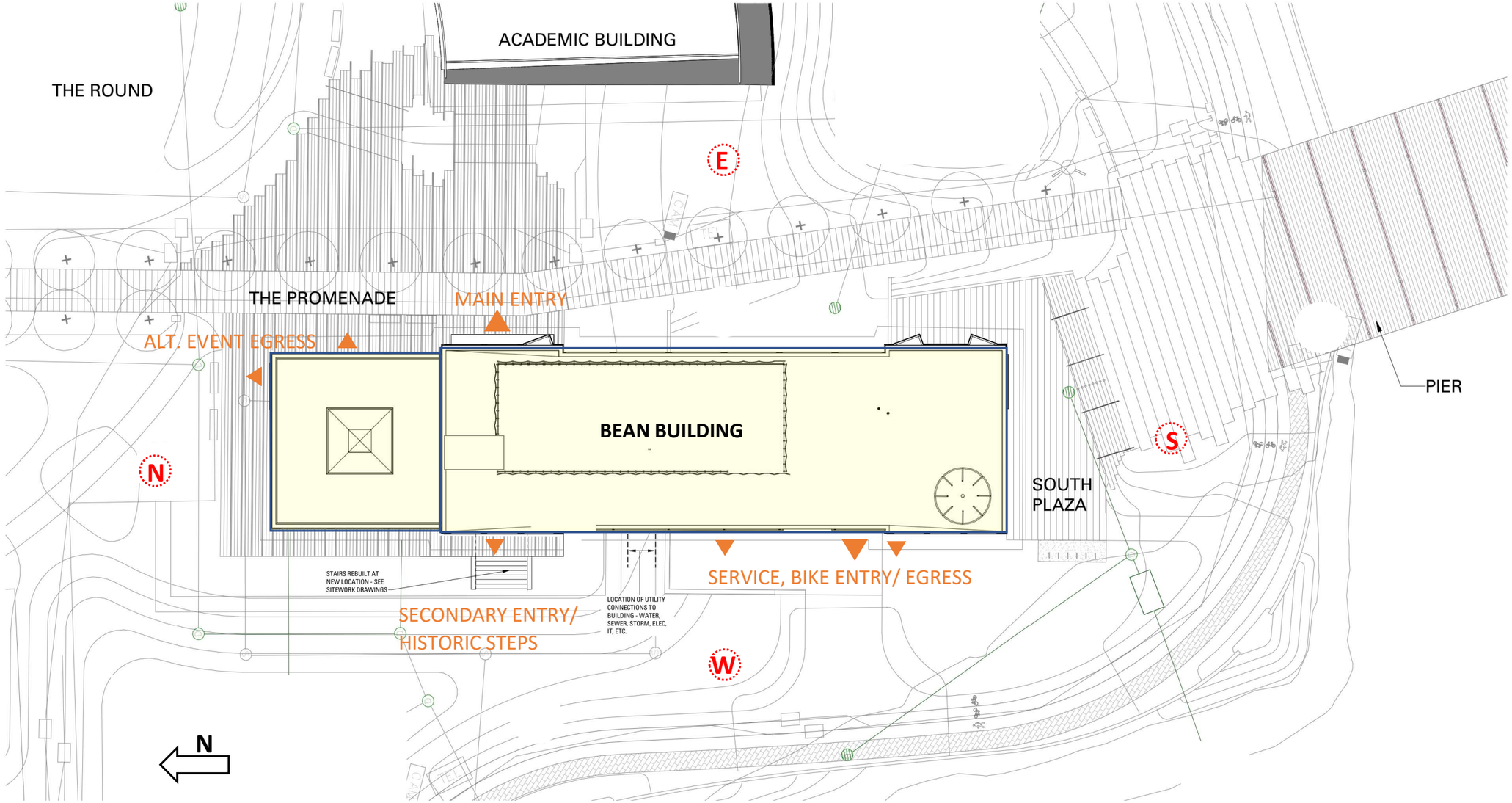
Job #	2202		
Project	THE ROUX INSTITUTE		
Drawn By	ZH SK JC MS	Checked	STIMSON
Date			
Scale	1" = 40'		

Drawing Title

EMERGENCY ACCESS ROUTES

Figure 5-2

ARCHITECTURAL SITE PLAN



Roux Institute | Bean Building

Bruner/Cott
ARCHITECTS



BOLA BIKE RACKS: 95 TOTAL

MAINE YACHT CENTER
Coastal Path
2
Overlook
LEARNING, RESEARCH, AND COLLABORATION BUILDING +FFE 22.5
bus shelter
FUTURE DEVELOPMENT
water service
14
The Round
8
Campus Beach
FUTURE DEVELOPMENT
Promenade
7
SHERWOOD STREET
Stormwater Garden
8
8
BEAN BUILDING +FFE 21.56
PIER +12.8
22
4
8
FUTURE DEVELOPMENT
6
PARKING STRUCTURE
CHILDCARE
Childcare Play Area
Coastal Path
MLLW (-4.58)
MLW (-3.92')
MHHW (3.35')
MEAN TIDE (0)
COVE
I-295
75' BUFFER FROM MHHW
0'
40'

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
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Stamp

Job #	2202
Project	THE ROUX INSTITUTE
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Checked	STIMSON
Date	
Scale	1" = 40'

Drawing Title

EXTERIOR BICYCLE PARKING

Figure 5-4

Memorandum

To: Chuck Hewett
Sam Reiche

Date: October 31, 2023

Project #: 58570.00

From: Jennifer Conley, PE, PTOE

Re: The Roux Institute at Northeastern University EV Charging Station Demand Analysis

The Roux Institute at Northeastern University is providing the following Electric Vehicle (EV) study as specified in the City of Portland Technical Manual Section 1, Subsection 1.14 (Electric Vehicle Infrastructure). The Technical Manual states that

> *In the case of new structured and surface parking of greater than 100 spaces, the review authority may establish the EV parking requirements on the basis of an EV parking demand study. Such study shall be prepared by a qualified professional using industry best practice, and account for future growth in EV demand.*

The Roux Institute at Northeastern University's proposed garage exceeds this threshold since it has been designed to accommodate 708 spaces. The garage is designed to meet the campus' long-term needs and will not be used to full capacity in its first years. For this phase, 16 of those parking spaces will be used to accommodate parking for 66 bicycles and the remaining 692 parking spaces will be used to accommodate vehicular parking. In addition to the garage spaces, there will be 14 parking spaces provided at grade on site.

As a result, this study finds that 24 EV charging spaces are needed to meet the projected EV charging demand in 2027. An additional 38 EV-ready spaces should be prepared to support demand into 2032. The Roux Institute at Northeastern University is committed to annually monitor EV charging use during the TDM monitoring and reporting process and increase the number of EV charging spaces as needed to meet future demand.

Existing EV Ownership Data

The U.S Department of Energy provides an EV Infrastructure Projection Tool that presents recent local EV information for Portland and South Portland. By the end of 2021, there were 475,600 light-duty vehicles on the road in Portland and South Portland and 4,500 (or 0.9%) of those were plug-in electric vehicles[1].

As presented in the *Maine Won't Wait* Climate Plan - 2022 Progress Report, there were 8,594 EVs (including Battery Electric Vehicles/BEVs and Plug in Hybrid Vehicles/PHEVs) registered in the State of Maine[2] in 2022. This represents 1% of the total registered vehicles in the state of Maine in 2022[3].

[1] https://afdc.energy.gov/evi-pro-lite
[2] https://www.maine.gov/climateplan/sites/maine.gov.climateplan/files/inline-files/MWW_Climate%20Plan%20Update%20December%202022_digital.pdf
[3] https://www.maine.gov/sos/bmv/stats/Reg%2022.pdf

Projected Roux Institute at Northeastern University EV Charging Demand

The share of EVs is expected to grow in line with national trends. By interpolating between years shown in Table 1[4], an EV share of 9% is expected at opening day in 2027. Additional EV-ready spaces will be needed to accommodate a projected increase to 15% of vehicles by 2032[5].

Table 1 National EV Projections

	2020[1]	2025[1]	2030[2]
Total EV population (millions)	1.8	7.1	na
EV share of new light duty vehicle sales	2.3%	11%	na
EV share of US light duty vehicle population	1%	3%	15%

Source: [1] Charging Up America: Assessing the Growing Need for U.S. Charging Infrastructure Through 2030 Gordon Bauer, Chih-Wei Hsu, Mike Nicholas, and Nic Lutsey, July 2021 https://theicct.org/sites/default/files/publications/charging-up-america-jul2021.pdf
[2] Building the electric-vehicle charging infrastructure America needs https://www.mckinsey.com/industries/public-sector/our-insights/building-the-electric-vehicle-charging-infrastructure-america-needs

A parking analysis was conducted to understand how many vehicles would be on campus during each part of the day in 2027 and 2032. Although people arrive and depart throughout the day, the campus population can be broadly divided into day and night users. Charging infrastructure should be sized to meet the needs of both groups, which can be considered non-overlapping. Table 2 presents the assumptions used to estimate the total number of projected EVs on campus in 2027. The parking analysis demonstrates an anticipated overlap between the daytime and evening parking demand resulting in the peak parking demand at 4PM. Based on expected population and assumptions shown in Table 2, there will be an estimated 538 vehicles parked on campus throughout the daytime period and 513 vehicles parked on campus throughout the evening period when the campus opens.

[4] https://theicct.org/sites/default/files/publications/charging-up-america-jul2021.pdf
[5] https://www.mckinsey.com/industries/public-sector/our-insights/building-the-electric-vehicle-charging-infrastructure-america-needs

Table 2 2027 Parking Demand Data

	Graduate Students	Affiliated Users	Special Events	Embedded Start ups	Staff/Faculty/ Research	Signature Partners	Total
Total	**1,899**	**35**	**150**	**60**	**225**	**55**	**2,424**
% Auto Mode Share	80%	90%	90%	90%	90%	90%	
% On Site Daily	43%	100%	100%	84%	84%	84%	
% Internal Capture Rate	0%	0%	0%	10%	10%	10%	
% Daytime Users[1]	40%	100%	33%	100%	80%	100%	
% Evening Users[2]	60%	0%	67%	0%	20%	0%	
Daytime Vehicles on Campus	261	32	45	41	122	37	538
Evening Vehicles on Campus	392	0	90	0	31	0	513

Source: The Roux Institute at Northeastern University
1 Daytime users on Campus from 8AM – 4PM
2 Evening users on Campus from 4PM – 11PM

A level 2 EV charger provides approximately 25 miles of range per hour of charging while a DC Fast charging provides approximately 100-200 miles per 30 minutes of charging[6]. Given that most students and staff/faculty live within 50 miles of the campus (currently 87% of students are within 50 miles), the Roux Institute at Northeastern University plans to place time limits on Level 2 chargers. Due to the nature of the distribution of daytime and evening classes, daytime students and staff/faculty are expected to be on campus between the hours of 8AM and 6PM and evening students and staff/faculty are expected to be on campus between the hours of 4PM and 11PM. In addition, events will take place throughout the daytime and evening periods. To be conservative, it is assumed that each EV charging space will turn over every three hours. As shown in Table 3, this would allow for each EV charging space to be used 2 times during both the daytime and evening periods each day. The Roux Institute at Northeastern University plans to install signage that indicates 3-hour charging limits with idle fees applied after this time. Table 3 demonstrates how 24 EV charging stations would meet the demands of the Roux Institute at Northeastern University based on the distribution of parking demand during the daytime and evening periods.

[6] https://afdc.energy.gov/fuels/electricity_infrastructure.html

Table 3 2027 EV Parking Demand Data

	Daytime Period	Evening Period
Time Period	8AM – 4PM[1]	4PM-11PM
# of Hours	8[1]	7
# of Hours to charge each EV	2	2
# of Charging Periods[2]	2	2
Vehicles on Campus	538	513
% EV Vehicles on Campus	9%	9%
#EVs on Campus	48	46
# of EV Charging Spaces Needed	24	23

Source: The Roux Institute at Northeastern University

[1] Assuming only 8AM – 4PM for number of hours since daytime period overlaps with the evening period to not double count 4PM-6PM. However, a portion of daytime students are still parked until 6PM.

[2] Assumes only two charging periods in each time frame in the event that turnover is not as vigorously enforced. Actual capacity will be three charging periods per time frame.

EV Parking Management and Future Monitoring

To promote turnover, time limits will be enforced and chargers will be connected to the internet so that drivers can check availability in real-time. To manage the shared use of the EV charging spaces, a reservation system will be investigated. This could allow drivers to reserve charging time in advance or allow drivers to place a brief hold on an available space (e.g., 15 minutes to walk to the garage and move their car to the charger). Other management systems could include a valet system and/or a mobile app.

As part of the TDM monitoring and reporting process, the Roux Institute at Northeastern University plans to track charging session data to assess the existing and projected needs for EV charging on campus. The Roux Institute at Northeastern University will also collect data on EV ownership during the permit process.

At opening year, this study finds that 24 EV chargers will satisfy demand for charging on campus. Consistent with this analysis, the calculation was repeated for 2032 with higher enrollment and greater EV adoption, finding that 62 EV chargers will meet demand at that time. Therefore, the Roux Institute at Northeastern University proposes to open the garage with 24 EV chargers and have an additional 38 EV-ready.

PC1

Zachary Powell <zpowell@portlandmaine.gov>

Trojan horse “university” IDEALS proposal

Tamas Peredy <peredy.tamas@gmail.com> Sun, Nov 26, 2023 at 5:33 AM
To: zpowell@portlandmaine.gov

This is a luxury condo, hotel and retail development project presented under the ruse of a university proposal. This will destroy the local area and snarl traffic for years. There is no infrastructure to support this behemoth. No parking. No road access.

I strongly urge you to reject this new mall. It is bad for Portland.

Tamas Peredy
10 Island street

PC2

Zachary Powell <zpowell@portlandmaine.gov>

Fwd: East Deering Neighbors for Responsible Development Comments on One Bean Pot Circle

Kevin Kraft <kkraft@portlandmaine.gov> Tue, Feb 6, 2024 at 9:57 AM
To: Zachary Powell <zpowell@portlandmaine.gov>

FYI

---------- Forwarded message ---------
From: **EastDeering Neighbors** <ednfrd@gmail.com>
Date: Tue, Feb 6, 2024 at 9:18 AM
Subject: East Deering Neighbors for Responsible Development Comments on One Bean Pot Circle
To: <planningboard@portlandmaine.gov>

Please accept these comments from the neighborhood on the traffic issue and recommendations:

Program Component	2027 (Opening)	2032
Daycare Center	50 children	50 children
Academic Cafe	8,000sf	8,000sf
Roux Institute Graduate Student	1,899 students	3,123 students
Faculty, Staff, Researchers	225 staff	300 staff
embedded startup	60 staff	100 staff
JAX & Oth Partners	55 staff	64 staff
Affiliated Users	35 visitors	100 visitors
Special Events (daily)	150 attendees	150 attendees

NOTE: Garage has been designed to accommodate 708 spaces. For this phase, 16 of those will be parking spaces to accommodate 66 bicycles. In addition to the garage, there will be 14 parking spaces at grade.

* *

TRAFFIC

The document submitted to MDOT states that trips have been calculated at 90% auto mode share, 5% transit and 5% walk/bike for all users except students which will be calculated at 80/10/10 split.

Academic Trips – Time of Day Distribution (Peak Times Only)

	Day Students		Night Students		Affiliated Users	
Time	In	Out	In	Out	In	Out
8:00 am	25%				20%	
9:00 am	20%				40%	
10:00 am	25%				20%	
11:00 am	20%					

3:00 pm	25%		
4:00 pm	30%	20%	20%
5:00 pm	30%	35%	40%
6:00 pm		20%	20%

Peak volume occurs from 8-11 am in the morning and 3-6 pm in the evening.

Peak AM Hours = 359 all trips, 82 internal, 20 transit, 20 bike/ped and 237 vehicles.
Peak PM Hours = 825 trips, 202 internal, 51 transit, 51 bike/ped and 521 vehicles.

**Peak AM hours 308 exiting and Peak PM hours 438 Exiting and 387 Entering (825)

NEIGHBORHOOD RECOMMENDATIONS FOR CONSIDERATION

1. **Require applicant to design and construct traffic improvements to the site approach of Sherwood Street and conduct a site distance analysis to include the approach to Kensington Street at the railroad overpass.**

2. **How will the Roux project minimize intrusion of the site generated trips onto local neighborhood streets? (Roux does not currently charge students for parking but will at the future campus which will further encourage high volumes of single-occupant vehicle travel and increased on-street parking.)**

3. **High volume of Roux students at peak times will be entering and exiting campus at the same time elementary school children are going to and being released from school. How will Roux deal with the safety of children including the additional volume of traffic generated by parent vehicles converging on Sherwood and Veranda Streets at those times?**

4. **Consideration should be given to collecting data that includes Portland School peak hours from 7am-9am and 2-4pm. Traffic counts to be collected prior to May 15th to capture accurate school traffic counts.**

5. **Require a parking demand and supply analysis, critical to estimating traffic impacts.**

6. **Implement an effective Shuttle Service Program at off-site parking locations.**

7. **Provide direct Campus connections to proposed bike/pd trails in Phase I which currently do not exist. AND require trip distribution information for bike/ped trips and seasonal impact on the Bike/ped percentages.**

8. **Require applicant to design and construct traffic improvements to the Washington Avenue and Veranda Street intersection that minimizes the increased level of traffic congestion at the intersection in Phase I.**

9. **Provide Capacity analysis for Washington Avenue for existing traffic adaptive operation in the applicant's modeling.**

10. **Provide data that supports the suggested "headway" improvements and commitment for Metro Route 7 from Portland Downtown "Pulse" to Falmouth. (Requires transfers)**

11. **Provide timeline for construction/implementation for multi-mode improvements proposed to mitigate traffic impact.**

12. **How will Sea Level Rising be addressed?**

--
Kevin Kraft, AICP
Deputy Director Planning & Urban Development Department
389 Congress Street
Portland, Maine 04101
Phone: 207.874.8430
kkraft@portlandmaine.gov



EastDeering Neighbors <ednfrd@gmail.com> 9:48 AM (6 minutes ago)

to planningboard@portlandmaine.gov

To: Chairman Mazer and Planning Board.

On behalf of the East Deering Neighborhood for Responsible Development (EDFRD), I respectfully ask that our Independent Traffic Consultant, Bill Bray, be allowed to make a brief presentation to the Planning Board as our representative at the upcoming Planning Board Workshop for Roux at Northeastern University.

Some members of the EDFRD have agreed to waive their time to allow for our consultant to present at the meeting.

Thank you in advance for your consideration of our request.

Best regards,

Steve Von Vogt
East Deering Neighbors for Responsible Development
Windsor Heights
Portland, ME 04103

February 8, 2024

Brandon Mazer, Chair
Portland Planning Board

Dear Mr. Mazer,

I am writing to provide background on discussions that have taken place between Metro and the Initiative for Digital Engineering and Life Sciences (IDEALS) on how transit may serve a future Roux Institute campus at 1 Bean Pot Circle.

As you know, Greater Portland Metro is a quasi-governmental transit agency, governed by a Board made up of representatives from its member municipalities: Portland, Westbrook, Falmouth, Freeport, Brunswick, and Yarmouth. We provide public transit within these communities, plus two others (South Portland and Gorham). Our annual ridership was about 2.1 million in 2019. Ridership was significantly impacted by the pandemic, but we are on pace to return to pre-pandemic ridership levels by the end of 2025. Our ridership in 2023 was 1.69 million.

Metro currently operates two bus routes, the Route 7 and Route 9, through the East Deering neighborhood. Route 7 runs along Veranda Street into Falmouth, while the Route 9 loops around the entirety of Portland, including along Washington Avenue in East Deering. Both routes could be somewhat useful for students, faculty, and visitors to access the site if they are willing and able to walk. However, in order to achieve the transit mode share goals set for the site, it is likely that a more direct transit option will be needed.

Dating back to early 2022, the IDEALS team reached out to Metro to begin discussions on how Metro may be a more direct part of the transportation solution at the proposed site. Metro was a part of numerous meetings with IDEALS staff, Portland Planning and DPW staff, MaineDOT engineers, and others, with the goal of minimizing traffic impact to the East Deering neighborhood and encouraging as many trips as possible to be made by transit, walking, and bicycling, while mitigating the impact of additional personal vehicle traffic.

A result of these meetings has been a general understanding that the Roux Institute should have direct, front-door transit access in order for transit to be seen as an appealing option by as many travelers as possible. While no formal commitments have been made yet, Metro and IDEALS are discussing the possibility of extending our Route 5 service, which currently terminates in downtown Portland, eastward and northward to the proposed campus. Additionally (or alternatively), our existing Route 7 service could be deviated from Veranda Street into the site. Both options are likely

www.gpmetro.org
114 Valley St. • Portland, ME • 04102
Phone: 207-774-0351 Fax: 207-774-6241

to impact the service frequency of the service(s) that accesses the site without additional vehicles on the road. Metro and IDEALS are working on a funding structure that would leverage federal transit start-up funding to provide this extra coverage. The Roux Institute would contribute directly to this additional service, as well as indirectly via passenger fare payments generated by the additional service. The City of Portland would also contribute to the enhanced service via Metro's cost allocation process.

The result of this collaboration would be a fixed route transit service that arrives and departs the 1 Bean Pot Circle site every 30 minutes on weekdays, with direct access to downtown Portland and other points of interest to the west, and with connections to most of the rest of Metro's transit routes, South Portland Bus Service's routes, and regional routes serving Biddeford and Saco.

In addition to contributing to a route with front-door access to the Roux Institute campus, IDEALS is also including a covered bus stop on their site plan, located close to academic buildings, with the idea that this would be a suitable location or a bus route to lay over, for bus operators to take a break, etc. IDEALS will ensure that the site is equipped to accommodate buses laying over and maneuvering within the site safely and smoothly.

Finally, the Roux Institute has already taken the significant step of instituting a pass program for its students and faculty, which allows them to ride Metro for free – paid for, at a discount, by Northeastern. The program is already well utilized, despite being relatively early in its existence. In August 2023, Metro extended our Husky Line service from our Elm Street bus terminal to the Eastern Waterfront, about 1,000 feet from the front door of the Roux Institute's current home at 100 Fore Street. Since then, over 9,000 trips have been made using Roux Institute passes, including over 2,500 in January 2024 alone. This indicates that Roux students and faculty are already comfortable taking transit, and this should only increase when the service is more direct. The pass program is expected to continue after they move to a new home.

We are looking forward to continuing our discussions with IDEALS and Northeastern University to make sure that transit is the mode of choice for the next home of the Roux Institute.

Thank you,

Mike Tremblay, Director of Transit Development
Greater Portland Metro

CC:
Portland Planning staff
Portland Planning Board

www.gpmetro.org
114 Valley St. • Portland, ME • 04102
Phone: 207-774-0351 Fax: 207-774-6241

Richard Weare <dewdev2013@gmail.com>
to planningboard@portlandmaine.gov

8:54 AM (2 hours ago)

Adverse traffic concerns are of major concern for the neighborhood.

One way to help with this problem is to install a off-ramp from I-295/Washington Avenue at exist 8.

The parking garage location needs to be moved to the east to allow room for any future off ramp construction, so that that traffic can travel alongside the parking garage to the front entrance on the north side of the garage.

Developer states in neighborhood meetings that they are siting the buildings to allow for the off ramp, but that is not true. If you look at the location of the garage building, you will see that it is too close to the property line to allow for the off-ramp traffic.

Richard Weare

646 Washington Avenue

THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
PHASE 1
PORTLAND, MAINE

LAND-USE PERMIT SET

OCTOBER 27, 2023

NOT FOR CONSTRUCTION



PROJECT LOCATION MAP

DRAWING INDEX	
SHEET TITLE	SHEET DESCRIPTION
G-000	COVER
G-001	GENERAL NOTES, LEGEND & ABBREVIATIONS
C-001	DEMOLITION PLAN – 1
C-002	DEMOLITION PLAN – 2
C-101	SITE LAYOUT PLAN – 1
C-102	SITE LAYOUT PLAN – 2
C-201	SITE UTILITY PLAN – 1
C-202	SITE UTILITY PLAN – 2
C-301	GRADING & DRAINAGE PLAN – 1
C-302	GRADING & DRAINAGE PLAN – 2
C-303	PLAN INSETS
C-304	LAYOUT, STRUCTURE & PIPE TABLES
D-401	CIVIL DETAILS – 1
D-402	CIVIL DETAILS – 2
D-403	CIVIL DETAILS – 3
D-404	CIVIL DETAILS – 4
D-405	CIVIL DETAILS – 5
D-406	CIVIL DETAILS – 6
D-407	CIVIL DETAILS – 7
E-001	ELECTRICAL LEGEND
E-010	ONE LINE DIAGRAMS
E-101	ELECTRICAL SITE PLAN
E-200	ELECTRICAL DETAILS



SITE LOCATION MAP

SOURCE: USGS TOPO QUADRANGLE

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED
PROFESSIONAL ENGINEER

Stamp

Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	AS NOTED

Drawing Title
COVER

G-000

CIVIL GENERAL NOTES

1. SITE AND TOPOGRAPHIC DATA PROVIDED BY ON THE GROUND SURVEY PERFORMED BY VHB, 500 SOUTHBOROUGH DRIVE, SUITE 105B, SOUTH PORTLAND, MAINE 04106 (207).889.3150. PLAN ENTITLED "EXISTING CONDITIONS SURVEY; RECORD OWNER: THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFT SCIENCE, 1 BEAN POT CIRCLE, CITY OF PORTLAND, COUNTY OF CUMBERLAND, STATE OF MAINE" DATED: 9/15/2023
2. VERTICAL DATUM IS REFERENCED TO CITY DATUM WITH ONE FOOT CONTOUR INTERVALS. CITY DATUM IS +0.02 FT NGVD 1929. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
3. THE ENTIRE SITE SHALL BE DEVELOPED AND/OR MAINTAINED AS DEPICTED ON THE SITE PLAN. APPROVAL OF THE PLANNING AUTHORITY OR PLANNING BOARD SHALL BE REQUIRED FOR ANY ALTERATION TO OR DEVIATION FROM THE APPROVED SITE PLAN, INCLUDING, WITHOUT LIMITATION: TOPOGRAPHY, DRAINAGE, LANDSCAPING, RETENTION OF WOODED OR LAWN AREAS, ACCESS, SIZE, LOCATION, AND SURFACING OF PARKING AREAS, AND LOCATION AND SIZE OF BUILDINGS.
4. THE CONTRACTOR SHALL CALL "DIG SAFE" AT 811 AT LEAST 72 HOURS PRIOR TO EXCAVATION IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL SAFETY CODES.
5. PROPERLY PROTECT AND DO NOT DISTURB PROPERTY IRONS AND MONUMENTS. IF DISTURBED, THE PROPERTY MONUMENT SHALL BE RESET AT THE CONTRACTOR'S EXPENSE BY A LICENSED LAND SURVEYOR ACCEPTABLE TO THE CITY. PROPERTY MONUMENTS SHALL BE RESET IN ACCORDANCE WITH CITY OF PORTLAND STANDARDS.
6. DO NOT PARK, IMPEDE ACCESS TO, OR STORE EQUIPMENT ON ADJACENT CITY OR PRIVATELY OWNED LOTS, UNLESS PERMISSION HAS BEEN GRANTED IN ADVANCE IN WRITING BY CITY AND/OR LAND OWNER.
7. PRIOR TO CONSTRUCTION, A PRECONSTRUCTION MEETING SHALL BE HELD AT THE PROJECT SITE WITH THE CONTRACTOR, ENGINEER, CITY OF PORTLAND DEVELOPMENT REVIEW COORDINATOR, CITY OF PORTLAND DEPARTMENT OF PUBLIC WORKS REPRESENTATIVE, PORTLAND WATER DISTRICT REPRESENTATIVE AND OWNER TO REVIEW THE CONSTRUCTION SCHEDULE AND CRITICAL ASPECTS OF THE SITE WORK. AT THAT TIME, THE SITE/BUILDING CONTRACTOR SHALL PROVIDE THREE (3) COPIES OF A DETAILED CONSTRUCTION SCHEDULE TO THE ATTENDING CITY REPRESENTATIVE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE A MUTUALLY AGREEABLE TIME FOR THE PRECONSTRUCTION MEETING.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE SITE DRAWINGS, INCLUDING BUT NOT LIMITED TO ALL UTILITIES, STORM INFRASTRUCTURE, SIGNS, UTILITY POLES, FENCES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH THE GOVERNING AUTHORITY'S SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COSTS SHALL BE INCURRED BY THE CONTRACTOR.
9. LAND OUTSIDE THE PROPOSED LIMIT OF WORK SHALL NOT BE DISTURBED BY THE CONTRACTOR. ANY LAND OUTSIDE LIMIT OF WORK DISTURBED BY CONTRACTOR SHALL BE RESTORED BY CONTRACTOR AT NO EXPENSE TO OWNER.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.
11. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL SAFETY CODES, REGULATIONS, LEGAL REQUIREMENTS, PERMIT CONDITIONS, ETC.
12. THE CONTRACTOR SHALL TAKE ADEQUATE PRECAUTIONS TO PROTECT ALL WALKWAYS, STREETS, PAVEMENTS, CURBING, TREES, PLANTINGS, LAWN, FENCING TO REMAIN ON OR OFF THE PREMISES, AND SHALL REPAIR AND REPLACE AT HIS/HER OWN EXPENSE, AS DIRECTED BY THE ENGINEER, ANY ITEMS DAMAGED AS A RESULT OF THE CONTRACTOR'S WORK.
13. THE CONTRACTOR SHALL PROVIDE ADEQUATE BRACING AND SHORING OF ALL EXCAVATIONS IN ACCORDANCE WITH THE REQUIREMENTS OF ALL GOVERNING CODES AND REGULATIONS.
14. SAWCUTS IN EXISTING PAVEMENT SHALL BE SMOOTH AND STRAIGHT. EXISTING PAVEMENT SHALL BE SAWCUT AND BUTTED TO THE NEW PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED.
15. WORK WITHIN PUBLIC RIGHT-OF-WAY SHALL COMPLY WITH APPLICABLE CITY OF PORTLAND AND STATE REQUIREMENTS.
16. ALL CURB DAMAGED DURING CONSTRUCTION SHALL BE REPLACED IN KIND AND SHALL CONFORM TO CITY OF PORTLAND SPECIFICATIONS. COST IS INCIDENTAL TO CONTRACT.
17. ALL FULL DEPTH PAVEMENT REPLACEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF PORTLAND TECHNICAL STANDARDS.
18. ALL WORK WITHIN THE RIGHT OF WAY OF CITY STREETS SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY TRAFFIC ENGINEER. THE CONTRACTOR SHALL SUBMIT A PROPOSED TRAFFIC CONTROL PLAN TO THE TRAFFIC ENGINEER AT LEAST 7 DAYS BEFORE BEGINNING CONSTRUCTION IN ANY STREET. THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE SUBJECT TO APPROVAL BY THE TRAFFIC ENGINEER, WHO MAY ATTACH SPECIAL CONDITIONS TO, OR REQUIRE MODIFICATIONS OF, THE TRAFFIC CONTROL PLAN. WORK SHALL NOT BEGIN UNTIL THE PLAN IS APPROVED BY THE TRAFFIC ENGINEER.
19. THE CONTRACTOR SHALL OBTAIN A CITY STREET OPENING PERMIT BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR WILL ALSO BE REQUIRED TO HAVE A CURRENT EXCAVATOR'S LICENSE IN THE CITY.
20. ALL WORK IN THE PUBLIC R.O.W. SHALL BE COMPLETED IN ACCORDANCE WITH THE CITY'S TECHNICAL MANUAL ARTICLES VI, VII, AND IX OF CHAPTER 25-STREETS, SIDEWALKS, AND OTHER PUBLIC PLACES OF THE CITY OF PORTLAND CODE OF ORDINANCES.
21. ALL SEWER CONSTRUCTION IN THE PUBLIC WAY SHALL BE COMPLETED IN ACCORDANCE WITH ARTICLE II OF CHAPTER 24-SEWERS OF THE CITY OF PORTLAND CODE OF ORDINANCES.
22. ALL WATER DISTRIBUTION CONSTRUCTION IN THE PUBLIC WAY SHALL BE COMPLETED IN ACCORDANCE WITH PORTLAND WATER DISTRICT STANDARDS.
23. CONTACT CITY OF PORTLAND ARBORIST AND ENGINEER PRIOR TO CUTTING ROOTS, TRIMMING BRANCHES, OR DISTURBING TREES WITHIN THE R.O.W. THAT NOT HAVE BEEN NOTED FOR REMOVAL ON THE PLANS.
24. IF IMPORTED FILL MATERIAL IS REQUIRED, IT SHALL BE CERTIFIED IN WRITING BY CONTRACTOR AS NON-CONTAMINATED, CLEAN FILL SUITABLE FOR THE INTENDED USE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TESTING OF ENVIRONMENTAL PARAMETERS AS OUTLINED IN THE PROJECT SPECIFICATIONS.
25. RESTORE ALL AREAS DISTURBED BY CONTRACTOR'S OPERATIONS TO ORIGINAL FINISH (GRAVEL, PAVEMENT, RIPRAP, GRASS, ETC.) UNLESS OTHERWISE NOTED ON PLANS. RESTORATION OF ALL AREAS DAMAGED BY CONTRACTOR SHALL BE INCIDENTAL TO THE PROJECT.
26. ALL MATERIAL SHALL BE FURNISHED BY CONTRACTOR UNLESS OTHERWISE NOTED.
27. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF ALL DIMENSIONS PRIOR TO START OF CONSTRUCTION.
28. RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
29. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS. PERMIT APPLICATIONS SHALL BE SUBMITTED WITH ADEQUATE TIME SO AS NOT TO DELAY CONSTRUCTION.
30. CONTRACTOR SHALL PROVIDE AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES IN ACCORDANCE WITH THESE PLANS AND THE LATEST EDITION OF THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION'S BEST MANAGEMENT PRACTICES MANUAL. KEEP ALL STREETS FREE OF DUST, MUD, AND DEBRIS. STREETS AND WALKWAYS SHALL BE SWEPT REGULARLY, AND TEMPORARY CONSTRUCTION ENTRANCES SHALL BE UTILIZED DURING CONSTRUCTION. CONTRACTOR SHALL MAINTAIN EROSION CONTROL AND STORMWATER POLLUTION PREVENTION SYSTEMS IN COMPLIANCE WITH THE REQUIREMENTS OF THE MAINE CONSTRUCTION GENERAL PERMIT (MCGP). CONTRACTOR SHALL CONDUCT AND MAINTAIN RECORDS OF EROSION CONTROL INSPECTIONS PER THE NOTICE OF INTENT TO COMPLY WITH THE MAINE CONSTRUCTION GENERAL PERMIT. CONTRACTOR SHALL PREPARE AND SUBMIT A NOTICE OF TERMINATION TO THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, UPON COMPLETION OF THE CONSTRUCTION PROJECT. SUBMIT A COPY OF THE INSPECTION RECORDS AND THE NOTICE OF TERMINATION TO THE OWNER AND ARCHITECT. A DRAFT OF THE NOTICE WILL BE PROVIDED TO THE OWNER AND THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO SUBMISSION.
31. THE UTILITY LOCATIONS SHOWN IN PLAN AND PROFILE ARE APPROXIMATE AND REQUIRE FIELD VERIFICATION BY THE CONTRACTOR. CONTACT THE ENGINEER AND OWNER IMMEDIATELY UPON DISCOVERING ANY CONFLICTS WITH EXISTING AND PROPOSED UTILITY LOCATIONS. NOT ALL EXISTING UTILITIES ARE SHOWN ON PLANS.
32. CONTRACTOR SHALL CLEAN AND/OR FLUSH ALL MANHOLES, CATCH BASINS, AND ASSOCIATED PIPING AFTER THE WORK HAS BEEN COMPLETED.
33. CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITY WITH UTILITY COMPANIES, EMERGENCY SERVICES AND CITY. NOTIFY UTILITY COMPANIES WITHIN 48 HOURS OF WORK ACTIVITY ADJACENT TO THOSE UTILITIES.
34. CONTRACTOR SHALL SEQUENCE THE WORK SO AS TO MAINTAIN UTILITY SERVICES FOR EXISTING OPERATIONS ON AND ADJACENT TO THE SITE. CONTRACTOR SHALL PROVIDE A PLAN FOR TEMPORARY UTILITY SERVICES OR AS REQUIRED. THE PLAN SHALL BE STAMPED BY A PROFESSIONAL ENGINEER AND SUBMITTED TO OWNER. ENGINEER AND UTILITY FOR ACCEPTANCE A MINIMUM OF 14 DAYS PRIOR TO START OF UTILITY WORK.
35. EXISTING FACILITIES (I.E. SIGNS, POLES, LIGHT POSTS, ETC.) SHALL BE REMOVED AND PROTECTED DURING CONSTRUCTION. OWNER RETAINS RIGHT TO KEEP ANY AND ALL REMOVED FACILITIES. CONTRACTOR SHALL DISPOSE OF ANY REMOVED FACILITY AT THE REQUEST OF CITY AT CONTRACTOR'S EXPENSE.
36. A COMPLETE SET OF "RECORD" DRAWINGS THAT REFLECT ANY AND ALL MODIFICATIONS TO THE SANITARY SEWER SYSTEM, WATER DISTRIBUTION SYSTEM, STORM SEWER SYSTEM AND ANY OTHER UTILITY INSTALLATIONS OR ALTERATIONS WITHIN THE PROJECT LIMITS SHALL BE SUBMITTED TO THE CITY OF PORTLAND. THESE DRAWINGS SHALL BE SUBMITTED IN BOTH DIGITAL (ACAD) AND HARD COPY FORMAT AS DEFINED IN THE SPECIFICATIONS PRIOR TO PAYMENT OF FINAL RETAINAGE.
37. ALL UTILITY SERVICES AND MAINS ARE APPROXIMATE AS SHOWN. CONTRACTOR SHALL FIELD VERIFY LOCATION OF EXISTING SERVICES AND MAINS AND RELOCATE AS REQUIRED TO COMPLETE WORK. CONTRACTOR SHALL COORDINATE WORK WITH THE CITY OF PORTLAND, PORTLAND WATER DISTRICT, UNITIL, CMP, AND ANY OTHER UTILITY OWNERS AND PROPERTY OWNERS.
38. WORK IS PROPOSED IN CLOSE PROXIMITY TO EXISTING UTILITIES. CONTRACTOR SHALL PROTECT EXISTING UTILITIES DURING CONSTRUCTION.
39. CAPPED PIPE STUB LOCATIONS SHALL BE MARKED WITH EMBEDDED STAKE AND A MINIMUM OF THREE TIES SHALL BE RECORDED. EMBEDDED STAKE SHALL BE 2X4 WITH PK NAIL DRIVEN IN TOP, LENGTH AS REQUIRED TO SPAN FROM TOP OF PIPE TO 6" BELOW GRADE. LOCATION AND ELEVATION OF PIPE STUB SHALL BE PROVIDED. WARNING TAPE AND WIRE SHALL BE INSTALLED OVER PIPE STUBS IN ACCORDANCE WITH SPECIFICATIONS.
40. ALL SIGNAGE SHALL CONFORM WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
41. ACTIVITIES THAT HAVE THE POTENTIAL TO DISTURB SOIL SUCH AS UTILITY AND SUBSURFACE STRUCTURE INSTALLATION/RELOCATION WORK, FOUNDATION INSTALLATION, GRADING, PAVING, AND LANDSCAPING SHALL BE CONDUCTED IN ACCORDANCE WITH THE PROJECT SOIL MANAGEMENT PLAN. APPLICABLE SOIL MANAGEMENT PROCEDURES INCLUDE SITE CONTROLS AND CONSTRUCTION MEASURES TO REDUCE EXPOSURE TO SOIL DURING CONSTRUCTION, AS WELL AS TO FACILITATE THE PROPER HANDLING, STORAGE, CHARACTERIZATION, TRANSPORT, ONSITE REUSE, AND/OR OFFSITE REUSE, OR DISPOSAL, OF EXCESS SOIL THAT MAY BE GENERATED DURING CONSTRUCTION.
42. ALL NEW BURIED WATER PIPE SHALL HAVE A MINIMUM 5 FEET COVER UNLESS NOTED OTHERWISE OR APPROVED BY THE ENGINEER. BURIED PIPE WITH LESS THAN 4 FEET OF COVER SHALL HAVE A MINIMUM OF 4 INCHES OF RIGID INSULATION WITH AN R-VALUE OF R-20 INSTALL IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
43. WHERE NEW WATER MAINS OF APPURTENANCES ARE TO BE CONNECTED TO EXISTING PIPE, CONTRACTOR SHALL CUT AND REMOVE THE EXISTING PIPE AS NECESSARY TO INSTALL THE NEW WORK. TEST PIT LOCATIONS WHERE NEW MAINS CONNECT TO EXISTING MAINS TO VERIFY PIPE DIAMETER AND MATERIAL TYPE.
44. SOLID SLEEVES ARE SHOWN ON THE DRAWINGS FOR ALL CONNECTIONS TO EXISTING WATER MAIN. IF OUTER DIAMETER OF EXISTING WATER MAIN IS FOUND TO BE GREATER THAN THE MAXIMUM OUTER DIAMETER COMPATIBLE WITH SOLID SLEEVES, CONTRACTOR SHALL INSTALL A COUPLING TO COMPLETE CONNECTION WITH EXISTING WATER MAIN.
45. BACKFLOW PREVENTERS SHALL BE PROVIDED AT ALL BUILDING SANITARY SEWER SERVICE OUTLETS.

CIVIL LEGEND

EXISTING		PROPOSED
	CONTOUR (1' INTERVAL)	
	CONTOUR (INDEX)	
S	SANITARY SEWER	S
SD	STORM DRAIN	SD
UD	UNDERDRAIN	UD
W	WATER LINE	W
E	UNDERGROUND ELECTRIC	
	UNDERGROUND TELECOMMUNICATIONS	
G	GAS LINE	
OE	OVERHEAD ELECTRIC	OE
	PROPERTY LINE	
	EDGE OF VEGETATION	
X X	FENCE	
	RETAINING WALL	
	GRANITE CURB	
	FLUSH CURB	
	SLOPE GRANITE CURB	
	TIPDOWN	
	EDGE OF PAVEMENT	
	EDGE OF GRAVEL	
T T T T T	GUARDRAIL	T T T T T
	RAILROAD TRACKS	
	ROOF OVERHANG	
	SEDIMENT BARRIER	
	LIMIT OF WORK	LW
	SIDEWALK	
	BITUMINOUS PAVEMENT	
	CONCRETE	
	BUILDING FOOTPRINT	

CIVIL LEGEND

EXISTING		PROPOSED
S	SANITARY SEWER MANHOLE	S
CO	CLEAN OUT	CO
D	DRAINAGE MANHOLE	D
	CATCH BASIN	
	AREA DRAIN	
	ELECTRICAL MANHOLE	
T	TELECOMMUNICATIONS MANHOLE	
TELE BOX	TELEPHONE STAND BOX	
	GAS METER BOX	
	GAS VENT	
	GAS GATE	
	TRANSFORMER	
	UTILITY POLE	
	UTILITY POLE WITH GUY	
	LIGHTPOST	
	WATER GATE VALVE	
	CURB STOP	
	REDUCER	
	SOLID SLEEVE	
	WATER SHUT OFF VALVE	
	HYDRANT	
W	WATER METER BOX	W
	PROPERTY MONUMENT	
MB	MAIL BOX	
	STREET AND MISCELLANEOUS SIGNS	
FP	FLAGPOLE	
XXX.XX	SPOT ELEVATION	XXX.XX
	TREE/SHRUB	
	BOLLARD	
	SECURITY CAMERA	CAM
	BLUE LIGHT INTERCOM	TEL

CIVIL ABBREVIATIONS

&	AND	N.I.C.	NOT IN CONTRACT
A.G.	ABOVE GROUND	NO.	NUMBER
		NR	NO REFUSAL
BC	BOTTOM OF CURB	N.T.S.	NOT TO SCALE
BIT	BITUMINOUS		
BW	BOTTOM OF WALL	OE	OVERHEAD ELECTRIC
B/W	BETWEEN	OH	OVERHEAD
CB	CATCH BASIN	±	PLUS OR MINUS
CI	CAST IRON	LLS	LICENSED LAND SURVEYOR
CMP	CENTRAL MAINE POWER	PROP.	PROPOSED
CMP	CORRUGATED METAL PIPE	PT.	POINT
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
DI	DUCTILE IRON	R.O.W.	RIGHT-OF-WAY
DIA.	DIAMETER	RCP	REINFORCED CONCRETE PIPE
DMH	DRAIN MANHOLE	REINF.	REINFORCED
DTL.	DETAIL	REQ'D	REQUIRED
E	UNDERGROUND ELECTRICAL	S	SLOPE (FT./FT.)
EL.	ELEVATION	S	SEWER
E.O.P.	EDGE OF PAVEMENT	SD	STORM DRAIN
EXIST.	EXISTING	SMH	SEWER MANHOLE
		SCH	SCHEDULE
FF	FINISH FLOOR	STA.	STATION
FM	FORCEMAIN		
FT	FOOT/FEET	TS	TOP OF STAIRS
		TW	TOP OF WALL
G	GAS MAIN	TYP.	TYPICAL
GS	GAS SERVICE		
GALV.	GALVANIZED	UP	UTILITY POLE
GRAN.	GRANITE		
		VC	VITRIFIED CLAY
HDPE	HIGH DENSITY POLYETHYLENE	VIT.	VITRIFIED CLAY
HYD	HYDRANT		
		W	WEST
INV.	INVERT	W	WATER
		W/	WITH
LF	LINEAR FEET	W	WATERMAIN
		WS	WATER SERVICE
MAX.	MAXIMUM	WV	WATER VALVE
MDOT	MAINE DEPARTMENT OF TRANSPORTATION		
MIN.	MINIMUM		
MON	MONUMENT		



OVERALL & INDEX SITE PLAN
SCALE: 1"=80'

BAR SCALE
1" = 80'
CHECK GRAPHIC SCALE BEFORE USING

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
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617 492-7000 Fax 492-7007

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GENERAL NOTES, LEGEND & ABBREVIATIONS

LAND-USE PERMIT SET

G-001

DEMOLITION NOTES:

1. SEQUENCE OF WORK WILL FOLLOW THE CONSTRUCTION MANAGEMENT PLAN. DEMOLITION ACTIVITIES SHALL BE SEQUENCED TO ENSURE AREAS OF THE SITE SHALL REMAIN OPERATIONAL DURING CONSTRUCTION.
2. PRIOR TO THE START OF DEMOLITION, THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND/OR APPROVALS FROM THE CITY OF PORTLAND, AND ALL OTHER AUTHORITIES HAVING JURISDICTION.
3. THE WORD "DEMOLISH" SHALL IMPLY THE FULL REMOVAL AND PROPER DISPOSAL OF THE ITEM AND ANY APPURTENANT ITEMS, AS NOTED, OR AS DIRECTED BY THE OWNER OR THEIR REPRESENTATIVE. THE OWNER RETAINS THE RIGHT TO KEEP ANY ITEM NOTED FOR REMOVAL OR DEMOLITION AT THE REQUEST OF THE OWNER OR THEIR REPRESENTATIVE.
4. CONSTRUCTION/DEMOLITION DEBRIS NOT APPROVED FOR REUSE ON-SITE, SHALL BE REMOVED AND DISPOSED OFF SITE IN ACCORDANCE WITH THE REQUIREMENTS OF ALL AUTHORITIES HAVING JURISDICTION. WASTE MANIFEST FORMS DOCUMENTING PROPER OFF-SITE DISPOSAL SHALL BE MADE AVAILABLE TO THE SITE/CIVIL ENGINEER AND THE CITY OF PORTLAND UPON REQUEST.
5. PRIOR TO THE START OF DEMOLITION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES TO BE DEMOLISHED OR TO REMAIN PROTECTED DURING CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF THE CONFLICT. FOR ANY UTILITY PIPES OF STRUCTURES FOUND THAT ARE NOT ON THE EXISTING PLAN OR ARE IN LOCATIONS THAT VARY FROM WHAT IS SHOWN, CONTRACTOR SHALL PROVIDE RECORD LOCATIONS.
6. LOCATIONS OF EXISTING UTILITIES AS SHOWN ON THE DRAWINGS ARE APPROXIMATE, AND NOT ALL UTILITY PIPING IS SHOWN. CONTRACTOR SHALL WORK WITH OWNER AND ENGINEER PRIOR TO STARTING ANY EXCAVATION TO DEVELOP AN INVESTIGATION PLAN TO DETERMINE LOCATIONS OF EXISTING FUEL LINES, DOMESTIC AND FIRE WATER LINES, ELECTRICAL DUCT BANKS, SITE SEWER LINES, AND THE PORTLAND WATER DISTRICT SANITARY SEWER FORCEMAIN IN THE VICINITY OF THE WORK AREA.
7. THE CONTRACTOR SHALL PROTECT ALL EXISTING UTILITIES TO REMAIN. ANY TEMPORARY SHUT DOWNS REQUIRED TO FACILITATE THE PROPOSED CONSTRUCTION, WHICH MAY AFFECT USES ON ADJACENT PROPERTIES SHALL BE COORDINATED BY THE CONTRACTOR, THE CITY OF PORTLAND AND APPLICABLE UTILITY.
8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) PLAN IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
9. CONTRACTOR SHALL COVER CONSTRUCTION DUMPSTERS AND ROLL-OFF CONTAINERS, AND STORE ALL CONSTRUCTION CHEMICALS INSIDE THE CONSTRUCTION TRAILER OR UNDER A COVERED AREA DURING PERIODS WHEN CONSTRUCTION CEASES.
10. ALL SITE FEATURES OUTSIDE LIMIT OF WORK AND NOT DESIGNATED FOR DEMOLITION SHALL BE PROTECTED.
11. WORK SHALL REMAIN WITHIN THE DEFINED LIMITS OF WORK. DEMOLITION WORK WILL NOT IMPACT PRIOR PHASES OF WORK ON THE SITE UNLESS OTHERWISE NOTED ON THESE PLANS.
12. CONTRACTOR SHALL REPAIR OR REPLACE ANY STRUCTURES OR UTILITIES DAMAGED DURING DEMOLITION WORK. THE CONTRACTOR SHALL PROCEED WITH CAUTION WITHIN THE PROPOSED WORK AREA TO PREVENT ANY INTERRUPTION TO EXISTING UTILITY SERVICE UNLESS OTHERWISE COORDINATED WITH THE OWNER.
13. CONTRACTOR SHALL REMOVE AND REUSE EXISTING FENCING ON THE SITE AS IS POSSIBLE. PRIOR TO START OF WORK, CONTRACTOR SHALL REVIEW ALL FENCING WITH OWNER AND ENGINEER TO CONFIRM DEMOLITION OR REUSE. SEE EXHIBIT INCLUDED IN THE SPECIFICATIONS FOR FURTHER INFORMATION ON THE EXISTING FENCING.
14. FOR ALL ELECTRICAL DEMOLITION IDENTIFIED ON THESE PLANS, THE CONTRACTOR SHALL ALSO REVIEW WITH THE PROJECT ELECTRICAL DRAWINGS, AND COORDINATE WITH CENTRAL MAINE POWER AS REQUIRED.
15. TREES WITHIN THE LIMITS OF WORK THAT ARE NOT DESIGNATED AS BEING PROTECTED SHALL BE DEMOLISHED. CONTRACTOR SHALL COMPLY WITH SECTION 4.3 AND CHAPTER 4 FIGURE IV OF THE CITY OF PORTLAND TECHNICAL MANUAL FOR LANDSCAPE PRESERVATION.
16. ALL PERIMETER AND SECURITY FENCING ON THE PROJECT PARCEL SHALL BE DEMOLISHED UNLESS OTHERWISE INDICATED. CONTRACTOR SHALL VERIFY PROPERTY LIMITS PRIOR TO FENCE DEMOLITION.
17. DEMOLITION OF UTILITY POLES, METERS, AND EQUIPMENT SHALL BE SEQUENCED WITH NEW WORK TO ENSURE CONTINUED ELECTRICAL SERVICE TO UTILITY CUSTOMERS.
18. DEMOLISH ALL PAVEMENT, CURB, SIDEWALK AND GUARDRAIL WITHIN THE LIMIT OF WORK UNLESS OTHERWISE INDICATED.

SHEET LEGEND

- XXXXXXXXXXXXXXXXX — UTILITY LINE DEMOLITION
- CATCH BASIN INLET PROTECTION
- SEDIMENT BARRIER
- STRUCTURE DEMOLITION
- TREE DEMOLITION

INSET A

MATCHLINE SEE INSET A

MATCHLINE SEE SHEET C-002

MATCHLINE SEE SHEET C-002

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1" = 20'
CHECK GRAPHIC SCALE BEFORE USING

IDEALS
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Drawing Title
DEMOLITION PLAN - 1

C-001

MATCHLINE SEE SHEET C-001

MATCHLINE SEE SHEET C-001

MATCHLINE SEE INSET A

MATCHLINE SEE INSET B

DEMOLITION OF OVERHEAD SERVICE WITH TRANSFORMERS SHALL BE SEQUENCED WITH NEW WORK TO ENSURE CONTINUED SERVICE TO CUSTOMERS

DEMOLISH HYDRANT

LIMITS OF PREVIOUSLY DEMOLISHED BUILDING; REMNANT FOUNDATION MAY REMAIN

SALVAGE RAILS

DEMOLISH HYDRANT

DEMOLISH CONCRETE PAD

TOP OF FRAME = 17.82' COVER NOT REMOVABLE AT TIME OF SURVEY

APPROXIMATE LOCATION OF ELECTRICAL POLE TO BE DEMOLISHED

TOP OF FRAME = 14.93'
TOP OF PIPE = 11.3' (6" CAST?)
TOP OF SILT = 10.9'±
OTHER FEATURES NOT VISIBLE

TOP OF FRAME = 15.00' COVER NOT REMOVABLE AT TIME OF SURVEY

DEMOLISH HYDRANT

DEMOLISH WATER SERVICE

APPROXIMATE LOCATION OF UTILITY METER TO BE DEMOLISHED

DEMOLISH FLAG POLE & ASSOCIATED LIGHT FIXTURES & CONDUIT

APPROXIMATE LOCATION OF ELECTRICAL POLE TO BE DEMOLISHED

TOP OF FRAME = 17.60' FULL OF WATER FEATURES NOT VISIBLE

APPROXIMATE LOCATION OF OVERHEAD TELECOM UTILITIES TO BE DEMOLISHED

DEMOLISH SIGN

DEMOLISH GAS SERVICE

DEMOLISH HYDRANT

DEMOLISH TREE, TYP.

DEMOLISH CONCRETE PAD

DEMOLISH CONCRETE WALL

TOP OF FRAME = 11.21' FL/ = 2.5' (12" PVC)

DEMOLISH TREE, TYP.

DEMOLISH STAIR

DEMOLISH STACK FOUNDATION

FORMER BRICK STACK

DEMOLISH RETAINING WALL

PRESERVE & PROTECT BUILDING TO REMAIN

DEMOLISH CONCRETE PAD

DEMOLISH CHAINLINK FENCE

DEMOLISH TRANSFORMER

10" PVC
INV = 0.8'
CONNECTION COULD NOT BE DETERMINED AT THE TIME OF SURVEY

12" PVC
INV = 1.5'

TOP OF FRAME = 8.84'
INV A = 3.3' (12" PVC)
INV B = 5.0' (12" PVC)
INV C = 2.8 (12" PVC)

TOP OF FRAME = 8.71'
FL/ = 3.2' (12" PVC)

TOP OF FRAME = 9.3'
INV A = 4.4' (12" PVC)
INV B = 4.8' (6" PVC)
INV C = 4.7 (8" PVC)
INV D = 4.8' (6" PVC)

TOP OF FRAME = 9.30'
FL/ = 5.7' (6" PVC)

LIMITS OF PREVIOUSLY DEMOLISHED BUILDING; REMNANT FOUNDATION MAY REMAIN

TOP OF FRAME = 9.55'
INV A = 6.4' (6" PVC)
INV B = 6.4' (6" PVC)
SUMP = 3.4'

TOP OF FRAME = 9.12'
INV = 5.7'
(12" PVC)

TOP OF FRAME = 9.63'
INV A = 4.1' (10" PVC)
INV B = 4.1' (10" PVC)
INV C = 3.8' (12" PVC)

TOP OF FRAME = 10.34' INACCESSIBLE AT TIME OF SURVEY

TOP OF FRAME = 8.25'
INV A = 3.2' (8" PVC)
INV B = 3.4' (12" PVC)
INV C = 3.0 (8" PVC)

DEMOLISH BUILDING FOUNDATION

PERIMETER BARRIER, TYP.

APPROXIMATE FLOOD ZONE LINE BY ELEVATION (EL. 9)

APPROXIMATE FEMA FLOOD ZONE LINE

DEMOLISH BUILDING FOUNDATION

DEMOLISH BUILDING & PIER

INSET B

NOTES:
1. REFER TO SHEET C-001 FOR GENERAL DEMOLITION NOTES AND DEMOLITION LEGEND.

20' 0 20' 40'
BAR SCALE
1" = 20'
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STATE OF MAINE
AMY N. LEBEL
17065
LICENSED
PROFESSIONAL ENGINEER

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Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	1"=20'

Drawing Title

DEMOLITION PLAN - 2

C-002

NOTES:
1. SEE LANDSCAPE PLANS FOR SITE SURFACE MATERIAL ASSOCIATED WITH LANDSCAPED AREAS, PATIOS, AND NON-BITUMINOUS WALKWAYS & ROADWAYS, PLANTING PLANS AND SITE FURNISHINGS.
2. UTILITY AND DRAINAGE STRUCTURES NOT SHOWN FOR CLARITY, SEE GRADING AND DRAINAGE AND UTILITY PLAN FOR MORE INFORMATION.
3. REFER TO SHEET C-304 FOR LINE AND CURVE LAYOUT DATA.

REFER TO CIVIL PLANS BY VHB FOR SHERWOOD STREET DESIGN
CONCRETE SIDEWALK, TYP.
PEDESTRIAN RAMP, TYP.
BIKE LANE STRIPING PER CITY OF PORTLAND TECHNICAL MANUAL
DOUBLE YELLOW CENTERLINE STRIPE, TYP.
FLUSH GRANITE CURB, TYP.
CROSSWALK, TYP.
VERTICAL GRANITE CURB, TYP.
PWD SEWER EASEMENT
STOP SIGN, TYP.
STOP BAR, TYP.
LIMIT OF WORK
PROPERTY BOUNDARY, TYP.
4" LOAM & SEED, TYP.
SIDEWALK RAMP DETECTABLE WARNING, TYP.
STOP SIGN, TYP.
STOP BAR, TYP.
CONCRETE PAD, TYP.
CONCRETE SIDEWALK, TYP.
PWD SEWER EASEMENT
BITUMINOUS PAVEMENT, TYP.
TREE, TYP. SEE LANDSCAPE PLANS
VEHICULAR PRECAST CONCRETE PAVERS, TYP. SEE LANDSCAPE PLANS
DO NOT ENTER SIGN, TYP.
5'X8' STANDARD PAD-MOUNTED BUS SHELTER (2) MIN 2'-8" OPENING FOR EACH
ONE WAY AND ROUNDABOUT SIGN, TYP.
TIPDOWN, TYP.
STOP BAR, TYP.
STOP SIGN, TYP.
FLUSH GRANITE CURB, TYP.
TIMBER GUARDRAIL, TYP. SEE LANDSCAPE PLANS
4" LOAM & SEED, TYP.
ARCHITECTURAL CONCRETE RETAINING WALL, SEE STRUCTURAL PLANS
VEHICULAR ASPHALT PAVING, TYP. SEE LANDSCAPE PLANS
ACCESSIBLE PARKING SPACE, TYP.
ONE WAY SIGN, TYP.
PARKING GARAGE
4" LOAM & SEED, TYP.
CURB STOP, TYP.
ACCESSIBLE PARKING SPACE SIGN (MUTCD R7-8), TYP. AT MARKED ACCESSIBLE SPACES
MOUNTABLE GRANITE CURB, TYP.
BIKE RACK, TYP. SEE LANDSCAPE PLANS
MATCHLINE SEE INSET A, SHT. C-303
MATCHLINE SEE SHEET C-102
MATCHLINE SEE SHEET C-102

BAR SCALE
1" = 20'
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17065
LICENSED
PROFESSIONAL ENGINEER
Amy N Lebel

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Drawn By	BCM Designed By ANL Checked DLC
Date	27 OCTOBER 2023
Scale	1"=20'

Drawing Title
SITE LAYOUT PLAN - 1

C-101

MATCHLINE SEE SHEET C-101

MATCHLINE SEE SHEET C-101

PARKING GARAGE

DAY CARE CENTER

DO NOT ENTER SIGN, TYP.

ONE WAY AND ROUNDABOUT SIGN, TYP.

ONE WAY SIGN, TYP.

PEDESTRIAN RAMP, TYP.

CROSSWALK, TYP.

AUTHORIZED VEHICLES ONLY SIGN, TYP.

ACCESSIBLE PARKING SPACE, TYP.

SIDEWALK RAMP DETECTABLE WARNING, TYP.

VEHICULAR GATE WITH KNOX LOCKBOX, TYP.

CURB STOP, TYP.

ACCESSIBLE PARKING SPACE SIGN (MUTCD R7-8), TYP. AT MARKED ACCESSIBLE SPACES

FLUSH GRANITE CURB, TYP.

PEDESTRIAN GATE, TYP.

FENCE, TYP.

PWD SEWER EASEMENT

VERTICAL GRANITE CURB, TYP.

BITUMINOUS PAVEMENT, TYP.

CONCRETE SIDEWALK, TYP.

TIPDOWN, TYP.

BENCH, TYP. SEE LANDSCAPE PLANS

TREE, TYP. SEE LANDSCAPE PLANS

4" LOAM & SEED, TYP.

BIKE RACK, TYP. SEE LANDSCAPE PLANS

STAIR, TYP. SEE LANDSCAPE PLANS

BOLLARD, TYP. SEE LANDSCAPE PLANS

GRANITE COBBLESTONE PAVERS, TYP. SEE LANDSCAPE PLANS

VEHICULAR CONCRETE PAVEMENT, TYP. SEE LANDSCAPE PLANS

VEHICULAR GRANITE PAVERS, TYP. SEE LANDSCAPE PLANS

VEHICULAR GRANITE PAVERS, TYP. SEE LANDSCAPE PLANS

MOUNTABLE GRANITE CURB, TYP.

RAMP TO LOADING DOCK

VEHICULAR ASPHALT PAVING, TYP. SEE LANDSCAPE PLANS

TIMBER GUARDRAIL, TYP., SEE LANDSCAPE PLANS

ARCHITECTURAL CONCRETE RETAINING WALL, TYP.

ROOF OVERHANG, TYP.

PROPERTY BOUNDARY, TYP.

LIMIT OF WORK, TYP.

LEARNING RESEARCH & COLLABORATION BUILDING

BEAN BUILDING

SEE LANDSCAPE PLANS FOR ROOF LANDSCAPING

ROOF OVERHANG

SEE LANDSCAPE PLAN FOR MORE DETAIL ON SURFACE MATERIALS

VEHICULAR PRECAST CONCRETE PAVERS, TYP. SEE LANDSCAPE PLANS

STONE RETAINING WALL, TYP. SEE LANDSCAPE PLANS

ARCHITECTURAL CONCRETE RETAINING WALL, TYP. SEE LANDSCAPE PLANS

STONE RETAINING WALL, TYP. SEE LANDSCAPE PLANS

VEHICULAR GRANITE PAVERS, TYP. SEE LANDSCAPE PLANS

APPROXIMATE FLOOD ZONE LINE BY ELEVATION

APPROXIMATE FLOOD ZONE LINE BY ELEVATION (EL. 9)

APPROXIMATE FEMA FLOOD ZONE LINE

EXISTING PIERS

MEAN TIDE (0)

MHW (7.39')

MLW (0.80')

ZONE AE (EL. 9)

INTERTIDAL ZONE

MATCHLINE SEE INSET A, SHT. C-303

MATCHLINE SEE INSET B, SHT. C-303

NOTES:
1. REFER TO SHEET C-101 FOR GENERAL SITE LAYOUT PLAN NOTES.
2. REFER TO SHEET C-304 FOR LINE AND CURVE LAYOUT DATA.

20' 0 20' 40'
BAR SCALE
1" = 20'
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Drawing Title
SITE LAYOUT PLAN - 2

C-102



BAR SCALE
1" = 20'
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Scale	1"=20'

Drawing Title
SITE UTILITY PLAN - 1

C-201

MATCHLINE SEE SHEET C-201

MATCHLINE SEE SHEET C-201

PARKING GARAGE

DAY CARE CENTER

6" FIRE PROTECTION SERVICE
2" DOMESTIC WATER SERVICE
6" SANITARY INV OUT=16.00
4" DI
6" COPPER
CAP FOR FUTURE CONNECTION 12" PVC INV=10.11
END CAP
FROM OW SEP
SMH 4
6" SANITARY INV OUT=9.33
6" FIRE PROTECTION SERVICE
2" DOMESTIC WATER SERVICE
OIL/WATER SEPARATOR VENT OUTLET
BELOW-GRADE STORMWATER TREATMENT
SMH 10
ELECTRIC HAND HOLE, TYP., SEE ELECTRICAL PLANS
ADJUST STRUCTURE RIM TO GRADE
SECURITY CAMERA AND BLUE LIGHT INTERCOM, TYP.
SURFACE STORMWATER TREATMENT SYSTEM
SECURITY CAMERA, TYP.
UNDERGROUND ELECTRICAL, TYP., SEE ELECTRICAL PLANS
MATCH EXISTING INVERT, CONNECT NEW PIPE TO EXISTING STRUCTURE 12" PVC INV IN= 1.3 PROVIDE BACKFLOW PREVENTER
PWD SEWER EASEMENT
SMH 1
SMH 2
SMH 5
SMH 6
SMH 7
SMH 12
MATCHLINE SEE INSET A, SHT C-303
MATCHLINE SEE INSET B, SHT. C-303
EXISTING PIERS
INTERTIDAL ZONE
MEAN TIDE (0)
MHW (7.39')
MLW (0.50')
HAT (11.39')
LAT (-0.50')
4" DOMESTIC WATER SERVICE
6" FIRE PROTECTION SERVICE
6" SANITARY INV OUT=5.7
BEAN BUILDING
HYDRANT ASSEMBLY, TYP.
3" BLOW-OFF VALVE AND THRUST BLOCK
LEARNING RESEARCH & COLLABORATION BUILDING
ELECTRIC VAULT, TYP., SEE ELECTRICAL PLANS
OIL/WATER SEPARATOR VENT OUTLET
4'x6' GREASE INTERCEPTOR
8'x14' SUBSURFACE EMERGENCY FUEL TANK
6" SANITARY INV OUT = 17.83
6" SANITARY INV OUT = 17.69
8" SANITARY INV OUT=14.97
6" DOMESTIC WATER SERVICE
8" FIRE PROTECTION SERVICE
8" FIRE PROTECTION SERVICE
END CAP
8" SANITARY INV OUT=13.66 (2)
APPROXIMATE FLOOD ZONE LINE BY ELEVATION (EL. 9)
APPROXIMATE FEMA FLOOD ZONE LINE

NOTE:
1. REFER TO SHEET C-304 FOR SANITARY SEWER PIPE AND STRUCTURE TABLES.

BAR SCALE
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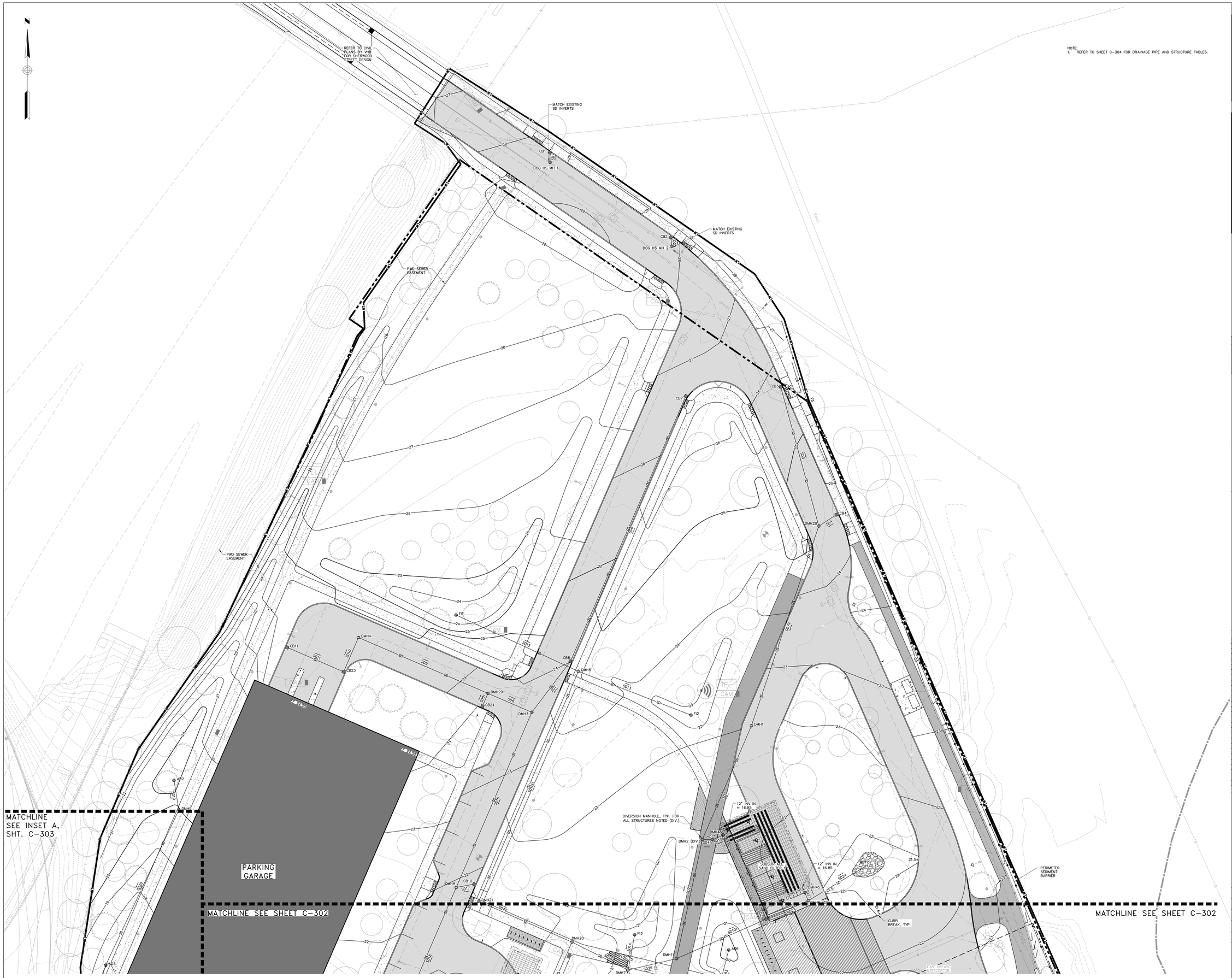
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Drawing Title
SITE UTILITY PLAN - 2

C-202



NOTE:
1. REFER TO SHEET C-304 FOR DRAINAGE PIPE AND STRUCTURE TABLES.

BAR SCALE
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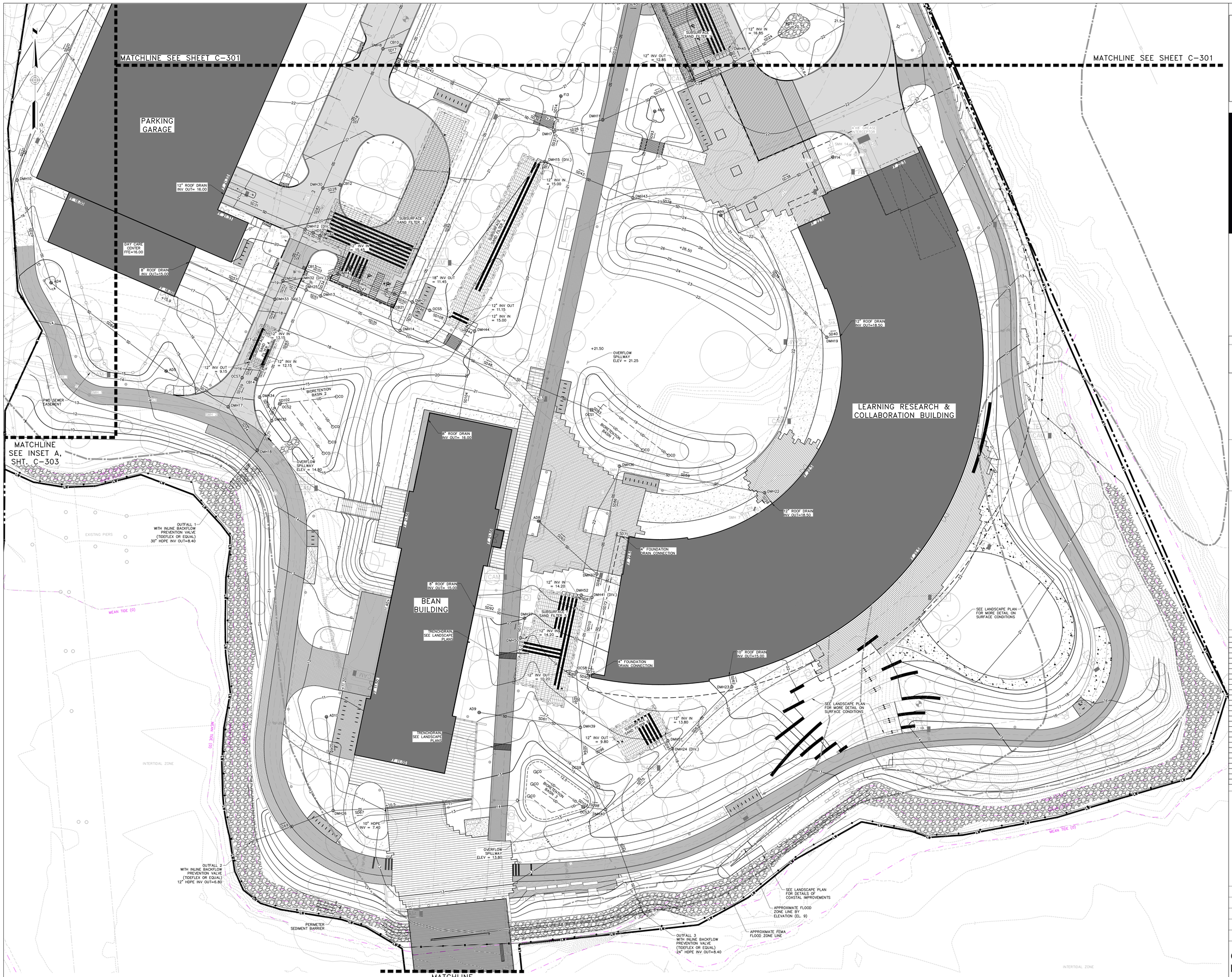
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Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	1"=20'

Drawing Title
GRADING & DRAINAGE PLAN - 1

C-301



NOTE:
1. REFER TO SHEET C-304 FOR DRAINAGE PIPE AND STRUCTURE TABLES.

BAR SCALE
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CHECK GRAPHIC SCALE BEFORE USING

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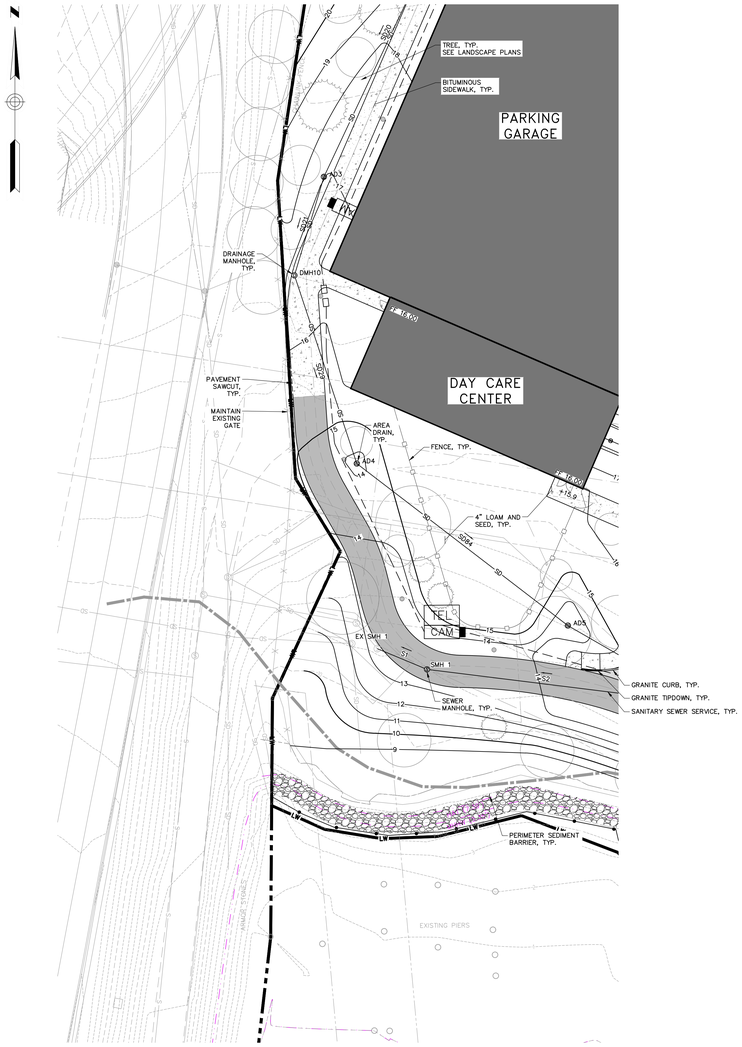
Stamp

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Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
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Date	27 OCTOBER 2023
Scale	1"=20'

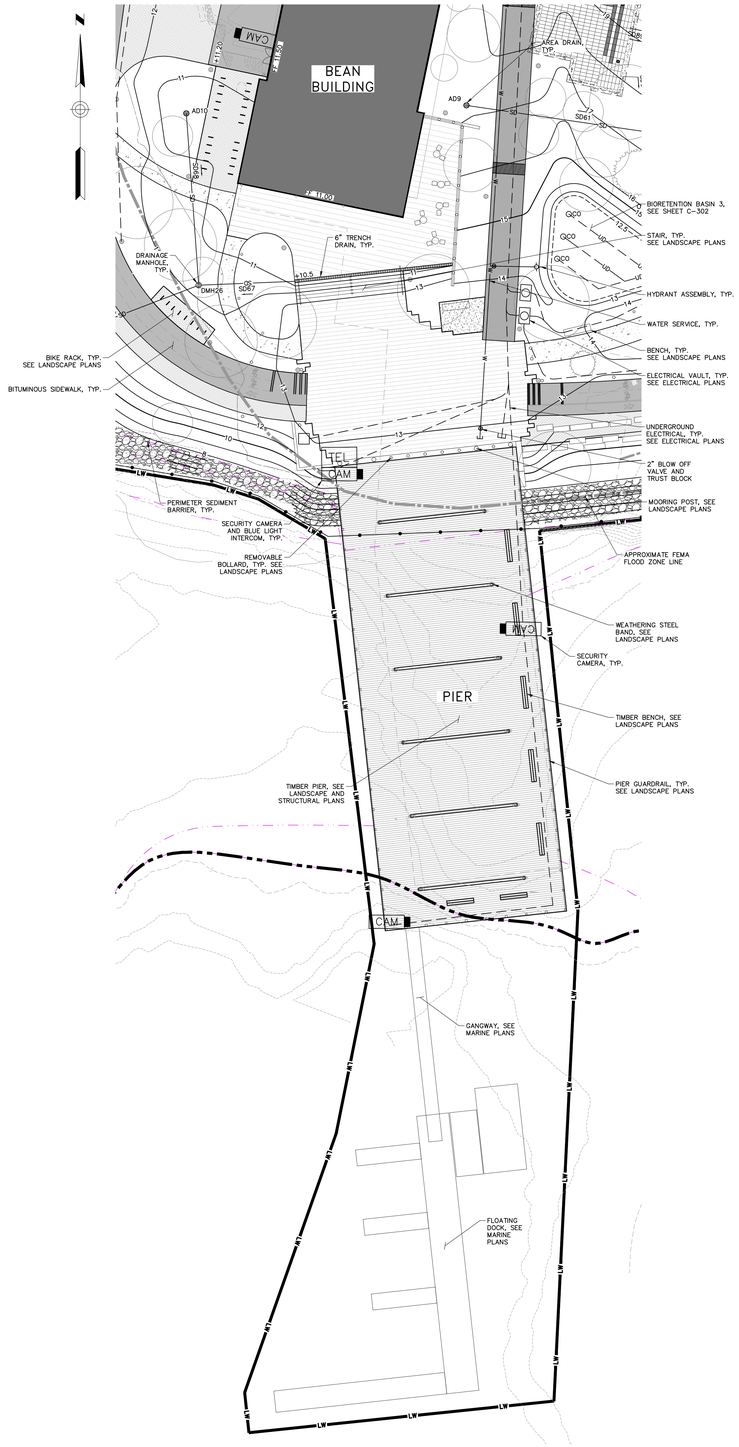
Drawing Title

GRADING & DRAINAGE PLAN - 2

C-302



INSET A



INSET B

NOTE:
1. REFER TO SHEET C-304 FOR SANITARY SEWER AND STORMWATER DRAINAGE STRUCTURE AND PIPE TABLES.

20' 0 20' 40'
BAR SCALE
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Drawing Title
PLAN INSETS

C-303

LAYOUT DATA – SHEET C–101 & C–102

LINE LAYOUT DATA						
Line #	Length	Direction	START NORTHING	START EASTING	END NORTHING	END EASTING
L1	37.23	S23° 23' 22.07"W	308428.31	2929642.18	308394.14	308394.14
L2	108.87	N23° 38' 38.32"W	308328.65	2929718.85	308428.38	308428.38
L3	2.61	N3° 31' 51.46"E	308302.91	2929722.80	308305.52	308305.52
L4	6.11	N66° 26' 01.46"E	308266.27	2929693.26	308268.71	308268.71
L5	81.96	S23° 38' 40.60"E	308354.24	2929627.49	308279.16	308279.16
L6	124.86	S23° 38' 38.32"E	308449.04	2929692.35	308334.66	308334.66
L7	119.85	S23° 38' 40.60"E	308644.91	2929622.42	308535.12	308535.12
L8	179.23	S55° 17' 21.81"E	308836.64	2929401.25	308734.58	308734.58
L9	1.47	S66° 38' 16.59"E	308166.05	2929389.55	308165.47	308165.47
L10	25.43	S23° 23' 55.71"W	308215.69	2929389.22	308192.35	308192.35
L11	1.47	N66° 36' 04.29"W	308225.52	2929416.87	308226.11	308226.11
L12	25.43	N23° 24' 16.45"E	308175.88	2929417.18	308199.22	308199.22
L13	45.37	N66° 26' 01.46"E	308210.02	2929664.37	308228.16	308228.16
L14	65.46	S23° 34' 05.14"E	308270.02	2929638.19	308210.02	308210.02
L15	18.03	N66° 21' 19.40"E	308262.79	2929621.68	308270.02	308270.02
L16	73.00	S23° 38' 40.60"E	308329.67	2929592.40	308262.79	308262.79
L17	13.00	S66° 21' 19.40"W	308334.88	2929604.31	308329.67	308329.67
L18	27.12	S23° 38' 40.60"E	308366.31	2929596.01	308341.47	308341.47
L19	32.29	S12° 15' 38.07"W	308397.86	2929602.87	308366.31	308366.31
L20	116.20	S23° 23' 22.07"W	308504.52	2929649.00	308397.86	308397.86
L21	100.71	S23° 38' 40.60"E	308616.73	2929608.56	308524.47	308524.47
L22	377.86	N23° 23' 55.71"E	308269.84	2929412.65	308616.63	308616.63
L23	6.47	N66° 36' 04.29"W	308247.55	2929426.40	308250.12	308250.12
L24	87.95	N23° 24' 16.45"E	308108.97	2929414.37	308189.69	308189.69
L25	0.50	S23° 24' 32.18"W	308128.10	2929371.44	308127.65	308127.65
L26	47.00	N66° 35' 27.82"W	308109.43	2929414.57	308128.10	308128.10
L27	13.01	S23° 24' 16.45"W	308140.04	2929376.61	308128.10	308128.10
L28	3.67	S66° 38' 16.59"E	308148.08	2929370.63	308146.62	308146.62
L29	87.98	N23° 27' 50.30"E	308062.17	2929322.46	308142.88	308142.88
L30	48.29	N66° 36' 04.30"W	308162.54	2929340.94	308181.72	308181.72
L31	6.12	N23° 23' 55.70"E	308150.35	2929341.11	308155.97	308155.97
L32	83.92	N23° 27' 50.30"E	308073.37	2929307.70	308150.35	308150.35
L33	29.39	S23° 23' 55.70"W	308432.89	2929331.57	308405.92	308405.92
L34	85.17	N66° 36' 04.29"W	308406.88	2929429.46	308440.70	308440.70
L35	16.41	N23° 23' 55.71"E	308372.09	2929430.75	308387.16	308387.16
L36	8.59	N68° 23' 55.71"E	308366.27	2929420.02	308369.43	308369.43
L37	61.88	N23° 23' 55.71"E	308306.82	2929392.70	308363.60	308363.60
L38	8.58	N21° 37' 22.26"W	308295.01	2929395.80	308302.99	308302.99
L39	10.68	N23° 23' 55.71"E	308281.38	2929391.50	308291.18	308291.18
L40	8.59	N68° 23' 55.71"E	308275.56	2929380.77	308278.72	308278.72
L41	61.86	N23° 23' 55.71"E	308216.12	2929353.45	308272.90	308272.90
L42	8.59	N21° 36' 04.29"W	308204.32	2929356.55	308212.30	308212.30
L43	32.50	S66° 36' 04.30"E	308205.59	2929306.94	308192.68	308192.68
L44	48.39	S23° 23' 55.70"W	308467.80	2929298.74	308423.39	308423.39
L45	124.17	N66° 36' 04.29"W	308428.91	2929438.99	308478.22	308478.22
L46	252.85	S23° 23' 55.71"W	308668.77	2929559.13	308436.71	308436.71
L47	199.78	S55° 17' 21.81"E	308813.01	2929386.20	308699.25	308699.25

CURVE LAYOUT DATA										
Curve #	Length	Radius	Delta	Chord Direction	Chord Length	START NORTHING	START EASTING	END NORTHING	END EASTING
C1	41.77	18.00	132.97	S89° 52' 22"W	33.01	308428.38	2929675.19	308428.31	2929642.18
C2	23.71	50.00	27.17	N10° 03' 23"W	23.49	308305.52	2929722.96	308328.65	2929718.85
C3	43.91	40.00	62.90	N34° 58' 56"E	41.74	308268.71	2929698.86	308302.91	2929722.80
C4	39.24	25.00	89.92	S68° 36' 20"E	35.33	308279.16	2929660.36	308266.27	2929693.26
C5	41.04	50.00	47.03	S0° 07' 39"E	39.90	308394.14	2929627.40	308354.24	2929627.49
C6	56.59	169.47	19.13	N14° 51' 22"W	56.33	308218.49	2929773.30	308272.93	2929758.86
C8	64.07	200.00	18.35	S14° 28' 00"E	63.80	308334.66	2929742.42	308272.89	2929758.36
C9	17.07	48.00	20.38	S33° 50' 03"E	16.98	308463.15	2929682.89	308449.04	2929692.35
C10	29.28	30.00	55.93	S16° 03' 39"E	28.13	308490.18	2929675.11	308463.15	2929682.89
C11	45.91	74.00	35.55	S5° 52' 15"E	45.18	308535.12	2929670.49	308490.18	2929675.11
C12	117.64	213.00	31.64	S39° 28' 01"E	116.15	308734.58	2929548.59	308644.91	2929622.42
C13	31.40	20.00	89.96	N68° 23' 00"E	28.27	308165.47	2929390.90	308175.88	2929417.18
C14	31.43	20.00	90.04	S21° 37' 10"E	28.29	308192.35	2929379.12	308166.05	2929389.55
C15	31.42	20.00	90.00	S68° 23' 56"W	28.28	308226.11	2929415.52	308215.69	2929389.22
C16	31.42	20.00	90.01	N21° 35' 54"W	28.29	308199.22	2929427.28	308225.52	2929416.87
C17	17.59	207.97	4.85	S21° 09' 39"E	17.58	308216.26	2929732.89	308199.86	2929739.24
C18	33.10	20.00	94.83	S66° 09' 08"E	29.45	308228.16	2929705.95	308216.26	2929732.89
C19	7.85	5.00	90.00	S21° 21' 19"W	7.07	308341.47	2929606.88	308334.88	2929604.31
C20	20.52	25.00	47.03	S0° 07' 39"E	19.95	308524.47	2929648.95	308504.52	2929649.00
C21	58.01	25.00	132.96	N89° 52' 38"E	45.85	308616.63	2929562.71	308616.73	2929608.56
C22	23.56	15.00	90.00	N21° 36' 04"W	21.21	308250.12	2929420.46	308269.84	2929412.65
C23	69.12	44.00	90.01	N21° 35' 54"W	62.23	308189.69	2929449.31	308247.55	2929426.40
C24	7.86	5.00	90.04	S21° 37' 00"E	7.07	308146.62	2929374.00	308140.04	2929376.61
C25	15.69	10.00	89.90	N68° 24' 47"E	14.13	308142.88	2929357.49	308148.08	2929370.63
C26	47.84	40.00	68.53	N10° 47' 59"W	45.04	308017.93	2929330.90	308062.17	2929322.46
C27	7.85	5.00	90.00	N21° 36' 04"W	7.07	308155.97	2929343.54	308162.54	2929340.94
C28	53.43	40.50	75.58	N61° 15' 19"E	49.64	308049.50	2929264.18	308073.37	2929307.70
C29	23.56	15.00	90.00	S68° 23' 56"W	21.21	308440.70	2929351.30	308432.89	2929331.57
C30	23.56	15.00	90.00	N21° 36' 04"W	21.21	308387.16	2929437.27	308406.88	2929429.46
C31	3.93	5.00	45.00	N45° 53' 56"E	3.83	308369.43	2929428.00	308372.09	2929430.75
C32	3.93	5.00	45.00	N45° 53' 56"E	3.83	308363.60	2929417.27	308366.27	2929420.02
C33	3.93	5.00	45.02	N0° 53' 17"E	3.83	308302.99	2929392.64	308306.82	2929392.70
C34	3.93	5.00	45.02	N0° 53' 17"E	3.83	308291.18	2929395.74	308295.01	2929395.80
C35	3.93	5.00	45.00	N45° 53' 56"E	3.83	308278.72	2929388.75	308281.38	2929391.50
C36	3.93	5.00	45.00	N45° 53' 56"E	3.83	308272.90	2929378.02	308275.56	2929380.77
C37	3.93	5.00	45.00	N0° 53' 56"E	3.83	308212.30	2929353.39	308216.12	2929353.45
C38	3.93	5.00	45.00	N0° 53' 56"E	3.83	308200.49	2929356.49	308204.32	2929356.55
C39	23.56	15.00	90.00	N68° 23' 56"E	21.21	308192.68	2929336.77	308200.49	2929356.49
C40	31.42	20.00	90.00	S68° 23' 56"W	28.28	308478.22	2929325.03	308467.80	2929298.74
C41	23.56	15.00	90.00	S68° 23' 56"W	21.21	308436.71	2929458.71	308428.91	2929438.99
C42	34.33	25.00	78.69	S15° 56' 43"E	31.70	308699.25	2929550.42	308668.77	2929559.13

STRUCTURE & PIPE DATA – SHEET C–201 & C–202

STRUCTURE TABLE				
NAME	DIA.	RIM	INV IN/SIZE/FROM	INV OUT/SIZE/TO
4'x8' GREASE INTERCEPTOR	4'	22.25	17.13/6"PVC/LRC SAN OUTLET 5	17.10/6"PVC/SMH 14
EX SMH 1	4'	13.13	1.30/10"PVC/SMH 1	
OW SEP. 1	4'	20.05	15.48/6"PVC/GARAGE SAN OUTLET	15.14/6"PVC/SMH 4
OW SEP. 2	4'	22.30	17.51/6"PVC/LRC SAN OUTLET 1	17.17/6"PVC/SMH 14
SMH 1	4'	13.33	1.60/10"PVC/SMH 2	1.50/10"PVC/EX SMH 1
SMH 2	4'	14.65	3.55/8"PVC/SMH 12 3.55/10"PVC/SMH 3	3.45/10"PVC/SMH 1
SMH 3	4'	18.80	8.00/10"PVC/SMH 4 8.00/6"PVC/CHILD CARE SAN OUTLET 8.00/8"PVC/SMH 5	7.90/10"PVC/SMH 2
SMH 4	4'	19.90	15.05/6"PVC/OW SEP. 1 9.78/10"PVC/STUB	9.68/10"PVC/SMH 3
SMH 5	4'	21.10	11.02/8"PVC/SMH 6	10.92/8"PVC/SMH 3
SMH 6	4'	21.50	12.18/8"PVC/SMH 7	12.08/8"PVC/SMH 5
SMH 7	4'	22.40	13.60/8"PVC/LRC SAN OUTLET 4 13.54/6"PVC/CO1 13.36/8"PVC/SMH 9	13.26/8"PVC/SMH 6
SMH 9	4'	22.40	14.88/8"PVC/LRC SAN OUTLET 2 14.88/6"PVC/SMH 10	14.78/8"PVC/SMH 7
SMH 10	4'	22.20	15.85/6"PVC/SMH 11	15.75/6"PVC/SMH 9
SMH 11	4'	22.20	16.57/6"PVC/SMH 14	16.47/6"PVC/SMH 10
SMH 12	4'	13.90	5.25/6"PVC/BEAN SAN OUTLET	5.15/8"PVC/SMH 2
SMH 14	4'	22.75	17.00/6"PVC/4'x8' GREASE INTERCEPTOR 17.06/6"PVC/OW SEP. 2	16.96/6"PVC/SMH 11

PIPE TABLE			
PIPE NAME	SIZE	LENGTH	SLOPE
S1	10" PVC	16'	0.0125
S2	10" PVC	85'	0.0218
S3	8" PVC	133'	0.0120
S4	6" PVC	43'	0.0105
S5	10" PVC	87'	0.0500
S6	6" PVC	8'	0.0125
S7	6" PVC	55'	0.0242
S8	10" PVC	37'	0.0454
S9	6" PVC	6'	0.0150
S10	6" PVC	43'	0.0121
S11	10" PVC	28'	0.0118
S12	8" PVC	172'	0.0170
S13	8" PVC	88'	0.0120
S14	8" PVC	90'	0.0120
S15	8" PVC	3'	0.0200
S16	6" PVC	5'	0.0200
S17	6" PVC	1'	0.0200
S18	8" PVC	136'	0.0104
S19	8" PVC	7'	0.0129
S20	6" PVC	78'	0.0112
S21	6" PVC	57'	0.0109
S22	6" PVC	22'	0.0177
S25	6" PVC	20'	0.0350
S26	6" PVC	7'	0.0157
S27	6" PVC	12'	0.0150

STRUCTURE & PIPE DATA – SHEET C–301 & C–302

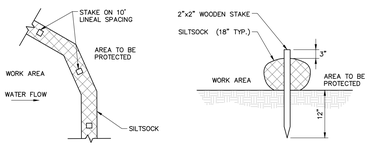
STRUCTURE TABLE				
NAME	DIA.	RIM	INV IN/SIZE/FROM	INV OUT/SIZE/TO
AD1	4'	20.75		17.25/12"HDPE/DMH6 (DIV.)
AD2	4'	19.60		15.60/12"HDPE/DMH9
CB1	4'	28.36		24.86/12"HDPE/DOG HS MH 1
CB2	4'	28.06		24.40/12"HDPE/DOG HS MH 2
CB3	4'	25.80		21.50/12"HDPE/DMH28
CB4	4'	24.35		20.00/12"HDPE/DMH28
CB7	4'	26.75		21.75/12"HDPE/CB8
CB8	4'	24.00	17.60/12"HDPE/CB7	17.50/12"HDPE/DMH3
CB10	4'	22.85		17.50/12"HDPE/DMH8
CB11	4'	24.00		20.20/12"HDPE/CB23
CB23	4'	24.00	20.00/12"HDPE/CB11	19.90/12"HDPE/DMH4
CB24	4'	23.70		19.12/12"HDPE/DMH29
DMH1	4'	22.60	18.70/12"HDPE/DMH28	18.60/12"HDPE/DMH2 (DIV.)
DMH2 (DIV.)	4'	22.65	18.10/12"HDPE/DMH1	17.04/12"HDPE/HDS1 16.95/12"HDPE/DMH11
DMH3	4'	22.78	17.24/12"HDPE/CB8 18.70/12"HDPE/DMH29	17.14/18"HDPE/DMH8
DMH4	4'	24.40	19.70/12"HDPE/CB23	19.60/12"HDPE/DMH29
DMH5	4'	24.60	19.20/12"HDPE/FI1 18.00/12"HDPE/FI2	15.00/18"HDPE/DMH21
DMH6 (DIV.)	4'	20.91	17.03/12"HDPE/AD1	16.93/12"HDPE/DMH45 16.93/12"HDPE/OCS4
DMH8	4'	21.90	17.35/12"HDPE/CB10 16.50/18"HDPE/DMH3	16.40/18"HDPE/DMH30
DMH9	4'	20.00	15.50/12"HDPE/AD2	15.40/12"HDPE/AD3
DMH28	4'	24.45	19.90/12"HDPE/CB4 19.90/12"HDPE/CB3	19.80/12"HDPE/DMH1
DMH29	4'	23.75	19.00/12"HDPE/DMH4 18.90/12"HDPE/CB24	19.00/12"HDPE/DMH3
DMH45	4'	20.78	16.90/12"HDPE/DMH6 (DIV.)	16.85/12"HDPE/SSSF1 INLET 2
DMH46	4'	22.50	16.85/12"HDPE/HDS1	16.85/12"HDPE/SSSF1 INLET 1
DOG HS MH 1	4'	28.42	24.76/12"HDPE/CB1	
DOG HS MH 2	4'	28.18	24.30/12"HDPE/CB2	
FI1	2'	23.50		19.65/12"HDPE/DMH5
FI2	2'	22.50		18.50/12"HDPE/DMH5
HDS1	4'	22.58	17.00/12"HDPE/DMH2 (DIV.)	16.90/12"HDPE/DMH46

PIPE TABLE			
PIPE NAME	SIZE	LENGTH	SLOPE
SD1	12" HDPE	3'	0.0333
SD2	12" HDPE	2'	0.0500
SD3	12" HDPE	94'	0.0170
SD4	12" HDPE	10'	0.0100
SD5	12" HDPE	80'	0.0062
SD6	12" HDPE	193'	0.0215
SD7	12" HDPE	40'	0.0065
SD8	12" HDPE	29'	0.0103
SD9	12" HDPE	92'	0.0065
SD10	12" HDPE	22'	0.0091
SD11	12" HDPE	38'	0.0053
SD12	12" HDPE	89'	0.0051
SD13	12" HDPE	79'	0.0063
SD16	18" HDPE	126'	0.0051
SD17	12" HDPE	8'	0.0187
SD19	12" HDPE	16'	0.0062
SD20	12" HDPE	113'	0.0212
SD22	12" HDPE	79'	0.0108
SD24	12" HDPE	43'	0.0051
SD27	12" HDPE	2'	0.0150
SD45	12" HDPE	3'	0.0100
SD79	12" HDPE	140'	0.0079
SD81	12" HDPE	6'	0.0367
SD100	18" HDPE	167'	0.0168
SD105	12" HDPE	4'	0.0125

STRUCTURE TABLE			
NAME	DIA.	RIM	INV IN/SIZE/FROM	INV OUT/SIZE/TO
AD3	4'	17.00	13.00/12"HDPE/DMH9	12.90/12"HDPE/DMH10
AD4	4'	13.90	9.90/12"HDPE/DMH10	9.80/12"HDPE/AD5
AD5	4'	13.50	9.30/12"HDPE/AD4	9.20/12"HDPE/DMH17
AD6	4'	19.80		16.20/12"HDPE/DMH43
AD7	4'	20.50	16.92/12"HDPE/DMH19 16.92/10"HDPE/FI4	16.82/12"HDPE/DMH43
AD8	4'	21.25		17.25/12"HDPE/DMH37
AD9	4'	17.20		13.50/10"HDPE/DMH39
AD10	4'	10.64		7.54/10"HDPE/DMH26
CB12	4'	20.50		16.10/12"HDPE/DMH30
CB13	4'	19.25		15.75/12"HDPE/DMH32 (DIV.)
CB14	4'	15.75		12.25/12"HDPE/SSSF4 INLET 2
CB21	4'	19.50		15.85/12"HDPE/DMH32 (DIV.)
DMH7	5'	21.10	14.00/12"HDPE/DMH15 (DIV.) 15.85/12"HDPE/FI3 12.15/18"HDPE/DMH11	12.05/18"HDPE/DMH20
DMH10	4'	16.50	12.52/12"HDPE/AD3	12.42/12"HDPE/AD4
DMH11	4'	22.50	12.40/12"HDPE/OCS4 16.10/12"HDPE/DMH2 (DIV.)	12.30/18"HDPE/DMH7
DMH12 (DIV.)	5'	20.03	15.70/12"HDPE/GARAGE ROOF DRAIN 15.63/18"HDPE/DMH30	15.53/12"HDPE/HDS2 15.03/18"HDPE/DMH16
DMH13	4'	19.23	10.28/24"HDPE/DMH14 15.35/12"HDPE/DMH32 (DIV.)	10.18/24"HDPE/DMH25
DMH14	4'	19.50	10.68/24"HDPE/DMH31 12.65/12"HDPE/OCS1	10.58/24"HDPE/DMH13
DMH15 (DIV.)	4'	20.00	15.25/12"HDPE/DMH43	15.15/12"HDPE/DMH7 15.15/12"HDPE/SSSF2 INLET 1
DMH16	4'	19.06	13.15/12"HDPE/DMH33 (DIV.) 14.66/18"HDPE/DMH12 (DIV.)	13.05/18"HDPE/DMH25
DMH17	4'	14.70	8.94/12"HDPE/OCS7 8.94/12"HDPE/AD5	8.84/18"HDPE/DMH18
DMH18	5'	14.30	8.65/18"HDPE/DMH17 9.20/24"HDPE/DMH35	8.55/30"HDPE/
DMH19	4'	22.35	18.40/12"HDPE/LRC ROOF DRAIN 3	18.30/12"HDPE/AD7
DMH20	4'	21.70	11.75/18"HDPE/DMH21 11.75/18"HDPE/DMH7	11.65/24"HDPE/DMH31
DMH21	4'	22.05	12.20/18"HDPE/DMH5	12.10/18"HDPE/DMH20
DMH22	4'	22.40	18.44/12"HDPE/LRC ROOF DRAIN 1	18.34/12"HDPE/DMH36
DMH23	4'	20.40	14.90/10"HDPE/LRC ROOF DRAIN 2	14.80/12"HDPE/DMH24 (DIV.)
DMH24 (DIV.)	4'	18.00	14.00/12"HDPE/DMH23	13.90/12"HDPE/DMH51 13.90/12"HDPE/DMH40
DMH25	4'	19.50	10.12/24"HDPE/DMH13 12.80/18"HDPE/DMH16	10.02/24"HDPE/DMH34
DMH26	4'	11.80	7.20/10"HDPE/TRENCH DRAIN 3 7.20/10"HDPE/AD10	7.10/12"HDPE/
DMH27	4'	18.66	14.77/12"HDPE/BEAN BLDG ROOF DRAIN 2	14.77/12"HDPE/DMH50
DMH30	4'	20.50	15.91/18"HDPE/DMH8 16.00/12"HDPE/CB12	15.81/18"HDPE/DMH12 (DIV.)
DMH31	5'	20.51	10.90/24"HDPE/DMH20 11.35/18"HDPE/OCS6 10.98/12"HDPE/OCS5	10.80/24"HDPE/DMH14
DMH32 (DIV.)	4'	19.90	15.55/12"HDPE/CB13 15.65/12"HDPE/CB21	15.65/12"HDPE/DMH13 15.55/12"HDPE/DMH47
DMH33 (DIV.)	4'	18.45	13.65/8"HDPE/CHILD CARE ROOF DRAIN	13.25/12"HDPE/DMH16 13.25/12"HDPE/SSSF4 INLET 1
DMH34	4'	15.50	9.62/24"HDPE/DMH25	9.52/24"HDPE/DMH35
DMH35	4'	15.50	9.40/24"HDPE/DMH34 10.40/12"HDPE/OCS2	9.30/24"HDPE/DMH18
DMH36	4'	21.73	17.85/12"HDPE/DMH22	17.75/12"HDPE/DMH37
DMH37	4'	22.10	17.35/12"HDPE/DMH36 16.95/12"HDPE/AD8	16.85/12"HDPE/DMH41 (DIV.)
DMH39	4'	16.86	9.88/18"HDPE/OCS8 13.15/10"HDPE/AD9	9.78/24"HDPE/OCS9
DMH40	5'	17.67	9.00/24"HDPE/OCS9 8.90/12"HDPE/OCS3 11.50/12"HDPE/DMH24 (DIV.)	8.80/24"HDPE/
DMH41 (DIV.)	4'	18.22	14.33/12"HDPE/DMH37	14.33/12"HDPE/OCS8 14.23/12"HDPE/DMH52
DMH42	1'	17.33	15.45/12"HDPE/HDS2	15.35/12"HDPE/SSSF3 INLET 2
DMH43	4'	22.80	15.90/12"HDPE/AD7 15.90/12"HDPE/AD6	15.80/12"HDPE/DMH15 (DIV.)
DMH44	4'	19.58	15.70/12"HDPE/BEAN BLDG ROOF DRAIN 1	15.05/12"HDPE/SSSF2 INLET 2
DMH47	4'	19.38	15.50/12"HDPE/DMH32 (DIV.)	15.50/12"HDPE/SSSF3 INLET 1
DMH50	4'	19.30	14.35/12"HDPE/DMH27	14.25/12"HDPE/SSSF5 INLET 2
DMH51	4'	17.68	13.80/12"HDPE/DMH24 (DIV.)	13.70/12"HDPE/SSSF6 INLET 1
DMH52	4'	21.40	14.35/12"HDPE/DMH41 (DIV.)	14.25/12"HDPE/SSSF5 INLET 1
FI3	2'	20.00		16.00/12"HDPE/DMH7
FI4	2'	22.00		18.33/10"HDPE/AD7
HDS2	4'	19.85	15.49/12"HDPE/DMH12 (DIV.)	15.49/12"HDPE/DMH42

STRUCTURE TABLE					
NAME	STRUCT. WIDTH	STRUCT. LENGTH	RIM	INV IN/SIZE/FROM	INV OUT/SIZE/TO
OCS1	4'	4'	19.50	16.34/6"HDPE/	15.00/12"HDPE/DMH14
OCS2	4'	4'	14.50	11.34/6"HDPE/	10.50/12"HDPE/DMH35
OCS3	4'	4'	13.00	9.84/6"HDPE/	9.00/12"HDPE/DMH40
OCS4	4'	4'	22.25	12.80/12"HDPE/SSSF1 OUTLET 16.60/12"HDPE/DMH6 (DIV.)	12.70/12"HDPE/DMH11
OCS5	4'	4'	20.40	11.06/12"HDPE/SSSF2 OUTLET	11.06/12"HDPE/DMH31
OCS6	4'	4'	19.60	11.41/18"HDPE/SSSF3 OUTLET	11.41/18"HDPE/DMH31
OCS7	4'	4'	16.70	9.08/12"HDPE/SSSF4 OUTLET	9.08/12"HDPE/DMH17
OCS8	4'	4'	19.20	13.00/12"HDPE/DMH41 (DIV.) 10.17/12"HDPE/SSSF5 OUTLET 10.65/4"HDPE/CO2	10.07/18"HDPE/DMH39
				9.65/24"HDPE/DMH39	

PIPE TABLE			
PIPE NAME	SIZE	LENGTH	SLOPE
PIPE 2	12" HDPE	3'	0.0167
SD14	12" HDPE	21'	0.0071
SD15	24" HDPE	17'	0.0071
SD18	18" HDPE	100'	0.0049
SD21	12" HDPE	34'	0.0112
SD23	12" HDPE	27'	0.0122
SD25	12" HDPE	4'	0.0125
SD26	18" HDPE	29'	0.0052
SD28	12" HDPE	8'	0.0125
SD29	12" HDPE	70'	0.0360
SD30	12" HDPE	45'	0.0058
SD31	12" HDPE	55'	0.0055
SD32	12" HDPE	2'	0.0200
SD33	12" HDPE	14'	0.0143
SD34	12" HDPE	10'	0.0300
SD35	24" HDPE	55'	0.0055
SD36	18" HDPE	38'	0.0079
SD37	12" HDPE	17'	0.0676
SD38	10" HDPE	83'	0.0170
SD39	12" HDPE	106'	0.0130
SD40	12" HDPE	7'	0.0143
SD41	12" HDPE	3'	0.0500
SD42	18" HDPE	65'	0.0054
SD43	12" HDPE	61'	0.0090
SD44	12" HDPE	3'	0.0167
SD46	12" HDPE	8'	0.0100
SD47	12" HDPE	44'	0.0045
SD48	12" HDPE	138'	0.0170
SD49	24" HDPE	144'	0.0052
SD50	18" HDPE	9'	0.0067
SD51	24" HDPE	7'	0.0086
SD52	12" HDPE	10'	0.0100
SD53	12" HDPE	6'	0.0167
SD54	18" HDPE	31'	0.0061
SD55	12" HDPE	3'	0.0167
SD56	30" HDPE	24'	0.0063
SD57	8" HDPE	60'	0.0225
SD58	12" HDPE	7'	0.0086
SD59	12" HDPE	97'	0.0051
SD60	12" HDPE	50'	0.0060
SD61	10" HDPE	66'	0.0053
SD62	10" HDPE	7'	0.0143
SD63	12" HDPE	55'	0.0145
SD64	12" HDPE	19'	0.0053
SD65	24" HDPE	76'	0.0053
SD66	24" HDPE	73'	0.0055
SD69	12" HDPE	58'	0.0052
SD70	24" HDPE	14'	0.0086
SD71	4" HDPE	7'	0.0171
SD72	4" HDPE	93'	0.0104
SD73	4" HDPE	1'	0.0700
SD74	18" HDPE	13'	0.0192
SD75	12" HDPE	57'	0.0421
SD76	12" HDPE	9'	0.0111
SD77	24" HDPE	18'	0.0056
SD78	12" HDPE	57'	0.0161
SD82	18" HDPE	26'	0.0069
SD83	6" HDPE	1'	0.0100
SD84	12" HDPE	95'	0.0053
SD85	12" HDPE	9'	0.0078
SD86	12" HDPE	71'	0.0056
SD88	12" HDPE	12'	0.2100
SD89	12" HDPE	1'	0.0300
SD90	4" HDPE	4'	0.0125
SD91	18" HDPE	34'	0.0056
SD93	12" HDPE	57'	0.0053
SD94	24" HDPE	21'	0.0062
SD95	12" HDPE	2'	0.0500
SD96	12" HDPE	25'	0.0080
SD97	24" HDPE	30'	0.0067
SD98	12" HDPE	11'	0.0091
SD99	18" HDPE	34'	0.0109
SD100	18" HDPE	167'	0.0168
SD101	12" HDPE	63'	0.0048
SD102	6" HDPE	2'	0.0250
SD103	6" HDPE	0'	???
SD104	12" HDPE	57'	0.0053



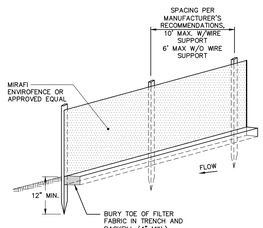
PLAN VIEW SECTION

NOTE:

1. WHEN STAKING IS NOT POSSIBLE, HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SEDIMENT BARRIER TO HELP STABILIZE DURING RAINFALL/RUNOFF EVENTS.

SEDIMENT BARRIER – SILT SOCK

N.T.S.



NOTES:

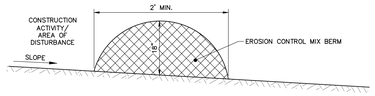
- INSTALL FABRIC ON UPHILL SIDE OF SUPPORT POSTS
- INSTALL SILT FENCE ACROSS SLOPES
- SILT FENCE SHALL NOT BE USED IN DRAINAGE WAYS

MAINTENANCE: INSPECT FOR TEARS IN THE FABRIC OR DAMAGE TO SUPPORTS. REPAIR AS NECESSARY. REMOVE ACCUMULATED SEDIMENT WHEN IT REACHES A DEPTH OF SIX–INCHES OR LESS.

REMOVAL: WHEN UPSLOPE AREAS ARE STABILIZED, THE STRUCTURE AND ANY ACCUMULATED SEDIMENT WILL BE REMOVED.

SEDIMENT BARRIER – SILTATION FENCE DETAIL

N.T.S.

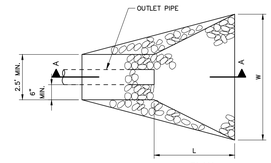


NOTES:

1. EROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE PROJECT SITE. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.
2. EROSION CONTROL MIX SHALL CONTAIN A WELL–GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:
   - THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS.
   - PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70% MAXIMUM OF 85%, PASSING A 0.75" SCREEN.
   - THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
   - LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
   - SOLUBLE SALTS CONTENT SHALL BE < 4.0 MMHOS/CM.
   - THE PH SHOULD FALL BETWEEN 5.0 AND 8.0.

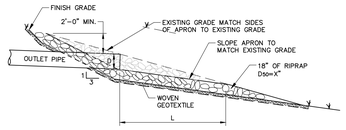
SEDIMENT BARRIER – EROSION CONTROL MIX BERM

N.T.S.



PLAN

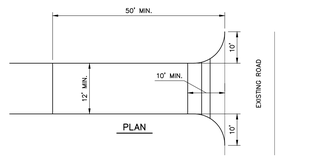
PIPE DIA. (D, IN.)	LENGTH (L, FT.)	WIDTH (W, FT.)	D50 (X, IN.)
18"	6'	4.5'	6"
24"	8'	6'	6"
30"	10'	7.5'	12"



SECTION A–A

RIPRAP INLET/OUTLET PROTECTION

N.T.S.



PLAN

PROFILE

NOTES:

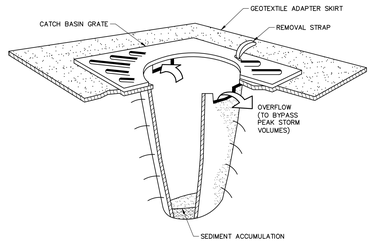
- CONSTRUCTION ENTRANCES MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
- WHEEL WASH PITS MAY ALSO BE USED, IF APPROVED.

MAINTENANCE: INSPECT FOR EFFECTIVE REMOVAL OF SOIL FROM VEHICLES PRIOR TO LEAVING THE SITE, SWEEP ANY SOIL FROM ADJACENT ROADWAYS.

REMOVAL: AT LEAST ONE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED UNTIL ALL AREAS OF THE SITE ARE STABILIZED.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

N.T.S.



NOTES:

CATCH BASIN PROTECTION TO BE "SILTSACK" (BY ACF ENVIRONMENTAL) OR "STREAM GUARD" (BY FOSS ENVIRONMENTAL SERVICES).

INSERT TO BE EMPTIED IN AN APPROVED MANNER WHEN IT IS 1/2 FULL OF SEDIMENT.

INSPECT INSERT AFTER ALL RAINFALL EVENTS, REPAIR AND MAINTAIN AS REQUIRED.

TEMPORARY INLET PROTECTION

N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION CONTROL

CONTRACTOR SHALL PREPARE AND SUBMIT A SOIL EROSION AND WATER POLLUTION CONTROL PLAN TO ENGINEER.

MEASURE	DATES FOR USE	TIMING, ACTIVITY, AND LOCATION
SEDIMENT BARRIER	ALL	BEFORE SOIL DISTURBANCE, INSTALL DOWNHILL OF AREAS TO BE DISTURBED AND AROUND MATERIAL STOCKPILES.
UP–SLOPE DIVERSION	ALL	BEFORE SOIL DISTURBANCE, INSTALL UPHILL OF AREAS TO BE DISTURBED AND MATERIAL STOCKPILES.
CATCH BASIN PROTECTION	ALL	BEFORE SOIL OR PAVEMENT DISTURBANCE, INSTALL ACF ENVIRONMENTAL, INC. HIGH FLOW SILTSACK, SILTSAVER INLET FILTER OR EQUAL, INSTALLED PER MANUFACTURER'S REQUIREMENTS.
DUST CONTROL	ALL	DURING DRY WEATHER, APPLY WATER AND CALCIUM CHLORIDE TO CONTROL DUST.
TEMPORARY SEEDING	APRIL 15 TO OCT. 1	SOIL STOCKPILES THAT ARE NOT COVERED AND DISTURBED AREAS THAT WILL NOT BE DISTURBED AGAIN WITHIN 14 DAYS. IF GRASS GROWTH PROVIDES LESS THAN 95% SOIL COVERAGE BY NOV. 1, APPLY MULCH AND ANCHOR WITH EROSION CONTROL BLANKET.
MULCH	APRIL 15 TO SEPT. 15	ON ALL AREAS OF EXPOSED SOIL PRIOR TO RAIN EVENTS OR EVERY 7 DAYS, APPLY 100–150 LBS (2.5 BALES) PER 1,000 SQ. FT. BY MECHANICAL BLOWER.
WINTER MULCH	SEPT. 16 TO OCT. 31	ON ALL AREAS OF EXPOSED SOIL PRIOR TO PRECIPITATION OR EVERY 7 DAYS, APPLY 150 TO 170 LBS. MULCH (4 BALES) PER 1,000 SQ. FT. BY MECHANICAL BLOWER, EROSION CONTROL BLANKET MAY BE USED AS A SUBSTITUTE FOR WINTER MULCH.
	NOV. 1 TO APRIL 14	ON ALL AREAS OF EXPOSED SOIL, APPLY 150 TO 170 LBS. MULCH (4 BALES) PER 1,000 SQ. FT. AND ANCHOR WITH NETTING AT THE END OF EACH WORKING DAY. EROSION CONTROL BLANKET MAY BE USED AS A SUBSTITUTE FOR WINTER MULCH.
INSPECTIONS	UNTIL SITE IS PERMANENTLY STABILIZED	INSPECT THE EROSION AND SEDIMENTATION CONTROL MEASURES DAILY, AND MAINTAIN AND REPAIR AS NECESSARY.

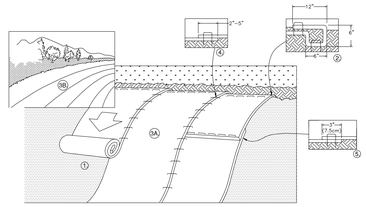
PERMANENT EROSION CONTROL:

MEASURE	DATES FOR USE	TIMING, ACTIVITY, AND LOCATION
PAVEMENT BASE COURSE FINAL COURSE	WHEN NO FROST IS IN GROUND	INSTALL ONLY IN AREAS SHOWN ON THE PLAN, SHORTLY AFTER PAVEMENT BASE IS BROUGHT TO FINAL GRADE. INSTALL NEAR COMPLETION OF PROJECT.
PERMANENT SEEDING	APRIL 15 TO SEPT. 15	ON FINAL GRADE AREAS, WITHIN 7 DAYS OF GRADE PREPARATION, PREPARE TOPSOIL, FOLLOWED BY SEED AND MULCH APPLICATION.
DORMANT SEEDING	SEPT. 16 TO APRIL 15	ON FINAL GRADE AREAS, WITH PREPARED TOPSOIL. APPLY SEED AT DOUBLE THE SPECIFIED RATE ON BARE SOIL, AND FOLLOW WITH AN APPLICATION OF WINTER MULCH.
GROUND COVER, TREES, SHRUBS	APRIL 15 TO NOV. 1	INSTALL WITH FINAL LANDSCAPING.
PERMANENT MULCH	ALL	INSTALL WITH FINAL LANDSCAPING.

INSPECTIONS:

REGULAR INSPECTIONS OF ALL EROSION AND SEDIMENTATION CONTROLS SHALL BE MADE AT LEAST WEEKLY AND PRIOR TO AND FOLLOWING STORM EVENTS. MINIMUM INSPECTIONS SHALL BE MADE AS LISTED IN THE TABLE BELOW.

INSPECTED ITEM	LOOK FOR
MULCHED SURFACES	THIN MULCH OR INADEQUATE APPLICATION. WIND MOVEMENT.
SEEDED SURFACES	POOR SEED GERMINATION, LOSS OF MULCH. DEVELOPMENT OF RIVULETS.
SEDIMENT BARRIER	SEDIMENT BUILD–UP TO ONE HALF THE HEIGHT OF THE BARRIER, UNDERMINING OF THE BARRIER. SUPPORTING STAKES LOOSE, TOPPLED, OR UNMARKED. BREAKS IN BARRIER.
PERIMETER DIVERSION	DISCHARGE IS TO STABILIZED AREA. EROSION OR BREAKS IN BARRIER. SUPPORTING STAKES LOOSE, TOPPLED OR UNMARKED.
CATCH BASIN PROTECTION	SEDIMENT BUILD–UP AND STRUCTURE BLOCKAGES. SLOW FLOW/PONDING WATER. BREAKS IN FABRIC OR VOIDS IN BARRIER.
DEWATERING FILTER	BREAKS IN FABRIC OR SUPPORTING STRUCTURE. SLOW FLOW, INDICATING HIGH SEDIMENT BUILD–UP.
CONSTRUCTION ENTRANCE	SEDIMENTATION OF ROADWAYS. OFF–SITE DUST COMPLAINTS.



1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (RECP's), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED AS WELL AS REMOVING ANY PROTRUDING ROCKS, STUMPS OR ROOTS. DURING THE GROWING SEASON (APRIL 15–SEPTEMBER 15) USE RECP'S ON THE BASE OF GRASSED WATERWAYS, SOIL SLOPES HAVING A GRADE GREATER THAN 15% OR ANYWHERE WHERE HAY MULCH HAS PROVEN TO BE INEFFECTIVE AT CONTROLLING SHEET EROSION. RECP'S ARE A MANUFACTURED COMBINATION OF MULCH AND NETTING DESIGNED TO PREVENT EROSION AND RETAIN SOIL MOISTURE. FOR OVER WINTER PROTECTION, APPLY RECP'S ON THE BASE AND SIDE SLOPES OF GRASSED WATERWAYS AND ON SLOPES STEEPER THAN AN 8% GRADE.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE RECP's IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF RECP's EXTENDED BEYOND THE UP–SLOPE PORTION OF THE TRENCH. ANCHOR THE RECP's WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF RECP's BACK OVER SEED AND COMPACTED SOIL. SECURE RECP's OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE RECP's.
3. ROLL THE RECP's (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. RECP's WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL RECP's MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING THE DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
4. THE EDGES OF PARALLEL RECP's MUST BE STAPLED WITH APPROXIMATELY 2" – 5" OVERLAP DEPENDING ON RECP's TYPE.
5. CONSECUTIVE RECP's SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE RECP's WIDTH. NOTE: *IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE RECP's.
6. UNTIL GRASS IS ABUNDANT, INSPECT PERIODICALLY AND AFTER EACH RAINSTORM TO CHECK FOR EROSION. IMMEDIATELY REPAIR AND ADD MORE MULCH UNTIL GRASSES ARE FIRMLY ESTABLISHED. DO NOT MOW THE FIRST YEAR.

ROLLED EROSION CONTROL MATTING

N.T.S.

EROSION AND SEDIMENT CONTROL NOTES

TEMPORARY EROSION CONTROL MEASURES MAY INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCES, HYDRAULIC MULCH, HAY AND STRAW MULCH, EROSION CONTROL BLANKET, TURF REINFORCED MATTING, RIPRAP AND TEMPORARY SEEDING. TEMPORARY SEDIMENT CONTROL MEASURES INCLUDE THE USE OF SEDIMENT BARRIER LIKE SILT SOCK, SILT FENCE, AND EROSION CONTROL MIX BERMS, CATCHBASIN TEMPORARY INLET PROTECT AND GEOTEXTILE FILTER BAGS. PERMANENT MEASURES INCLUDE PERMANENT VEGETATION OR PAVING.

GENERAL

A. THE PROJECT SHALL CONFORM WITH THE STANDARDS OF THE MAINE CONSTRUCTION GENERAL PERMIT.

B. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK PUBLISHED BY THE MAINE DEP UNLESS OTHERWISE NOTED IN THESE PLANS. HTTP://MAINE.GOV/DEP/BLWQ/DOCSTANDARDS/ESCBMPS/

C. ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION, AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.

D. THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.

E. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE SITE WHENEVER POSSIBLE WHILE ALLOWING PROPER SITE DEVELOPMENT.

F. CONSTRUCTION STAGING SHALL BE CONDUCTED IN A WAY TO MINIMIZE THE POTENTIAL FOR STORMWATER RUN–ON TO DISTURBED AREAS. SEDIMENT BARRIER AND ANY OTHER RELEVANT EROSION CONTROL MEASURES SHALL BE MOVED AND/OR ADDED TO, TO ACCOUNT FOR CHANGES IN DISTURBED AREA DUE TO CONSTRUCTION STAGING..

G. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/REPLACEMENT/MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:

i. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS THAT 90% OF THE DISTURBED AREA IS COVERED WITH REASONABLY THICK UNIFORM STAND OF PERMANENT GRASS SPECIES, FREE FROM SIZABLE THIN OR BARE SPOTS.
ii. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THAT COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE OFF.
iii. FOR MULCHED AREAS, PERMANENT STABILIZATION MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL.
iv. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE ASPHALT BINDER COURSE.

H. IF THE AREA WILL REMAIN UNWORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, AND WILL NOT BE BUILT ON, THEN IMMEDIATELY PROVIDE PERMANENT STABILIZATION USING VEGETATION THROUGH PLANTING, SOD OR THROUGH THE USE OF PERMANENT MULCH OR RIPRAP. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS. AMEND AREAS OF DISTURBED, OVERLY–COMPACTED SUBSOIL WITH TOPSOIL OR COMPOST AND LIGHTLY TILL 2–3" OF SOIL AMENDMENTS INTO THE TOP 8" OF SOIL.

I. PERMANENT SEEDING SPECIFICATION: IT IS RECOMMENDED THAT PERMANENT SEEDING BE COMPLETED BETWEEN APRIL 1 AND AUGUST 15 OF EACH YEAR. LATE SEASON SEEDING MAY BE DONE BETWEEN AUGUST 15 AND SEPTEMBER 15. AREAS NOT SEEDED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 1 SHALL BE SEEDED WITH AROOSTOCK WINTER RYE OR MULCHED AT SPECIFIED RATES. SEE WINTER SEEDING AND MULCHING SPECIFICATIONS FOR STABILIZATION AFTER NOVEMBER 1:

i. APPLY TOPSOIL TO A DEPTH OF 6 INCHES, IN COMPACTED AREAS TILL 2–3" OF COMPOST INTO UPPER 8" OF DISTURBED SOIL AND THEN APPLY 6 INCHES OF TOPSOIL.
ii. APPLY LIME AND FERTILIZER ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TESTS, APPLY GROUND LIMESTONE AT A RATE OF 33 LBS PER 1000 SQUARE FEET AND GRANULAR, COMMERCIAL–GRADE FERTILIZER 10–10–10 AT A RATE OF 18 LBS PER 1000 SQUARE FEET.
iii. UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES. APPLY HAY OR STRAW MULCH AT A RATE OF 2.5 BALES PER 1000 SQUARE FEET AND ANCHOR AS NECESSARY.

J. PROTECT ALL SEEDED AREAS WITH MULCH OR EROSION CONTROL BLANKET IN AREAS OF SHEET OR CONCENTRATED FLOWS. MULCH ALL AREAS SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE. SCHEDULE SEEDING OR SODDING TO AVOID FAILURE DUE TO SUMMER DROUGHT AND FALL FROST. NEWLY SEEDED AREAS SHOULD BE PROTECTED FROM VEHICLE TRAFFIC, PEDESTRIAN TRAFFIC AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL ESTABLISHED. AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE OR SURFACE EROSION IS EVIDENT.

K. EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 3:1 OR AS OTHERWISE NOTED. EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN S150BN OR APPROVED EQUAL. EROSION CONTROL BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

L. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL TEMPORARY EROSION CONTROL MEASURE UPON STABILIZATION OF PROJECT AREA & COST SHALL BE INCIDENTAL TO CONTRACT.

WINTER CONDITIONS

A. WINTER CONSTRUCTION IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 1. IF AREAS WITHIN THE CONSTRUCTION AREA ARE STABILIZED WITH TEMPORARY OR PERMANENT MEASURES OUTLINED ABOVE BY NOVEMBER 15 THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES THAT ARE SPECIFIC TO WINTER CONDITIONS.

GOOD HOUSEKEEPING AND POLLUTION PREVENTION

A. SPILL PREVENTION CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER RUNOFF AND APPROPRIATE SPILL PREVENTION, CONTAINMENT AND RESPONSE PLANNING AND IMPLEMENTATION.

B. DURING CONSTRUCTION, PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUND OR SURFACE WATERS MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO INFILTRATION AREAS. AN INFILTRATION AREA IS ANY ARE OF THE SITE THAT BY DESIGN, OR AS A RESULTS OF SOIL AND TOPOGRAPHY, ACCUMULATES RUNOFF THAT INFILTRATES IN THE SOIL. DIKES, BERMS, SUMPS AND OTHER FORMS OF TEMPORARY SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.

C. LOCATE ALL MATERIAL STOCKPILES WITH CONSIDERATION FOR STORMWATER DRAINAGE PATTERNS AND INFRASTRUCTURE.

D. TAKE ALL REASONABLE MEASURES TO MINIMIZE DUST RESULTING FROM THE PROJECT. OIL MAY NOT BE USED FOR DUST CONTROL.

E. LOCATE ALL LITTER, CONSTRUCTION DEBRIS AND CONSTRUCTION CHEMICALS WITH CONSIDERATION FOR STORMWATER DRAINAGE PATTERNS AND INFRASTRUCTURE.

F. TRENCH OR FOUNDATION DE–WATERING MUST BE SPREAD THROUGH SUFFICIENT NATURAL BUFFERS THAT HAVE CAPACITY TO INFILTRATE THE PUMPED WATER OR SHOULD BE PUMPED TO DESIGNED CONSTRUCTION DEWATERING DEVICES AS DESCRIBED IN THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK.

G. SEDIMENTS AND SOIL MATERIALS SHOULD BE SWEPT FROM PAVED SURFACES AT THE END OF EACH WORKDAY OR PRIOR TO RAIN EVENTS, WHENEVER POSSIBLE.

INSPECTION AND MAINTENANCE

A. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT, THE MAINE EROSION AND SEDIMENT CONTROL BMPS HANDBOOK OR ANY MUNICIPAL REQUIREMENTS MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF ADDITIONAL BMPS OR MODIFICATIONS TO BMPS ARE NECESSARY, THE MODIFICATIONS MUST BE IMPLEMENTED WITH 7 CALENDAR DAYS OR PRIOR TO ANY PRECIPITATION EVENT. ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

B. AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT BY THE CONTRACTOR, SUMMARIZING THE SCOPE OF THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO THE OPERATION OF EROSION AND SEDIMENT CONTROL BMPS, MATERIAL STORAGE AREAS, AND VEHICLE ACCESS POINTS TO THE CONSTRUCTION AREA. THE INSPECTION LOG SHOULD BE DELIVERED TO THE PROPERTY OWNER OR RESPONSIBLE CONTRACTING ENTITY UPON COMPLETION OF THE PROJECT.

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
REGISTERED PROFESSIONAL ENGINEER
Amy N. Lebel

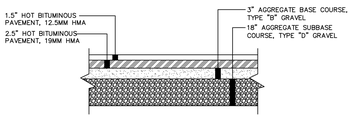
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Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	AS NOTED

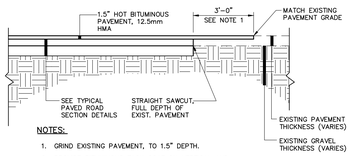
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CIVIL DETAILS - 1

D-401



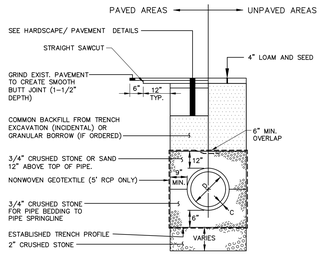
BITUMINOUS PAVEMENT SECTION
N.T.S.



NOTES:

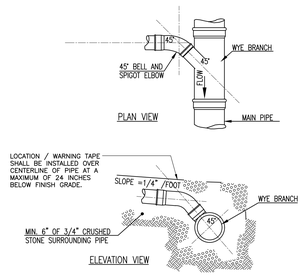
1. GRIND EXISTING PAVEMENT, TO 1.5" DEPTH.
2. PROVIDE BITUMINOUS TACK COAT ON VERTICAL AND HORIZONTAL SURFACES PRIOR TO PAVING.
3. DETAIL APPLICABLE TO PAVEMENT BUTT JOINTS AT ROADWAY WORK LIMITS. REFER TO PIPE INSTALLATION DTL. OR PAVED ROAD SECTION DTLS. FOR TRENCH REPAIR REQUIREMENTS.

PAVEMENT BUTT JOINT DETAIL
N.T.S.

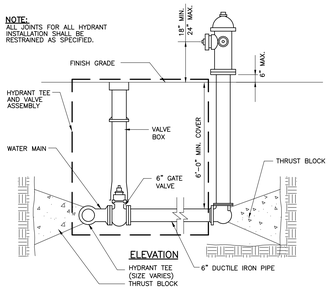


NOTES:
DEPTH & TYPE OF PAVEMENT & AGGREGATE COURSES SHALL BE PER PLANS.
SEE CIVIL & LANDSCAPING PAVEMENT DETAILS.

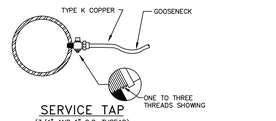
TYPICAL STORMDRAIN/ SEWER PIPE TRENCH INSTALLATION
N.T.S.



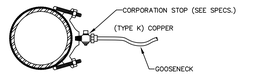
TYPICAL LATERAL WYE CONNECTION DETAILS
N.T.S.



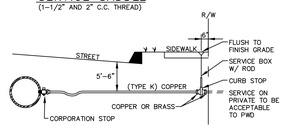
TYPICAL HYDRANT ASSEMBLY DETAIL
N.T.S.



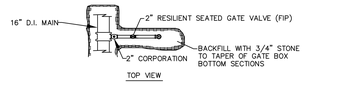
SERVICE TAP
(3/4" AND 1" C.C. THREAD)



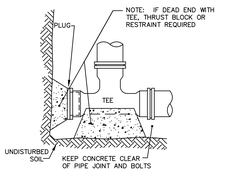
SERVICE SADDLE
(1-1/2" AND 2" C.C. THREAD)



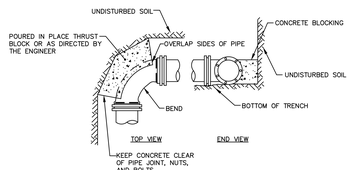
TYPICAL SERVICE CONNECTION
N.T.S.



SIDE-ARM BLOW-OFF
4" & LARGER MAINS
N.T.S.

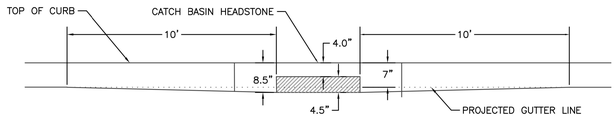


STANDARD TEE BLOCKING
N.T.S.



STANDARD BEND BLOCKING
N.T.S.

NOTE:
DISH 10' EITHER SIDE OF HEADSTONE FOR CATCH BASIN AT LOW POINT



TYPICAL PAVEMENT GRADING FOR CATCH BASIN INLETS (IN CITY RIGHT-OF-WAY)
N.T.S.

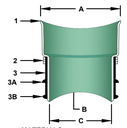
CORRUGATED HDPE/PP BELL GRAVITY APPLICATIONS

A. BELL END ACCEPTS CORRUGATED HDPE/PP DUAL WALL PIPE--ADS/HANCOR INC. SPECIFICATIONS IN 4", 6", 8", 10", 12", 15", 18", 21", 24", AND 30" SIZES.

B. CURVATURE VARIES WITH MAINLINE DIAMETERS.

C. SPIGOT END PVC SDR 35, ASTM D3034 DIAMETERS: 4", 6", 8", 10", 12", 15", 18", 21", 24" AND 30"

PART	PART NAME
1	HUB ADAPTOR
2	SECURING CLAMP*
3	RUBBER SLEEVE(AVAILABLE IN NITRILE AND EPDM BY SPECIAL ORDER)
3A	UPPER SEGMENT**
3B	LOWER SEGMENT**
4	(NOT SHOWN) ADS/HANCOR INC. SUPPLIES VALLEY GASKET



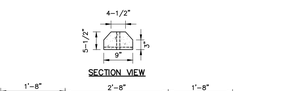
MATERIALS
PVC SDR 26 ASTM D3034
BAND SS #301
SCREW SS #305
HOUSING SS #301
ASTM F477

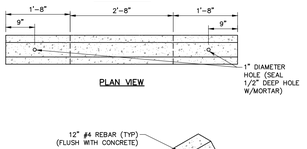
* OPTIONAL: #316 STAINLESS STEEL BAND, SCREW AND HOUSING
** DISTANCE BETWEEN 4A AND 4B WILL VARY BY PRODUCT TYPE
*** WILL NOT APPEAR ON RUBBER SLEEVES FOR CONCRETE OR CLAY PIPE

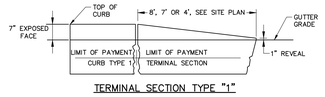
INSERTA TEE SIZE	HOLE DIAMETER
4" (100 mm)	4 5/8" (114 mm)
6" (150 mm)	6 1/2" (165 mm)
8" (200 mm)	8 3/4" (222 mm)
10" (250 mm)	10 7/8" (276 mm)
12" (300 mm)	12 7/8" (327 mm)
15" (375 mm)	15 15/16" (402 mm)
18" (450 mm)	19 3/4" (503 mm)
21" (525 mm)	22 3/4" (573 mm)
24" (600 mm)	25 3/4" (643 mm)
30" (750 mm)	32 1/32" (826 mm)

NOTE: RECOMMENDED METHOD OF CUTTING HOLE IS WITH HOLE SAW FOR PVC AND OTHER PLASTICS, AND DIAMOND BIT FOR CONCRETES, CLAY, FRP AND D.I. (SEE INSTALLATION INSTRUCTIONS. HOLE SAWS ARE AVAILABLE FOR PURCHASE OR RENT.)

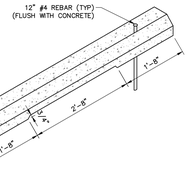
INSERTA TEE DETAIL
N.T.S.







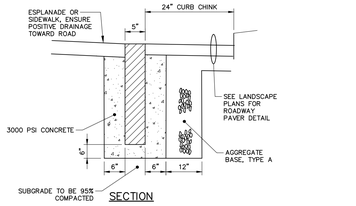
TERMINAL CURB SECTION
N.T.S.



NOTE:

1. CONCRETE SHALL BE 4,000 PSI.

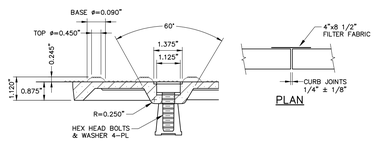
WHEEL STOP
N.T.S.



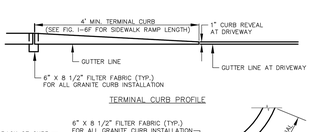
NOTES:

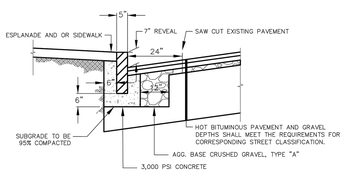
1. THE MINIMUM HEIGHT OF THE CONCRETE BACKING SHALL BE 10-INCHES OR TO THE BOTTOM OF THE HOT MIX ASPHALT PAVEMENT, WHICHEVER IS GREATER, MEASURED FROM THE BOTTOM OF CURB.
2. WOODEN SHIMS MAY BE USED TO SET CURB.

TYPICAL FLUSH CURB INSTALLATION (IN CITY RIGHT-OF-WAY)
N.T.S.
NOTE: AGGREGATE TYPES PER MDOT SECTION 304.02



BOLT DETAIL

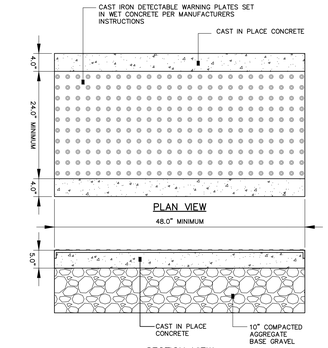




NOTES:

1. INDIVIDUAL PIECES OF CURB SHORTER THAN 4 L.F. ARE NOT ALLOWED, WITH THE EXCEPTION OF RADIAL CURB.
2. THE MINIMUM HEIGHT OF THE CONCRETE BACKING SHALL BE 10-INCHES OR TO THE BOTTOM OF THE HOT MIX ASPHALT PAVEMENT, WHICHEVER IS GREATER, MEASURED FROM THE BOTTOM OF CURB.
3. CURBING SHALL BE SET IN A 6-INCH BED OF POURED IN PLACE 3,000 PSI CONCRETE MIX.
4. WOODEN SHIMS MAY BE USED TO SET CURB.

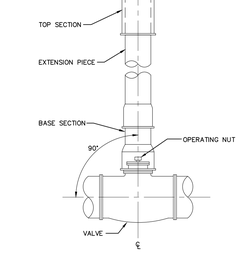
VERTICAL GRANITE CURB (IN CITY RIGHT-OF-WAY)
N.T.S.



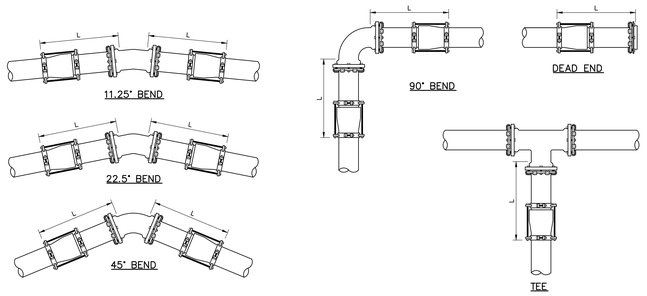
SIDEWALK RAMP DETECTABLE WARNING
N.T.S.

NOTES:

1. ALL DETECTABLE WARNING PLATES SHALL BE UNCOATED CAST IRON. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
2. CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MAINE D.O.T. CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
3. TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
4. SIZE: THE DETECTABLE WARNING PLATES SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE PLATE WIDTH AND CONCRETE SHALL EXTEND THE WIDTH OF THE CURB RAMP, LANDING, OR BLENDING TRANSITION TO THE STREET.
5. ORIENTATION: THE DETECTABLE WARNING PANEL SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE. THE PANEL SHALL BE ORIENTED TO THE DIRECTION OF TRAVEL AS IDENTIFIED BY THE POINT OF EGRESS.



VALVE WITH VALVE BOX
N.T.S.



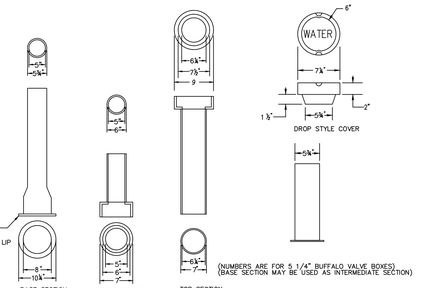
DIAMETER	REQUIRED LENGTH OF RESTRAINED JOINT PIPE ON BOTH SIDES OF FITTING				REQUIRED LENGTH OF RESTRAINED JOINT PIPE
	HORIZONTAL BEND				
	11.25°	22.5°	45°	TEE/90°	DEAD END
6"	2'	4'	9'	21'	51'
8"	3'	6'	11'	27'	67'
10"	4'	7'	14'	32'	81'
12"	4'	8'	16'	38'	96'
16"	5'	10'	20'	48'	123'

ASSUMED PARAMETERS:	
LAYING CONDITION	TYPE 5
SOIL DESIGNATION	SILT 1
DEPTH COVER	5 FT
DESIGN PRESSURE	200 PSI
SAFETY FACTOR	1.5

NOTES:

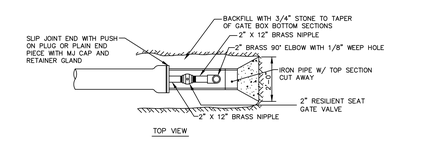
1. RESTRAINED JOINTS SHALL BE MECHANICAL JOINT OR PUSH-ON RESTRAINED JOINT AS SPECIFIED IN SECTION 33 14 11.01.

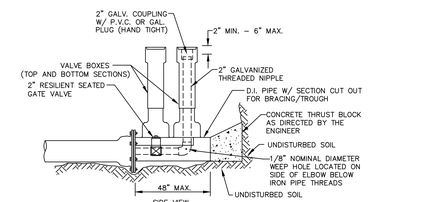
THRUST RESTRAINT DETAIL
N.T.S.



NOTE : ANY EXTENSION OF SERVICE BOX REQUIRES:
1) 1" FEMALE IRON PIPE COUPLING
2) 1" THREADED PIPE
(THIS IS TO BE A NON-WELDED, TWO PIECE ARRANGEMENT. SLIP ON ADAPTERS ARE NOT PERMISSIBLE.)

VALVE BOX & COVER
N.T.S.





STANDARD 2" BLOW OFF
N.T.S.

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED PROFESSIONAL ENGINEER

Stamp

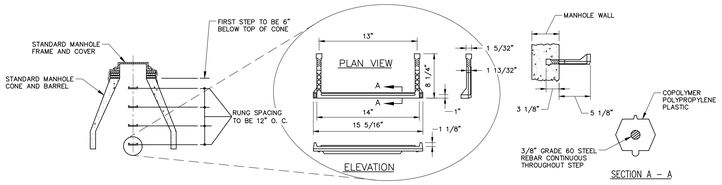
Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	AS NOTED

Drawing Title
CIVIL DETAILS - 2

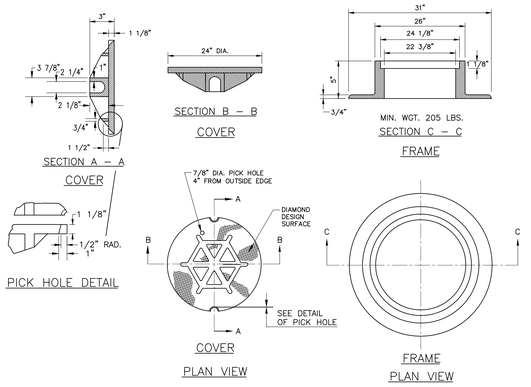
D-402

GENERAL NOTES FOR MANHOLES AND CATCH BASINS

1. ALL CONCRETE SHALL BE CLASS "A" AND HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 LBS. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478.
3. ALL MANHOLES SHALL HAVE A BITUMINOUS WATERPROOFING APPLIED TO THE EXTERIOR SURFACE. IF CONSTRUCTED OF BRICK MASONRY, SURFACE SHALL BE PLASTERED WITH A SMOOTH MORTAR FINISH 3/8" THICK. AFTER THE MORTAR HAS SET, THE SURFACE SHALL BE WATERPROOFED AS REQUIRED BY SUPPLEMENTAL SPECIFICATIONS SECTION 604.
4. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35. ALL PARTS OF CASTINGS, EXCEPT FINISHED SURFACE, SHALL RECEIVE A COAT OF COAL TAR PITCH VARNISH OR ASPHALTUM PAINT WHICH SHALL BE SMOOTH AND TOUGH BUT NOT BRITTLE.
5. MANHOLES MAY BE CONSTRUCTED OF MASONRY, PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
6. CONTRACTOR SHALL SUBMIT ANTIFLOATATION CALCULATIONS FOR ALL MANHOLE AND CATCH BASIN STRUCTURES.
7. ALL PRECAST MANHOLES AND CATCH BASINS SHALL BE IDENTIFIED BY STATION, OFFSET, AND STRUCTURE ID PAINTED ON THE SIDE OF THE STRUCTURE BY THE MANUFACTURER.
8. STORM AND SEWER MANHOLES SHALL HAVE SOLID COVERS WITH ONE DRILLED PICK HOLE.
9. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.
10. WHEN THE FLOW CHANGES DIRECTION IN A MANHOLE, THE CHANNEL ALIGNMENT SHALL FOLLOW A SMOOTH RADIUS. CHANNELS SHALL BE FORMED TO ACCEPT ALL INLET PIPES.
11. ON STORM AND SEWER MANHOLES, THE SHELF AND CHANNEL SHALL BE FORMED BY BRICK SET IN CEMENT MORTAR OR BY FACTORY PRE-CAST CONCRETE. SUCH PRE-CAST CONCRETE SHALL BE EPOXY COATED AND THE SHELF SHALL HAVE A PERMANENT NON-SKID SURFACE.



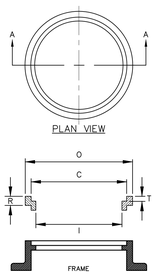
PLASTIC MANHOLE STEPS
N.T.S.



NOTE:

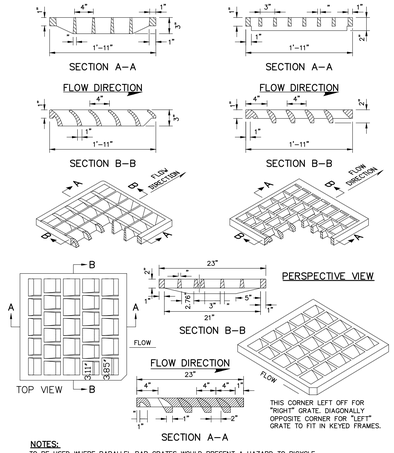
FOR ALL CROSS COUNTRY MANHOLES (LAWN AREAS), USE PAM REXUS MANHOLE COVERS BY CERTAINTEED.

TYPE "A" CAST IRON MANHOLE COVER AND FRAME
N.T.S.



SIZE	C	R	T	O	I	Wt.
R241 1/2	24	1 1/2	1 1/8	26 1/4	22 1/2	60
R242	24	2	1 1/8	26 1/4	22 1/2	80
R242 1/2	24	2 1/2	1 1/8	26 1/4	22	100
R243	24	3	1 1/8	26 1/4	22	120

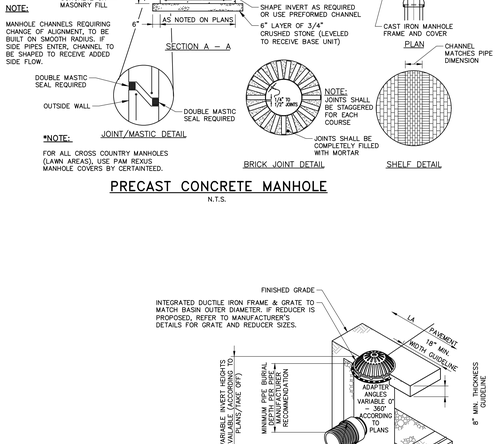
MANHOLE RISER RING
N.T.S.



NOTES:

TO BE USED WHERE PARALLEL BAR GRATES WOULD PRESENT A HAZARD TO BICYCLE TRAFFIC. FOR USE ON CATCH BASIN TYPES: A1–C, A2–C, A5–C, B1–C, B2–C, B5–C, F3–C, F4–C, F5–C, F6–C.

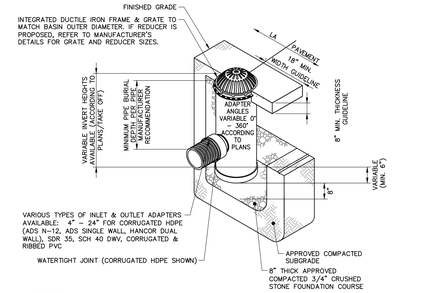
"CASCADE-TYPE" GRATES
N.T.S.



*NOTE:

FOR ALL CROSS COUNTRY MANHOLES (LAWN AREAS), USE PAM REXUS MANHOLE COVERS BY CERTAINTEED.

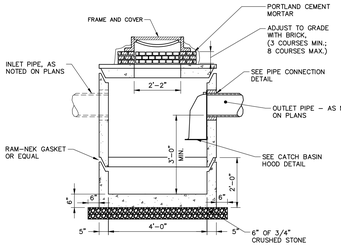
PRECAST CONCRETE MANHOLE
N.T.S.



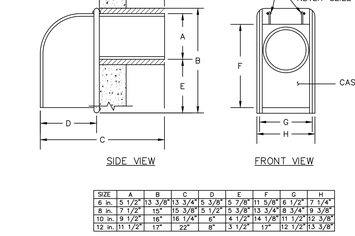
NOTES:

1. INSTALL BASIN IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
2. PRODUCT SHALL BE NYLOPLAST DRAIN BASIN MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS (ADS) OR APPROVED EQUAL.
3. GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
4. FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
5. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTORATIONS.
6. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS & HANCOR DUAL WALL) & SDR 35 PVC.
7. ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°.

FIELD INLET
N.T.S.



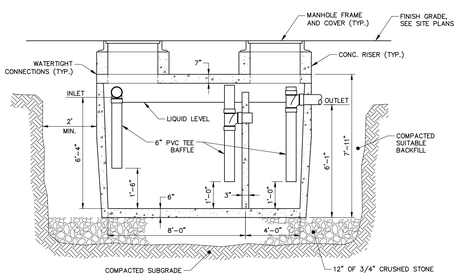
PRECAST CONCRETE CATCH BASIN
N.T.S.



SIZE	A	B	C	D	E	F	G	H
6 in.	5 1/2"	13 3/8"	13 3/4"	5 3/8"	5 7/8"	11 5/8"	6 1/2"	7 1/4"
8 in.	7 1/2"	15"	15 3/8"	5 1/2"	5 3/8"	13 3/4"	8 3/4"	9 3/8"
10 in.	9 1/2"	16"	16 1/4"	6"	4 1/2"	14 1/8"	11 1/2"	12 3/8"
12 in.	11 1/2"	17"	22"	8"	3 1/2"	17"	12 1/2"	13 3/8"

NOTE: PROVIDE IN CATCH BASINS IN PAVED AREAS ONLY.

CATCH BASIN HOOD
N.T.S.



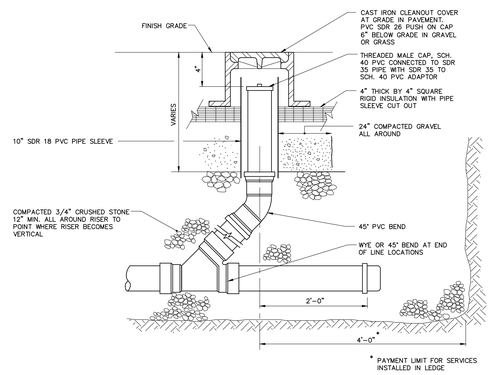
CONCRETE SPECIFICATIONS

1. 5,000 PSI AT 28 DAYS
2. 4% – 6% ENTRAINED AIR
3. TANK PENETRATIONS ARE INTEGRALLY CAST
4. ALL JOINTS SEALED WITH BUTYL RUBBER JOINT SEALANT
5. H-20 LOADING

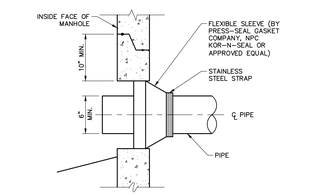
GREASE TRAP INFORMATION

1. TANKS SHOULD BE PUMPED AS NEEDED
2. ACCESS COVERS SHOULD HAVE RISERS TO BRING COVER ACCESS TO GRADE.

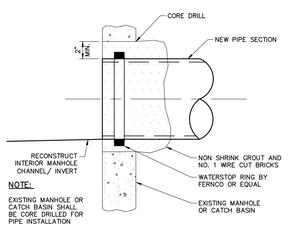
EXTERNAL GREASE TRAP DETAIL
N.T.S.



CLEANOUT DETAIL
N.T.S.



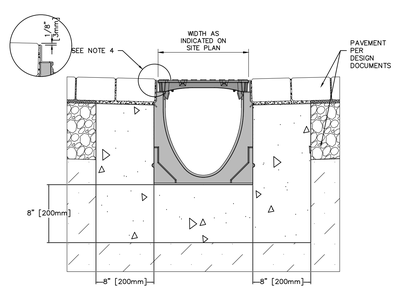
NEW PIPE TO NEW STRUCTURE CONNECTION DETAIL
N.T.S.



NOTE:

EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION

NEW PIPE TO EXISTING STRUCTURE
N.T.S.



NOTES:

1. IT IS NECESSARY TO ENSURE MINIMUM DIMENSIONS SHOWN ARE SUITABLE FOR EXISTING GROUND CONDITIONS. ENGINEERING ADVICE MAY BE REQUIRED.
2. MINIMUM CONCRETE STRENGTH OF 4,000 PSI IS RECOMMENDED. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
3. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND. ENGINEERING ADVICE MAY BE REQUIRED.
4. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" [3mm] ABOVE THE TOP OF THE CHANNEL EDGE.
5. CONCRETE BASE THICKNESS SHOULD MATCH SLAB THICKNESS. ENGINEERING ADVICE MAY BE REQUIRED TO DETERMINE PROPER LOAD CLASS.
6. REFER TO ACO'S LATEST INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.

TRENCH DRAIN
N.T.S.

SPECIFICATION CLAUSE

K200 KLASSIKDRAIN 'DRAINLOK' LOAD CLASS C

GENERAL

THE SURFACE DRAINAGE SYSTEM SHALL BE POLYMER CONCRETE K200 CHANNEL SYSTEM WITH GALVANIZED STEEL EDGE RAILS AS MANUFACTURED BY ACO POLYMER PRODUCTS, INC.

MATERIALS

CHANNELS SHALL BE MANUFACTURED FROM POLYESTER RESIN POLYMER CONCRETE WITH AN INTEGRALLY CAST-IN GALVANIZED STEEL EDGE RAIL. MINIMUM PROPERTIES OF POLYMER CONCRETE WILL BE AS FOLLOWS:

COMPRESSIVE STRENGTH: 14,000 PSI
FLEXURAL STRENGTH: 4,000 PSI
TENSILE STRENGTH: 1,500 PSI
WATER ABSORPTION: 0.07%
FROST PROOF: YES
DILUTE ACID AND ALKALI RESISTANT: YES
B117 SALT SPRAY TEST COMPLIANT: YES

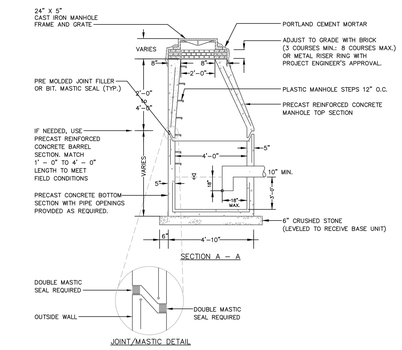
THE SYSTEM SHALL BE 8" (200mm) NOMINAL INTERNAL WIDTH WITH A 10.2" (260mm) OVERALL WIDTH AND A BUILT-IN SLOPE OF 0.5%. CHANNEL INVERT SHALL HAVE DEVELOPED "V" SHAPE. ALL CHANNELS SHALL BE INTERLOCKING WITH A MALE/FEMALE JOINT.

THE COMPLETE DRAINAGE SYSTEM SHALL BE BY ACO POLYMER PRODUCTS, INC. ANY DEVIATION OR PARTIAL SYSTEM DESIGN AND/OR IMPROPER INSTALLATION WILL VOID ANY AND ALL WARRANTIES PROVIDED BY ACO POLYMER PRODUCTS, INC.

CHANNEL SHALL WITHSTAND LOADING TO PROPER LOAD CLASS AS OUTLINED BY EN 1433. GRATE TYPE SHALL BE APPROPRIATE TO MEET THE SYSTEM LOAD CLASS SPECIFIED AND INTENDED APPLICATION. GRATES SHALL BE SECURED USING "DRAINLOK" BOLTLESS LOCKING SYSTEM. CHANNEL AND GRATE SHALL BE CERTIFIED TO MEET THE SPECIFIED EN 1433 LOAD CLASS. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

NOTES:

- FOR USE IN PARTIALLY OR TOTALLY ENCLOSED PARKING GARAGES, AUTOMOTIVE REPAIR FACILITIES OR ANY OTHER PROPOSED STRUCTURE WHERE DEEMED APPROPRIATE BY THE CITY ENGINEER.
- DISCHARGE SHALL BE TO SANITARY SEWER.
- A VENT PIPE MAY BE REQUIRED THAT HAS A VERTICAL OUTLET OFF TO THE SIDE OF THE STRUCTURE.
- AN OIL ABSORBENT BOOM IS REQUIRED TO BE PLACED WITHIN THE MANHOLE ON THE WATER SURFACE AND REPLACED AT A MINIMUM ANNUALLY.



OIL / GRIT SEPARATOR
N.T.S.

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED PROFESSIONAL ENGINEER

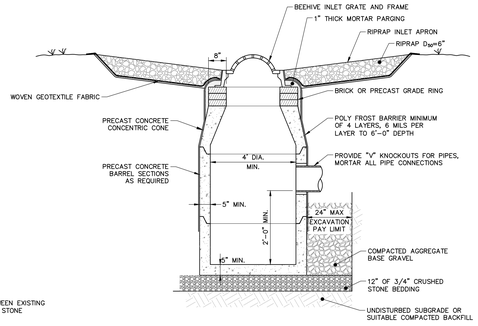
Stamp

Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	AS NOTED

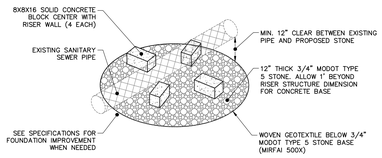
Drawing Title

CIVIL DETAILS - 3

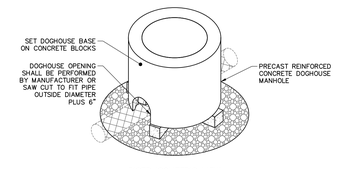
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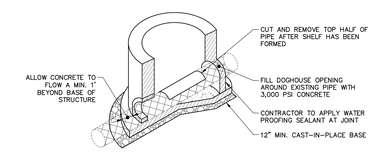
AREA DRAIN IN RIPRAP
N.T.S.



BASE ISOMETRIC VIEW



RISER ISOMETRIC VIEW

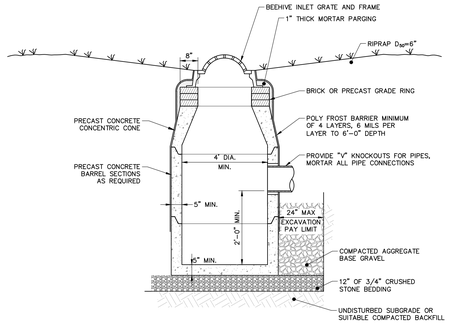


FOUNDATION SECTION VIEW

NOTES:

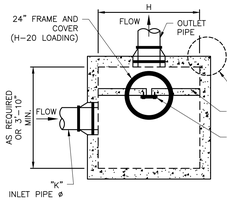
1. ASSEMBLED DOGHOUSE MANHOLE SHALL BE IN ACCORDANCE WITH ALL REQUIREMENTS OF PRECAST MANHOLE DETAIL ON THIS SHEET.

DOGHOUSE MANHOLE
NOT TO SCALE



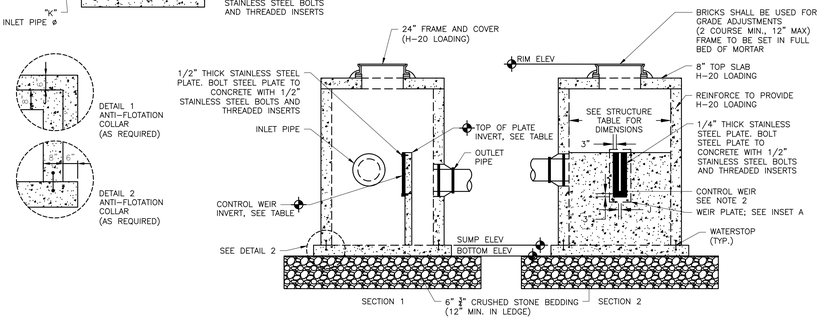
AREA DRAIN IN VEGETATION
N.T.S.

OUTLET CONTROL STRUCTURE – DIMENSIONS/ ELEVATIONS		
LOCATION	TOP OF PLATE B (ELEV.)	CONTROL WEIR C (ELEV.)
OCS1	19.34	17.34
OCS2	14.34	12.34
OCS3	12.84	10.84
OCS4	15.80	13.80
OCS5	14.06	12.06
OCS6	14.41	12.41
OCS7	12.08	10.08
OCS8	13.17	11.17
OCS9	12.60	10.60

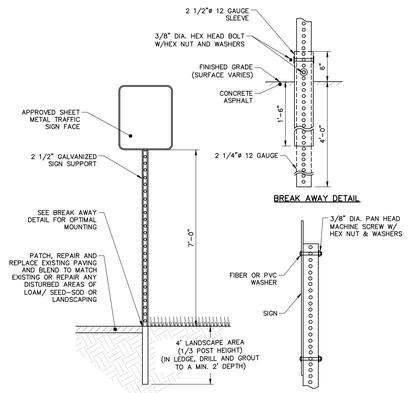


NOTES:

1) ALL CEMENT CONCRETE TO BE 4000 PSI (MIN).
2) CONTROL WEIR SHALL BE SIZED TO MITIGATE DESIGN STORM AS REQUIRED BY THE REGULATIONS AND IN ACCORDANCE WITH THE APPROVED DRAINAGE CALCULATIONS. STAINLESS STEEL PLATE SHALL BE USED FOR CONTROL WEIRS LESS THAN 2 INCHES WIDE.
3) ALL STAINLESS STEEL SHALL BE GRADE 316.
4) MINIMUM EMBANKMENT ELEVATION TO BE 12" ABOVE 50-YEAR STORM ELEVATION.



OUTLET CONTROL STRUCTURE
N.T.S.

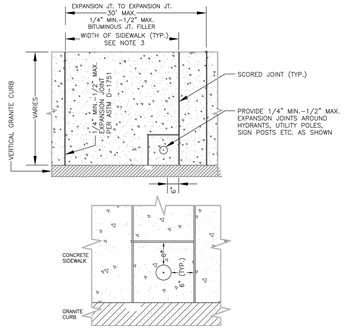


BREAK AWAY DETAIL

NOTES:

1. ALL HARDWARE SHALL BE STAINLESS STEEL.

TRAFFIC SIGN POST
N.T.S.

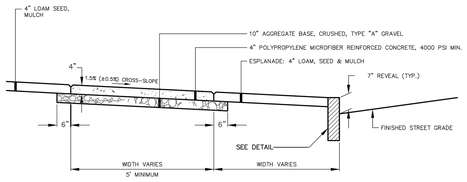


CONCRETE SIDEWALK JOINT NOTES:

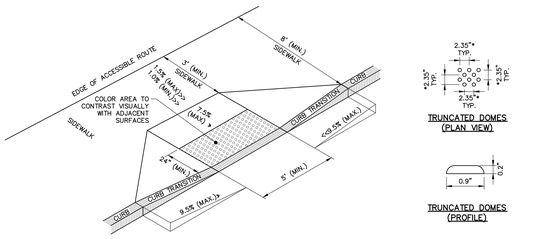
1. EXPANSION JOINTS SHALL BE LOCATED WHERE SIDEWALK ABUTS DRIVEWAYS, CURB OR OTHER ADJACENT STRUCTURES.
2. SLABS SHALL BE PLACED ALTERNATELY IN LENGTHS, NOT TO EXCEED 30 LINEAR FEET OR AS DIRECTED AND SHALL BE SEPARATED BY AN EXPANSION JOINT OF PREFORMED EXPANSION FILLER 1/4" MIN.-1/2" MAX. IN THICKNESS AND SHALL EXTEND THE FULL LENGTH/DEPTH OF THE CONCRETE.
3. THE SIDEWALK SURFACE SHALL BE SCORED INTO BLOCK UNITS. THE DEPTH OF SCORING SHALL BE AT LEAST ONE QUARTER OF THICKNESS OF THE SLABS (1" TYP.). SCORED JOINTS MUST BE COMPLETED AS PART OF THE FINISHING PROCESS. SAW CUTTING OF JOINTS IS NOT ALLOWED. SCORED JOINTS SHALL BE PLACED AT THE FOLLOWING LOCATIONS:
   A. IN LOCATIONS TO ENSURE BLOCK UNITS DO NOT EXCEED 36 SQUARE FEET.
   B. AT THE SPACING THAT MATCHES ADJACENT TIP DOWN CURB
   C. EXTENSION OF EXPANSION JOINTS LOCATED AT HYDRANTS & UTILITY POLES.
4. ALL OUTSIDE EDGES OF THE SLAB AND ALL JOINTS SHALL BE ROUNDED WITH A 1/4" RADIUS EDGING TOOL.
5. CONCRETE SHALL BE FINISHED BY MEANS OF A FLOAT, STEEL TROWELED AND BROOMED WITH A FINE BRUSH IN A TRANSVERSE DIRECTION.

SIDEWALK EXPANSION JOINT (IN CITY RIGHT-OF-WAY)
N.T.S.

NOTE
CONCRETE SIDEWALKS TO BE TREATED WITH CONSOLIDECK SALTGUARD WB OR APPROVED EQUAL. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION.



REINFORCED CONCRETE SIDEWALK (IN CITY RIGHT-OF-WAY)
N.T.S.



TRUNCATED DOMES (PLAN VIEW)

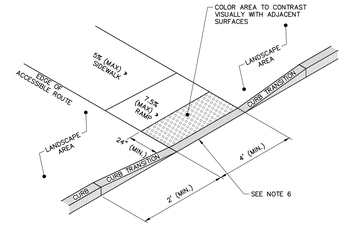
TRUNCATED DOMES (PROFILE)

*DIMENSIONS ARE CENTER TO CENTER

NOTES:

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5% (1% MIN.)
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E. HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
5. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
6. ADJACENT SURFACES AT TRANSITIONS SHALL BE FLUSH WITH CURB RAMPS.
7. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5'x5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE ALL CURBING AT RAMP (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY OR OTHERWISE INDICATED.
10. DETECTABLE WARNING SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. TRUNCATED DOMES AND ALL RELATED INSTALLED SURFACES TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS. ALL DETECTABLE WARNING SURFACE INSTALLATIONS SHALL BE AT A MINIMUM AT LEAST AS NON SKID AS THE SURROUNDING PEDESTRIAN SURFACES.
12. FOR ALLOWABLE SLOPE OF ACCESSIBLE ROUTE ON EXISTING SITE, SEE SECTION 405 OF THE ADA STANDARD FOR ACCESSIBLE DESIGN.

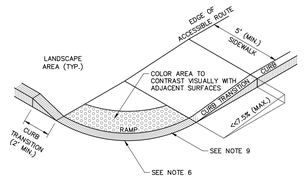
ACCESSIBLE CURB RAMP (ACR) – TYPE 'A'
N.T.S.



NOTE:

1. ACCESSIBLE CURB RAMP NOTES PROVIDED UNDER "ACCESSIBLE CURB RAMP – TYPE 'A' DETAIL ON THIS SHEET ARE APPLICABLE.

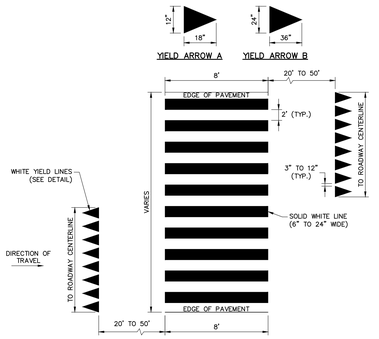
ACCESSIBLE CURB RAMP (ACR) – TYPE 'D'
N.T.S.



NOTE:

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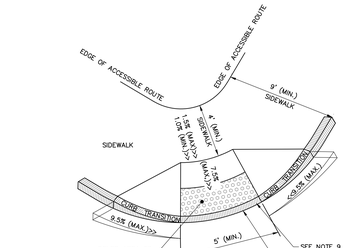
ACCESSIBLE CURB RAMP (ACR) – TYPE 'E'
N.T.S.



NOTE:

1. YIELD ARROW A SHALL BE USED FOR TRAVEL LANES UNDER TWELVE (12) FEET. YIELD ARROW B SHALL BE USED FOR TRAVEL LANES TWELVE (12) FEET OR GREATER

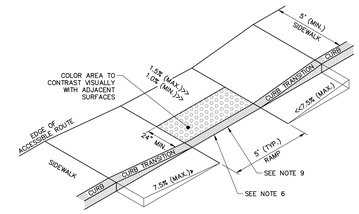
CROSSWALK PAVEMENT MARKINGS
N.T.S.



NOTE:

1. ACCESSIBLE CURB RAMP NOTES PROVIDED UNDER "ACCESSIBLE CURB RAMP – TYPE 'A' DETAIL ON THIS SHEET ARE APPLICABLE.

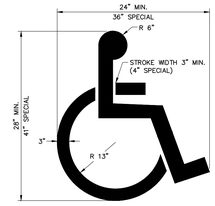
ACCESSIBLE CURB RAMP (ACR) – TYPE 'F'
N.T.S.



NOTE:

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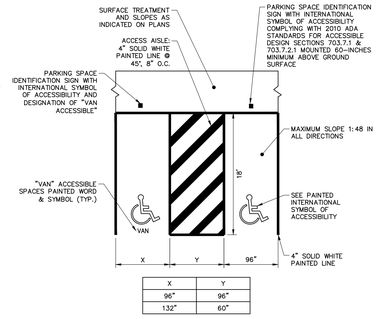
ACCESSIBLE CURB RAMP (ACR) – TYPE 'H'
N.T.S.



NOTES:

1. SYMBOL SHALL BE PAINTED WHITE IN COMPLIANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SECTION 3B.19, SECTION 3B.20 AND FIGURE 3B-22.
2. A BLUE RECTANGULAR (MIN. 36" X 36") BACKGROUND AND WHITE BORDER ARE OPTIONAL IN ACCORDANCE WITH MUTCD SECTION 3B.19 AND FIGURE 3B-22.
3. SYMBOL FINISH SHALL BE NON-GLARE IN ACCORDANCE WITH ADA STANDARDS FOR ACCESSIBLE DESIGN SECTION 703.7.1.

PAINTED INTERNATIONAL SYMBOL OF ACCESSIBILITY
N.T.S.



X	Y
96"	96"
132"	60"

ACCESSIBLE PARKING STALL LAYOUT
N.T.S.

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

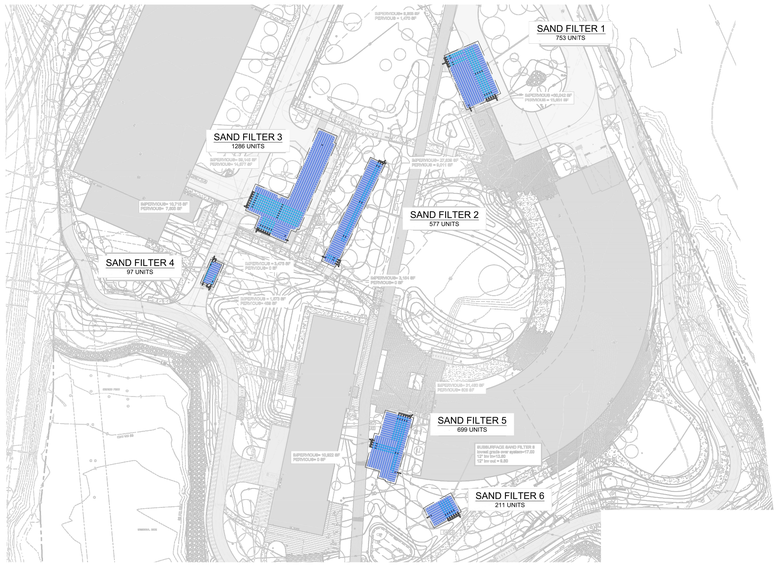
STATE OF MAINE
AMY N. LEBEL
17065
LICENSED PROFESSIONAL ENGINEER
Amy N. Lebel

Stamp

Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	AS NOTED

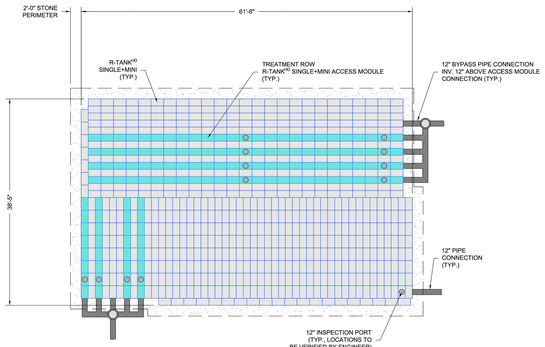
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CIVIL DETAILS - 4

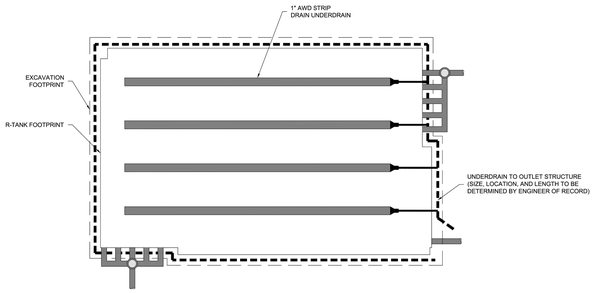
D-404



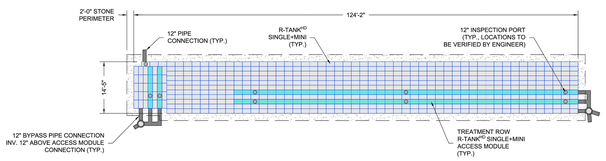
SUBSURFACE STORMWATER TREATMENT INDEX

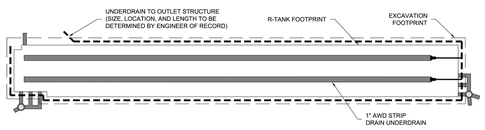
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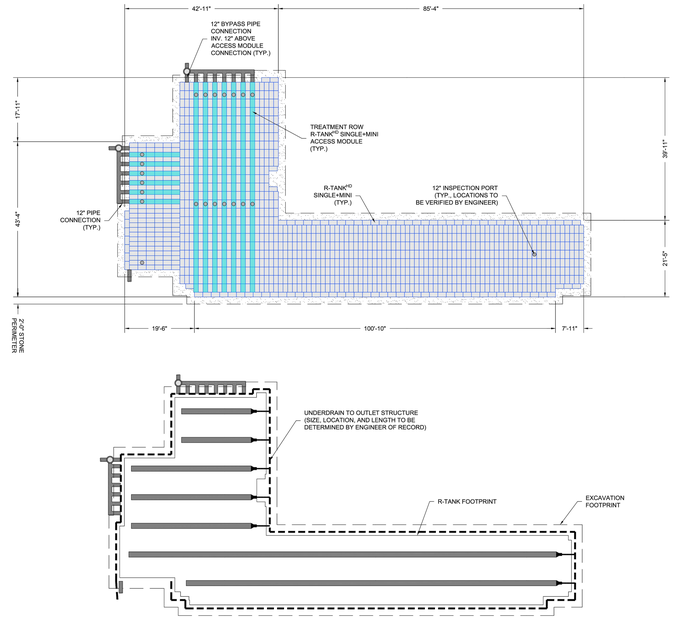


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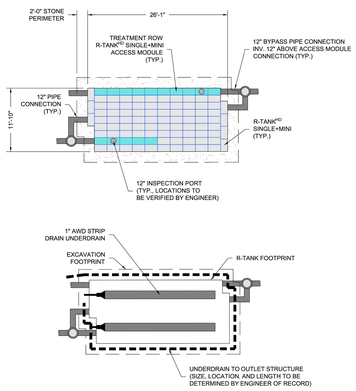




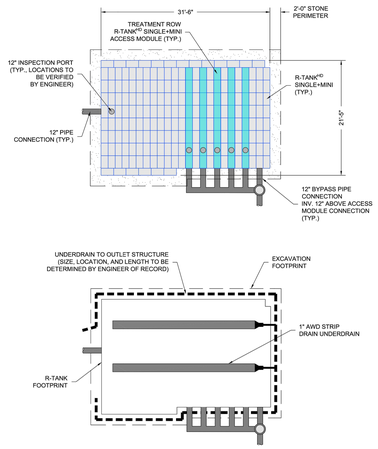
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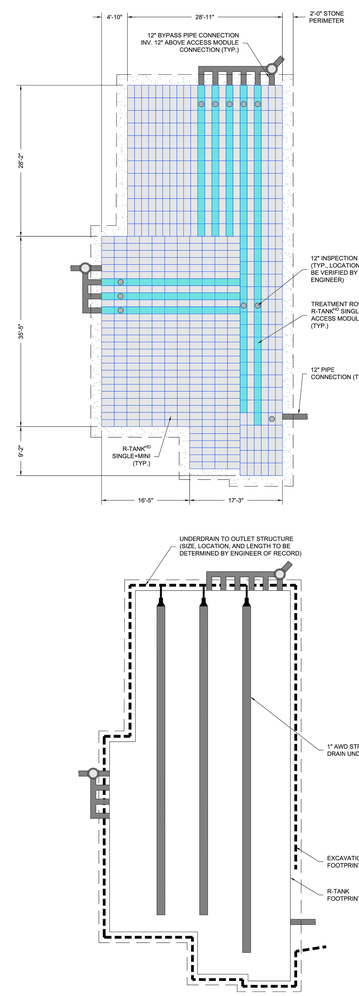
SAND FILTER 3



SAND FILTER 4



SAND FILTER 6



SAND FILTER 5

IDEALS
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617 492-7000 Fax 492-7007

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Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED
PROFESSIONAL ENGINEER

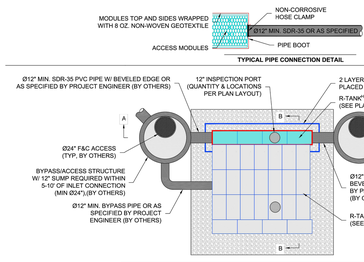
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Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	AS NOTED

Drawing Title

CIVIL DETAILS - 5

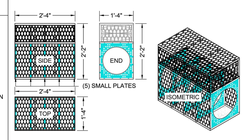
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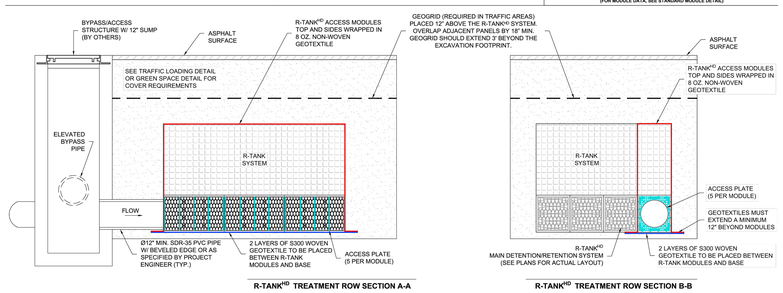
NOTE:
IF PIPE CONNECTING TO TREATMENT ROW IS LARGER THAN Ø12" SDR-35, IT SHALL BE ABUTTED FLUSH TO END PLATE AND SEALED WITH A PIPE BOOT.

TYPICAL PIPE CONNECTION DETAIL

R-TANK^HD TREATMENT ROW WITH PRECAST INLET/ACCESS STRUCTURE



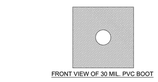
SINGLE + MINI R-TANK^HD - ACCESS MODULE DETAIL
(FOR MODULE DATA, SEE STANDARD MODULE DETAIL)



R-TANK^HD TREATMENT ROW SECTION A-A

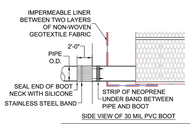
R-TANK^HD TREATMENT ROW SECTION B-B

END VIEW OF PIPE/LINER CONNECTION



30 MIL. PVC BOOT

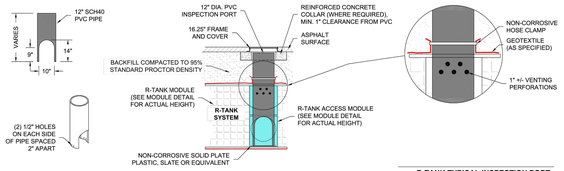
FRONT VIEW OF 30 MIL. PVC BOOT



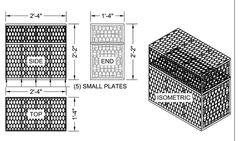
SIDE VIEW OF 30 MIL PVC BOOT | SIDE VIEW OF PIPE/LINER CONNECTION

R-TANK TYPICAL EXCAVATION INLET/OUTLET W/ 30 MIL PVC PIPE BOOT DETAIL

NOTES
1. THE INSPECTION PORT IS USED IN THE ACCESS MODULE TO INSPECT THE LEVEL OF SEDIMENT ACCUMULATION.
2. MINIMUM REQUIRED MAINTENANCE INCLUDES A QUARTERLY INSPECTION DURING THE FIRST YEAR OF OPERATION AND A YEARLY INSPECTION THEREAFTER. FLUSH AS NEEDED.
3. R-TANK^FC, R-TANK^FD, R-TANK^FT AND R-TANK^TC MAY BE USED IN TRAFFIC APPLICATIONS.
4. SEE TRAFFIC LOADING DETAIL FOR MINIMUM & MAXIMUM COVER REQUIREMENTS.
5. IF INSPECTION PORT IS LOCATED IN A NON-TRAFFIC AREA, A PLASTIC CAP CAN BE USED IN LIEU OF A FRAME AND COVER WITH CONCRETE COLLAR.



R-TANK TYPICAL INSPECTION PORT

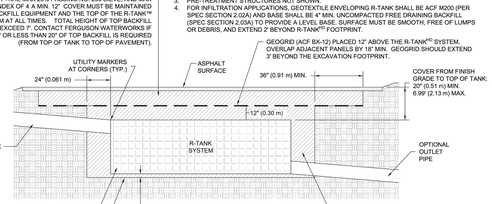


MODULE DATA

GEOMETRY:	**LOAD RATING:**
LENGTH = 28.15 IN. (715 MM)	33.4 PSI, (MODULE ONLY)
WIDTH = 15.75 IN. (400 MM)	HS20/HS25 - SEE SPEC FOR
HEIGHT = 25.98 IN. (660 MM)	COVER REQUIREMENTS
TANK VOLUME = 6.67 CF	**MATERIAL:**
STORAGE VOLUME = 6.33 CF	100% RECYCLED POLYPROPYLENE
VOID INTERNAL VOLUME: 95%	**SMALL PLATES REQUIRED:**
VOID SURFACE AREA: 90%	5/SEGMENT, 10/MODULE

SINGLE + MINI R-TANK^HD - MODULE DETAIL

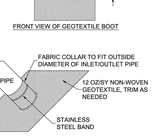
TOTAL COVER: 20" MINIMUM AND 84" MAXIMUM. FIRST 12" MUST BE FREE DRAINING BACKFILL (SPEC SECTION 2.03B): STONE =1.5" OR SOIL (USCS CLASS GW, GP, SW OR SP). ADDITIONAL FILL MAY BE STRUCTURAL FILL (SPEC SECTION 2.05C): STONE OR SOIL (USCS CLASS SM, SP, SW, GM, GP OR GW) WITH MAX CLAY CONTENT=10%, MAX 25% PASSING NO. 200 SIEVE, AND MAX PLASTICITY INDEX OF 4 A MIN. 12". COVER MUST BE MAINTAINED BETWEEN BACKFILL EQUIPMENT AND THE TOP OF THE R-TANK™ SYSTEM AT ALL TIMES. TOTAL HEIGHT OF TOP BACKFILL SHOULD NOT EXCEED 7'. CONTACT FERGUSON WATERWORKS IF MORE THAN 7' OR LESS THAN 20" OF TOP BACKFILL IS REQUIRED (FROM TOP OF TANK TO TOP OF PAVEMENT).



R-TANK^HD & HS-20 LOADS - SECTION VIEW

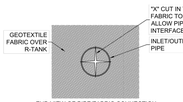
NOTES:
1. FOR COMPLETE MODULE DATA, SEE APPROPRIATE R-TANK^HD MODULE SHEET.
2. INSTALLATIONS PER THIS DETAIL MEET GUIDELINES OF HL-93 LOADING PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, CUSTOMARY U.S. UNITS, 7TH EDITION, 2014 WITH 2015 AND 2016 INTERIM REVISIONS.
3. PRE-TREATMENT STRUCTURES NOT SHOWN.
4. FOR INFILTRATION APPLICATIONS, GEOTEXTILE ENVELOPING R-TANK SHALL BE ACF M200 (PER SPEC SECTION 2.02A) AND BASE SHALL BE 4" MIN. UNCOMPACTED FREE DRAINING BACKFILL (SPEC SECTION 2.03A) TO PROVIDE A LEVEL BASE. SURFACE MUST BE SMOOTH, FREE OF LUMPS OR DEBRIS, AND EXTEND 2' BEYOND R-TANK^HD FOOTPRINT.

NOTE:
- PIPE BOOTS ARE AVAILABLE IN THE FOLLOWING STANDARD SIZES: 8" | 12" | 15" | 18" | 24"
- LARGER SPECIAL ORDER, CUSTOM SIZES ARE AVAILABLE.



FRONT VIEW OF GEOTEXTILE BOOT

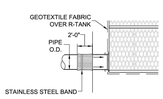
CUT AN "X" IN THE FABRIC ENVELOPE THAT IS SLIGHTLY LARGER THAN THE PIPE, PULL THE FABRIC FLAPS AROUND THE PIPE, AND SEAL WITH A STAINLESS STEEL BAND.



END VIEW OF PIPE/FABRIC CONNECTION

GEOTEXTILE BOOT

AFTER TANK WRAP IS SECURED TO PIPE, SLIDE BOOT AGAINST R-TANK AND SECURE WITH SECOND STAINLESS STEEL BAND, THEN ATTACH BOOT FLAP TO TANK ENVELOPE FABRIC WITH DUCT TAPE OR OTHER ADHESIVE.

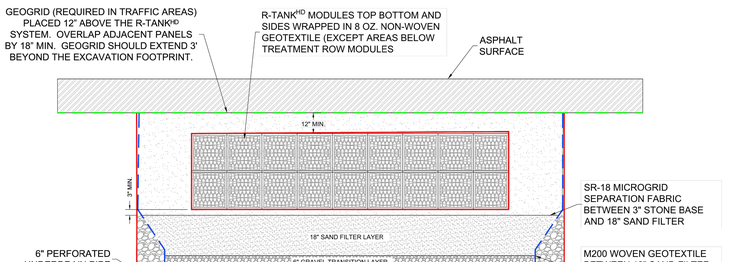


SIDE VIEW OF GEOTEXTILE BOOT



SIDE VIEW OF PIPE/FABRIC CONNECTION

R-TANK TYPICAL TANK INLET/OUTLET W/ GEOTEXTILE PIPE BOOT DETAIL

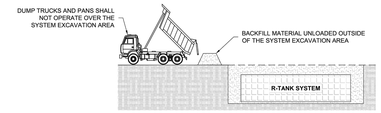


R-TANK QUANTITIES

SYSTEM DESIGNATION	FILTER 1	FILTER 2	FILTER 3	FILTER 4	FILTER 5	FILTER 6
R-TANK^HD MODULE TYPE	SINGLE+MINI	SINGLE+MINI	SINGLE+MINI	SINGLE+MINI	SINGLE+MINI	SINGLE+MINI
TRAFFIC LOAD	HS-20	NON-TRAFFIC	HS-20	HS-20	NON-TRAFFIC	NON-TRAFFIC
# OF SINGLE+MINI R-TANKS	621	485	1075	82	877	171
# OF SINGLE+MINI R-TANK ACCESS MODULES	132	92	211	15	122	40
TOTAL SYSTEM STORAGE	4,501 CF	4,859 CF	11,204 CF	992 CF	5,599 CF	1,794 CF
R-TANK STORAGE VOLUME	4,788 CF	3,654 CF	8,144 CF	614 CF	4,427 CF	1,336 CF
STONE STORAGE VOLUME (40% VOID RATIO)	1,732 CF	1,201 CF	3,060 CF	378 CF	1,182 CF	462 CF
STONE BED FOOTPRINT	2,738 SF	2,265 SF	4,751 SF	469 SF	2,595 SF	879 SF
BACKFILL QUANTITY	473 CY	380 CY	826 CY	88 CY	404 CY	143 CY
N280 NON-WOVEN GEOTEXTILE TANK WRAP	648 SY	531 SY	1,118 SY	87 SY	609 SY	195 SY
N280 NON-WOVEN GEOTEXTILE EXCAVATION WRAP	1,760 SY	1,652 SY	3,086 SY	391 SY	1,677 SY	636 SY
30 MIL PVC LINER	530 SY	528 SY	938 SY	136 SY	507 SY	206 SY
8 OZ. NON-WOVEN GEOTEXTILE TREAT. ROW WRAP	230 SY	199 SY	367 SY	21 SY	213 SY	72 SY
S300 WOVEN GEOTEXTILE TREAT. ROW BASE FABRIC	113 SY	79 SY	180 SY	13 SY	104 SY	34 SY
ACF BX-12 GEOGRID	437 SY	0 SY	763 SY	66 SY	0 SY	0 SY
12" INSPECTION PORTS	13	9	22	2	11	6
GEOTEXTILE PIPE BOOTS (12")	33	21	45	15	33	21
30 MIL. PVC PIPE BOOTS (12")	11	7	15	5	11	7
STORMING CIPS (12")	2	2	2	2	2	1
NOTE: STONE QUANTITY INCLUDES 12" OF COVER AND 3" OF BASE.						
NOTE: GEOTEXTILE / LINER QUANTITIES INCLUDE A 15% WASTE FACTOR.						
SEE SHEETS 3 - 14 FOR DETAILS AND ADDITIONAL INFORMATION						

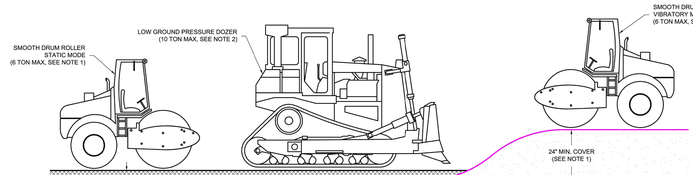
SAND FILTER ELEVATIONS

SYSTEM DESIGNATION	FILTER 1	FILTER 2	FILTER 3	FILTER 4	FILTER 5	FILTER 6
CRUSHED STONE BELOW LINER	13.52	11.67	12.12	8.82	10.87	10.47
7" STONE UNDERDRAIN LAYER	14.02	12.17	12.62	9.32	11.37	10.97
1" AWD STRIP DRAIN	14.27	12.42	12.87	9.57	11.62	11.22
GRAVEL TRANSITION LAYER	14.60	12.75	13.20	9.90	11.95	11.55
18" SAND FILTER LAYER BASE	15.10	13.25	13.70	10.40	12.45	12.05
BASE STONE UNDER TANKS	16.60	14.75	15.20	11.90	13.95	13.55
TANK INV.	16.85	15.00	15.45	12.15	14.20	13.88
TOP OF TANK	19.02	17.17	17.62	14.32	16.37	15.97
GEOGRID / TOP OF STONE	20.02	17.67	18.62	15.32	16.87	16.97
MIN. ALLOW. FINAL GRADE	20.69	18.17	19.29	15.99	17.37	17.64
MAX. ALLOW. FINAL GRADE	26.01	24.18	24.61	21.31	23.36	22.96



DUMP TRUCK DETAIL (SEE NOTE 3)

NOTES:
1. FOLLOWING PLACEMENT OF SIDE BACKFILL, A UNIFORM 12" LIFT OF THE FREELY DRAINING MATERIAL (SPEC SECTION 2.03 B2) SHALL BE PLACED OVER THE R-TANK AND LIGHTLY COMPACTED USING A WALK-BEHIND TRENCH ROLLER. ALTERNATELY, A ROLLER (MAXIMUM GROSS VEHICLE WEIGHT OF 6 TONS) MAY BE USED. ROLLER MUST REMAIN IN STATIC MODE UNTIL A MINIMUM OF 24" OF COVER HAS BEEN PLACED OVER THE MODULES. SHEEP FOOT ROLLERS SHOULD NOT BE USED. **SPEC SECTION 3.05 A5**
2. ONLY LOW PRESSURE TIRE OR TRACK VEHICLES (LESS THAN 7 PSI AND OPERATING WEIGHT OF LESS THAN 20,000 LBS) SHALL BE OPERATED OVER THE R-TANK SYSTEM DURING CONSTRUCTION. **SPEC SECTION 3.05 A5**
3. DUMP TRUCKS AND PANS SHALL NOT BE OPERATED WITHIN THE R-TANK SYSTEM AT ANY TIME. WHERE NECESSARY, THE HEAVY EQUIPMENT SHOULD UNLOAD IN AN AREA ADJACENT TO THE R-TANK SYSTEM AND THE MATERIAL SHOULD BE MOVED OVER THE SYSTEM WITH TRACKED EQUIPMENT. **SPEC SECTION 3.05 A5**
4. ENSURE THAT ALL UNRELATED CONSTRUCTION TRAFFIC IS KEPT AWAY FROM THE LIMITS OF EXCAVATION UNTIL THE PROJECT IS COMPLETE AND FINAL SURFACE MATERIALS ARE IN PLACE. NO NON-INSTALLATION RELATED LOADING SHOULD BE ALLOWED OVER THE R-TANK SYSTEM UNTIL THE FINAL DESIGN SECTION HAS BEEN CONSTRUCTED (INCLUDING PAVEMENT). **SPEC SECTION 3.05 B**
5. SEE R-TANK INSTALLATION GUIDE OR CONTACT YOUR LOCAL FERGUSON REPRESENTATIVE FOR ADDITIONAL INFORMATION.



CONSTRUCTION EQUIPMENT COVER DETAIL - GREEN SPACE

PART 1 - GENERAL
1.01 RELATED DOCUMENTS
A. Drawings, technical specification and general provisions of the Contract as modified herein apply to this section.

1.02 DESCRIPTION OF WORK INCLUDED
A. Provide excavation and base preparation per geotechnical engineer's recommendations and/or as shown on the design drawings, to provide adequate support for project design loads and safety from excavation sidewall collapse. Excavations shall be in accordance with the owner's and OSHA requirements.
B. Provide and install R-TanksLD; R-TankHD; R-TankSD; or R-TankLID system (hereafter called R-Tank) and all related products including fill materials, geotextiles, geogrids, inlet and outlet pipe with connections per the manufacturer's installation guidelines provided in this section.
C. Provide and construct the cover of the R-Tank system including; stone backfill, structural fill cover, and pavement section as specified.
D. Protect R-Tank system from construction traffic after installation until completion of all construction activity in the installation area.

1.03 QUALITY CONTROL
A. All materials shall be manufactured in ISO certified facilities.
B. Installation Contractor shall demonstrate the following experience:
1. A minimum of three R-Tank or equivalent projects completed within 2 years; and,
2. A minimum of 25,000 cubic feet of storage volume completed within 2 years.
3. Contractor experience requirement may be waived if the manufacturer's representative provides on-site training and review during construction.
C. Installation Personnel: Performed only by skilled workers with satisfactory record of performance on bulk earthworks, pipe, chamber, or pond/landfill construction projects of comparable size and quality.
D. Contractor must have manufacturer's representative available for site review if requested by Owner.

1.04 SUBMITTALS
A. Submit proposed R-Tank layout drawings. Drawings shall include typical section details as well as the required base elevation of stone and tanks, minimum cover requirements and tank configuration.
B. Submit manufacturer's product data, including compressive strength and unit weight.
C. Submit manufacturer's installation instructions.
D. Submit R-Tank sample for review. Reviewed and accepted samples will be returned to the Contractor.
E. Submit material certificates for geotextile, geogrid, base course and backfill materials.
F. Submit required experience and personnel requirements as specified in Section 1.03.
G. Any proposed equal alternative product substitution to this specification must be submitted for review and approved prior to bid opening. Review package should include third party reviewed performance data that meets or exceeds criteria in Table 2.01 B.

1.05 DELIVERY, STORAGE, AND HANDLING
A. Protect R-Tank and other materials from damage during delivery, and store UV sensitive materials under tarp to protect from sunlight when time from delivery to installation exceeds two weeks. Storage of materials shall be on smooth surfaces, free from dirt, mud and debris.
B. Handling is to be performed with equipment appropriate to the materials and site conditions, and may include hand, handcart, forklifts, extension lifts, etc.
C. Cold weather:
1. Care must be taken when handling plastics when air temperature is 40 degrees or below as plastic becomes brittle.
2. Do not use frozen materials or materials mixed or coated with ice or frost.
3. Do not build on frozen ground or wet, saturated or muddy subgrade.

1.06 PREINSTALLATION CONFERENCE.
A. Prior to the start of the installation, a preinstallation conference shall occur with the representatives from the design team, the general contractor, the excavation contractor, the R-Tank installation contractor, and the manufacturer's representative.

1.07 PROJECT CONDITIONS
A. Coordinate installation of the R-Tank system with other on-site activities to eliminate all non-installation related construction traffic over the completed R-Tank system. No loads heavier than the design loads shall be allowed over the system, and in no case shall loads higher than a standard AASHTO HS20 (or HS25, depending on design criteria) load be allowed on the system at any time.
B. Protect adjacent work from damage during R-Tank system installation.
C. All pre-treatment systems to remove debris and heavy sediments must be in place and functional prior to operation of the R-Tank system. Additional pretreatment measures may be needed if unit is operational during construction due to increased sediment loads.
D. Contractor is responsible for any damage to the system during construction.

PART 2 - PRODUCTS
2.01 R-TANK UNITS
A. R-Tank - Injection molded plastic tank plates assembled to form a 95% void modular structure of predesigned height (custom for each project).
B. R-Tank units shall meet the following Physical & Chemical Characteristics:

PROPERTY	DESCRIPTION	R-Tank^HD VALUE	R-Tank^FC VALUE	R-Tank^FD VALUE
Void Area	Volume available for water storage	95%	95%	95%
Surface Void Area	Percentage of exterior available for infiltration	40%	50%	40%
Vertical Compressive Strength	ASTM D 2412 / ASTM F 2418	35.0 psi	33.4 psi	42.8 psi
Lateral Compressive Strength	ASTM D 2412 / ASTM F 2418	20.0 psi	23.4 psi	24.4 psi
HS-20 Minimum Cover	Cover required to support HS-20 loads	N/A	42"	18"
HS-25 Minimum Cover	Cover required to support HS-25 loads	N/A	48"	18"
Maximum Cover	Maximum allowable cover depth	5 feet	< 7 feet	< 10 feet
Unit Weight	Weight of plastic per cubic foot of tank	3.85 lbs / cf	3.85 lbs / cf	4.25 lbs / cf
Rig Thickness	Thickness of load bearing sidewalls	0.18 inches	0.18 inches	0.18 inches
Service Temperature	Temperature range for use	-10 ~ 120° F	-10 ~ 120° F	-10 ~ 120° F

C. Supplier: Ferguson Waterworks 2831 Cardwell Road Richmond, VA 23234 (T): 800-448-3636; (F): 804-743-7779 www.ferguson.com

2.02 GEOSYNTHETICS
A. Geotextile. A geotextile envelope is required to prevent backfill material from entering the R-Tank modules.
1. Standard Application: The standard geotextile shall be an 8 oz per square yard nonwoven geotextile (ACF N080 or equivalent).
2. Infiltration Applications: When water must infiltrate/exfiltrate through the geotextile as a function of the system design, a woven monofilament (ACF M200 or equivalent) shall be used.
B. Geogrid. For installations subject to traffic loads and/or when required by project plans, install geogrid (ACF BX12 or equivalent) to reinforce backfill above the R-Tank system. Geogrid is not always required for R-TankSD installations, and is often not required for non-traffic load applications.

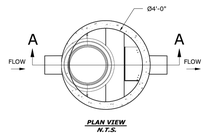
2.03 BACKFILL & COVER MATERIALS
A. Backfill Materials: Stone (angular and smaller than 1.5" in diameter) or soil (GW, GP, SW, or SP as classified by the Unified Soil Classification System) shall be used below the R-Tank system (3" minimum). Material must be free from lumps, debris, and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation. For infiltration applications backfilling material shall be free draining.
B. Side and Top Backfill: Material must be free from lumps, debris and any sharp objects that could cut the geotextile. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation.
1. Traffic Applications - Free draining material shall be used adjacent to (24" minimum) and above (for the first 12") the R-Tank system.
a. For HD, and SD modules, backfill materials shall be free draining stone (angular and smaller than 1.5" in diameter) or soil (GW, GP, SW, or SP as classified by the Unified Soil Classification System).
b. For UD modules with less than 14" of top cover, backfill materials shall be free draining stone (angular and smaller than 1.5" in diameter). The use of soil backfill on the sides and top of the UD module is not permitted unless the modules are installed outside of traffic areas or with cover depths of 14" or more. Top backfill material (from top of module to bottom of pavement base or 12" maximum) must be consistent with side backfill.
2. Non-Traffic / Green Space Applications - For all R-Tank modules installed in green spaces and not subjected to vehicular loads, backfill materials may either follow the guidelines for Traffic Applications above, or the top backfill layer (12" minimum) may consist of AASHTO #57 stone blended with 30-40% (by volume) topsoil to aid in establishing vegetation.
C. Additional Cover Materials: Structural Fill shall consist of granular materials meeting the gradational requirements of SM, SP, SW, GM, GP or GW as classified by the Unified Soil Classification System. Structural fill shall have a maximum of 25 percent passing the No. 200 sieve, shall have a maximum clay content of 10 percent and a maximum Plasticity Index of 4. Material shall be within 3 percent of the optimum moisture content as determined by ASTM D698 at the time of installation.

2.04 OTHER MATERIALS
A. Utility Marker: Install metallic tape at corners of R-Tank system to mark the area for future utility detection.

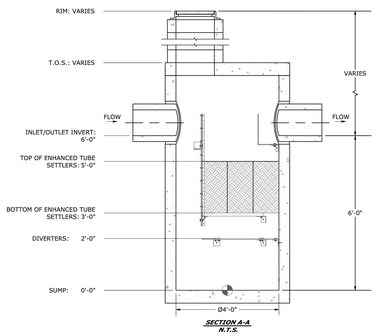
PART 3 - EXECUTION
3.01 ASSEMBLY OF R-TANK UNITS
A. Assembly of modules shall be performed in accordance with the R-Tank Installation Manual, Section 2.

3.02 LAYOUT AND EXCAVATION
A. Installer shall stake out, excavate, and prepare the subgrade area to the required plan grades and dimensions, ensuring that the excavation is at least 2 feet greater than R-Tank dimensions in each direction allowing for installation of geotextile filter fabric, R-Tank modules, and free draining backfill materials.
B. All excavations must be prepared with OSHA approved excavated sides and sufficient working space.
C. Protect partially completed installation against damage from other construction traffic by establishing a perimeter with high visibility construction tape, fencing, barricades, or other means until construction is complete.
D. Base of the excavation shall be uniform, level, and free of lumps or debris and soft or yielding subgrade areas. A minimum 2,000 pounds per square foot bearing capacity is required.
1. Standard Applications: Compact subgrade to a minimum of 95% of Standard Proctor (ASTM D698) density or as required by the Owner's engineer.
2. Infiltration Applications: Subgrade shall be prepared in accordance with the contract documents. Compaction of subgrade should not be performed in infiltration applications.
E. Unsuitable Soils or Conditions: All questions about the base of the excavation shall be directed to the owner's engineer, who will approve the subgrade conditions prior to placement of stone. The owner's engineer shall determine the required bearing capacity of the R-Tank subgrade; however in no case shall a bearing capacity of less than 2,000 pounds per square foot be provided.
1. If unsuitable soils are encountered at the subgrade, or if the subgrade is pumping or appears excessively soft, repair the area in accordance with contract documents and/or as directed by the owner's engineer.
2. If indications of the water table are observed during excavation, the engineer shall be contacted to provide recommendations.
3. Do not start installation of the R-Tank system until unsatisfactory subgrade conditions are corrected and the subgrade conditions are accepted by the owner's engineer.

3.03 PREPARATION OF BASE
A. Place a thin layer (3" unless otherwise specified) of bedding material (Section 2.03 A), over the subgrade to establish a level working platform for the R-Tank modules. Level to within ¼" (+/- ½") or as shown on the plans. Native subgrade soils or other materials may be used if determined to meet the requirements of 2.03 A and are accepted by the owner's engineer.
1. Standard Applications: Static ro



PLAN VIEW
N.T.S.



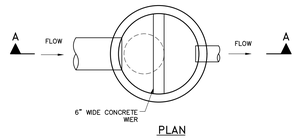
SECTION A-A
N.T.S.

GENERAL NOTES:

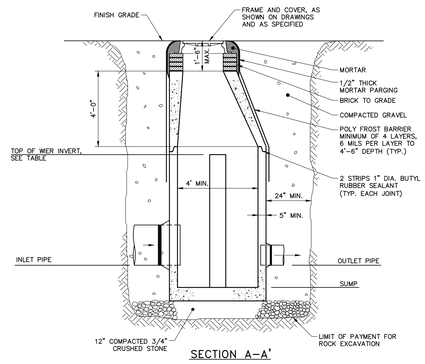
1. CONCRETE COMPONENTS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C478.
2. CONTRACTOR TO INSTALL THE STRUCTURE IN ACCORDANCE WITH ASTM C1821.
3. CONTRACTOR TO PROVIDE ALL LABOR AND EQUIPMENT REQUIRED TO OFFLOAD AND INSTALL UNIT.
4. CONTRACTOR TO PROVIDE AND INSTALL ALL PIPES, FRAMES, COVERS, HATCHES, AND RISERS UNLESS SPECIFIED OTHERWISE.
5. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS.

NOTE: PROVIDE STORMSETTLER BY STORMTRAP OR APPROVED EQUAL.

HYDRODYNAMIC SEPARATOR
N.T.S.



PLAN



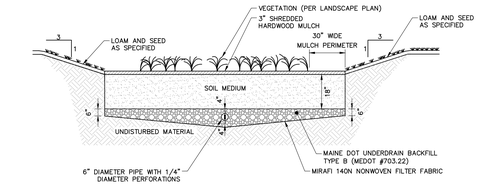
SECTION A–A'

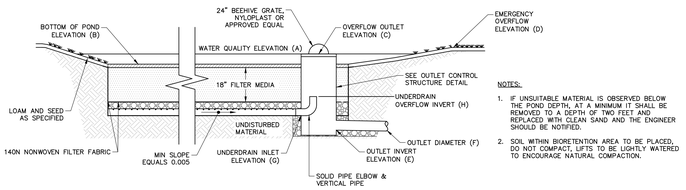
NOTE:
1. SEE STRUCTURE TABLE FOR DIMENSIONS.

DIVERSION MANHOLE DETAIL
N.T.S.

DIVERSION STRUCTURE DIMENSIONS/ ELEVATIONS	
LOCATION	TOP OF WEIR B (ELEV)
DMH2 (DIV.)	17.50
DMH6 (DIV.)	17.90
DMH12 (DIV.)	16.90
DMH15 (DIV.)	16.20
DMH24 (DIV.)	14.50
DMH32 (DIV.)	16.20
DMH33 (DIV.)	13.60
DMH37 (DIV.)	15.70

BIORETENTION BASIN DIMENSIONS/ ELEVATION (FEET)								
LOCATION	A (ELEV)	B (ELEV)	C (ELEV)	D (ELEV)	E (ELEV)	F (ELEV)	G (ELEV)	H (ELEV)
BIORETENTION BASIN 1	19.50	19.00	19.50	21.25	15.00	1.00	16.34	17.84
BIORETENTION BASIN 2	14.50	14.00	14.50	14.80	10.50	1.00	11.34	12.84
BIORETENTION BASIN 3	13.00	12.50	13.00	13.80	9.00	1.00	9.84	11.34





NOTES:

1. IF UNSUITABLE MATERIAL IS OBSERVED BELOW THE POND DEPTH, AT A MINIMUM IT SHALL BE REMOVED TO A DEPTH OF TWO FEET AND REPLACED WITH CLEAN SAND AND THE ENGINEER SHOULD BE NOTIFIED.
2. SOIL WITHIN BIORETENTION AREA TO BE PLACED, DO NOT COMPACT, LIFTS TO BE LIGHTLY WATERED TO ENCOURAGE NATURAL COMPACTION.

BIORETENTION BASIN
N.T.S.

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Woodard & Curran

LAND-USE PERMIT SET

NOT FOR CONSTRUCTION

Number	Revision	Date

STATE OF MAINE
AMY N. LEBEL
17065
LICENSED
PROFESSIONAL ENGINEER

Stamp

Job #	2202
Project	THE ROUX INSTITUTE AT NORTHEASTERN UNIVERSITY
Drawn By	BCM
Designed By	ANL
Checked	DLC
Date	27 OCTOBER 2023
Scale	AS NOTED

Drawing Title
CIVIL DETAILS - 7

D-407



PHASE 1 SITE PLAN

NORTHEASTERN IDEALS Portland, ME

STIMSON

PARKING STRUCTURE

BEAN BUILDING

LEARNING, RESEARCH, AND COLLABORATION BUILDING

MATCH L.2.01
MATCH L.2.00

MATCH L.2.00
MATCH L.8.00

LIMIT OF WORK

NOTE: CONTRACTOR TO REMOVE CONSTRUCTION FILL DEBRIS FROM BEACH, INCLUDING BRICK, TILE, GRANITE BLOCK, AND OTHER MATERIALS IDENTIFIED BY OWNER AND DESIGN TEAM

PATHWAY AT PROPERTY LINE PLAN
1"=20'

MATERIALS LEGEND

PAVEMENT

P1	ASPHALT PAVING - VEHICULAR	1 L6.00
P2	CONCRETE PAVEMENT-PEDESTRIAN	2 L6.00
P3	CONCRETE PAVEMENT-VEHICULAR	3 L6.00
P4	GRANITE PAVERS 01 - VEHICULAR	5 L6.00
P5	GRANITE PAVERS 02-VEHICULAR	5 L6.00
P6	PRECAST CONCRETE PAVERS - VEHICULAR	7 L6.00
P7	PRECAST CONCRETE PAVERS - PEDESTRIAN	7 L6.00
P8	GRANITE PAVERS 01- PEDESTRIAN	6 L6.00
P9	GRANITE COBBLESTONE PAVERS - PERMEABLE	8 L6.00
P10	GRANITE COBBLESTONE PAVERS- VEHICULAR	7 L6.00
P11	DECOMPOSED GRANITE PAVEMENT	13 L6.00

CURBS AND EDGES

C1	GRANITE CURB - 6" RAISED	9 L6.00
C2	GRANITE CURB - FLUSH	11 L6.00
C3	GRANITE CURB - TRANSITION	15 L6.00
C4	GRANITE CURB - MOUNTABLE	12 L6.00
E1	STEEL EDGING	14 L6.00
E2	RECLAIMED RAIL TRACK	
TD	TRENCH DRAIN	3 L6.02
SI	STEEL CURB INLET (QUANTITY: 5)	21 L6.00
RR	SHORELINE PROTECTION, SEE MARINE ENGINEER DRAWINGS	

WALLS AND STAIRS

W1	ARCHITECTURAL CONCRETE RETAINING WALL	1 L6.01
W2	CONCRETE RETAINING WALL WITH STONE VENEER	2 L6.01
W3	CONCRETE FOUNDATION WALL AT WOOD DECK	16 L6.00
W4	BOARD FORMED CONCRETE RETAINING WALL	1 L6.01
W5	MONOLITHIC STONE RETAINING WALL ON DENSE GRADED CRUSHED STONE BASE	19 L6.00
S1	MONOLITHIC GRANITE STAIRS ON CONCRETE FOUNDATION	17 L6.00

SITE FURNISHINGS

WB	MONOLITHIC GRANITE BENCH WITH WOOD INSET	1 L6.02
WW	WOOD BENCH AT CONCRETE RETAINING WALL	20 L6.00
CB	PRE-CAST CONCRETE BRIDGE - PEDESTRIAN	2 L6.02
WD	WOOD DECK AT TERRACED LANDSCAPE	16 L6.00
HR	STAINLESS STEEL HANDRAIL WITH INTEGRATED LIGHTING	18 L6.00
CR	STAINLESS STEEL CURB RAIL	2 L6.02
TG	VEHICULAR TIMBER GUARDRAIL	3 L6.01
DW	DETECTABLE WARNING STRIP AT ADA CURB RAMP	15 L6.00
VG	VEHICULAR GATE (QUANTITY: 1)	7 L6.01
BR	BIKE RACK (QUANTITY: 95)	5 L6.01
B	REMOVABLE BOLLARD (QUANTITY: 17)	4 L6.01
F	WOODEN SLAT FENCE AT PLAYGROUND	3 L6.03

MATERIALS NOTES:

1. MAKE TRANSITIONS BETWEEN CHANGES IN PAVING SMOOTH AND GRADUAL WITH NO SHARP OR ABRUPT CHANGES UNLESS OTHERWISE SHOWN.
2. REFER TO LANDSCAPE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

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LAND-USE PERMIT SET

Number	Revision	Date

REGISTERED LANDSCAPE ARCHITECT
STEPHEN C. STIMSON
No. 3916
STATE OF MAINE

Stamp

Job #	2202		
Project	THE ROUX INSTITUTE		
Drawn By	ZH SK JC MS	Checked	STIMSON
Date	27 OCTOBER 2023		
Scale	1" = 20'		

Drawing Title

Materials Plan

L3.00

MATERIALS LEGEND

PAVEMENT

P1	ASPHALT PAVING - VEHICULAR	1 / 16.00
P2	CONCRETE PAVEMENT-PEDESTRIAN	2 / 16.00
P3	CONCRETE PAVEMENT-VEHICULAR	3 / 16.00
P4	GRANITE PAVERS 01 - VEHICULAR	5 / 16.00
P5	GRANITE PAVERS 02-VEHICULAR	5 / 16.00
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P10	GRANITE COBBLESTONE PAVERS- VEHICULAR	7 / 16.00
P11	DECOMPOSED GRANITE PAVEMENT	13 / 16.00

CURBS AND EDGES

C1	GRANITE CURB - 6" RAISED	9 / 16.00
C2	GRANITE CURB - FLUSH	11 / 16.00
C3	GRANITE CURB - TRANSITION	15 / 16.00
C4	GRANITE CURB - MOUNTABLE	12 / 16.00
E1	STEEL EDGING	14 / 16.00
E2	RECLAIMED RAIL TRACK	
TD	TRENCH DRAIN	3 / 16.02
SI	STEEL CURB INLET (QUANTITY: 5)	21 / 16.00
RR	SHORELINE PROTECTION, SEE MARINE ENGINEER DRAWINGS	

WALLS AND STAIRS

W1	ARCHITECTURAL CONCRETE RETAINING WALL	1 / 16.01
W2	CONCRETE RETAINING WALL WITH STONE VENEER	2 / 16.01
W3	CONCRETE FOUNDATION WALL AT WOOD DECK	16 / 16.00
W4	BOARD FORMED CONCRETE RETAINING WALL	1 / 16.01
W5	MONOLITHIC STONE RETAINING WALL ON DENSE GRADED CRUSHED STONE BASE	19 / 16.00
S1	MONOLITHIC GRANITE STAIRS ON CONCRETE FOUNDATION	17 / 16.00

SITE FURNISHINGS

WB	MONOLITHIC GRANITE BENCH WITH WOOD INSET	1 / 16.02
WW	WOOD BENCH AT CONCRETE RETAINING WALL	20 / 16.00
CB	PRE-CAST CONCRETE BRIDGE - PEDESTRIAN	2 / 16.02
WD	WOOD DECK AT TERRACED LANDSCAPE	16 / 16.00
HR	STAINLESS STEEL HANDRAIL WITH INTEGRATED LIGHTING	18 / 16.00
CR	STAINLESS STEEL CURB RAIL	2 / 16.02
TG	VEHICULAR TIMBER GUARDRAIL	3 / 16.01
DW	DETECTABLE WARNING STRIP AT ADA CURB RAMP	15 / 16.00
VG	VEHICULAR GATE (QUANTITY: 1)	7 / 16.01
BR	BIKE RACK (QUANTITY: 95)	5 / 16.01
B	REMOVABLE BOLLARD (QUANTITY: 17)	4 / 16.01
F	WOODEN SLAT FENCE AT PLAYGROUND	3 / 16.03

MATERIALS NOTES:

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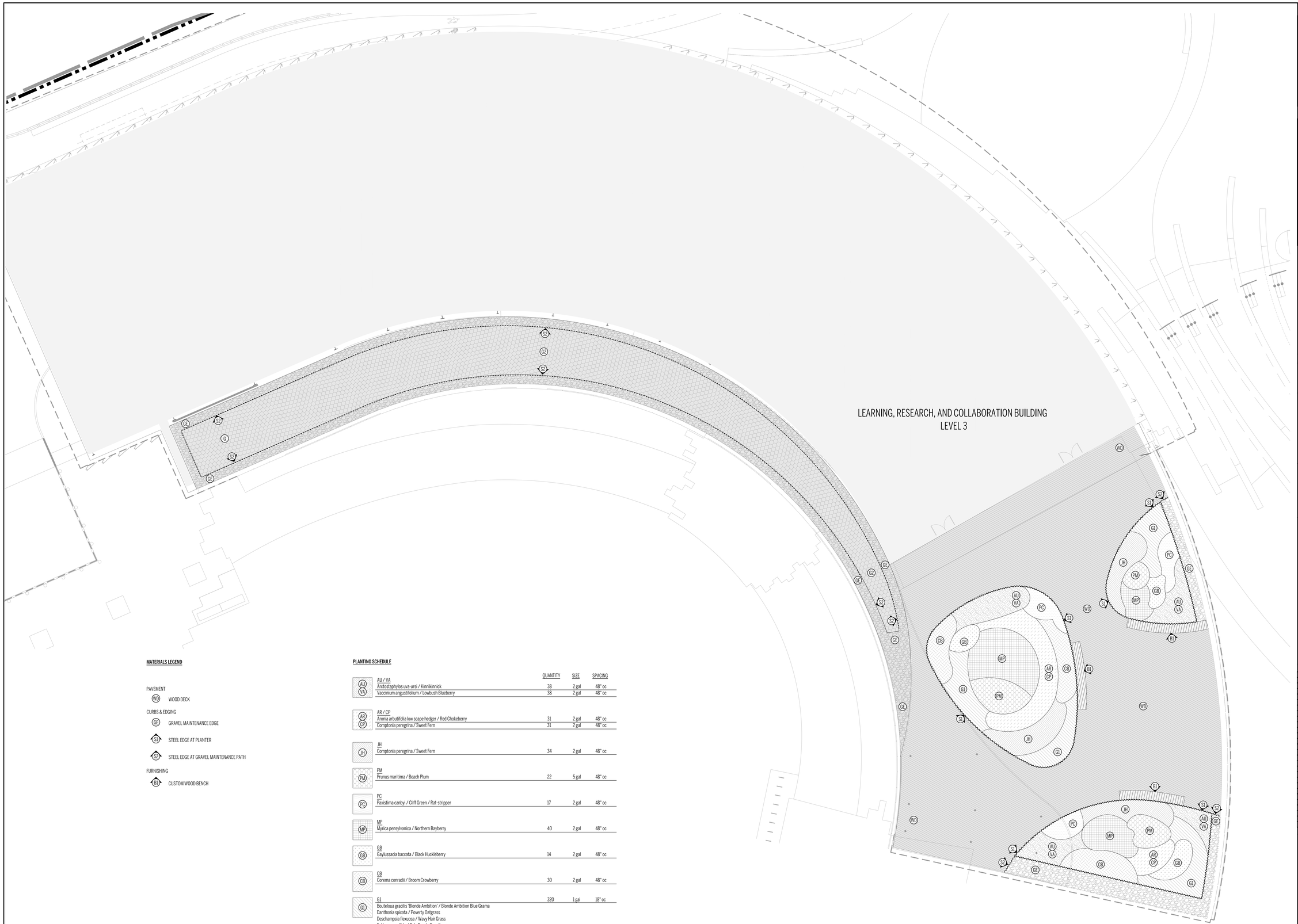
Stamp

Job #	2202		
Project	THE ROUX INSTITUTE		
Drawn By	ZH SK JC MS	Checked	STIMSON
Date	27 OCTOBER 2023		
Scale	1" = 20'		

Drawing Title

Materials Plan

L3.01



MATERIALS LEGEND

PAVEMENT

WD WOOD DECK

CURBS & EDGING

GE GRAVEL MAINTENANCE EDGE

S1 STEEL EDGE AT PLANTER

S2 STEEL EDGE AT GRAVEL MAINTENANCE PATH

FURNISHING

B1 CUSTOM WOOD BENCH

PLANTING SCHEDULE

		QUANTITY	SIZE	SPACING
AU / VA	AU / VA			
AU	Arctostaphylos uva-ursi / Kinnikinnick	38	2 gal	48" oc
VA	Vaccinium angustifolium / Lowbush Blueberry	38	2 gal	48" oc
AR / CP	AR / CP			
AR	Aronia arbutifolia low scape hedger / Red Chokeberry	31	2 gal	48" oc
CP	Comptonia peregrina / Sweet Fern	31	2 gal	48" oc
JH	JH			
JH	Comptonia peregrina / Sweet Fern	34	2 gal	48" oc
PM	PM			
PM	Prunus maritima / Beach Plum	22	5 gal	48" oc
PC	PC			
PC	Paxistima canbyi / Cliff Green / Rat-stripper	17	2 gal	48" oc
MP	MP			
MP	Myrica pensylvanica / Northern Bayberry	40	2 gal	48" oc
GB	GB			
GB	Gaylussacia baccata / Black Huckleberry	14	2 gal	48" oc
CB	CB			
CB	Corema conradii / Broom Crowberry	30	2 gal	48" oc
G1	G1	320	1 gal	18" oc
	Bouteloua gracilis 'Blonde Ambition' / Blonde Ambition Blue Grama			
	Danthonia spicata / Poverty Oatgrass			
	Deschampsia flexuosa / Wavy Hair Grass			
	Echinacea pallida / Pale Purple Coneflower			
	Festuca rubra / Red Fescue			
	Ionactis linariifolia / Flaxleaf Aster			
	Juncus trifidus / Highland Rush			
	Schizachyrium scoparium / Little Bluestem			
	Sibbaldiopsis tridentata / Three-leaved Cinquefoil			
	Solidago caesia / Wreath Goldenrod			
	Symphyotrichum novae-angliae / New England Aster			
G2	G2	3,628 SF	LiveRoof Maxx (8" soil depth)	
	Bouteloua gracilis 'Blonde Ambition' / Blonde Ambition Blue Grama			
	Danthonia spicata / Poverty Oatgrass			
	Deschampsia flexuosa / Wavy Hair Grass			
	Echinacea pallida / Pale Purple Coneflower			
	Festuca rubra / Red Fescue			
	Ionactis linariifolia / Flaxleaf Aster			
	Juncus trifidus / Highland Rush			
	Schizachyrium scoparium / Little Bluestem			
	Sibbaldiopsis tridentata / Three-leaved Cinquefoil			
	Solidago caesia / Wreath Goldenrod			
	Symphyotrichum novae-angliae / New England Aster			

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Checked	STIMSON
Date	27 OCTOBER 2023
Scale	1" = 10'

Drawing Title
Roof Plan

L3.10

PARKING STRUCTURE

MATCH INSET PLAN
MATCH L4.00

MATCH L4.01
MATCH L4.00

LEARNING, RESEARCH, AND
COLLABORATION BUILDING

BEAN
BUILDING

5,838 sf
M1

764 sf
M1

606 sf
M1

3,767 sf
M2

2,402 sf
M2

4,904 sf
M2

4,528 sf
M1

521 sf
M1

992 sf
M1

992 sf
M1

1,495 sf
M2

504 sf
M1

MATCH L4.01
MATCH L4.00

MATCH INSET PLAN
MATCH L4.00

PATHWAY AT PROPERTY LINE PLAN
1"=20'

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Drawing Title
Planting Plan

L4.00



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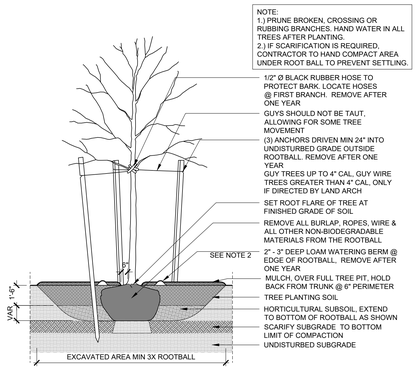
REGISTERED LANDSCAPE ARCHITECT
STEPHEN C. STIMSON
No. 3916
STATE OF MAINE

Stamp

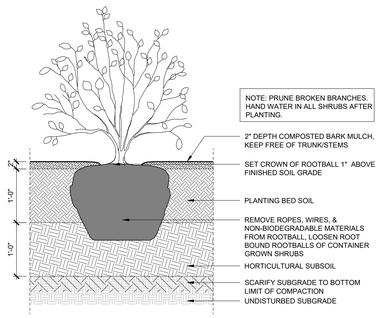
Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	ZH SK JC MS
Checked	STIMSON
Date	27 OCTOBER 2023
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Drawing Title
Planting Plan

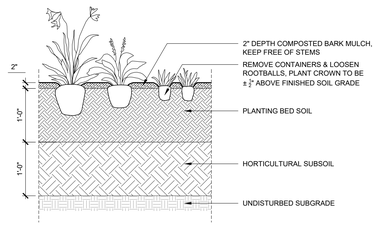
L4.01



3 **TREE PLANTING**
1/4" = 1'-0"



2 **SHRUB PLANTING**
1" = 1'-0"



1 **PERENNIAL AND GROUNDCOVER PLANTING**
1" = 1'-0"

MEADOW SITE PREPARATION AND SEEDING NOTES

1) Materials Delivery, Storage, and Handling:
   a) General:
      i) Deliver materials only after preparation for on-site seeding of the meadow seeding area and adjacent areas has been completed and accepted.
      ii) Prohibit materials only after preparation for on-site seeding of the meadow seeding area and adjacent areas has been completed and accepted.
      iii) Prohibit storage of any equipment or materials on the areas to be seeded once the final mowing prior to seeding has occurred.
   b) Seed:
      i) Seed shall be stored at temperatures between 40- and 60-degrees F and with a relative humidity of between 25-60%.
      ii) Protect seed from drying out, becoming moist or wet, overheating, and /or from contamination during delivery. Seed that has become wet or moldy shall not be accepted.
      iii) Transport temperature shall not exceed 105 F at any time. If transit from cold storage to sowing is greater than 10 days, seed must be kept under storage temperatures and relative humidity described above.

2) Installation Seasons:
   a) Work only within seasonal limitations for proper seeding. These are optimal times for rapid establishment of optimal ground cover, and suppression of weeds.
   b) Permanent meadow seeding should be sown between *July 1 – Aug. 15, Nov. 15 – Dec. 15*
   c) If sowing is being done between August 1 and August 31, use 25% more seed per unit area and expect more weed management.
   d) If seeding occurs between October 1 and January 31st, it must be done when there is no snow on the ground.

3) Site Preparation Acceptance:
   a) Prior to seeding, the site must be inspected by the Landscape Architect, Meadow Specialist, and Meadow Installer to ensure that weed control is acceptable, seed bed is in the appropriate condition for seeding, and the site has been correctly delineated.
   b) If it is determined that conditions are not acceptable for seeding, the unacceptable areas should be mitigated and re-inspected by the Landscape Architect and Meadow Consultant prior to seeding.

4) Seeding and Meadow Acceptance:
   a) If the site preparation process starts and seeding does not occur within proper seeding windows, the Owner shall sow and manage a cover crop to protect and stabilize meadow areas until the next occurring seeding window.
   b) The Landscape Architect and Meadow Consultant must inspect site prior to seed installation and provide site preparation acceptance.
   c) Seeding shall consist of soil preparation, seeding, weeding, and otherwise providing all labor and materials necessary to secure the establishment of acceptable vegetative layer.
   d) After seeding, the site must be inspected by the Landscape Architect and the Meadow Consultant to ensure that seeding has been completed as per construction drawings.
   e) Meadow acceptance occurs a minimum of 120 days from completion of final meadow seeding phase and between May and September
   f) Meadow acceptance shall be an acceptable stand of meadow which is defined to mean a uniform coverage with well established, close stands of plants that meet the following criteria: a minimum of 8 thriving desirable plants per square foot (excluding nurse crop), no bare or dead spots over 36" maximum in any dimension, no more than 10% of the meadow is bare, and free from disease, and detrimental insect infestation.
   g) Begin management practice immediately after seeding is complete for a given area.

5) Meadow Seed:
   a) See Plant Lists in the Drawings for Meadow Seed Mixes
   b) Provide fresh, new crop seed that is 98% Pure Live Seed (for tested species) or better. In no case shall weed seed content exceed 1% by weight. All seeds shall comply with Federal and State seed laws. Seed shall not be coated with herbicides and/or fungicides.
   c) Seed mixes shall be delivered in individual bags labeled by mix and then by seed size within each mix.
   d) Small Seed: 25,000 seeds per/oz or less. Individual seeds can be picked up by hand.
   e) Very Fine Seed: 25,000+ seeds/oz. Individual seeds are too small to be picked up by hand.
   f) Grain: Cover crop grain seed and large wildflower seed (¼-¼" in size)
   g) Fluffy Seed: Seed with fluffy, feathery seed coat

6) Seed Mix Suppliers:
   a) Ernst Conservation Seeds, Inc., 8884 Mercer Pike, Meadville PA 16335, Tel: 800-873-3321, http://www.ernstseed.com/.
   b) Prairie Moon Nursery, 32115 Prairie Lane, Winona, MN 55987. Tel: (886)417-8156, www.prairiemoon.com
   c) Roundstone Native Seed Company, 9764 Raider Hollow Rd, Upton, KY 42784, Tel: (270) 531-3034, https://roundstoneseed.com
   d) Equal approved by the Architect and Meadow Consultant.

7) Cover Crops
   a) Cover Crop shall be installed in areas disturbed during construction for soil stabilization prior to permanent meadow seed: May 1 – Oct. 1
   b) Cover crops should only be sown in areas with new soil that will not need Erosion Control Fabric, or to protect and stabilize soils outside of the seeding window.

8) Seeding Materials and Equipment:
   a) Use flake pine shavings as a seed mix broadcasting agent.
   b) Do not use fertilizer.
   c) Mechanized equipment for finished grading shall be skid-steer (full-size or mini) or tractor with Harley Rake/Power Rake attachment.
   d) Hand seeding techniques shall be used to sow meadow seed in all areas.
   e) Hydroseeding is not allowed.
   f) No mulch shall be used in seeded meadow areas.

9) Site Preparation: GENERAL
   a) Pre-installation examination and sequencing are required: Before beginning any establishment phase (site preparation, seeding, planting), the Contractor shall examine previous work, related work, and conditions under which this work is to be performed and notify the Landscape Architect in writing of all deficiencies and conditions detrimental to the proper completion of this work. Beginning work means Contractor accepts substrates, previous work, and conditions.
   b) The Contractor shall not commence work associated with the installation of meadows until all work in the work areas is complete and accepted by the Landscape Architect.
   c) The following shall be completed prior to the commencement of seeding:
      i) Fine gradings and the removal of all debris and weeds.
      ii) Utilities have been installed and accepted.
      iii) All trees, shrubs, and perennials have been planted.
      iv) Permanent and temporary irrigation for trees, shrubs, and perennials located within or adjacent to meadow seeding areas has been installed and accepted.
      v) Stormwater management areas, swales, and drainage areas shall remain dry during seeding and meadow establishment. The contractor and owner shall coordinate site drainage during meadow establishment so to bypass seeded areas from stormwater surge.
   d) Prior to seeding, stake areas with pin flags that identify seed type for each area.
   e) Do not proceed with seeding until the extent and distribution of seeding/planting zones has been accepted by the Landscape Architect.
   f) Meadow seed mix installation should not occur until any vegetation management procedures, such as weed control or other vegetation removals, in meadow areas have been completed and accepted.
   g) The Landscape Architect and Meadow Consultant must inspect site prior to seed installation and provide site preparation acceptance.
   h) A properly compacted seedbed should not allow a shoe to sink more than ½" when walking on the seedbed.
   i) Meadow areas shall have at least one full growing season of weed control prior to seeding and must be inspected by the Meadow Consultant prior to seeding.
   j) Cover crops should only be sown in areas with new soil that will not need Erosion Control Fabric, or to protect and stabilize soils outside of the seeding window.

10) Site Preparation for Dormant Seeding shall occur in the following sequence:
   a) Early May: Site Visit #1 -Site visit with the Contractor and Meadow Consultant to finalize the spray plan (timing and products) and to delineate all meadow extents where soil disturbance will not occur. Once meadow has been delineated all mowing within this area should cease.
   b) Mid-June: Spray #1 - Broadcast spray area with Glyphosate, and other products as specified in Early May visit. At least two weeks without mowing should have occurred prior to the first spray.
   c) Mid-July: Mow #1 - Mow any areas where growth is higher than 6" to a height of 4". Wait at least 3 weeks from the date of the first spray prior to mowing.
   d) Early August: Site Visit #2 -Site visit with Contractor and Meadow Specialist to finalize spray plan (timing and products).
   e) Late August: Spray #2 - Broadcast spray area with Glyphosate, and other products as specified in early August visit.
   f) Mid-September: Mow #2 - Mow any areas where growth is higher than 6" to a height of 4". Wait at least 3 weeks from date of spray prior to mowing.
   g) Early October: -Site Visit #3 -Site visit with Contractor and Meadow Specialist to finalize spray plan (timing and products).
   h) Late October: Spray #3 - Broadcast spray area with Glyphosate, and other products as specified in early October visit.

11) Site Preparation for Summer Seeding shall occur in the following sequence:
   a) Early August: Site Visit #1 - Site visit with contractor and meadow expert to finalize spray plan (timing and products) and to delineate all meadow extents where soil disturbance will not occur. Once meadow has been delineated all mowing within this area should cease.
   b) Late August: Spray #1 - Broadcast spray area with Glyphosate, and other products as specified in early August visit.
   c) Mid-September: Mow #1 - Mow any areas where growth is higher than 6" to a height of 4". Wait at least 3 weeks from date of spray prior to mowing.
   d) Early October: Site Visit #2 -Site visit with Contractor and Meadow Specialist to finalize spray plan (timing and products).
   e) Late October: Spray #2 - Broadcast spray area with Glyphosate, and other products as specified in early October visit.
   f) Early May (the following year): Site Visit #3 -Site visit with contractor and meadow expert to finalize spray plan (timing and products).
   g) Mid-June: Spray #3 - Broadcast spray area with Glyphosate, and other products as specified in early May visit. At least two weeks should without mowing should have occurred prior to the first spray.
   h) Early-July: Mow #2 - Mow any areas where growth is higher than 6" to a height of 4".

12) Permanent Meadow Mix Seeding Installation shall occur in the following sequence:
   a) Install meadow seed mix during the timeline established by this document.
   b) Seeding shall consist of soil preparation, seeding, weeding, and otherwise providing all labor and materials necessary to secure the establishment of acceptable vegetative layer.
   c) Prior to seeding and planting verify meadow area is prepared and ready for vegetation installation and that water is available for seed mixing.
   d) Scarify soil to depth of approximately ½" using appropriate equipment. Repeat as needed to create a seedbed with approximately 50% of the soil exposed. No tilling should be performed, as this will increase weed presence due to the release of dormant weed seeds below the soil surface.
   e) Segregate the seeds according to mix and then by seed size. For the hand broadcast method, "Fluffy," "Small," and "Grain" seed can be combined (henceforth referred to collectively as "Large" seed). "Very Fine" seed (seed which cannot be picked up individually by hand) must always remain separate.
   f) Bulk up "Large" seed by mixing with an inert bulking material such as sawdust, sand, or flake pine shavings. Seed and bulking material can be mixed on tarps spread on the ground. Slightly dampening the bulking material will help the seed to be evenly distributed throughout the bulked material. Use enough bulking material to allow seed to be evenly distributed over the entire project area.
   g) Seeding must happen within 24 hours of mixing seed with wet material.
   h) Only seed that can be installed in a single workday should be mixed at any given time.
   i) Hand sow large seed that has been bulked up with wet inert material. Evenly distribute seed by sowing equal quantities in two directions at right angles to each other.
   j) Run over area with dethatcher or power rake to lightly cover large seed no to exceed ¾" depth. Use a hand rake if the area is not accessible with machinery.
   k) Bulk up the "Very fine" seed in the manner described above and broadcast evenly over the prepared surface. Do not incorporate into the soil as these species need light to germinate and will not do so if buried in the soil.
   l) Any stabilization fabrics shall only be placed after permanent seed has been sown and accepted.
   m) Begin management practice immediately after seeding is complete for a given area.

13) Management procedures and activities during meadow establishment shall observe the following guidelines:
   a) In the first growing season seeded vegetation should not be allowed to exceed 12" in height.
   b) As vegetation approaches 12" in the meadow, mow or cut all growth to approximately 4-6" height (approximately once per month during the growing season).
   c) Use flail or rotary-style equipment that will chop dead growth.
   d) Sickle bar type mowers that cut at the base of vegetation and drop plant material intact should not be used as the intact cut plant material can inhibit seedling development.
   e) In locations inaccessible to a mower (wet areas, steep slopes, etc.), string trim vegetation to the specified height.
   f) Areas with live plants should not be mown. Areas should be weeded by hand or with small mechanical equipment where appropriate. Work in these areas to be completed by meadow installer.
   g) Do not irrigate seeded meadow areas unless required for planted vegetation, in which case irrigation should be directed at planted vegetation and not on seeded areas, to the extent possible.
   h) Mow entire meadow one time to height of 4" in March/early April with a flail mower. Do not mow lower than 4". String trim areas inaccessible to a mower.
   i) Spot treat weeds as required (min. 1 spray, max. 3 sprays).
   j) Maintenance contractors shall not blow leaves or other debris in the direction of seeded meadows or within seeded meadows.
   k) Conduct a minimum of two (2) annual meadow checks by a meadow expert.

14) If a meadow is damaged, remove damaged materials if necessary. Restore areas to original grades and reestablish meadow as originally installed following the establishment train time frames.
   a) Request Landscape Architect approval prior to beginning repairs.
   b) If a meadow exhibits unsatisfactory growth, perform soil testing for chemical properties, compaction, and infiltration rates.
   c) Adhere to Landscape Architect's recommended remediation.
   d) Remediation may include additional weed control or re-seeding.

15) Reseeding shall be performed at the request of the Landscape Architect.
   a) Reseeding shall be required if meadow establishment/performance is poor, dead spots are apparent, or other unsuitable conditions are present.
   b) Work shall be performed according to the installation calendar above. Work outside this window is not permitted.
   c) Cut or trim vegetation to maximum of 2" prior to reseeding. Remove cut vegetation from the meadow.
   d) When reseeding, follow the seeding process outlined above.
   e) When reseeding areas where erosion control is in place, apply seed mixture starting at the top of the slope and over the extent of erosion control material to be reseeded. Hand rake to move seed through the erosion control matting towards soil contact.t. Hands sow sand/seed mixture down into the areas between the cut vegetation.

16) Warranty and Management
   a) Begin management practice immediately after seeding is complete for a given area.
   b) Meadow acceptance occurs a minimum of 120 days from completion of final meadow seeding phase and between May and September
   c) The Contractor shall warranty and maintain the meadow for two years following meadow acceptance.

PLANT SCHEDULE

TREES	BOTANICAL / COMMON NAME	CONT	SIZE	QTY	REMARKS
AB	Abies balsamea / Balsam Fir	B & B	5' -6" H	3	
AC	Acer saccharinum / Silver Maple	B & B	2"-2.5" Cal	3	
AR	Acer rubrum / Red Maple	B & B	2"-2.5" Cal	3	
AS	Acer saccharum 'Green Mountain' / Sugar Maple	B & B	2"-2.5" Cal	11	
AF	Acer x freemanii 'Jeffersred' / Autumn Blaze® Freeman Maple	B & B	2"-2.5" Cal	41	
AA	Amelanchier arborea 'Autumn Brilliance' / Autumn Brilliance Downy Serviceberry	B & B	3' -4' H	41	
BA	Betula alleghaniensis / Yellow Birch	B & B	1.5"-2" Cal	24	
BP1	Betula papyrifera / Paper Birch	B & B	1.5"-2" Cal	22	
BP	Betula papyrifera / Paper Birch	B & B	1.5"-2" Cal	10	
BG	Betula populifolia / Gray Birch	B & B	6 - 8' H	4	
CD	Calocedrus decurrens / Incense Cedar	B & B	5' -6' H	5	
CO	Carya ovata / Shagbark Hickory	B & B	2"-2.5" Cal	3	
CC	Cercis canadensis / Eastern Redbud	B & B	3' -4' H	10	
CT	Chamaecyparis thyoides / Atlantic White Cypress	B & B	5' -6' H	4	
CV	Crataegus viridis 'Winter King' / Winter King Hawthorn	B & B	5' -6' H	15	
GK	Gymnocladus dioica / Kentucky Coffeetree	B & B	2"-2.5" Cal	3	
JC	Juglans cinerea / Butternut	B & B	2"-2.5" Cal	6	
LL	Larix laricina / Tamarack	B & B	8' -10' H	13	
LL2	Larix laricina / Tamarack	B & B	5' -6' H	3	
MV	Magnolia virginiana / Sweetbay Magnolia	B & B	4' -5' H	4	
MS	Malus sargentii / Sargent Crabapple	B & B	4' -5' H	2	
NS	Nyssa sylvatica / Tupelo	B & B	1.5"-2" Cal	21	
PG	Picea glauca / White Spruce	B & B	6' -7' H	12	
PR	Pinus rigida / Pitch Pine	B & B	3' -4' H	30	
PS	Pinus strobus / White Pine	B & B	6' -7' H	21	
PT	Populus tremuloides / Quaking Aspen	B & B	1.5"-2" Cal	38	
QA	Quercus alba / White Oak	B & B	1.5"-2" Cal	17	
QB	Quercus bicolor / Swamp White Oak	B & B	2"-2.5" Cal	4	
QC	Quercus coccinea / Scarlet Oak	B & B	2"-2.5" Cal	5	
QI	Quercus ilicifolia / Scrub Oak	B & B	2"-2.5" Cal	3	
QM	Quercus macrocarpa / Burr Oak	B & B	2"-2.5" Cal	1	
QR	Quercus rubra / Red Oak	B & B	2"-2.5" Cal	22	
SS	Sassafras albidum / Sassafras	5 Gal.	1"-1.5" Cal	7	
TO	Thuja occidentalis / American Arborvitae	B & B	6 - 7' H	9	
TG	Thuja standishii x plicata 'Green Giant' / Green Giant Arborvitae	B & B	5' -6' H	12	
TA	Tilia americana / American Linden	B & B	1.5"-2" Cal	2	

SHRUBS			AVG SIZE	SPACING	QTY	AREA
SH		Shrub (See SHRUBS below for ground plane species list)	2 GAL	48" OC	3,325	51,081 SF

PERENNIALS			AVG SIZE	SPACING	QTY	AREA
P		Perennials - container (See PERENNIALS below for ground plane species list)	1 QT	30" OC	4,396	26,256 SF
MP		Perennials - plug (See PERENNIALS below for ground plane species list)	2" Plug	18" o.c.	45,753	89,360 SF

LAWN			AREA
L		Lawn sod	41,368 SF

SEEDED AREAS			SIZE	SPACING	AREA	REMARKS
M3		Perimeter Meadow	SEED		17,307 sf	
M1		Upland Meadow	SEED		93,555 sf	
M2		Wet Meadow	SEED		18,214 sf	

NOTE: Tree caliper sizes listed are intended to depict the average size of all trees installed. Exact installed sizes may vary.

SPECIES LIST (GROUND PLANE)

SHRUBS

SHRUB PALETTE
Arctostaphylos uva-ursi / Kinnikinnick
Aronia arbutifolia / Red Chokeberry
Aronia arbutifolia low scape hedger / Red Chokeberry
Celphanthus occidentalis / Buttonbush
Clethra alnifolia / Mountain Sweet Pepperbush
Clethra alnifolia 'Hummingbird' / Hummingbird Summersweet
Comptonia peregrina / Sweet Fern
Fothergilla gardenii / Dwarf Fothergilla
Gaylussacia baccata / Black Huckleberry
Ilex glabra 'Shamrock' / Shamrock Inkberry Holly
Ilex verticillata / Winterberry
Ilex verticillata 'Red Sprite' / Red Sprite Winterberry
Juniperus horizontalis / Creeping Juniper
Kalmia angustifolia / Sheep Laurel
Myrica gale / Sweetgale
Perennial Plugs / Perennial Plugs
Perennial Plugs / Perennial Plugs
Prunus maritima / Beach Plum
Rhododendron viscosum / Swamp Azalea
Spiraea alba / Meadowsweet
Vaccinium corymbosum / Highbush Blueberry
Viburnum dentatum / Viburnum
Viburnum dentatum 'Christom' / Blue Muffin® Arrowwood Viburnum
Viburnum trilobum 'Compactum' / Compact American Cranberrybus
Viburnum x 'Burkwoodii' / Burkwood Viburnum

PERENNIALS

PERENNIALS
Achillea millefolium / Common Yarrow
Actaea racemosa / Black Snakeroot
Adiantum pedatum / Northern Maidenhair Fern
Ammophila breviligulata / American Beachgrass
Andropogon virginicus / Broomsedge Bluestem
Carex pensylvanica / Perensylvania Sedge
Carex stricta / Tussock Sedge
Danthonia spicata / Poverty Oatgrass
Dennstaedtia punctilobula / Hay-scented Fern
Doellingeria umbellata / Flat-topped Aster
Echinacea purpurea / Coneflower
Elymus virginicus / Virginia Wild Rye
Festuca rubra / Red Fescue 305
Gaultheria procumbens / Wintergreen
Helenium autumnale / Sneezeweed
Iris versicolor / Blue Flag
Juncus greenei / Greene's Rush
Maianthemum canaderse / Canada Mayflower
Osmundastrum cinnamomeum / Cinnamon Fern
Panicum virgatum / Switch Grass
Panicum virgatum 'Cape Breeze' / Cape Breeze Switch Grass
Penstemon hirsutus / Hairy Beardtongue
Polystichum acrostichoides / Christmas Fern
Schizachyrium scoparium / Little Bluestem
Solidago bicolor / White Goldenrod
Symphyotrichum ericoides / Heath Aster
Symphyotrichum novae-angliae / New England Aster
Symphyotrichum novi-belgii / New York Aster

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

LAND-USE PERMIT SET

Number	Revision	Date



Stamp

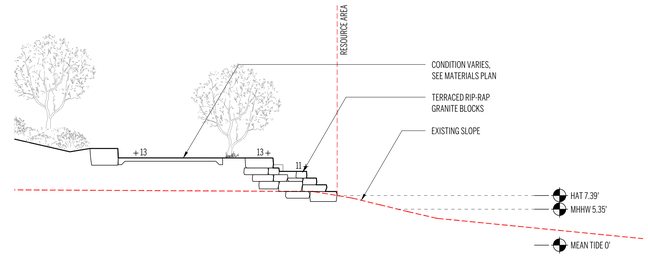
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Project	THE ROUX INSTITUTE
Drawn By	ZH SK JC MS
Checked	STIMSON
Date	27 OCTOBER 2023
Scale	as noted

Drawing Title
Plant Schedules and Planting Details

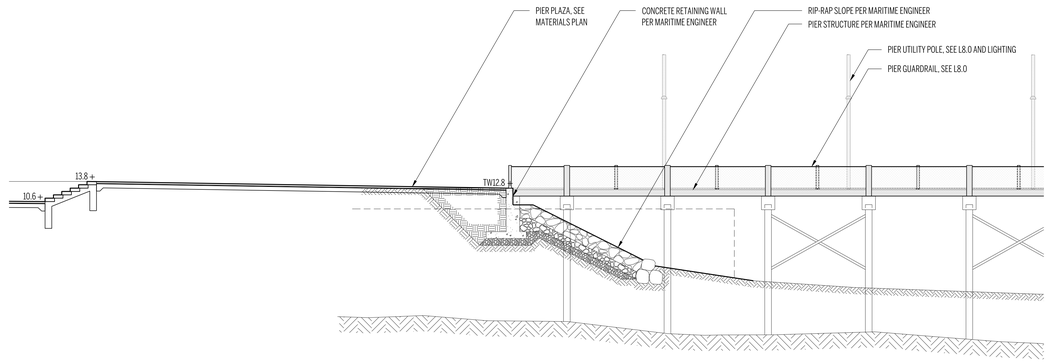
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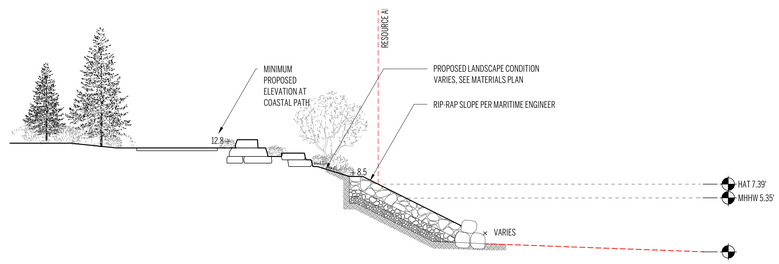
KEY PLAN
1"=100'



3 SECTION AT TERRACED RIP-RAP
1/8" = 1'-0"



2 SECTION AT PIER INTERFACE
1/8" = 1'-0"



1 TYPICAL SECTION AT SHORLINE
1/8" = 1'-0"

0 5' 10' 20' N

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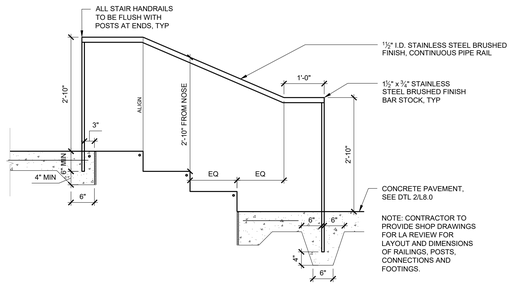
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STEPHEN C. STIMSON
No. 3916
STATE OF MAINE

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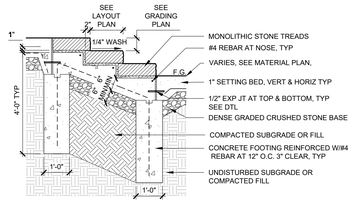
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Project	THE ROUX INSTITUTE
Drawn By	ZH SK JC MS
Checked	STIMSON
Date	27 OCTOBER 2023
Scale	AS NOTED

Drawing Title
--- Site Sections

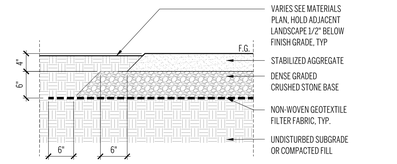
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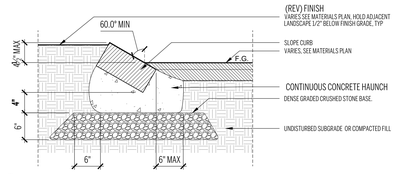
18 STAINLESS STEEL HANDRAIL WITH INTEGRATED LIGHTING
3/4" = 1'-0"



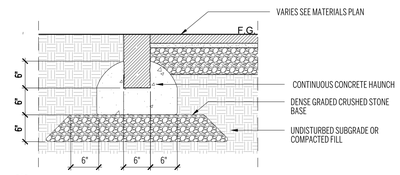
17 MONOLITHIC GRANITE STAIRS ON CONCRETE FOUNDATION
1/2" = 1'-0"



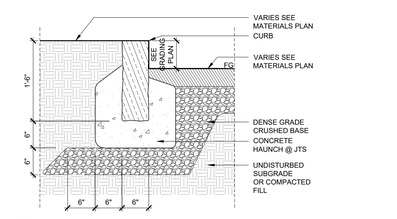
13 DECOMPOSED GRANITE PAVING
1" = 1'-0"



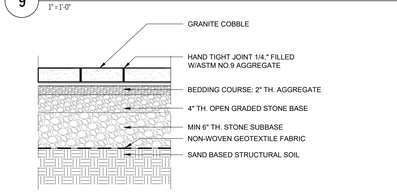
12 GRANITE CURB - MOUNTABLE
1" = 1'-0"



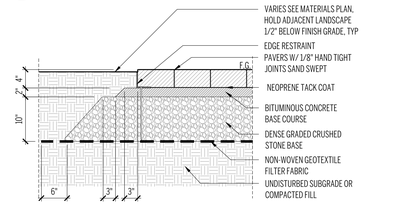
11 GRANITE CURB - FLUSH
1" = 1'-0"



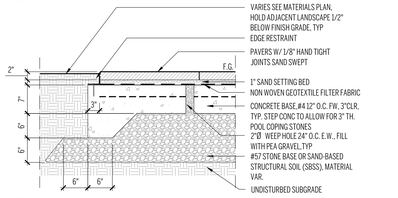
9 GRANITE CURB
1" = 1'-0"



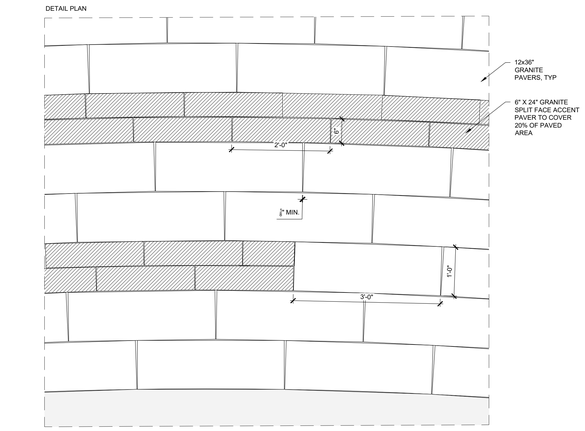
8 GRANITE COBBLE AT TREE PITS
1" = 1'-0"

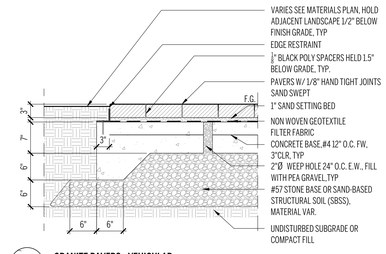


7 PRECAST CONCRETE PAVERS/COBBLESTONE
1" = 1'-0"

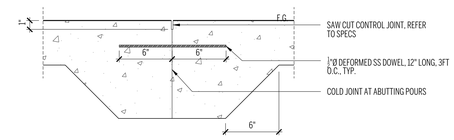


6 GRANITE PAVERS - PEDESTRIAN
1" = 1'-0"

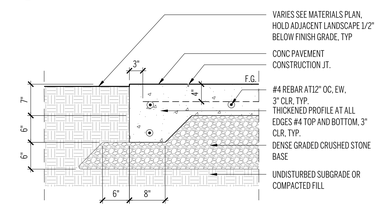




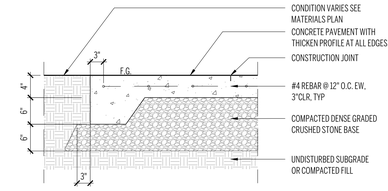
5 GRANITE PAVERS - VEHICULAR
1" = 1'-0"



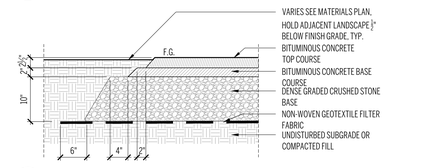
4 CONCRETE CONSTRUCTION JOINT
2" = 1'-0"



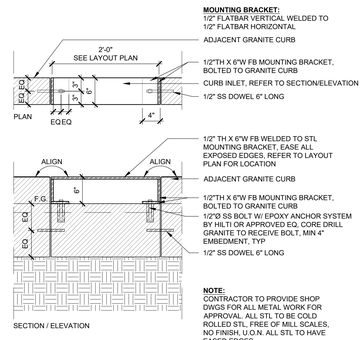
3 CONCRETE PAVEMENT - VEHICULAR
1" = 1'-0"



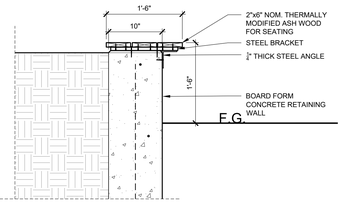
2 CONCRETE PAVEMENT - PEDESTRIAN
1" = 1'-0"



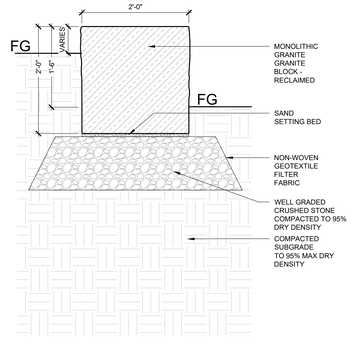
1 ASPHALT PAVING - VEHICULAR
1" = 1'-0"



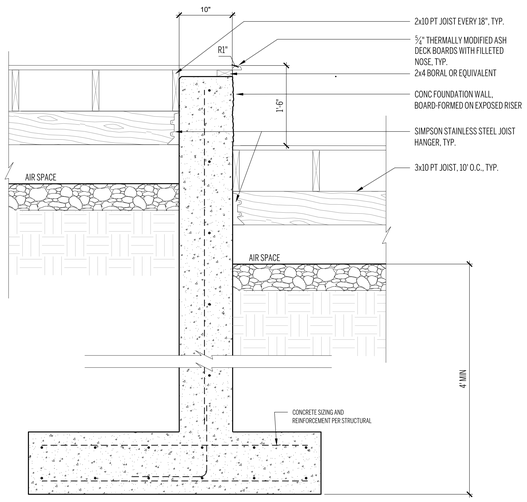
21 STEEL CURB INLET
1" = 1'-0"



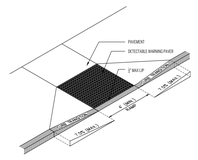
20 CONCRETE RETAINING WALL WITH WOOD CAP
NTS



19 MONOLITHIC STONE WALL ON DENSE GRADED CRUSHED STONE BASE
1" = 1'-0"

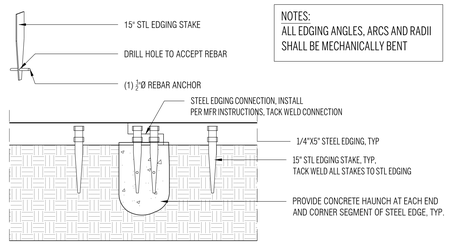


16 WOOD DECK AT TERRACED LANDSCAPE
NTS



1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 1.5 (1% min).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE CURB RAMPS SHALL BE 7.5%.
4. A MINIMUM OF 3 FEET CLEAR SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.).
5. CURB TREATMENT VARIES, SEE PLANS FOR CURB TYPE.
6. RAMP, CURB, AND ADJACENT PAVEMENTS SHALL BE GRADED TO PREVENT PONDING.
7. TYPICAL SIDEWALK SECTION FOR RAMP SECTION CONSTRUCTION.
8. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
9. ELIMINATE CURBING AT RAMP WHERE IT ABUTS ROADWAY, EXCEPT WHERE VERTICAL CURBING IS INDICATED ON THE DRAWINGS TO BE SET FLUSH.
10. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES.
11. DETECTABLE WARNINGS SHALL BE INSTALLED PERPENDICULAR TO THE ACCESSIBLE ROUTE.

15 ADA RAMP
NTS



NOTES:
ALL EDGING ANGLES, ARCS AND RADII SHALL BE MECHANICALLY BENT

14 STEEL EDGING
1" = 1'-0"

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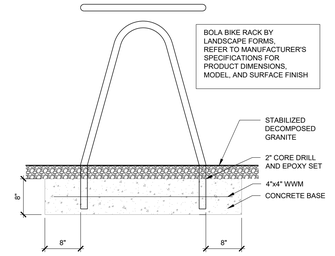
Number	Revision	Date

PROFESSIONAL LANDSCAPE ARCHITECT
STEPHEN C. STIMSON
No. 3916
STATE OF MAINE
Stamp

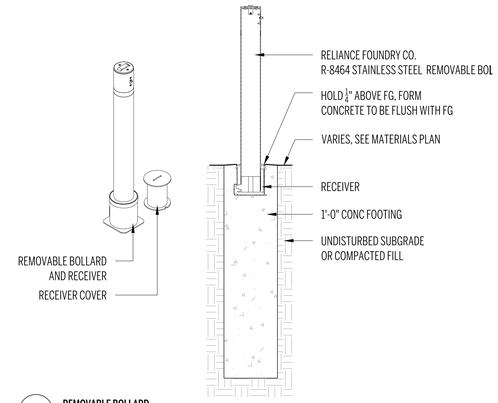
Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	ZH SK JC MS
Checked	STIMSON
Date	27 OCTOBER 2023
Scale	AS NOTED

Drawing Title
--- Site Details

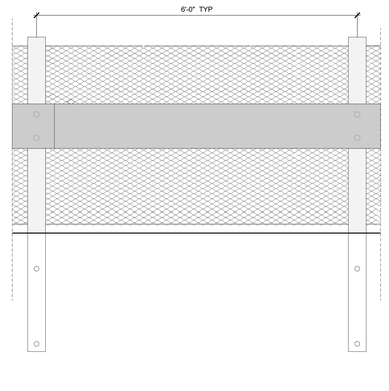
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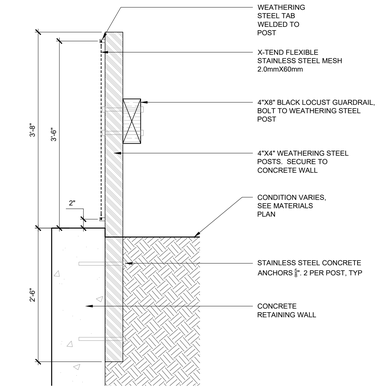
5 **BIKE RACK**
1" = 1'-0"



4 **REMOVABLE BOLLARD**
1" = 1'-0"

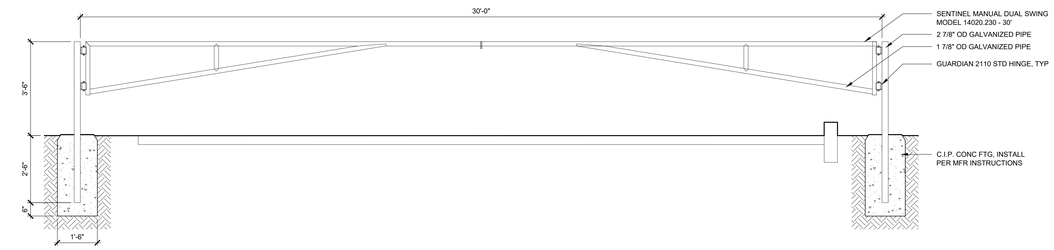


ELEVATION



SECTION

3 **TIMBER GUARDRAIL**
1" = 1'-0"

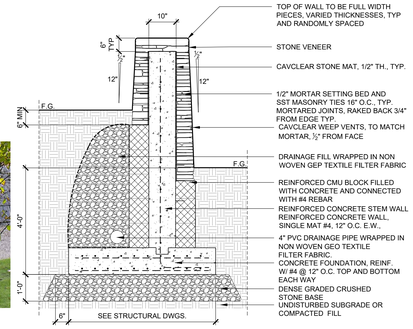


7 **VEHICULAR GATE**
1/2" = 1'-0"

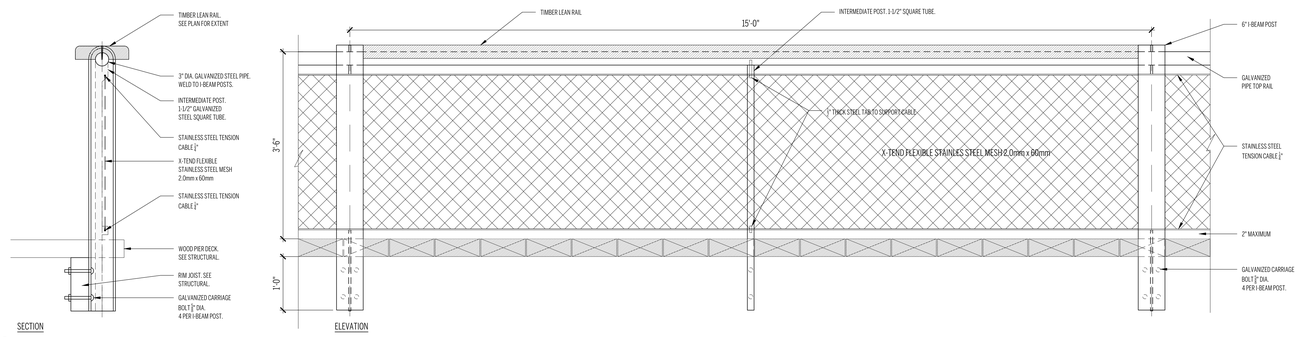


GRANITE VENEER MASONRY PRECEDENT

REINFORCING CHART		
HR	L	VERTICAL REINF.
8'-10"	7'-0"	#6@6" O.C.
6'-8"	6'-0"	#6@12" O.C.



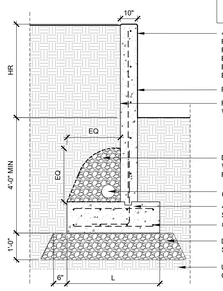
2 **CONCRETE RETAINING WALL WITH STONE VENEER**
1/2" = 1'-0"



6 **PIER GUARDRAIL**
1" = 1'-0"

REINFORCING CHART		
HR	L	VERTICAL REINF.
8'-10"	7'-0"	#6@6" O.C.
6'-8"	6'-0"	#6@12" O.C.

NOTE: CONTRACTOR TO PROVIDE SHOP DRAWINGS SHOWING FORM DIMENSIONS, TIE HOLE LOCATIONS, STEEL, AND WALL DIMENSIONS FOR LAND ARCH REVIEW AND APPROVAL PRIOR TO CONSTRUCTION



1 **ARCHITECTURAL CONCRETE RETAINING WALL**
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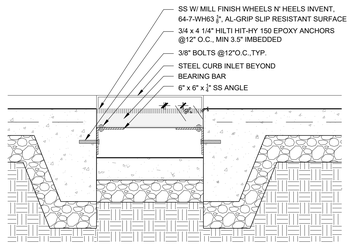
LAND-USE PERMIT SET

Number	Revision	Date

PROFESSIONAL LANDSCAPE ARCHITECT
STEPHEN C STIMSON
No. 3916
STATE OF MAINE
Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	ZH SK JC MS
Checked	STIMSON
Date	27 OCTOBER 2023
Scale	AS NOTED
Drawing Title	--- Site Details

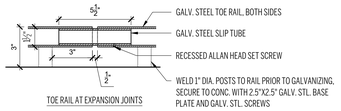
L6.01



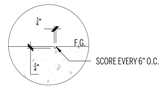
METAL GRATE BRIDGE PRECEDENT



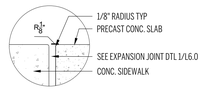
3 **METAL GRATE BRIDGE - PEDESTRIAN**
1" = 1'-0"



TOE RAIL AT EXPANSION JOINTS

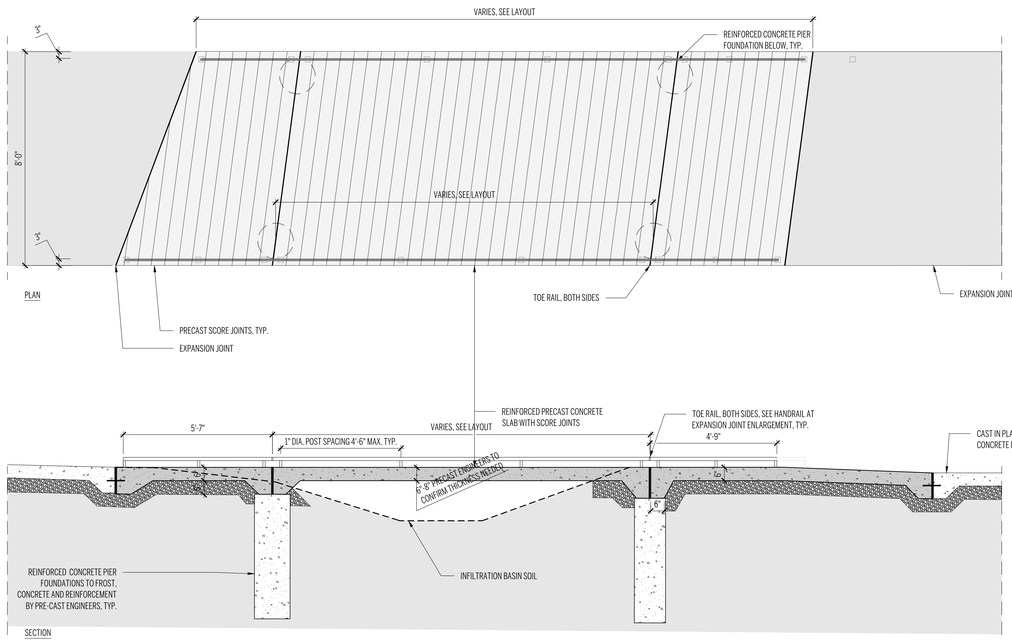


PRECAST SCORE JOINT

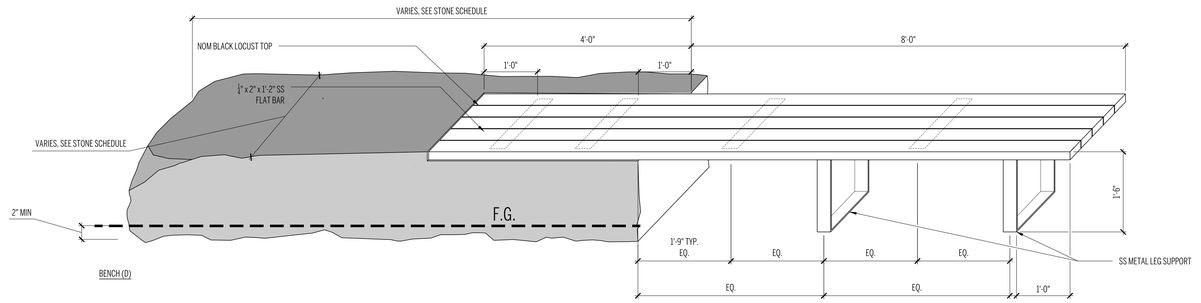


EXPANSION JOINT

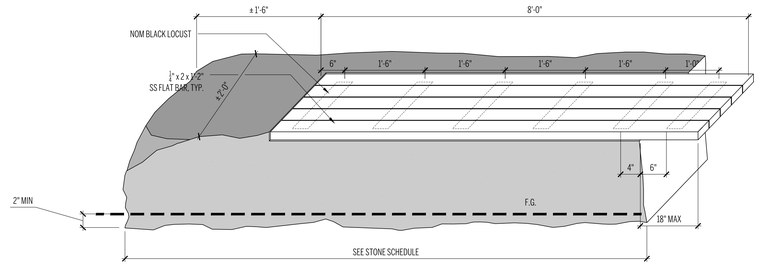
SECTION: HANDRAIL AT EXPANSION JOINTS TYP.
SCALE: 3"=1'-0"



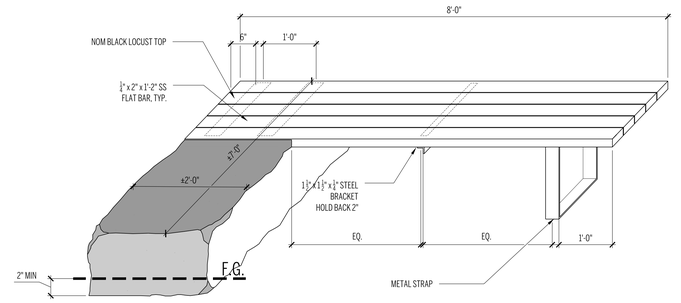
2 **CAST CONCRETE BRIDGE - PEDESTRIAN**
1/2" = 1'-0"



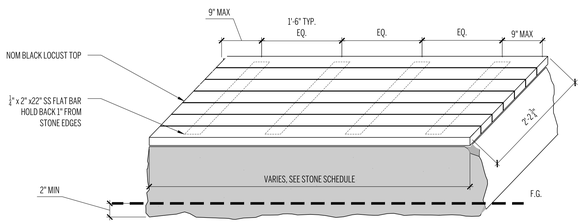
BENCH (D)



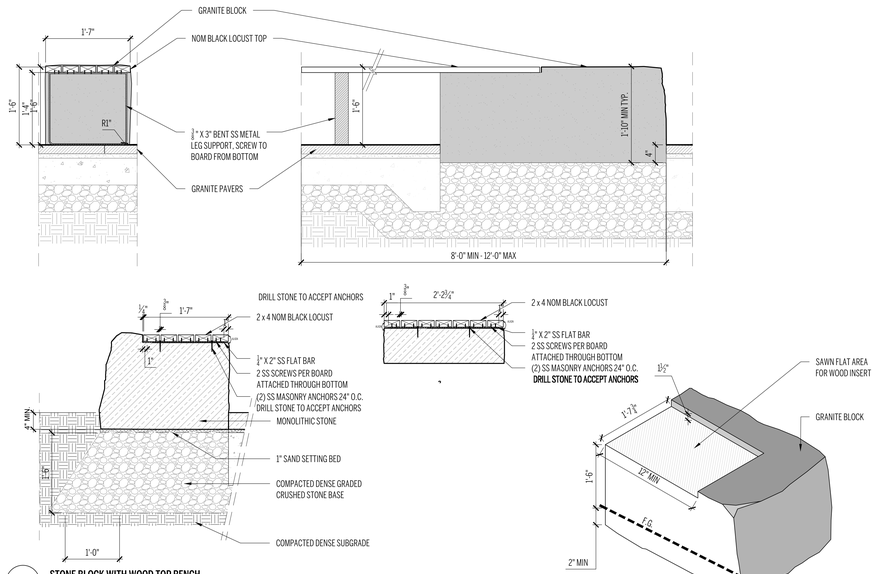
BENCH (C)



BENCH (B)



BENCH (A)



1 **STONE BLOCK WITH WOOD TOP BENCH**
1" = 1'-0"

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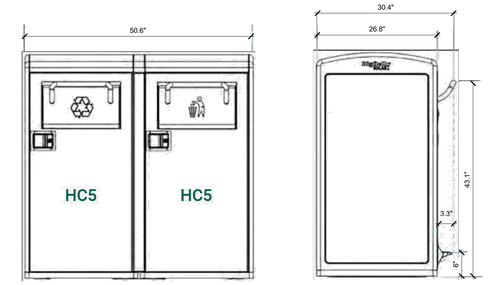
REGISTERED LANDSCAPE ARCHITECT STEPHEN C. STIMSON No. 3916 STATE OF MAINE

Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	ZH SK JC MS Checked STIMSON
Date	27 OCTOBER 2023
Scale	AS NOTED

Drawing Title
--- Site Details

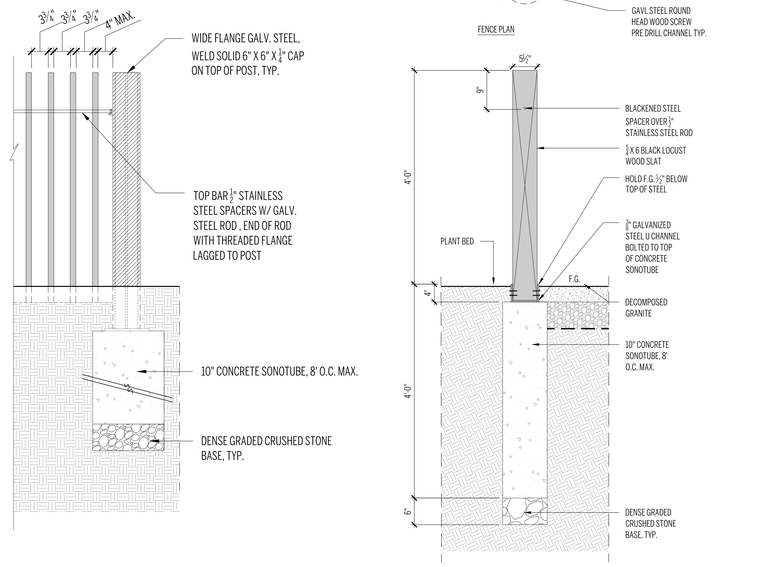
L6.02



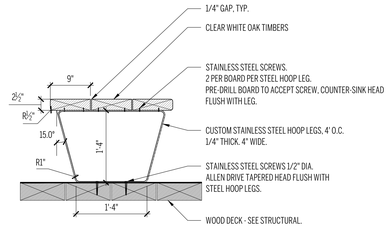
HC5/HC5 Double Station
Approximately 540 lbs (245 kg)

CleanCUBE BY ECUBE.
-120L CAPACITY, SOLAR POWERED
-FOOT PEDAL OPERATED. SEE SPECS

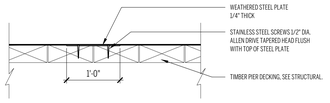
9 **CLEAN CUBE TRASH COMPACTER (WR)**
1" = 1'-0"



3 **WOODEN SLAT FENCE AT PLAYGROUND**
1" = 1'-0"



2 **RECLAIMED LUMBER BENCH AT PIER**
1" = 1'-0"



1 **WEATHERING STEEL BAND AT PIER DECK**
1" = 1'-0"

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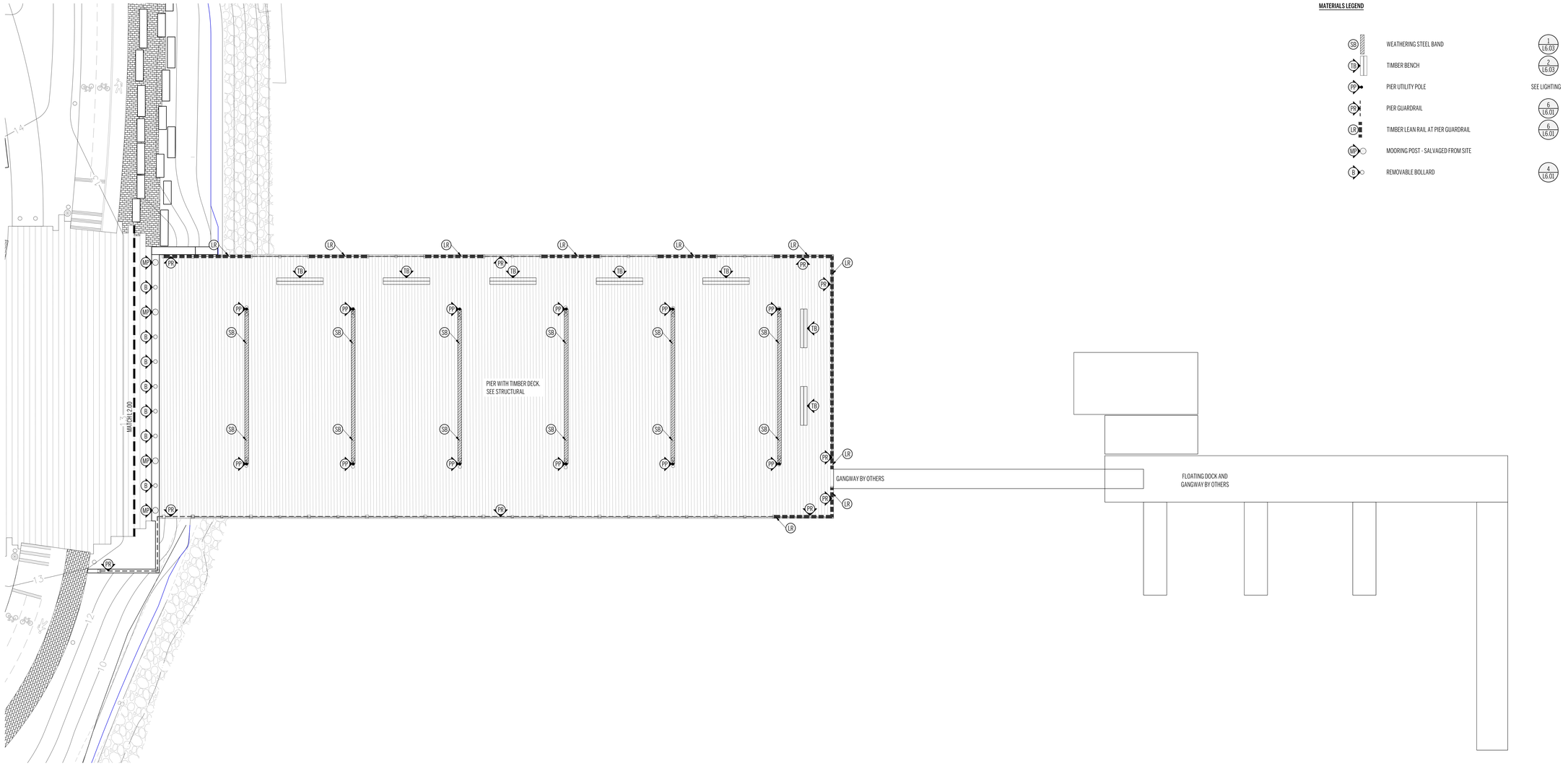
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--- Site Details

L6.03



MATERIALS LEGEND

SB	WEATHERING STEEL BAND	1 / L6.03
TB	TIMBER BENCH	2 / L6.03
PP	PIER UTILITY POLE	SEE LIGHTING
PR	PIER GUARDRAIL	6 / L6.01
LR	TIMBER LEAN RAIL AT PIER GUARDRAIL	6 / L6.01
MP	MOORING POST - SALVAGED FROM SITE	
B	REMOVABLE BOLLARD	4 / L6.01

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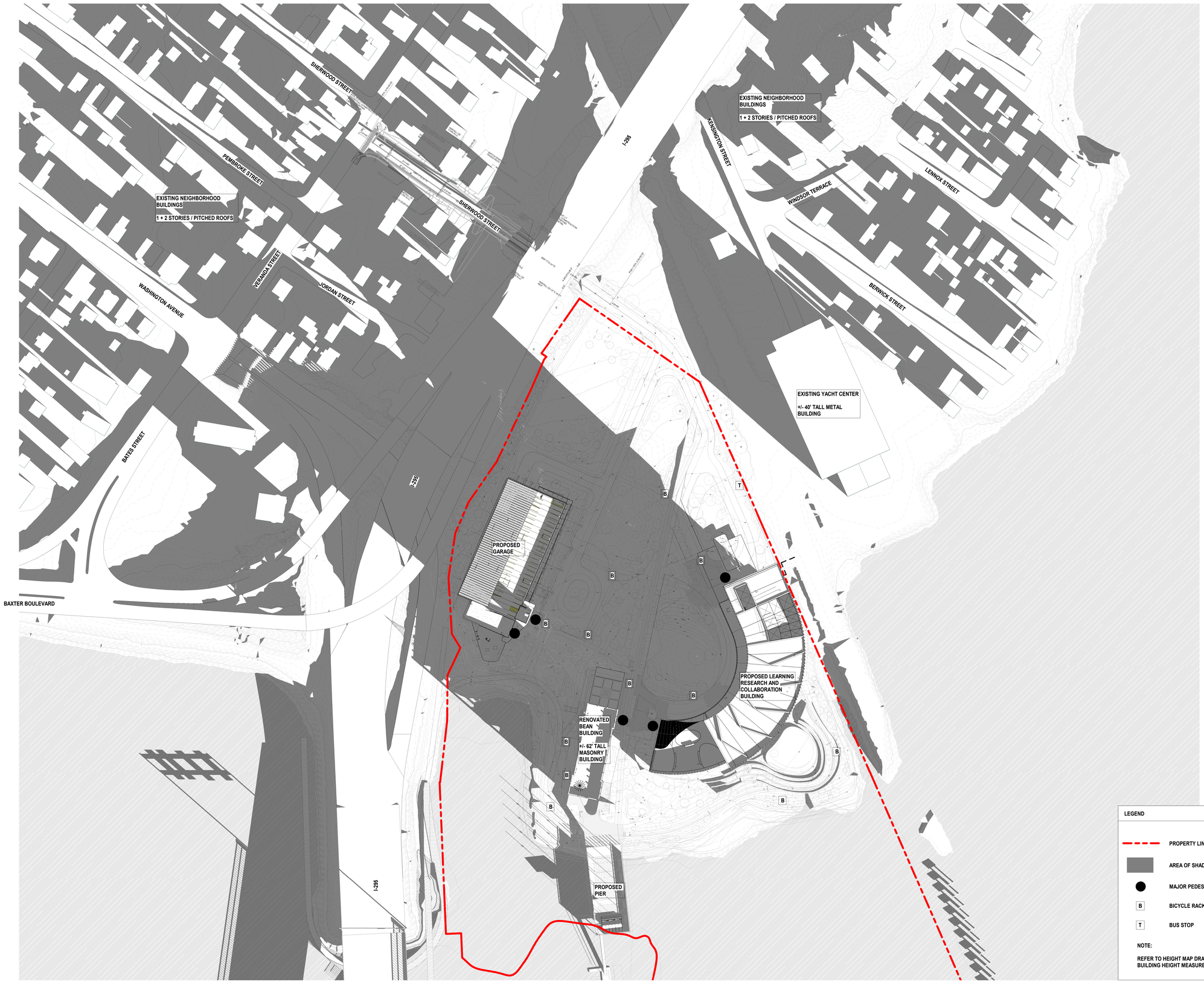
REGISTERED LANDSCAPE ARCHITECT
STEPHEN C. STIMSON
No. 3916
STATE OF MAINE

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Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	ZH SK JC MS
Checked	STIMSON
Date	27 OCTOBER 2023
Scale	1" = 10'

Drawing Title
Pier Plan

L8.00



1 SHADOW STUDY - DECEMBER 21st - 9am
1/64" = 1'-0"

10/27/2023 3:12:45 PM

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No. 3838
STATE OF MAINE
Stamp 10/27/2023

Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB Checked CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - DECEMBER 21 - 9AM

AS60.01



1 SHADOW STUDY - DECEMBER 21st - Noon
1/64" = 1'-0"

10/27/2023 3:13:54 PM

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Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3838
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Stamp 10/27/2023

Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB Checked CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - DECEMBER 21 - NOON

AS60.02



1 SHADOW STUDY - DECEMBER 21st - 3pm
1/64" = 1'-0"

10/27/2023 3:15:16 PM

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Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB
Checked	CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - DECEMBER 21 - 3PM

AS60.03



1 SHADOW STUDY - MARCH 21st - 9am
1/64" = 1'-0"

10/27/2023 3:16:33 PM

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
NO. 3838
STATE OF MAINE
Stamp 10/27/2023

Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB
Checked	CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - MARCH 21 - 9AM

AS60.04



1 SHADOW STUDY - MARCH 21st - Noon
1/64" = 1'-0"

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

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617 492-7000 Fax 492-7007

LAND-USE PERMIT SET

Number	Revision	Date

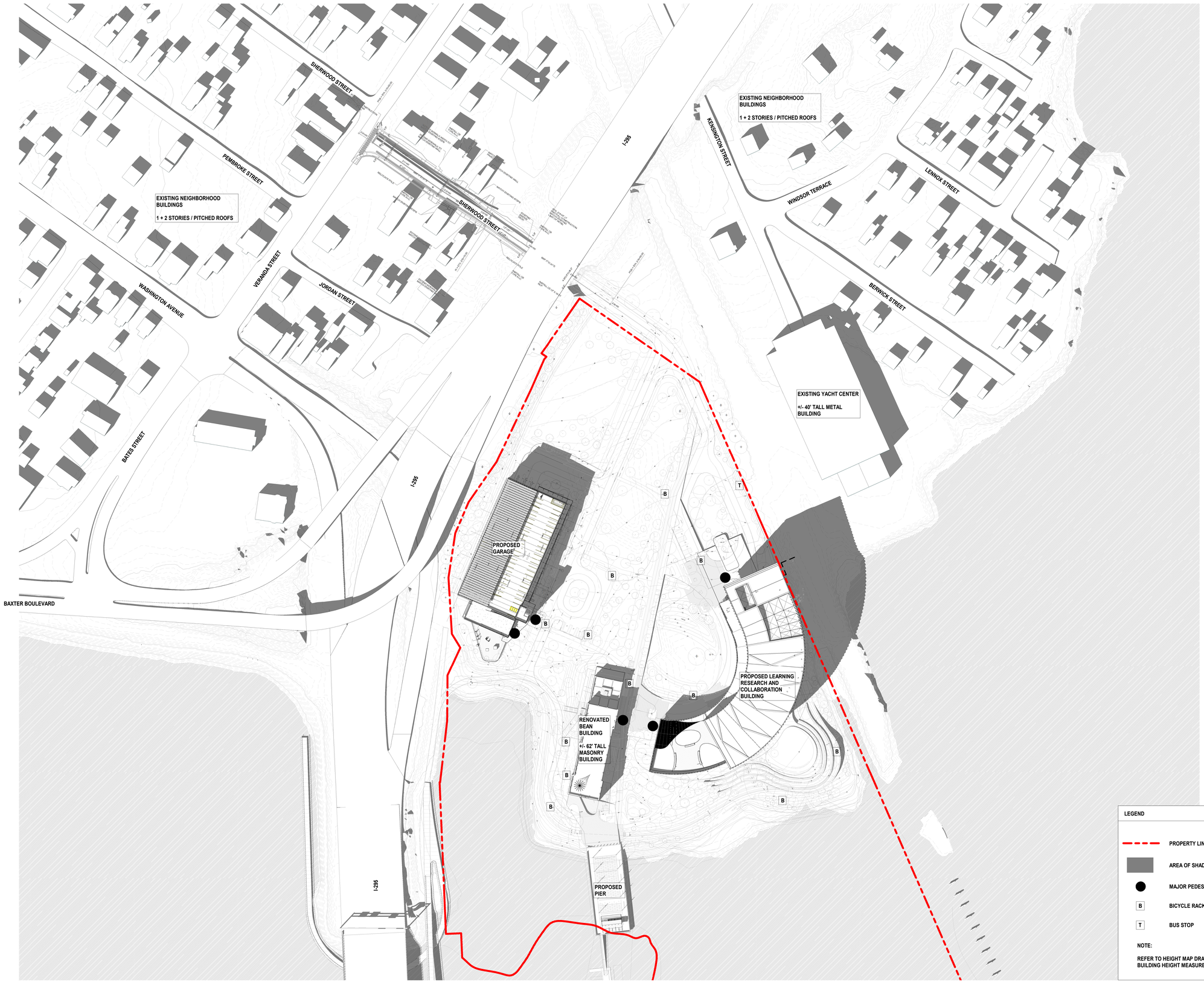
LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3838
STATE OF MAINE
Stamp 10/27/2023

Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB Checked CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - MARCH 21 - NOON

AS60.05

10/27/2023 3:17:43 PM



1 SHADOW STUDY - MARCH 21st - 3pm
1/64" = 1'-0"

IDEALS
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LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3898
STATE OF MAINE

Stamp 10/27/2023

Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB Checked CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - MARCH 21 - 3PM

AS60.06

10/27/2023 3:18:53 PM



1 SHADOW STUDY - JUNE 21st - 9am
1/64" = 1'-0"

IDEALS
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Roux Campus

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LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3838
STATE OF MAINE
Stamp 10/27/2023

Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB
Checked	CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - JUNE 21 - 9AM

AS60.07

10/27/2023 3:20:00 PM



1 SHADOW STUDY - JUNE 21st - Noon
1/64" = 1'-0"

10/27/2023 3:21:09 PM

IDEALS
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LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
NO. 3538
STATE OF MAINE
Stamp 10/27/2023

Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB
Checked	CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - JUNE 21 - NOON

AS60.08



1 SHADOW STUDY - JUNE 21st - 3pm
1/64" = 1'-0"

10/27/2023 3:22:17 PM

IDEALS
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LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
NO. 3538
STATE OF MAINE
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Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB Checked CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - JUNE 21 - 3PM

AS60.09



1 SHADOW STUDY - AUGUST 21st - 9am
1/64" = 1'-0"

10/27/2023 3:23:25 PM

IDEALS
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LICENSED ARCHITECT
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STATE OF MAINE
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Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB Checked CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - AUGUST 21 - 9AM

AS60.10



1 SHADOW STUDY - AUGUST 21st - Noon
1/64" = 1'-0"

10/27/2023 3:24:34 PM

IDEALS
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LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
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STATE OF MAINE
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Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB
Checked	CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - AUGUST 21 - NOON

AS60.11



1 SHADOW STUDY - AUGUST 21st - 3pm
1/64" = 1'-0"

10/27/2023 3:25:44 PM

IDEALS
Initiative for Digital Engineering and Life Sciences
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LAND-USE PERMIT SET

Number	Revision	Date

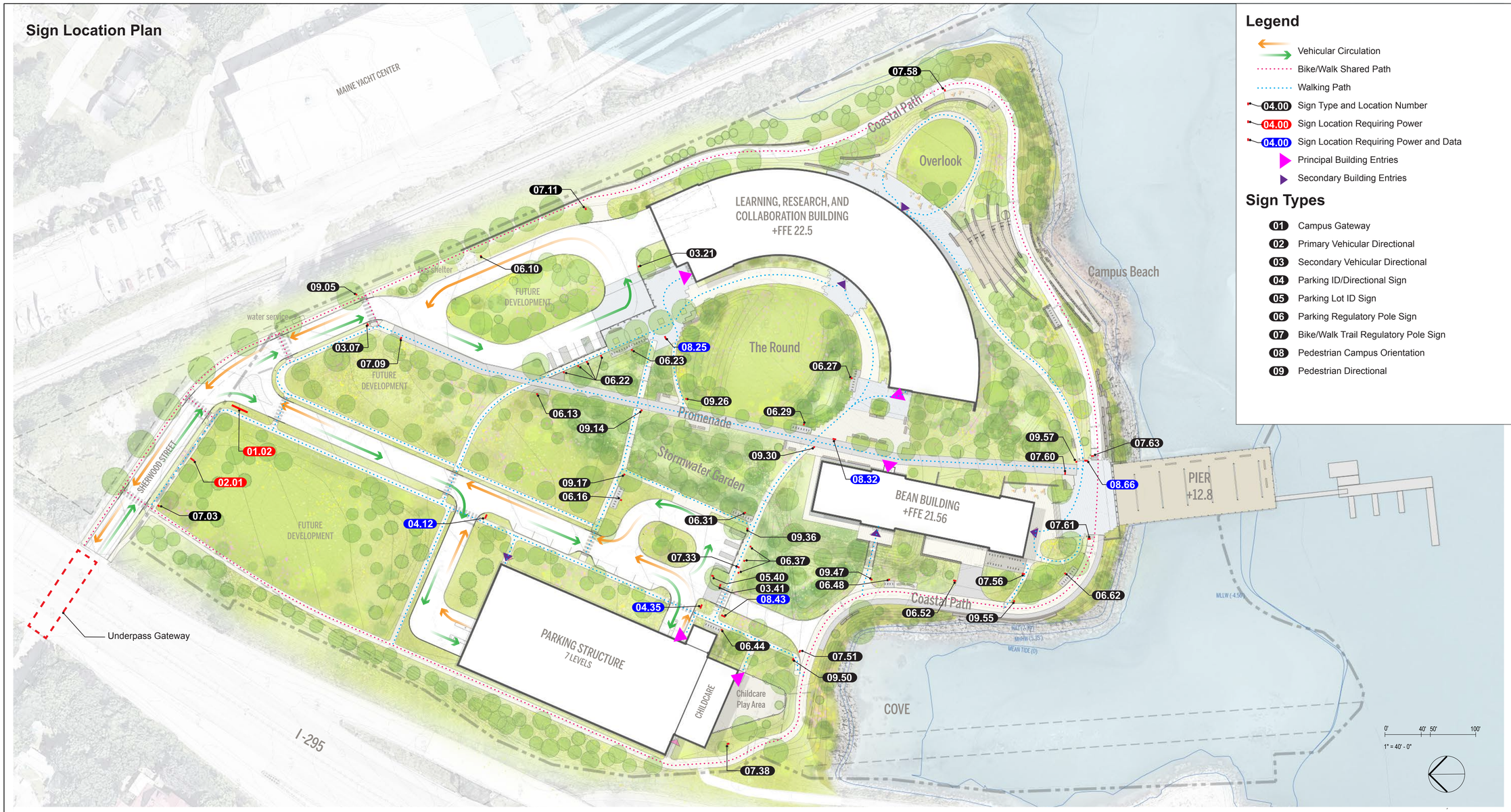
LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
NO. 3838
STATE OF MAINE
Stamp 10/27/2023

Job #	2202
Project	IDEALS - THE ROUX INSTITUTE
Drawn By	JB Checked CM
Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SHADOW STUDY - AUGUST 21 - 3PM

AS60.12

Sign Location Plan



Legend

- Vehicular Circulation
- Bike/Walk Shared Path
- Walking Path
- 04.00 Sign Type and Location Number
- 04.00 Sign Location Requiring Power
- 04.00 Sign Location Requiring Power and Data
- Principal Building Entries
- Secondary Building Entries

Sign Types

- 01 Campus Gateway
- 02 Primary Vehicular Directional
- 03 Secondary Vehicular Directional
- 04 Parking ID/Directional Sign
- 05 Parking Lot ID Sign
- 06 Parking Regulatory Pole Sign
- 07 Bike/Walk Trail Regulatory Pole Sign
- 08 Pedestrian Campus Orientation
- 09 Pedestrian Directional

IDEALS
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Signage and Graphics
48 Dunster Street
Cambridge, MA 02138
617 868-5430

LAND-USE PERMIT SET

Sign Message Schedule

Sign Type	Loc. No.	Quantity	Sign Legend	Notes
02	01	1	[Side A] (Up Arrow) Academic Building Drop-Off Receiving (Right Arrow) Garage (P Symbol) Bean Building Drop-Off Receiving Childcare Center [Side B] (Up Arrow) Campus Exit Veranda St. to Rte. 295 (Left Arrow) Garage Bean Building Childcare Center	Double Sided
01	02	1	(NU Logo) The Roux Institute at Northeastern Univeristy (Address)	Double Sided
07	03	1	[Side A] (Right Arrow) (Bike Symbol) Coastal Bike Trail [Side B] (Left Arrow) (Bike Symbol) Coastal Bike Trail	
09	05	1	[Side A] (Up Arrow)(Bike Symbol) Coastal Bike Trail [Side B] (Walk Bike Symbol) The Roux Institute Casco Bay Pier	Double Sided
03	07	1	(Up Arrow) Academic Building Drop-Off Receiving [Side B] Campus Exit Veranda St. to Rte. 295	Single Sided
07	09	1	[Side A] (Walk Bike Symbol) Walk Your Bike [Side B] (Up Arrow) (Bike Symbol) Coastal Bike Trail	Double Sided

Sign Type	Loc. No.	Quantity	Sign Legend	Notes
06	10	1	(Greater Portland Metro Bus graphics, TBD)	Single Sided Tall Pole Condition
07	11	1	[Side A] (Up Arrow) (Bike Symbol) Coastal Bike Trail [Side B] (Up Arrow) (Bike Symbol) Coastal Bike Trail	Double Sided
04	12	1	[Side A] (Right Arrow) (P Symbol) Visitor Parking (Up Arrow) Childcare Center Bean Building Drop-Off Receiving [Side B] (Left Arrow) (P Symbol) Visitor Parking (Up Arrow) Campus Exit Veranda St. to Rte. 295	Double Sided
06	13	1	(Bike Parking Symbol) (Regulartory Text to be Determined)	Single Sided
09	14	1	[Side A] (Up Arrow) Academic Building (Left Arrow) Coastal Bike Trail (Right Arrow) Bean Building Casco Bay Pier [Side B] (Up Arrow)(P Symbol) Garage (Right Arrow) Coastal Bike Trail (Left Arrow) Bean Building Casco Bay Pier	Double Sided
06	16	1	(Bike Parking Symbol) (Regulartory Text to be Determined)	Single Sided
09	17	1	[Side A] (Up Arrow) Academic Building (Right Arrow) Bean Building Casco Bay Pier [Side B] (Up Arrow)(P Symbol) Garage Childcare Center Bean Building	Double Sided

Sign Type	Loc. No.	Quantity	Sign Legend	Notes
03	21	1	(Right Arrow) Academic Building Receiving	Single Sided
06	22	4	(Wheelchair Symbol) Academic Building Accessible Parking Only	Single Sided
06	23	1	(Bike Parking Symbol) (Regulatory Text to be Determined)	Single Sided
08	25	1	[Side A] (Campus Orientation Map) [Side B] (Poster Graphics or Community Bulletins)	Double Sided
09	26	1	[Side A] Up Arrow) Academic Building (Right Arrow) Bean Building Casco Bay Pier (Left Arrow) Coastal Bike Trail [Side B] (Up Right Arrow) Garage (P Symbol) Child Care Center (Right Arrow) Coastal Bike Trail (Left Arrow) Bean Building Casco Bay Pier	Double Sided
06	27	1	(Bike Parking Symbol) (Regulatory Text to be Determined)	Single Sided
06	29	1	(Bike Parking Symbol) (Regulatory Text to be Determined)	Single Sided
09	30	1	[Side A] Up Arrow) Academic Building (Right Arrow) Casco Bay Pier (Left Arrow) Coastal Bike Trail [Side B] (Up Right Arrow) Garage (P Symbol) Child Care Center (Right Arrow) Coastal Bike Trail (Left Arrow) Casco Bay Pier	Double Sided
06	31	1	(Bike Parking Symbol) (Regulatory Text to be Determined)	Single Sided
08	32	1	[Side A] (Campus Orientation Map) [Side B] (Poster Graphics or Community Bulletins)	Double Sided

Sign Type	Loc. No.	Quantity	Sign Legend	Notes
07	33	1	[Side A] (Walk Bike Symbol) Walk Your Bike [Side B] (Up Arrow) Childcare Center	Double Sided
04	35	1	[Side A] (Right Arrow) (P Symbol) Visitor Parking Childcare Center Drop-Off	Single Sided
09	36	1	[Side A] (Left Arrow) Academic Building (Up Arrow) Bean Building [Side B] (Up Arrow) Garage (P Symbol) Child Care Center	Double Sided
06	37	3	(Wheelchair Symbol) Bean Building Accessible Parking Only	Single Sided
07	38	1	[Side A] (Up Arrow) (Bike Symbol) Coastal Bike Trail [Side B] (Up Arrow) (Bike Symbol) Coastal Bike Trail	Double Sided
05	40	1	(P symbol) Bean Building Short-Term Parking	Single Sided
03	41	1	(Up Arrow) Bean Building Receiving Service Vehicles Only	Single Sided
08	43	1	[Side A] (Campus Orientation Map) [Side B] (Poster Graphics or Community Bulletins)	Double Sided
06	44	1	(Bike Parking Symbol) (Regulatory Text to be Determined)	Single Sided
09	47	1	(Right Arrow) (Wheelchair Symbol) Bike Parking (Bike Symbol) Bean Building Casco Bay Pier (Accessible Path Map)	Single Sided
06	48	1	(Bike Parking Symbol) (Regulatory Text to be Determined)	Single Sided

Sign Type	Loc. No.	Quantity	Sign Legend	Notes
09	50	1	[Side A] (Up Arrow) Garage (P Symbol) Bike Parking (Bike Symbol) [Side B] (Up Arrow) Coastal Bike Trail	Double Sided
07	51	1	[Side A] (Walk Bike Symbol) Walk Your Bike (Rule) (Up Arrow) Bike Parking [Side B] (Bike Symbol) Coastal Bike Trail	Double Sided
06	52	1	Bean Bulding Receiving	Single Sided
09	55	1	(Right Arrow) (Wheelchair Symbol) Bean Building Casco Bay Pier (Accessible Path Map)	Single Sided
07	56	1	[Side A] (Bike Symbol) Bike Parking [Side B] (Bike Symbol) Bike Parking	Double Sided
09	57	1	[Side A] (Up Arrow) Bean Building Academic Building Garage (Parking Symbol) (Left Arrow) Bike Parking (Bike Symbol) [Side B] (Left Arrow) Campus Beach (Right Arrow) Bike Parking (Bike Symbol)	Double Sided
07	58	1	[Side A] (Up Arrow) (Bike Symbol) Coastal Bike Trail [Side B] (Up Arrow) (Bike Symbol) Coastal Bike Trail	Double Sided
07	60	1	[Side A] (Walk Bike Symbol) Walk Your Bike (Rule) (Left Arrow) (Bike Sybol) Bike Parking [Side B] (Right Arrow) (Bike Symbol) Bike Parking	Double Sided

Sign Type	Loc. No.	Quantity	Sign Legend	Notes
07	61	1	[Side A] (Walk Bike Symbol) Walk Your Bike (Rule) (Up Arrow) Bike Parking [Side B] (Bike Symbol) Coastal Bike Trail	Double Sided
06	62	1	(Bike Parking Symbol) (Regulartory Text to be Determined)	Single Sided
07	63	1	[Side A] (Walk Bike Symbol) Walk Your Bike (Rule) (Up Arrow) Campus Beach [Side B] (Bike Symbol) Bike Parking	Double Sided
10	65	1	(Graphics interpreting the history of the Pier, to be determined)	Single Sided
08	66	1	[Side A] (Campus Orientation Map) [Side B] (Poster Graphics or Community Bulletins)	Double Sided
10	67	1	(Graphics interpreting the history of the Pier, to be determined)	Single Sided

Number	Revision	Date

Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	AJB Checked SP
Date	27 OCTOBER 2023
Scale	1" = 40' - 0"

Drawing Title

Sign Location Plan and Message Schedule

SG.01

8/22/2023 2:59:29 PM

Word-marks

The Roux Institute
at Northeastern University

Monogram & Word-mark mono (Formal)

The Roux Institute
at Northeastern University

Monogram & Word-mark (Formal)

The Roux Institute
at Northeastern University

Monogram & Word-mark (Formal)

LVX VERITAS VIRTVS
The Roux Institute
at Northeastern University

Monogram & Notched Word-mark mono (Formal)

LVX VERITAS VIRTVS
The Roux Institute

"N" with notched word-mark & motto

The Roux Institute

Roux Institute Word-mark

The Roux

Possible "shorthand" for the campus sub-brand?

Typeface

FF Real Head Pro

Primary Typeface

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

FF Real Head Pro - Semilight

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

FF Real Head Pro - Book

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

FF Real Head Pro - Medium

ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
0123456789

FF Real Head Pro - Demibold

Colors and Materials

Red
PMS 186C

Warm Gray Metallic
to match Architecture

Granite to match
Site Benches

White
Mathews White

Charcoal Gray
Metallic

Timber to match
Architecture

Black
PMS Black C

Brushed or
Non-Directaional
SST

Gold Metallic
PMS 871C

Brushed or
Non-Directaional
Aluminum

Architecture and Landscape Design



A sweeping view of the LRC



The Mass Timber West Wing



IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

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LAND-USE PERMIT SET

Number	Revision	Date

Stamp

Job #	2202		
Project	THE ROUX INSTITUTE		
Drawn By	AJB	Checked	SP
Date	27 OCTOBER 2023		
Scale	Not To Scale		

Drawing Title

Graphic Standards

SG.02

8/22/2023 2:59:23 PM

Site Wayfinding System Sign Types

Sign Structures

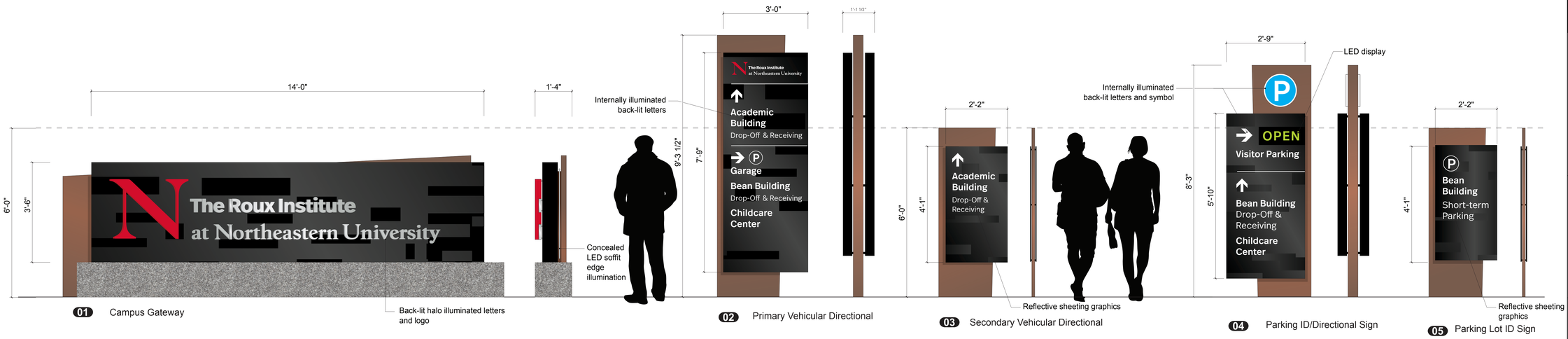
The sign system is comprised of fabricated aluminum panel contruction with durable automotive paint finishes and installed with reinforced concrete footings. Sign Type 01 also incorporates a granit base, to match the granite used in site furnishings.

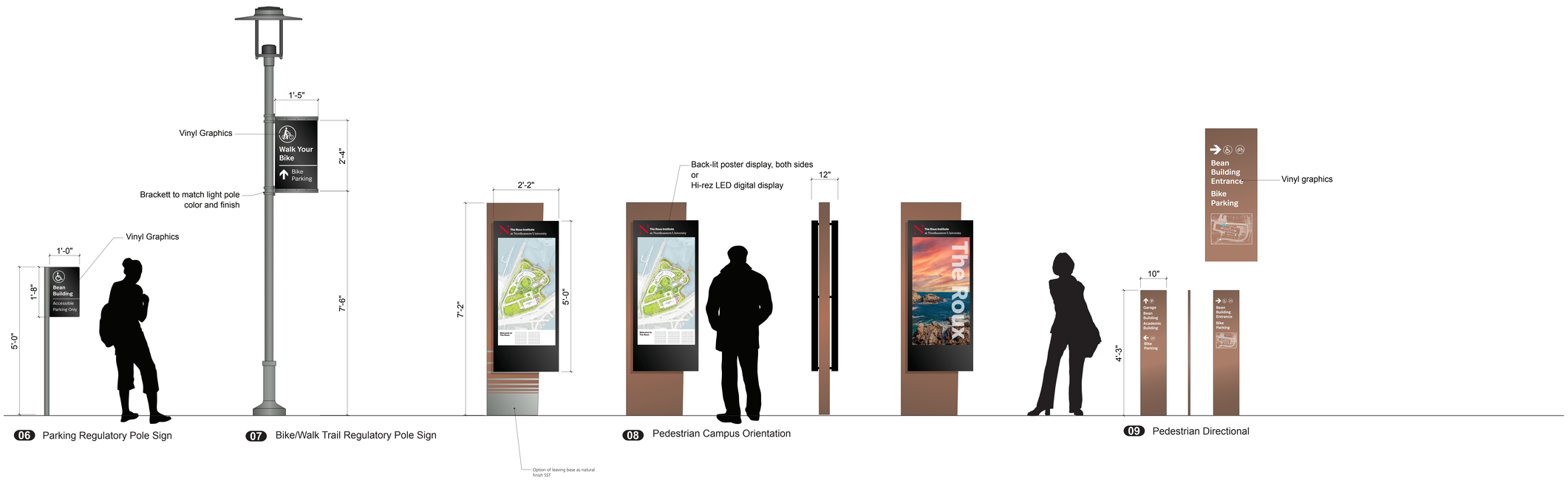
The system is designed to be dissassembled to accomodate change over time and maintenance.

Graphics

Sign Types 01, 02 and 04 have internally illuminated back-lit lettering and graphics wtih augmented edge illumination as noted. Sign Type 08 incorporates a conventional backlit poster display case for the map and information graphics. LED digital displays in place of backlit displays may be explored for ease of update.

All other sign types inorporate reflective or opaque vinyl lettering and graphics.





IDEALS
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LAND-USE PERMIT SET

Number	Revision	Date

Stamp

Job #	2202		
Project	THE ROUX INSTITUTE		
Drawn By	AJB	Checked	SB
Date	27 OCTOBER 2023		
Scale	3/4" = 1' - 0"		

Drawing Title

Site Wayfinding System Sign Types

SG.03

8/22/2023 2:59:23 PM

Underpass Gateway



Northeastern Campus Mural Program



Tommy's Park, Portland, ME



Lafayette College Gateway



Existing Conditions



Northeastern Red Painted Girders



Northeastern Red Painted Girders
with Underpass Mural with Lighting

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Date	27 OCTOBER 2023
Scale	Not To Scale

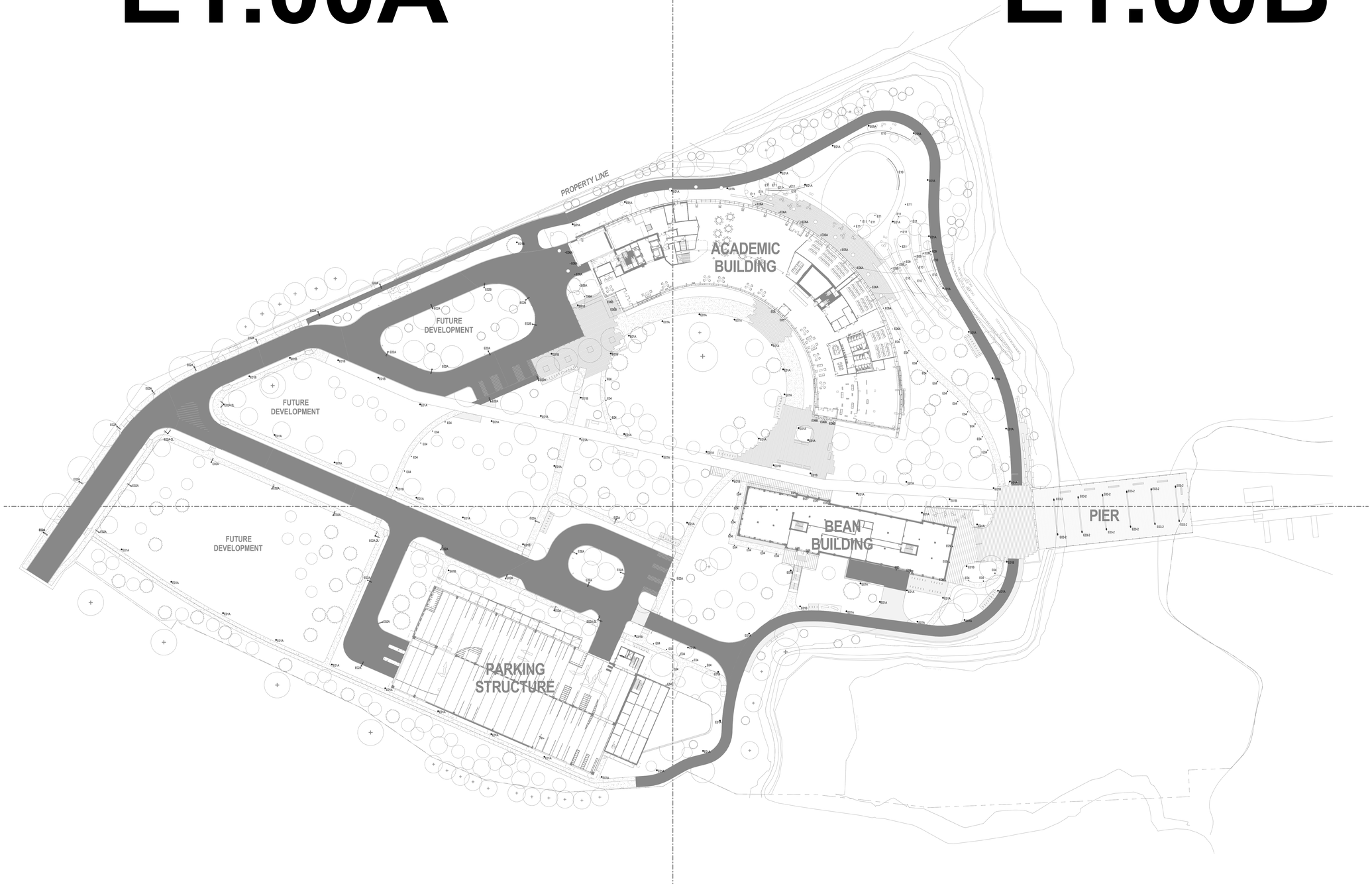
Drawing Title
UNDERPASS GATEWAY

SG.04

8/22/2023 2:59:29 PM

E1.00A

E1.00B



E1.00D

E1.00C

IDEALS
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KeyPlan

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ARUP
Arup US Inc
60 State Street
Boston MA 02109
617.864.2987
www.arup.com

SITE PLAN SUBMISSION

Number	Revision	Date

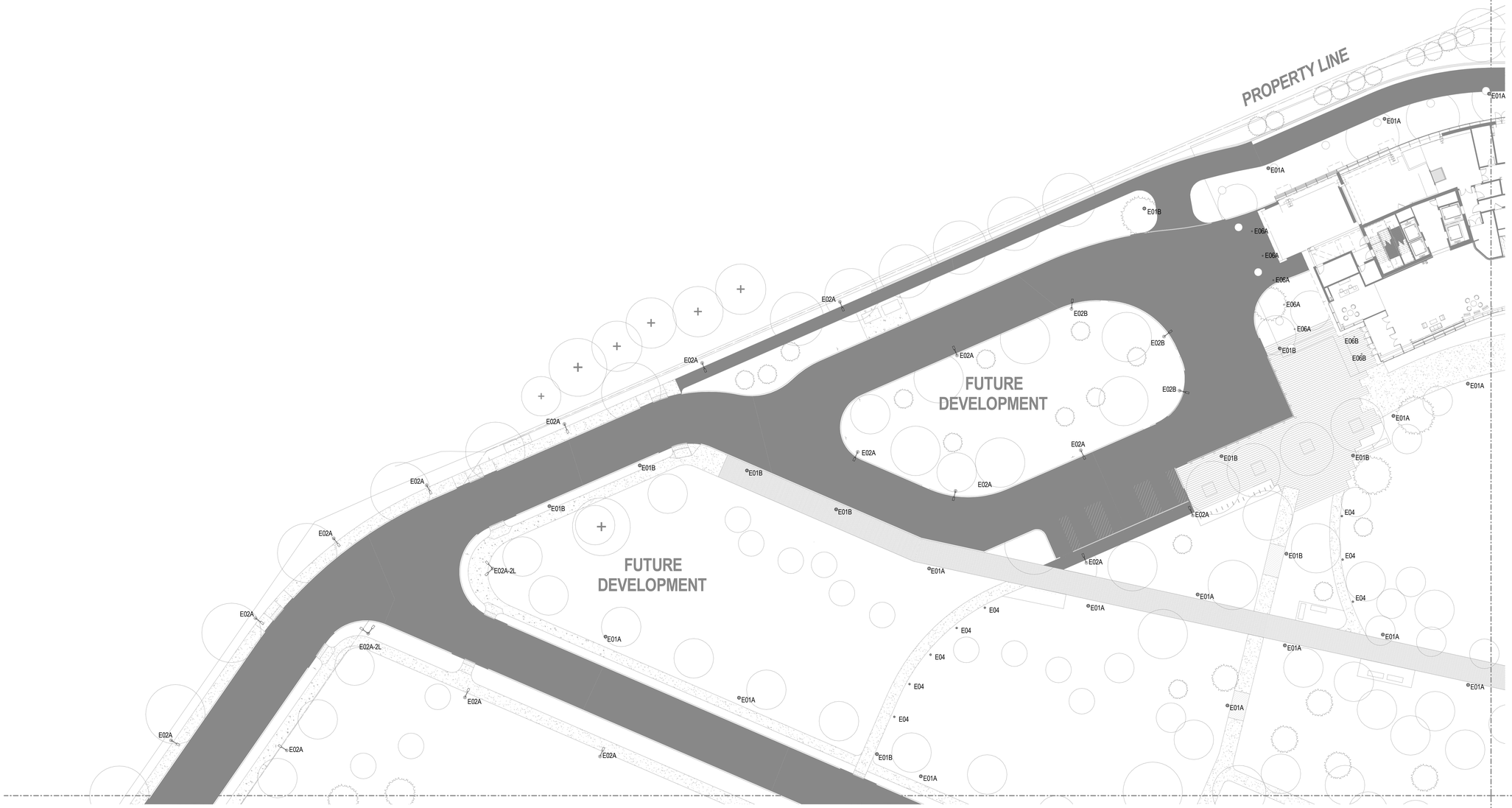
Stamp
COMMONWEALTH OF MASSACHUSETTS
JULIAN ASTBURY
ELECTRICAL
No. 45455
REGISTERED PROFESSIONAL ENGINEER
10.27.2023

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS
Checked	JW
Date	27 OCTOBER 2023
Scale	1" = 40'-0"

Drawing Title
SITE LIGHTING KEY PLAN

E1.00

10/27/2023 2:20:42 PM



1 SITE LIGHTING PLAN - PART A
1" = 20'-0"

IDEALS
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Roux Campus

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KeyPlan

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SITE PLAN SUBMISSION

Number	Revision	Date

Stamp
10.27.2023

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS Checked JW
Date	27 OCTOBER 2023
Scale	1" = 20'-0"

Drawing Title
SITE LIGHTING PLAN - PART A

E1.00A

10/27/2023 2:21:16 PM



1 SITE LIGHTING PLAN - PART B
1" = 20'-0"

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SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ASTBURY
ELECTRICAL
No. 16459
REGISTERED PROFESSIONAL ENGINEER

10.27.2023

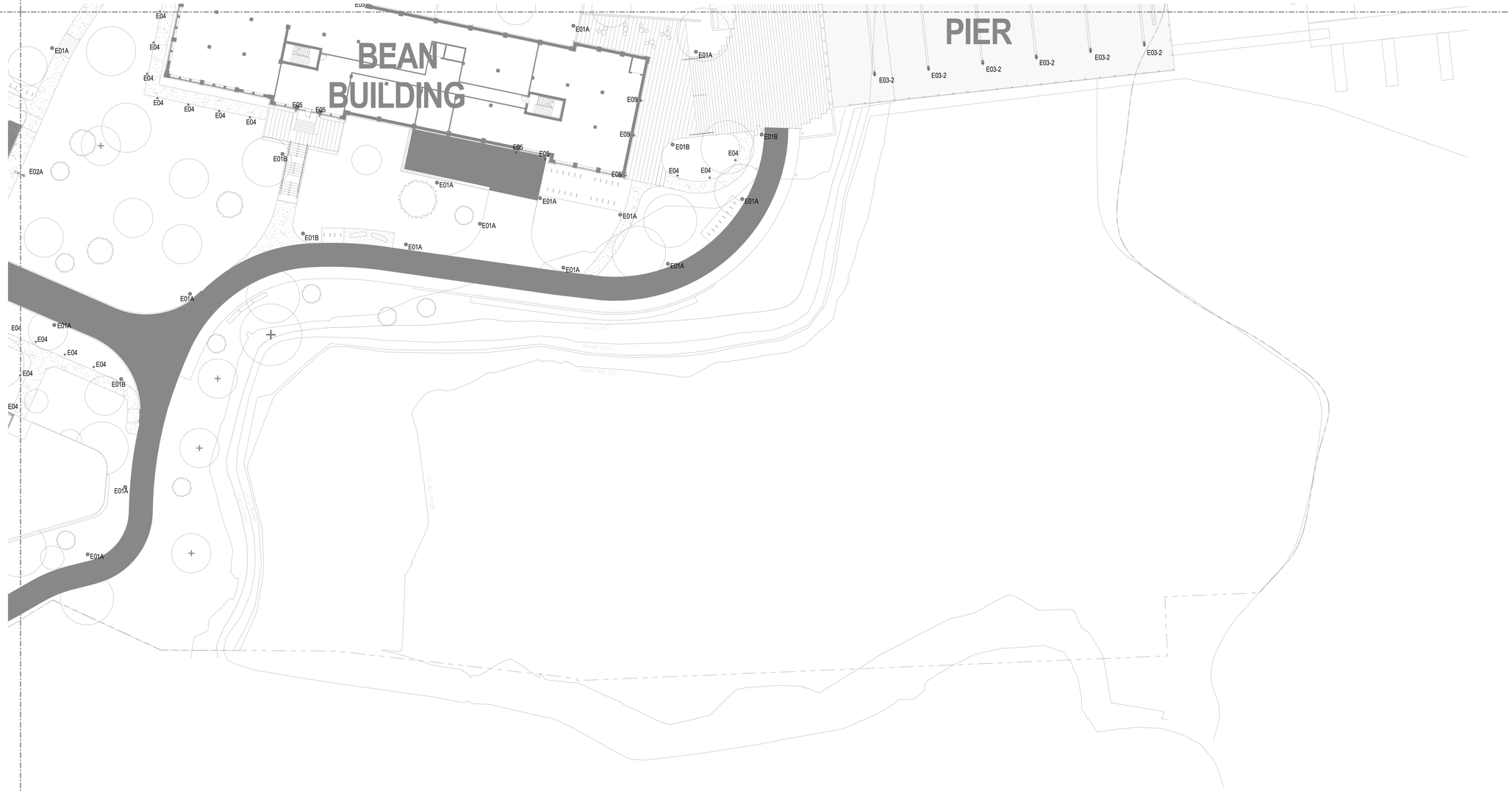
Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS Checked JW
Date	27 OCTOBER 2023
Scale	1" = 20'-0"

Drawing Title
SITE LIGHTING PLAN - PART B

E1.00B

10/27/2023 2:21:18 PM



1 SITE LIGHTING PLAN - PART C
1" = 20'-0"

IDEALS
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SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ARTBURY
ELECTRICAL
No. 35405
REGISTERED PROFESSIONAL ENGINEER

10.27.2023

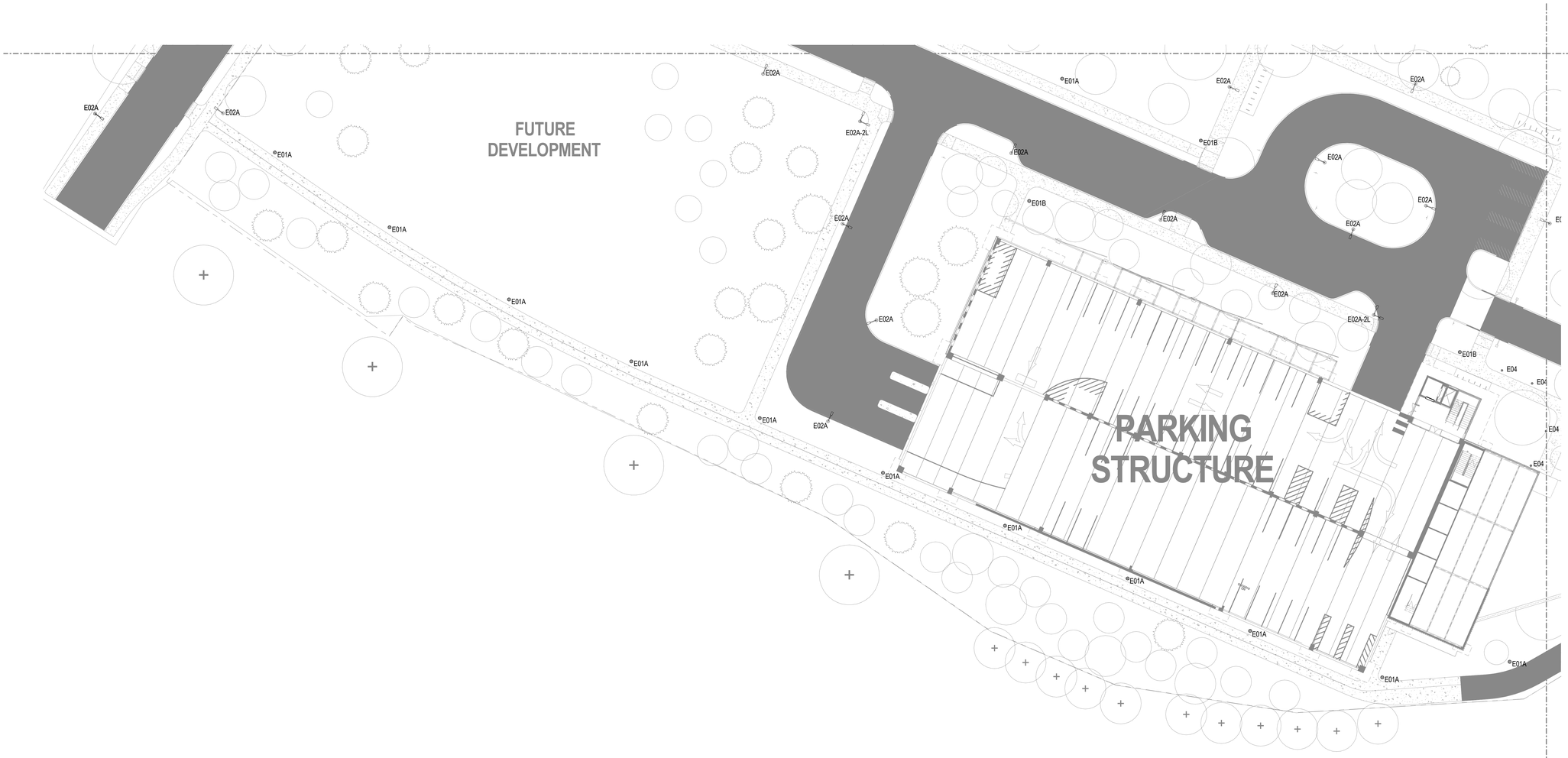
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Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS Checked JW
Date	27 OCTOBER 2023
Scale	1" = 20'-0"

Drawing Title
SITE LIGHTING PLAN - PART C

E1.00C

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1 SITE LIGHTING PLAN - PART D
1" = 20'-0"

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The Roux Institute

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SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ASTBURY
ELECTRICAL
No. 45458
REGISTERED PROFESSIONAL ENGINEER

10.27.2023

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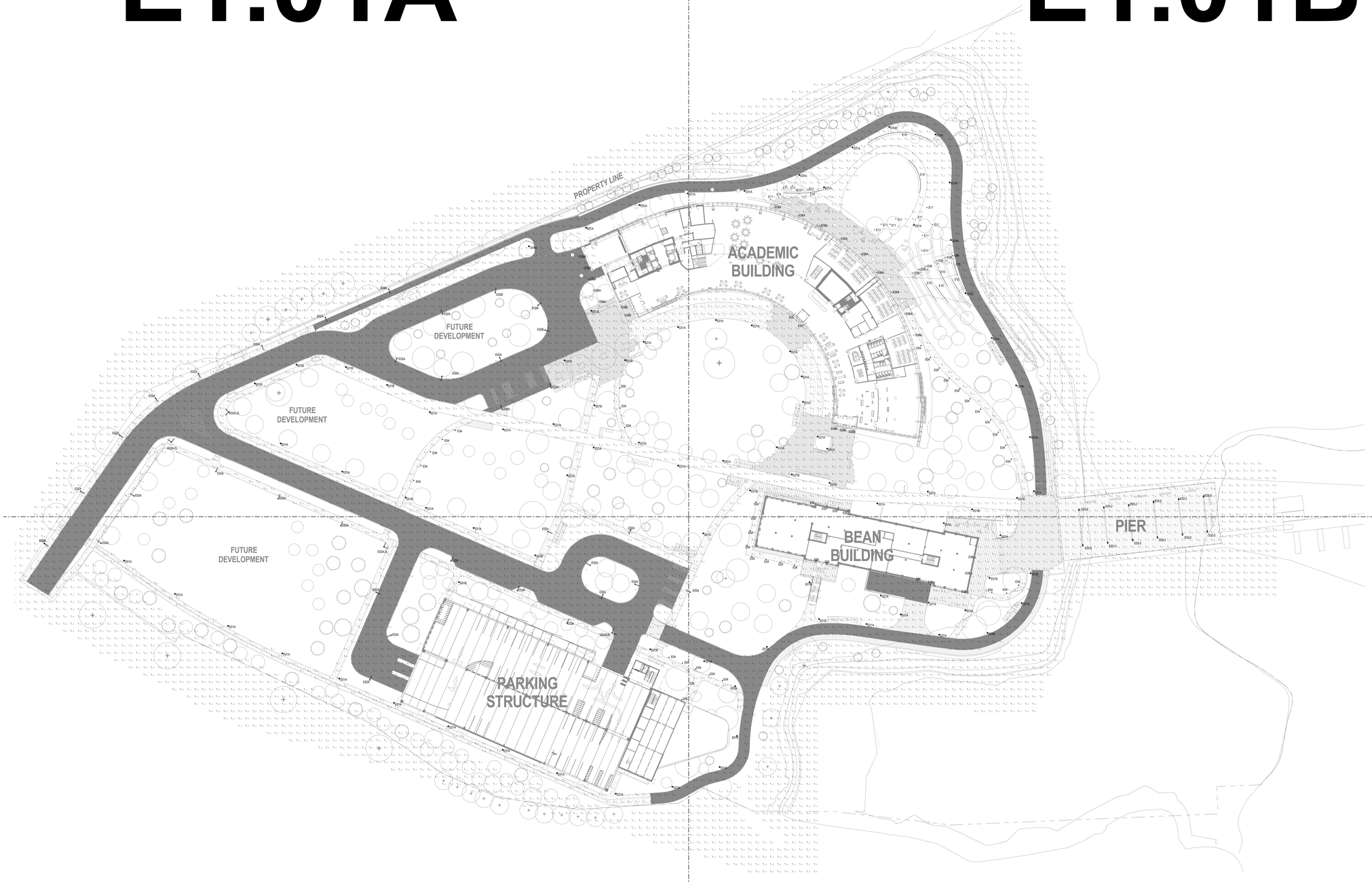
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SITE LIGHTING PLAN - PART D

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E1.01A

E1.01B



E1.01D

E1.01C

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Drawing Title

SITE LIGHTING PHOTOMETRIC KEY PLAN

E1.01

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The City of Portland Technical Manual - Section 12 - Site Lighting (Adopted 3/26/19; Rev. 12/8/20)

12.1. PURPOSE
The intent of this design is to promote and protect public health, safety and general welfare, and encourage the preservation of the natural nighttime outdoor environment. Specifically, the intent of this design is to limit light trespass, glare and light pollution to safeguard adequate safety, night vision, and comfort of the neighboring properties.

12.3. GENERAL STANDARDS
Outdoor lighting standards listed below apply to the Site Lighting
• Uniformity: 20:1
• Illumination levels: Min 0.2 (fc), Max 5.0 (fc), Ave 1.25 (fc)
• No fixture shall exceed 20,000 lumens (± 3%).
- Path lighting: 1,500 lumens Maximum Lumens allowed will apply to E04.
- Residential/ Commercial Pole at 20' : 15,000 lumens Maximum Lumens allowed will apply to E01 Series, E02 Series, and E03.
- Building Entrance: 3,500 lumens Maximum Lumens allowed will apply to E05 and E06 Series.
• Light Trespass: The maximum illumination level at a property line shall not exceed 0.1fc at the waterline (sensitive use) or 1.0fc next to industrial and/or non-sensitive uses. All adjacent properties are considered non-sensitive (interstate, rail right-of-way).
• Full Cut-off Fixtures and Shielding Required. All the lighting fixtures selected are full cutoff and the uplight component of the BUG rating is U0. Please note that the E04 is Night Sky friendly with minimum uplight component and U1 rating. The E10 linear tape light fixtures are installed aimed at the ground and integrated into an architectural detail, to eliminate the possibility of uplight.
• Fixture Height:
- Building Mounted/ Entrances: below the roof eave and not to exceed 20 feet, whichever is lower. As only exceptions, E06B will be mounted under the lowest point of the building canopy, at 32ft.
- All the light poles and bollards respect the height provision (Light sources on Poles at or below 20ft - Bollards at or below 3.5')

12.5. ARCHITECTURAL AND SPECIALTY LIGHTING AND UPLIGHTING
For accent lighting of the Landscape, E11 fixture will be installed upward and aimed on the trees.
E11 does not exceed 4,000 mean lumens per accent feature, is fully shielded from view off-site, and uses a narrow cone of light for the purpose of confining the light to the object.

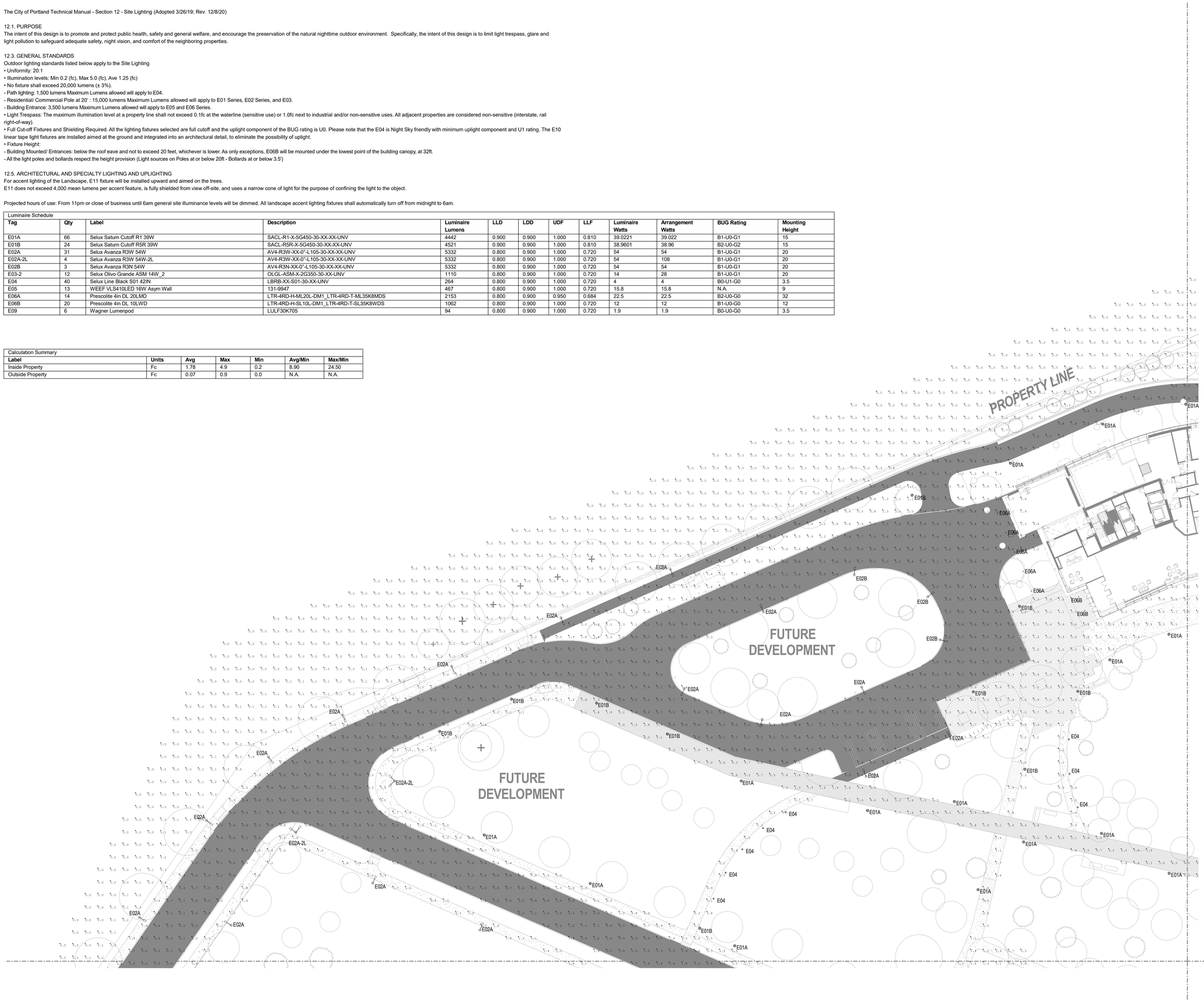
Projected hours of use: From 11pm or close of business until 6am general site illuminance levels will be dimmed. All landscape accent lighting fixtures shall automatically turn off from midnight to 6am.

Luminaire Schedule

Tag	Qty	Label	Description	Luminaire Lumens	LLD	LDD	UDF	LLF	Luminaire Watts	Arrangement Watts	BUG Rating	Mounting Height
E01A	66	Selux Saturn Cutoff R1 39W	SACL-R1-X-5G450-30-XX-XX-UNV	4442	0.900	0.900	1.000	0.810	39.0221	39.022	B1-U0-G1	15
E01B	24	Selux Saturn Cutoff R5R 39W	SACL-R5R-X-5G450-30-XX-XX-UNV	4521	0.900	0.900	1.000	0.810	38.9601	38.96	B2-U0-G2	15
E02A	31	Selux Avanza R3W 54W	AV4-R3W-XX-0°-L105-30-XX-XX-UNV	5332	0.800	0.900	1.000	0.720	54	54	B1-U0-G1	20
E02A-2L	4	Selux Avanza R3W 54W-2L	AV4-R3W-XX-0°-L105-30-XX-XX-UNV	5332	0.800	0.900	1.000	0.720	54	108	B1-U0-G1	20
E02B	3	Selux Avanza R3N 54W	AV4-R3N-XX-0°-L105-30-XX-XX-UNV	5332	0.800	0.900	1.000	0.720	54	54	B1-U0-G1	20
E03-2	12	Selux Olivo Grande ASM 14W_2	OLGL-ASM-X-2G350-30-XX-UNV	1110	0.800	0.900	1.000	0.720	14	28	B1-U0-G1	20
E04	40	Selux Line Black S01 42IN	LBRB-XX-S01-30-XX-UNV	264	0.800	0.900	1.000	0.720	4	4	B0-U1-G0	3.5
E05	13	WEEF VLS410LED 16W Asym Wall	131-9947	467	0.800	0.900	1.000	0.720	15.8	15.8	N.A.	9
E06A	14	Prescolite 4in DL 20LMD	LTR-4RD-H-ML20L-DM1_LTR-4RD-T-ML35K8MDS	2153	0.800	0.900	0.950	0.684	22.5	22.5	B2-U0-G0	32
E06B	20	Prescolite 4in DL 10LWD	LTR-4RD-H-SL10L-DM1_LTR-4RD-T-SL35K8WDS	1062	0.800	0.900	1.000	0.720	12	12	B1-U0-G0	12
E09	6	Wagner Lumenpod	LULF30K705	94	0.800	0.900	1.000	0.720	1.9	1.9	B0-U0-G0	3.5

Calculation Summary

Label	Units	Avg	Max	Min	Avg/Min	Max/Min
Inside Property	Fc	1.78	4.9	0.2	8.90	24.50
Outside Property	Fc	0.07	0.9	0.0	N.A.	N.A.



1 SITE LIGHTING PHOTOMETRIC PLAN - PART A
1" = 20'-0"

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10.27.2023

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Project	THE ROUX INSTITUTE
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Date	27 OCTOBER 2023
Scale	As indicated

Drawing Title
SITE LIGHTING PHOTOMETRIC PLAN - PART A

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1 SITE LIGHTING PHOTOMETRIC PLAN - PART B
1" = 20'-0"

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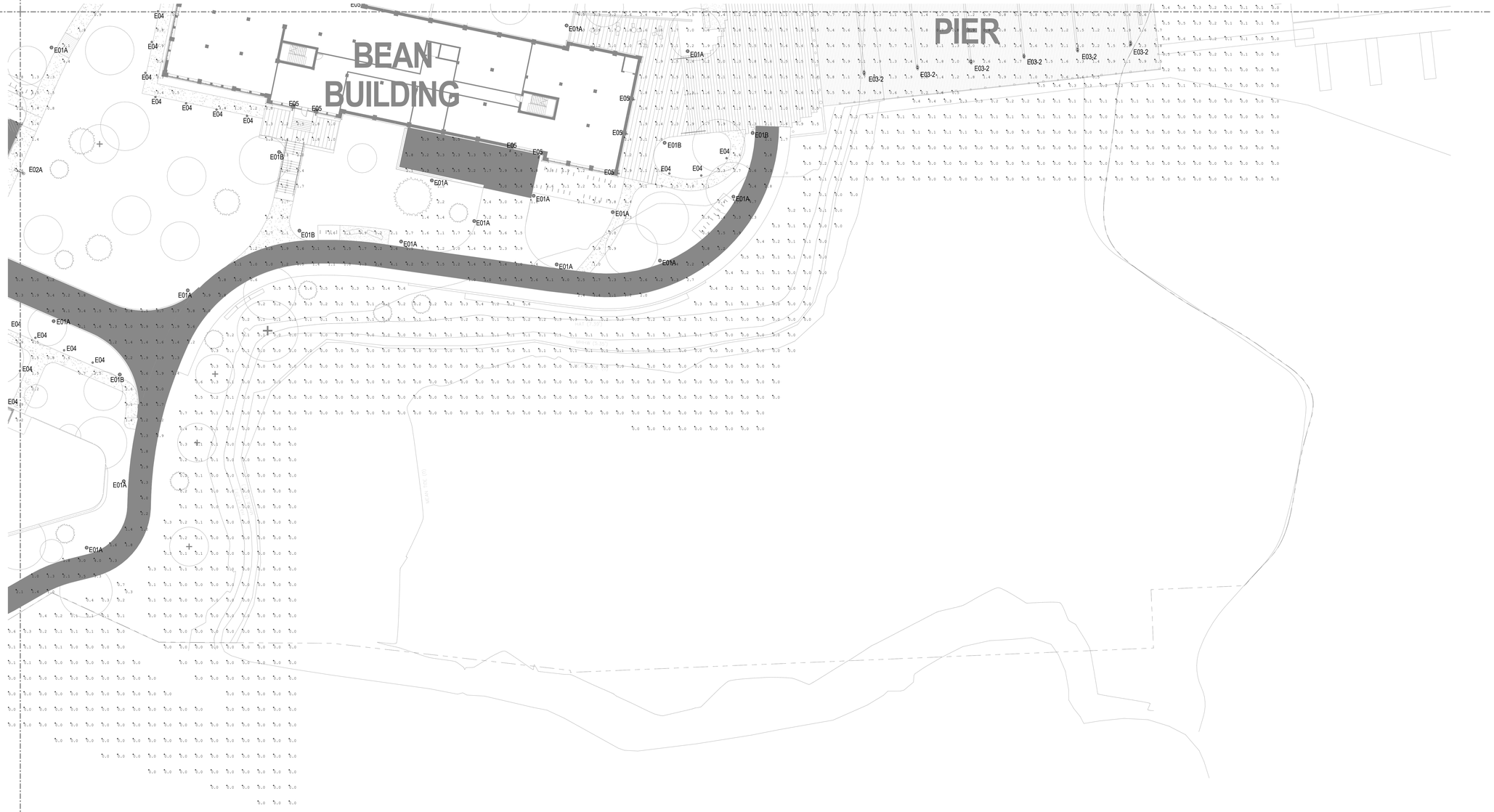
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Project	THE ROUX INSTITUTE
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Date	27 OCTOBER 2023
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Drawing Title
SITE LIGHTING PHOTOMETRIC PLAN - PART B

E1.01B

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1 SITE LIGHTING PHOTOMETRIC PLAN - PART C
1" = 20'-0"

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COMMONWEALTH OF MASSACHUSETTS
JULIAN ARTBURY
ELECTRICAL
No. 58455
REGISTERED PROFESSIONAL ENGINEER

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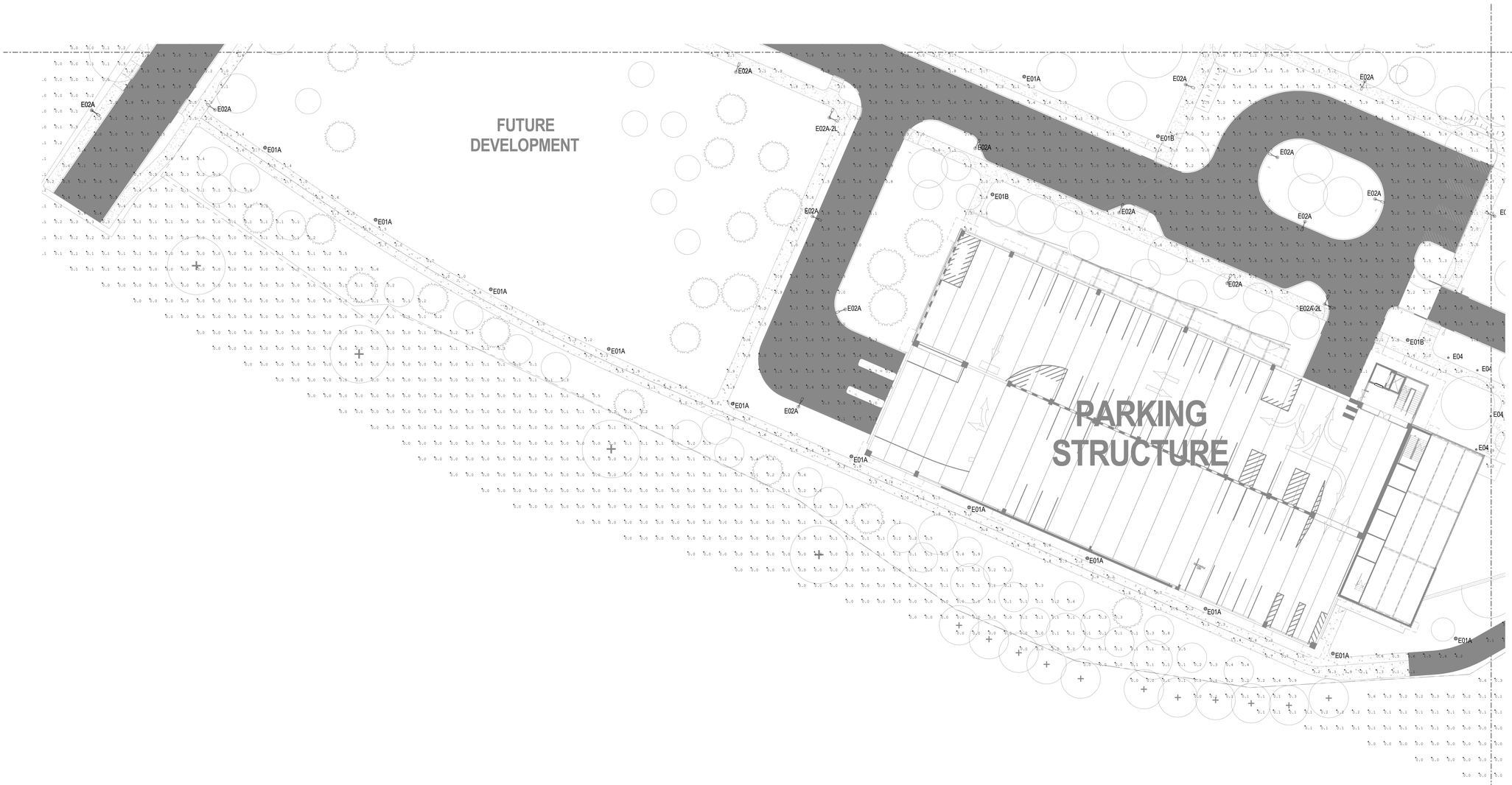
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Job #	2202
Project	THE ROUX INSTITUTE
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Scale	1" = 20'-0"

Drawing Title
SITE LIGHTING PHOTOMETRIC PLAN - PART C

E1.01C

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1 SITE LIGHTING PHOTOMETRIC PLAN - PART D
1" = 20'-0"

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COMMONWEALTH OF MASSACHUSETTS
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ELECTRICAL
No. 19459
REGISTERED PROFESSIONAL ENGINEER

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Job #	2202
Project	THE ROUX INSTITUTE
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Scale	1" = 20'-0"

Drawing Title
SITE LIGHTING PHOTOMETRIC PLAN - PART D

E1.01D

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Date: _____ Customer: _____
Project: _____
Type: _____ Qty: _____

selux

Saturn Cutoff LED



Order Code: _____ _____ _____ _____ _____ _____ _____ _____

Pole Order Code: Series Height Finish Options

SACL	Series	SACL Saturn Cutoff LED							
	Optics	R1 Type I	R2 Type II	R3 Type III	R3W Type III (White)	R4 Type IV	R5R Type V (Round)	R5S Type V (Square)	R5Q Type V (Rectangular)
	Mounting	1 Single	1A Single Arm Mount	2 Double	W Wall Mount				
	Light Engine	5G450 3500-4000lm	5G700 5200-6000lm	5G905 7000-7500lm					*Based on R1 distribution in 3000K CCT
	CCT	27' 2700K	30' 3000K	40 4000K					*Not available with DS. *DA Approved for other CCT, please consult factory.
	Power Cord Length	08 8 ft	10 10 ft	12 12 ft	14 14ft	16 16 ft	18 18 ft	XX XX	For 1 mounting per the pole. Specify the total mounting cost the pole height. A
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color		
	Voltage	UNV 120V - 277V	120 120V	240 240V	277 277V	347* 347V	480* 480V		*Equipped with step down transformer
	Options	DM* Dimming (0-10V)	HS* House Side Shield (360°)	HLS0.5* Motion Sensor Switching Low Output 50%	HLS01* Motion Sensor Switching Low Output 10%	DS Pendulight Finish	PCT* Photocell Twistlock	MS* Motion Sensor Fixture with Optional Photocell (See page 2 for order code)	*Open, L, R, and N only. *Only available in White, Bronze or Black. *120V, 240V or 277V only. *PCT is 4th only. Cannot be combined.

Product Modifications
Please list modification requirements for review by factory:

Approvals

Date:

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E01 SERIES

Date: _____ Customer: _____
Project: _____
Type: _____ Qty: _____

selux

Avanza 450



Order Code: _____ _____ _____ _____ _____ _____ _____ _____

Pole Order Code: Series Height Finish Options

	Series	AV4 Avanza 450							
	Optics	R3W Type III Distribution, Wide	R3N Type III Distribution, Narrow	R5 Type V Distribution					
	Mounting	5A* Single Pole Adapter	S1 Single Short Arm Mount	S2 Double Short Arm (180°)	L1 Single Long Arm Mount	L2 Double Long Arm Mount (180°)	L4* Quad Long Arm Mount	SW Short Arm Wall Mount	*Not available with P. *Not available with P.
	Tilt of Mounting	0°	5°						
	Light Engine	L700 5641/5,660lm	L105 7445/5,910lm						
	CCT	27' 2700K	30 3000K	35* 3500K	40 4000K	50* 5000K			*Consult factory. *DA approved with 2700K and 3000K CCT.
	Power Cord Length	12 12'	15 15'	18 18'	20 20'	25 25'	XX* XX		*Add length of arm and height of pole to determine power cord length.
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color		
	Voltage	UNV 120-277V	120* 120V	208 208V	240* 240V	277 277V	347* 347V	480* 480V	*Specify for PL option. *Equipped with step down transformer.
	Options	DM Dimming (0-10V)	HLS0.5*,** Motion Sensor Switching Low Output 50%	HLS01*,** Motion Sensor Switching Low Output 10%	TLR1* Twist Lock Receptacle with Shorting Cap	TLR3* Twist Lock Receptacle 3-Pin with Photocell	M5* Motion Sensor with Optional Photocell (See page 2 for order code)		*120V, 240V, 277V only. *HLS0.5 and HLS01 for PL only. Cannot be combined. TLRP or PE only. Cannot be combined. Not available with DM or DA mounting. **LEDS light engine only.

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E02 SERIES

Date: _____ Customer: _____
Project: _____
Type: _____ Qty: _____

selux

Olivio Media LED
Sisterna 2 Arm Mount



Order Code: #1 OLML _____ _____ _____ _____ _____ _____ _____
#2 OLML _____ _____ _____ _____ _____ _____ _____
#3 OLML _____ _____ _____ _____ _____ _____ _____
#4 OLML _____ _____ _____ _____ _____ _____ _____
Fixture # Series Optics Mounting Light Engine CCT Finish Voltage Options

Pole Order Code: Series Height Finish RN Round Pairs Options *Make to stock on page 4 for Round locations

	Series	OLML Olivio Media LED							
	Optics	S09 Spot, 9°	S20 Spot, 20°	F40 Flood medium, 40°	F80 Flood wide, 78°	ASM Asymmetric (not SLV or SLV option)			
	Mounting	5Ba Number of Arm Locations - Ba is number of luminaires per pole(s)							
	Light Engine	2035D 3500K	2052S 5000K	2070D 3500K	2010S 5000K				*Based on P80 distribution and 3000K CCT.
	CCT	27' 2700K	50' 5000K	35* 3500K	40 4000K	50* 5000K			*Dark Sky approved with 20s option only. *Consult Factory.
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color		
	Voltage	UNV 120-277V	120 120V	208 208V	240 240V	277 277V			
	Options	DS* Dark Sky (0-10v Option)	DM Dimming (0-10V)	SLH Spread Lens Horizontal (Fixed)	SLV Spread Lens Vertical (Fixed)	PC Photocell (consult factory)	HLS01* Motion Switching Low Output 10%	HX* Hexagonal Parapoints (consult factory)	CF Color Filter (consult factory)

* DA approved with (DS) option only. per IDSNA G115.
* Are available with 120, 240V, or 277V only. Cannot be combined. Not available with DM option.

Product Modifications
Please list modification requirements for review by factory:

Approvals

Date:

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E03

Date: _____ Customer: _____
Project: _____
Type: _____ Qty: _____

selux

Line Round Bollard



Order Code: LRB _____ _____ _____ _____ _____ _____ _____

LRB	Series	LRB Line Round Bollard							
	Nominal Overall Height	3 3'	3.5 3.5'	4 4'					*For other heights consult factory.
	Light Engine	501 Single 1 Cell 4W/350lm	503 Single 3 Cell 12W/990lm	506 Single 6 Cell 24W/1,470lm	DD1 Double 1 Cell (back to back 180°) 8W/660lm	DD3 Double 3 Cell (back to back 180°) 24W/1,980lm			*Based on 3000K CCT.
	CCT	27' 2700K	30 3000K	35* 3500K	40 4000K	50* 5000K			*Consult factory for lead time.
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color		
	Voltage	UNV 120-277V	120 120V	240 240V	277 277V	347* 347V	480* 480V		*Equipped with step down transformer. Wattage increases nominal 10%.
	Options	DM Dimming (0-10V)	REC* Receptacle with weatherproof cover	REC2* Receptacle with weatherproof padlockable in-use cover	REC3* Duplex Receptacle with weatherproof cover	REC4* USB & Duplex Receptacle with weatherproof padlockable in-use cover			*Not available with 3' height. See page 3 for details.

Product Modifications
Please list modification requirements for review by factory:

Approvals

Date:

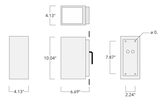
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E04

VLS410 LED
Surface Mounted Wall Luminaires
1/6

we-ef





Description
IP66, Class I, M37. Marine-grade, die-cast aluminum alloy. SCE superior corrosion protection including PCS hardware. Silicone QCDB Controlled Compression Gasket. Safety glass lens. Two cable entries. CAD-optimized optics for superior illumination and glare control. Integral driver. DLCB One LED Concept. Factory-installed LED circuit board. 0-10V Dimming comes standard with luminaire. Specify product with 7 Digit product code – Finish Color. Accessories, such as mounting, optical, and electrical, must be specified separately. Example: XXX-XXXX-9004 (Black) + XXX-XXXX (Accessory 1)

Specifications may change without prior notice, verify status at time of order, all rights reserved.

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Sales Support Hotline: +1 972 783 8949 | 410 D Keystone Drive | Warrendale PA 15086 U.S.A. | Tel +1 724 742 9330 | info.usa@we-ef.com | www.we-ef.com | 23-08-2023 18:18
Technical modifications and errors excepted

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E05

prescolite

LTR-4RD
LITEISTRY 4" ROUND DOWNLIGHT

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

LITEISTRY



FEATURES
- 4" architectural LED downlight delivering 600 – 4000 lm
- Five beam distributions from 0.3 to 1.2 Spacing Criteria
- Quiet reflector appearance with superior 90° optical cutoff
- 2700K – 5000K, 80+ and 90+ CRI options
- Available for New Construction (non-IC), IC and Chicago Plenum applications
- Variety of dimming protocol options including 0–10V, DALI, DMX, and Lutron EcoSystem
- NX Lighting Controls wired and wireless controls capability available

SERVICE PROGRAMS
STOCK QS

CONTROL TECHNOLOGY
NX LIGHTING CONTROLS

SPECIFICATIONS

CONSTRUCTION
- Standard Non-IC: Chicago Plenum and IC options
- Painted black durable steel platform with pre-installed bar hangers
- Pre-wired junction box with snap-on covers for easy access
- Snap-in connection from driver compartment allows easy installation
- Light Engine connections use plenum rated (CMP) cable

OPTICS
- Visually pleasing 50° cutoff to source and source image
- The light distribution is free of distracting hot spots, scallops, pixelation and the perimeter has a smooth gradation
- Optical grade silicone lens integral to light engine
- High purity spun aluminum reflector, self-flanged
- Flush Mount flange option with mud-in ring available
- Large selection of anodized finishes and colors
- Painted cones and flange options available

ELECTRICAL
- Chip-on-board LED with 2 SDCM
- Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at >55,000 hours (TM-21)
- Universal voltage 120V–277V driver, 347V optional
- UL Class 2, inherent short circuit and overload protection
- Flicker free 0-10V dimming with 1% or <1% performance
- DALI, DMX, and Lutron EcoSystem options
- Integral and remote emergency controller and battery pack options available
- NX or Lutron Vive control options available
- Refer to additional spec sheets for information on SpectraSync™, Tunable White or Dim-to-Warm solutions

INSTALLATION
- Accommodates ceiling thickness up to 2" (See DIMENSIONS section for details)
- Universal adjustable mounting brackets also accept 0.5" EMT conduit or 1.5" or 0.75" lathing channel (by others) or Prescolite accessory bar hangers (BZA or BB)
- Light Engine/Driver fully serviceable from above or below the ceiling

CERTIFICATIONS
- cCSAus certified to UL 1598
- Suitable for wet locations, covered ceiling. EMI EMR: Suitable for damp locations.
- ENERGY STAR certified models available (For list and additional information, visit http://www.energystar.gov).
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy America/Construction Materials under Trade Agreements effective 6/6/2020.

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	600-4000
Wattage Range	8-52
Efficacy Range (LPW)	90-99*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	65-433 (120V)

*Based on Spectrum, 3W, 80 CRI

currentlighting.com/prescolite
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E06 SERIES

ECOSENSE®

RISE®

OVERVIEW • SPECIFICATIONS • ORDERING

INTERIOR • EXTERIOR | **FOBO SINGLE ROUND**

DATE | PROJECT | FIRM | TYPE

RISE IS A SYSTEM OF BEAUTIFULLY DESIGNED OUTDOOR RATED LUMINAIRES THAT PROVIDE EFFICIENT AND POWERFUL LIGHT USING THE LATEST IN LED TECHNOLOGY. RISE FOBO SINGLE IS A POWERFUL AND COMPACT LED LIGHT FIXTURE, DELIVERING UP TO 1170 LUMENS, THAT CAN BE USED IN SPOT, ACCENT, LANDSCAPE AND FLOODLIGHT APPLICATIONS. ITS UNIQUE MACRO™ LOCK FEATURE ALLOWS FOR FULL 180 DEGREE TILT AND 360 DEGREE PAN AIMABILITY USING ONLY ONE TWIST.



FEATURES :
- POWERFUL CBCP
- EXTREMELY COMPACT
- POWERFUL OUTPUT UP TO 1170 LUMENS
- MACRO™ LOCK - 180° TILT AND 360° PAN
- 12 UNIQUE BEAM ANGLES
- MULTIVOLT (100 V-277 V)
- 4 CCTs 2200K THROUGH 6500K
- 80+ AND 90+ CRI
- DIMMABLE TO 5%
- IP66 RATED

FIXTURE MODEL	FIXTURE CONFIG.	POWER/ LUMEN OUTPUT*	CCT/ COLOR	CRI	BEAM ANGLE	FINISHES	ACCESSORIES	WIRING AND MOUNTING
FOBO	W - Single Round	LO - Low Output MO - Medium Output HO - High Output	22 - 2200K 25 - 2500K 27 - 2700K 30 - 3000K 35 - 3500K 40 - 4000K 50 - 5000K 65 - 6500K 80 - 80+ 90 - Green BL - Blue AM - Amber *2200K and 2500K not available in 40', 60° and 70° and 90°	8 - 80 9 - 90* X - For RO, GR, BL, AM *90 CRI not available in 2200K, 2500K, 5000K, and 6500K	05 - Laser Spot (5°) 10 - Very Narrow Spot (10°) 15 - Narrow Spot (15°) 20 - Spot (20°) 40 - Flood (40°) 60 - Medium Flood (60°) 70 - Wide Flood (70°) 90 - Very Wide Flood (90°) E2 - Elliptical 2 (30°x55°) E3 - Elliptical 3 (50°x75°) E4 - Elliptical 4 (60°x90°)	K - Black Z - Bronze S - Silver W - White C - Custom *Provide RAL #	X - No Accessory H - Half Snoot F - Full Snoot Will ship as if Full Snoot was ordered	A - 19" Flying Leads - Internal Cable IG Bottom Exit, 1/2" NPT, UL/cUL Listed B* - 10' External Cable Side Exit, Surface Mount, UL Listed C* - 10' External Cable Side Exit, Surface Mount, UL Listed D* - 10' External Cable Bottom Exit, Surface Mount - 1/2" NPT, UL Listed *Will ship as if Full Snoot was ordered

EXAMPLE: FOBO-W-LO-22-8-05-S-X-A
*SEE PHOTOMETRY CHART FOR LUMEN DATA

PERFORMANCE

WATTS	POWER	LUMEN OUTPUT 5°	40°	EFFICACY 5°	40°	CBCP 5°	40°
4	Low Output	309	429	76	107	21,991	705
7.5	Medium Output	531	761	71	101	37,824	1,251
11.5	High Output	744	1,120	65	99	53,048	1,874

ALL LUMEN DATA IS FROM 4000K BOOK FIXTURES. PLEASE SEE PHOTOMETRY SPEC SHEET FOR ADDITIONAL LUMEN DATA.

COLOR RENDERING INDEX	80+, 90+				
COLOR CONSISTENCY	3-STEP MACADAM ELLIPSE				
LUMEN DEPRECIATION	WATTS	L70 @ 25C	L70 @ 50C	L90 @ 25C	L90 @ 50C
	LOW	>60,500*	>60,500*	>60,500*	>60,500*
		>109,000**	>109,000**	>109,000**	>109,000**
	MEDIUM	>60,500*	>60,500*	>60,500*	>60,500*
		>109,000**	>109,000**	>109,000**	>109,000**
	HIGH	>60,500*	>36,300*	>60,500*	>33,200*
		>181,000**		>169,800**	

* ENERGY STAR REPORTED TESTING HOURS TO DATE. CALCULATIONS FOR LED FIXTURES ARE BASED ON MEASUREMENTS THAT COMPLY WITH IES LM-80 TESTING PROCEDURES AND IES TM-21 CALCULATOR
** ESTIMATED HOURS

NOTE: Information on this Spec Sheet is subject to change, please visit ecosenselighting.com/downloads/ies for the most updated information.

ECOSENSE LIGHTING INC.
837 NORTH SPRING STREET
SUITE 103
LOS ANGELES, CA 90012

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855.6.ECOSEN

ECOSENSE LIGHTING PRODUCT NOTICE
THE ECOSENSE LIGHTING PRODUCTS DESCRIBED IN THIS DOCUMENT ARE SUBJECT TO ECOSENSE LIGHTING'S STANDARD TERMS AND CONDITIONS OF SALE, INCLUDING, BUT NOT LIMITED TO, ECOSENSE LIGHTING'S LIMITED WARRANTY. FOR A COPY OF ECOSENSE LIGHTING'S STANDARD TERMS AND CONDITIONS OF SALE, INCLUDING ECOSENSE LIGHTING'S LIMITED WARRANTY, PLEASE REFER TO WWW.ECOSENSELIGHTING.COM/LEGAL. "ECOSENSE", "RISE", "MACRO" AND "MACRO LOCK" ARE TRADEMARKS OF ECOSENSE LIGHTING INC.

E07

Date: _____ Customer: _____
Project: _____
Type: _____ Qty: _____

selux

Line Black Round Column



Order Code: LBRC _____ _____ _____ _____ _____ _____ _____

LBRC	Series	LBRC Line Black Round Column							
	Height	10 10'	12 12'	14 14'	16 16'	18 18'			*Overall height includes the light engine. Please consult factory for complete dimensions.
	Optics	AS Asymmetric	AM Asymmetric Medium	AW Asymmetric Wide					
	Light Engine	503 Single 3 Cell 12W/740lm	506 Single 6 Cell 24W/1,470lm	S12 Single 12 Cell 48W/2,970lm	DD3 Double 3 cell (staggered 180°) 24W/1,480lm	DD6 Double 6 cell (staggered 180°) 48W/2,958lm	DD12 Double 12 cell (staggered 180°) 96W/5,940lm		*For mixing of optics/light engines, please consult factory. *Consult factory for lead time. *Based on 3000K CCT and AM optics.
	CCT	27'* 2700K	30* 3000K	35* 3500K	40 4000K	50* 5000K			*Consult factory for lead time.
	Finish	WH White	BK Black	BL Semi-Matte Black	BZ Bronze	SV Silver	SP Specify Premium Color		
	Voltage	UNV 120-277V	120 120V	240 240V	277 277V	347* 347V	480* 480V		*Equipped with step down transformer. Wattage increases nominal 10%.
	Options	REC* GFCI receptacle with weatherproof cover	REC2* GFCI receptacle with weatherproof padlockable in-use cover	REC3* USB & Duplex Receptacle with weatherproof cover	REC4* USB & Duplex Receptacle with weatherproof padlockable in-use cover	DM* Dimming, 0-10V	TLR1 Twist Lock Receptacle 1-Pin with Shorting Cap	TLRP1 Twist Lock Receptacle 3-Pin with Photocell	*See page 3 for details. *DA, CB, SJM, or WG only – cannot be combined. *Not available on 50' or 10'. available with Single Light Engine (S-14) and Double Light Engine (all 'D')
		MS*,** Motion Sensor Fixture (Only 24' mounting height) (see page 3 for order code)	BC Bare Cover for roof mounted buried base	BBXX Bare Base, Unpainted (XX=Color) See page 4)	CF Comfort Dimming (Shields LEDs)				*Equipped with step down transformer. **Not available with 3' height. See page 3 for details.

Product Modifications
Please list modification requirements for review by factory:

Approvals

Date:

Selux Corporation © 2023, T 845-434-1400, 800-735-8927, F 845-834-1401, www.selux.us
In a continuing effort to offer the best product possible, we reserve the right to change, without notice, specifications or materials that in our opinion will not alter the function of the product. Specification sheets found at www.selux.us are the most recent versions and supersede all other printed or electronic versions.

E08

LUMENPOD® 16 Another Luminaria® Component for Life Safety and Light

PROJECT NAME: _____
REP AGENCY: _____
APPROX. LINEAR FT: _____
SERVICE OPTIONS: ☐ Field Measure ☐ Job Site Support ☐ System Installation

SCAN OR CODE for electrical information, downloads and instructions.

PART NUMBER BUILDER

LULF40K700	LULF			
EXAMPLE	FIXTURE TYPE	COLOR TEMP	OPTIC	DRIVE CURRENT
* Indicates stock, other options may require additional lead time.	LULF - Luminaria® 16	*27K 2700 K *30K 3000 K *40K 4000 K *50K 5000 K	BLU Blue GRN Green RED Red AMB Amber	16 16" beam 23 23" beam 40 40° beam *90 90° beam

Extended MLOQ/MOV version requires 2WU kit*

ELECTRICAL SPECIFICATIONS

24VDC	ETL LISTED WET, IK10, IP67, CE	0-10V INPUT	-40°F TO +120°F
INPUT VOLTAGE	CERTIFICATIONS	DIMMING	OPERATING TEMP
CLASS 2 REQUIRED	5 YEARS	UP TO 11b LM/W LED	80+ / 8'
DRIVER	WARRANTY	EFFICIENCY	CRI / WIRE LENGTH

CONSTRUCTION



This Luminaria®'s threaded stainless steel body designes heat directly into the mounting material. A machined in-solder position is it nearly flush with any diameter hole in foil, as well as flat or severe stock.

PHOTOMETRICS



Adjustments: Photometrics can be fine tuned on fabricated systems by rotating the fixture around the rail clockwise. A 25° angle provides a superb illumination results in most applications. IES reports to view or download are available by scanning the QR code or visiting our website.

LUMENGEAR™ LED DRIVER & NEMA ENCLOSURE OPTIONS

Wagner offers multiple ETL listed options for both 24VDC power supplies and NEMA enclosures. Quantities and types will be configured based on your specifications and design. Additional specifications options are available by request. Not all options apply to all products, please verify compatability with the factory.

CLASS II DRIVERS:
- STD 100W
- Dali, DMX, 0-10V Dimming Protocols
- Multiple Wattages
- Made in USA Units Available

NEMA ENCLOSURES:
4X - Polycarbonate, Painted Steel or Stainless Steel

LUMENPOST™:
Integrated 100W, 0-10V DIM

@wagnercompanies
WAGNER 888-243-6094 lf.info@wagner.com 1300D West Brown Deer Road // Milwaukee, WI 53224, USA.
Wagner Companies Logo
LULF SUBM RS

E09

WALA STATIC WHITE
Flexible Fixtures - Q-CAP

Declare.



- Flexible micro-fixture with 9" wide bend radius
- Fully encapsulated flexible linear LED fixture
- Perfect for interior and exterior applications
- Optional seamless connection eliminates light gap

1 PRODUCT	2 MOUNTING	3 RATED	4 CCT	5 WATTAGE	6 LENS	7 WIRE INPUT/ OUTPUT	8 CONNECTOR WIRE IN	9 CONNECTOR WIRE OUT	10 END CAPS	11 LENGTH (IN)	12 EXACT OPTIONS
WALA-SW											

Sample Part Number: WALA-SW-WSC-DRY-30-4.0-ENC/FL-P1-BW-BW-NA-NF-E

1 PRODUCT
- WALA-SW

2 MOUNTING
- PPD-C PVC Clip
- PPD-M PVC Channel
- PPD-LP-C PVC Low Profile Custom Length
- PPD-LP-2 PVC Low Profile 2.0in
- PPD-LP-P PVC Low Profile Channel Custom Length
- WSC-* Wire Suspension Cable (Specify Length)
- WSC-** Wire Snap Clip

White snap clip only for tested cove use, not intended for hanging fixtures in open air.
*FS mounting clip recommended for seamless applications.

3 RATED
- DRY IP20
- WET IP67

4 CCT
- 24 2400K
- 27 2700K
- 30 3000K
- 35 3500K
- 40 4000K

5 WATTAGE
- 1.0 1.0W/ft
- 2.0 2.0W/ft3
- 4.0 4.0W/ft (Max)
- 5.0 5.0W/ft (HO)
- HO = High Output
- *For 1.0W/ft, 2.0W/ft, 4.0W/ft only.

6 LENS
- ENC/FL Encapsulated in Clear
- ENC/OP Encapsulated in Opal (Translucent)
- For optical lenses at 20° and 60°, see Accessories. Not factory installed on full reel supply.

7 WIRE INPUT/OUTPUT
- S1 Single 1 Input only - Exit Front
- S2 Single 2 Input only - Exit Front
- S3 Single 3 Input only - Seamless Feed
- P1 Pass Through 1 Input/Output - Exit Front
- P2 Pass Through 2 Input/Output - Exit Front
- P3 Pass Through 3 Input/Output - Seamless Feed

8 CONNECTOR/WIRE IN
- BW Bare Wire (Standard 24")
- BWL Bare Wire (Long 48")
- CONN Connector-F
- CONN2 Connector-2M

Connector/Wire In not needed to specify product. Typical available in BW. Connector/Wire In only needed if specifying CONN or CONN2. Connector/Wire In not available with WSC. Wire Suspension Cable. Connector/Wire In not needed to specify pass through or feed. Connector/Wire In not available with 1.0W/ft or 2.0W/ft. Maximum custom length is 144" (12ft). Minimum custom length is 6" (0.5ft).

9 CONNECTOR/WIRE OUT
- N/A Closed End (No Feed)
- BW Bare Wire (Standard 24")
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10 END CAPS

Single	EL Clear
	BK White
Pass Through	N/A Not Applicable

11 LENGTH (IN)
Fixture length min 12", max 196". Consult factory for lengths under 12". Available in 1" increments.

12 EXACT OPTIMAL
- O Optimal Illumination
- E Even Illumination

Optimal Illumination: Spacing Criterion Equal to or Greater than Mounting Height. Even Illumination: Spacing Criterion Equal to Half of Mounting Height.

Field modifications are not covered under Q-Tran warranty | 5 year warranty | Side Bend | Date quoted to change, all data has +/- 5% tolerance | PPS/FT and PPS-LF/FT is to be cut at Q-Tran to requested length | Not field cuttable

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Specification subject to change. Rev 09.09.20

E10

ECOSENSE®

RISE®

OVERVIEW • SPECIFICATIONS • ORDERING

INTERIOR • EXTERIOR | **FOBO SINGLE ROUND**

DATE | PROJECT | FIRM | TYPE

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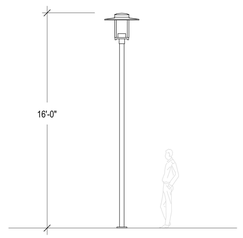
EXAMPLE: FOBO-W-LO-22-8-05-S-X-A
*SEE PHOTOMETRY CHART FOR LUMEN DATA

PERFORMANCE

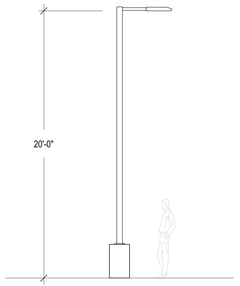
WATTS	POWER	LUMEN OUTPUT 5°	40°	EFFICACY 5°	40°	CBCP 5°	40°
4	Low Output	309	429	76	107	21,991	705
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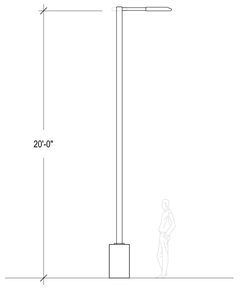
COLOR RENDERING INDEX	80+, 90+				
COLOR CONSISTENCY	3-STEP MACADAM ELLIPSE				
LUMEN DEPRECIATION	WATTS	L70 @ 25C	L70 @ 50C	L90 @ 25C	L90 @ 50C
	LOW	>60,500*	>60,500*	>60,500*	>60,500*
		>109,000**	>109,000**	>109,000**	>109,000**
	MEDIUM	>60,500*	>60,500*	>60,500*	>60,500*
		>109,000**	>109,000**	>109,000**	>109,000**
	HIGH	>60,500*	>36,300*	>60,500*	>33,200*



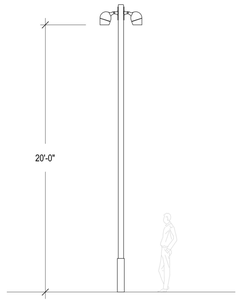
E01 SERIES POLE MOUNTED LUMINAIRES
SCALE: 1/4" = 1'-0"



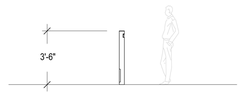
E02 SERIES POLE MOUNTED LUMINAIRES
SCALE: 1/4" = 1'-0"



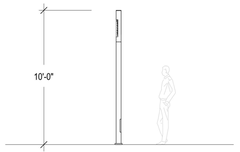
E02A-2L POLE MOUNTED LUMINAIRE
SCALE: 1/4" = 1'-0"



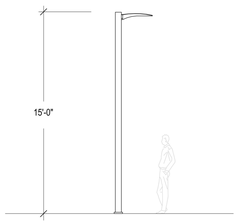
E03-2 POLE MOUNTED LUMINAIRE
SCALE: 1/4" = 1'-0"



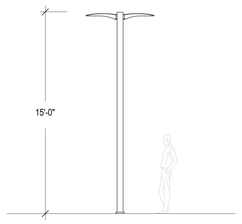
E04 BOLLARD LUMINAIRE
SCALE: 1/4" = 1'-0"



E08 POLE MOUNTED LUMINAIRE
SCALE: 1/4" = 1'-0"



P01 SERIES POLE MOUNTED LUMINAIRES
SCALE: 1/4" = 1'-0"



P01A-2 POLE MOUNTED LUMINAIRE
SCALE: 1/4" = 1'-0"

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

KeyPlan

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

ARUP
Arup US Inc
60 State Street
Boston MA 02109
617.864.2987
www.arup.com

SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ANTHONY WESTBURY
No. 35405
REGISTERED PROFESSIONAL ENGINEER
10.27.2023

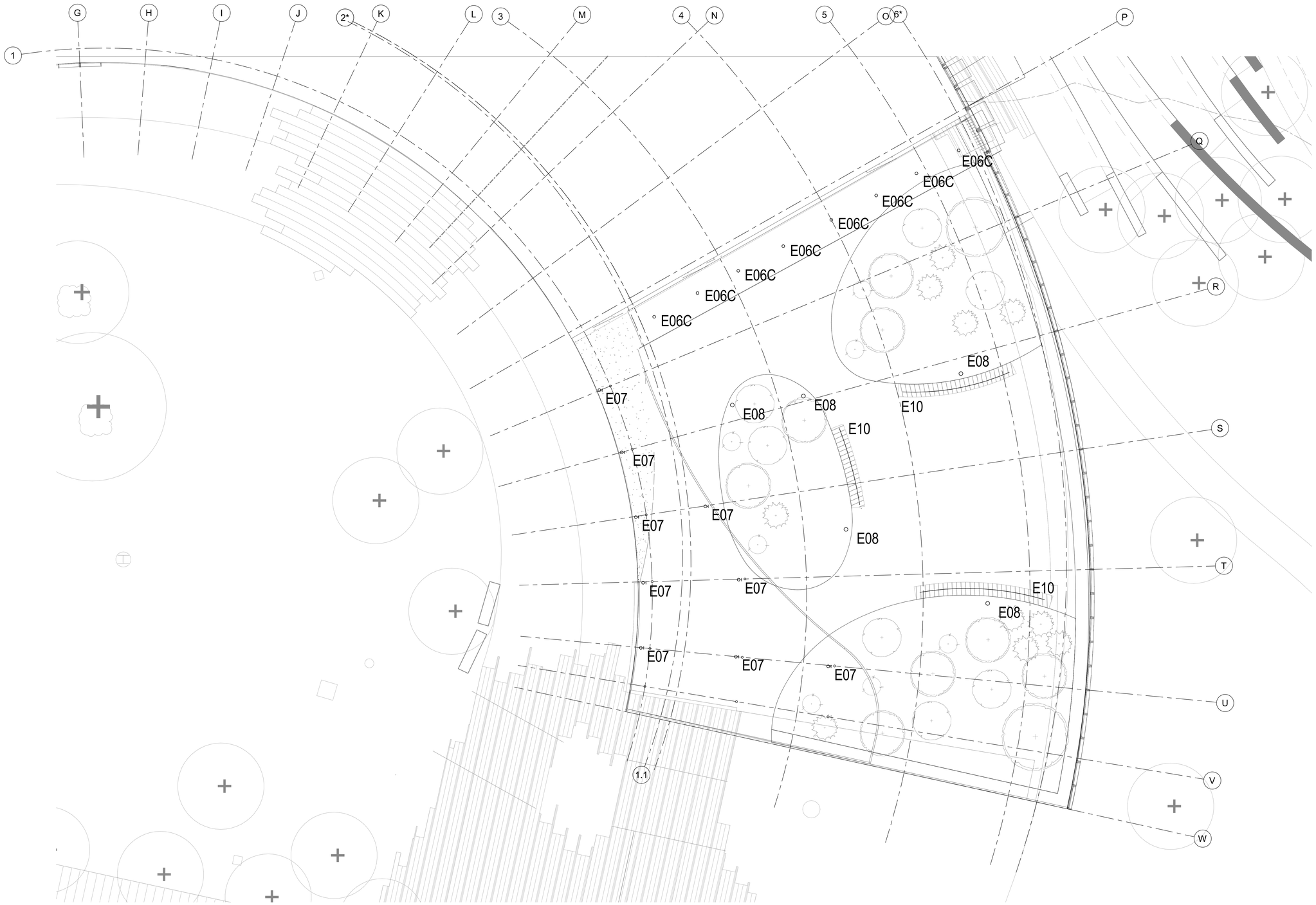
Stamps

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS Checked JW
Date	27 OCTOBER 2023
Scale	1/4" = 1'-0"

Drawing Title
SITE LIGHTING SCHEDULES AND DETAILS SHEET 2

E1.03

10/27/2023 2:21:04 PM



1 SITE LIGHTING - LEVEL 3 TERRACE
1/8" = 1'-0"

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

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KeyPlan

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SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ARTBURY
ELECTRICAL
No. 58455
REGISTERED PROFESSIONAL ENGINEER

10.27.2023

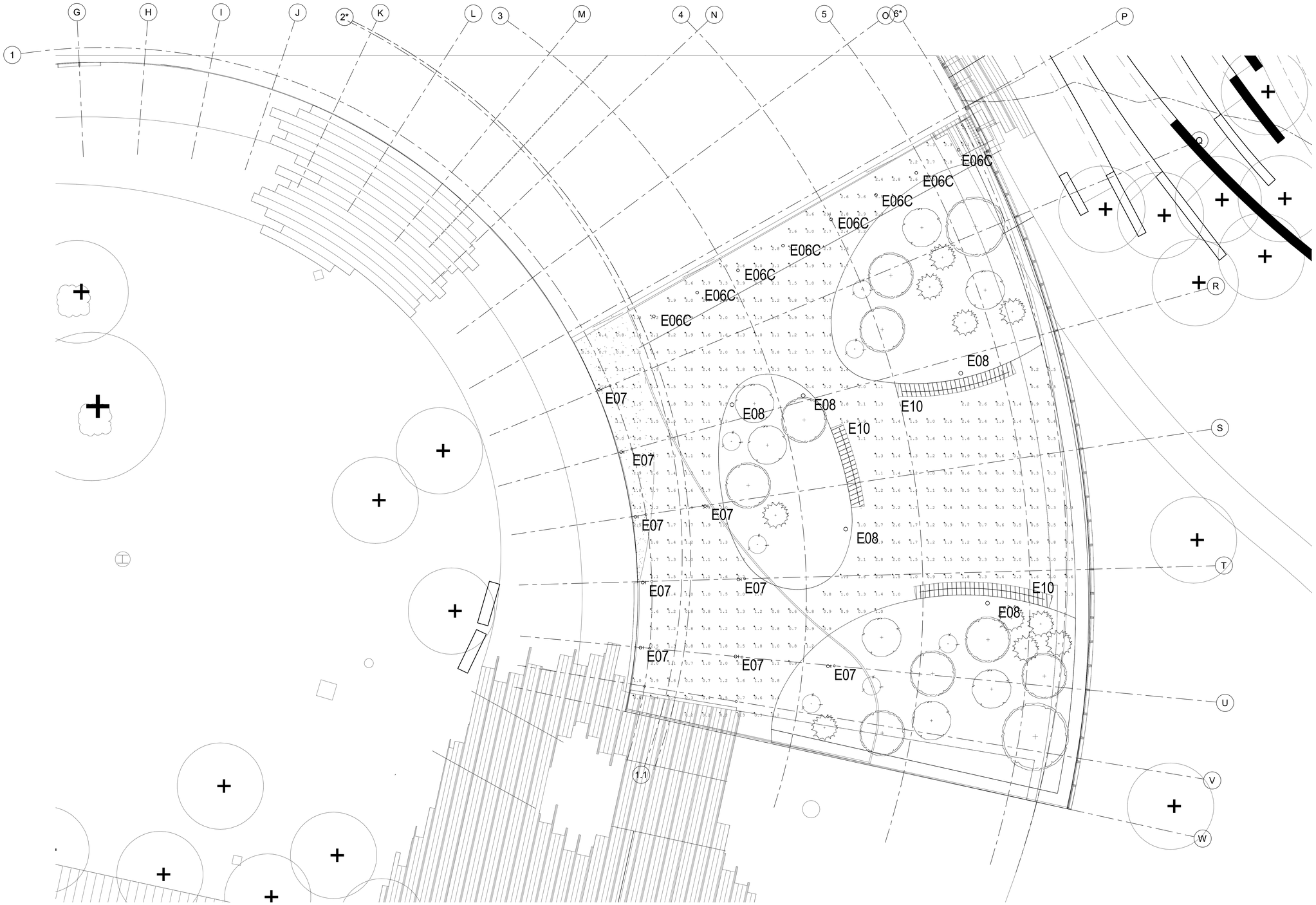
Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS
Checked	JW
Date	27 OCTOBER 2023
Scale	1/8" = 1'-0"

Drawing Title
SITE LIGHTING - LEVEL 3 TERRACE

E1.04

10/27/2023 2:21:34 PM



The City of Portland Technical Manual - Section 12 - Site Lighting (Adopted 3/26/19; Rev. 12/8/20)

12.1. PURPOSE
The intent of this design is to promote and protect public health, safety and general welfare, and encourage the preservation of the natural nighttime outdoor environment. Specifically, the intent of this design is to limit light trespass, glare and light pollution to safeguard adequate safety, night vision, and comfort of the neighboring properties.

12.3. GENERAL STANDARDS
Outdoor lighting standards listed below apply to the Level 3 Terrace Lighting
• Uniformity: 20:1
• Illumination levels: Min 0.2 (fc), Max 5.0 (fc), Ave 1.25 (fc)
• No fixture shall exceed 20,000 lumens (± 3%).
- Path lighting: 1,500 lumens Maximum Lumens allowed will apply to E08.
- Building Entrance: 3,500 lumens Maximum Lumens allowed will apply to E06C
• Light Trespass: The maximum illumination level at a property line shall not exceed 0.1 (fc)
• Full Cut-off Fixtures and Shielding Required. All the lighting fixtures selected are full cutoff and the uplight component of the BUG rating is U0.
Please note that the E08 is Night Sky friendly with minimum uplight component and U1 rating. The E10
linear tape light fixtures are installed aimed at the ground and integrated into an architectural detail, to eliminate the possibility of uplight. E07 is installed below the trellis structure aimed down.
• Fixture Height:
- All the light poles and bollards respect the height provision (Light sources on Poles at or below 20ft)

Projected hours of use: From 11pm or close of business until 6am general site illuminance levels will be dimmed. All landscape accent lighting fixtures shall automatically turn off from midnight to 6am.

Luminaire Schedule
Scene: Flood Light Scheme

Tag	Qty	Label	Description	Luminaire Lumens	LLD	LDD	UDF	LLF	Luminaire Watts	Arrangement Watts	BUG Rating	Mounting Height
E06C	8	Prescolite LTR	LTR-4RD-H-SL06L-DMTW_LTR-4RD-T-SL2230TD9XWS	571	0.800	0.900	1.000	0.720	10	10	B1-U0-G0	11.454
E07	9	Ecosense WF 11W	F080-1R-HO-30-9-90-X-X-X	708	0.900	0.800	1.000	0.720	11.5	11.5	B1-U1-G0	9, 11, 12, 13.6
E08	5	Linea Black Selux S06 Asymmetric Wide 24W	LRBC-XX-AW-S06-30-XX-UNV	1479	0.900	0.950	1.000	0.855	24	24	B0-U1-G1	10
E10	1	Q-tran Wala 1W-ft	WALA-SW-WSC-DRY-30-SO-ENC-TL_1	39	0.800	0.900	1.000	0.720	1.01	1.01	B0-U1-G0	2

Calculation Summary
Scene: Flood Light Scheme

Label	Units	Avg	Max	Min	Avg/Min	Max/Min
Floor_Planar	Fc	1.46	3.3	0.2	7.30	16.50

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute

KeyPlan

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

ARUP
Arup US Inc
60 State Street
Boston MA 02109
617.864.2987
www.arup.com

SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ASTBURY
ELECTRICAL
No. 45458
REGISTERED PROFESSIONAL ENGINEER

10.27.2023

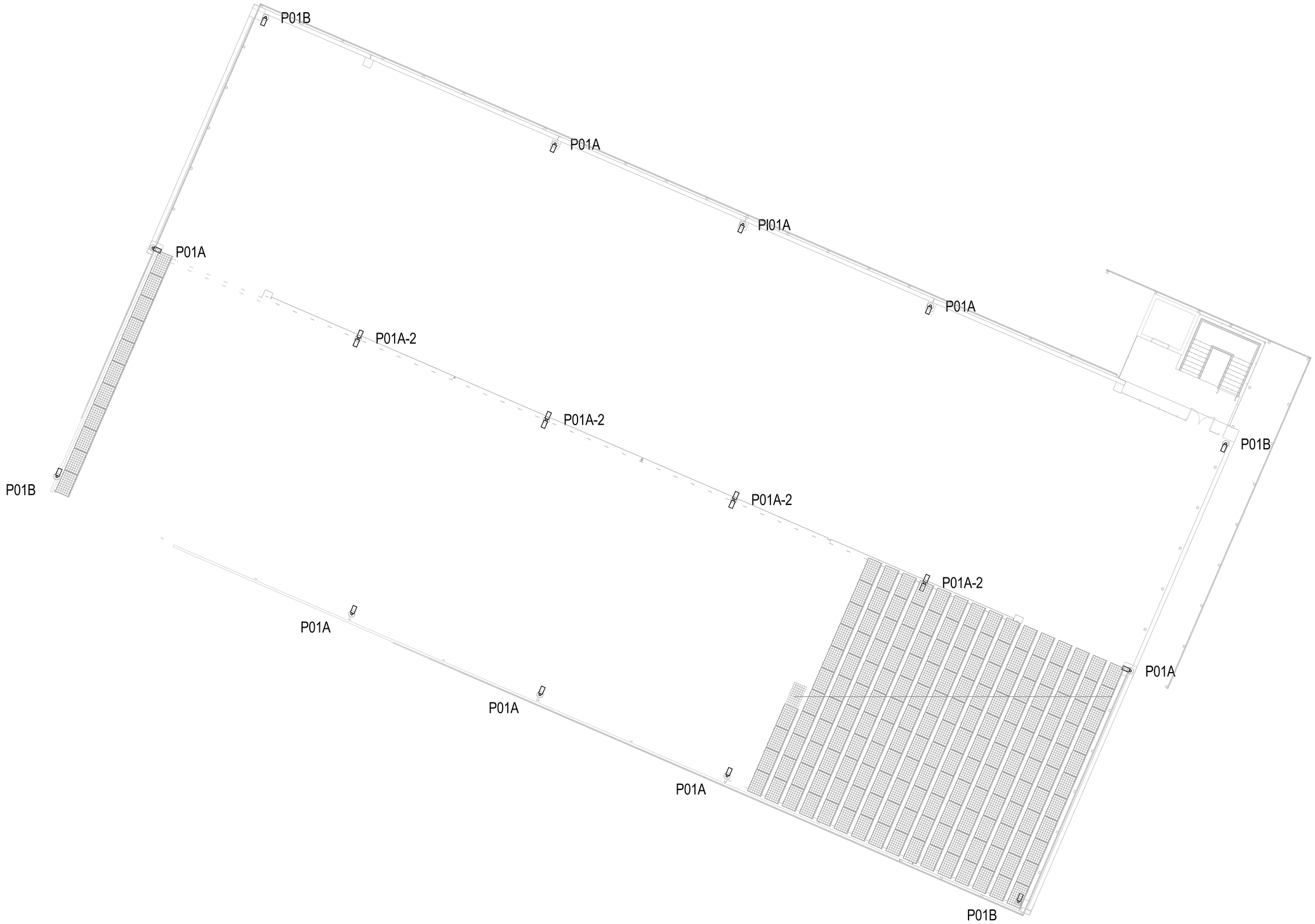
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Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS
Checked	JW
Date	27 OCTOBER 2023
Scale	1/8"=1'-0"

Drawing Title
SITE LIGHTING - LEVEL 3 TERRACE PHOTOMETRIC PLAN

E1.05

10/27/2023 2:21:52 PM



1 SITE LIGHTING - PARKING GARAGE TOP LEVEL
1/8" = 1'-0"

IDEALS
Initiative for Digital Engineering and Life Sciences
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LVX VERITAS VIRTVS
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SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ASTBURY
ELECTRICAL
No. 19459
REGISTERED PROFESSIONAL ENGINEER

10.27.2023

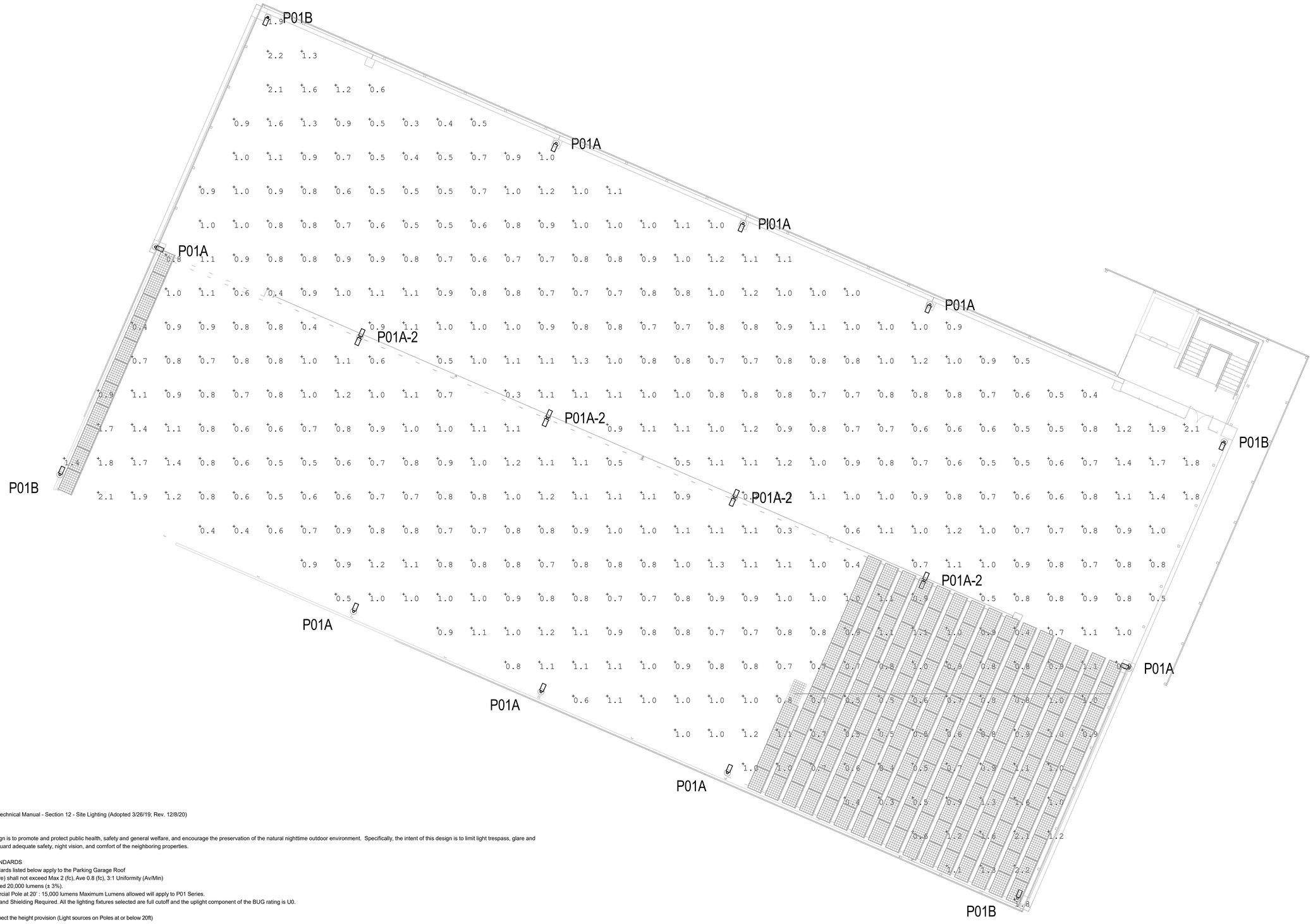
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Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS
Checked	JW
Date	27 OCTOBER 2023
Scale	1/8" = 1'-0"

Drawing Title
SITE LIGHTING - PARKING GARAGE TOP LEVEL

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The City of Portland Technical Manual - Section 12 - Site Lighting (Adopted 3/26/19; Rev. 12/8/20)

12.1. PURPOSE
The intent of this design is to promote and protect public health, safety and general welfare, and encourage the preservation of the natural nighttime outdoor environment. Specifically, the intent of this design is to limit light trespass, glare and light pollution to safeguard adequate safety, night vision, and comfort of the neighboring properties.

12.3. GENERAL STANDARDS
Outdoor lighting standards listed below apply to the Parking Garage Roof
• Parking Lot (Structure) shall not exceed Max 2 (fc), Ave 0.8 (fc), 3:1 Uniformity (Av/Min)
• No fixture shall exceed 20,000 lumens (± 3%).
- Residential/ Commercial Pole at 20' : 15,000 lumens Maximum Lumens allowed will apply to P01 Series.
• Full Cut-off Fixtures and Shielding Required. All the lighting fixtures selected are full cutoff and the uplight component of the BUG rating is U0.
• Fixture Height:
- All the light poles respect the height provision (Light sources on Poles at or below 20ft)

Projected hours of use: From 11pm or close of business until 6am general site illuminance levels will be dimmed. All landscape accent lighting fixtures shall automatically turn off from midnight to 6am.

Luminaire Schedule

Tag	Qty	Label	Description	Luminaire Lumens	LLD	LDD	UDF	LLF	Luminaire Watts	Arrangement Watts	BUG Rating	Mounting Height
P01A	8	D-Series Size 0 BLC4 EGS	DSX0 LED P1 30K 80CRI BLC4 EGS-F	1610	0.900	0.900	1.000	0.810	33.21	33.21	B0-U0-G1	75
P01A-2	4	D-Series BLC4 EGS DH	DSX0 LED P1 30K 80CRI BLC4 EGS-F	1610	0.900	0.900	1.000	0.810	33.21	66.42	B0-U0-G1	75
P01B	4	D-Series Size 0 LCCO EGS_2	DSX0 LED P1 30K 80CRI LCCO EGS-F	1844	0.900	0.900	1.000	0.810	33.21	33.21	B0-U0-G0	75

Calculation Summary

Label	Units	Avg	Max	Min	Avg/Min	Max/Min
Parking Structure_Top	Fc	0.90	2.2	0.3	3.00	7.33

1 SITE LIGHTING - PARKING GARAGE TOP LEVEL
1/8" = 1'-0"

IDEALS
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Roux Campus

The Roux Institute

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ARUP
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SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ASTBURY
ELECTRICAL
No. 19459
REGISTERED PROFESSIONAL ENGINEER
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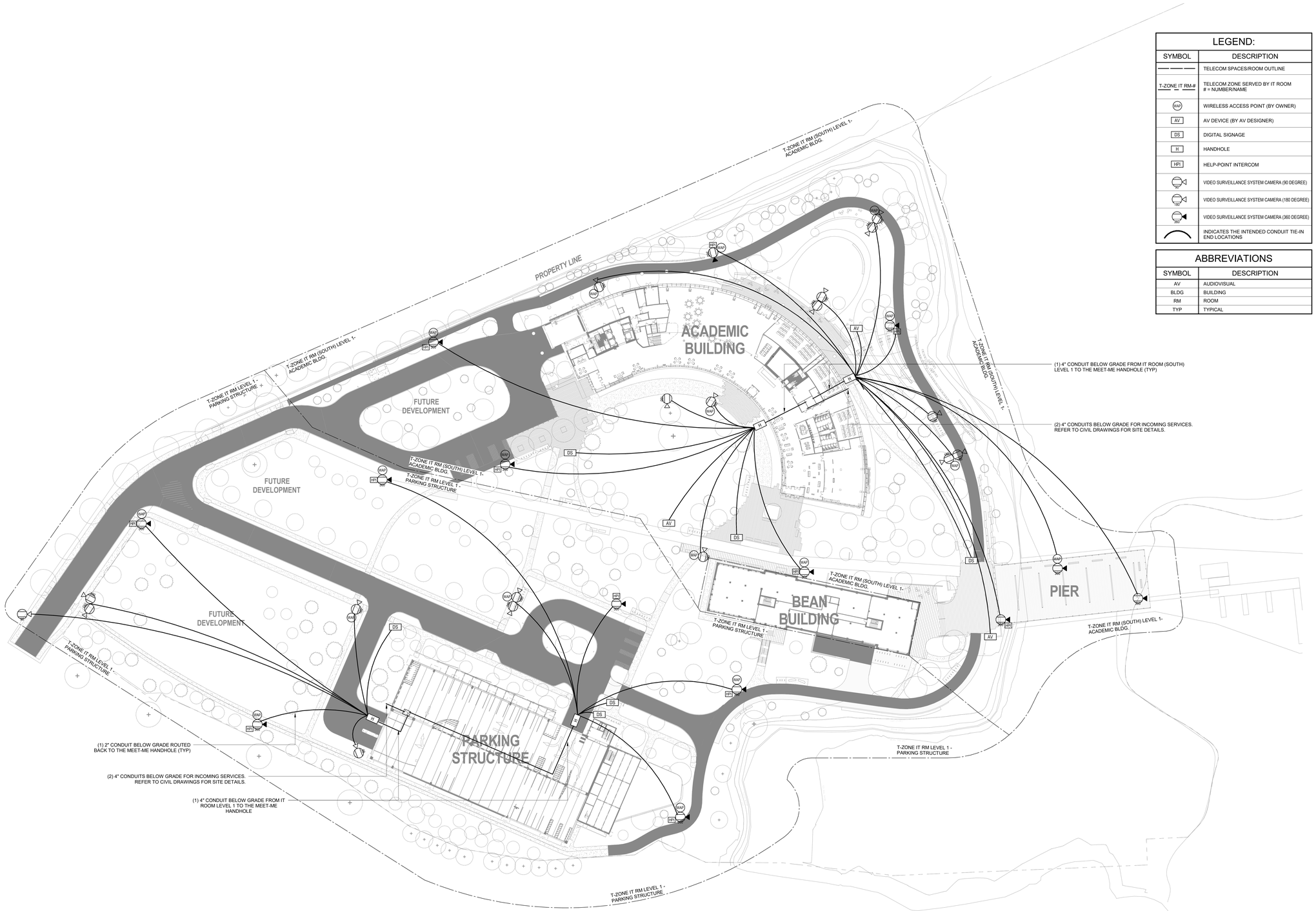
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Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	CS
Checked	JW
Date	27 OCTOBER 2023
Scale	1/8"=1'-0"

Drawing Title
SITE PHOTOMETRIC PLAN - PARKING GARAGE TOP LEVEL

E1.07

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LEGEND:	
SYMBOL	DESCRIPTION
	TELECOM SPACES/ROOM OUTLINE
T-ZONE IT RM-#	TELECOM ZONE SERVED BY IT ROOM # = NUMBER/NAME
WAP	WIRELESS ACCESS POINT (BY OWNER)
AV	AV DEVICE (BY AV DESIGNER)
DS	DIGITAL SIGNAGE
H	HANDHOLE
HPI	HELP-POINT INTERCOM
90°	VIDEO SURVEILLANCE SYSTEM CAMERA (90 DEGREE)
180°	VIDEO SURVEILLANCE SYSTEM CAMERA (180 DEGREE)
360°	VIDEO SURVEILLANCE SYSTEM CAMERA (360 DEGREE)
	INDICATES THE INTENDED CONDUIT TIE-IN END LOCATIONS

ABBREVIATIONS	
SYMBOL	DESCRIPTION
AV	AUDIOVISUAL
BLDG	BUILDING
RM	ROOM
TYP	TYPICAL

NOTES:

1. REFER TO SECURITY DRAWINGS FOR SECURITY SYMBOL LEGEND DETAILS.
2. ALL EXTERIOR DEVICES SHOWN ON PLAN SHALL BE MOUNTED ON LIGHT POLES (BY OTHERS) UNLESS COLOCATED WITH HELP-POINT INTERCOM.
3. BACKBONE AND INCOMING SERVICE PATHWAY DUCT BANKS ARE TO BE CONCRETE ENCASED, 4" PVC MATERIAL, USE MAXCELL FLEXIBLE FABRIC INNERDUCT SYSTEM EQUIPPED WITH PULL CORD.
4. HORIZONTAL DEVICE PATHWAYS ARE TO BE DIRECT BURIED CONDUITS OF UP TO 2" AS REQUIRED.
5. MINIMUM DEPTH FROM TOP OF THE CONDUIT MUST BE BURIED AT LEAST 24" BELOW THE GROUND SURFACE/FINISHED GRADE. IN AREAS WHERE FROST CONDITIONS COULD DAMAGE CABLES IN CONDUITS, AS A MINIMUM, THE DEPTH SHOULD BE BASED ON 50-YEAR FROST LINE.
6. THE MINIMUM BEND RADIUS FOR A CONDUIT THAT IS 2" OR LESS IN DIAMETER SHALL BE 6 TIMES THE INTERNAL CONDUIT DIAMETER. IF THE CONDUIT IS LARGER THAN 2" THE BEND RADIUS SHALL BE 10 TIMES THE INTERNAL DIAMETER OF THE CONDUIT.
7. PROVIDE A HANDHOLE IN CONDUIT RUNS SUCH THAT:
   A. MAXIMUM CONTINUOUS CONDUIT RUN SHALL NOT EXCEED 600FT
   B. NO MORE THAN TWO 90 DEGREE BENDS EXIST IN A CONTINUOUS CONDUIT RUN
   C. AT LEAST ONE HANDHOLE PER REVERSE (U-SHAPED) BEND IN CONDUIT RUN
   D. IT IS LOCATED IN THE STRAIGHT SECTION OF A CONDUIT AND NOT IN LIEU OF A BEND
   E. SIZE THE HANDHOLE ACCORDINGLY AND PER TIA STANDARDS
8. CONDUIT ENTRY INTO THE HANDHOLE SHALL BE SUCH THAT THE CONDUITS END ON OPPOSIDE ENDS OF THE HANDHOLE AND AT THE SAME ELEVATION, AND NOT ON THE SIDEWALLS

IDEALS
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SITE PLAN SUBMISSION

Number	Revision	Date

COMMONWEALTH OF MASSACHUSETTS
JULIAN ASTBURY
ELECTRICAL
No. 45455
REGISTERED PROFESSIONAL ENGINEER
10.27.2023

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Job #	2102
Project	THE ROUX INSTITUTE
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Date	27 OCTOBER 2023
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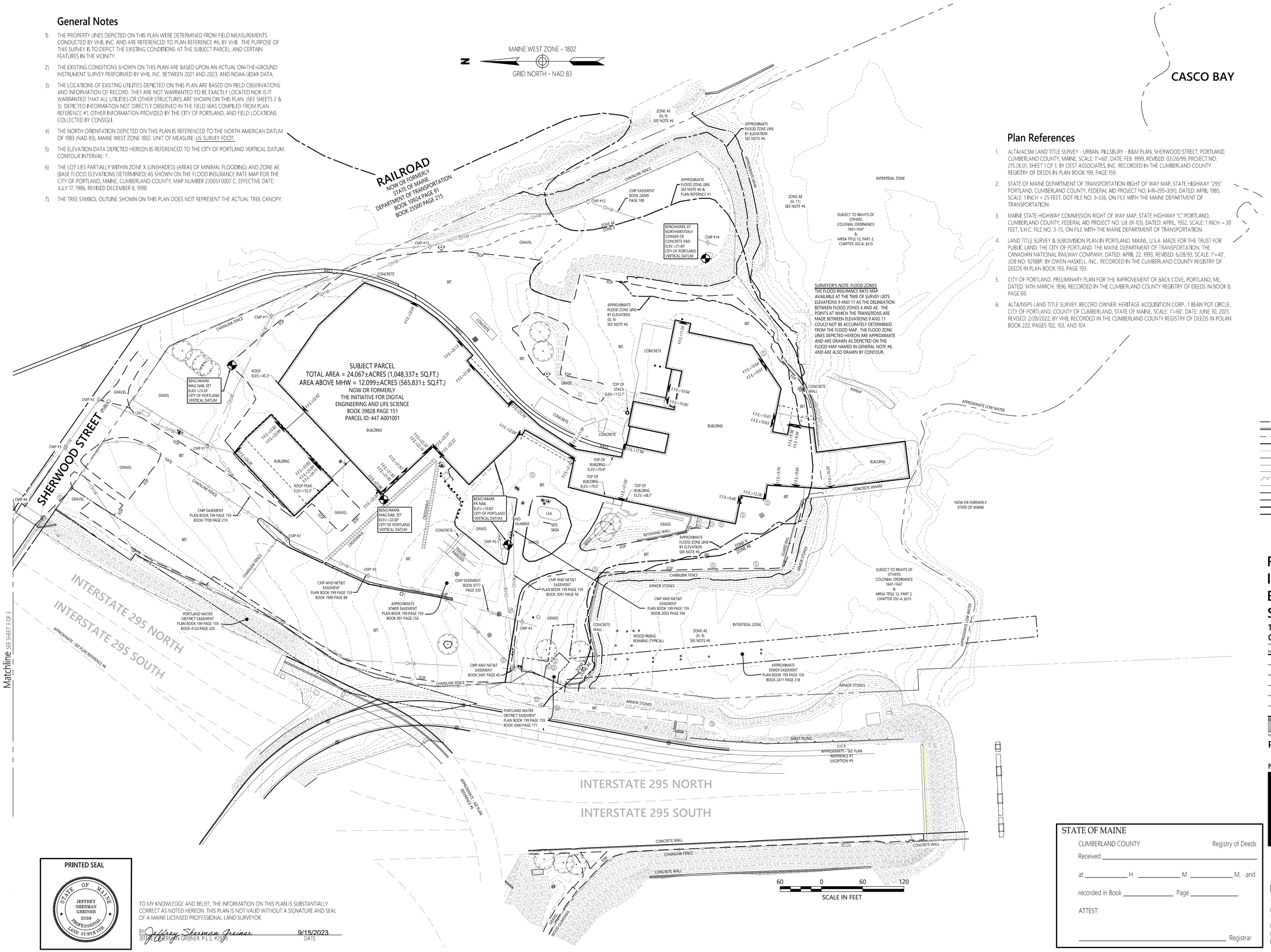
Drawing Title
TELECOM SITE PLAN

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General Notes

1) THE PROPERTY LINES DEPICTED ON THIS PLAN WERE DETERMINED FROM FIELD MEASUREMENTS CONDUCTED BY VHB, INC. AND ARE REFERENCED TO PLAN REFERENCE #6, BY VHB. THE PURPOSE OF THIS SURVEY IS TO DEPICT THE EXISTING CONDITIONS AT THE SUBJECT PARCEL, AND CERTAIN FEATURES IN THE VICINITY.
2) THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE BASED UPON AN ACTUAL ON-THE-GROUND INSTRUMENT SURVEY PERFORMED BY VHB, INC. BETWEEN 2021 AND 2023, AND NOAA LIDAR DATA.
3) THE LOCATIONS OF EXISTING UTILITIES DEPICTED ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN. (SEE SHEETS 2 & 3) DEPICTED INFORMATION NOT DIRECTLY OBSERVED IN THE FIELD WAS COMPILED FROM PLAN REFERENCE #1, OTHER INFORMATION PROVIDED BY THE CITY OF PORTLAND, AND FIELD LOCATIONS COLLECTED BY CONSIGLI.
4) THE NORTH ORIENTATION DEPICTED ON THIS PLAN IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), MAINE WEST ZONE 1802. UNIT OF MEASURE: US SURVEY FOOT.
5) THE ELEVATION DATA DEPICTED HEREON IS REFERENCED TO THE CITY OF PORTLAND VERTICAL DATUM. CONTOUR INTERVAL: 1'.
6) THE LOT LIES PARTIALLY WITHIN ZONE X (UNSHADED) (AREAS OF MINIMAL FLOODING) AND ZONE AE (BASE FLOOD ELEVATIONS DETERMINED) AS SHOWN ON THE FLOOD INSURANCE RATE MAP FOR THE CITY OF PORTLAND, MAINE, CUMBERLAND COUNTY, MAP NUMBER 230051 0007 C, EFFECTIVE DATE: JULY 17, 1986, REVISED DECEMBER 8, 1998.
7) THE TREE SYMBOL OUTLINE SHOWN ON THIS PLAN DOES NOT REPRESENT THE ACTUAL TREE CANOPY.



Plan References

1. ALTA/ACSM LAND TITLE SURVEY - URBAN, PILLSBURY - B&M PLAN, SHERWOOD STREET, PORTLAND, CUMBERLAND COUNTY, MAINE, SCALE: 1"=60', DATE: FEB. 1999, REVISED: 02/26/99, PROJECT NO. 215.26.01, SHEET 1 OF 1, BY OEST ASSOCIATES, INC. RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 199, PAGE 159.
2. STATE OF MAINE DEPARTMENT OF TRANSPORTATION RIGHT OF WAY MAP, STATE HIGHWAY "295" PORTLAND, CUMBERLAND COUNTY, FEDERAL AID PROJECT NO. I-IR-295-3(91), DATED: APRIL 1985, SCALE: 1 INCH = 25 FEET, DOT FILE NO. 3-336, ON FILE WITH THE MAINE DEPARTMENT OF TRANSPORTATION.
3. MAINE STATE HIGHWAY COMMISSION RIGHT OF WAY MAP, STATE HIGHWAY "C" PORTLAND, CUMBERLAND COUNTY, FEDERAL AID PROJECT NO. U.I. 01-1(3), DATED: APRIL, 1952, SCALE: 1 INCH = 30 FEET, S.H.C. FILE NO. 3-75, ON FILE WITH THE MAINE DEPARTMENT OF TRANSPORTATION.
4. LAND TITLE SURVEY & SUBDIVISION PLAN IN PORTLAND, MAINE, U.S.A. MADE FOR THE TRUST FOR PUBLIC LAND, THE CITY OF PORTLAND, THE MAINE DEPARTMENT OF TRANSPORTATION, THE CANADIAN NATIONAL RAILWAY COMPANY, DATED: APRIL 22, 1993, REVISED: 6/28/93, SCALE: 1"=40', JOB NO. 92188P, BY OWEN HASKELL, INC., RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 193, PAGE 193.
5. CITY OF PORTLAND, PRELIMINARY PLAN FOR THE IMPROVEMENT OF BACK COVE, PORTLAND, ME, DATED: 14TH MARCH, 1896, RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 8, PAGE 69.
6. ALTA/NSPS LAND TITLE SURVEY, RECORD OWNER: HERITAGE ACQUISITION CORP., 1 BEAN POT CIRCLE, CITY OF PORTLAND, COUNTY OF CUMBERLAND, STATE OF MAINE, SCALE: 1"=60', DATE: JUNE 30, 2021, REVISED: 2/28/2022, BY VHB, RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN POLAN BOOK 222, PAGES 102, 103, AND 104.

Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HH□ HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- BOLLARD w/LIGHT
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- F.F.E.=45.27' FINISHED FLOOR ELEVATION
- BIT. BITUMINOUS
- LSA LANDSCAPED AREA
- FOP EDGE OF PAVEMENT
- CURB
- GRAVEL
- STREETLINE
- HIGHWAY LINE
- PROPERTY LINE
- GUARD RAIL
- CHAIN LINK FENCE
- TREELINE
- OHW OVERHEAD WIRE
- SEWER EASEMENT
- WATER EASEMENT
- FLOOD ZONE
- FLOOD CONTOUR

vhb.com
vhb
500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150

Record Owner: The Initiative for Digital Engineering and Life Science
1 Bean Pot Circle, City of Portland
County of Cumberland, State of Maine

No.	Revision	Date	Appvd.

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Issued for: **Permitting** — Date: **Sept. 15, 2023**

Not Issued For Construction

Drawing Title: **Existing Conditions Survey**

Drawing Number: **Sv-1**

Sheet 1 of 3

Project Number: **58570.00**

Record Owner
THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCE
100 COMMERCIAL STREET
PORTLAND, MAINE
PARCEL ID: 447 A001001
BOOK 39828 PAGE 151

PRINTED SEAL
STATE OF MAINE
JEFFREY SHERMAN GREINER
2539
PROFESSIONAL LAND SURVEYOR

TO MY KNOWLEDGE AND BELIEF, THE INFORMATION ON THIS PLAN IS SUBSTANTIALLY CORRECT AS NOTED HEREON. THIS PLAN IS NOT VALID WITHOUT A SIGNATURE AND SEAL OF A MAINE LICENSED PROFESSIONAL LAND SURVEYOR.

BY Jeffrey Sherman Greiner 9/15/2023
JEFFREY SHERMAN GREINER, P.L.S. #2539 DATE

STATE OF MAINE
CUMBERLAND COUNTY Registry of Deeds
Received _____
at _____ H _____ M _____ M, and
recorded in Book _____ Page _____
ATTEST:
_____ Registrar

Saved: Friday, September 15, 2023 3:07:40 PM JGREINER Plotted: Friday, September 15, 2023 3:36:22 PM Jeffrey Greiner

N

MAINE WEST ZONE - 1802

GRID NORTH - NAD 83

General Notes

SEE SHEET 1 OF 3

Utility Notes

1) THE PURPOSE OF THIS PLAN IS TO COMPILE UTILITY LOCATIONS FROM VARIOUS SOURCES.
2) THE LOCATIONS OF EXISTING UTILITIES DEPICTED ON THIS PLAN ARE BASED ON FIELD OBSERVATIONS AND INFORMATION OF RECORD. THEY ARE NOT WARRANTED TO BE EXACTLY LOCATED NOR IS IT WARRANTED THAT ALL UTILITIES OR OTHER STRUCTURES ARE SHOWN ON THIS PLAN. DEPICTED INFORMATION NOT DIRECTLY OBSERVED IN THE FIELD WAS COMPILED FROM PLAN REFERENCE #1, OTHER INFORMATION PROVIDED BY THE CITY OF PORTLAND, AND FIELD LOCATIONS COLLECTED BY CONSIGLI.
3) THE NORTH ORIENTATION DEPICTED ON THIS PLAN IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD 83), MAINE WEST ZONE 1802; UNIT OF MEASURE: US SURVEY FOOT.
4) THE ELEVATION DATA DEPICTED HEREON IS REFERENCED TO THE CITY OF PORTLAND VERTICAL DATUM. CONTOUR INTERVAL: 1'.

CASCO BAY

RAILROAD

SHERWOOD STREET (PUBLIC)

INTERSTATE 295 NORTH

INTERSTATE 295 SOUTH

CMP #2

CMP #3

CMP #4

CMP #5.1

CMP #10

CMP #11

CMP #12

CMP #13

CMP #14

RECORD SEWER LOCATION

TOP OF FRAME = 27.86'
INV A = 12.1' (18" *)
INV B = 16.8' (8" PVC)
INV C = 12.6' (12" *)
INV D = 12.1' (18" *)
(* PIPE MATERIAL NOT VISIBLE)

TOP OF FRAME = 17.82'
COVER NOT REMOVEABLE AT TIME OF SURVEY

APPROXIMATE SEE GENERAL NOTE #3

TOP OF FRAME = 14.92'
TOP OF PIPE = 11.3' (6" CAST?)
TOP OF SILT = 10.9'±
OTHER FEATURES NOT VISIBLE

TOP OF FRAME = 15.02'
INV = 11.4' (18" CMP)
TOP OF SILT = 10.4'±

TOP OF FRAME = 15.47'
FU = 7.0' (10" CLAY)

TOP OF FRAME = 14.65'

TOP OF FRAME = 11.33'
INV A = 6.19' (12" RCP)
INV B = 5.77' (18" RCP)
INV C = 5.71' (12" RCP)
INV D = 6.05' (15" CMP)

TOP OF FRAME = 15.52'
INV A = 4.80' (18" RCP)
INV B = 10.99' (15" CMP)
INV C = 4.48' (24" CMP)
INV D = 6.08' (12" RCP)

RECORD DRAINAGE LOCATION

TOP OF FRAME = 14.75'
INV A = 4.1' (*)
TOP OF WATER = -6.2'
(* PIPE SIZE & TYPE NOT OBSERVABLE)

FRAME DISLODGED FROM VAULT
TOP OF FRAME & INVERTS NOT MEASUREABLE

CONNECTION COULD NOT BE DETERMINED AT THE TIME OF SURVEY

RECORD SEWER LOCATION

TOP OF FRAME = 17.60'
FULL OF WATER
FEATURES NOT VISIBLE

APPROXIMATE RECORD WATERLINE LOCATION

12" WATER LINE

WATERLINE LOCATION BY CONSIGLI

APPROXIMATE RECORD WATERLINE LOCATION

12" WATER LINE

ASSUMED CONNECTION

TOP OF FRAME = 10.34'
INACCESSIBLE AT TIME OF SURVEY

TOP OF FRAME = 8.25'
INV A = 3.2' (8" PVC)
INV B = 3.4' (12" PVC)
INV C = 3.0 (8" PVC)

TOP OF FRAME = 9.63'
INV A = 4.1' (10" PVC)
INV B = 4.1' (10" PVC)
INV C = 3.8' (12" PVC)

TOP OF FRAME = 9.55'
INV A = 6.4' (6" PVC)
INV B = 6.4' (6" PVC)
SUMP = 3.4'

TOP OF FRAME = 9.3'
INV A = 4.4' (12" PVC)
INV B = 4.8' (6" PVC)
INV C = 4.7' (8" PVC)
INV D = 4.8' (6" PVC)

TOP OF FRAME = 9.30'
FU = 5.7' (6" PVC)

10" PVC

COOLING WATER OUTFALL

TOP OF FRAME = 9.12'
INV = 5.7' (12" PVC)

GAS LINE MARKED IN FIELD

TOP OF FRAME = 8.84'
INV A = 3.3' (12" PVC)
INV B = 5.0' (12" PVC)
INV C = 2.8 (12" PVC)

12" PVC

12" PVC

TOP OF FRAME = 8.41'
FU = 3.8' (12" PVC)

ASSUMED CONNECTION

12" PVC
INV = 1.5'

TOP OF FRAME = 8.71'
FU = 3.2' (12" PVC)

10" PVC
INV = 0.8'
CONNECTION COULD NOT BE DETERMINED AT THE TIME OF SURVEY

TOP OF FRAME = 15.00'
INACCESSIBLE AT TIME OF SURVEY

32" DIAMETER SMH
TOP OF FRAME = 11.15'
FU = 1.3' (12" PVC)

32" DIAMETER SMH
TOP OF FRAME = 11.20'
FU = -0.4' (12" PVC)

TOP OF FRAME = 11.13'
INV A = -0.9' (30" CMP)
INV B = -1.0 (30" CMP)

GAS GATE

30" CMP

28" CMP
INV = 3.6'

18" CMP

18" CMP
INV = 4.1'

18" CMP
INV = 4.3'

18" CMP
INV = 4.0'

TOP OF FRAME = 7.97'

TOP OF FRAME = 23.93'
INV A = 14.32" (18" RCP)
INV B = 14.47' (15" RCP)
INV C = 14.33" (18" RCP)

18" CONC
INV = 19.5'

18" CONC
INV = 7.9'

ASSUMED CONNECTION

60 0 60 120
SCALE IN FEET

Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HH HAND HOLE
- WATER GATE
- FIRE HYDRANT
- GAS GATE
- BOLLARD w/LIGHT
- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- OHW OVERHEAD WIRES
- SANITARY LINE
- W RECORD WATER LINE
- DRAINAGE
- G GAS LINE
- UNDERGROUND ELECTRIC
- W CONSIGLI WATER LINE
- E CONSIGLI ELECTRIC LINE
- S CONSIGLI SANITARY LINE

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JEFFREY SHERMAN GREINER
2539
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9/15/2023

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1 Bean Pot Circle, City of Portland
County of Cumberland, State of Maine

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Date
Sept. 15, 2023

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Drawing Title
Existing Conditions Survey Utilities

Drawing Number
Sv-2

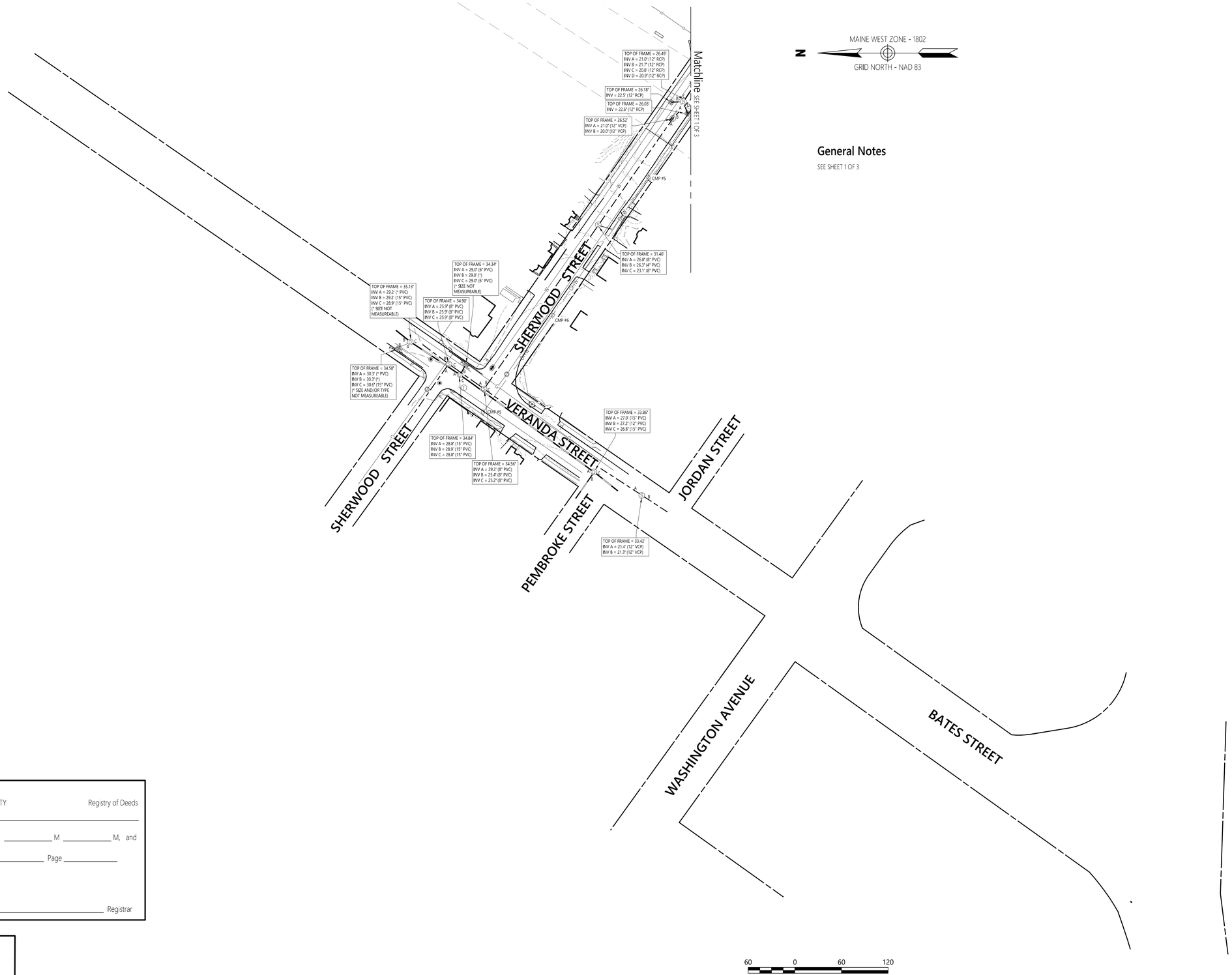
Sheet 2 of 3

Project Number
58570.00

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THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCE
100 COMMERCIAL STREET
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PARCEL ID: 447 A001001
BOOK 39828 PAGE 151

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N

MAINE WEST ZONE - 1802

GRID NORTH - NAD 83

60 0 60 120

SCALE IN FEET

General Notes

SEE SHEET 1 OF 3

Legend

- DRAIN MANHOLE
- CATCH BASIN
- SEWER MANHOLE
- ELECTRIC MANHOLE
- TELEPHONE MANHOLE
- MANHOLE
- HAND HOLE
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- STREET SIGN
- LIGHT POLE
- UTILITY POLE
- GUY POLE
- GUY WIRE
- CURB
- GRAVEL
- STREETLINE
- HIGHWAY LINE
- PROPERTY LINE
- GUARD RAIL
- CHAIN LINK FENCE
- TREELINE
- OVERHEAD WIRE
- SEWER EASEMENT
- WATER EASEMENT
- SANITARY LINE
- WATER LINE
- DRAINAGE
- GAS LINE
- UNDERGROUND ELECTRIC

STATE OF MAINE

CUMBERLAND COUNTY Registry of Deeds

Received _____

at _____ H _____ M _____ M, and

recorded in Book _____ Page _____

ATTEST:

_____ Registrar

PRINTED SEAL

STATE OF MAINE
JEFFREY SHERMAN GREINER
2509
PROFESSIONAL LAND SURVEYOR

Jeffrey Sherman Greiner

9/15/2023

vhb.com

vhb

500 Southborough Drive
Suite 105B
South Portland, ME 04106
207.889.3150

Record Owner: The Initiative for Digital Engineering and Life Science

1 Bean Pot Circle, City of Portland
County of Cumberland, State of Maine

No.	Revision	Date	Appvd.

Designed by | Checked by

Issued for: Permitting

Date: Sept. 15, 2023

Not Issued For Construction

Drawing Title:
Existing Conditions Survey Off-Site Utilities

Drawing Number: **Sv-3**

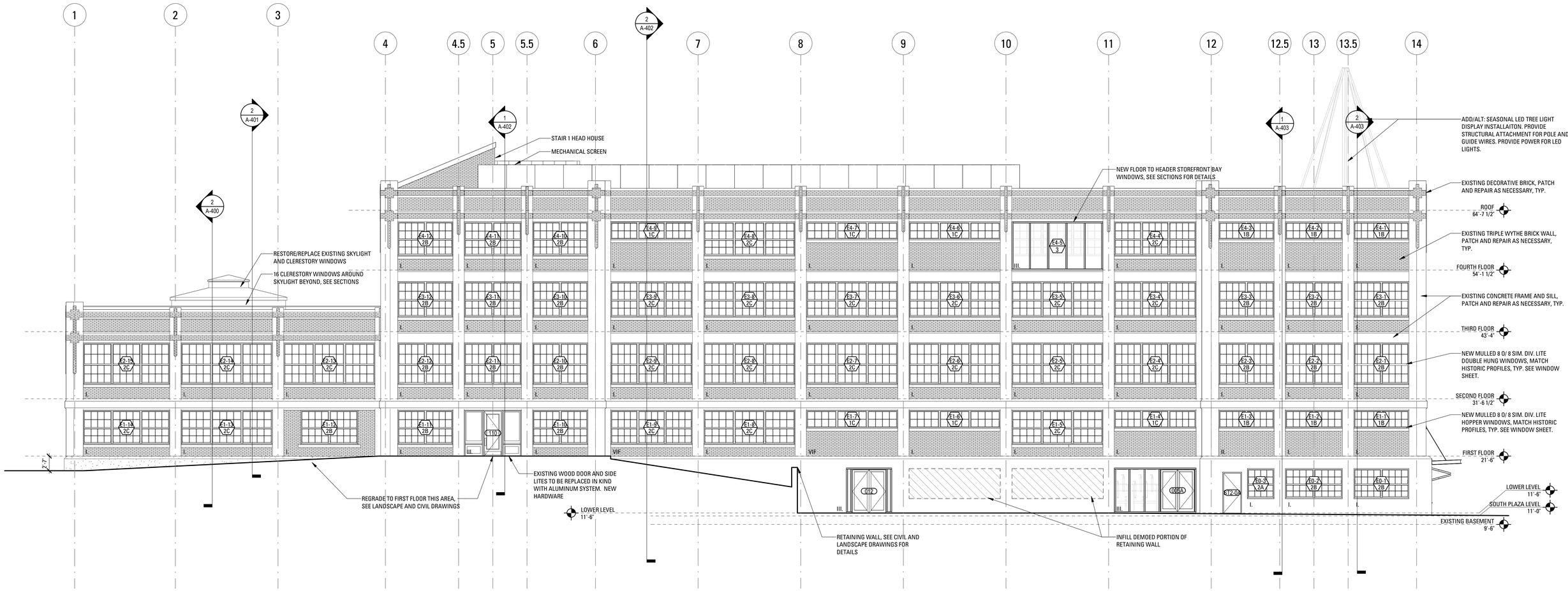
Sheet 3 of 3

Project Number: **58570.00**

Record Owner

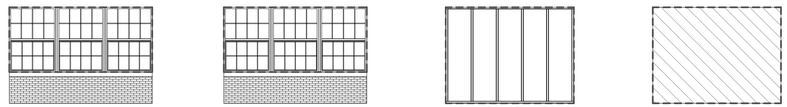
THE INITIATIVE FOR DIGITAL ENGINEERING AND LIFE SCIENCE
100 COMMERCIAL STREET
PORTLAND, MAINE
PARCEL ID: 447 A001001
BOOK 39828 PAGE 151

Saved: Friday, September 15, 2023 3:07:40 PM JGREINER Plotted: Friday, September 15, 2023 3:39:11 PM Jeffrey Greiner



1 WEST ELEVATION
1/8" = 1'-0"

INFILL TYPOLOGIES LEGEND



TYPE I.
NEW MULTI-PANE WINDOW IN EXISTING OPENING, MINOR REPAIRS TO INFILL

TYPE II.
NEW HISTORIC STYLE WINDOW, NEW CONCRETE SILL, NEW MASONRY INFILL

TYPE III.
NEW STOREFRONT WINDOWS FILLING OPENING

TYPE IV.
CONCRETE INFILL AT DEMOED PORTIONS OF FOUNDATION WALL

PROJECT NORTH
TRUE NORTH

REGISTERED ARCHITECT
JOHN PAPPAS
ARC4420
STATE OF MAINE

Roux Institute Bean Building
Project # 22.031

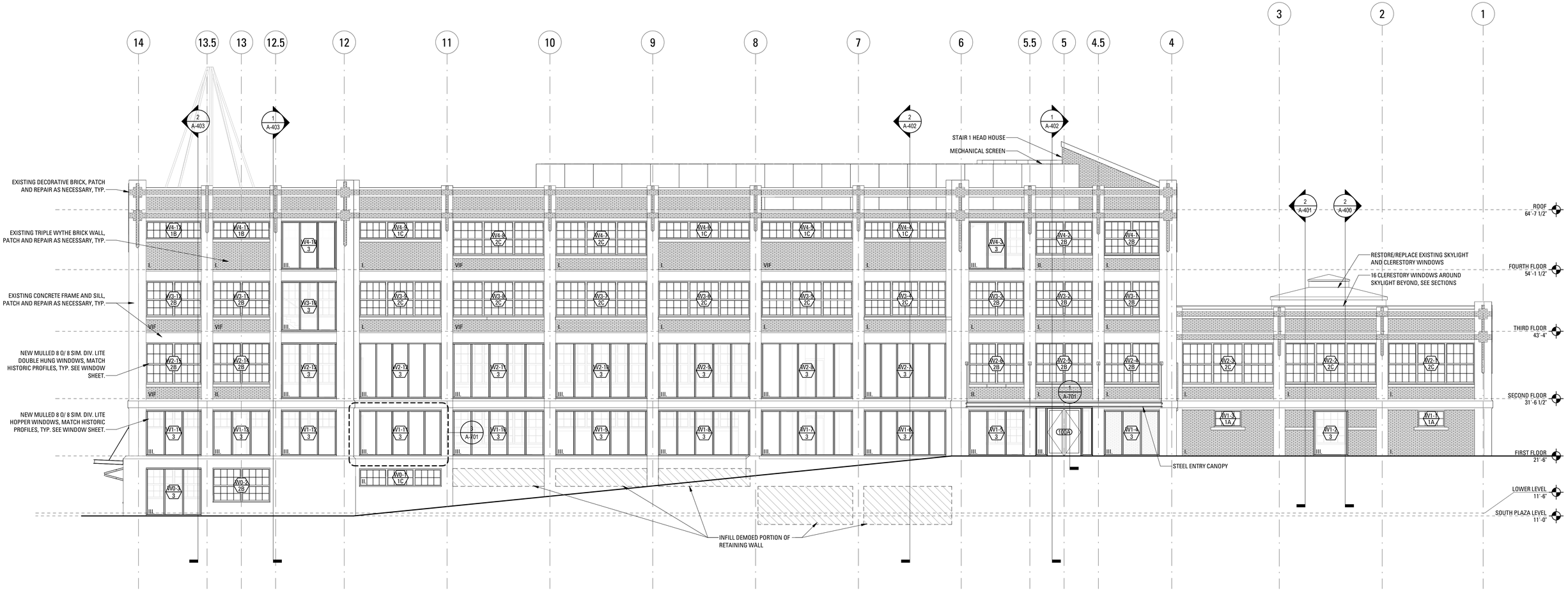
Northeastern University - IDEALS
Portland, ME 04103

OCTOBER 27, 2023 **LAND-USE PERMIT SET**

Rev.	Date	Revision Title

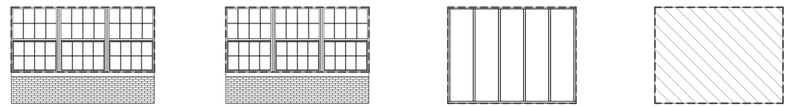
WEST ELEVATION

A-301



1 EAST ELEVATION
1/8" = 1'-0"

INFILL TYPOLOGIES LEGEND



TYPE I.
NEW MULTI-PANE WINDOW IN EXISTING OPENING, MINOR REPAIRS TO INFILL

TYPE II.
NEW HISTORIC STYLE WINDOW, NEW CONCRETE SILL, NEW MASONRY INFILL

TYPE III.
NEW STOREFRONT WINDOWS FILLING OPENING

TYPE IV.
CONCRETE INFILL AT DEMOED PORTIONS OF FOUNDATION WALL

PROJECT NORTH
TRUE NORTH

REGISTERED ARCHITECT Jason Vallancey #ARC4420 STATE OF MAINE

Roux Institute Bean Building
Project # 22.031

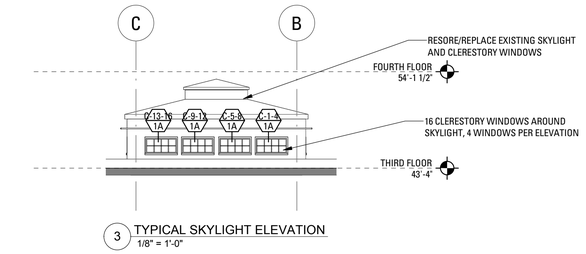
Northeastern University - IDEALS
Portland, ME 04103

OCTOBER 27, 2023 **LAND-USE PERMIT SET**

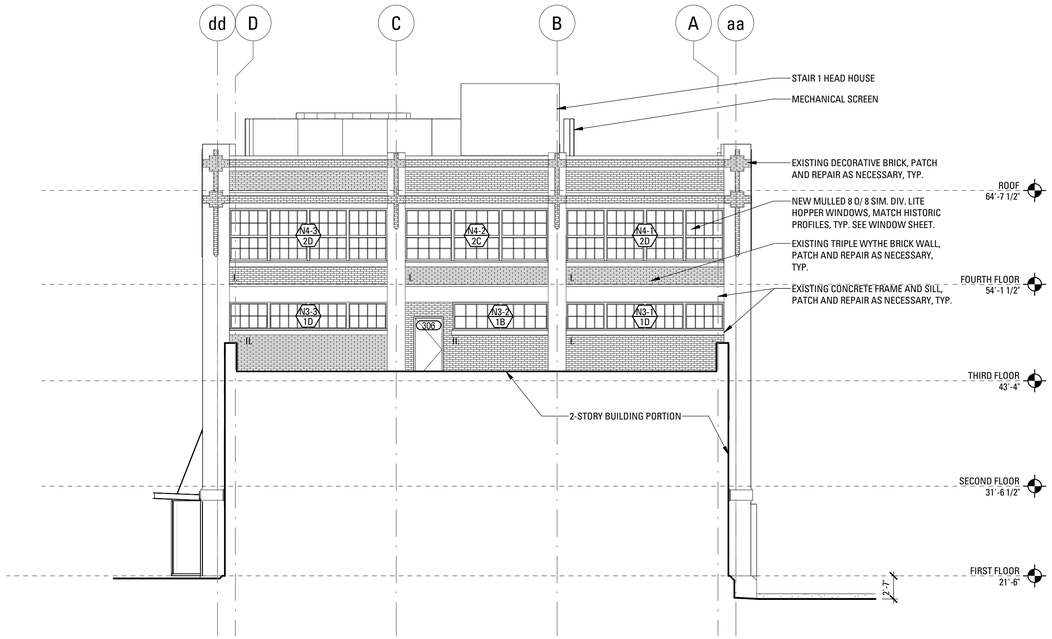
Rev.	Date	Revision Title

EAST ELEVATION

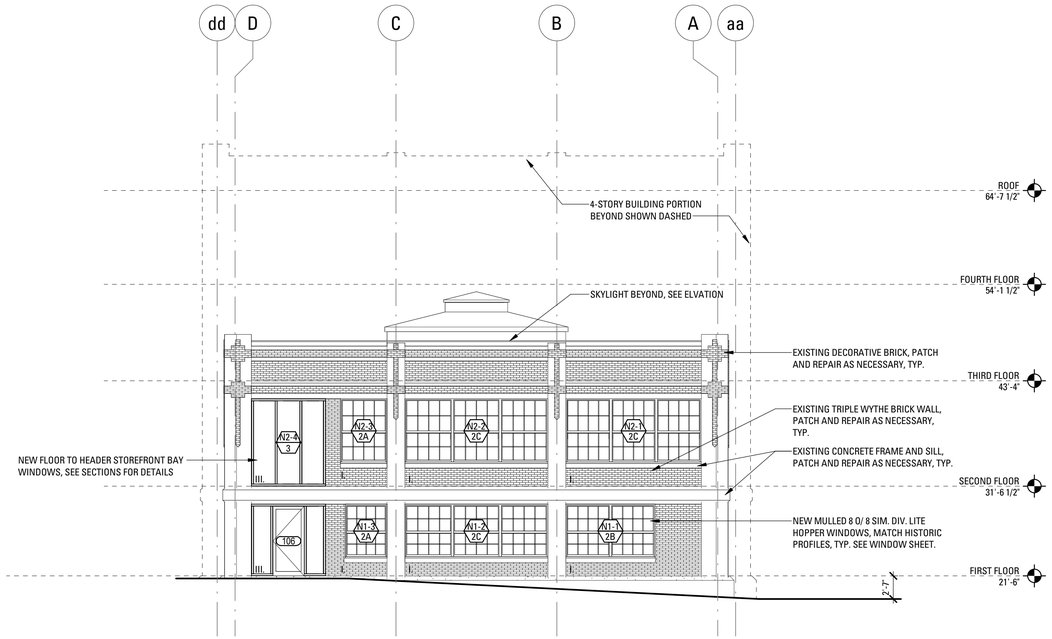
A-302



3 TYPICAL SKYLIGHT ELEVATION
1/8" = 1'-0"

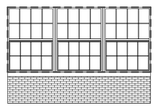


2 NORTH ELEVATION - UPPER FLOORS
1/8" = 1'-0"

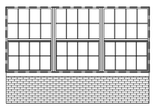


1 NORTH ELEVATION - LOWER FLOORS
1/8" = 1'-0"

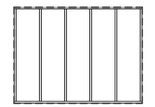
INFILL TYPOLOGIES LEGEND



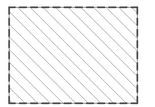
TYPE I.
NEW MULTI-PANE WINDOW IN EXISTING OPENING, MINOR REPAIRS TO INFILL



TYPE II.
NEW HISTORIC STYLE WINDOW, NEW CONCRETE SILL, NEW MASONRY INFILL



TYPE III.
NEW STOREFRONT WINDOWS FILLING OPENING



TYPE IV.
CONCRETE INFILL AT DEMOED PORTIONS OF FOUNDATION WALL

PROJECT NORTH
TRUE NORTH



Roux Institute Bean Building
Project # 22.031

Northeastern University - IDEALS
Portland, ME 04103

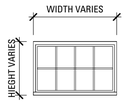
OCTOBER 27, 2023 **LAND-USE PERMIT SET**

Rev.	Date	Revision Title

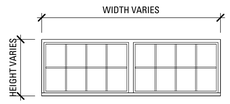
NORTH ELEVATION

A-303

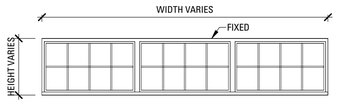
WINDOW TYPES



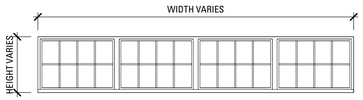
TYPE 1A - ONE WINDOW



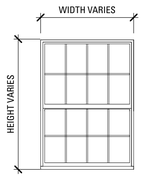
TYPE 1B - TWO WINDOWS



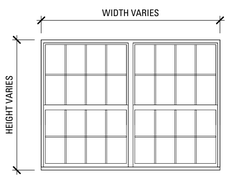
TYPE 1C - THREE WINDOWS



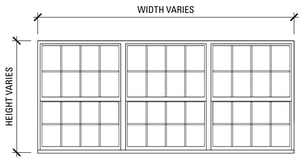
TYPE 1D - FOUR WINDOWS



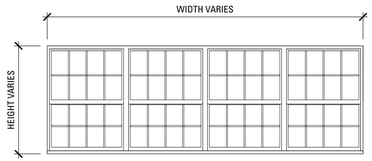
TYPE 2A - ONE WINDOW



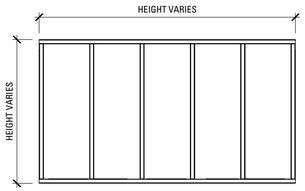
TYPE 2B - TWO WINDOWS



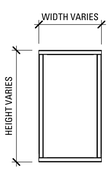
TYPE 2C - THREE WINDOWS



TYPE 2D - FOUR WINDOWS



TYPE 3 - INSET STOREFRONT WINDOW

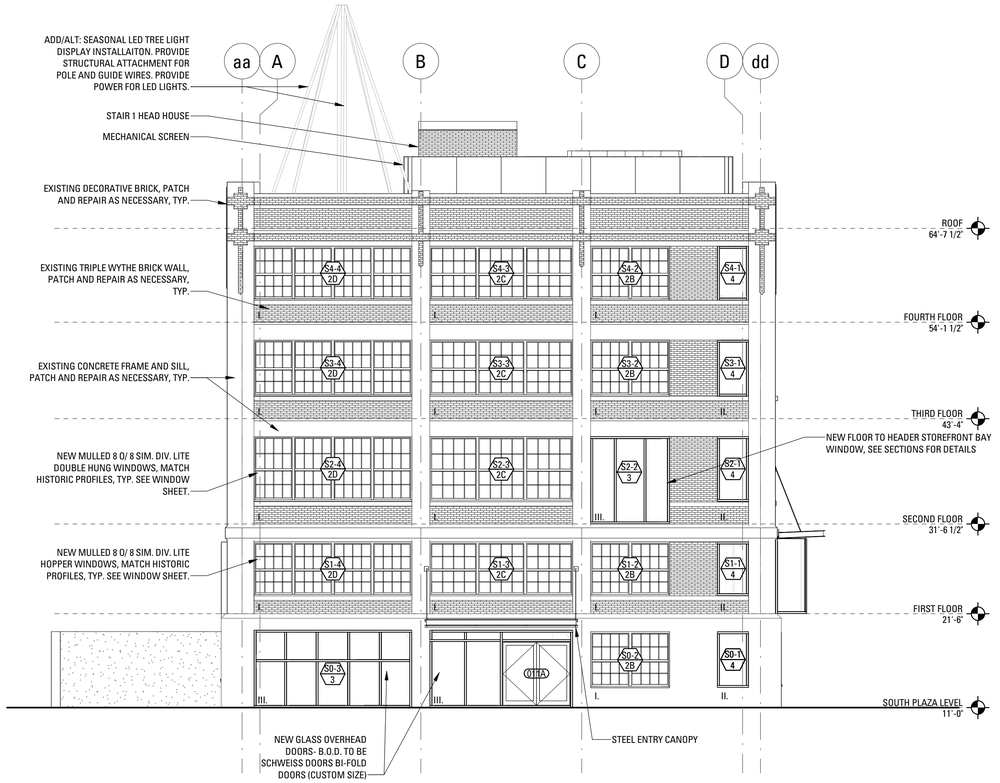


TYPE 4 - ONE WINDOW

NOTE:
-TYPE 1 & 2 WINDOW BASIS OF DESIGN IS TRIPLE-GLAZED WAUSAU INVENT RETRO - XLT WITH SIMULATED DIVIDED LITES, FIXED-SIMULATED SASH
-TYPE 3 & 4 STOREFRONT BASIS OF DESIGN IS TRIPLE-GLAZED KAWNEER TRIFAB 451T.

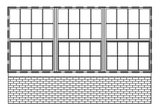
WINDOW SCHEDULE

MARK	TYPE	JAMB	HEAD	SILL	COMMENTS
1A	Single Sash (1-Unit)				WINDOWS WITHIN EXISTING OPENINGS, DIMENSIONS TO BE VERIFIED IN FIELD
1B	Single Sash (2-Unit)				WINDOWS WITHIN EXISTING OPENINGS, DIMENSIONS TO BE VERIFIED IN FIELD
1C	Single Sash (3-Unit)				WINDOWS WITHIN EXISTING OPENINGS, DIMENSIONS TO BE VERIFIED IN FIELD
1D	Single Sash (4-Unit)				WINDOWS WITHIN EXISTING OPENINGS, DIMENSIONS TO BE VERIFIED IN FIELD
2A	Simulated Double Sash (1-Unit)				WINDOWS WITHIN EXISTING OPENINGS, DIMENSIONS TO BE VERIFIED IN FIELD
2B	Simulated Double Sash (2-Unit)				WINDOWS WITHIN EXISTING OPENINGS, DIMENSIONS TO BE VERIFIED IN FIELD
2C	Simulated Double Sash (3-Unit)				WINDOWS WITHIN EXISTING OPENINGS, DIMENSIONS TO BE VERIFIED IN FIELD
2D	Simulated Double Sash (4-Unit)				WINDOWS WITHIN EXISTING OPENINGS, DIMENSIONS TO BE VERIFIED IN FIELD

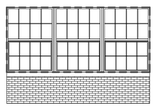


1 SOUTH ELEVATION
1/8" = 1'-0"

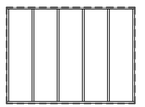
INFILL TYPOLOGIES LEGEND



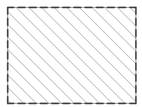
TYPE I.
NEW MULTI-PANE WINDOW IN EXISTING OPENING, MINOR REPAIRS TO INFILL



TYPE II.
NEW HISTORIC STYLE WINDOW, NEW CONCRETE SILL, NEW MASONRY INFILL



TYPE III.
NEW STOREFRONT WINDOWS FILLING OPENING



TYPE IV.
CONCRETE INFILL AT DEMOED PORTIONS OF FOUNDATION WALL

PROJECT NORTH
TRUE NORTH



Roux Institute Bean Building
Project # 22.031

Northeastern University - IDEALS
Portland, ME 04103

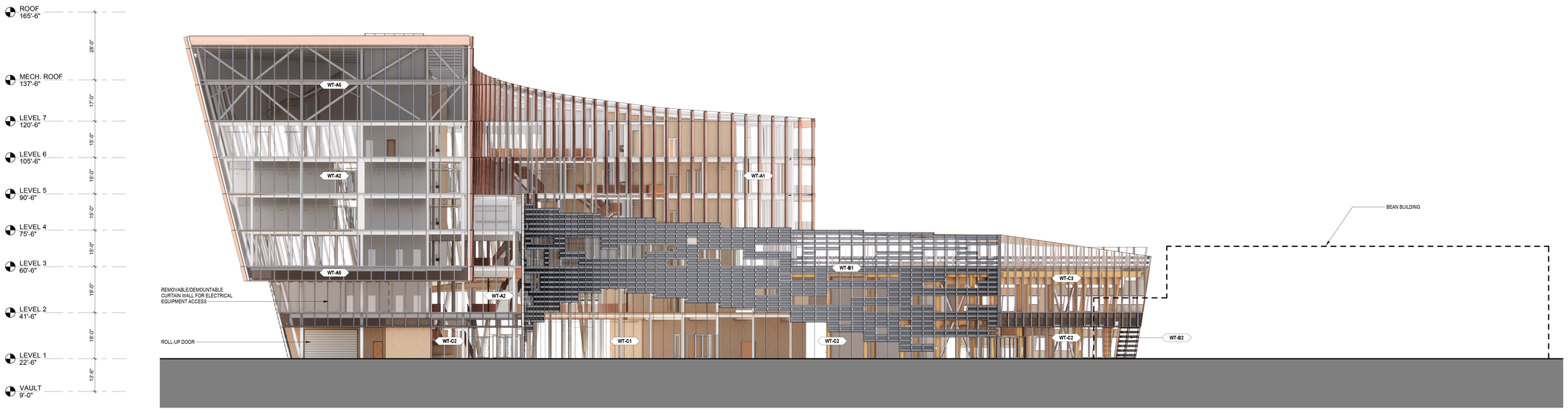
OCTOBER 27, 2023 **LAND-USE PERMIT SET**

Rev.	Date	Revision Title

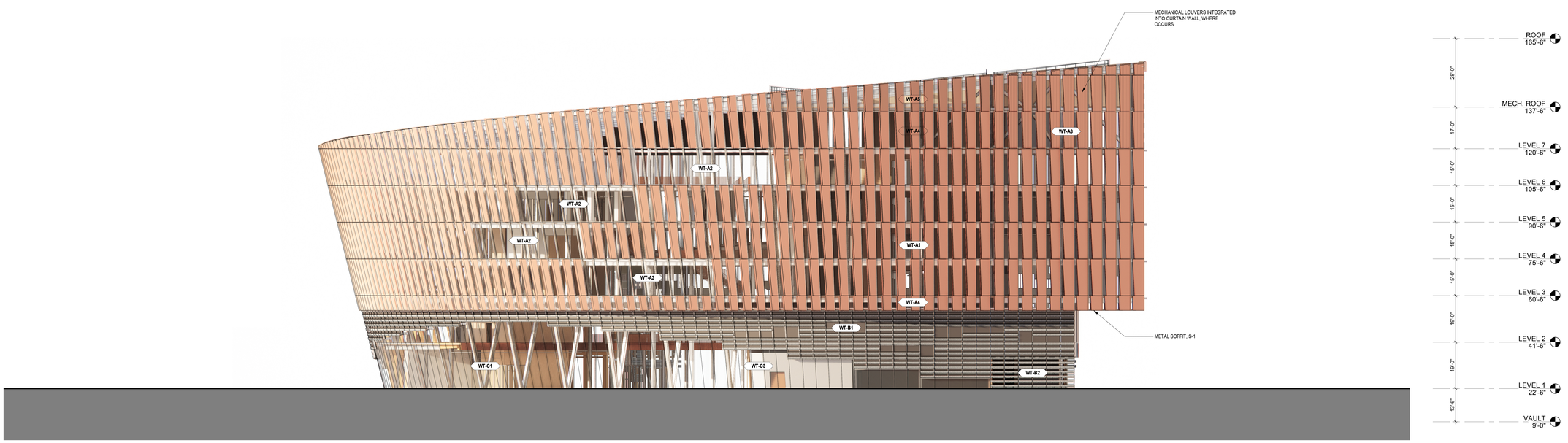
SOUTH ELEVATION AND WINDOW TYPES

A-304

System	**Plan color code**														
	Name	**Unitized System**						**Unitized System**		**Cassette Toggle System**			**Vertical Rainscreen System**	**Soffit**	
	Type number	**WT-A**						**WT-B**		**WT-C**			**WT-D**	**S-1**	
	Sub type	WT-A1	WT-A2	WT-A3	WT-A4	WT-A5	WT-A6	WT-B1	WT-B2	WT-C1	WT-C2	WT-C3			
	General description	The unitized curtain wall system consists of thermally broken aluminum framing with a double chicken head extrusion, pressure equalized to the rear seal. The vision panels are TGU, structurally glazed to the thermally broken aluminum framing. This system includes varying depth/profile of exterior extruded aluminum vertical fins supported by thermally broken knife plates at the stack joint and custom formed 1/4" painted aluminum panels with mineral wool insulation and Glv. steel backpan. This unitized system includes insulated open shadowbox with 1/8" painted formed aluminum panel and galc. steel backpan at the edge of slab. Curtainwall system allows for steel stiffeners as required. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	The unitized curtain wall system consists of thermally broken aluminum framing with a double chicken head extrusion, pressure equalized to the rear seal. The vision panels are TGU, structurally glazed to the thermally broken aluminum framing. This unitized system includes insulated open shadowbox with 1/8" painted formed aluminum panel and galc. steel backpan at the edge of slab. Curtainwall system allows for steel stiffeners as required. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-A1, but the glass is replaced by Louvers.	Similar to WT-A1, but the TGU is fully fritted/opacified, and the system includes backpan and mineral wool insulation. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-A2, but the TGU is fully fritted/opacified, the system includes backpan and mineral wool insulation.	Similar to WT-A2, but the Glazing unit is a fully fritted/opacified Laminated glass. The system is a screen system, hence does not include open spandrel.	The unitized curtain wall system consists of thermally broken aluminum framing with a double chicken head extrusion, pressure equalized to the rear seal. TGU is structurally glazed to the thermally broken aluminum framing. The opaque surfaces consist of granite panels and custom formed painted aluminum panels with black fabric faced mineral wool insulation and galv. backpan. The granite panels are supported by stainless steel undercut anchors and aluminum substructure which is locally supported by thermally broken stainless steel angles fixed to the mullion. Curtainwall system allows for steel stiffeners as required. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-B1, but bottom bearing @ ground level only, without custom formed painted aluminum panel, backpan, insulation or glass.	The cassette toggle system consists of triple glazing units structurally glazed to aluminum U channel, toggled onto a custom extruded glazing adapter which is fixed onto bottom-bearing, double-story glass fins. TGU panels have horizontal joint at the 19ft without a horizontal transom. Upper row of glass panels are stacked on top of the glass panels at grade with setting blocks between the panels. Glazing adapter contains a pressure equalized cavity which is vented and drained to the exterior, and vented to the head connection. The fin connection at the top has a vertical slotted hole to accommodate the building movements. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-C1, the glass fins are replaced by Aluminum extrusion. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-C2, the TGU is fully fritted/opacified. In addition, the system would include Mineral wool insulation and galv. Steel back pan. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Metal panel rainscreen system with steel stud back up wall. Build-up from interior to exterior: -Structural framing -Exterior Sheathing -Continuous air/vapor barrier -Mineral wool insulation -Thermally broken substructure -Air cavity -1/8" Painted Aluminum Panels Joints to be designed as per architectural drawings. Fixings and substructure to include bi-metallic separator as required, to prevent galvanic corrosion.	Exterior soffit cladding panel with continuous air/vapor barrier and mineral wool insulation. The exterior cladding is to be mechanically fastened to the sub-structure which is supported by the backup structure. Build-up from interior to exterior: -Structural framing -Exterior Sheathing -Continuous air/vapor barrier -Mineral wool insulation -Thermally broken substructure -Air cavity -1/8" Painted aluminum soffit panels Joints to be designed as per architectural drawings. Fixings and substructure to include bi-metallic separator as required, to prevent galvanic corrosion.
	Primary specification section	084413 - Glazed Aluminum Curtain Walls						084413 - Glazed Aluminum Curtain Walls		084401 - Glass Fin Supported Glazing System	084414 - Glazed Stick-Built Systems		070001 - Rainscreen System	070001 - Rainscreen System	



1 NORTH ELEVATION - OVERALL
1/16" = 1'-0"



2 EAST ELEVATION - OVERALL
1/16" = 1'-0"

10/2/2023 4:52:50 PM

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

KeyPlan

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

DESIGN DEVELOPMENT

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
NO. 3838
STATE OF MAINE

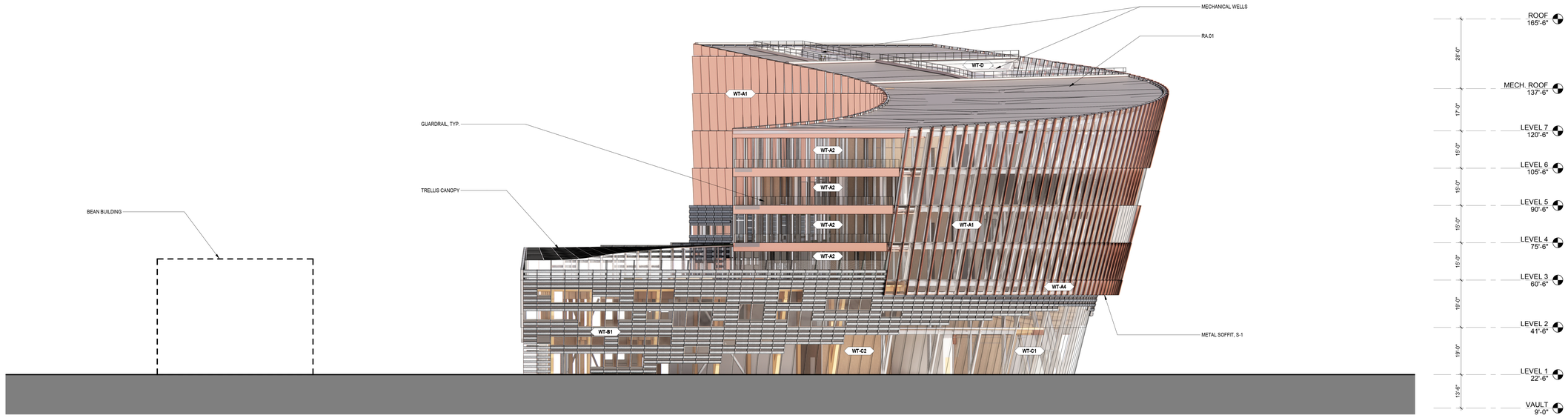
Stamp 10/27/2023

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Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER, 2023
Scale	1/16" = 1'-0"

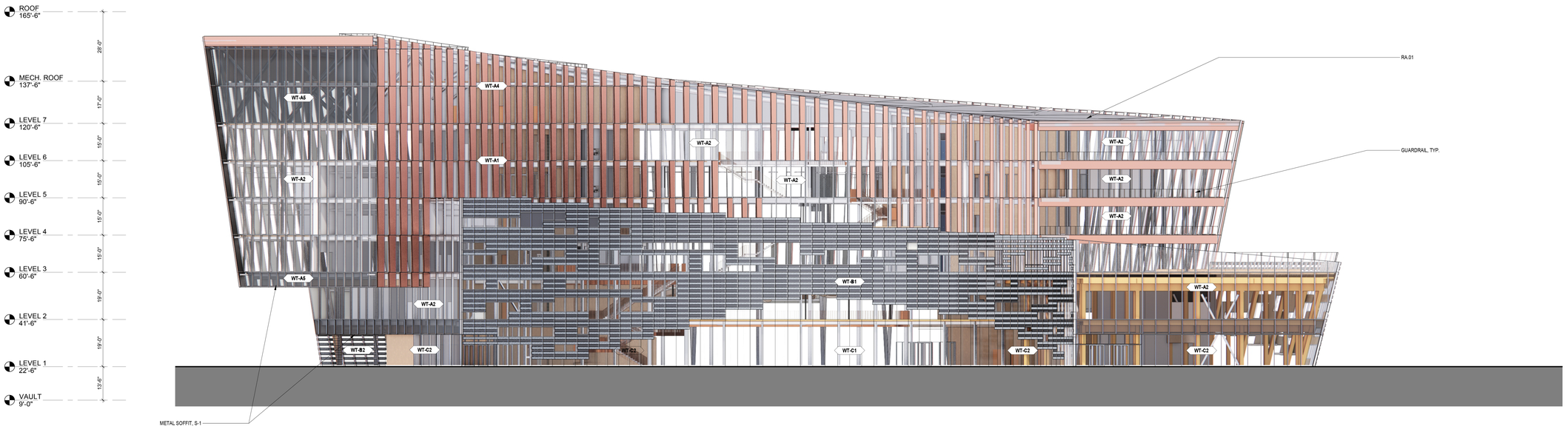
Drawing Title
NORTH & EAST EXTERIOR ELEVATIONS

A20.01

System	**Plan color code**														
	Name	**Unitized System**						**Unitized System**		**Cassette Toggle System**			**Vertical Rainscreen System**	**Soffit**	
	Type number	**WT-A**						**WT-B**		**WT-C**			**WT-D**	**S-1**	
	Sub type	WT-A1	WT-A2	WT-A3	WT-A4	WT-A5	WT-A6	WT-B1	WT-B2	WT-C1	WT-C2	WT-C3			
	General description	The unitized curtain wall system consists of thermally broken aluminum framing with a double chicken head extrusion, pressure equalized to the rear seal. The vision panels are TGU, structurally glazed to the thermally broken aluminum framing. This system includes varying depth/profile of exterior extruded aluminum vertical fins supported by thermally broken knife plates at the stack joint and custom formed 1/4" painted aluminum panels with mineral wool insulation and Glv. steel backpan. This unitized system includes insulated open shadowbox with 1/8" painted formed aluminum panel and galc. steel backpan at the edge of slab. Curtainwall system allows for steel stiffeners as required. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	The unitized curtain wall system consists of thermally broken aluminum framing with a double chicken head extrusion, pressure equalized to the rear seal. The vision panels are TGU, structurally glazed to the thermally broken aluminum framing. This unitized system includes insulated open shadowbox with 1/8" painted formed aluminum panel and galc. steel backpan at the edge of slab. Curtainwall system allows for steel stiffeners as required. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-A1, but the glass is replaced by Louvers.	Similar to WT-A1, but the TGU is fully fritted/opacified, and the system includes backpan and mineral wool insulation. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-A2, but the TGU is fully fritted/opacified, the system includes backpan and mineral wool insulation.	Similar to WT-A2, but the Glazing unit is a fully fritted/opacified Laminated glass. The system is a screen system, hence does not include open spandrel.	The unitized curtain wall system consists of thermally broken aluminum framing with a double chicken head extrusion, pressure equalized to the rear seal. TGU is structurally glazed to the thermally broken aluminum framing. The opaque surfaces consist of granite panels and custom formed painted aluminum panels with black fabric faced mineral wool insulation and galv. backpan. The granite panels are supported by stainless steel undercut anchors and aluminum substructure which is locally supported by thermally broken stainless steel angles fixed to the mullion. Curtainwall system allows for steel stiffeners as required. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-B1, but bottom bearing @ ground level only, without custom formed painted aluminum panel, backpan, insulation or glass.	The cassette toggle system consists of triple glazing units structurally glazed to aluminum U channel, toggled onto a custom extruded glazing adapter which is fixed onto bottom-bearing, double-story glass fins. TGU panels have horizontal joint at the 19ft without a horizontal transom. Upper row of glass panels are stacked on top of the glass panels at grade with setting blocks between the panels. Glazing adapter contains a pressure equalized cavity which is vented and drained to the exterior, and vented to the head connection. The fin connection at the top has a vertical slotted hole to accommodate the building movements. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-C1, the glass fins are replaced by Aluminum extrusion. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Similar to WT-C2, the TGU is fully fritted/opacified. In addition, the system would include Mineral wool insulation and galv. Steel back pan. The sloped glass is not tilted outward more than 15 degrees, provide mechanical restraint as an alternate only if deemed to be required.	Metal panel rainscreen system with steel stud back up wall. Build-up from interior to exterior: -Structural framing -Exterior Sheathing -Continuous air/vapor barrier -Mineral wool insulation -Thermally broken substructure -Air cavity -1/8" Painted Aluminum Panels Joints to be designed as per architectural drawings. Fixings and substructure to include bi-metallic separator as required, to prevent galvanic corrosion.	Exterior soffit cladding panel with continuous air/vapor barrier and mineral wool insulation. The exterior cladding is to be mechanically fastened to the sub-structure which is supported by the backup structure. Build-up from interior to exterior: -Structural framing -Exterior Sheathing -Continuous air/vapor barrier -Mineral wool insulation -Thermally broken substructure -Air cavity -1/8" Painted aluminum soffit panels Joints to be designed as per architectural drawings. Fixings and substructure to include bi-metallic separator as required, to prevent galvanic corrosion.
	Primary specification section	084413 - Glazed Aluminum Curtain Walls						084413 - Glazed Aluminum Curtain Walls		084401 - Glass Fin Supported Glazing System	084414 - Glazed Stick-Built Systems		070001 - Rainscreen System	070001 - Rainscreen System	



1 SOUTH ELEVATION - OVERALL
1/16" = 1'-0"



2 WEST ELEVATION - OVERALL
1/16" = 1'-0"

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KeyPlan

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DESIGN DEVELOPMENT

Number	Revision	Date

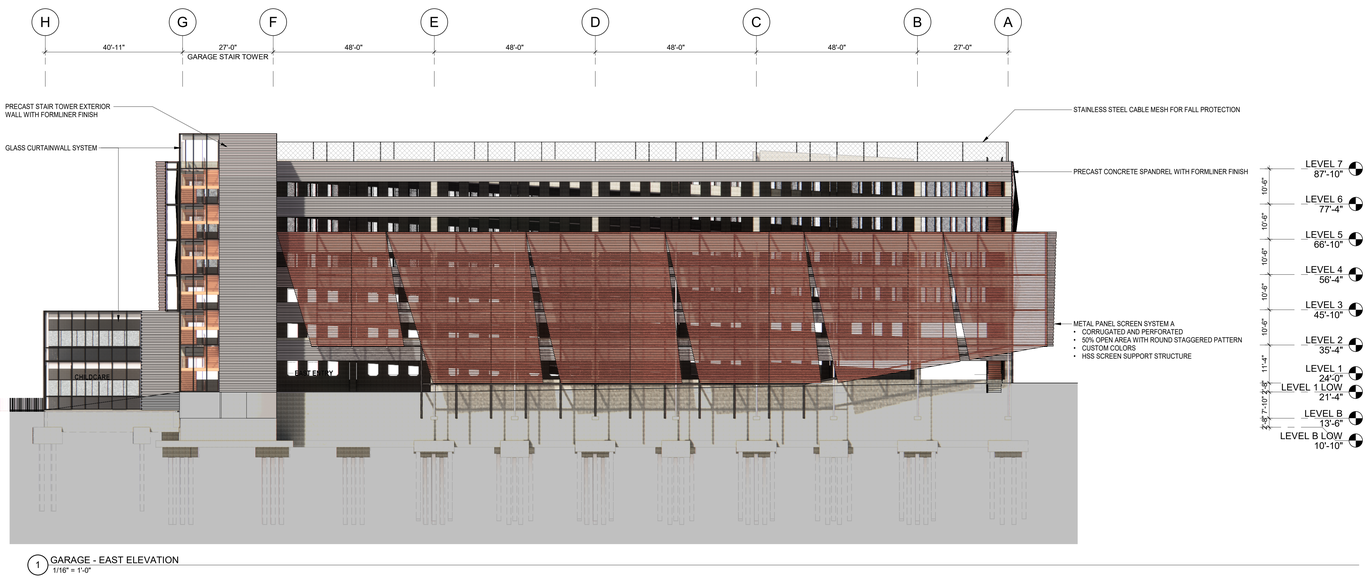
LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
NO. 3838
STATE OF MAINE

Stamp 10/27/2023

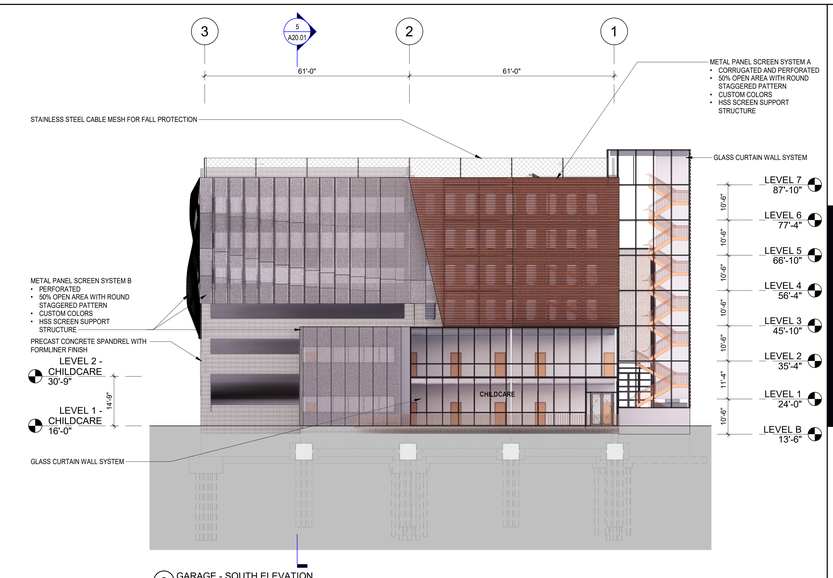
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Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER, 2023
Scale	1/16" = 1'-0"

Drawing Title
SOUTH & WEST EXTERIOR ELEVATIONS

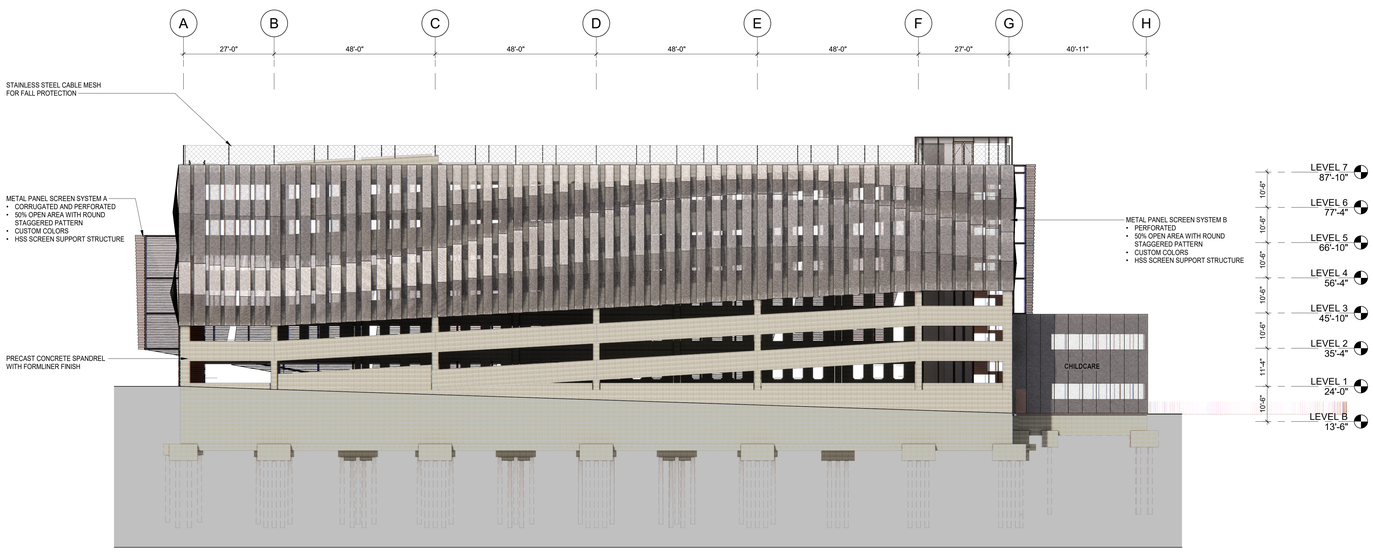
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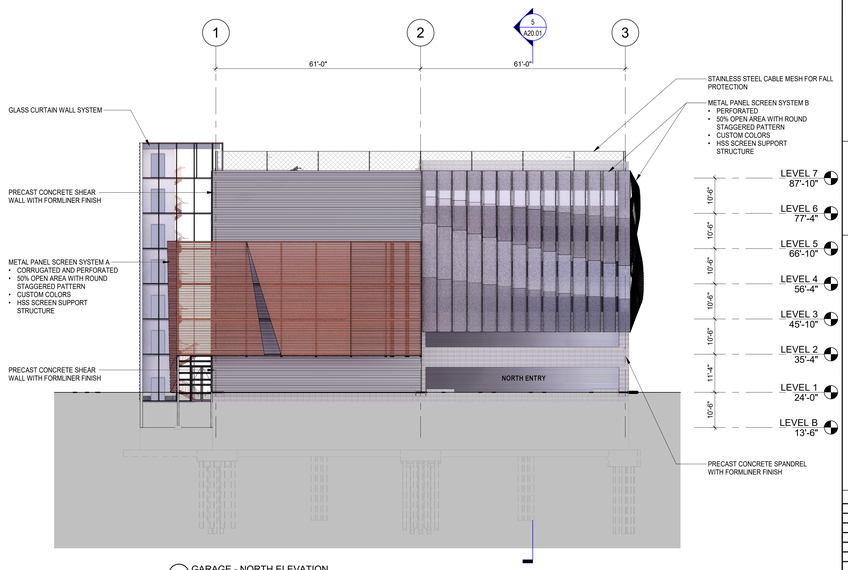
1 GARAGE - EAST ELEVATION
1/16" = 1'-0"



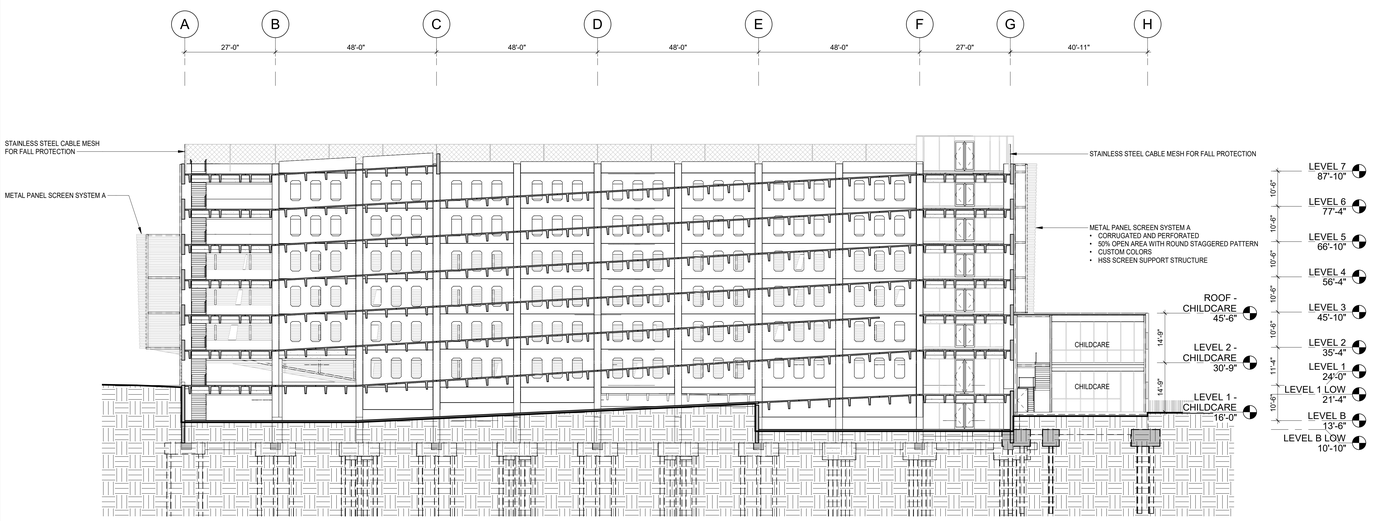
2 GARAGE - SOUTH ELEVATION
1/16" = 1'-0"



3 GARAGE - WEST ELEVATION
1/16" = 1'-0"



4 GARAGE - NORTH ELEVATION
1/16" = 1'-0"



5 GARAGE - SECTION
1/16" = 1'-0"

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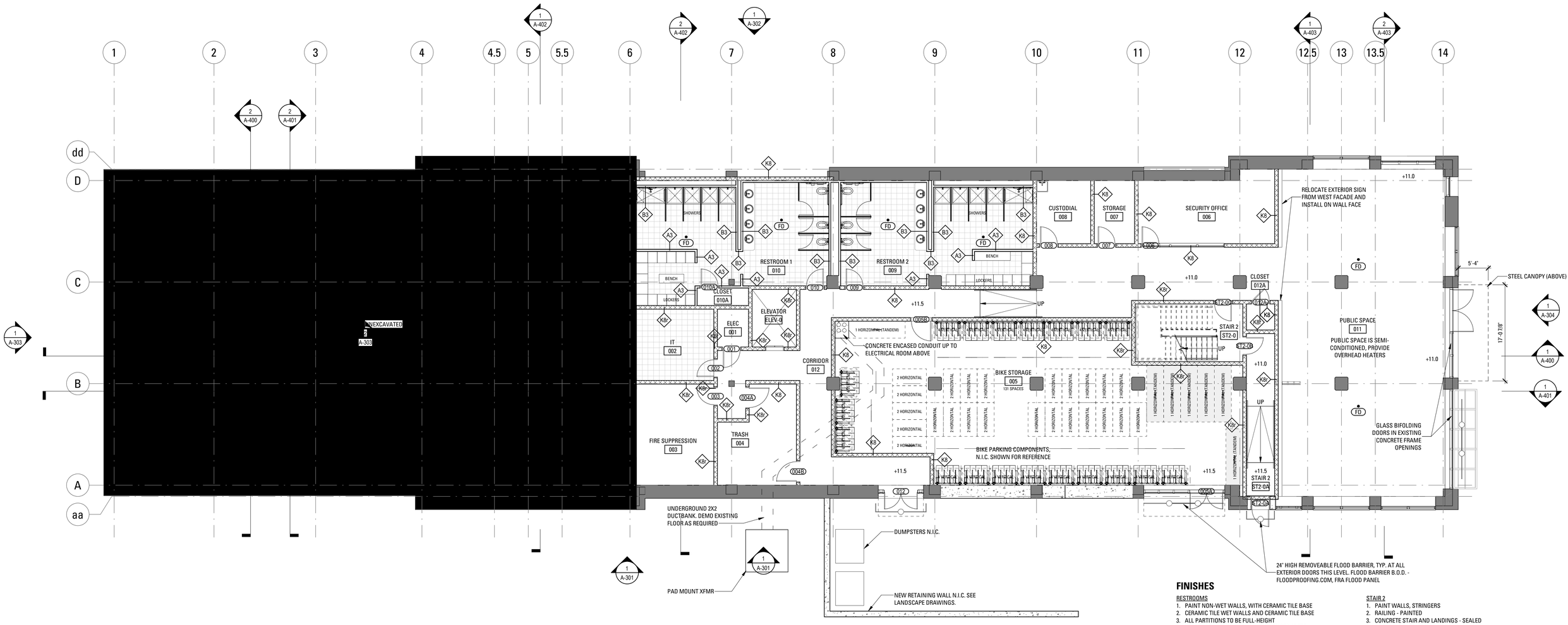
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Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER 2023
Scale	

Drawing Title
PARKING GARAGE EXT. ELEVATIONS AND SECTION

A20.01

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1 LOWER LEVEL FLOOR PLAN

SCALE: 1/8" = 1'-0"

NOTE WELL: THIS ENTIRE FLOOR TO BE RAISED ABOVE EXISTING CONCRETE LEVEL OF 9.5'. SEE ELEVATION NUMBERS ON PLAN AND BUILDING SECTIONS.

NOTE : INTERIOR FACE OF EXTERIOR WALLS IN RESTROOMS ONLY TO BE FURRED OUT WITH 3-5/8" STUD W/ MINERAL WOOL INSULATION AND FINISHED W/ PAINT ON (1) LAYER 5/8" TYPE 'X' DRYWALL. REMAINING EXTERIOR WALLS TO REMAIN AS-IS BUT RECEIVE NEW PAINT

BIKE RACK NOTES

- VERTICAL BIKE RACKS (HOLD 4 BIKES)
- HORIZONTAL BIKE RACKS (HOLD 2 BIKES)
- HORIZONTAL BIKE RACKS (HOLD 1 TANDEM BIKE)

*ASSUMING 25% OF BIKE RACKS HAVE OUTLETS FOR E-BIKE

FINISHES

RESTROOMS
1. PAINT NON-WET WALLS, WITH CERAMIC TILE BASE
2. CERAMIC TILE WET WALLS AND CERAMIC TILE BASE
3. ALL PARTITIONS TO BE FULL-HEIGHT
4. CERAMIC TILE FLOOR (THIN SET) OVER CONCRETE
5. ACT CEILING
6. RECESS LIGHTING, WALL MOUNT AT MIRROR
7. FLOOR DRAIN IN FLOOR

IT
1. NO PAINT ON WALLS, NO BASE
2. STATIC-FREE VCT FLOOR - GLUED
3. NO CEILING
4. SURFACE MOUNT LIGHT

CUSTODIAL/TRASH/ELEC/FIRE SUPPRESSION
1. FRP ON ALL WALLS
2. FLOOR DRAIN IN FLOOR
3. EPOXY FLOOR FINISH OVER CONCRETE TOPPING
4. NO CEILING
5. SURFACE MOUNT LIGHT

STAIR 2
1. PAINT WALLS, STRINGERS
2. RAILING - PAINTED
3. CONCRETE STAIR AND LANDINGS - SEALED
4. CUSTOM GUARD RAIL - PAINTED
5. SURFACE MOUNTED LIGHTING

OFFICE/PUBLIC SPACE/CORRIDOR
1. PAINT EXTERIOR WALLS, CORE WALLS
2. SEAL EXISTING CONCRETE COLUMNS
3. PAINT EXISTING CEILING
4. SURFACE MOUNTED (CEILING) LIGHTING
5. SEAL NEW CONCRETE FLOOR

BIKE STORAGE
1. PAINT EXTERIOR WALLS, CORE WALLS
2. STOREFRONT ON SOUTH WALL - FULL LENGTH
3. SEAL EXISTING CONCRETE COLUMNS
4. PAINT EXISTING CEILING
5. SURFACE MOUNTED (CEILING) LIGHTING
6. SEAL NEW CONCRETE FLOOR

NOTE: ALL GWB THIS FLOOR TO BE MOISTURE RESISTANT

PROJECT NORTH
TRUE NORTH

LICENSED ARCHITECT Jason Harvey RICHARD STATE OF MAINE

Roux Institute Bean Building
Project # 22.031

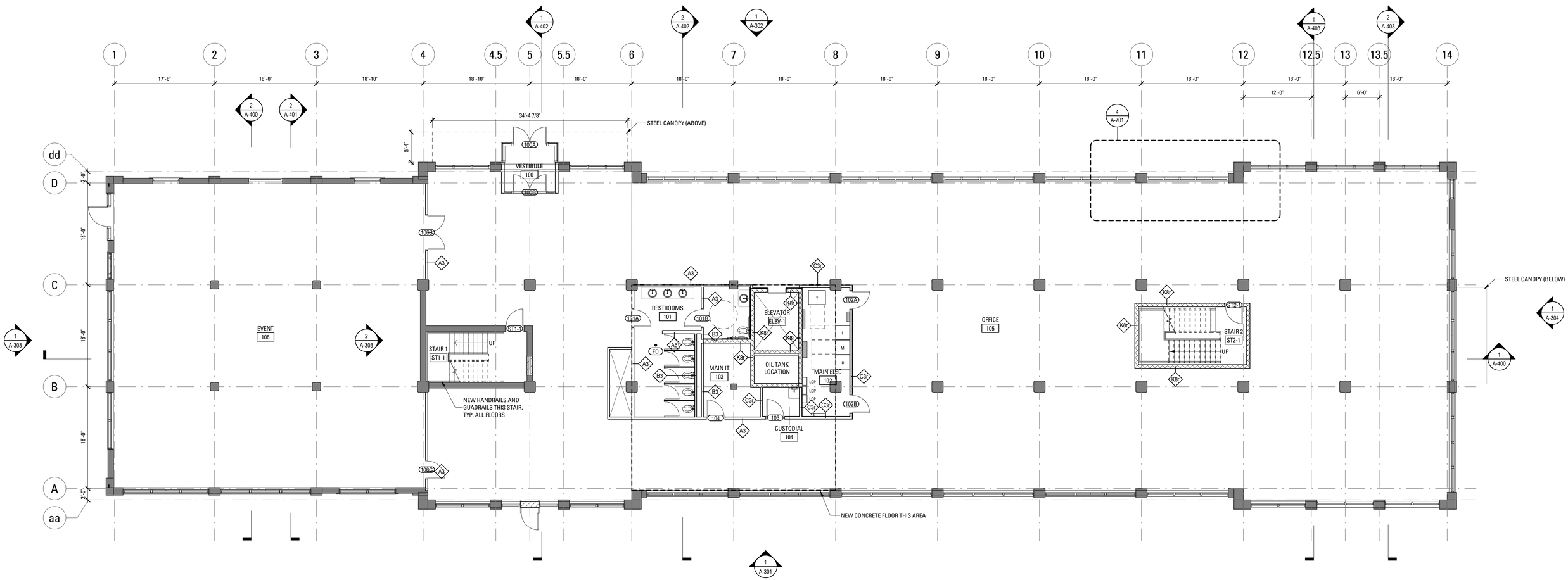
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OCTOBER 27, 2023 **LAND-USE PERMIT SET**

Rev.	Date	Revision Title

LOWER LEVEL FLOOR PLAN

A-100



1 FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0"

NOTE : INTERIOR FACE OF EXTERIOR WALLS TO BE FURRED OUT WITH 3-5/8" STUD W/ MINERAL WOOL INSULATION AND FINISHED W/ PAINT ON (1) LAYER 5/8" TYPE 'X' DRYWALL

FINISHES

RESTROOMS
1. PAINT NON-WET WALLS, WITH CERAMIC TILE BASE
2. CERAMIC TILE WET WALLS AND CERAMIC TILE BASE
3. CERAMIC TILE FLOOR (THIN SET) OR EPOXY FLOOR OVER EXISTING CONCRETE
4. ACT CEILING
5. RECESS LIGHTING, WALL MOUNT AT MIRROR
6. FLOOR DRAIN IN FLOOR

ELEC/IT/FIRE SUPPRESSION
1. PAINT WALLS, RUBBER BASE
2. STATIC-FREE VCT FLOOR - GLUED
3. NO CEILING
4. SURFACE MOUNT LIGHT

CUSTODIAL/TRASH
1. FRP ON ALL WALLS
2. FLOOR DRAIN IN FLOOR
3. EPOXY FLOOR FINISH OVER EXISTING CONCRETE
4. NO CEILING
5. SURFACE MOUNT LIGHT

STAIR 1
1. PAINT EXISTING CONCRETE/CMU
2. NEW RAILING - PAINTED
3. SEAL EXISTING CONCRETE FLOOR
4. NEW, CUSTOM GUARD RAIL - PAINTED
5. SURFACE MOUNTED LIGHTING

STAIR 2
1. PAINT WALLS, STRINGERS
2. RAILING - PAINTED
3. CONCRETE STAIR AND LANDINGS - SEALED
4. CUSTOM GUARD RAIL - PAINTED
5. SURFACE MOUNTED LIGHTING

OFFICE/EVENT
1. PAINT EXTERIOR WALLS, CORE WALLS
2. SEAL EXISTING CONCRETE COLUMNS
3. PAINT EXISTING CEILING
4. SURFACE MOUNTED (CEILING) LIGHTING
5. SEAL EXISTING CONCRETE FLOOR

PROJECT NORTH
TRUE NORTH

LICENSED ARCHITECT
Jason Farrell
ARC4429
STATE OF MAINE

Roux Institute Bean Building
Project # 22.031

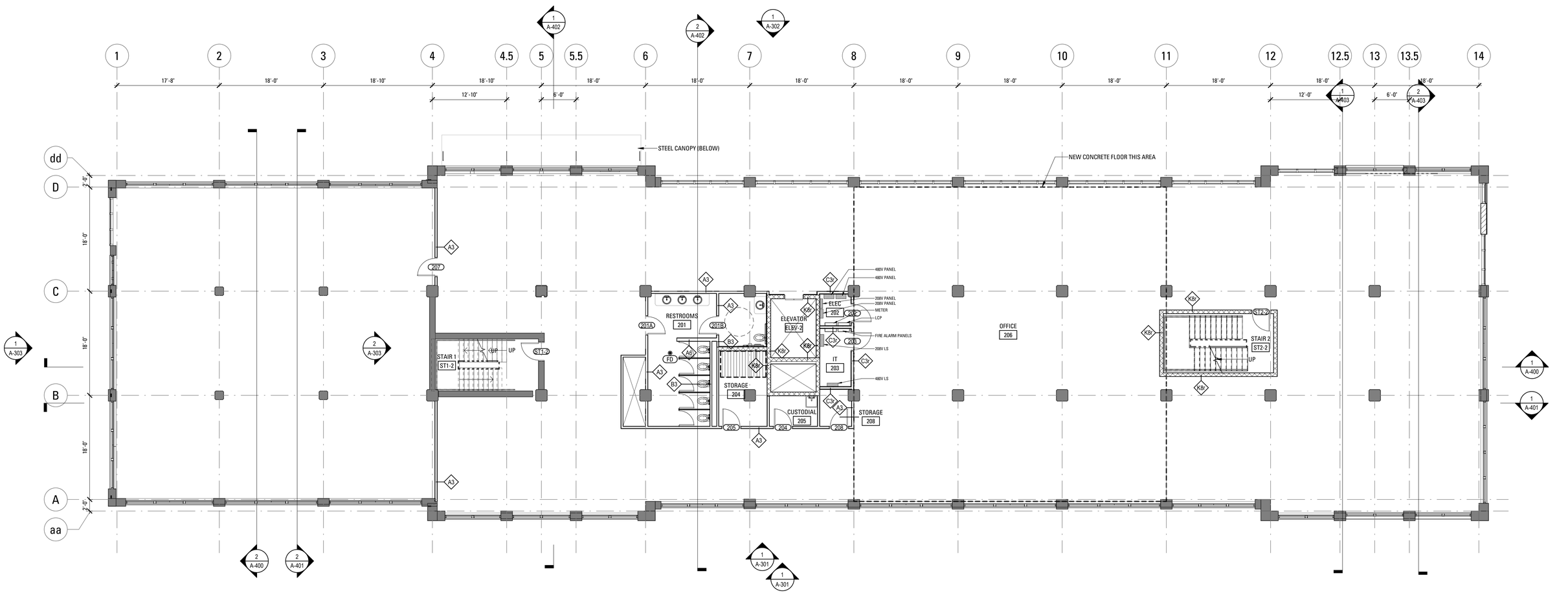
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OCTOBER 27, 2023 **LAND-USE PERMIT SET**

Rev.	Date	Revision Title

FIRST FLOOR PLAN

A-101



1 SECOND FLOOR PLAN

SCALE: 1/8" = 1'-0"

NOTE : INTERIOR FACE OF EXTERIOR WALLS TO BE FURRED OUT WITH 3-5/8" STUD W/ MINERAL WOOL INSULATION AND FINISHED W/ PAINT ON (1) LAYER 5/8" TYPE 'X' DRYWALL

PROJECT NORTH
TRUE NORTH

Roux Institute Bean Building
Project # 22.031

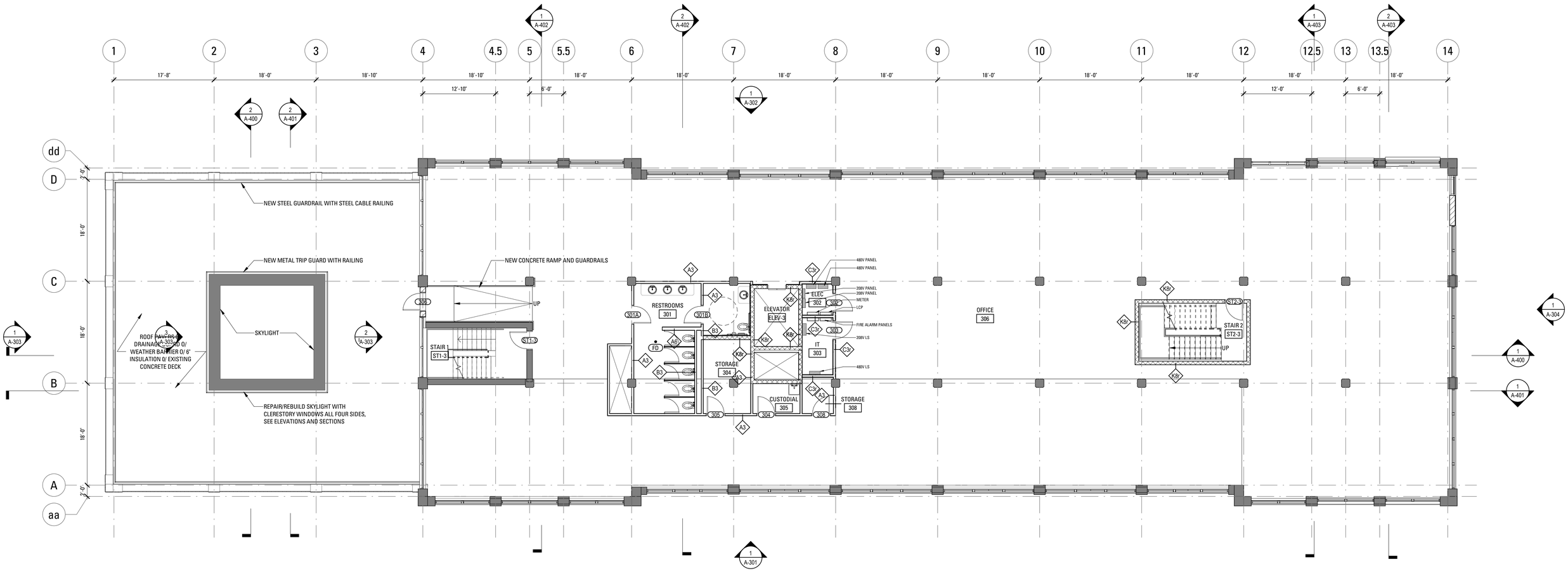
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Rev.	Date	Revision Title

SECOND FLOOR PLAN

A-102



1 THIRD FLOOR PLAN

SCALE: 1/8" = 1'-0"

NOTE : INTERIOR FACE OF EXTERIOR WALLS TO BE FURRED OUT WITH 3-5/8" STUD W/ MINERAL WOOL INSULATION AND FINISHED W/ PAINT ON (1) LAYER 5/8" TYPE 'X' DRYWALL

PROJECT NORTH
TRUE NORTH

REGISTERED ARCHITECT
Justin Farney
ARC4429
STATE OF MAINE

Roux Institute Bean Building
Project # 22.031

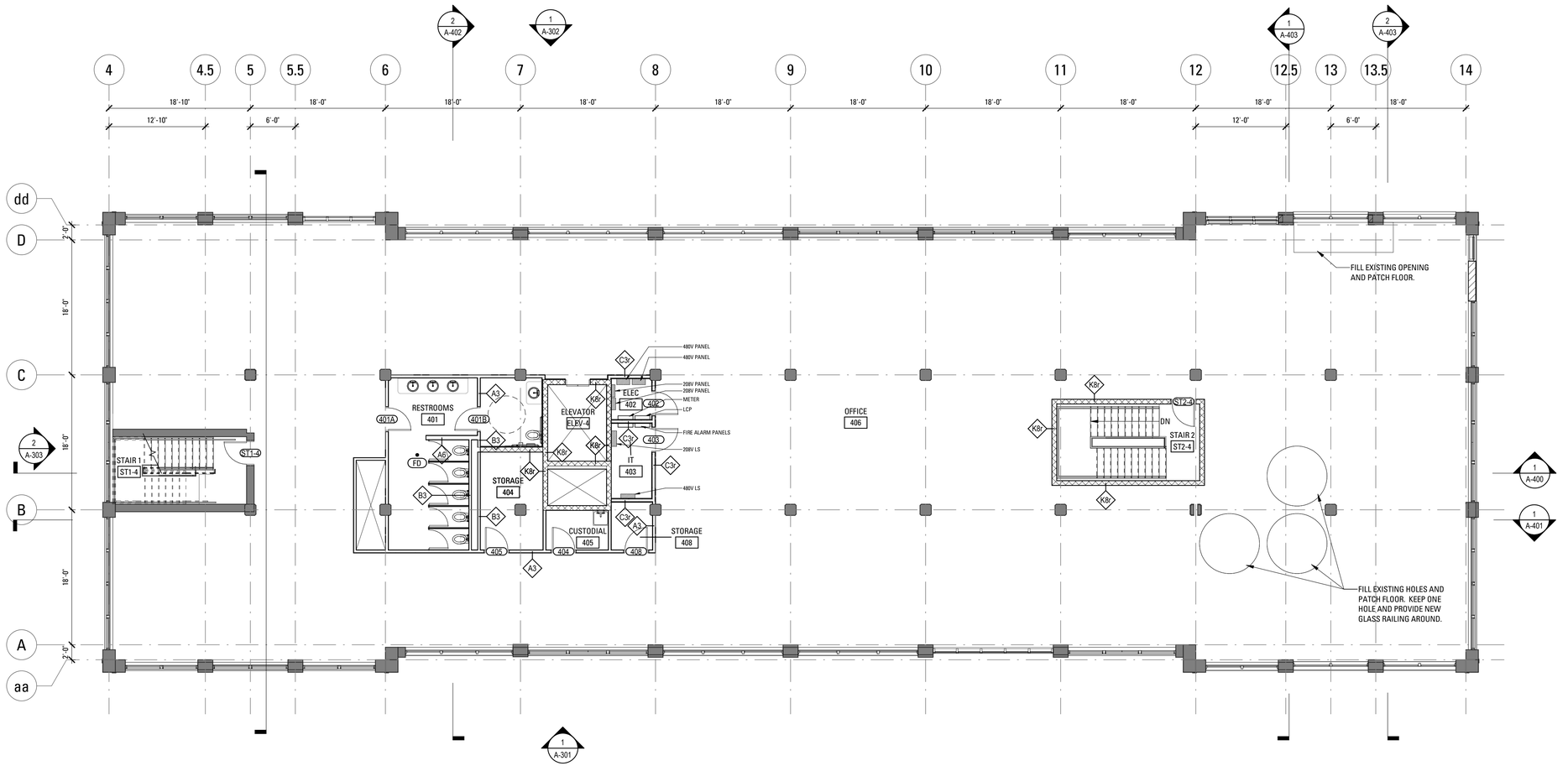
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Rev.	Date	Revision Title

THIRD FLOOR PLAN

A-103



1 FOURTH FLOOR PLAN

SCALE: 1/8" = 1'-0"

NOTE : INTERIOR FACE OF EXTERIOR WALLS TO BE FURRED OUT WITH 3-5/8" STUD W/ MINERAL WOOL INSULATION AND FINISHED W/ PAINT ON (1) LAYER 5/8" TYPE 'X' DRYWALL

PROJECT NORTH
TRUE NORTH

REGISTERED ARCHITECT
Justin Farney
ARC4429
STATE OF MAINE

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Project # 22.031

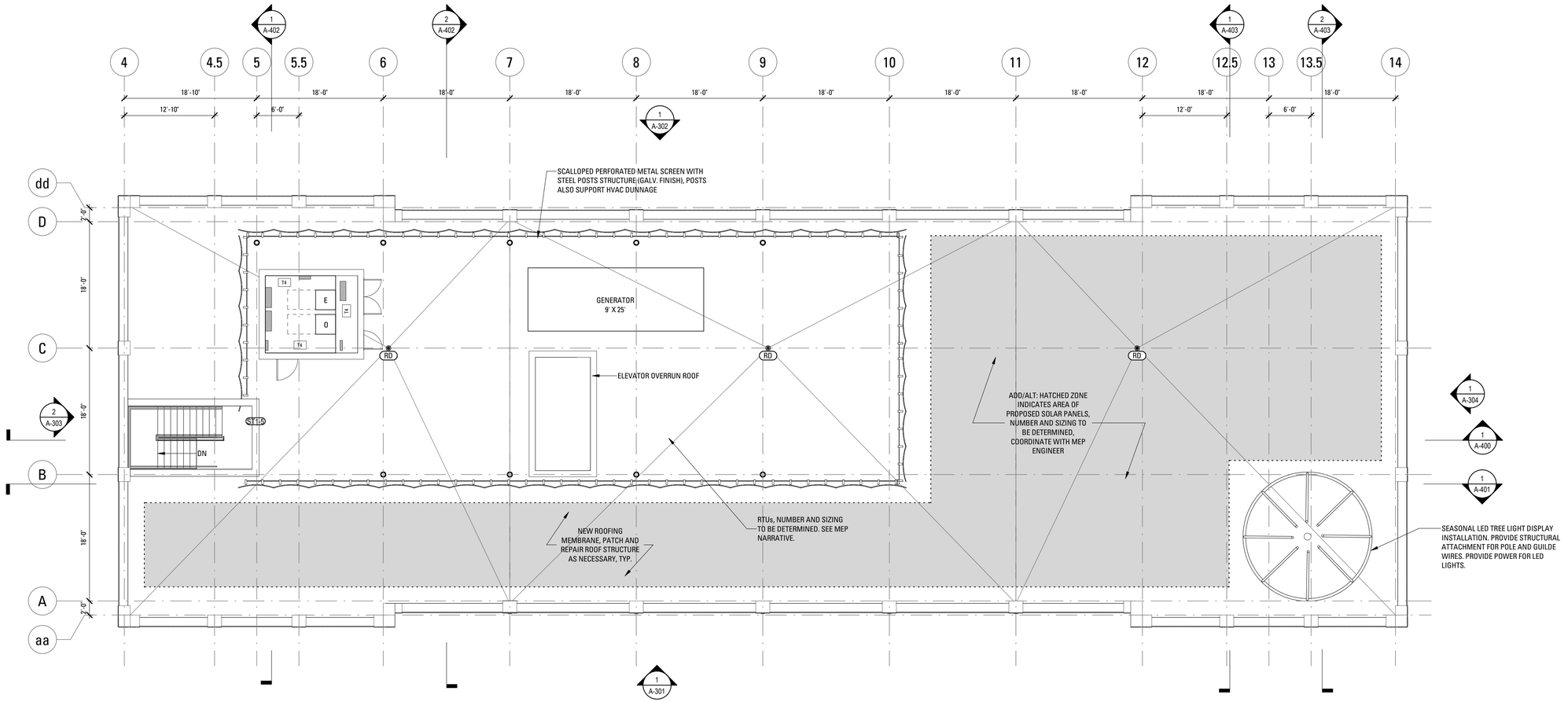
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OCTOBER 27, 2023 **LAND-USE PERMIT SET**

Rev.	Date	Revision Title

FOURTH FLOOR PLAN

A-104



1 ROOF PLAN
SCALE: 1/8" = 1'-0"

PROJECT NORTH
TRUE NORTH

REGISTERED ARCHITECT
STATE OF MAINE
ARC4420

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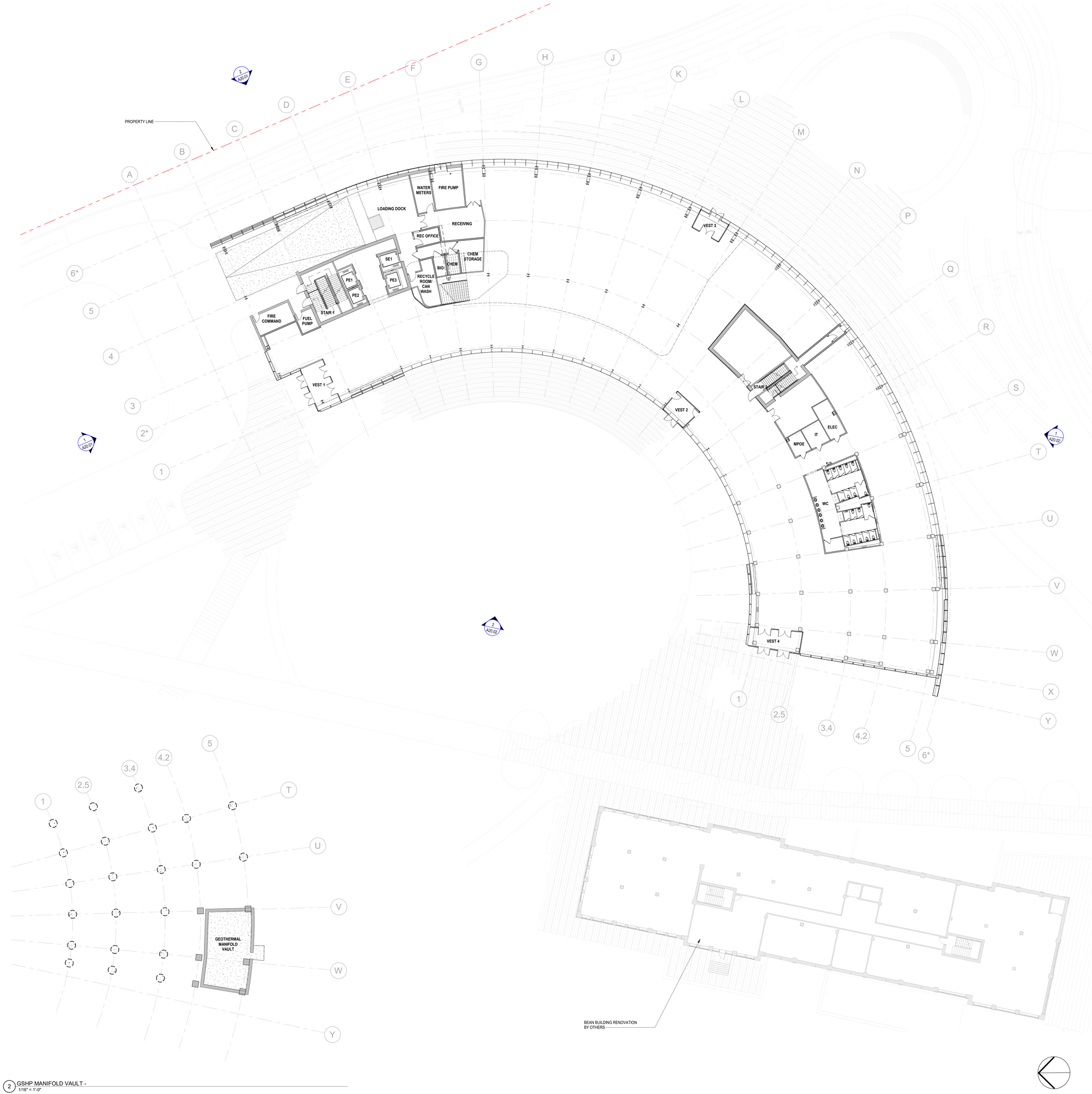
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Rev.	Date	Revision Title

ROOF PLAN

A-105

40,100 GSF



2 GSHP MANIFOLD VAULT -
1/16" = 1'-0"

1 1ST FLOOR PLAN
1/16" = 1'-0"

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Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3838
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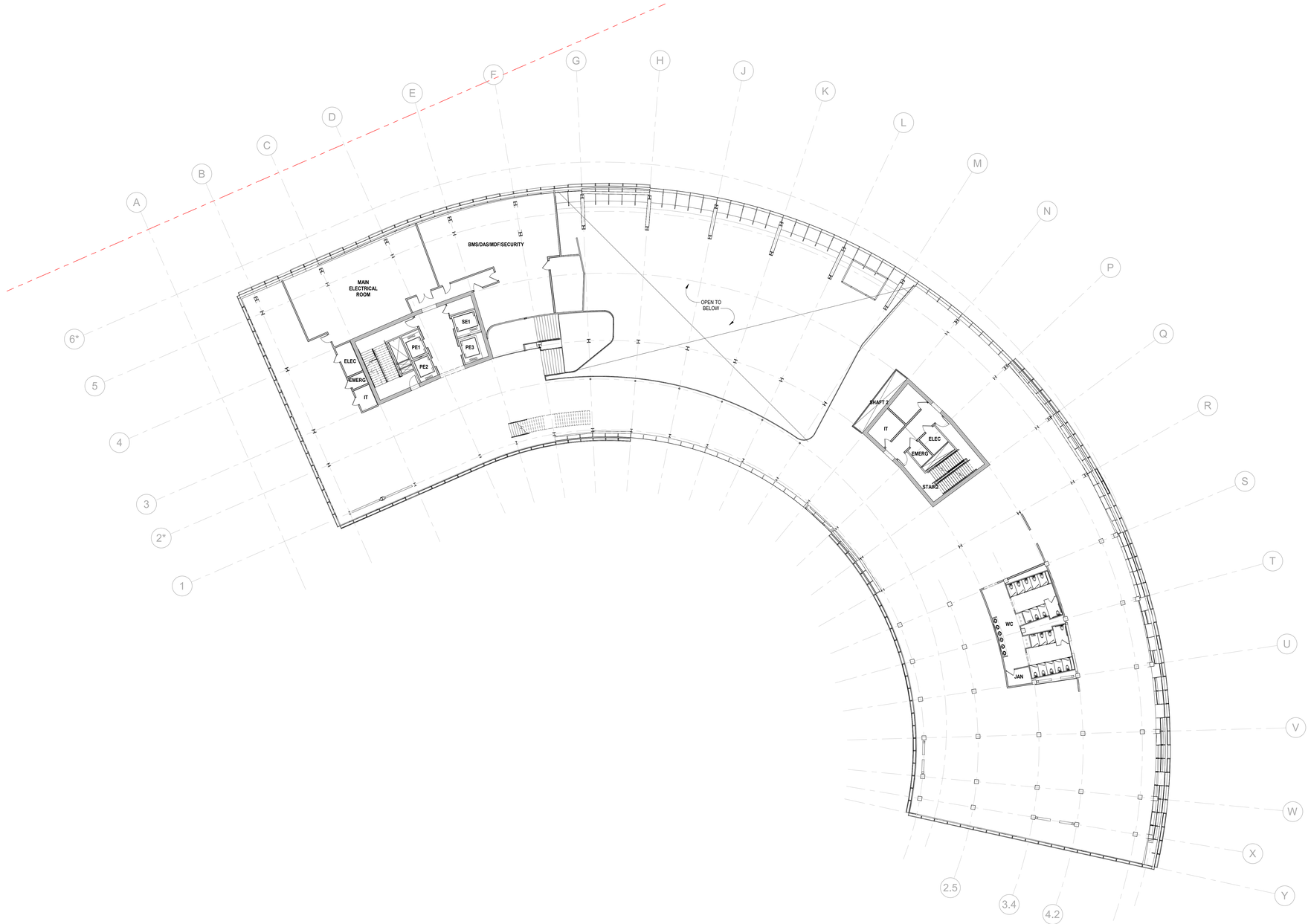
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Checked	BC
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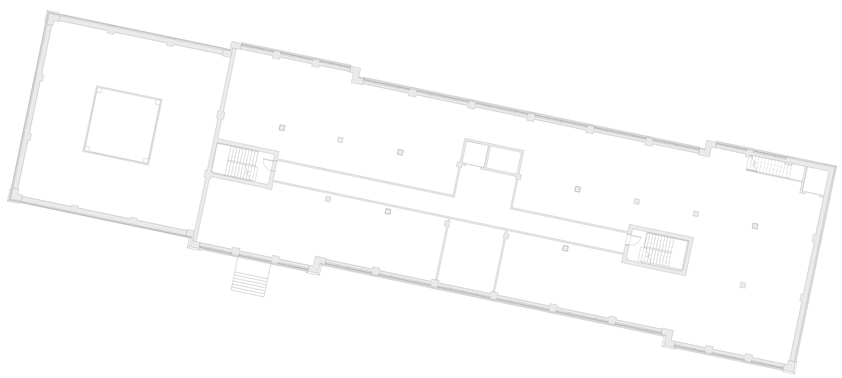
Drawing Title
1ST FLOOR PLAN

A1.01

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34,720 GSF





1 2ND FLOOR PLAN
1/16" = 1'-0"

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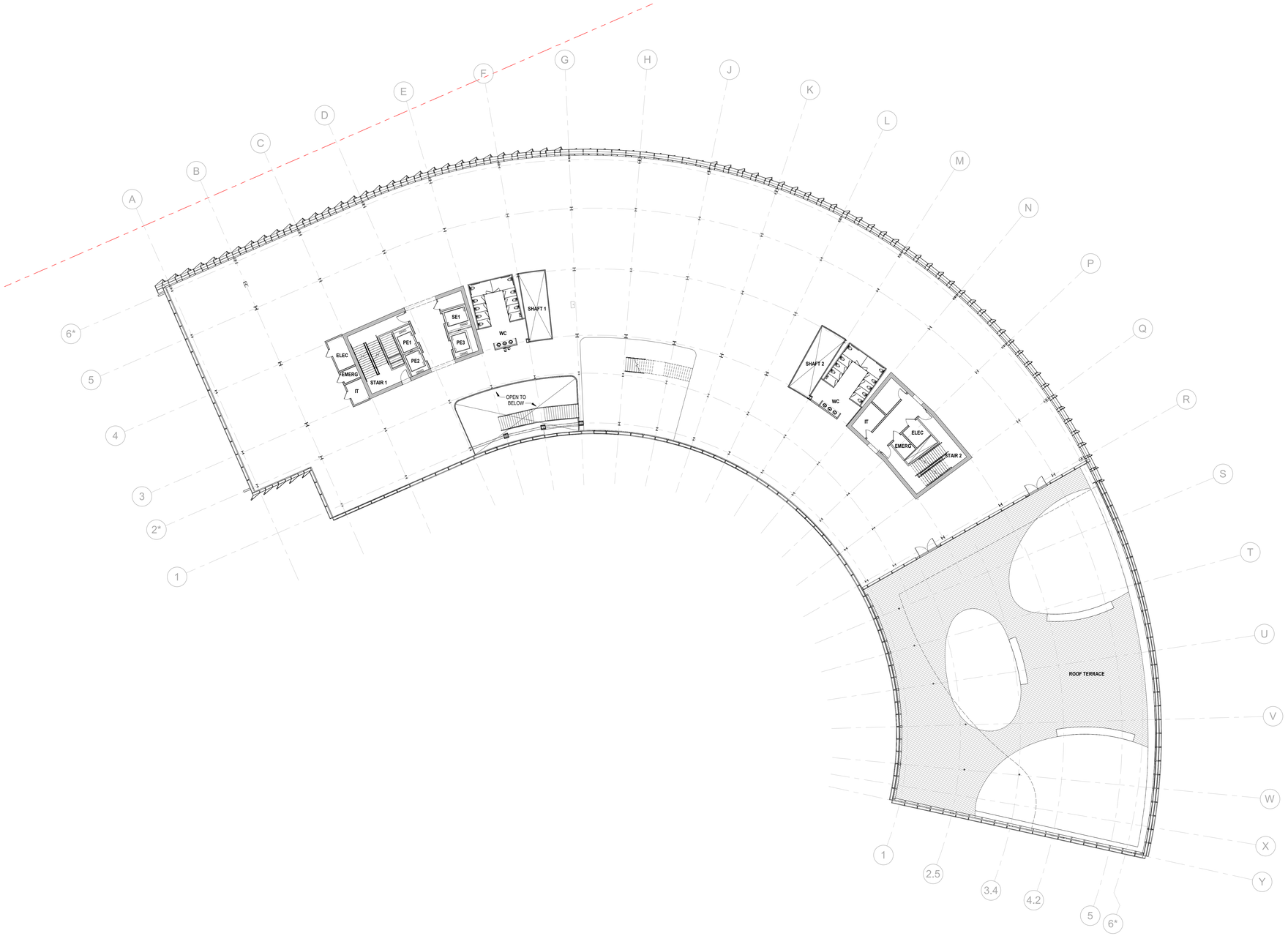
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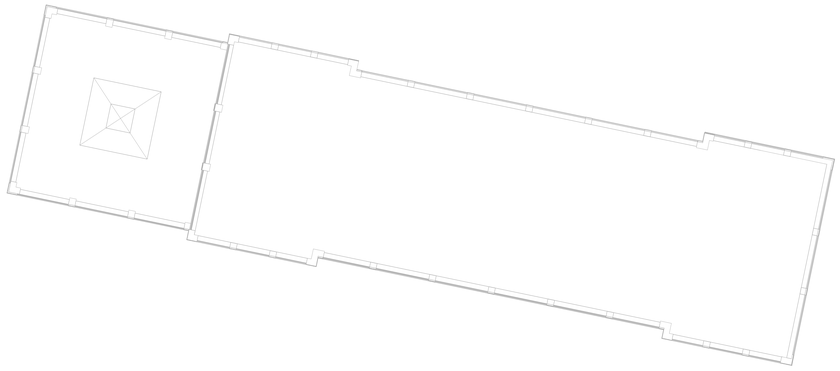
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2ND FLOOR PLAN

A1.02

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39,540 GSF





1 3RD FLOOR PLAN
1/16" = 1'-0"

9/29/2023 12:25:24 PM

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Number	Revision	Date

LICENSED ARCHITECT
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No. 3038
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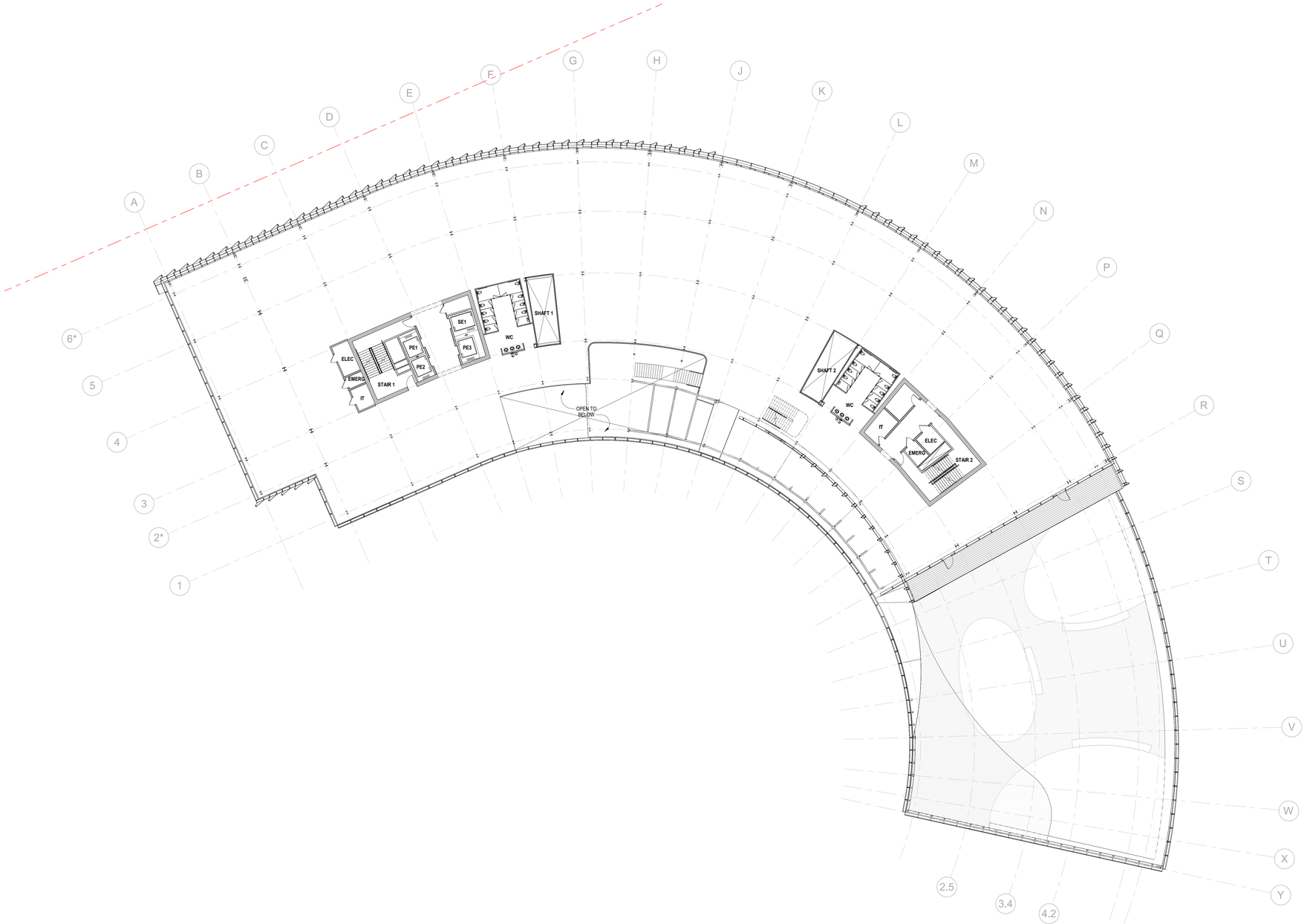
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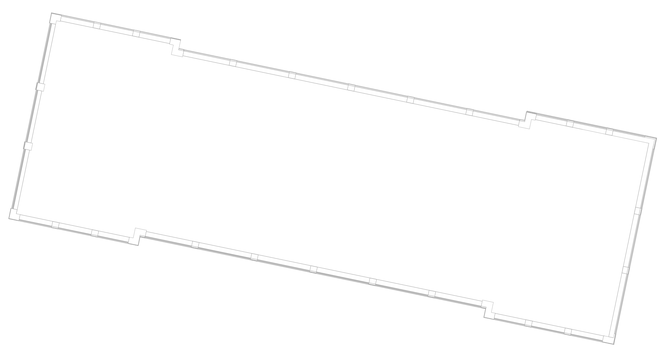
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Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER, 2023
Scale	1/16" = 1'-0"

Drawing Title
3RD FLOOR PLAN

A1.03

36,970 GSF





1 4TH FLOOR PLAN
1/16" = 1'-0"

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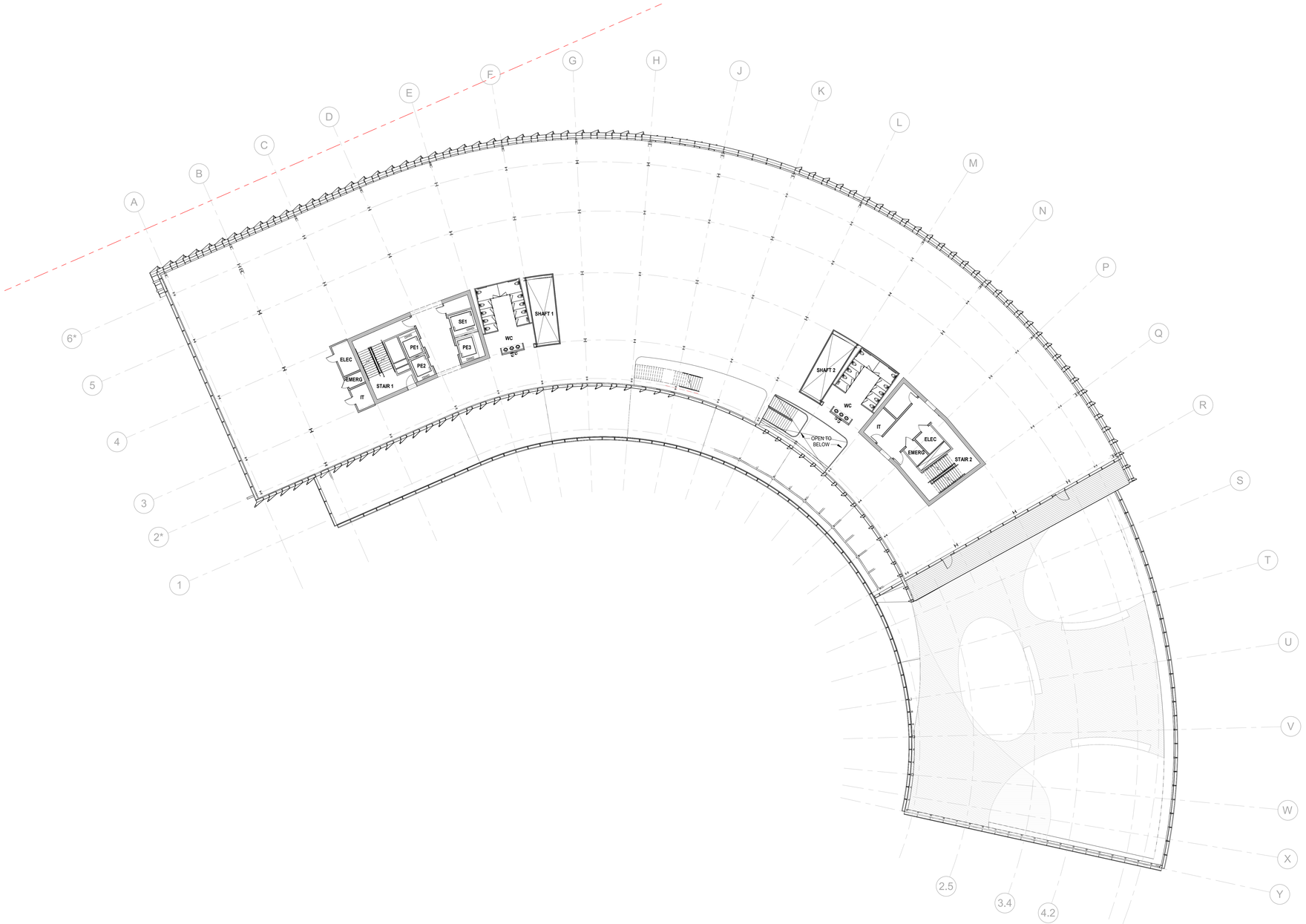
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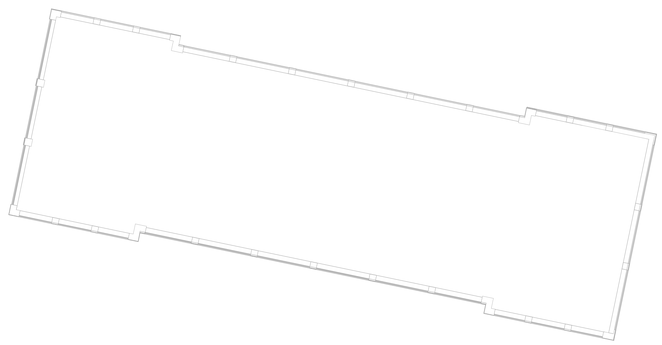
Job #	2202		
Project	THE ROUX INSTITUTE		
Drawn By	WS	Checked	BC
Date	27 OCTOBER, 2023		
Scale	1/16" = 1'-0"		

Drawing Title
4TH FLOOR PLAN

A1.04

37,220 GSF





1 5TH FLOOR PLAN
1/16" = 1'-0"

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Cambridge, MA 02138
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LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
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No. 3898
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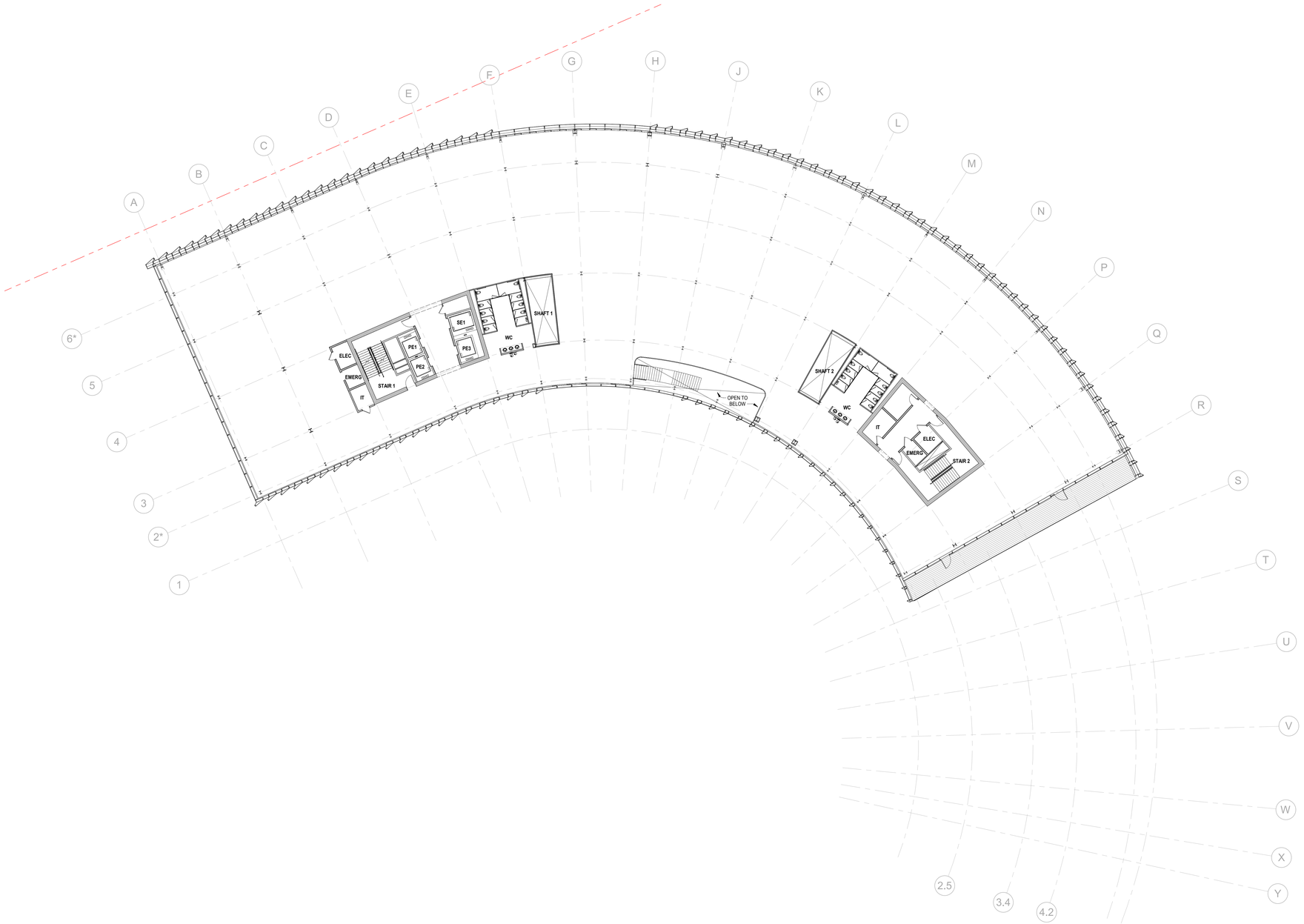
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Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER, 2023
Scale	1/16" = 1'-0"

Drawing Title
5TH FLOOR PLAN

A1.05

38,510 GSF



1 6TH FLOOR PLAN
1/16" = 1'-0"

9/29/2023 12:25:31 PM

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3038
STATE OF MAINE

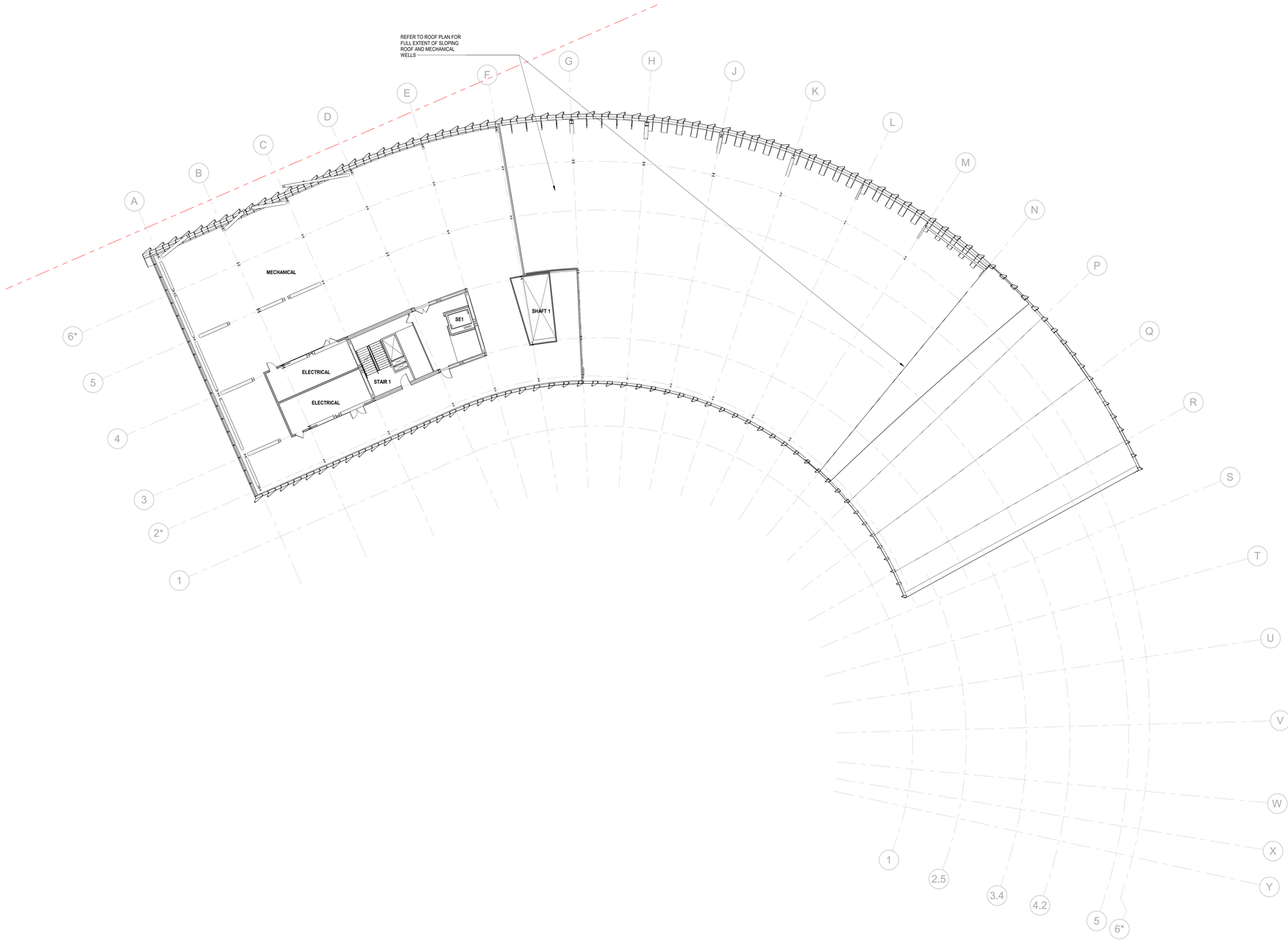
Stamp 10/27/2023

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER, 2023
Scale	1/16" = 1'-0"

Drawing Title
6TH FLOOR PLAN

A1.06

10,940 GSF



1 7TH FLOOR PLAN
1/16" = 1'-0"

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LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3838
STATE OF MAINE

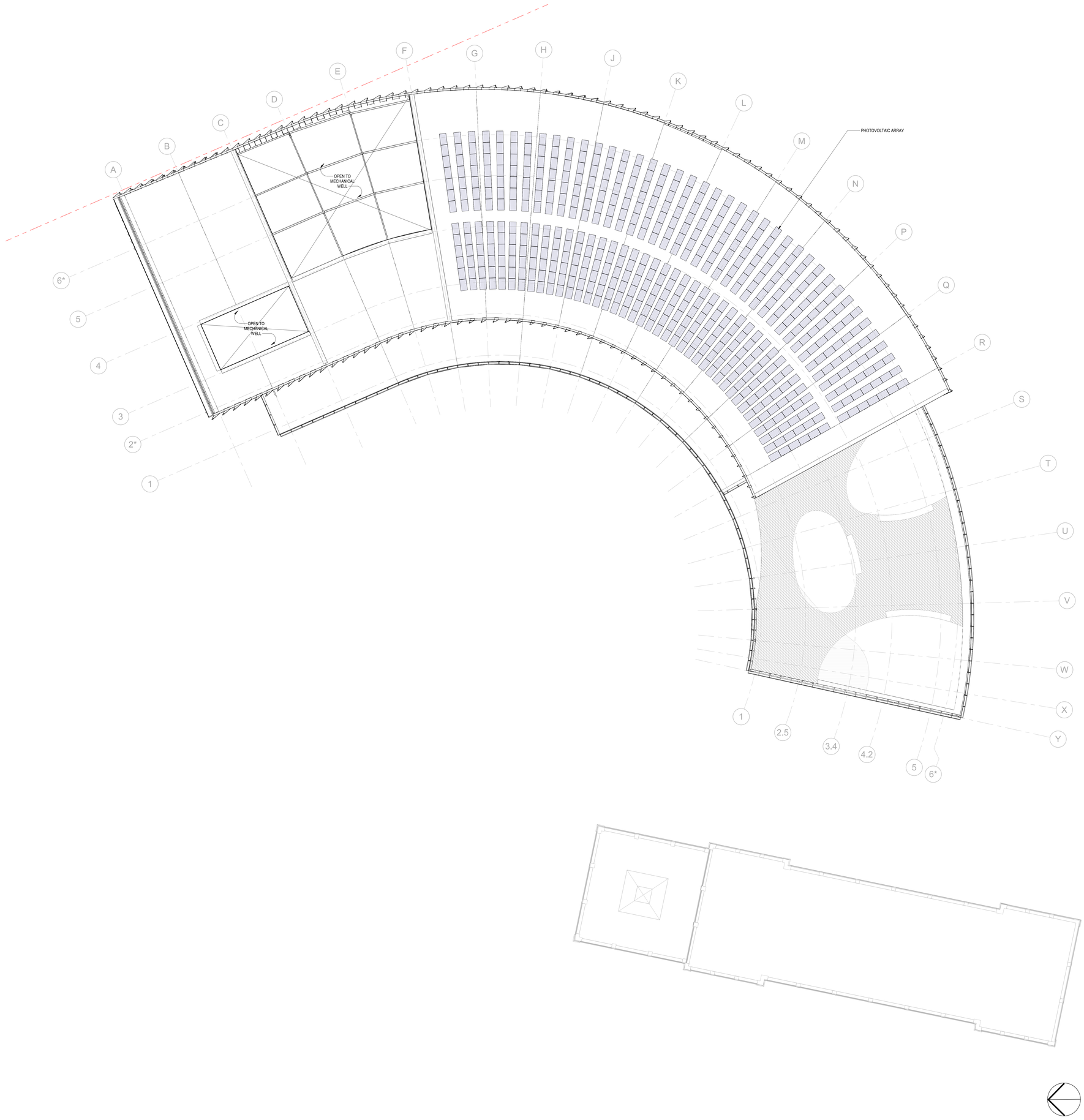
Stamp 10/27/2023

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER, 2023
Scale	1/16" = 1'-0"

Drawing Title
7TH FLOOR PLAN

A1.07

9/29/2023 12:25:33 PM



1 ROOF PLAN - OVERALL Copy 2
1/16" = 1'-0"

9/29/2023 12:25:38 PM

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LAND-USE PERMIT SET

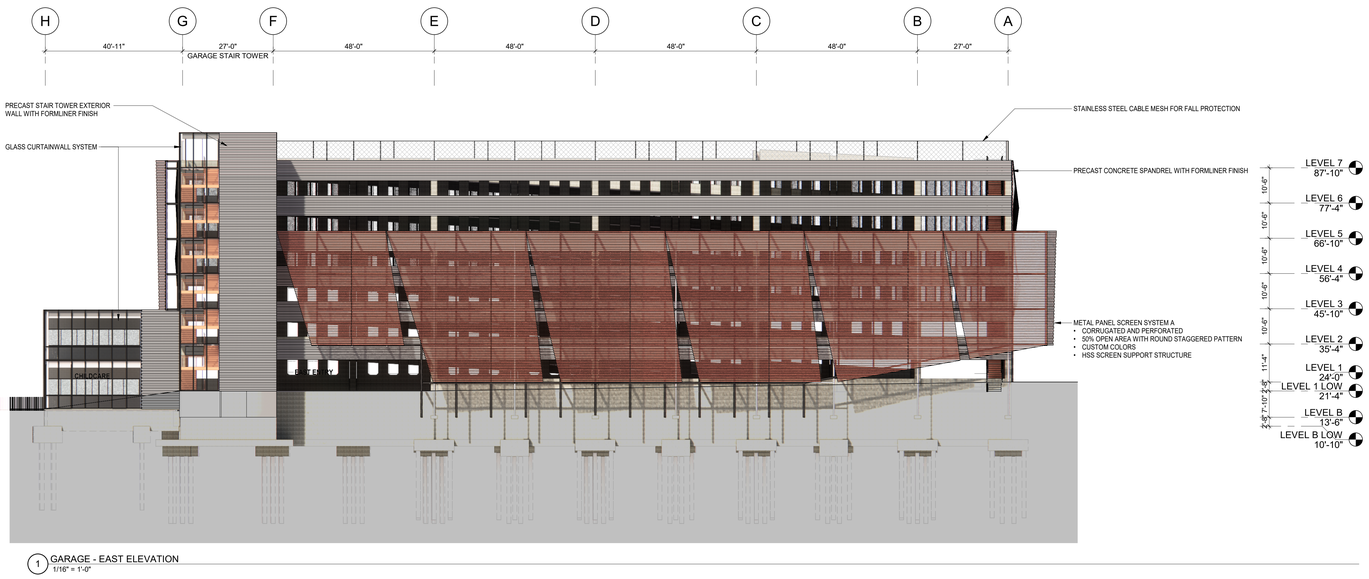
Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
NO. 3838
STATE OF MAINE
Stamp 10/27/2023

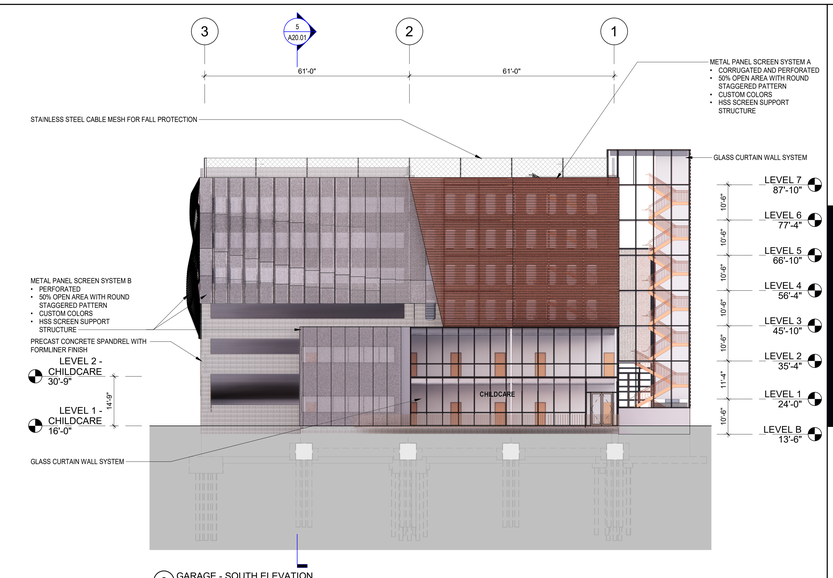
Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER, 2023
Scale	1/16" = 1'-0"

Drawing Title
ROOF PLAN

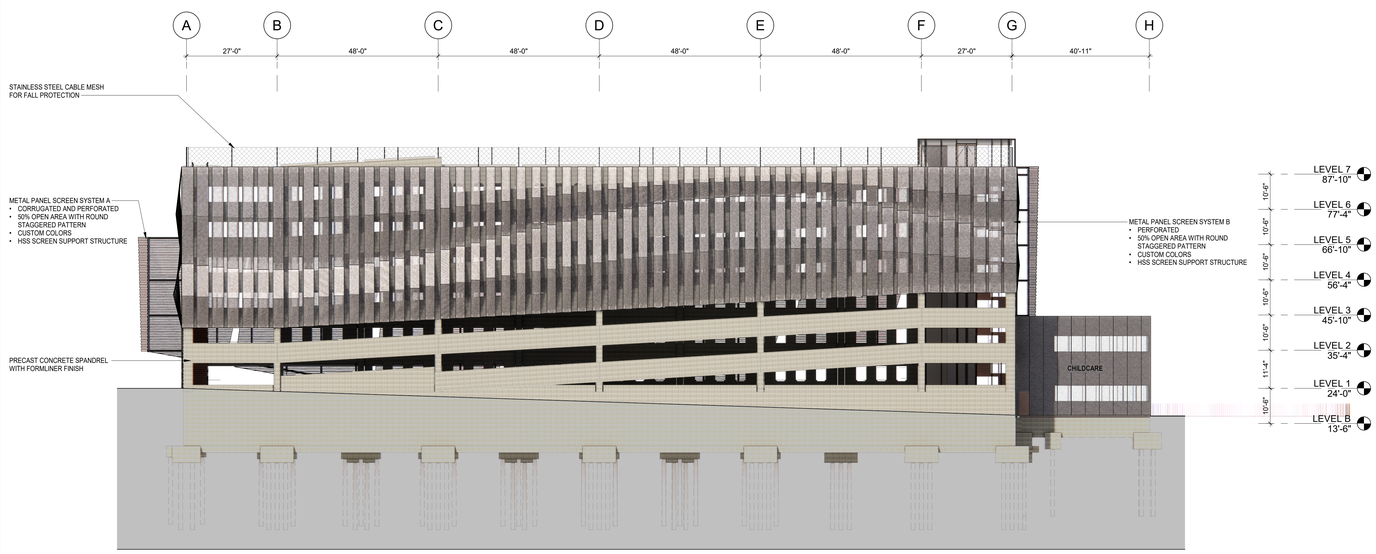
A1.10



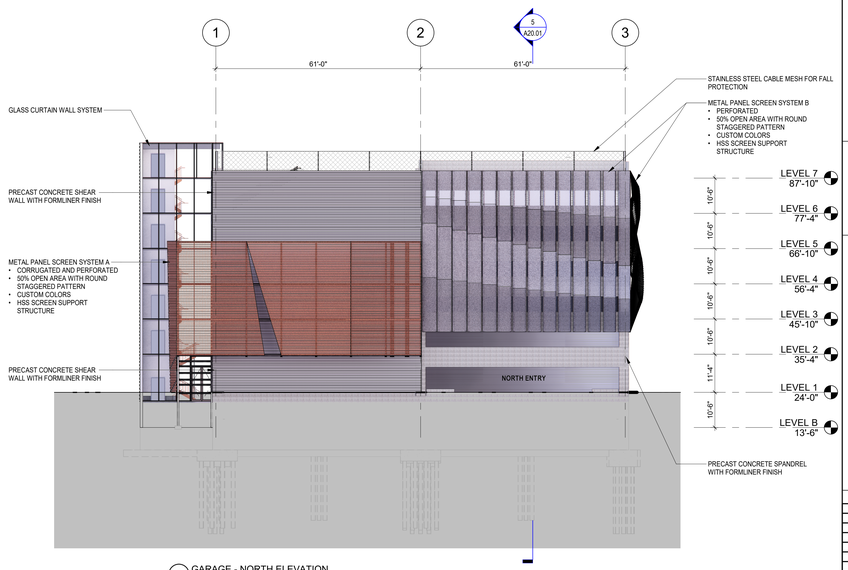
1 GARAGE - EAST ELEVATION
1/16" = 1'-0"



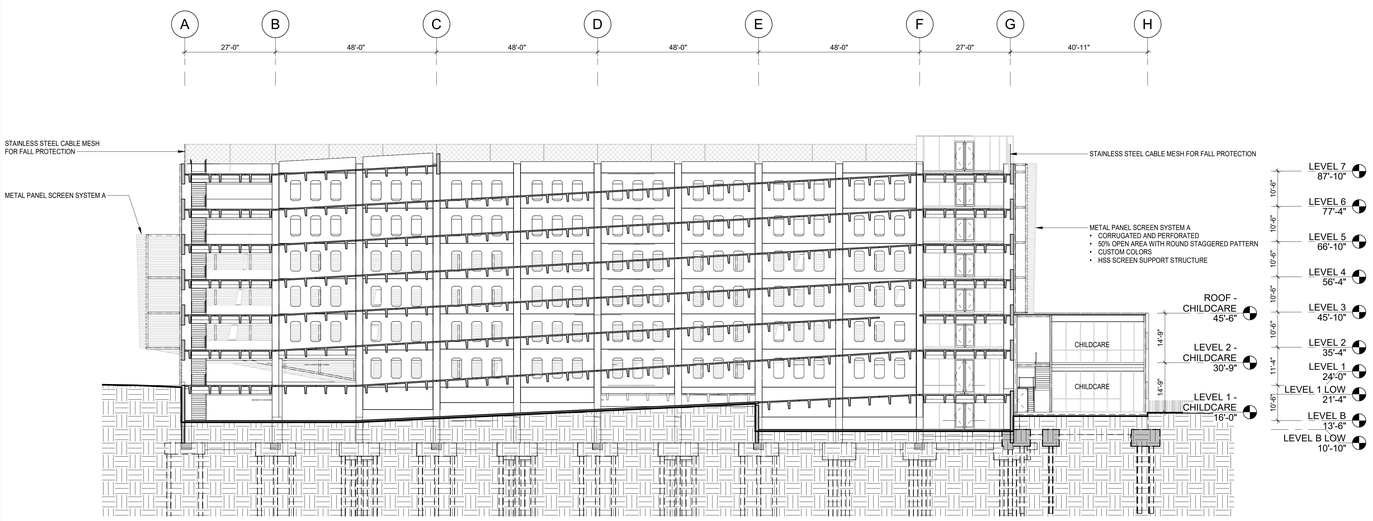
2 GARAGE - SOUTH ELEVATION
1/16" = 1'-0"



3 GARAGE - WEST ELEVATION
1/16" = 1'-0"



4 GARAGE - NORTH ELEVATION
1/16" = 1'-0"



5 GARAGE - SECTION
1/16" = 1'-0"

11/2/2023 11:54:41 AM

IDEALS
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LAND-USE PERMIT SET

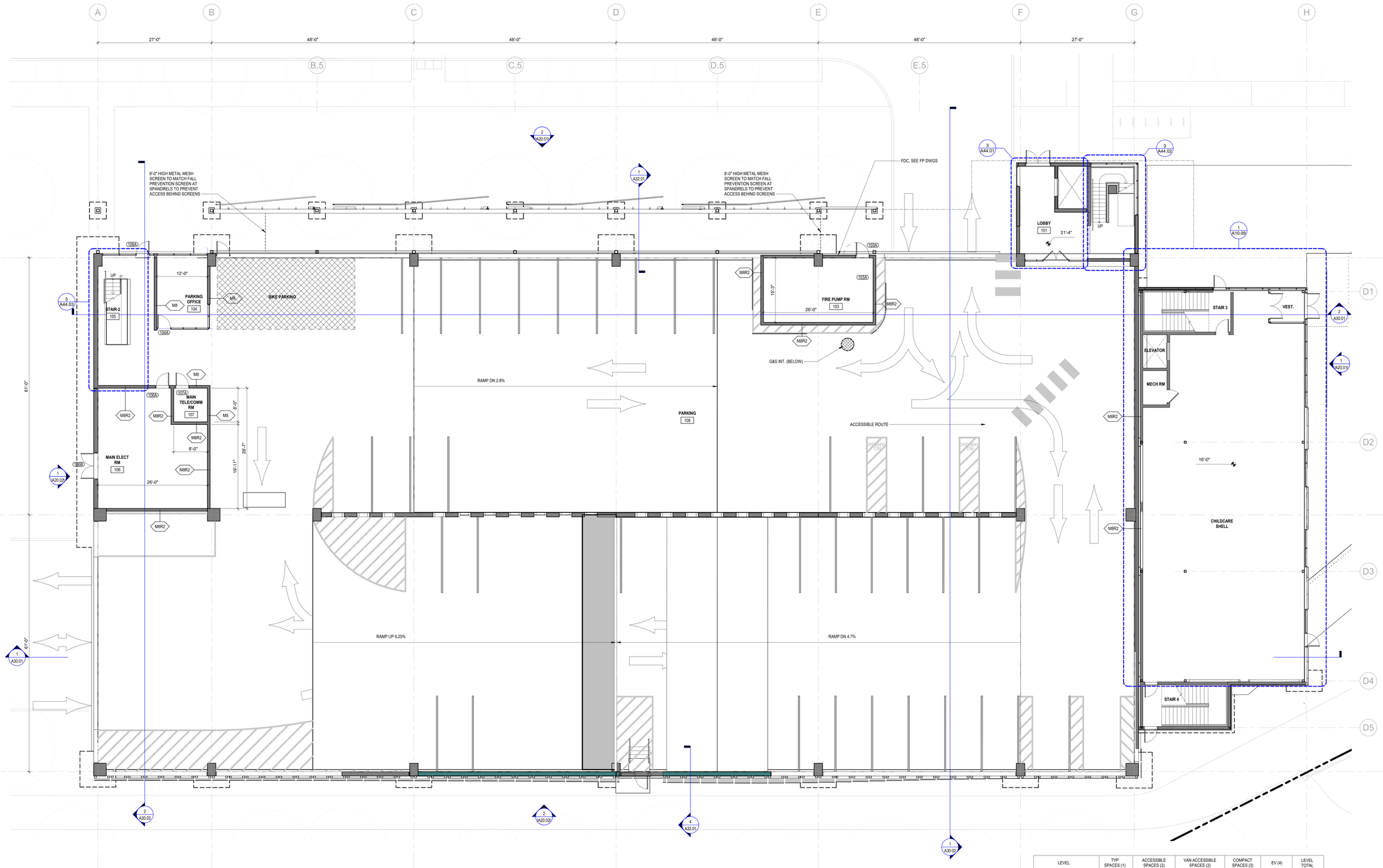
Number	Revision	Date

Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	WS
Checked	BC
Date	27 OCTOBER 2023
Scale	

Drawing Title
PARKING GARAGE EXT. ELEVATIONS AND SECTION

A20.01



1 LEVEL 1 FLOOR PLAN
1/8" = 1'-0"

LEVEL	TYP SPACES (1)	ACCESSIBLE SPACES (2)	VAN ACCESSIBLE SPACES (2)	COMPACT SPACES (3)	EV (4)	LEVEL TOTAL
SITE	6	4	4	0	0	14
LEVEL 01	52	4	0	4	2	62
LEVEL 02	82	2	0	4	4	92
LEVEL 03	83	2	0	4	4	93
LEVEL 04	83	0	0	6	4	93
LEVEL 05	84	0	0	6	4	94
LEVEL 06	81	0	0	6	6	93
LEVEL 07	77	0	0	7	0	84
TOTAL SPACES	548	12	4	37	24	625

	REQUIRED	PROVIDED
ACCESSIBLE SPACES REQUIRED (2%)	12.5	16
VAN SPACES REQUIRED (1/6 OF TOTAL)	2.08	4
EV SPACES PER STUDY	23	24
MAX COMPACT (20%)	143	37

NOTES:
1. TYPICAL SPACES 8'-0" WIDE BY 18'-0" DEEP.
2. ADA SPACES AND AISLE PER ADA REQUIREMENTS.
3. COMPACT SPACES 8'-0" WIDE BY 16'-0" DEEP.
4. EV SPACES 8'-0" WIDE BY 18' DEEP WITH EXTRA SPACE BETWEEN VEHICLES.

IDEALS
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DESIGN DEVELOPMENT GARAGE

Number	Revision	Date

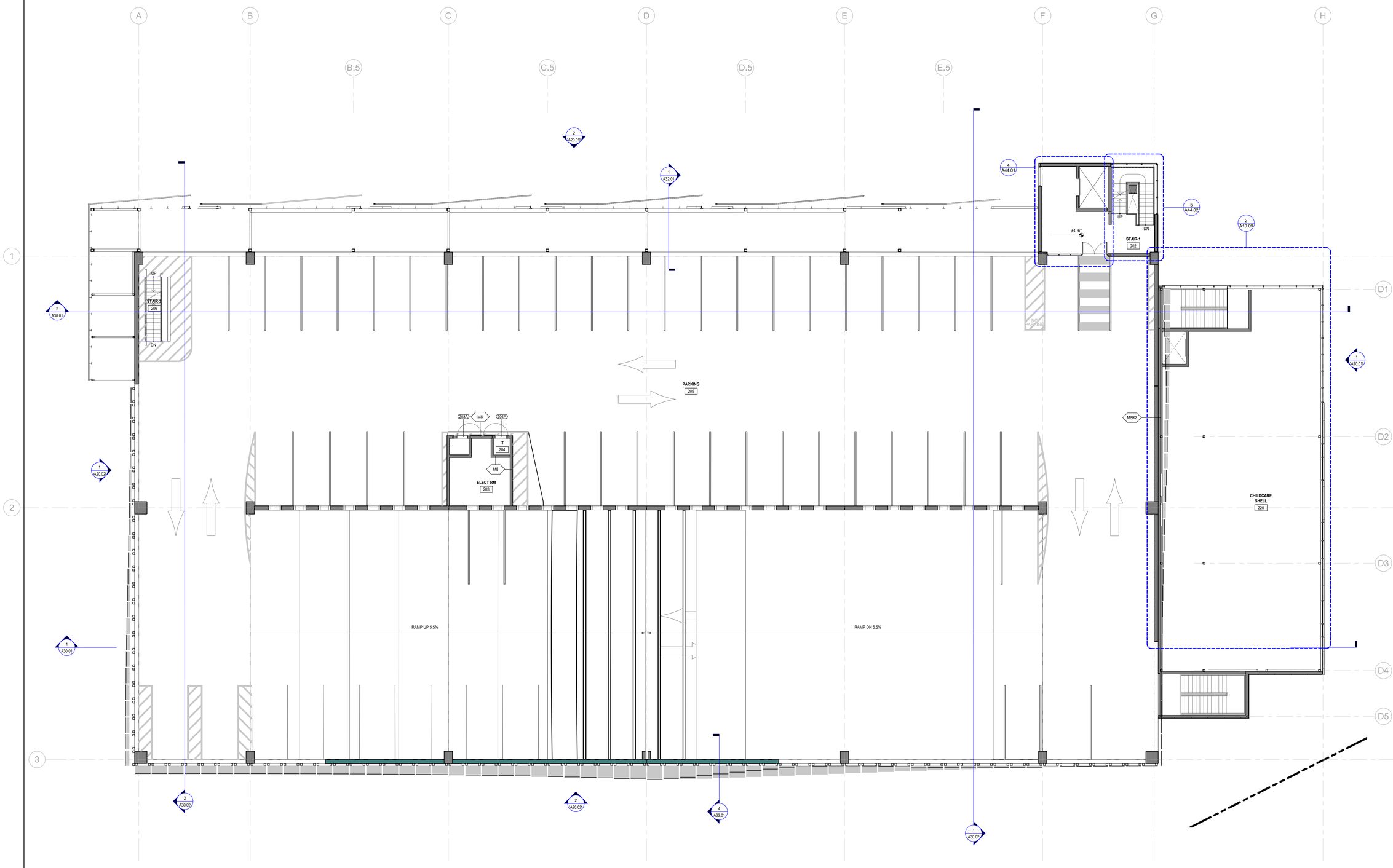
Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	MW
Checked	BC
Date	31 JANUARY 2024
Scale	

Drawing Title
LEVEL-1 FLOOR PLAN

A10.01

2/1/2024 8:51:30 AM



1 LEVEL 2 FLOOR PLAN
1/8" = 1'-0"

IDEALS
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DESIGN DEVELOPMENT GARAGE

Number	Revision	Date

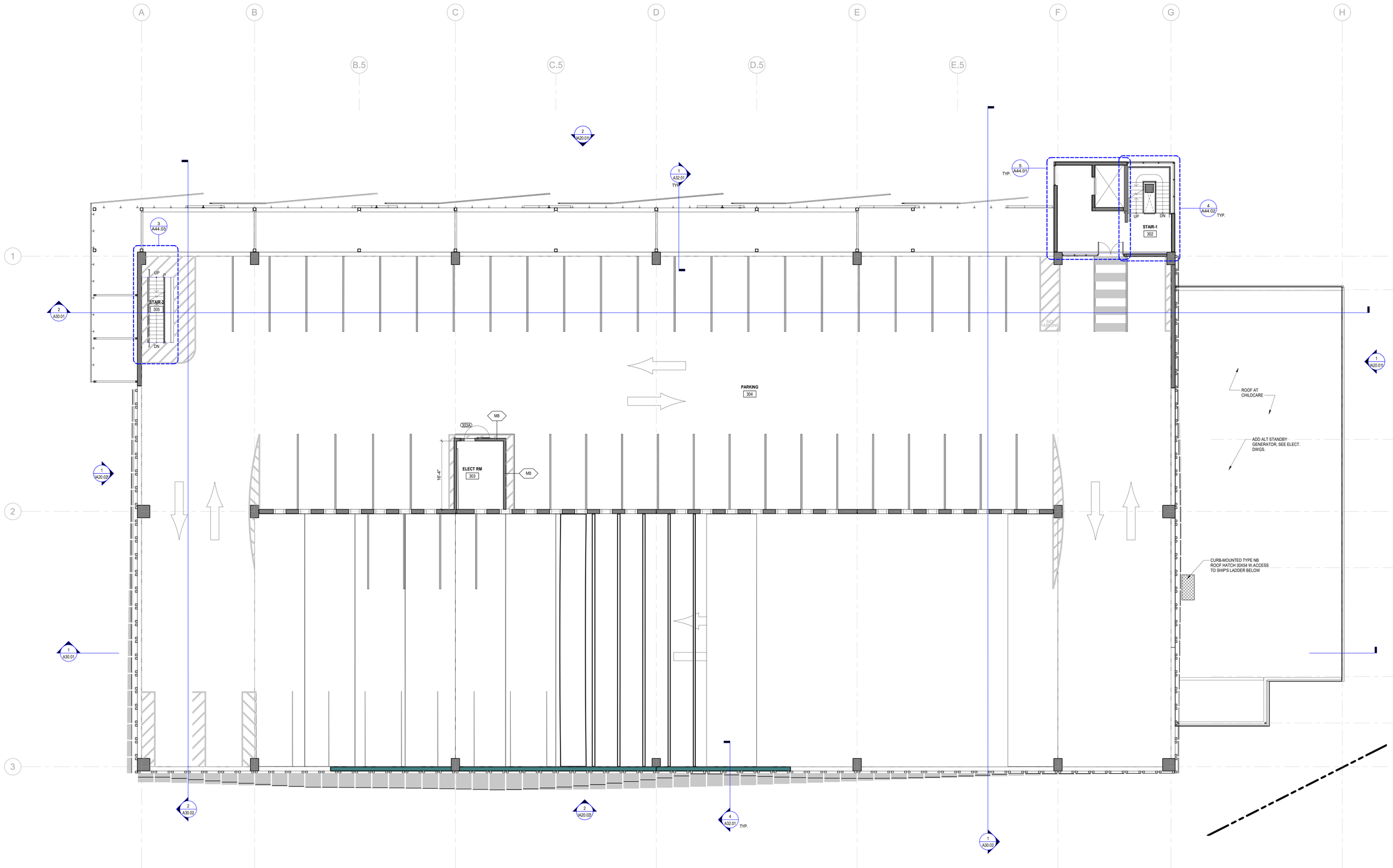
Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	MW
Checked	BC
Date	31 JANUARY 2024
Scale	

Drawing Title
LEVEL-2 FLOOR PLAN

A10.02

2/1/2024 8:51:31 AM



1 LEVEL 3 FLOOR PLAN
1/8" = 1'-0"

2/1/2024 8:51:32 AM

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DESIGN DEVELOPMENT GARAGE

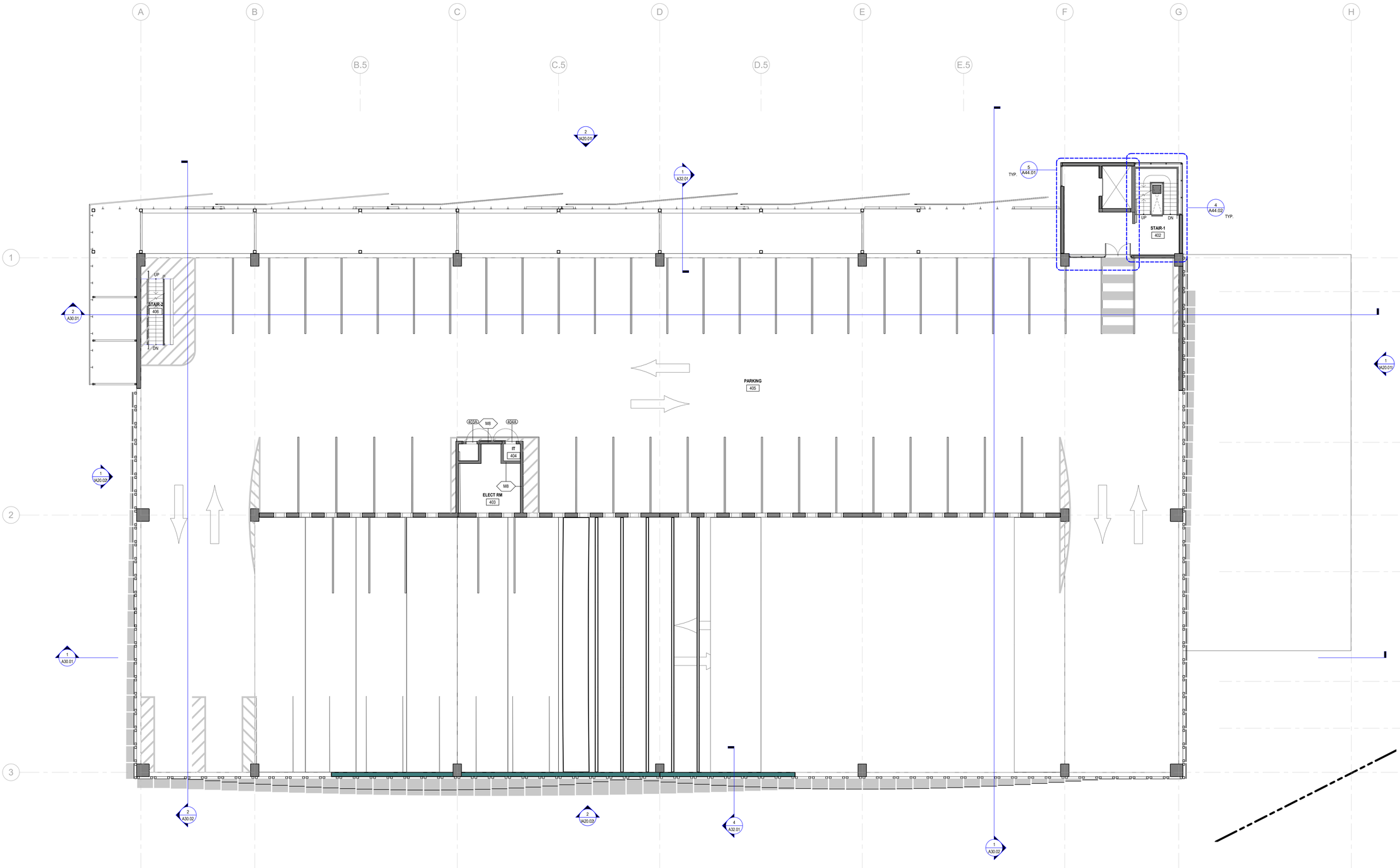
Number	Revision	Date

Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	MW
Checked	BC
Date	31 JANUARY 2024
Scale	

Drawing Title
LEVEL-3 FLOOR PLAN

A10.03



1 LEVEL 4 FLOOR PLAN
1/8" = 1'-0"

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DESIGN DEVELOPMENT GARAGE

Number	Revision	Date

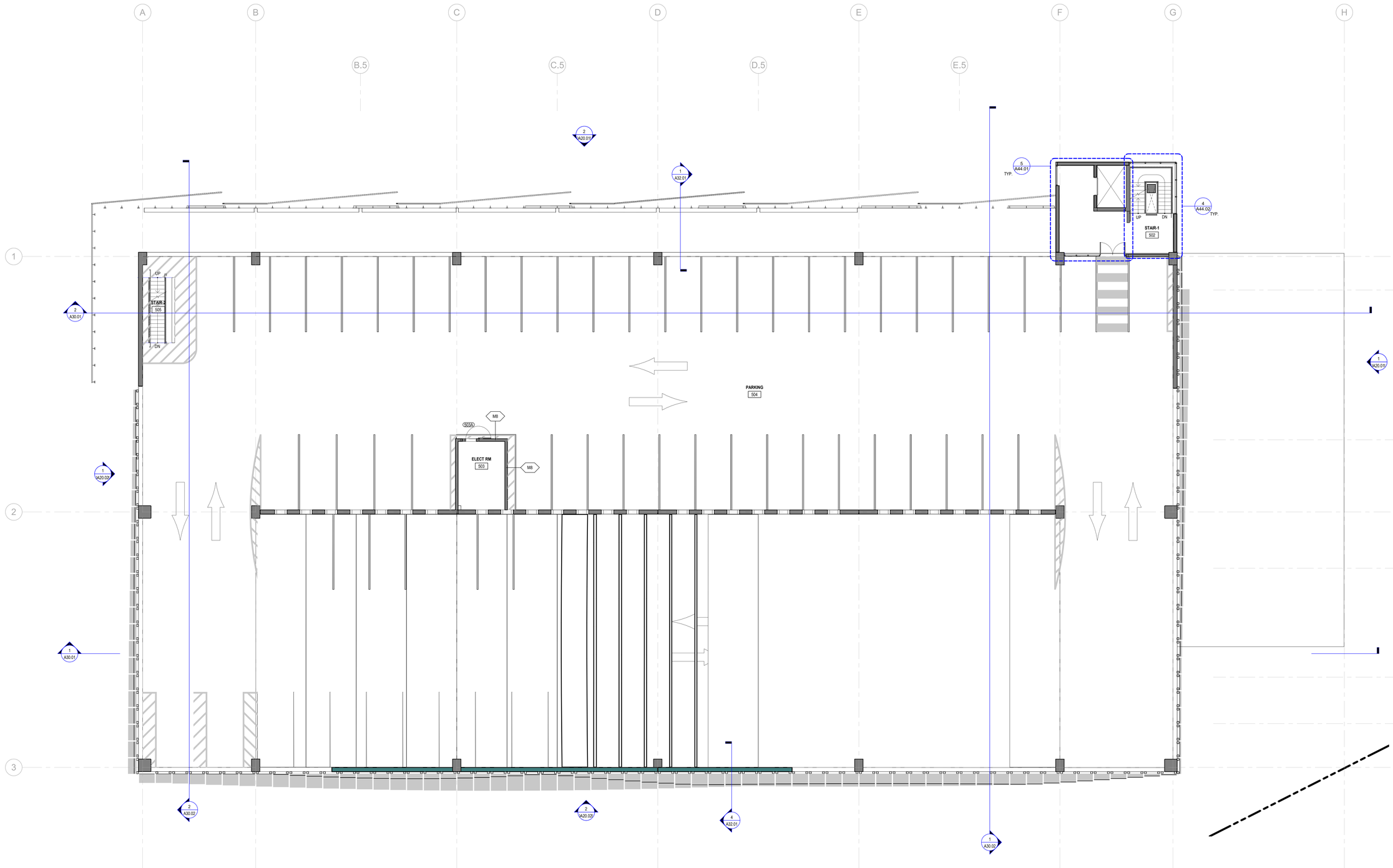
Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	MW
Checked	BC
Date	31 JANUARY 2024
Scale	

Drawing Title
LEVEL-4 FLOOR PLAN

A10.04

2/1/2024 8:54:54 AM



1 LEVEL 5 FLOOR PLAN
1/8" = 1'-0"

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DESIGN DEVELOPMENT GARAGE

Number	Revision	Date

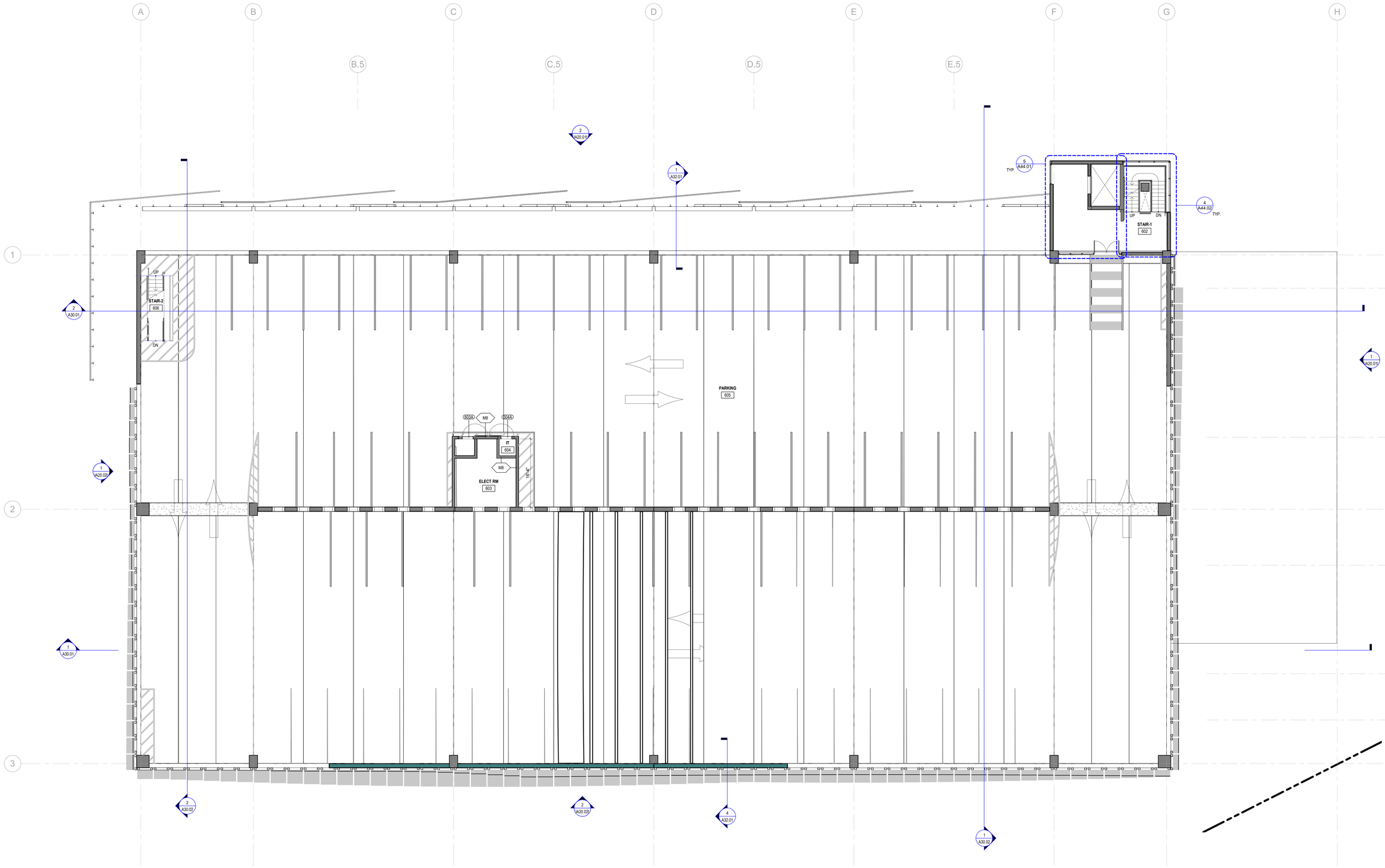
Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	MW
Checked	BC
Date	31 JANUARY 2024
Scale	

Drawing Title
LEVEL-5 FLOOR PLAN

A10.05

2/1/2024 8:51:35 AM



1 LEVEL 6 FLOOR PLAN
1/8" = 1'-0"

2/1/2024 8:51:36 AM

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DESIGN DEVELOPMENT GARAGE

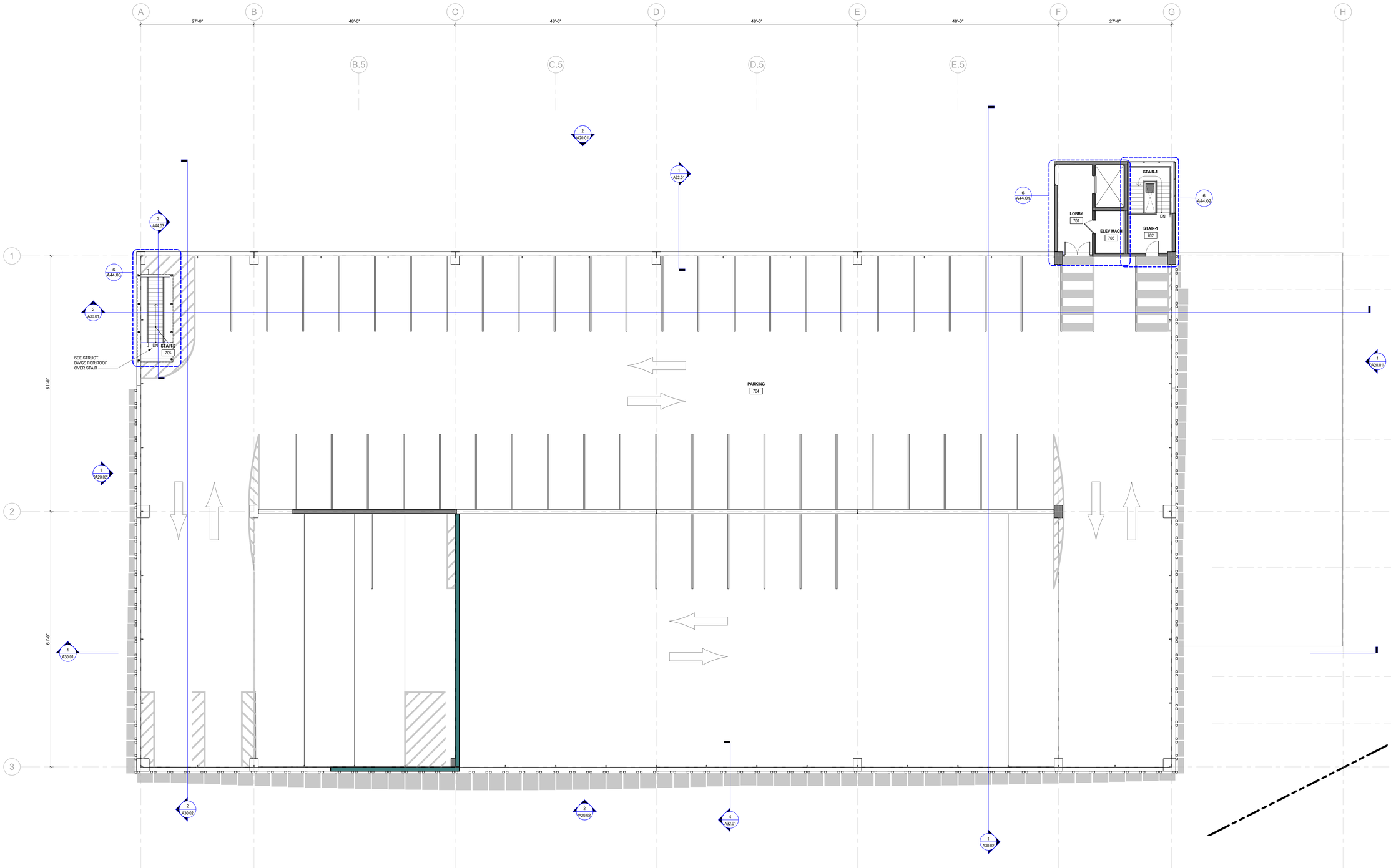
Number	Revision	Date

Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	MW
Checked	BC
Date	31 JANUARY 2024
Scale	

Drawing Title
LEVEL-6 FLOOR PLAN

A10.06



1 LEVEL 7 FLOOR PLAN
1/8" = 1'-0"

IDEALS
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DESIGN DEVELOPMENT GARAGE

Number	Revision	Date

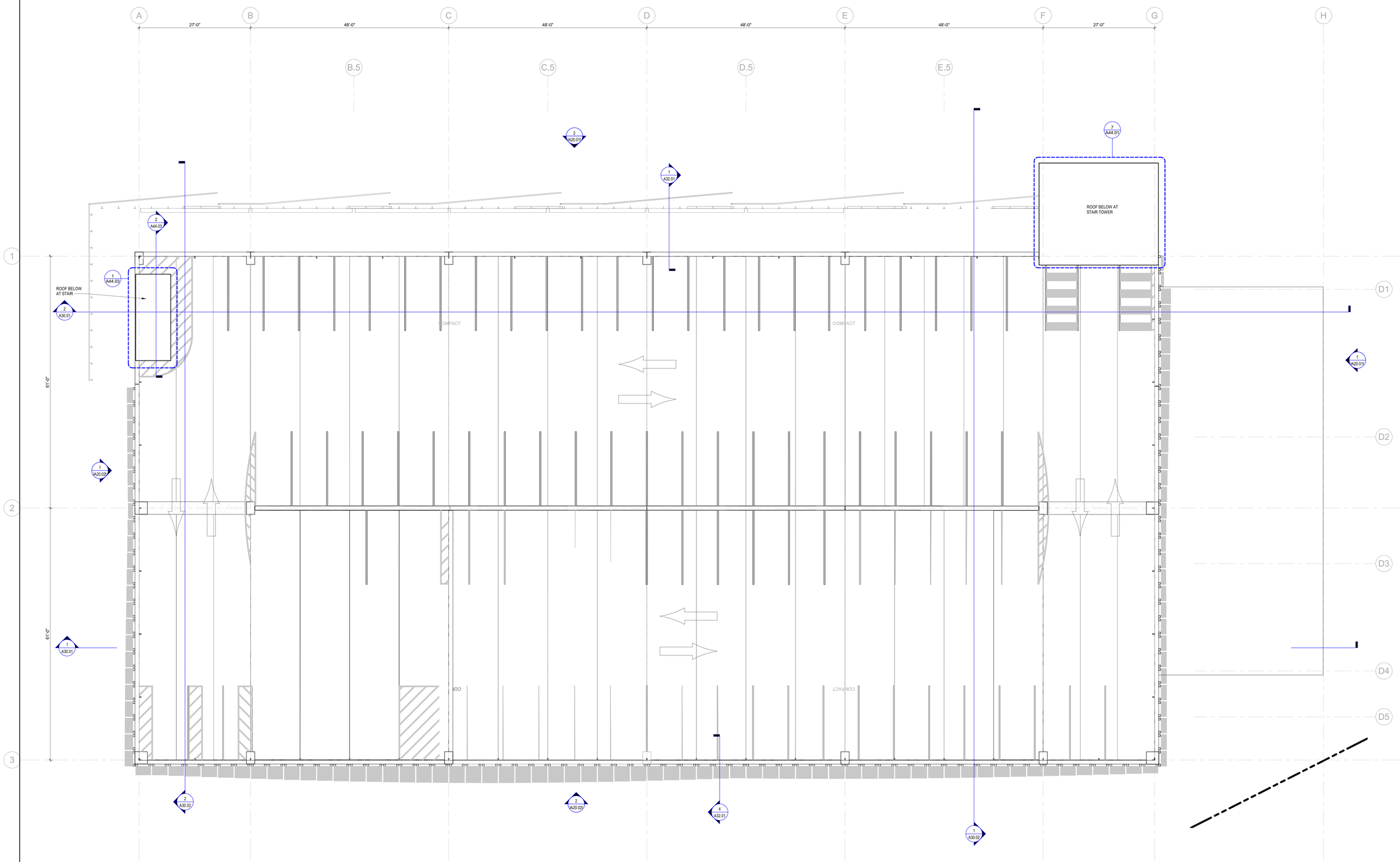
Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	MW
Checked	BC
Date	31 JANUARY 2024
Scale	

Drawing Title
LEVEL-7 FLOOR PLAN

A10.07

2/1/2024 8:53:51 AM



1 ROOF PLAN
1/8" = 1'-0"

2/1/2024 8:51:39 AM

IDEALS
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DESIGN DEVELOPMENT GARAGE

Number	Revision	Date

Stamp

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	Author
Checked	Checker
Date	31 JANUARY 2024
Scale	

Drawing Title
ROOF PLAN

A10.08

50% SUBMISSION
NOT FOR CONSTRUCTION
11/1/2023

IDEALS - ROUX CAMPUS

PORTLAND

CUMBERLAND COUNTY

SHERWOOD STREET

PROJECT LENGTH: 0.09 MILES

PERMIT REVIEW
NOT FOR CONSTRUCTION

PLANS PREPARED BY:

vhb

500 Southborough Drive, Suite 105B
South Portland, Maine 04106

PLAN LEGEND

Town, County, State		Catch Basins	Existing ■ Proposed
Property Lines		Manholes	Existing ● Proposed
R/W Lines-Existing		Proposed Underdrain	
R/W Lines-Proposed		Proposed Ditch	
Culvert-Existing		Existing Ditch	
Culvert Proposed		Utility Poles	Existing ♦ Proposed
Curbing	Existing Proposed	Fire Hydrants	Existing ◈ Proposed
Type 1		Existing Water Line	
Type 3		Existing San. Sewer	
Type 5		Existing San. Sewer Manhole	
Outline of Bodies of Water		Guardrail-Existing	
Exposed Bedrock		Guardrail-Proposed	
Buildings		Guardrail-Cable, Other	
Trees	Conifer Deciduous	Centerline-Existing	
Tree Line		Centerline-Proposed	10+00
Clearing Limit Line		Travelway-Existing	
Railroad		Travelway-Proposed	

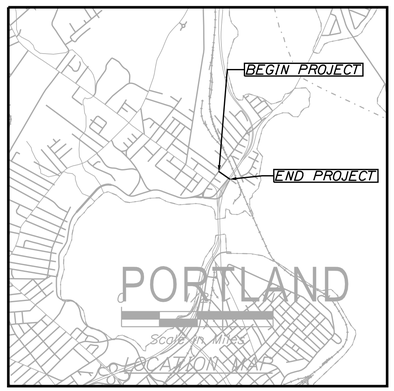
Boring HB-XXX-###

Pavement Core PC-#

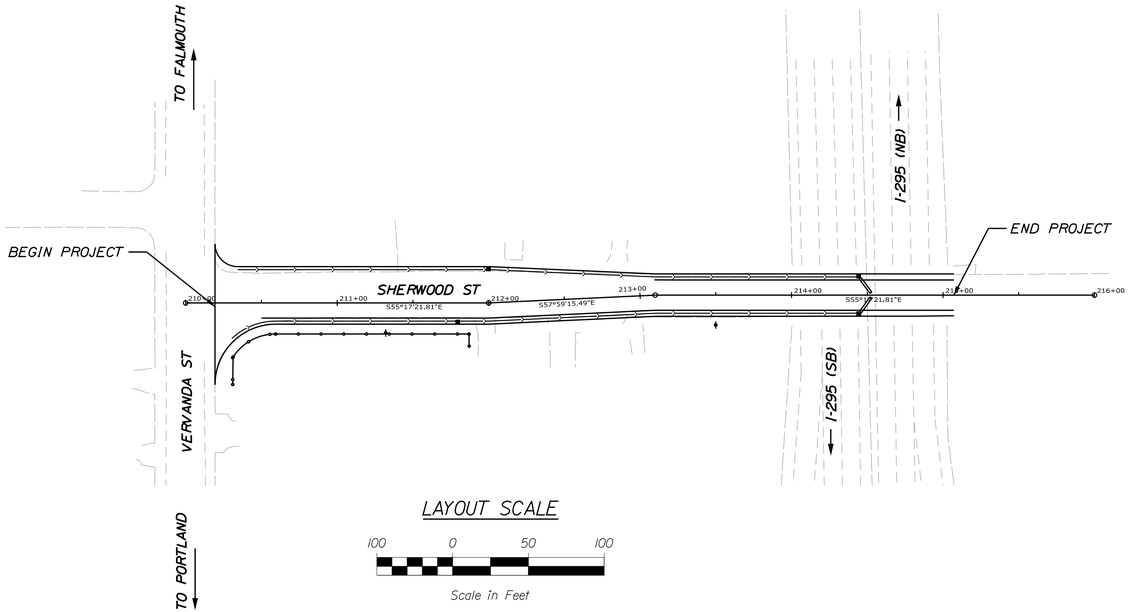
Test Pit TP-XXX-###

Probe P-#.#X

#.# = Depth
X = W (Weathered Rock)
R (Refusal)
NR (No Refusal)



0 1/2 1
Scale in Miles
LOCATION MAP



LAYOUT SCALE

100 0 50 100
Scale in Feet

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
Typical Sections	2
Plans	3
Profiles	4
Cross Sections	5-16

TRAFFIC DATA — SHERWOOD ST

Current (2023) AADT	XXX
Future (2043) AADT	XXX
DHV - % of AADT	XX%
Design Hour Volume	XXXX
% Heavy Trucks (AADT)	X%
Directional Distribution (DHV)	XX%
Design Speed (mph)	XX
Functional Class:	Major Collector
Corridor Priority	3

PROJECT LOCATION:	FROM THE INTERSECTION OF SHERWOOD STREET AND VERNANDA STREET RUNNING SOUTHEAST 0.09 MILES TO JUST PAST THE I-295 UNDERPASS.
PROGRAM AREA:	HIGHWAY PROGRAM
SCOPE OF WORK:	ROADWAY RECONSTRUCTION WITH INTERSECTION AND PEDESTRIAN IMPROVEMENTS

IDEALS

APPROVED — DATE

COMMISSIONER:

CHIEF ENGINEER:

STATE OF MAINE — ETHAN C. FLYNN 13436 — LICENSED PROFESSIONAL ENGINEER

Ethan C. Flynn — SIGNATURE

13436 — P.E. NUMBER

11-01-2023 — DATE

PROJECT INFORMATION

PROGRAM	HIGHWAY
PROJECT MANAGER	J. CONLEY
DESIGNER	J.DAVIS
CONSULTANT	VHB
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

PORTLAND
SHERWOOD STREET

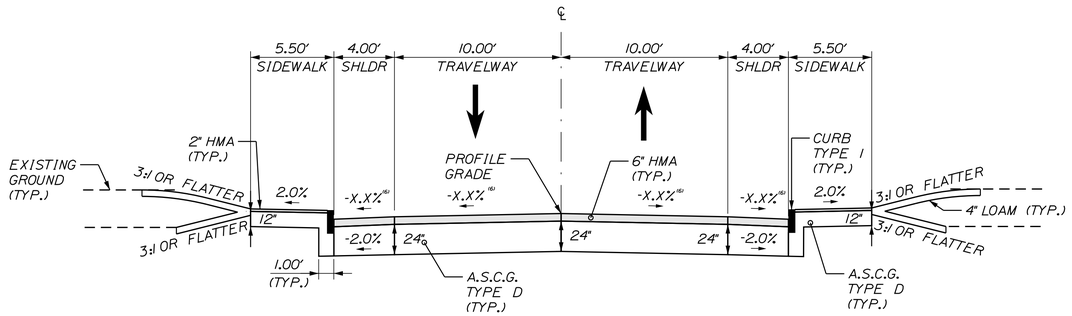
TITLE SHEET

SHEET NUMBER
1
OF 16

Filename: ...\ls\Sherwood_St\001_Title.dgn Division: HIGHWAY Username: EFlynn Date:11/1/2023

TYPICAL SECTIONS
Sherwood St

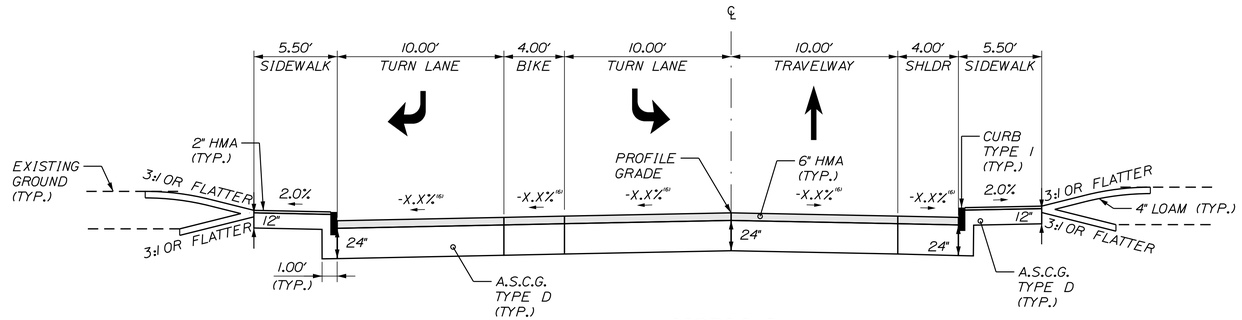
SHERWOOD STREET SUPERELEVATION TABLE					
LEFT SHLDR (%)	TURN LANE (%)	TRAVEL LANE (%)	STATION	TRAVEL LANE %	RIGHT SHLDR (%)
			START		
-	0.6%	0.6%	**210+19.34**	-0.7%	-0.7%
-	0.3%	0.3%	**210+25.00**	-0.8%	-0.8%
-	-0.8%	-0.8%	**210+50.00**	-1.4%	-1.4%
-	-2.0%	-2.0%	**210+75.00**	-2.0%	-2.0%
			TO		
-	-2.0%	-2.0%	**211+50.00**	-2.0%	-2.0%
-	-2.3%	-2.3%	**211+75.00**	-1.5%	-1.5%
			TO		
-2.3%	-	-2.3%	**213+00.00**	-1.5%	-1.5%
-2.1%	-	-2.1%	**213+25.00**	-1.8%	-1.8%
-2.0%	-	-2.0%	**213+50.00**	-2.0%	-2.0%
			TO		
-2.0%	-	-2.0%	**215+00.00**	-2.0%	-2.0%
MATCH	-	MATCH	**215+07.17**	MATCH	MATCH
			END		



NORMAL

LEFT SIDEWALK	(2) 11' WIDE LANES & (2) 4' BIKE LANES	RIGHT SIDEWALK
STATION TO STATION	STATION TO STATION	STATION TO STATION
213+10.00 TO 215+07.17	213+10.00 TO 215+07.17	213+10.00 TO 215+07.17

NOTE: BRIDGE UNDERPASS STA. 213+98.00 TO 215+07.35



NORMAL

LEFT SIDEWALK	(3) 11' WIDE LANES & (2) 4' BIKE LANES	RIGHT SIDEWALK
STATION TO STATION	STATION TO STATION	STATION TO STATION
210+19.34 TO 212+00.00	210+19.34 TO 212+00.00	210+19.34 TO 212+00.00

NOTES:

1. THE PAVEMENT AND BASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. CROWNS FOR BOTH NORMAL AND SUPERELEVATION SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
3. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVELWAY CROSS SLOPES 'ROLLOVER' SHALL NOT EXCEED 8%.
4. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.
5. 4" OF LOAM SHALL BE USED IN ALL LAWN AREAS.
6. SEE SUPERELEVATION TABLE FOR CROSS SLOPES

NOT TO SCALE

IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY		
DESIGN-DETAILED	JBD	AHS	09/2023
CHECKED-REVIEWED	EOF	JC	09/2023
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

IDEALS - PORTLAND
SHERWOOD STREET

TYPICALS

SHEET NUMBER

2

OF 16

Filename: ...\000_HDPLAN_Planset_25Scale.DGN Division: HIGHWAY Username: asiegel Date:9/15/2023

Filename: ...\000_HDPLAN_Planset_25Scale.DGN Division: HIGHWAY Username: asiegel Date:9/15/2023

CURVE DATA #1
PI = 212+00.00
Δ = 2°41'53.7" Lt.

POB = STA. 210+00.00

STA. 210+19.34
BEGIN FULL CONSTRUCTION
MATCH EXISTING
LIMIT OF WORK

INSTALL CB
TYPE A1-C

MATCH EXISTING
PAVED PATH

MATCH EXISTING WALL

REDUCE SIDWALK WIDTH TO
MATCH EXISTING STEPS

EXTEND SIDEWALK TO
MATCH EXISTING WALL

MATCH EXISTING STEPS

PI = STA. 212+00.00

SB I-295

NB I-295

STA. 215+07.17
END FULL CONSTRUCTION
MATCH EXISTING
LIMIT OF WORK

EXISTING
BRIDGE
DECK

INSTALL CB
TYPE A1-C

POE = STA. 216+00.00

5.5'

5.8'

5.8'

6" UD

12" UD

12" UD

10'

10'

10'

10'

10'

10'

210+00

211+00

212+00

213+00

214+00

215+00

216+00

S55°17'21.81"E

S57°59'15.49"E

S55°17'21.81"E

SHERWOOD STREET

VERANDA STREET

5.5'

6.0'

6.0'

RELOCATE POLE

INSTALL CB
TYPE A1-C

MATCH EXISTING STEPS

RELOCATE POLE

INSTALL (2) 12" X 16 FT
RCP

INSTALL CB
TYPE A1-C

EXTEND SIDEWALK TO
MATCH EXISTING WALL

PI = STA. 213+10.00

CURVE DATA #1
PI = 213+10.00
Δ = 2°41'53.7" Rt.

THIS APPEARS TO
BE A PAVED PATH
DISCUSS IF WE
NEED CURB CUT?

EXTEND SIDEWALK TO
MATCH EXISTING WALL

PLAN

25 0 25 50
Scale of Feet

IDEALS

HIGHWAY PLANS

vhb

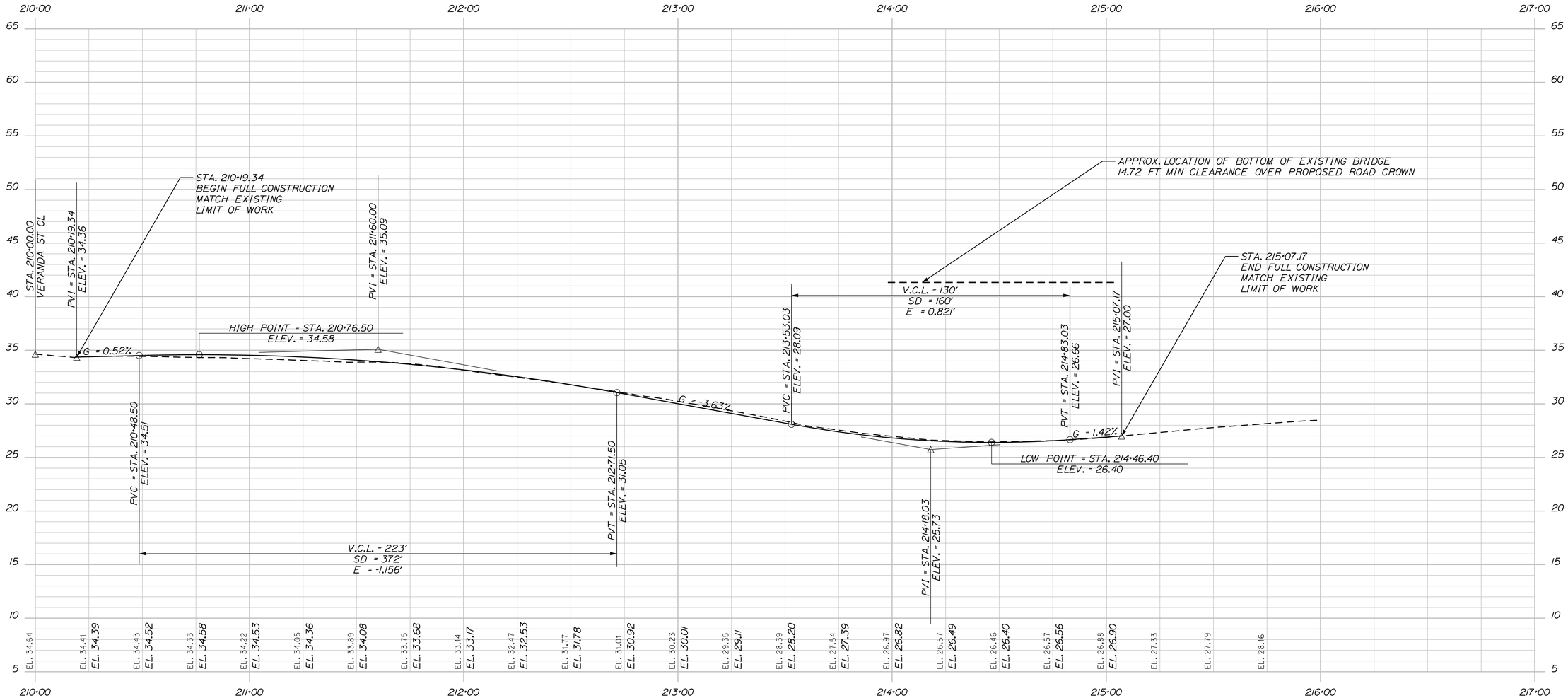
	DATE	BY
JENN CONLEY	09/2023	AHS
PROJ. MANAGER	JBD	JC
DESIGN-DETAILED	ECF	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

IDEALS - PORTLAND
SHERWOOD STREET

PLAN

SHEET NUMBER
3
OF 16

Filename: ...\000_HDPLAN_Planset_25Scale.DGN Division: HIGHWAY Username: asiegel Date:9/15/2023



PROFILE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

IDEALS

HIGHWAY PLANS

vhb

	BY	DATE
PROJ. MANAGER	JENN CONLEY	
DESIGN-DETAILED	JBD	AHS 09/2023
CHECKED-REVIEWED	ECF	JC 09/2023
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

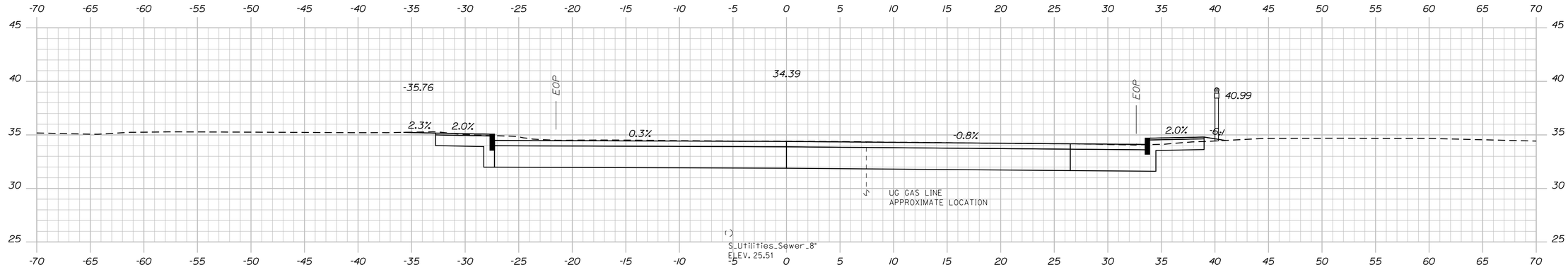
IDEALS - PORTLAND
SHERWOOD STREET

PROFILE

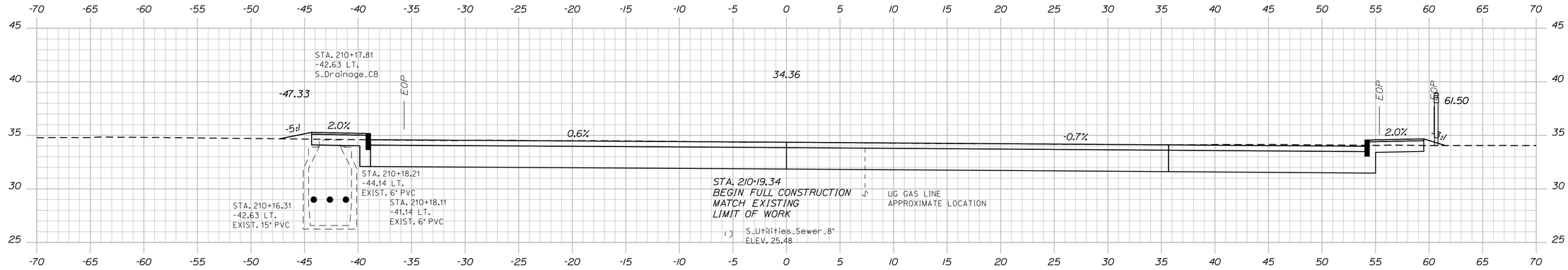
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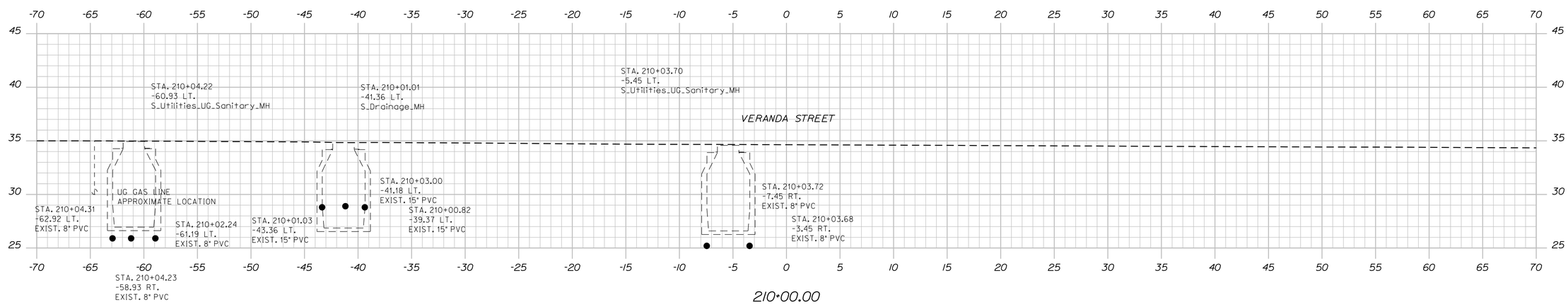
OF 16



210+25.00



210+19.34



210+00.00

IDEALS

HIGHWAY PLANS

vhb

	BY	DATE
ENGINEER	AHS	09/2023
PROJ. MANAGER	JC	09/2023
DESIGN-DETAILED	JENN CONLEY	
CHECKED-REVIEWED	JBD	
DESIGN2-DETAILED2	ECF	
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

IDEALS - PORTLAND SHERWOOD STREET

CROSS-SECTIONS (1 OF 12)

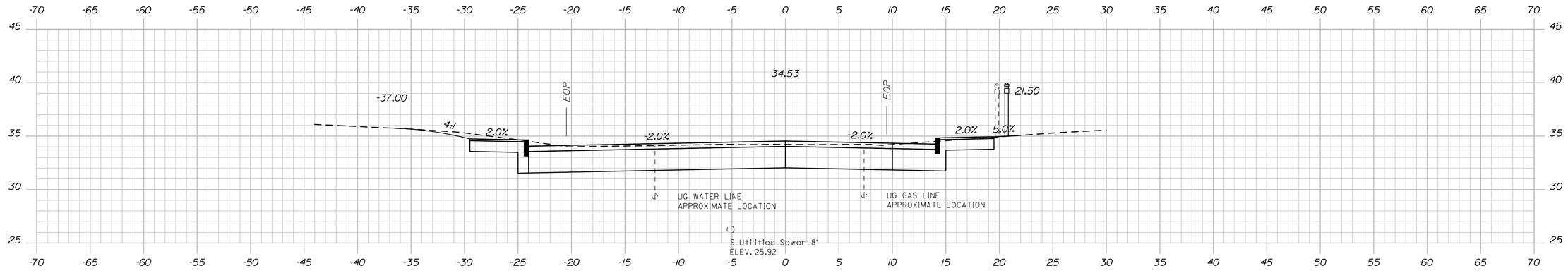
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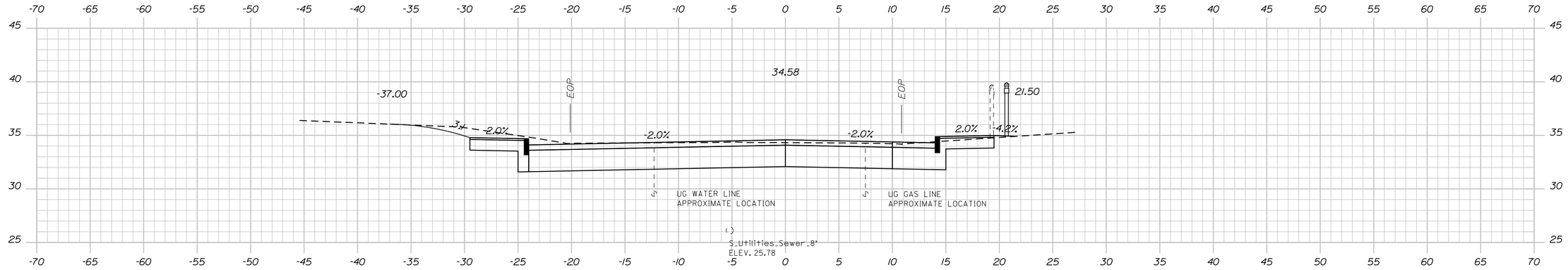
OF 16

Sta. 210+00.00 to Sta. 210+25.00

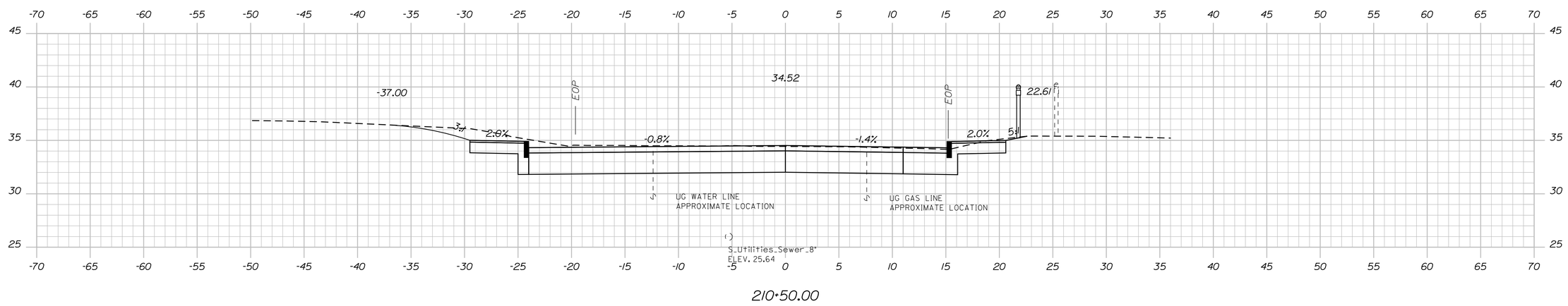
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211+00.00



210+75.00



210+50.00

Sta. 210+50.00 to Sta. 211+00.00

IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY	
DESIGN-DETAILED	JBD	09/2023
CHECKED-REVIEWED	ECF	09/2023
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

	BY	DATE
	AHS	09/2023
	JC	

IDEALS - PORTLAND
SHERWOOD STREET

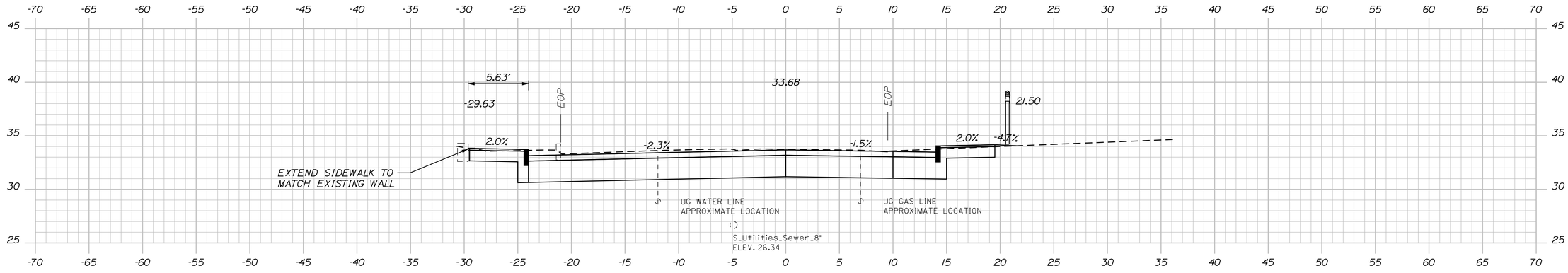
CROSS-SECTIONS
(2 OF 12)

SHEET NUMBER

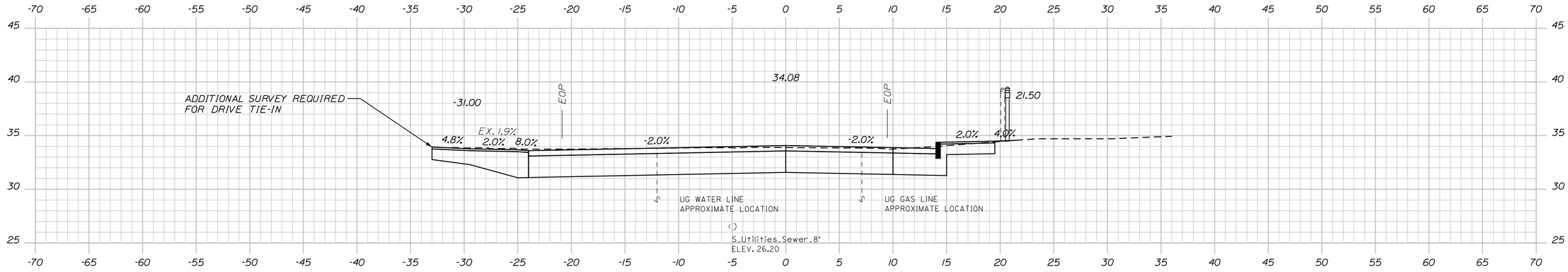
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OF 16

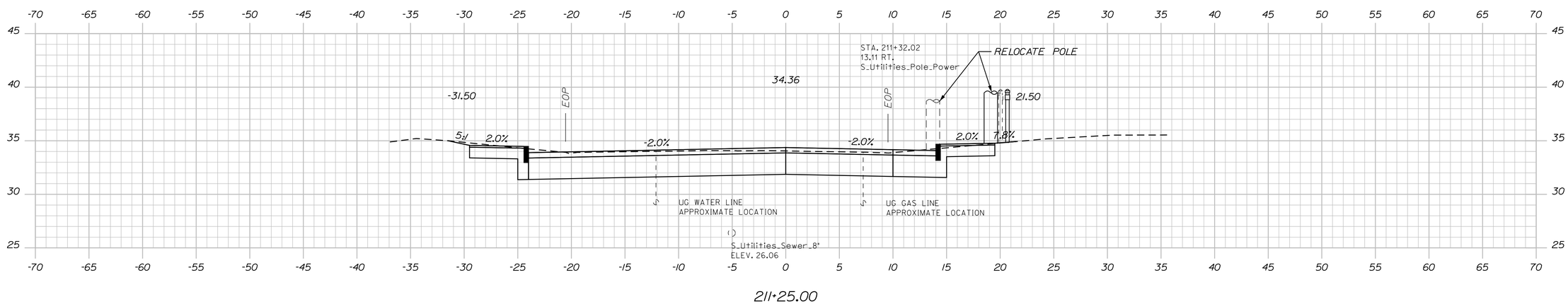
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211+75.00



211+50.00



211+25.00

IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY	
DESIGN-DETAILED	JBD	09/2023
CHECKED-REVIEWED	EOF	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

BY	AHS	09/2023
	JC	

IDEALS - PORTLAND
SHERWOOD STREET

CROSS-SECTIONS
(3 OF 12)

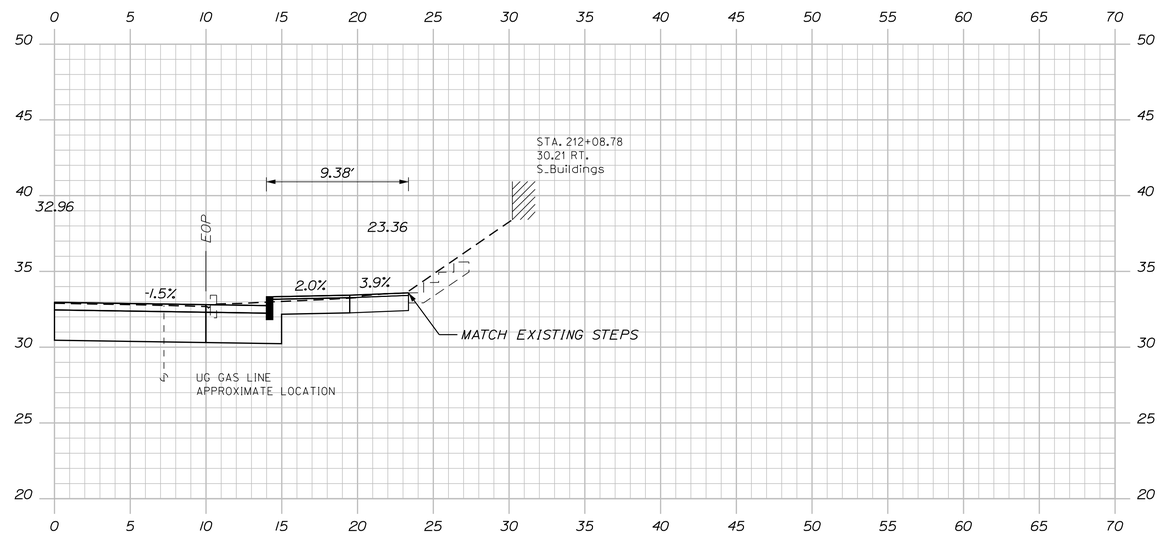
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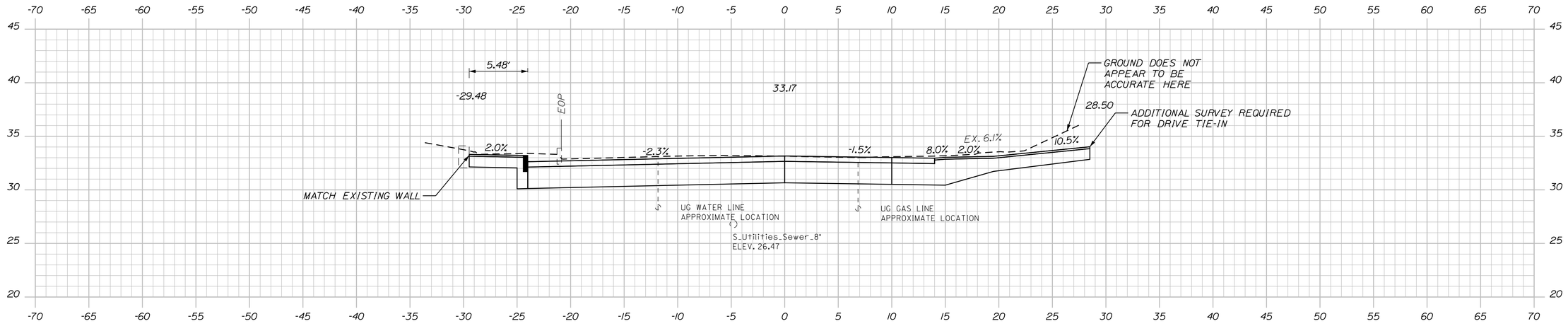
OF 16

Sta. 211+25.00 to Sta. 211+75.00

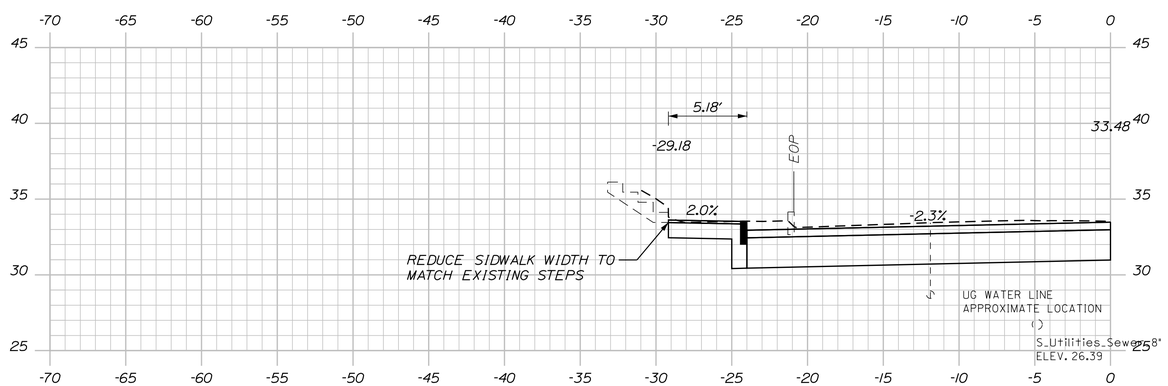
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212+08.78



212+00.00



211+85.47

IDEALS

HIGHWAY PLANS

PROJ. MANAGER	JENN CONLEY
DESIGN-DETAILED	JBD
CHECKED-REVIEWED	ECF
DESIGN2-DETAILED2	
DESIGN3-DETAILED3	

	DATE	BY
REVISIONS 1	09/2023	AHS
REVISIONS 2	09/2023	JC
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

IDEALS - PORTLAND SHERWOOD STREET

CROSS-SECTIONS (4 OF 12)

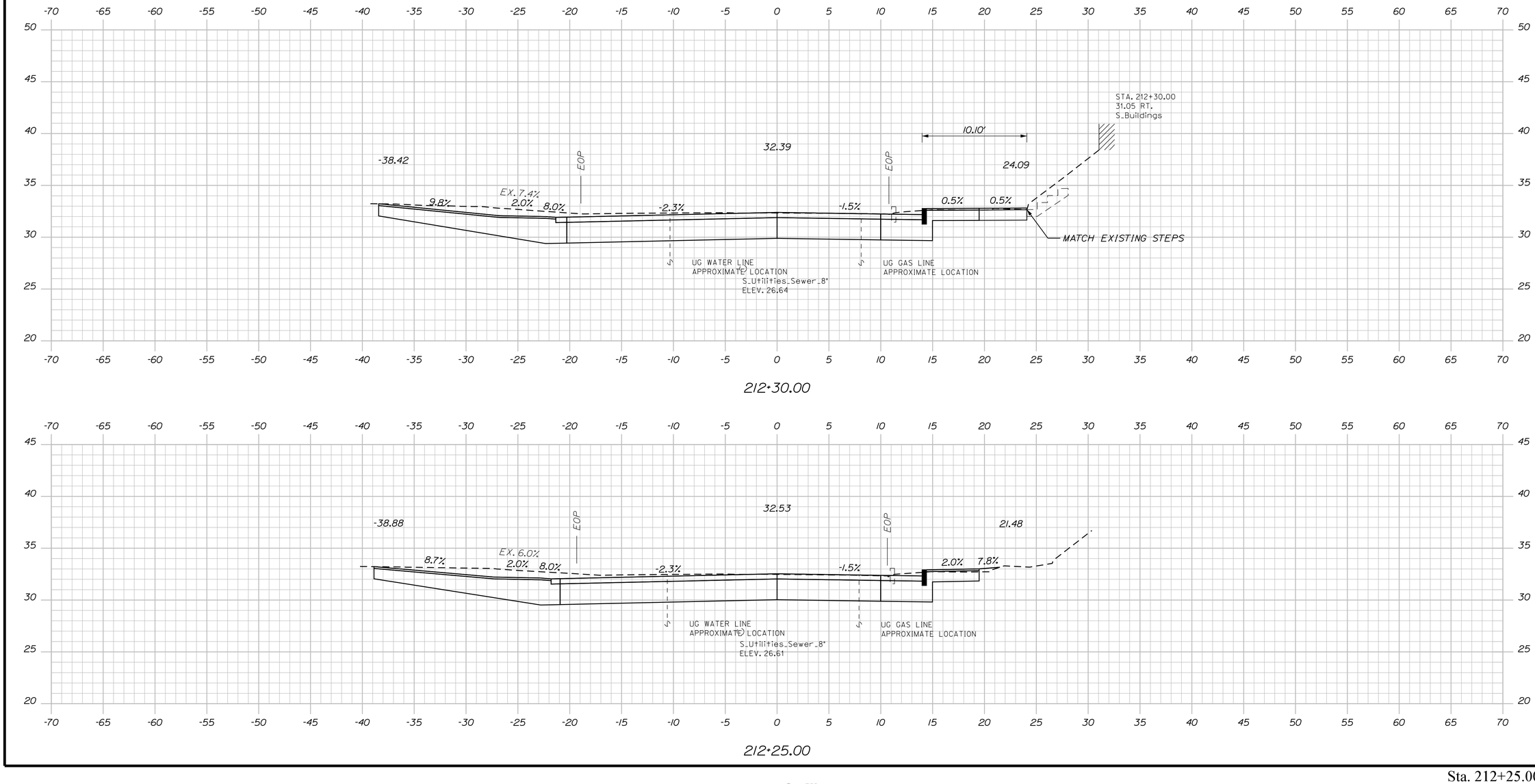
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8

OF 16

Sta. 211+85.47 to Sta. 212+08.78

Filename: ...\000_HDPLAN_Planset_25Scale.DGN Division: HIGHWAY Username: aslegel Date:9/15/2023



IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY	BY	DATE
DESIGN-DETAILED	JBD	AHS	09/2023
CHECKED-REVIEWED	ECF	JC	09/2023
DESIGN2-DETAILED2	ECF		
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

IDEALS - PORTLAND
SHERWOOD STREET

CROSS-SECTIONS
(5 OF 12)

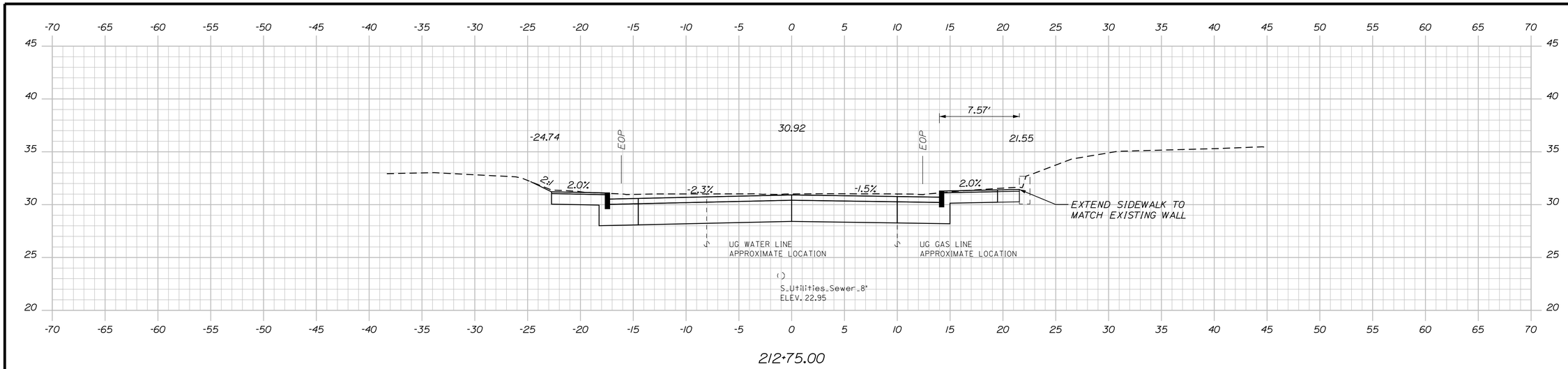
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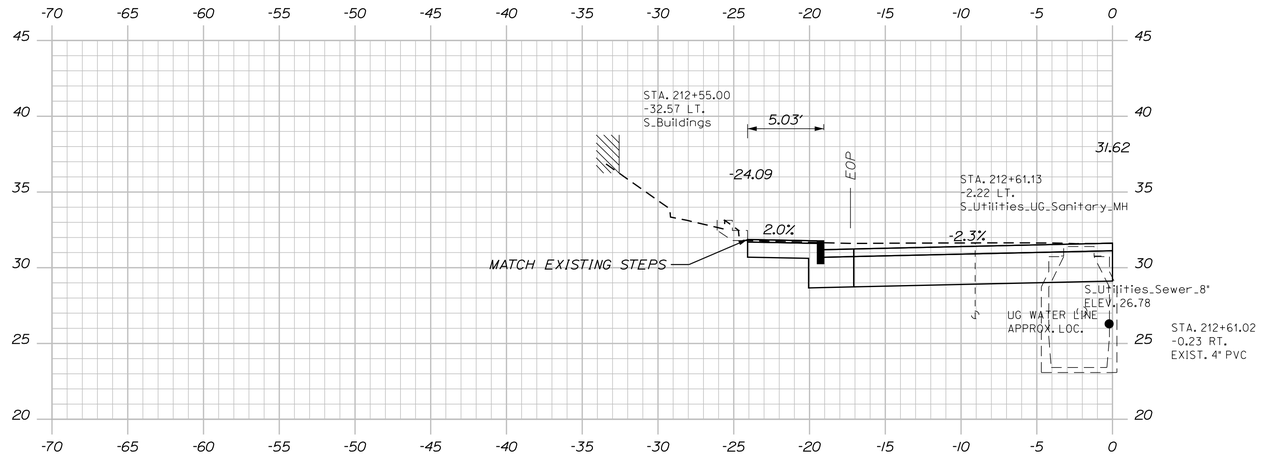
OF 16

Sta. 212+25.00 to Sta. 212+30.00

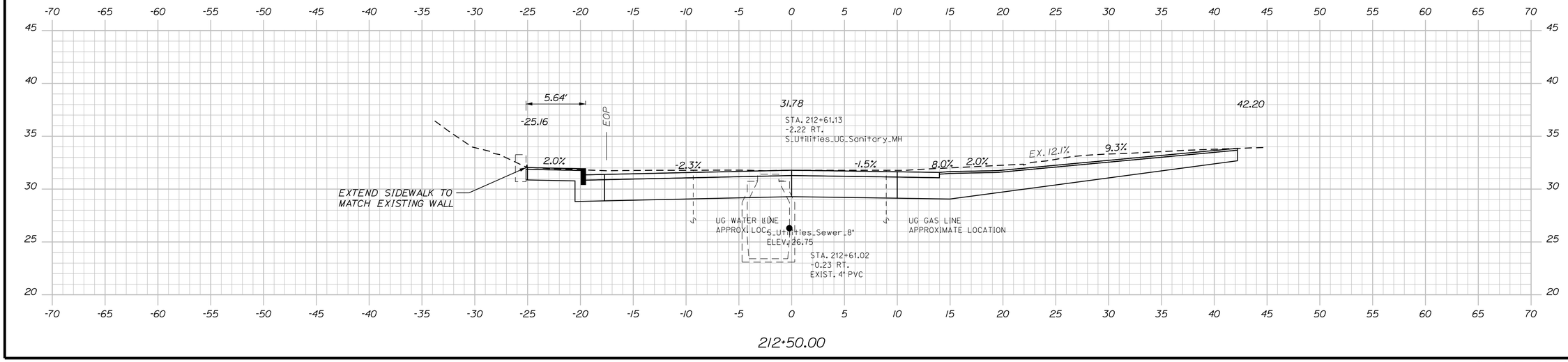
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212+75.00



212+55.00



212+50.00

IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY	BY
DESIGN-DETAILED	JBD	AHS
CHECKED-REVIEWED	ECF	JC
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

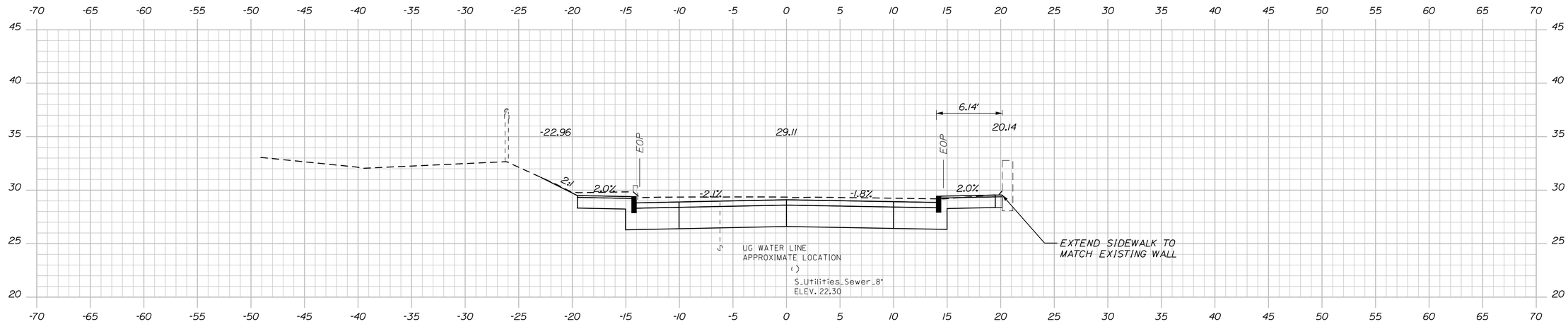
DATE
09/2023
09/2023

IDEALS - PORTLAND
SHERWOOD STREET
CROSS-SECTIONS
(6 OF 12)

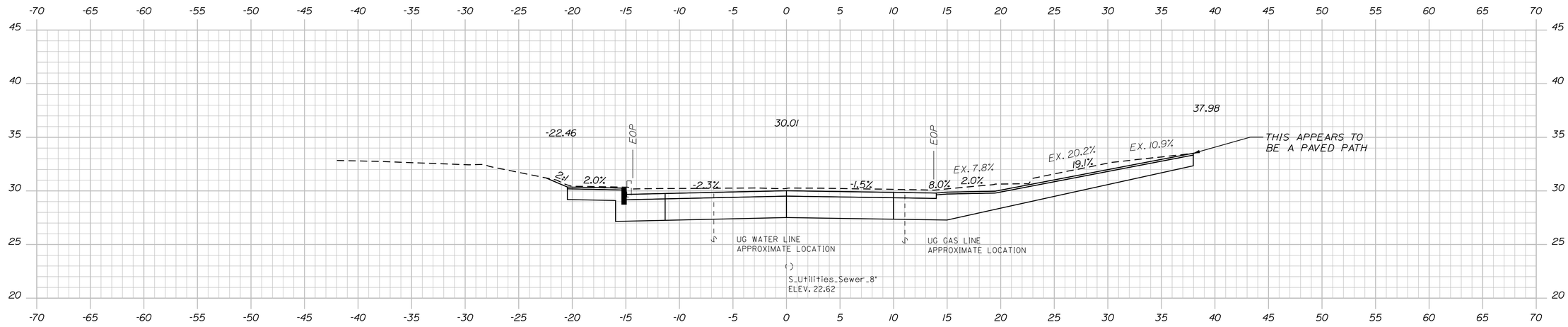
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OF 16

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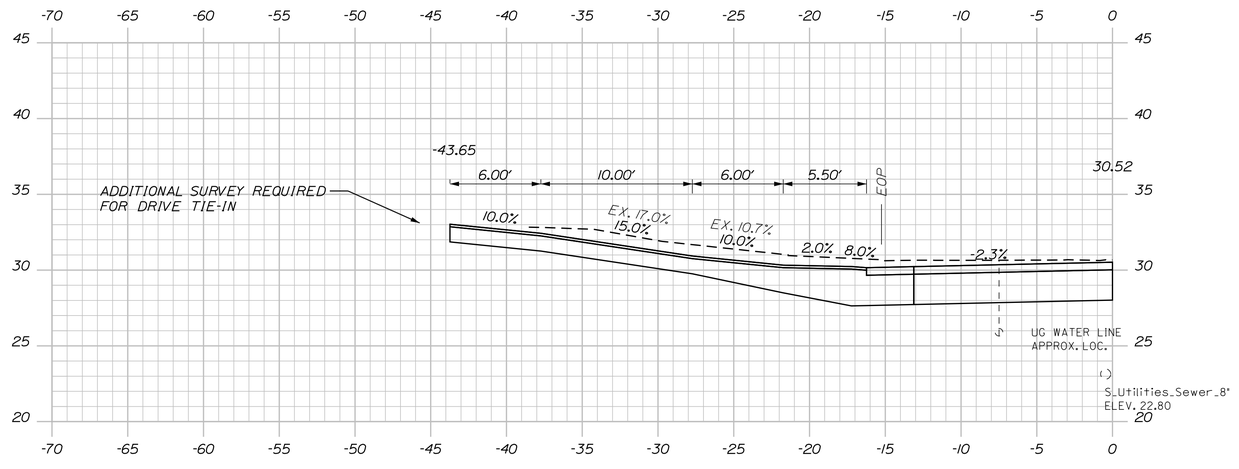
Sta. 212+50.00 to Sta. 212+75.00



213+25.00



213+00.00



212+86.00

IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY	DATE
DESIGN-DETAILED	JBD	BY 09/2023
CHECKED-REVIEWED	ECF	AHS 09/2023
DESIGN2-DETAILED2		JC
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

IDEALS - PORTLAND
SHERWOOD STREET

CROSS-SECTIONS
(7 OF 12)

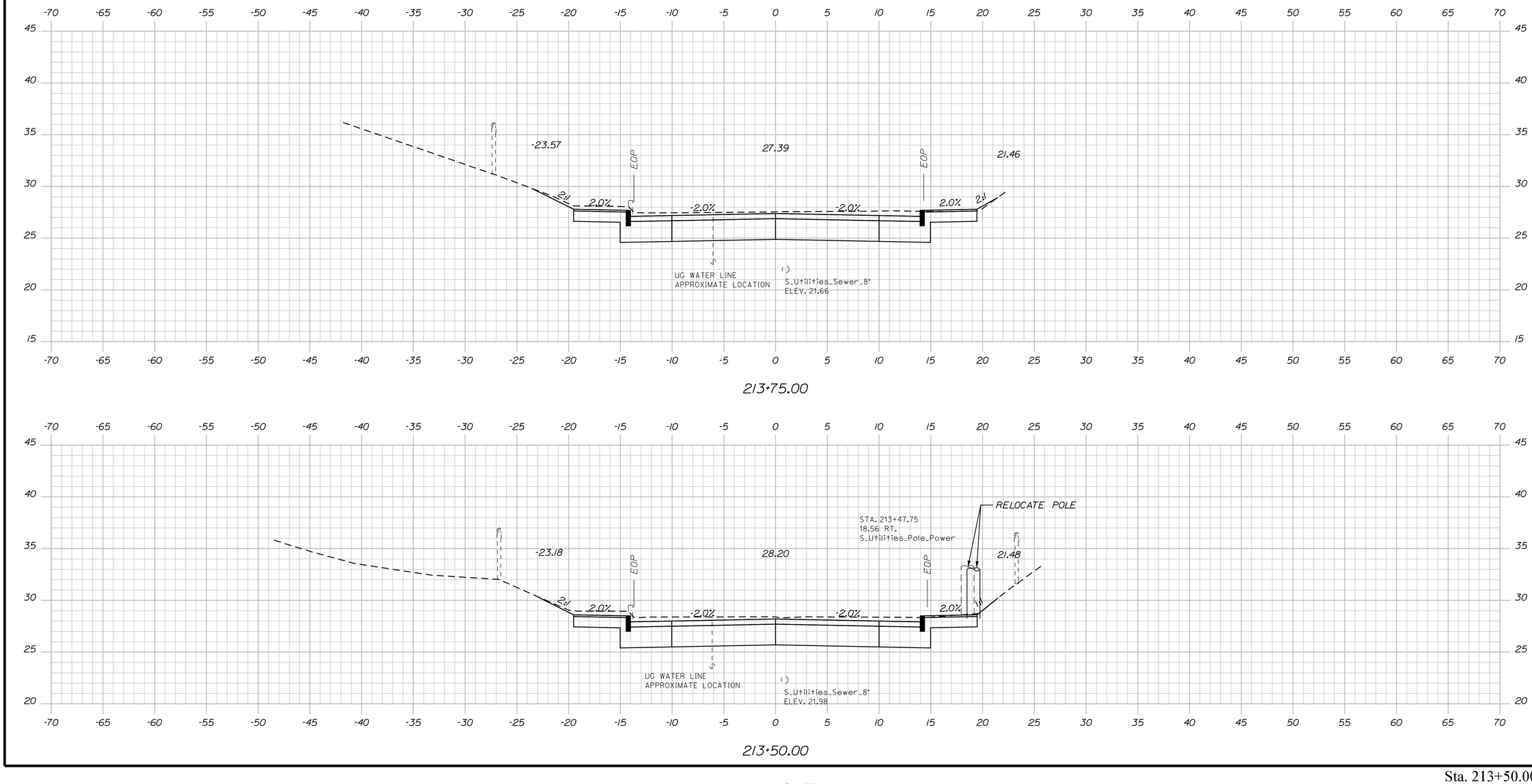
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OF 16

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Sta. 212+86.00 to Sta. 213+25.00



IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY	BY	DATE
DESIGN-DETAILED	JBD	AHS	09/2023
CHECKED-REVIEWED	ECF	JC	09/2023
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

IDEALS - PORTLAND
SHERWOOD STREET

CROSS-SECTIONS
(8 OF 12)

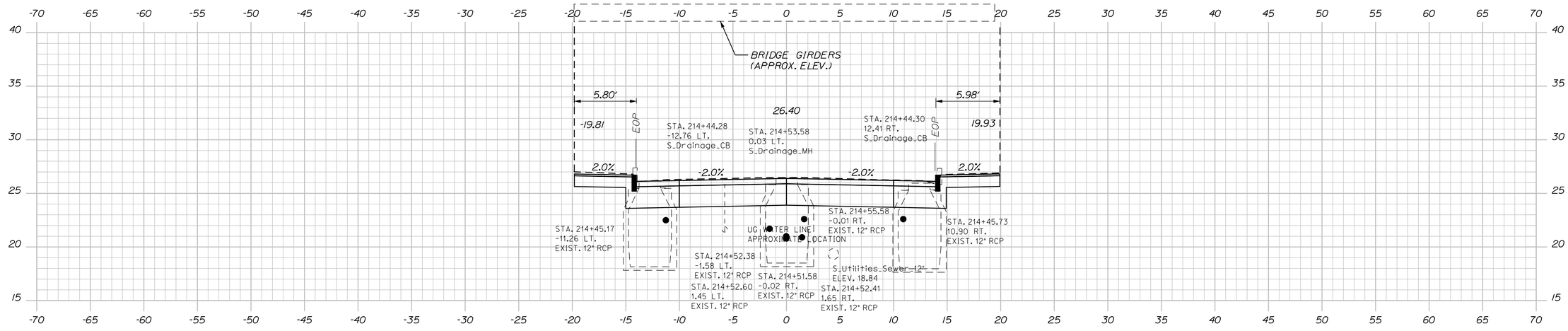
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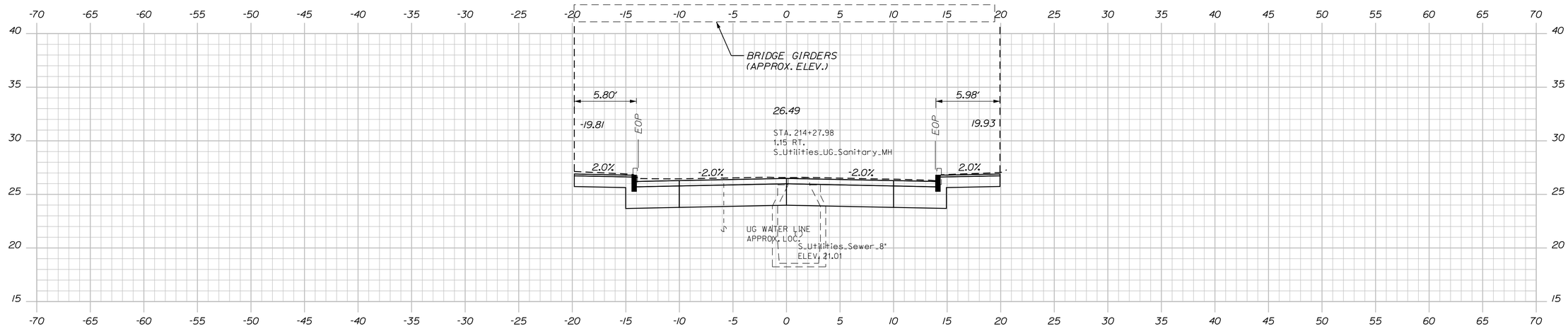
OF 16

Sta. 213+50.00 to Sta. 213+75.00

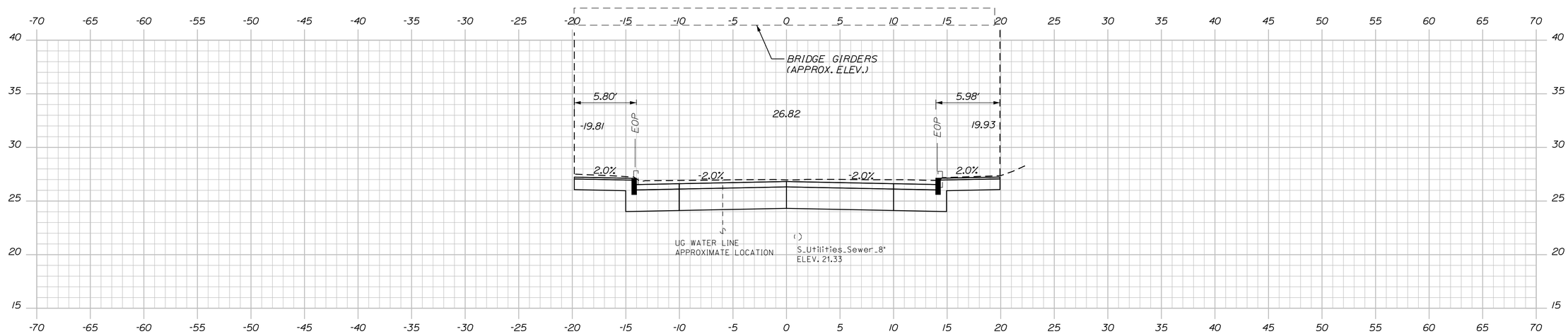
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214+50.00



214+25.00



214+00.00

Filename: ...\000_HDPLAN_Planset_25Scale.DGN Division: HIGHWAY Username: asiegel Date:9/15/2023

IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY		
DESIGN-DETAILED	JBD	AHS	09/2023
CHECKED-REVIEWED	ECF	JC	09/2023
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

IDEALS - PORTLAND
SHERWOOD STREET

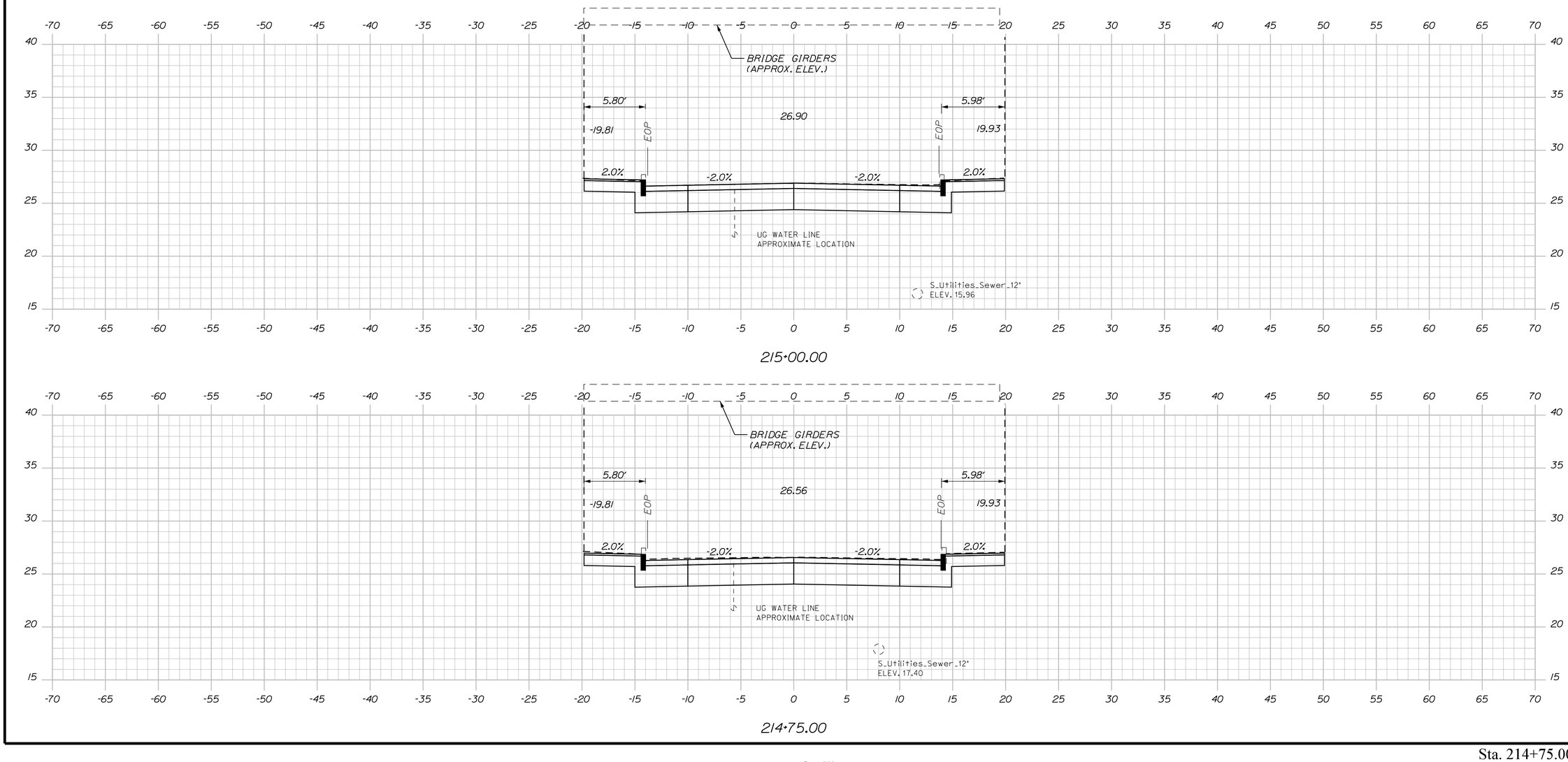
CROSS-SECTIONS
(9 OF 12)

SHEET NUMBER

13

OF 16

Sta. 214+00.00 to Sta. 214+50.00



IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY		
DESIGN-DETAILED	JBD	BY	AHS
CHECKED-REVIEWED	ECF		JC
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

DATE
09/2023
09/2023

IDEALS - PORTLAND SHERWOOD STREET

CROSS-SECTIONS (10 OF 12)

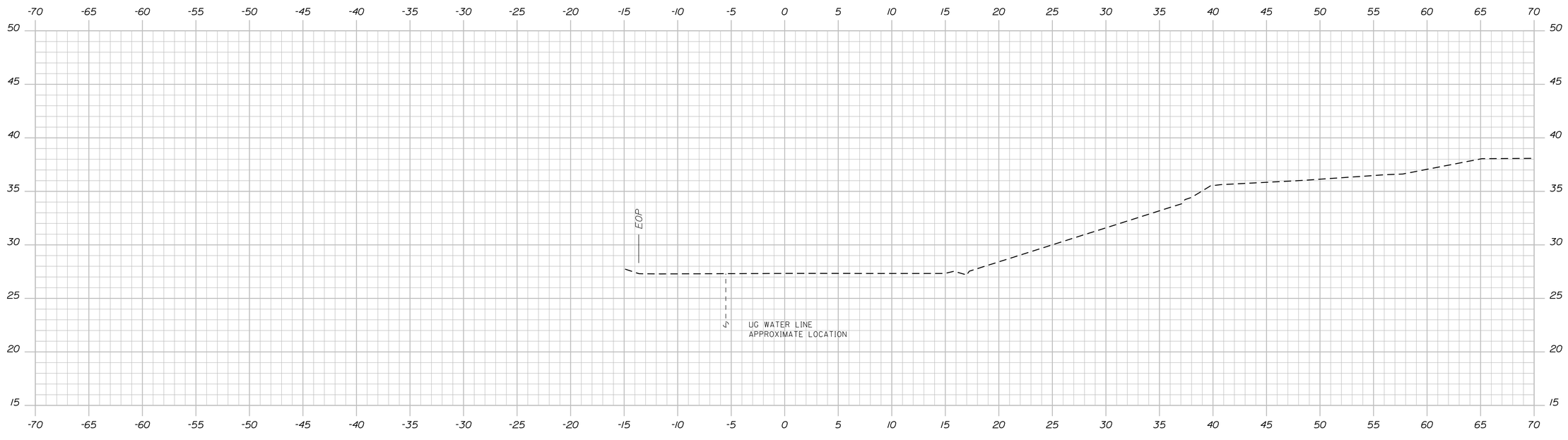
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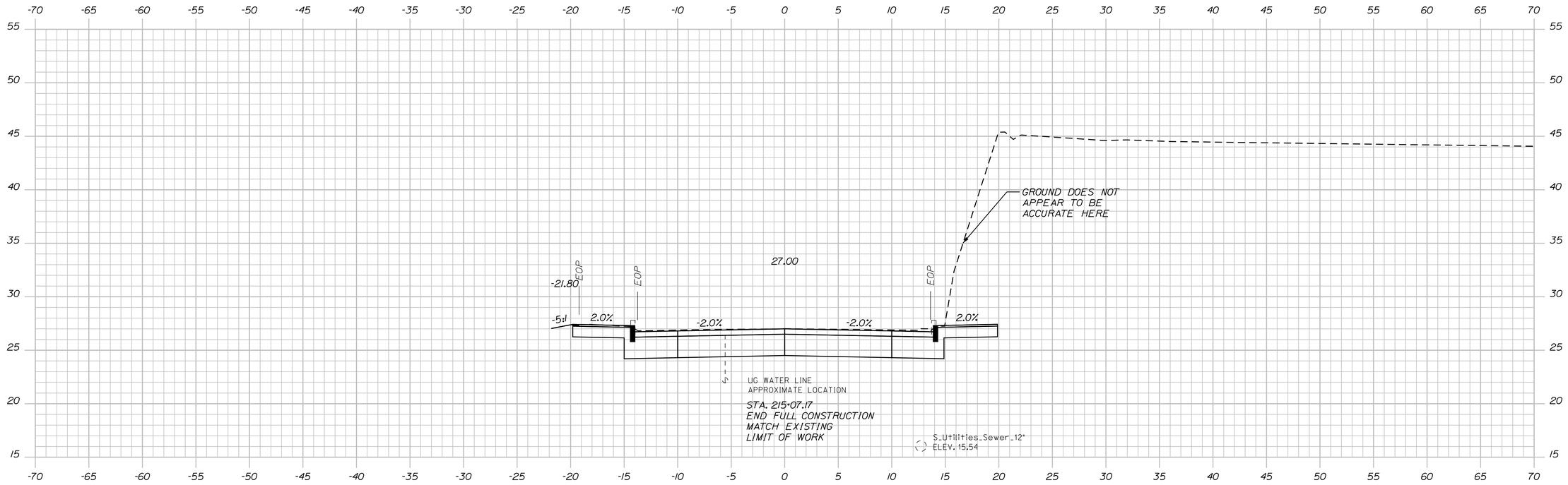
OF 16

Sta. 214+75.00 to Sta. 215+00.00

Filename: ...\000_HDPLAN_Planset_25Scale.DGN Division: HIGHWAY Username: asiegel Date:9/15/2023



215+25.00



215+07.17

IDEALS

HIGHWAY PLANS

vhb

PROJ. MANAGER	JENN CONLEY		
DESIGN-DETAILED	JBD	AHS	09/2023
CHECKED-REVIEWED	ECF	JC	09/2023
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

IDEALS - PORTLAND
SHERWOOD STREET

CROSS-SECTIONS
(11 OF 12)

SHEET NUMBER

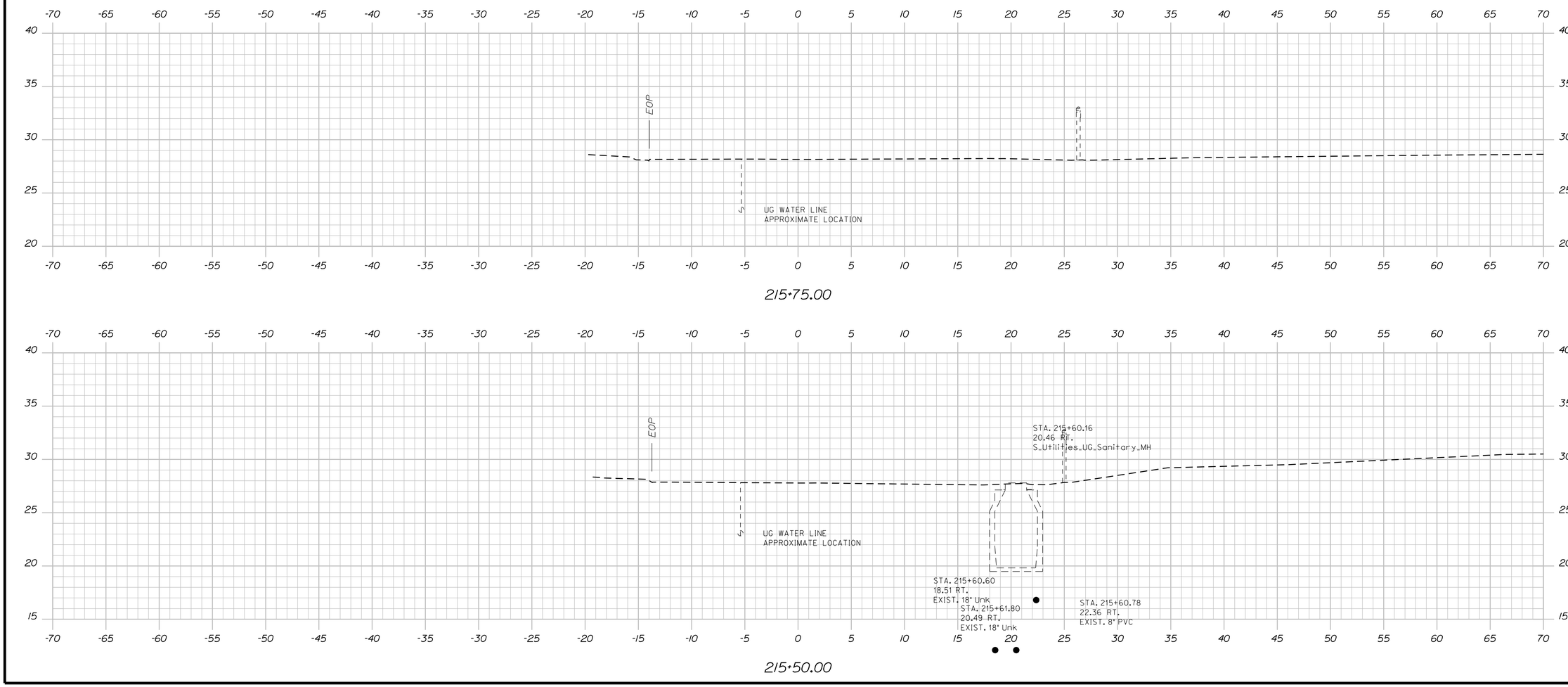
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OF 16

Sta. 215+07.17 to Sta. 215+25.00

Filename: ...\000_HDPLAN_Planset_25Scale.DGN Division: HIGHWAY Username: asiegel Date:9/15/2023

Filename: ...\000_HDPLAN_Planset_25Scale.DGN Division: HIGHWAY Username: asiegel Date:9/15/2023



IDEALS

HIGHWAY PLANS

vhb

	JENN CONLEY	BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED	JBD	AHS	09/2023
CHECKED-REVIEWED	ECF	JC	09/2023
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

IDEALS - PORTLAND
SHERWOOD STREET

CROSS-SECTIONS
(12 OF 12)

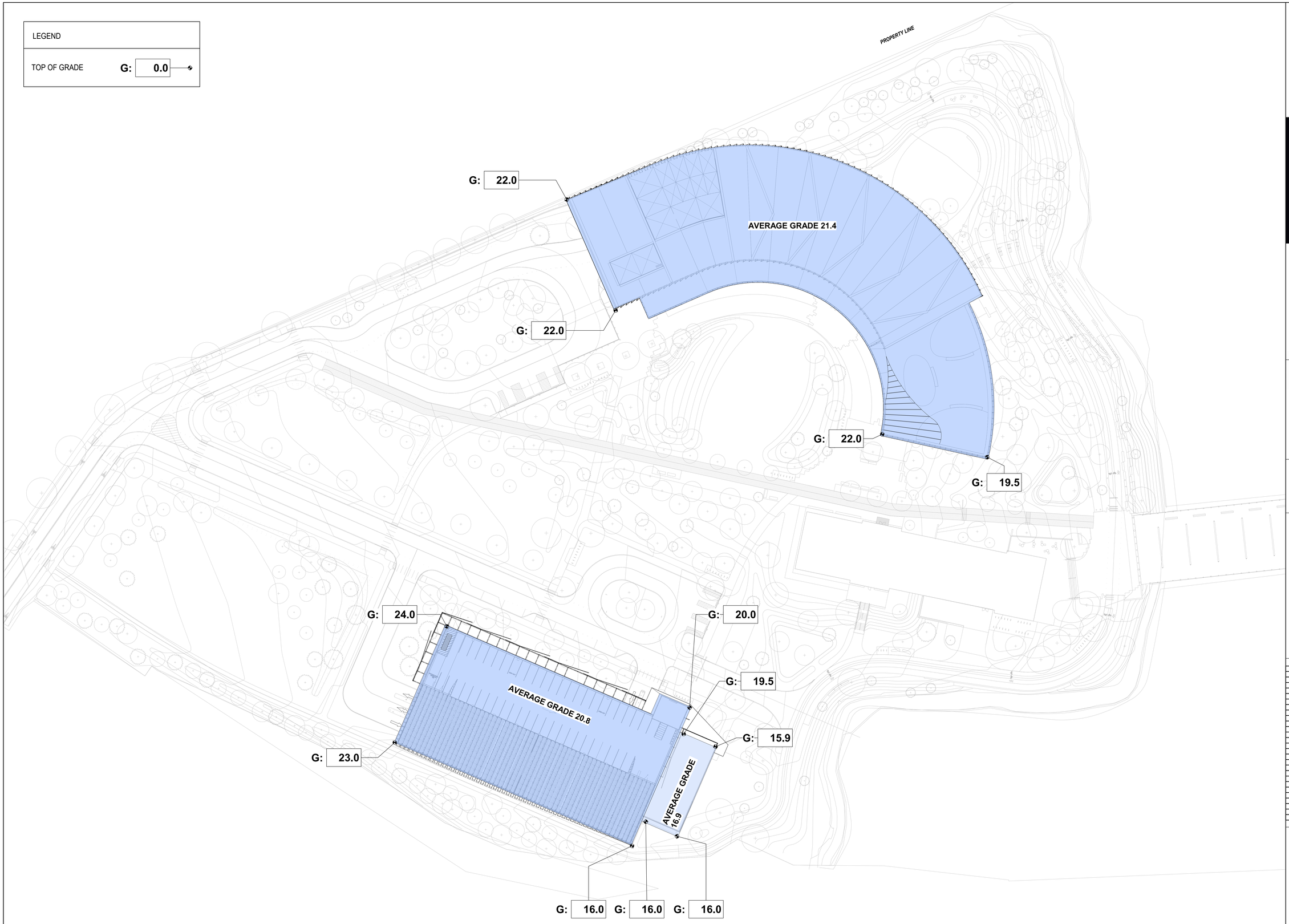
SHEET NUMBER

16

OF 16

Sta. 215+50.00 to Sta. 215+75.00

LEGEND	
TOP OF GRADE	G: 0.0



IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
NO. 3838
STATE OF MAINE
Stamp 10/27/2023

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	SB Checked CM
Date	27 OCTOBER 2023
Scale	1" = 30'-0"

Drawing Title
AVERAGE GRADE DIAGRAM

AS61.01

10/27/2023 12:56:47 PM

LEGEND

TOP OF GRADE	G	0.0
TOP OF BUILDING	T	0.0
BUILDING HEIGHT ABOVE AVERAGE GRADE	H	0.0

PROPERTY LINE

AVERAGE GRADE 21.4

G	22.0
T	154.5
H	133.1

G	22.0
T	154.5
H	133.1

G	22.0
T	90.0
H	68.6

G	22.0
T	90.0
H	68.6

G	22.0
T	121.5
H	100.1

G	22.0
T	60.6
H	39.2

G	22.0
T	121.8
H	100.4

G	22.0
T	60.6
H	39.2

G	19.5
T	60.6
H	39.2

AVERAGE GRADE 20.8

AVERAGE GRADE 16.9

G	24.0
T	87.0
H	66.2

G	23.0
T	87.0
H	66.2

G	20.0
T	89.7
H	68.9

G	20.0
T	107.5
H	86.7

G	19.5
T	45.5
H	28.6

G	15.9
T	45.5
H	28.6

G	16.0	G	16.0	G	16.0
T	87.0	T	45.5	T	45.5
H	66.2	H	28.7	H	28.7

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3038
STATE OF MAINE

Stamp 10/27/2023

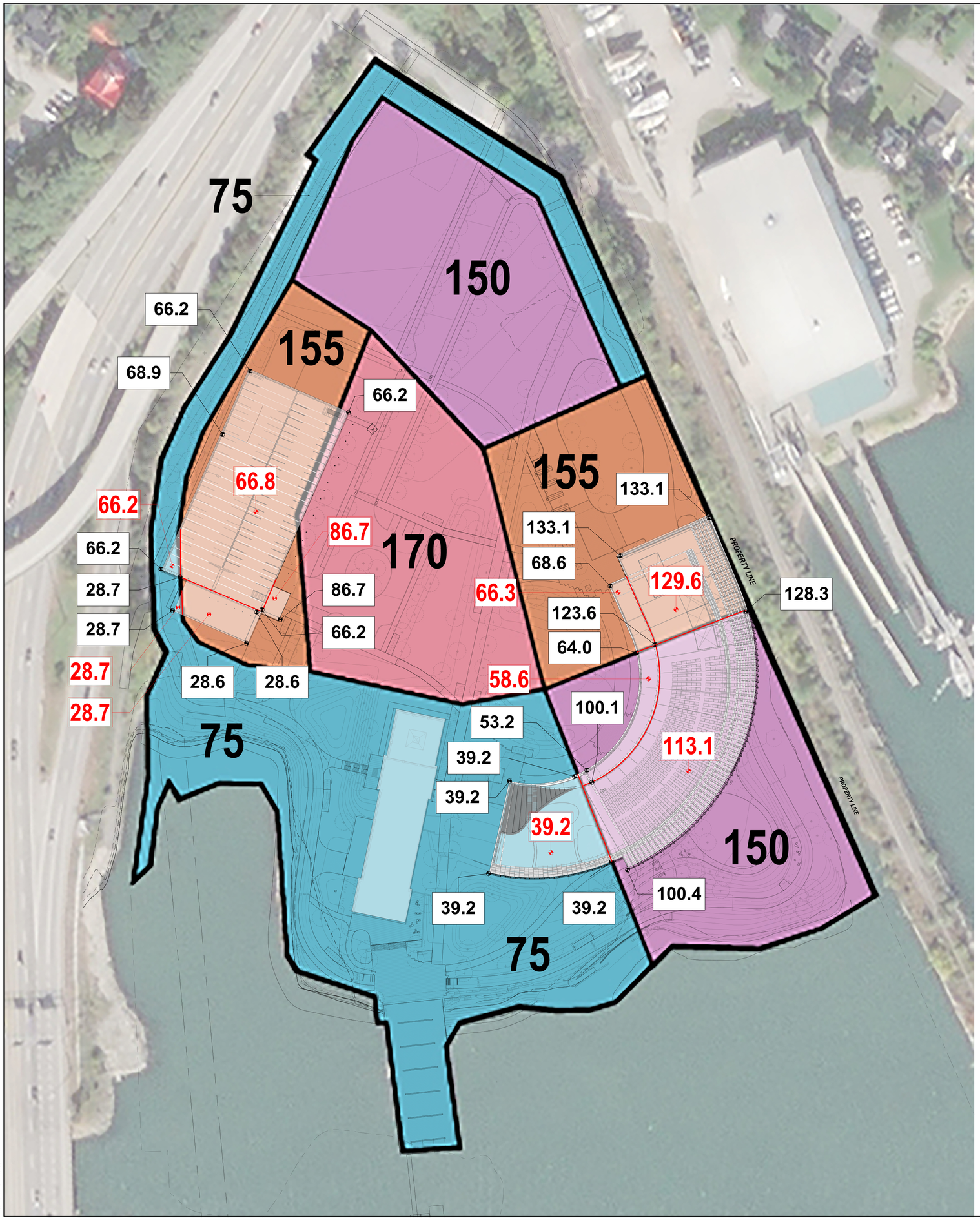
Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	SB
Checked	CM
Date	27 OCTOBER 2023
Scale	1" = 30'-0"

Drawing Title

BUILDING HEIGHT DIAGRAM

AS61.02

10/27/2023 12:57:00 PM



LEGEND

128.3

BUILDING HEIGHT ABOVE AVERAGE GRADE

66.3

AVERAGE BUILDING HEIGHT ABOVE AVERAGE GRADE PER HEIGHT ZONE

BUILDING HEIGHTS THAT SPAN TWO OR MORE HEIGHT ZONES ARE MEASURED BY CALCULATING THE HIGHEST POINT OF THAT PORTION OF THE BUILDING WITHIN A PARTICULAR HEIGHT ZONE. IF THE ROOF IS SLOPED, HEIGHT IS MEASURED AT THE MIDPOINT OF ALL SLOPES LOCATED WITHIN THE PARTICULAR HEIGHT ZONE.

IDEALS
Initiative for Digital Engineering and Life Sciences
Roux Campus

LVX VERITAS VIRTVS
The Roux Institute

CambridgeSeven
Architects and Planners
1050 Massachusetts Avenue
Cambridge, MA 02138
617 492-7000 Fax 492-7007

LAND-USE PERMIT SET

Number	Revision	Date

LICENSED ARCHITECT
TIMOTHY D. MANSFIELD
No. 3838
STATE OF MAINE
Stamp 10/27/2023

Job #	2202
Project	THE ROUX INSTITUTE
Drawn By	SB
Checked	CM
Date	27 OCTOBER 2023
Scale	1" = 40'-0"

Drawing Title
BUILDING HEIGHT MAP DIAGRAM

AS61.03

10/27/2023 1:10:58 PM

Memorandum
Planning & Urban Development Department

To:	Chair Mazer & Members of the Planning Board
From:	Maya Balassa
Date:	February 9, 2024
Re:	186 Woodford Street
Project ID:	PL-002753-2023
CBL:	124 J005001
Meeting Date:	February 13, 2024

I. INTRODUCTION

Community Housing of Maine (CHOM) has submitted a Major Site Plan and Subdivision application to facilitate the development of 79 affordable housing units at 186 Woodford Street in the B-2 Community Business zone. The project proposes the renovation of an ell of the existing Parish House into 37 age-restricted affordable units and the construction of a new building with 42 age-restricted affordable units. The project also includes various parking, utility and landscaping improvements. A subdivision is proposed to divide the existing lot into three lots, one with the new building, one with the redeveloped Parish House, and one with the remaining church. The lots containing the Parish House and the new affordable housing building will be owned and maintained by CHOM, and the church will continue to function as a place of worship under the existing ownership authority. The subject property totals 1.92 acres.

The Planning and Urban Development Department mailed 129 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the February 2nd and 3rd, 2024 editions of the *Portland Press Herald*.

Applicant:	Community Housing of Maine (CHOM)
Applicant Representatives:	Acorn Engineering, Inc.

II. REQUIRED REVIEWS

Review	*Applicable Standards*
Site Plan	Section 14.6
Subdivision	Section 15.4

Waiver Requests	*Applicable Standards*
The applicant is requesting a drive aisle width of 23 feet due to site constraints and low turnover.	Technical Manual, Vehicle Parking Dimensions Figure I-16A *Staff are supportive*

III. PROJECT DATA

Existing Zoning	B-2 Community Business Zone
Property Size	1.92 acre
Existing Use	Place of assembly

Proposed Use	Residential / Place of assembly

	Existing	*Proposed*	*Net Change*
Building Footprint	19,805 square feet	28,199 square feet	+8,394 square feet
Building Floor Area	24,600 square feet	79,472 square feet	+54,872 square feet
Impervious Surface Area	60,065 square feet	58,880 square feet	-1,185 square feet
Parking Spaces	83	57	-26
Bicycle Parking Spaces	0	15	+15
EV Charging Stations	0	12	+12

IV. BACKGROUND AND EXISTING CONDITIONS

The site currently contains the Woodfords Congressional Church and a large surface parking lot with 83 parking spaces. The property also leases space to A Company of Girls, Maine Council of Churches, Project Feed, and Stages Youth Theater. There are two curb cuts along Woodford Street that are used for both an entrance and exit and a curb cut along Beacon Street. The property at 186 Woodford Street is bounded by Woodford Street to the north and Beacon Street to the west. The site is zoned B-2 Community Business zone, which runs along Forest Avenue to the east and along Woodford Street, up to Beacon Street. Beyond Beacon Street to the west is a swath of B-1 Business zone. Surrounding the Business zones along Woodford Street to the north and south are large swaths of R-5 Residential zones, with an R-3 Residential zone mapped several blocks south.



Figure 1 Google Street View of the site from June, 2011

The surrounding area contains a mixture of residential, commercial, institutional, and light industrial uses. Woodfords Corner is two blocks to the east, which serves as a commercial node for the neighboring Back Cove, Rosemont, and Deering neighborhoods along Forest Avenue. Woodford Street includes a mixture of both commercial and residential uses. Low-density residential uses largely surround the site to the north and south.

On October 10, 2023, the Planning voted unanimously to recommend to the City Council adoption of a zoning map amendment (ZN-002535-2023) (Report Attachment 1) to rezone the Woodford's Congregational Church property from B-1 Neighborhood Business, B-2 Community Business and R-5 Residential to B-2 Community Business zone. The rezoning was adopted by the City Council on December 18, 2023.

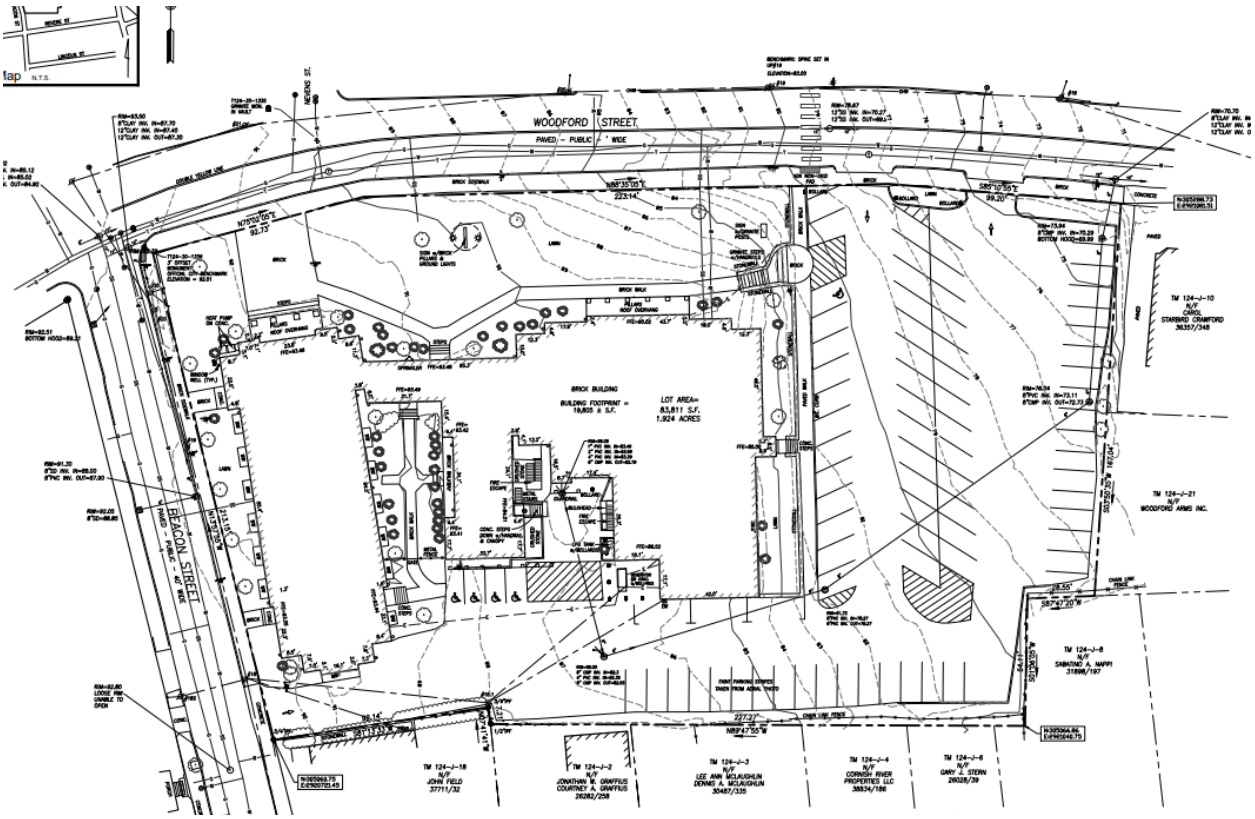


Figure 2 Existing Conditions survey of 186 Woodford Street

V. PROPOSED DEVELOPMENT

The applicant is proposing to demolish the parish house that is connected to the existing building and then construct a four-story building with 32 low-income residential units in its place. Additionally, the applicant is also proposing to construct a separate four-story building along the easterly property boundary with 47 low-income residential units, and redesign the remaining parking lot. The applicant is proposing one-way internal circulation, with vehicles entering the site off of Beacon Street, and exiting onto Woodford Street. A three-lot subdivision is being proposed in conjunction with the development. An access, utility, and maintenance easement (depicted on the Subdivision Plat) is proposed within the shared drive aisle onsite, that would benefit all three proposed lots.

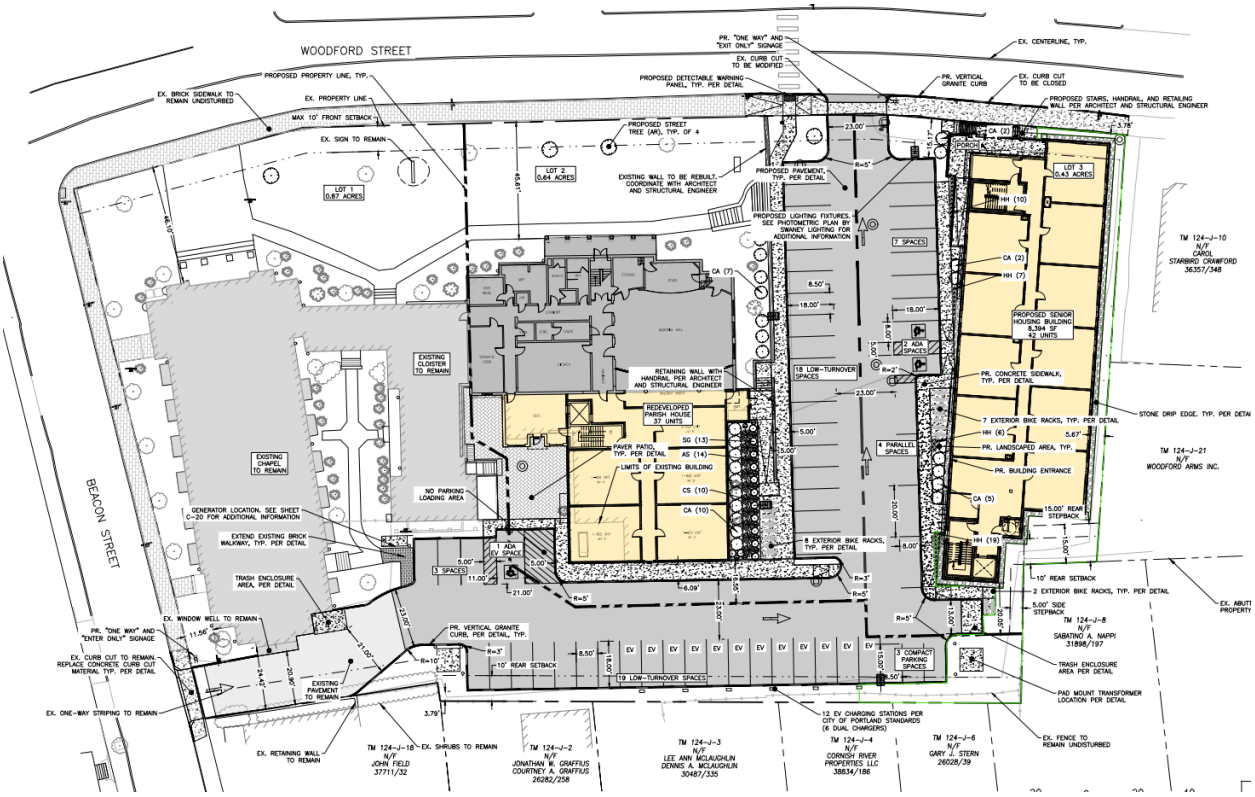


Figure 3 Site Plan at 186 Woodford Street showing the two residential buildings in yellow

VI. RIGHT, TITLE, & INTEREST

The applicant submitted the option to purchase agreement from Woodford Congregational Church of the United Church of Christ by Community Housing of Maine showing right, title and interest.

VII. FINANCIAL & TECHNICAL CAPACITY

The Community Housing of Maine submitted a letter self-certifying they have financial capacity to finance the proposed project. (Applicant Submittal H) The project team includes Acorn Engineering and CWS Architects, demonstrating technical capacity to complete the project. (Applicant Submittal I)

VIII. ZONING ANALYSIS

The site is located within the B-2 Community Business zone. Alongside the proposed development, the applicant is proposing to subdivide the site into three lots. The proposed multi-family residential is a permitted use in the B-2 Community Business zone. The analysis of the dimensional standards is provided in the table below:

Standard	*Requirement*	*Proposed (Lot 1)*	*Proposed (Lot 2)*	*Proposed (Lot 3)*	*Finding*
Lot Size (SF)	*None*	*37,289 SF*	*27,883 SF*	*18,641 SF*	*Standard Met.*
Area per D.U.	*1,000 SF/ unit 400 SF/ Unit (Table 18-C Affordable Housing Bonus)*	*N/A*	*753*	*444*	*Standard Met.*

Street Frontage	*20 feet*	*369.13 feet*	*152.56 feet*	*106.52 feet*	*Standard Met.*
Front Setback (Max)	*10 feet*	*46.10 feet (existing)*	*45.61 feet (existing)*	*3.78 feet*	*Standard Met.*
Rear Setback	*10 feet* *0 feet (Table 18-C Affordable Housing Bonus)*	*24.42 feet*	*16.55 feet*	*20.05 feet*	*Standard Met.*
Side Setback	*None*	*n/a*	*n/a*	*n/a*	*Standard Met.*
Stepback (above 35 ft is abutting residential)	*Side: 5 ft.* *Rear: 15 ft.*	*n/a*	*Rear: 50 feet*	*Side: 5 feet* *Rear: 25 feet*	
Building Height	*45 feet* *70 feet (Table 18-C Affordable Housing Bonus)*	*n/a*	*41.96 feet*	*46.76 feet*	*Standard Met.*
Lot Coverage (max)	*None*	*n/a*	*n/a*	*n/a*	*Standard Met.*
Impervious surface ratio (max)	*Residential: None* *Other uses in B-2: 80%*	*73.3%*	*75.1%*	*88.3% (Residential)*	*Standard Met*

The project is exempt from Section 18.2 Affordable Housing standards as the project is utilizing public financing requiring affordability restrictions.

IX. SUBDIVISION REVIEW STANDARDS (Section 15.4)

The proposed development has been reviewed by staff for conformance with the relevant review standards of Portland's Subdivision Ordinance and applicable regulations. Staff comments are listed below:

1. Will Not Result in Undue Water and Air Pollution (Section 15.4.1.A), and will not result in undue soil erosion (Section 15.4.1.D)
   The project site is currently improved with Woodfords Congressional Church and a large surface parking lot. Included in the applicant's proposal is a subsurface stormwater treatment system that will then discharge into the City's separated stormwater system. The proposed project will decrease impervious area onsite by 1,185 square feet. The subdivision associated with the development is not anticipated to result in undue water or air pollution. The standard is being met.

2. Has sufficient water available and will not cause unreasonable burden on existing water supply (Section 15.4.1.B and C)
   The applicant has requested ability to serve confirmation from the Portland Water District- staff are waiting for confirmation.

3. Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to use of the highway or public roads existing or proposed (Section 15.4.1.E)
   The site is located along Woodford Street, which runs between Forest Avenue and Stevens Avenue. The project is utilizing the proximity to transit parking exemption (Table 19-B) to reduce the off-street

parking requirement for the project. The existing roadways can reasonably manage the additional traffic associated with the development and therefore the subdivision will not cause unreasonable highway or public congestion, or unsafe conditions in relation to roadways. The project is meeting the standard.

4. Will provide for adequate sanitary sewer and stormwater disposal (Section 15.4.1.F) and will not cause an unreasonable burden on municipal solid waste and sewage (Section 15.4.1.G)
   The new building is proposed to connect into the City sewer and stormwater systems below Woodford Street. Staff are waiting on ability to serve letters.

5. Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat (Section 15.4.1.H)
   The site is currently improved with a church and existing parking lot surrounded by a mix of uses including businesses and multi-family housing. The location for the proposed housing is in context with the neighborhood, is located near community amenities and will not negatively impact the aesthetics. The site is not within a historic district or within 100 feet of a historic district or landmark.

6. Is in conformance with the Comprehensive Plan (Section 15.4.1.I)
   The proposed subdivision is in line with the Comprehensive Plan as it complies with the B-2 zoning requirements, and it facilitates the development of high-density, affordable housing that is proximate to existing transit, sidewalks, jobs, and amenities.

   The project supports several Comprehensive Plan goals including:

   Housing
   - "Increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences and financial capabilities of all Portland residents"
   - "Encourage additional contextually appropriate housing density in and proximate to neighborhood centers, concentrations of services, and transit nodes and corridors as a means of supporting complete neighborhoods."
   - "Pursue policies to enable people who work in Portland to have the option to live in Portland."

   Support Age-Friendly Housing Options
   - "Create, promote, and facilitate safe, affordable, and practical housing solutions that will meet the evolving needs of Portland residents as they age."

   Future Land Use: Priority Nodes & Corridors
   - "Priority nodes and corridors indicate areas that would be appropriate for new development to provide needed housing, businesses, and services proximate to transit, or areas that otherwise warrant some examination of potential for positive change in form and/or function."

7. Adequate financial and technical capacity (Section 15.4.1.J)
   The applicant has provided documentation to verify they have financial and technical capacity to complete the proposed project (Applicant Submittal H). CHOM has developed several projects in Portland (Applicant Submittal I). The standard is being met.

8. Whenever situated, in whole or in part, within the watershed of any pond or lake or within 250 feet of any wetland, great pond, or river, will not adversely affect the quality of such body of water or unreasonably affect the shoreline of such body of water (Section 15.4.1.K)
   Not applicable. The site is not within a watershed or within 250 feet of a wetland, great pond, river or other body of water.

9. Will not, adversely affect the quality and quantity of groundwater (Section 15.4.1.L)
   The project is not proposing activities that are known for impacting the quality of groundwater. The standard is being met.

10. Is or is not in a flood-prone area (Section 15.4.1.M)
    The site is not located in a flood prone area.

11. Will provide for adequate stormwater management (Section 15.4.1.N)
    The project is providing a subsurface stormwater treatment system that is meeting City and State standards in regards to the on-site detention of stormwater, water quality treatment, and erosion and sedimentation control. The standard is being met.

12. Will not have lots with a lot depth-to-shore frontage ratio greater than 5 to 1 if any lots in the proposed subdivision have shore frontage on a river, stream brook, great pond, or coastal wetland (Section 15.4.1.O)
    Not applicable. The site does not have shore frontage.

13. For any proposed subdivision that crosses municipal boundaries, will not cause unreasonable traffic congestion or unsafe conditions with respect to the use of existing public ways in an adjoining municipality in which part of the subdivision is located (Section 15.4.1.P)
    Not applicable. The site does not cross municipal boundaries.

X. SITE PLAN REVIEW STANDARDS (Section 14.6)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's Site Plan Ordinance, Section 14.6. Staff comments are below:

1. Transportation Standards (Section 14.6.1)
   A. Impact on surrounding street systems
      The applicant is proposing to change the internal traffic pattern to one-way, entering the site from Beacon Street and exiting onto Woodford Street. Staff are suggesting the applicant either change the driveway from Woodford Street to two-way or angle the parking to ensure the one-way flow.

      Staff are also requesting the applicant review the sidewalk along Woodford Street to identify if there are any locations that need repair to ensure ADA compliance.

   B. Access and circulation
      There is an existing sidewalk along the Woodford Street and Beacon Street frontage. There are currently two curb cuts along Woodford Street to the site that are proposed to be reduced to one, exit only, driveway. There is a curb cut along Beacon Street that is proposed to remain as a one way, enter only, driveway.

The new 42-unit building has the main entrance along Woodford Street with stairs leading up to the front porch, and lobby. There is an ADA ramp along the west side of the new building, leading from the ADA parking spaces to the porch and front entrance. The front entrance of the renovated Parish house is proposed on the eastern façade with an ADA ramp coming from the west.

There are two pedestrian entrances proposed to the site along the Woodford Street frontage. One provides direct access to the stairs and front porch of the new building and the other extends from Woodford Street along the western edge of the driveway into the interior of the site. The internal sidewalks are proposed to be five-feet in width. Staff are seeking confirmation that the sidewalks will be functionally 5 feet, accounting for vehicle overhangs, vegetation overgrowth, bicycle parking, or any other feature that may encroach on the width of the sidewalk or suggest widening the sidewalks to seven feet.

The pedestrian routing for residents from Woodford Street to the two residential buildings are shown in figure 4. The red lines depict the proposed ADA routing from Woodford Street to the renovated Parish house. The purple line depicts a non-ADA route from Woodford Street to the new 42-unit building. The green line depicts the proposed ADA route between Woodford Street and the new 42-unit building. Staff are seeking site plan changes to accommodate a clearer and more streamlined accessible route between Woodford Street and the new building.

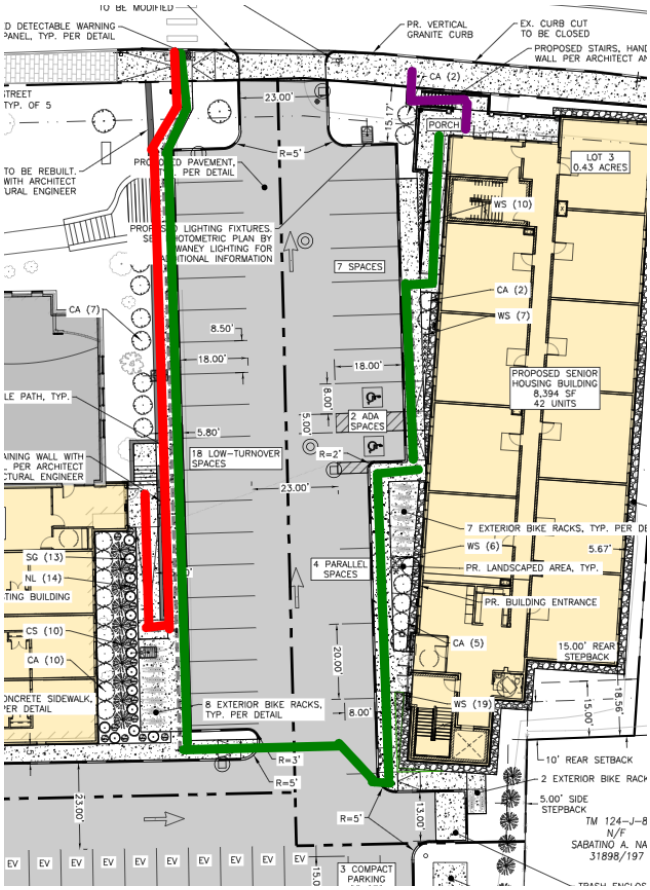


Figure 4 Pedestrian routing from Woodford Street to the new residential buildings

WAIVER REQUESTS

The applicant is seeking one waiver for this project.

I. *Technical Manual, Vehicle Parking Dimensions Figure I-16A:* Technical Manual I-16A requires 90-degree standard parking spaces to have a minimum aisle width of 24 feet. The applicant is proposing a drive aisle width of 23 feet, for a total reduction of one foot. The reduction in the drive aisle would allow the proposed development, which is expected to have low turnover, to minimize impervious surfaces and maximize construction of on-site housing with other amenities such as sidewalks. Staff recommend that the Planning Board support the requested waiver.

C. Public transit access

Not applicable. The site is not located along an existing public transit route.

D. Parking

The applicant is utilizing the exception to the off-street parking minimum per table 19-B, which allows for no off-street parking for development sites within a quarter mile of transit. The applicant has submitted a Transportation Demand Management Plan (Applicant Submittal T) in accordance with this exception. The applicant is proposing 53 parking spaces (3 ADA, 3 compact), a reduction of 26 spaces from the existing condition. The proposed use of the parking, particularly with respect to the allocation of available spaces between the church and proposed residential development, is not clear, and staff have requested further information on how the spaces will be utilized. The applicant is proposing 12 EV charging parking spaces along the rear of the site, which meets the City's requirement per Technical Manual Section 1.14. A total of 32 bike parking spaces are proposed for the housing units near the building entrances, meeting the bike parking standard.

E. Transportation demand management (TDM)

The applicant has submitted a Transportation Demand Management Plan (Applicant Submittal T). The plan outlines key strategies for promoting and supporting the transportation methods of biking, public transportation, and walking for residents. The location of the project is within walking distance of many restaurants and business for residents to utilize. The Metro bus 2 and 4 are nearby and route across the city including downtown and South Portland. To support residents to utilize the bus, the owners are offering educational materials and initial funds for riding the METRO. The project is providing 32 bike parking spaces and a bike repair station inside.

2. Environmental Quality Standards (Section 14.6.2)

A. Preservation of significant natural features

No significant natural features have been identified onsite. The project site is an existing parking lot and building.

B. Landscape preservation

The development site is an already developed site with a church, associated buildings, landscaped open space, and a surface parking lot. There are three trees along the eastern edge of the property that are proposed to be removed. The existing trees along the Woodford Street frontage are proposed to be preserved. Staff are seeking additional preservation details to ensure safety of the existing street trees during construction.

C. Site landscaping and buffers

The project is proposing four trees (red maple), 36 shrubs (red twig dogwood and ruby spice summersweet), and 67 perennials (Great masterwort, common ivy, and virgatum). Common Ivy and Great Masterwort are both non-native, staff are seeking a replacement with a native alternative.

The 79 units requires 79 street trees. The applicant is proposing four street trees, with three existing trees to remain. For remaining street trees (72) that cannot feasibly fit on the site, staff are requesting the applicant choose an acceptable alternative, laid out in the Technical Manual.

Staff are seeking additional plantings to meet the parking lot landscaping standard which requires at least two trees (or one tree and three shrubs) per five parking spaces.

D. Water quality/storm water management/erosion control

The project is subject to the Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 for stormwater management. The applicant is proposing underground stormwater detention to treat 57% of the redeveloped non-roof impervious area with a StormTech subsurface sand filter. Staff and the third-party stormwater engineer find the proposed detention volume and flow to be adequate and meet the standard. There are several outstanding comments from the staff regarding connection and structural details, including clarity on piping sizes, insulation, and location of connections.

The applicant will be required to submit a Stormwater Maintenance Agreement for the proposed stormwater system.

3. Public Infrastructure and Community Safety Standards (Section 14.6.3)

A. Consistency with City Master Plans

The project is in line with the City's Comprehensive Plan. The addition of high density, housing, including affordable housing on an existing parking lot near transit and businesses is in line with housing and transportation goals for the City.

B. Public safety and fire prevention

There is an existing fire hydrant at the corner of Revere Street and Beacon Street and a fire hydrant in front of 170 Woodford Street, both within 500 feet. The internal site has space for emergency vehicle access. Staff are still reviewing, but no concerns have arisen at this time.

C. Availability and capacity of public utilities

The applicant has requested ability to serve confirmation from utilities. The applicant has received confirmation from CMP, but is still awaiting Portland Water District.

4. Site Design Standards (Section 14.6.4)

A. Massing, ventilation, and wind impact

The building bulk and height is appropriate for the area, is meeting zoning requirements, and is not anticipated to have negative impacts.

B. Shadows

Not applicable.

C. Snow and ice loading

The applicant has stated that snow storage areas will not encroach on parking, walkways, or stormwater management systems. Staff are seeking the location of snow storage onsite for further review.

D. View corridors

Not applicable. The project is not in a view corridor.

E. Historic resources

Not applicable. The project is not a designated historic resource.

F. Exterior lighting

Lighting is proposed around the residential building and surface parking. The proposed lighting is not currently meeting several Technical Manual Site Lighting standards, including maximum foot-candle and light trespass standards. Staff are also seeking further detail to confirm that the lighting is full cutoff and that it meets color temperature standards.

G. Noise and vibration

Staff are awaiting further information of the location and screening of heating, ventilation, and air conditioning equipment for the proposed residential buildings.

H. Signage and wayfinding

Any proposed signage will be reviewed by the Office of Permitting and Inspection as part of a separate sign permit application.

I. Zoning-related design standards

The project is being reviewed against B-2 multi-family design standards (Report Attachment 3). Staff are seeking updates to the new building onsite to meet the design standards, including direct ADA access from Woodford Street to the main entrance, vegetated or other buffering to abutting residential uses, reconfiguration of the elevation along Woodford Street to interact more appropriately with the sidewalk and street, and confirmation of visual transmittance along Woodford Street. Staff are looking into additional recommendations for the street facing façade windows and recommend that the window size is proportionate to a four-story multi-family building.

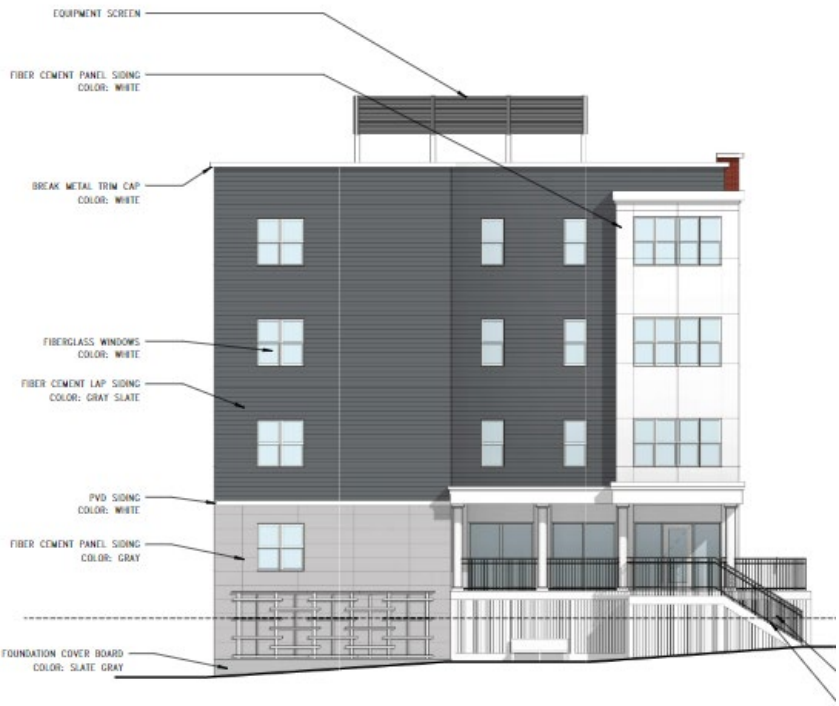


Figure 5 Elevation of the new building from Woodford Street

XI. NEIGHBORHOOD MEETING & PUBLIC COMMENT

The applicant held a neighborhood meeting on January 31, 2024 at 5:30 pm at 186 Woodford Street. Several questions were raised during the neighborhood meeting in regards to parking, public transportation, open space, resident demographics, façade treatment, and construction. There have been zero public comments submitted to the city in regards to this project.

XII. NEXT STEPS

The city will complete its review of the most recent submission (dated 02/07/24), email the applicant any remaining comments to be addressed in order to prepare a final submission, and then the city will schedule and hold a planning board public hearing.

XIII. ATTACHMENTS

Applicant Submittal

A. Cover Letter
B. Major Site Plan Application and Subdivision Application
C. Zoning Analysis Table
D. Right, Title and Interest
E. Easements
F. Wavier Table
G. Financial Capacity
H. Technical Capacity
I. Conformity with Land Use ordinance
J. Stormwater Report

K. Erosion and Sedimentation Control Report
L. Fire Department Letter
M. Wastewater Capacity
N. Lighting
O. Arch Design Narrative
P. Utilities
Q. Construction Management Report
R. Solid Waste Disposal
S. Parking Analysis
T. TDM Plan 186 Woodford Street
U. Meeting Certification letter
V. Woodford CHOM Neighborhood Letter
W. Sign-in Sheet
X. Meeting Minutes
Y. Parking Management Letter
Z. Comment Response Letter

Plans

P1. Cover Letter
P2. General Notes
P3. Survey
P4. CM Plan
P5. Site Plan
P6. Utility Plan
P7. Grading Plan
P8. Site Details -1
P9. Site Details -2
P10. Site Details -3
P11. Utility Details -1
P12. Utility Details-2
P13. Drainage Details
P14. Stormwater BMP Details
P15. Erosion and Sedimentation Control Details
P16. Erosion and Sedimentation Control Notes
P17. Subdivison Plat
P18. Photometric Plan
P19. Parish House Floor Plans and Elevations
P20. Senior Housing Building Floor Plans and Elevations

Report Attachments

1. City Staff Site Plan Comment Letter 1.26.24
2. Woodford Street – 186 Rezoning Report (ZN-002325-2023)
3. Design Review Memo

Att. 1

Dear Applicant,

We have completed our review of your application (PL-002753-2023) proposing to develop two residential buildings with 79 affordable housing units in the B2 Community Business zone. This development triggers major site plan review and subdivision review, and is subject to the following regulations:

- Site Plan – Article 14.6
- Zoning – Table 6C, and Table 7E
- Subdivision – Article 15
- Design Review

An overview of the City's review can be viewed in the attached project review worksheets and peer review comments.

Next Steps

Please review all feedback and reach out to the project review manager if you have any questions or would like to discuss this feedback in more detail. In order to proceed, the applicant shall prepare a written response to all feedback, and shall update plans, documents and other materials as necessary to address the above listed comments. The applicant shall notify the project review manager when a resubmission is uploaded to ProjectDox. Once received, the project review manager will notify the applicant of their scheduled review timeline for this resubmission.

Based upon the City's findings related to your application, the City will advance this application for a workshop with the Planning Board on **Tuesday, 02/13/24**. Please let me know at your earliest convenience if there are any conflicts with proposed date.

Sincerely,

Maya Balassa
Planner

Attachments

1. Site Plan Worksheet
2. Zoning Worksheet
3. Subdivision Worksheet
4. Design Review

Review Comments Round 1 | 1.26.23 | PL-02753-2023 | 186 Woodford Street

Planner: Maya Balassa | mbalassa@portlandmaine.gov | 207-874-8718

City Staff and Third-Party Peer Reviewers have completed the latest review of this application based off of the most recent submissions. Comments below have been provided to the Planning & Urban Development Department from the Department of Public Works, Water Resources, Zoning, and Third-Party Consulting Engineers (Stormwater + Traffic).

Please submit a written response to the comments below and upload the response, revised submissions, and new material to Project Dox (make sure all submissions maintain the same file naming format to allow for versioning). Once uploaded, please send an email to mbalassa@portlandmaine.gov notifying the planner of the resubmission.

Be advised that additional comments may be forthcoming and other changes may still be required if the comments are not addressed adequately. If you have any questions, please do not hesitate to ask.]

Green signifies the standard is being met; red signifies the there are outstanding comments.

General Review Comments		
Review	***Discussion***	***Status***
RTI	Overview: The applicant submitted the option to purchase agreement of the lot from Woodford Congregational Church of the United Church of Christ by Community Housing of Maine. Comments: •	
Financial & Technical Capacity	Overview: The Community Housing of Maine submitted a letter self-certifying they have financial capacity to finance the proposed project. The project team includes Acorn Engineering and CWS Architects, showing technical capacity. Comments: •	
Permits / Other Requirements	Overview: A access, utility, and maintenance easement is proposed within the shared drive aisle onsite benefiting all three proposed lots, seen of the Subdivision Plat. Comments: • Please provide the finalized easement, once created. This can be a condition of approval.	
Zoning	Overview: The site is located within the B-2 zone. Alongside the proposed development, the applicant is proposing to subdivide the site into three properties- each of which is required to meet zoning requirements. Comments: • Regarding the Parish House, Plan A1.10 shows the front part of the ground floor having Memorial hall with a stage, and balcony, a kitchen and two rooms labeled Germaine Room and Crib Room. The first floor includes the balcony of the memorial hall, a kitchenette and a lounge. The proposed use of this building is 37 dwelling units. Who is going to be using Memorial Hall, the kitchens and the other rooms mentioned above? • The height for the new addition to the Parish House and the height for the new building are both given as 44'. The applicant needs to provide an average grade calculation for both buildings and include the average grade line on the elevations.	
Additional Submissions Requested:		

14.6.1: Transportation Standards		
Standard	***Discussion***	***Status***

Impact on Surrounding Street Systems	Overview: The applicant is proposing to change the traffic pattern to a one way, entering the site from Beacon Street and exiting on Woodford Street. Comments: • The applicant shall review the entire sidewalk along their frontage and repair all identified hazards within the pedestrian walkway to ensure ADA compliance. These areas shall be depicted on a plan. • The applicant shall consolidate any proposed service trenches (where possible) to have one final trench repair. The proposed trenches shall be repaired per the Minor Excavation Pavement Repair Details (prior to paving the finished surface) found in the Rules and Regulations for Excavation Activity. Update the plans and detail sheets to show these requirements. • If the existing sidewalk grades are not compliant at the property line, then the limits of sidewalk replacement shall be extended to include a 5 foot minimum transition zone from the proposed 2% to the existing sidewalk slope. • The applicant shall dimension existing conditions in the ROW in addition to proposed improvements on the plan view sheets. For example ROW, street, lanes sidewalk, esplanade driveways (and other improvements) widths as well as when a width changes. • The proposed 3 foot bituminous strip on the driveway does not meet the current City standard and shall not exceed a 1 foot bituminous strip. Update the plans and detail sheets to meet the requirements of City Driveway Apron standards I-9 and I-10. CAD files can be obtained upon request.	
Access and Circulation	Overview: There is an existing sidewalk along the frontage of Woodford Street. There are currently two curb cuts along Woodford Street to the site that are proposed to be reduced to one, exit only driveway. The new 42-unit building has the main entrance along Woodford Street with two stairs up to the front porch, with an ADA ramp along the side leading to the front entrance. There is sidewalk proposed around the rear and side of the reconstructed 37 unit building that leads to Woodford Street. Internal sidewalks are proposed to be 5 feet wide. Comments: • The plans do not show a clear ADA pedestrian route from Woodford Street to the 42-unit building. Please adjust the site plan to show safe pedestrian routing. Staff are happy to meet and discuss ideas to accomplish this. • To minimize traffic impacts to Beacon Street, the site could include two-way circulation aisles so that traffic can enter the site from Woodford Street. The one-way driveway on Beacon Street would still need to remain. If the one-way circulation plan is to remain, the applicant shall implement angled parking spaces. • I support a waiver for parking lot aisle width given expected low vehicle turnover. This applies to a two-way traffic circulation system. If angled parking spaces are implemented, a waiver may not be required. • The warning signs at the existing crosswalk on Woodford Street shall be upgraded to meet current MUTCD standards.	
Public Transit Access	Overview: The project in within .25 miles on a Metro bus stop. The nearest bus stop is .15 miles away along Forest Avenue. Comments: •	
Parking	Overview: The applicant is utilizing the exception to off-street parking minimum per table 19-B, allowing no off-street parking required within a quarter mile of transit. The applicant has submitted a Transportation Demand Management. Despite using the parking exception, the applicant is proposing	

	53 parking spaces (3 ADA, 3 compact). The applicant is proposing 12 EV charging parking spaces along the rear of the site. 32 bike parking spaces are proposed for the housing units near entrances. Comments: • It is unclear how the parking spaces will be allocated between the existing and proposed uses and therefore I would suggest a parking management plan be provided. The applicant should also note if there are any site plan requirements for Jones, Rich, and Hutchins Funeral Home for use of the proposed parking area for overflow parking.	
Transportation Demand Management	Overview: The applicant has submitted a Transportation Demand Management Plan. Comments: •	
Additional Submissions Requested: •		

14.6.2: Environmental Quality Standards		
Standard	***Discussion***	***Status***
Preservation of Significant Natural Features	Overview: No significant natural features have been identified onsite. The project site is existing parking. Comments: •	
Landscape Preservation	Overview: There are three trees along the eastern edge that are proposed to be removed. Comments: • Please add preservation details to all existing trees proposed to remain within the area of disturbance. • Please include DBH and species of existing trees on the property survey o Please indicate which existing trees are proposed for removal and which are designated for preservation	
Site Landscaping and Buffers	Overview: The project is proposing four maple trees. Internally, the applicant is proposing 36 shrubs and 99 perennials. The project is proposing 42 plantings of Common Ivy and 14 plantings of Great Masterwort, which are both non-native. The project is required to plant 79 street trees. For remaining trees that cannot feasibly fit in the site, a fee-in-leiu of 400$ per tree is acceptable alternative. Comments: • Please update the landscaping plan to replace the ivy with a native perennial. • It appears that additional trees within 20 feet of the right of way could be added to the site. • Maples are no longer a suitable tree due to their percentage of the canopy and risk of loss from an invasive beetle. Please choose a different native approved tree. • The narrative states the development is unable to meet the 2 trees per 5 spaces parking lot landscaping standard. Paying into the tree fund can be part of meeting the standard, but please add additional landscaping to work towards the standard- staff are supportive of reducing parking space count to meet the standard, especially since the applicant is using proximity to transit to eliminate onsite parking requirement. • Please refrain from using maple species as proposed street trees o The greater Portland area is oversaturated with maple tree species leaving the city extremely vulnerable to infestation by Asian Longhorned Beetle	

	▪ The large grassy area and absence of overhead infrastructure create the opportunity to choose from several large growth form tree species that would compliment the existing maple trees on site • Street tree requirement: o 79 residential units * 1 tree/unit = 79 street tree ▪ Credit will be given for any new trees planted within 20' of the public ROW o Tree Fund contribution ▪ 79 required trees - 4 proposed new plantings = 75 remaining trees • 75 trees * $400/tree = $30,000 contribution to the tree fund in lieu of planting the remaining 75 required street trees ▪ The cost of site improvements that create a more hospitable environment for trees can be deducted from the in lieu contribution amount of $30k • Installing dedicated mulch rings around existing and newly planted trees • Providing decompaction and soil amendments (compost) for existing trees o Air spading the root zone of existing trees and applying compost	
Water Quality, Stormwater Management and Erosion Control	Overview: The applicant is proposing underground stormwater detention to treat 57% of the redeveloped non-roof impervious area with a StormTech subsurface sand filter. Comments: • Private connections into municipal catch basin structures are not permitted per technical manual standard 2.9.7. The private storm drain should be connected directly to the Woodford Street storm drain line with a new manhole. • The applicant should clarify the pipe size being proposed for the storm drain connecting into the Woodford Street storm drain pipe. The plans show conflicting information. • Per DPW's request the applicant has provided adequate stormwater detention volume and flow control for this project. • The project is required to comply with Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 for stormwater management. The Applicant has proposed a subsurface sand filter for stormwater management on the site. The system will provide for treatment of greater than 50% of the non-roof redeveloped impervious area on the site and will provide storage as required by the City. They've provided an inspection and maintenance plan, and will ultimately need a stormwater maintenance agreement. • The outlet control structure detail should be updated to include all of the proposed pipes, the isolator row pipe connection is not shown. The detail also calls for a frame and cover that are no longer manufactured. • The piping and grading around the proposed F-Basin at the northeast corner should be clarified. Notes call for both 8" and 12" pipe exiting this structure. The contours in the area also appear to show that the grade is a couple of feet higher than what is called out as the structure's rim. The pipe out of this structure ties into an existing manhole in the street, and based on the inverts provided and a 12-inch pipe, there will be only 1.25 feet of cover at the manhole, although it's noted that the existing pipes into the manhole appear to have similar amounts of cover. Adequate insulation should be used, and there will need to be care taken with the installation of the curbing as it appears that it will be close to the top of the pipe. • The Applicant has noted that they've made requests for utility ability to serve. They've received confirmation from CMP, and have noted they will provide others upon receipt.	

	• Based on my recent experience with PWD, they will require the demolition of the existing water service back to the main in the street, which will require some pavement repair at that location on Woodford Street.	
Transportation Demand Management	Overview: Comments: •	
Additional Submissions Requested: •		

14.6.3: Public Infrastructure + Community Safety Standards		
Standard	***Discussion***	***Status***
Public Safety and Fire Prevention	Overview: There is an existing fire hydrant at the corner of Revere Street and Beacon Street and a fire hydrant in front of 170 Woodford Street, both within 500 feet. The internal site has space for emergency vehicle access. Comments: •	
Public Utilities	Overview: Comments: • Please submit ability to serve confirmation when received by the applicant.	
Additional Submissions Requested: •		

14.6.4: Site Design Standards		
Standard	***Discussion***	***Status***
Massing, Ventilation and Wind Impact	Overview: The building bulk and height is appropriate for the area, is meeting zoning requirements, and is not anticipated to have negative impacts. Comments: •	
Shadow	Overview: Not applicable. Comments: •	
Snow and Ice Loading	Overview: The applicant has stated that snow storage areas will not encroach on parking, walkways, or stormwater management systems. Comments: • Please identify these snow storage locations on the site plan.	
View Corridors	Overview: Not applicable. The project is not in a view corridor. Comments: •	
Historic Resources	Overview: Not applicable. The project is not located in a historic district. Comments: •	

Exterior Lighting	Overview: Lighting is proposed around the residential building and surface parking. Comments: • In the Technical Manual, the maximum foot-candle for surface parking lots is 4 and the maximum foot-candle for site lighting is 5. Please adjust photometric plan to meet the maximum foot candle standard. • Please provide cutsheet details of proposed lighting to confirm they are full-cutoff and they are meeting color temperature standards. • The lighting trespass standard in the Tech Manual, states that lighting shall not exceed .1 along the property line. Lighting along the rear property line should show house-side shielding in the details. Please update photometric plan accordingly..	
Noise and Vibration	Overview: Comments: • Please show where the heating, ventilation, and air conditioning equipment is located and provide details for how it will be screened.	
Signage and Wayfinding	Overview: Comments: • Please clarify if any signage is proposed.	
Design Standards	Overview: The project is being reviewed under B-2 multi-family design standards. Comments: • The Design Review is attached below.	
Additional Submissions Requested: •		

	Zoning Use Review (Article 6)				
	Use Permissions (Table 6-A – Table 6-F)				
Proposed Use	***Permitted, Conditional or Accessory Use***		***Zone***		***Use Std***
Multi-family Residential	***Permitted***		***B-2 Community Business***		

	Zoning Dimensional Review (Article 7)				
	Dimensional Standards (Table 7-A – Table 7-H)				
Standard	***Requirement 1***	***Proposed (Lot 1)***	***Proposed (Lot 2)***	***Proposed (Lot 3)***	***Finding***
Lot Size (SF)	***None***	***37,289 SF***	***27,883 SF***	***18,641 SF***	
Area per D.U.	***1,000 SF/ unit 400 SF/ Unit (Table 18-C Affordable Housing Bonus)***	***N/A***	***753***	***444***	
Street Frontage	***20 feet***	***369.13 feet***	***152.56 feet***	***106.52 feet***	
Front Setback (Max)	***10 feet***	***46.10 feet (existing)***	***45.61 feet (existing)***	***3.78 feet***	
Rear Setback	***10 feet 0 feet (Table 18-C Affordable Housing Bonus)***	***24.42 feet***	***16.55 feet***	***20.05 feet***	
Side Setback	***None***				
Building Height	***45 feet 70 feet (Table 18-C Affordable Housing Bonus)***		***41.96 feet***	***46.76 feet***	

Subdivision Review Standards (Sec. 15.4 and 15.5)

General Standards of Review (Sec. 15.4.1)

Standard	*Discussion*	*Finding*
Will not result in undue water or air pollution.	Overview: The project site currently contains parking. Included in the proposal is a subsurface stormwater treatment system that will then discharge into the city's separated stormwater system. The subdivision associated with the development is not anticipated to result in undue water or air pollution. Updates Requested	Met
Has sufficient water available	Overview: The applicant has requested ability to serve confirmation from the Portland Water District. Updates Requested • Please submit ability to serve confirmation when received.	Not Met
Will not cause unreasonable burden on water supply	Overview: The applicant has requested ability to serve confirmation from the Portland Water District. Updates Requested • Please submit ability to serve confirmation when received.	
Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water	Overview: The site is an existing parking lot. Updates Requested: •	
Will not cause unreasonable highway or public road congestion	Overview: The site is located along Woodford Street, which runs between Forest Avenue and Stevens Avenue. The affordable housing for older populations is utilizing the proximity to transit to reduce onsite parking. The existing roadways can reasonably manage the additional traffic associated with the development. Updates Requested •	
Will provide for adequate sanitary waste and stormwater disposal	Overview: The new buildings are proposed to connect into the sewer and stormwater systems under Woodford Street. Updates Requested •	
Will not cause an unreasonable burden for the City to dispose of solid waste	Overview: Updates Requested • Please add additional information about how waste will be disposed of.	
Will not have undue adverse effect on the scenic or natural beauty of the area	Overview: The site is currently a parking lot. The new building is subject to design review of a multi-family in the B-2 Community Business zone. Updates Requested • Please respond to design review comments.	

Will conform with the Comprehensive Plan	Overview: The proposed development will add 72 units of low-income housing. The project is in line with Portland 2030 goals for meeting housing needs. Updates Requested •	
Subdivider has adequate financial and technical capacity to complete the project.	Overview: The applicant, Community Housing of Maine, has provided evidence of financial and technical capacity. Updates Requested •	
Will not adversely affect the quality of water within a water body situated within 250 feet of the subdivision	Overview: There is not a body of water within 250 feet of the subdivision. Updates Requested •	
Will not adversely impact the quality or quantity of groundwater	Overview: Adverse impacts on the groundwater is not anticipated. Updates Requested •	
Adequately addresses floodplain requirements if applicable	Overview: The site is not located a floodplain. Updates Requested •	
Will provide for adequate stormwater management	Overview: The project is proposing a subsurface stormwater treatment system under the parking lot to store and treat stormwater before slowly releasing into the City system within Woodford Street. Updates Requested • See site plan comments regarding stormwater management	
Will not have lot depth to width ratio greater than 5 to 1 if property fronts water body or water course	Overview: The site does not front a water body or water course. Updates Requested •	
Will not cause unreasonable traffic congestion or unsafe conditions on public ways within other municipalities if property is	Overview: The low-income housing units are being built on an existing parking lot, on a street that directs traffic between two large arterials. The project is not anticipated to cause unreasonable traffic or congestion or unsafe conditions on public ways. Updates Requested •	

situated partially within that municipality.		
Sewers and Storm Drains (15.5.5)		
Standard	***Discussion***	***Finding***
	Overview: A stormwater system in proposed onsite. DPW Water Resources has approved the approach taken by the applicant. Updates Requested •	
Blocks (15.5.6)		
Standard	***Discussion***	***Finding***
	Overview: The street distances are not changing from this application. Updates Requested •	
Lots (15.5.7)		
Standard	***Discussion***	***Finding***
	Overview: The proposed lots are meeting zoning dimensional standards. Updates Requested •	
Public Open Space (15.5.7)		
Standard	***Discussion***	***Finding***
	Overview: Public open space is not proposed for this subdivision.	

Planning Board Report
Planning & Urban Development

182 Rear & 186 Woodford Street
Zoning Map Amendment
ZN-002325-2023

Att. 2

Submitted to:	Portland Planning Board	**Prepared By:**	Zach Powell
Public Hearing Date:	October 10, 2023	**Date:**	October 6, 2023

I. INTRODUCTION

Community Housing of Maine (CHOM) has submitted a zoning map amendment application requesting to rezone property at 186 Woodford Street from R-5 Residential, B-1 Neighborhood Business & B-2 Community Business, to B-2 Community Business. The zoning map amendment would enable redevelopment of the eastern portion of the site, which is currently occupied by a surface parking lot, to affordable housing. While not under ownership of CHOM or proposed to be included as part of the proposed development, Planning Staff is recommending the inclusion of 182 Rear Woodford Street as part of the rezoning (Figure 1, outlined in green).



Figure 1: Aerial View of 182 Rear (Outlined in Green) and 186 (Outlined in Blue) Woodford Street

This application has been scheduled for a Planning Board Hearing without an initial Workshop. The Planning and Urban Development Department mailed 131 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the September 30, 2023 and October 3, 2023 editions of the *Portland Press Herald*.

Applicant: Community Housing of Maine (CHOM)

Authorized Agent: Peter Heil, Acorn Engineering

II. PROJECT DATA

Property Size	182 Rear Woodford Street: 4,203 square feet (0.1 acre) 186 Woodford Street: 83,934 square feet (1.93 acres)
Existing Zones	R-5 (Residential), B-1 (Neighborhood Business), B-2 (Community Business)
Existing Uses	General office (<5,000 sq. ft.), General services (<5,000 sq. ft.), Place of assembly, Surface parking lot
Proposed Zone	B-2 (Community Business)
Proposed Uses	General office (<5,000 sq. ft.), General services (<5,000 sq. ft.), Place of assembly, Residential, Surface parking lot

III. BACKGROUND & PROPOSED PROJECT

The property at 186 Woodford Street is an 83,934 square foot lot, and is the site of Woodfords Congregational Church. The property also leases space to A Company of Girls, Maine Council of Churches, Project Feed, and Stages Youth Theater. The property at 182 Rear Woodford Street is a 4,203 square foot undeveloped lot that is utilized for parking of the adjacent multi-family building at 180 Woodford Street.

The proposed zoning map amendment for 186 Woodford Street would facilitate CHOM's future plans to subdivide the lot into two parcels with the church and cloister remaining under the ownership of the Woodfords Congregation and the Parish House, and surface parking area under the ownership of CHOM. The development on the new parcel by CHOM proposes to retain the existing Parish House (shown in gray), demolish the rear ell, and construct a rear addition with a similar footprint to the current ell that would house 31 residential units. Along with the addition, the project proposes the construction of a new affordable housing building on the eastern portion of the site with 59 units.

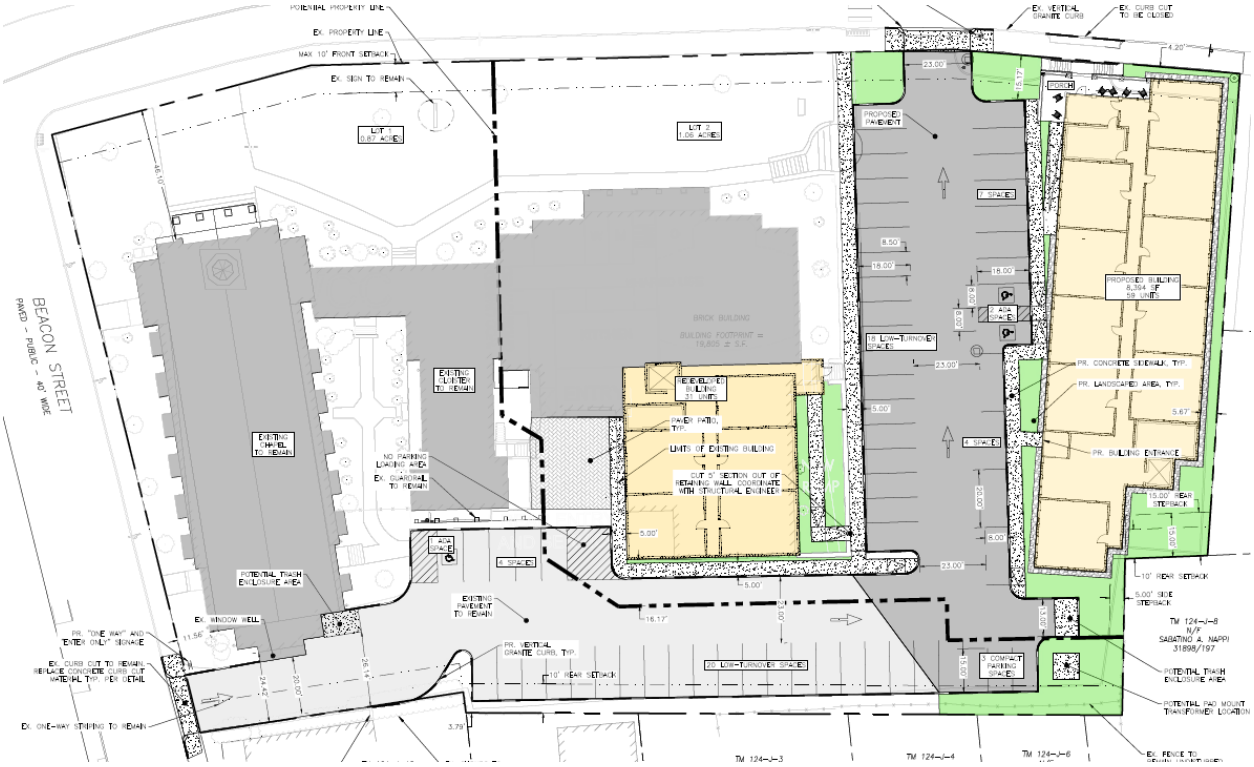


Figure 2: Conceptual Site Plan showing the redevelopment of the Parish building with 31 units (shown in the center) and construction of a new multi-family building with 59 units (shown on the right).

IV. EXISTING CONDITIONS AND SURROUNDING AREA

The proposed zoning map amendments include the Woodfords Congregational Church parcel at 186 Woodford Street (Chart 124, Block J, Lot 5001) and an undeveloped parcel at 182 Rear Woodford Street Cumberland Avenue (Chart 124, Block J, Lot 021001).

The property at 186 Woodford Street is bounded by Woodford Street (State Route 9) to the north and Beacon Street to the west. The site currently includes a General office (<5,000 sq. ft.) use (Maine Council of Churches), General services (<5,000 sq. ft.) use (Project Feed), Place of assembly uses (A Company of Girls, Stages Youth Theater & Woodfords Congregational Church), and an 83-space surface parking lot. The property at 182 Rear Woodford Street does not have street frontage and is an undeveloped parcel, but is

under common ownership with 180 Woodford Street. 180 Woodford Street has frontage along Woodford Street and improved with a multi-family building.

The surrounding area contains a mixture of residential, commercial, institutional, and light industrial uses. Two blocks to the east sits Woodfords Corner, which serves as a commercial node for the neighboring Back Cove, Rosemont, and Deering neighborhoods along Forest Avenue. Woodford Street includes a mixture of both commercial and residential uses. Lower-density residential uses are primarily located to the west and south whereas a greater mix of low- to mid-density residential, commercial, institutional, and light industrial uses are located to the north and east.



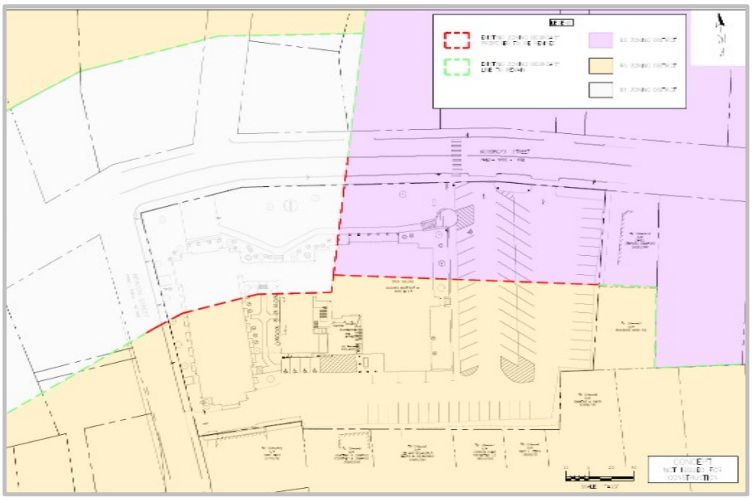
Figure 3: Route 2 Map (source: Greater Portland Metro)

The properties are an approximately one-minute walk from the METRO Route 2 line, which stops at Woodford's Corner every 30 minutes. The site is in close proximity to a neighborhood bikeway on Concord & Saunders Street and the Back Cove Shared Use Path (12-minute walk, 4-minute bike ride). The surrounding area is supported by a strong, connected pedestrian network with sidewalk facilities.

The southern portion of 186 & the entirety of 182 Rear Woodford Street are within the R-5 (Residential) zone, which extends south and southwest of the sites. The northeastern portion of 186 Woodford Street is zoned B-2 (Community Business) and northwestern portion is zoned B-1 (Neighborhood Business), with each zone respectively extending to the east and west.

V. PROPOSED MAP AMENDMENT

The applicant proposes a zoning map amendment to rezone 186 Woodford Street from R-5 (Residential), B-1 (Neighborhood Business), and B-2 (Community Business) completely to B-2. The proposed zoning map amendment will remove the existing split lot condition and will bring the Parish building into zoning conformity for height. Currently, the Church and Parish buildings are legally nonconforming in regards to height at 50 feet and 135 feet, respectively. With affordable housing density bonus allowances in the B-2 zone, rezoning this site would allow for renovations and increased density, facilitating affordable housing opportunities near a priority node and corridor identified in the Comprehensive Plan. The applicant's submittal (Plan 2) shows the proposed Zoning Map Amendment.


Figure 4: Existing Zoning with R-5 shown in yellow, B-1 in gray, and B-2 in purple.

VI. ZONING ANALYSIS

R-5 (Residential) Zone

The entirety of 182 Rear Woodford Street and the southern portion of 186 Woodford Street is zoned R-5 (Residential). The purpose of the R-5 zone is to:

> *"provide appropriate areas of the city for medium-density residential development characterized by single-family, two-family, and low-intensity multifamily dwellings on individual lots; to ensure the stability of established medium-density neighborhoods by controlling residential conversion; and to provide for planned residential unit development on substantially-sized parcels."*

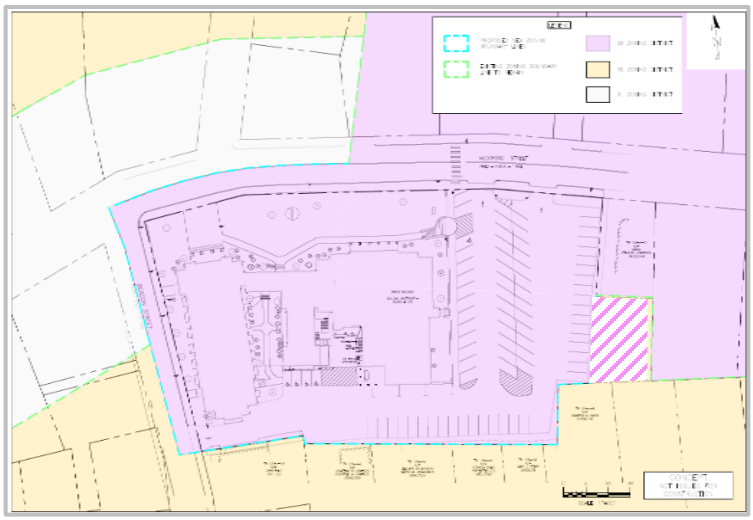


Figure 5: Proposed Zoning Map Amendment, with proposed amendment from Planning Staff to rezone 182 Rear Woodford Street to B-2 (Shown with diagonal stripes).

The R-5 zone limits residential density by requiring a minimum of 3,000 square feet of lot area per dwelling unit and further requires a minimum lot area of 5,000 to 6,000 square feet for residential uses. The maximum height in the R-5 zone is 35 feet and affordable housing height and density bonuses are not permitted. A number of categorical exemptions to off-street parking minimums are permitted for development in the R-5 zone (e.g., Affordable housing, Multi-Family housing, Transit proximate development and uses) and can be found in Table 19-B of the Land Use Code.

B-1 (Neighborhood Business) Zone

Currently, the northwestern portion of 186 Woodford Street is in the B-1 (Neighborhood Business) Zone. The purpose of the B-1 zone is to:

> *"provide limited areas for the location of small-scale commercial establishments intended to serve a local market. Uses that are complimentary, quiet, and generally do not disturb the comfort and enjoyment of the adjoining neighborhood environment are encourage, and should be designed for the pedestrian scale and to provide convenient access for nearby residents and workers to walk in to purchase goods and services. Buildings and uses shall be designed with attractive storefronts or similar features, with windows and doors convenient to a public sidewalk. This zone encourages mixed-use buildings, such as commercial first floor with residential uses above or combined retail/office uses in a multi-story structure. The zone also provides the opportunity for high residential density. Suitable locations for this zone may include street intersections and arterial streets with existing or proposed traditional neighborhood retail and service uses."*

The B-1 zone limits residential density by requiring a minimum of 1,000 square feet of lot area per dwelling unit, though affordable housing development within the zone is eligible to take advantage of density bonuses, which would allow for a reduction in the minimum lot area per dwelling unit requirement down to a minimum

of 400 square feet per unit, if 75% or more of the dwelling units were to be low-income units (≤80% of AMI for rental units and ≤100% of AMI for ownership units).

Maximum heights in the B-1 zone are 35 feet and again, affordable housing development within the zone is eligible to take advantage of height bonuses up to 15 feet, if ≥50% of units are low-income units or if 100% of units are workforce units (≤80% of AMI for rental and ownership units).

B-2 (Community Business) Zone

Currently, the northeastern portion of 186 Woodford Street is in the B-2 (Neighborhood Business) Zone and the applicant is requesting that this zone be expanded to encompass the entirety of both 182 Rear & 186 Woodford Street. The purpose of the B-2 zone is to:

> *"provide appropriate locations for the development and operation of community centers offering a mixture of commercial uses, housing, and services serving the adjoining neighborhoods and the larger community. The variety, sites, and intensity of the permitted commercial uses in the B-2 zone are intended to be greater than those permitted in the B-1/B-1b zones. The zone provides a broad range of goods and services with a mixture of large and small buildings, such as grocery stores, shops and services located in major shopping centers and along arterial streets. Such establishments should be readily accessible by automobile, by pedestrians and by bicycle. Development in the B-2 zone should related to the surrounding neighborhoods by design, orientation, and circulation patterns. The zone should provide locations for moderate to high-density housing in urban neighborhoods along arterials."*

The B-2 zone requires a minimum of 1,000 square feet of lot area per dwelling unit. Similar to the B-1 zone, density bonuses can be utilized to reduce the minimum lot area per dwelling unit requirement down to 400 square feet if 75% of dwelling units are low-income units (≤80% of AMI for rental units and ≤100% of AMI for ownership units). Maximum heights in the B-2 zone are 45 feet (50 feet with a commercial ground floor use) though affordable housing height bonuses permit up to 25 feet of additional height if ≥50% of units are low-income units, or if 100% of units are workforce units (≤80% of AMI for rental and ownership units). The Parish Building would come into conformance for height at 50 feet.

Table 1 provides a comparison of the permitted uses for zones under consideration. Uses marked with a 'P' are permitted uses in the zone. A 'C' indicates a conditional use. Uses with an empty cell are not permitted in the zone. "*" indicates that other restrictions may apply.

Table 1 - Permitted Uses	R-5	B-1	B-2
Single-family dwellings	P	P	P
Two-family dwellings	P	P	P
Multi-family dwellings	C	P*	P
Multiplex	P		
Congregate care facilities		P	
Handicapped family units	P		
Special needs independent dwelling units	P		
Combined living/working spaces		P	P
Lodging houses	C	P	P
Sheltered care group homes	C		
Clinics		P	P

Elementary, middle, and secondary schools	C	P	P
Governmental uses	P	P	P
Hospitals	C		
Intermediate care facilities	C		P
Long-term and extended care facilities	C		P
Places of assembly (<10,000 sq. ft.)	C	P	P
Places of assembly (>10,000 sq. ft.)	C		P
Preschool facilities	C	P	P
Post-secondary schools	C		P
Bed and breakfasts		P	P
Adult business establishments			P
Bars			P
General offices (<5,000 sq. ft.)		P	P
General offices (>5,000 sq. ft.)			P
General services (<5,000 sq. ft.)		P	P
General services (>5,000 sq. ft.)			P
Hostels		P	
Hotels			P
Marijuana retail store			P
Registered marijuana dispensary			P
Restaurants		P	P
Retail (<5,000 sq. ft.)		P	P
Retail (5,000 – 25,000 sq. ft.)			P
Retail (>25,000 sq. ft.)			P
Small-scale marijuana caregiver			P
Theaters and performance halls			P
Veterinary services			P
Communication studios			P
Laboratory and research facilities			C
Low-impact industrial (<10,000 sq. ft.)			P*
Low-impact industrial (>10,000 sq. ft.)			P*
Printing and publishing			C*
Repair services			P
Studios for artists and craftspeople		P	P
Warehouse, storage, and distribution			C*
Off-street parking	C		
Parks and open spaces	P	P	P
Solar energy system (minor)	P	P	P
Utility substations	C	P	P
Wind energy system (minor)			C

Table 2 provides a comparison of the dimensional requirements for zones under consideration.

Table 2 - Dimensional Standards	R-5	B-1	B-2
Lot Size (min)	6,000 sq. ft. to 5 ac. (depending on use)	Place of Assembly: 10,000 sq. ft. School: 20,000 sq. ft.	
Density (lot area per dwelling unit)	3,000 sq. ft.	1,000 sq. ft.	1,000 sq. ft. (435 sq. ft. if active street frontage)
Street Frontage (min)	50 ft.	20 ft.	20 ft.
Front Yard (min)	25 ft. (or average depth of adjacent yards)		
Front Yard (max)		10 ft., or average front yard depth of nearest developed lots if <10 ft.	10 ft.
Rear Yard (min)	20 ft.	10 ft. for principal & 5 ft. for accessory if abutting residential zone	Principal: 10 ft. Accessory: 5 ft.
Side Yard (min)	5-15 ft. (depending on height and location)	5 ft. if abutting residential zone	Accessory: 5 ft.
Stepbacks >35 ft. when abutting residential zone (min)		Side: 10 ft. Rear: 15 ft.	Side: 5 ft. Rear: 15 ft.
Lot Coverage (max)	40%		
Impervious Surface Ratio (max)		90%	Residential: None Other uses: 80%
Lot Width (min)	General: 60 ft. Multiplex: 90 ft.		
Building Height (max)	Principal: 35 ft. Accessory: 18 ft.	35 ft.	45 ft. (50 ft. if first floor is in commercial use)
Floor Area (max)		Restaurants (public area): 2,000 sq. ft. Clinics: 3,000 sq. ft. Non-residential uses on first floor: 10,000 sq. ft. total	Laboratory and research facilities & warehousing: 10,000 sq. ft.

Table 3 provides the information from Table 18-C of the Land Use Code on Dimensional Bonuses for Eligible Affordable Housing Projects.

Table 3 - Dimensional Bonuses for Eligible Affordable Housing Projects				
% Low-income Units	% Workforce Units	Density Permitted[1]	Additional Height Permitted	Setback Reductions[2]
10%	20%	1.1 x base	N/A	N/A
20%	40%	1.2 x base	10 ft.	N/A
30%	60%	1.3 x base	10 ft.	15 ft.
50%	100%	2.0 x base	15 ft.	15 ft.
75%	N/A	2.5 x base	25 ft.	10 ft.

[1] "Base" is the number of units allowed under the zoning without this bonus but with any other bonuses applied. If an eligible project is providing both workforce and affordable housing units, the applicant shall have the option of utilizing applicable incentives, but not cumulatively.

[2]Setback reductions are absolute reductions in front, side, and/or rear setback requirements.

VII. COMPREHENSIVE PLAN CONSISTENCY

Staff have identified that the map amendment aligns with Portland's comprehensive plan, *Portland's Plan 2030* by enhancing the ability for the applicant to rehabilitate and reuse existing historic structures on-site, facilitate future affordable housing development through infill of a surface parking lot, and provide housing opportunities within a multi-modal urban context. In addition, the map amendment would foster sustainable growth by providing contextually appropriate housing density in and approximate to Woodfords Corner; a priority node for the City with a concentration of services and amenities, and convenient access to transit; attributes which together make Woodfords Corner one of the most complete neighborhoods in Portland.

Relevant Comprehensive Plan goals and objectives include:

Environmental:

Support Sustainable Land Use & Transportation Policies

"Adopt sustainable land use and transportation policies that support connectivity, walkable neighborhoods, and multi-modal transportation."

Historic Resources:

Local Goal

"Stabilize and enhance historic areas of the city by ensuring quality investment in existing structures and compatible infill development."

Housing:

Local Goals

"Increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences and financial capabilities of all Portland residents"

"Encourage additional contextually appropriate housing density in and proximate to neighborhood centers, concentrations of services, and transit nodes and corridors as a means of supporting complete neighborhoods."

"Pursue policies to enable people who work in Portland to have the option to live in Portland."

Strategies

Remove Housing Barriers
"Evaluate whether current zoning allows for new development consistent with historic patterns of form, density, and/or use, as well as whether it allows for priority growth areas."

"Coordinate linkages between accessible transportation and housing affordability."

Promote Sustainability
"Encourage rehabilitation of existing historic buildings and materials."

Support Age-Friendly Housing Options
"Create, promote, and facilitate safe, affordable, and practical housing solutions that will meet the evolving needs of Portland residents as they age."

Adapt Affordable Housing
"Pursue new opportunities for increased energy efficiency, increased densities, mixed incomes, and greater connectivity to surrounding neighborhoods."

Future Land Use:
Priority Nodes & Corridors
"Priority nodes and corridors indicate areas that would be appropriate for new development to provide needed housing, businesses, and services proximate to transit, or areas that otherwise warrant some examination of potential for positive change in form and/or function."

VIII. NEIGHBORHOOD MEETING & PUBLIC COMMENT

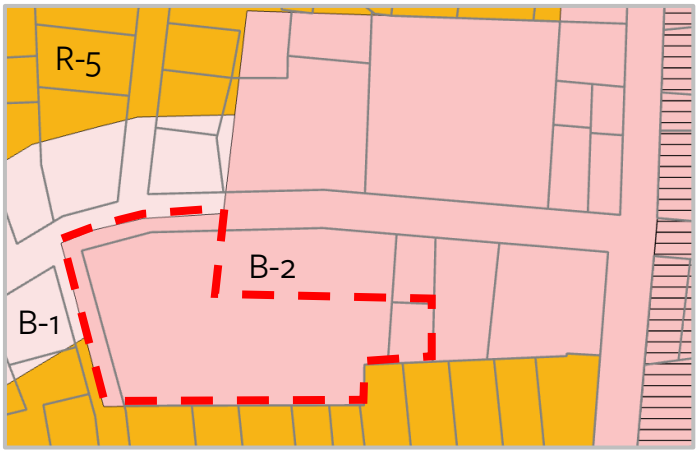
No public comment has been submitted. The Applicant held a neighborhood meeting on September 20, 2023 and was attended by 17 people. Comments at the neighborhood meeting primarily focused on changes to the surface parking, project schedules, and dwelling unit characteristics.

IX. REQUISITE COUNCIL ACTION

Any proposed rezoning, regardless of whether it is recommended by the Planning Board, must be approved by City Council vote in order to take effect.

X. PROPOSED MOTION

1. On the basis of materials submitted by the applicant, the City of Portland Land Use Code, Portland's Comprehensive Plan, public comment, and the information provided in the public hearing on October 10, 2023 for the application ZN-002325-2023 (182 Rear & 186 Woodford Street), and/or other findings, the Planning Board finds that the proposed zoning map amendment **[is/is not]** consistent with the Comprehensive Plan for the city of Portland; and therefore, the Planning Board **[recommends/does not recommend]** to the City Council adoption of the Zoning Map amendment for the area of land that includes 182 Rear & 186 Woodford Street as shown below:



XI. ATTACHMENTS

APPLICANT SUBMITTAL

A. Project Summary
B. Consistency with Comprehensive Plan
C. Checklist
D. Right, Title, & Interest
E. September 20, 2023 Neighborhood Meeting Materials

PLANS

Plan 1. Vicinity Map
Plan 2. Existing and Proposed Zoning Maps
Plan 3. Conceptual Site Plan

Design Review
Planning and Urban Development Department

City of portland

Subject:	186 Woodford Street
Zone:	B2
Date of Review:	Friday, January 19, 2023, Revised February 6, 2024
Reviewer(s):	Sean King (Urban Designer), Natasha Kypfer (Senior Planner), Maya Balassa (Planner)
Project ID:	PL-002753-2023

I. INTRODUCTION

The development project at 186 Woodford Street is subject to the site design review standards, Land Use Code section 14.6.4.I Design standards.

The proposed redevelopment of the building at 186 Woodford Street is located in the B-2 Community Business zone, and is subject to the design standards of the City of Portland *Design Manual* – ***(d) B-2 Commercial Business Zone, Appendix 2*** and ***(i) Two-family, special needs independent living units, multiple-family, lodging houses, bed and breakfasts and emergency shelters.***

II. DESIGN REVIEW COMMENTS: **bold** text denotes recent updates met, red text denotes standards not met and require resubmission.

(d) B-2 STANDARDS

a. Urban street wall: In the B-1, B-1b and B-2b zone it shall be required that buildings shall be located to create and preserve an urban street wall

Staff comment: Not applicable, the proposed development is located in the B-2 zone and is required to meet front setback of 10 feet maximum as required per LUC Article 7, Table 7-E Mixed Use Zone Dimensional Standards. Please refer to B-2 Guidelines (Appendix 2) for concerning the creation and preservation of an urban street wall.

b. Mixed Uses: In B-1b zone buildings shall be multi-stories with mixed uses.

Staff comment: Not applicable, the proposed development is located in the B-2 zone

c. *Building entrances: In the B-1 and B-2b zone building entrances shall be oriented toward, located adjacent to, and directly accessible from, a sidewalk in a public right-of-way.*

Staff comment: Not applicable, the proposed development is located in the B-2 zone, however the Applicant has proposed a main entrance oriented towards Woodford Street.

d. *Windows: In the B-1, B-1b, B-2, B-2b zones windows shall be required along the street frontage of a building. Windows shall be transparent (with visible transmittance (VT) of .7 or greater) and installed at a height to allow views into the building by passerby.*

Staff comment: The proposed Senior Housing building is located along the street frontage of Woodford Street with an internal program that includes a main entrance lobby and residential units. The Applicant shall specify the transparent visible transmittance (VT) of .7 or greater for windows adjacent to the public sidewalk along Woodford Street at the north elevation for Staff review.

e. *Façade character: In the B-1, B-1b, B-2, B-2b zones, active and public portions of the buildings (e.g. doors, windows, entries retail displays) shall be oriented to and, where possible, be located adjacent to the public sidewalk to create an active presence along the sidewalk.*

Staff comment: The proposed Senior Housing building is oriented towards Woodfords Street with the main entrance and porch. Staff finds that the proposed floor elevation is not directly accessible from the public sidewalk, and recommends that the Applicant lower the finished floor elevation of the lobby to match the adjacent sidewalk elevation and allow for a flush main entrance and porch to the public sidewalk. In addition, Staff finds the proposed staircases to access the porch elevation at 81.35' does not create an active presence along the sidewalk at the Senior Housing building, and recommends the Applicant create an internal stair transition accessible for residences to mitigate a change in finished floor elevation.

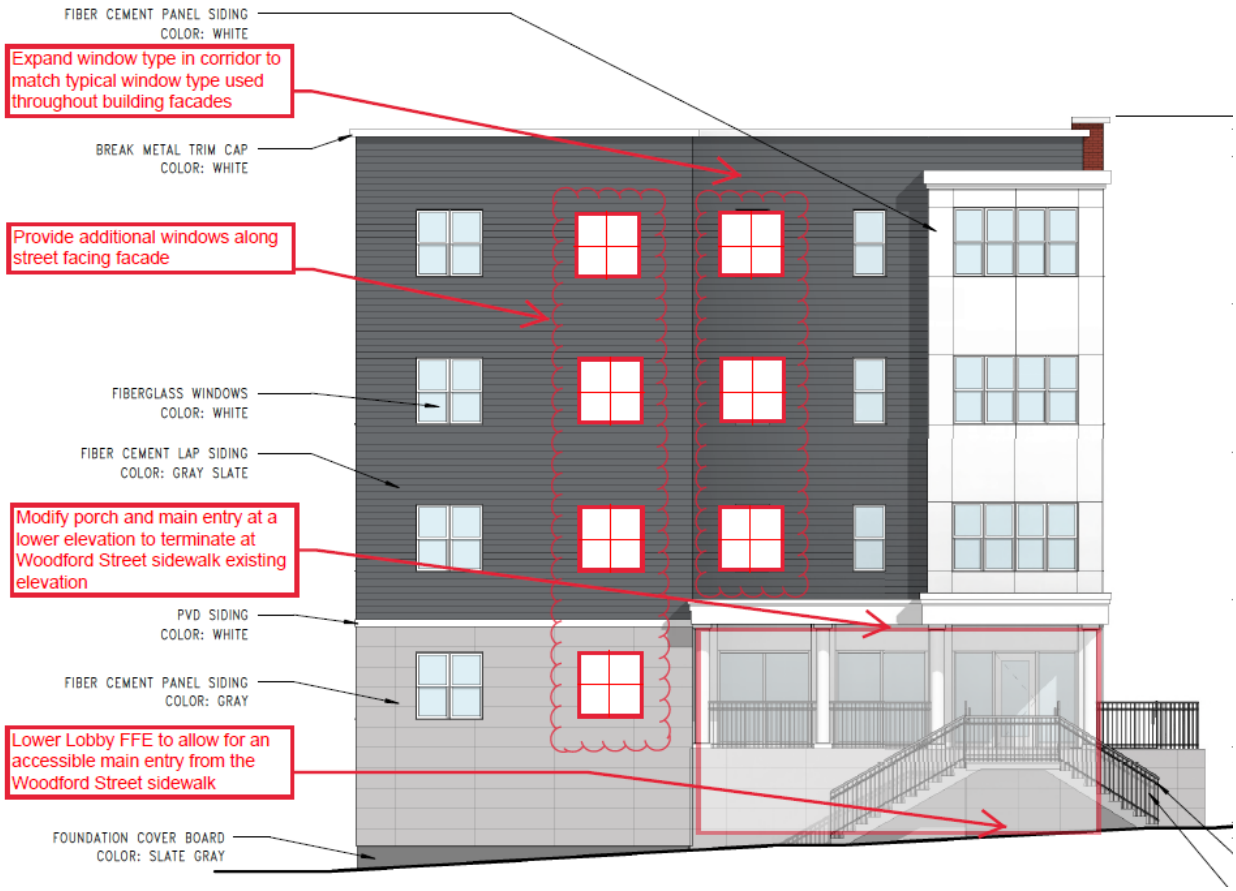


Figure 1: Staff recommendations to Applicant's South Elevation – Woodford Street

f. *Building design: B-1, B-1b, B-2 and B-2b commercial buildings shall be designed to be compatible with their residential and commercial neighbors.*

Staff comment: The proposed Senior Housing and Redeveloped Parish House buildings function as residential structures and are compatible with their residential neighbors through the arrangement of windows that indicate units and façade materials.

g. *Building materials: Façade materials of buildings located in the B-1, B-1b, B-2 and B-2b zones shall be compatible with those materials of surrounding residential and commercial use.*

Staff comment: The proposed building materials for the Senior Housing include fiber cement lap siding and panel in three tones, brick, metal trim, fiberglass windows and PVD siding as an accent at the front porch. Staff recommends a replacement of the PVD siding at the front porch for a longevity material, such as fiber cement and fiberglass columns, to reduce the amount of overall building materials.

The proposed building materials for the Redeveloped Parish House building include fiber cement lap siding and panel in three tones, brick, metal trim and fiberglass windows. Staff finds the proposed building materials to be appropriate with an arrangement that is compatible with the surrounding residential multi-family use.

h. *Building scale: In the B-1 and B-1b zones building scale must relate and be compatible with surrounding residential structures.*

Staff comment: Not applicable, the proposed development is located in zone B-2.

i. *Landscaping and buffers: In the B-1, B-1b, B-2 and B-2b zones buildings and associated parking areas must be screened to buffer abutting properties. A densely planted landscape buffer and/or fencing will be required to protect neighboring properties from the impacts associated with the development, including lighting, parking, traffic, noise, odor, smoke, or other incompatible uses. Where buildings are setback from the street, a landscaped area must be planted along the front yard street line.*

Staff comment: The proposed development plan includes the Senior Housing building abutting residential properties at the side and rear and surface parking abutting residential properties. The Applicant has not provided sufficient screening at abutting properties and Staff recommends the addition of a densely planted landscape buffer and/or fencing to screen vehicles parked, in addition to add fencing along the east property line to screen abutting residential properties.

(d) B-2 GUIDELINES

Please refer to Appendix 2 of this manual, The B-1, B-1b, B-2, B-2b Design Guidelines, for applicable design guidelines for the B-1 and B-2 zones. In addition, the following design guidelines shall also apply:

1) Buildings located in the **B-2** zone are specifically encouraged to adhere to the design guidelines contained in *the B-1, B-1b, B-2, B-2b Design Guidelines* (Appendix 2) of this section concerning the creation and preservation of an urban street wall.

2) In the B-1b and **B-2** zones, buildings are specifically encouraged to adhere to the guidelines contained in *the B-1, B-1b, B-2, B-2b Design Guidelines* (Appendix 2) of this section concerning building entrances.

B-2 STANDARDS (Appendix 2 of the Design Manual)

1. *Building location and form*
Buildings shall be located near the street so as to create an urban street wall.

Staff comment: The proposed development plan includes the Senior Housing building located near Woodford Street to create an urban street wall. As the abutting residential and commercial properties vary in location for street frontage, Staff finds this design standard to be met.

2. *Building function*
An urban street and business district requires a substantial intensity and variety of uses.

Staff comment: Not applicable, B-2 Guidelines do not specifically encourage a variety of uses.

3. *Orientation of buildings and their entrances to the street*
Major building entries shall be designed and located to provide the primary building access oriented to the public street and sidewalk.

Staff comment: The proposed Senior Housing building is oriented towards Woodfords Street with the main entrance and porch. Staff finds that the proposed floor elevation is not directly accessible from the public sidewalk, and recommends that the Applicant lower the finished floor elevation of the lobby to match the adjacent sidewalk elevation and allow for a flush main entrance and porch to the public sidewalk. In addition, Staff recommends an external stair that would connect from the public sidewalk on Woodford Street to the building entrance located at the west elevation.

The proposed Redeveloped Parish House, as a building addition, is not required to provide a major building entry oriented to the public street and sidewalk, however, Staff recommends the Applicant revise the architectural elevations to include the stair, ramp and cheek wall proposed in front of the main entry.

4. Windows
Windows shall be located in all building facades visible from the public way, especially on building facades along the major public street.

Staff comment: Not applicable, B-2 Guidelines do not specifically encourage windows located in all building facades visible from the public way.

5. Building character, detail, scale and graphic qualities
Building design will include various architectural and graphic amenities to provide a strong presence along a street and relate a building to its community.

Staff comment: The proposed Senior Housing building is oriented towards Woodfords Street with architectural elements to articulate the main entrance, porch, bay projection and detailing at windows and trim that Staff finds appropriate.

6. Signage and Building Entrances

Building entrances and building signage in the B-1, B-1b and B-2b zones will be designed and constructed at the pedestrian scale.

Staff comment: Staff finds the proposed staircases to access the porch elevation at 81.35' does not create an active presence along the sidewalk at the Senior Housing building, and recommends the Applicant create an internal stair transition accessible for residences to mitigate a change in finished floor elevation. Staff recommends the Applicant revise the south elevation to account for the removal of external stairs and modify the porch, awning and bay projection accordingly.

7. Development relationship to street

Building facades and site amenities shall form a cohesive wall of enclosure along a street.

Staff comment: Staff finds that the proposed Senior Housing building is located appropriately towards Woodford Street, however requests the Applicant create a stronger relationship for the main entrance by lowering the finish floor elevation to meet Woodford Street grade.

8. *Parking lots*

Parking lots shall be screened from view of the public way.

Staff comment: Not applicable, B-2 Guidelines do not specifically evaluate parking lot design.

Parking lots shall be screened from neighboring properties.

Staff comment: Not applicable, B-2 Guidelines do not specifically evaluate parking lot design.

Crosswalks shall be provided within parking lots and across entrance driveways, directing pedestrians to building entrances.

Staff comment: Not applicable, B-2 Guidelines do not specifically evaluate parking lot design.

Street trees shall be planted along property frontage 25 feet on center.

Staff comment: Not applicable, B-2 Guidelines do not specifically evaluate street trees as the development plan does not propose trees to establish a street wall.

9. *Transit connections*

Development proposed along established transit corridors must design uninterrupted access from the proposed development to the transit stop.

Staff comment: Not applicable, B-2 Guidelines do not specifically evaluate transit connections

(i) MULTIPLE-FAMILY STANDARDS

Multiple-family shall meet the following standards:

a. Proposed structures and related site improvements shall meet the following standards:

1. *The exterior design of the proposed structure, shall be designed to complement and enhance the nearest residential neighborhood.*

   Staff comment: The proposed development relates to the architectural style of adjacent multi-family residential buildings within the neighborhood at two-to- three-story heights, orientation to the street and consistency of exterior building materials of masonry, cementitious products and arrangement of windows to demonstrate the delineation of floors that Staff finds to meet this design standard.

2. *The proposed development shall respect the existing relationship of buildings to public streets.*

   Staff comment: The proposed development locates the new Senior Housing building towards the street, Staff is requesting that the Applicant remove the proposed staircases that parallel the sidewalk and lower the lobby finish floor elevation to sidewalk grade to engage with the public street and allow residents an accessible entry directly from the public sidewalk.

3. *Open space on the site for all multiple-family development shall be integrated into the development site.*

   Staff comment: Staff is requesting that the Applicant prepare a narrative and/or exhibit to clearly state the proposed open space on the site. Staff has concerns about the allocation of open space and accessibility to these open spaces for the residents and recommends clearly visible and accessible walkways, crosswalks and surfaces that promote a comfortable outdoor experience.

4. *The design of proposed dwellings shall provide ample windows to enhance opportunities for sunlight and air in each dwelling in principle living areas and shall also provide sufficient storage areas.*

   Staff comment: Staff finds the development provides ample windows and internal storage throughout the Senior Housing building, however Staff recommends the Applicant provide additional windows along the north elevation to allow for natural light into units. Staff finds the Redeveloped Parish House includes windows for each unit, however requests the Applicant resubmit architectural floor plans and elevations to match the proposed arrangement of windows.

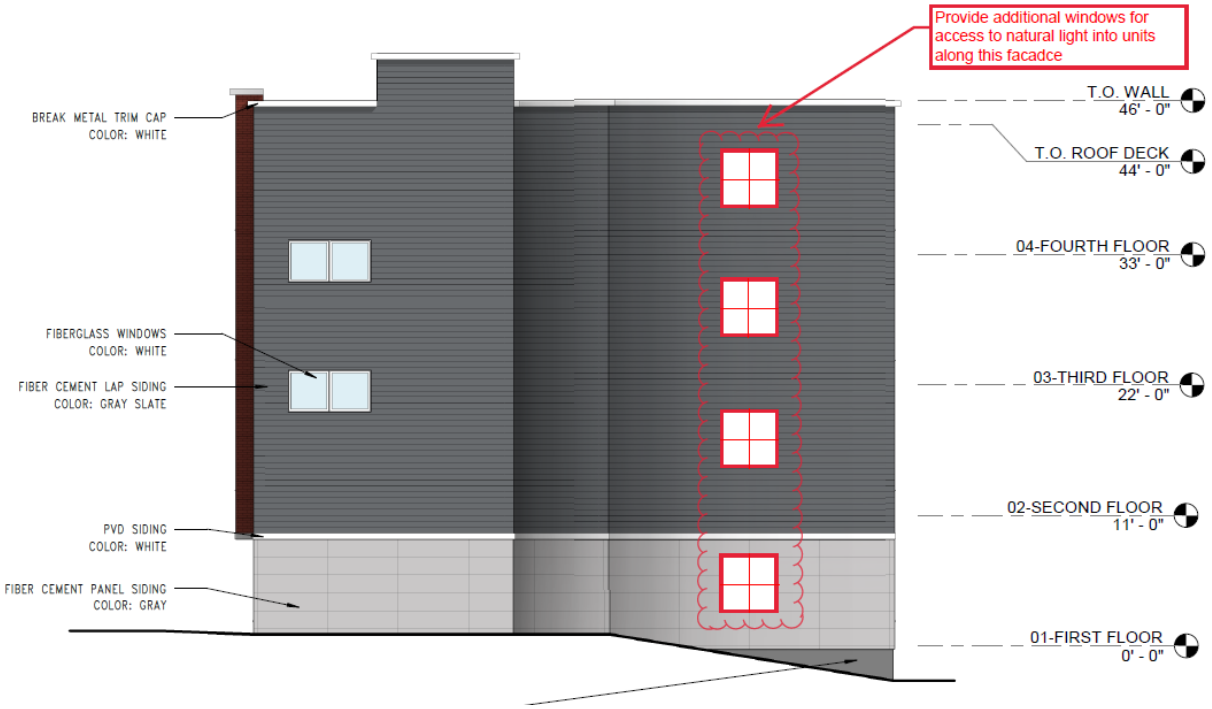


Figure 3: Staff recommendations to Applicant's North Elevation

5. *The scale and surface area of parking and driveways and paved areas are arranged and landscape to properly screen vehicles from adjacent properties and streets.*

   Staff comment: The proposed development plan includes surface parking abutting residential properties, Staff finds that the Applicant has not provided sufficient screening at abutting properties and Staff recommends the addition of a densely planted landscape buffer and/or fencing to screen vehicles parked for adjacent properties.

6. *Multiple-family dwellings shall not be converted to lodging houses unless all units in building have been vacant for at least one (1) year.*

   Staff comment: Not applicable, the proposed development plan does not convert multi-family dwellings to lodging houses.

ACORN ENGINEERING, INC.

Planning & Urban Development Department
Attn: Matthew Grooms, Development Review Manager
City of Portland, Maine
389 Congress Street, 4th Floor
Portland, ME 04101

February 7, 2024

Subject: Major Site Plan & Subdivision Application
186 Woodford Street, Portland, ME

Mr. Grooms:

On behalf of Community Housing of Maine (CHOM), we are pleased to submit a Major Site Plan & Subdivision Application for the approximate 1.92-acre parcel located at 186 Woodford Street (Map 124, Block J, Lot 5). The parcel is currently located within the Community Business B2 zoning district. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 40 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (82 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to create a new subdivision separating the existing church lot and individual lots for the respective affordable housing projects onsite. The land containing the Parish House and the new affordable housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

The project is subject to a Major Site Plan Development and Subdivision Application and approval from the Planning Board. We look forward to your review of this project, if you have any questions regarding these application materials, please do not hesitate to reach out.

Sincerely,

Peter Heil, P.E.
Project Manager
Acorn Engineering, Inc.

The following documents and drawings will be uploaded onto the City's electronic submission site per the procedure outlined in the application:

Documents:

- Section A: Cover Letter
- Section B: Major Site Plan and Subdivision Checklists
- Section C: Zoning Assessment
- Section D: Right, Title, Interest
- Section E: Easements
- Section F: Waiver Table
- Section G: Financial Capacity
- Section H Technical Capacity
- Section I: Conformity with Land Use Ordinance
- Section J: Stormwater Management Report
- Section K: Erosion & Sedimentation Control Report
- Section L: Fire Department Letter
- Section M: Wastewater Capacity Letter
- Section N: Lighting
- Section O: Architectural Design Narrative
- Section P: Utility Cover
- Section Q: Construction Management Plan
- Section R: Solid Waste
- Section S: Parking Analysis
- Section T: Transportation Demand Management Plan

Drawings:

- Civil Site Plan Set
- Architectural Plan Set

CITY OF PORTLAND
Planning & Urban Development Department

MAJOR SITE PLAN
GENERAL DOCUMENT AND DRAWINGS CHECKLIST

Please submit each document as a separate PDF file.
Please confirm by electronically checking the boxes in the left-hand column.

** PLEASE FILL OUT AND UPLOAD THE ZONING ASSESSMENT TABLE AND WAIVER TABLE SEPARATELY AS NOTED BELOW **

At the time of application submission, please contact the Department of Public Works regarding E-911 addressing for your project.

GENERAL APPLICATION DOCUMENTS	
Yes NA	**Project Description** • Cover letter with detailed project description
Yes NA	**Completed Checklist** (this document)
Yes NA	**Evidence of Right, Title, and Interest** • Deeds, leases, or purchase and sales agreements
Yes NA	**Evidence of State or Federal Approvals** • Permits or letters of non-jurisdiction, if applicable
Yes NA	**Zoning Assessment** (see Zoning Assessment Table) Summary of compliance with use and dimensional standards of the land use code
Yes NA	**Site Plan Standards Assessment** (see Section 14.6 of the land use code) • Summary of project compliance with site plan standards of the land use code
Yes NA	**Summary of Existing and/or Proposed Easements or Covenants, applicable.** • Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way
Yes NA	**Waiver Requests** (see Waiver Table) • Written request for waiver describing request and compliance with applicable waiver standards
Yes NA	**Financial Capability** • Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
Yes NA	**Technical Capability** • Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

MAJOR SITE PLAN
STANDARDS AND SUBMISSION CHECKLIST

Provide assessment of compliance with standards and include supplemental documentation, as applicable.
Please submit each document as a separate PDF file.

TRANSPORTATION	
Yes NA	**Impact on Surrounding Street Systems (14-14.6.1(A))** • Describe incremental volume of traffic impacts and mitigation measures. If needed
Yes NA	**Access and Circulation (14-14.6.1(B))** Identify and describe the following: • Site access and internal circulation, including ADA access • Drive-up features, if applicable • Loading and servicing needs, routes, and geometry, providing turning templates for delivery vehicles, if applicable • Sidewalks and condition along street frontages and internal walkways • Engineered details for ADA ramps and public sidewalks, meeting sidewalk material policy and construction requirements (Technical Manual, Section 1)
Yes NA	**Public Transit (14-14.6.1(C)), if applicable** Identify and describe the following: • Existing available transit service and proposed transit improvements, including design details, such as easement, pad base, and shelter
Yes NA	**Off-Street Parking (14-14.6.1(D)), if applicable** Identify and describe the following: • Proposed vehicular and bicycle parking supply (including ADA-compliant parking) in relation to applicable parking requirements in Article 19 of the land use code • Curb cut separation and parking layout (Technical Manual, Section 1) • Construction details for bicycle racks • Management plan for snow storage and removal
Yes NA	**Transportation Demand Management (TDM) (14-14.6.1(E)), if applicable** • Provide TDM plan drafted in accordance with Technical Manual Section 1 requirements

ENVIRONMENTAL		
Yes	NA	**Preservation of Significant Natural Features (14-14.6.2(A)), if applicable** Identify and describe the following: ● High and moderate value waterfowl and wading habitat ● Aquifers (for Casco Bay Islands) ● Waterbodies (including wetlands, watercourses, significant vernal pools and floodplains) ● Proposed preservation areas and protection measures ● Documentation from environmental compliance consultants and determinations from applicable state and federal agencies
Yes	NA	**Landscape Preservation (14-14.6.2(B))** Identify and describe the following: ● Measures to preserve trees, including within required zoning setbacks (Technical Manual, Section 4) ● Measures to protect existing vegetation during construction
Yes	NA	**Site Landscaping and Buffers (14-14.6.2(C))** Identify and describe the following: ● Overall landscaping approach and consistency with standards ● The use of screening and buffering of service areas and between non-residential and residential uses ● Existing Heritage or Feature Trees on site and measures to preserve ● Compliance with street tree requirements
Yes	NA	**Water Quality, Stormwater Management, and Erosion Control (14-14.6.2(D))** Identify and describe the following: ● Erosion and sedimentation control plan and measures ● Evidence of compliance with Urban Impaired Stream Standards pursuant to DEP Chapter 500 stormwater law, as applicable ● Subsurface sanitary sewage disposal and groundwater protection measures

PUBLIC INFRASTRUCTURE AND COMMUNITY SAFETY		
Yes	NA	**Consistency with City Master Plans (14-14.6.3(A))** • Describe proposed easements, rights and improvements to connect or continue off-premises public infrastructure, as applicable
Yes	NA	**Public Safety and Fire Prevention (14-14.6.3(B))** Identify and describe the following: • Compliance with Crime Prevention through Environmental Design (CPTED) requirements (Technical Manual, Section 3) • Emergency vehicle access • Consistency with public safety standards (Technical Manual, Section 3)
Yes	NA	**Availability and Adequacy of Public Utilities (14-14.6.3(C)) (Technical Manual, Sections 2 & 9)** Identify and describe the following: • Electrical services, including providing underground services • Existing and proposed connections for public utilities and required public utility upgrades • Sewer line connections
SITE DESIGN		
Yes	NA	**Massing, Ventilations and Wind Impact (14-14.6.4(A))** Identify and describe the following: • Wind and ventilation impacts on adjoining structures and/or adjacent public spaces, including wind study, if applicable • Bulk, location, or height impacts on adjoining structures
Yes	NA	**Shadows (14-14.6.4(B)), if applicable** • Provide shadow analysis of impacts on publicly accessible open space (Technical Manual, Section 11)
Yes	NA	**Snow and Ice Loading (14-14.6.4(C))** • Describe building design measures to prevent snow and ice from loading or falling onto adjacent properties or public ways
Yes	NA	**View Corridors (14-14.6.4(D)), if applicable** • Describe any protection of designated view corridors (Portland Design Manual, Appendix. 1)
Yes	NA	**Historic Resources (14-14.6.4(E)), if applicable** Identify and describe the following: • The site's status as a designated landmark, within a historic district or historic landscape district, or within 100 feet of any designated landmark, historic district, or historic landscape district • Compliance with standards for preservation and documentation of archaeological resources

Yes NA	**Exterior Lighting (14-14.6.4(F))** ● Describe how the proposed site lighting will adhere to photometrics requirements as it relates to light trespass and full cutoff fixture design, pursuant to Technical Manual Section 12
Yes NA	**Noise and Vibration (14-14.6.4(G))** ● Provide data on noise levels for HVAC and other mechanical equipment, such as design specifications, to demonstrate consistency with state and federal noise emissions requirements as well as City code
Yes NA	**Signage and Wayfinding (14-14.6.4(H)), if applicable** ● Provide signage plan showing the location, dimensions, height and setback of all existing and proposed signs ● Provide drawings of all commercial and directional signage on site
Yes NA	**Zone-Related Design Standards (14-14.6.4(I))** ● Address any applicable design review standards by zone, including compliance with Design Manual

MAJOR SITE PLAN
DRAWINGS CHECKLIST

Please upload the following DRAWINGS with the listed details into e-Plan as separate pdfs.

All drawings must be submitted in a 24 x 36 sheet size.

BOUNDARY SURVEY (stamped by a Maine Licensed Surveyor and drawn as per Technical Manual Sec. 13)

SITE PLAN(s) (stamped by a Maine Licensed Professional Engineer) including:

All sheets – Include a title block with project title and the following information:

- Project street address
- Name and address of property owner & applicant
- Licensed design professional, incl firm that produced plans
- North arrow
- Date of preparation and revision history block
- Tax parcel (chart, block, and lot) number

Existing Conditions Plan with the following:

- Existing structures, with distance from primary building façade(s) to the property line
- Approximate location of structures on abutting properties
- All streets and intersections adjacent to the site
- Existing driveways, pedestrian ways, and bicycle infrastructure, including dimensions and materials
- Existing public transit infrastructure
- Existing vehicle & bicycle parking areas
- Existing utilities on site and within adjacent rights-of-way
- Existing grades (two-foot contours preferred)
- Location of water courses, wetlands, and vegetation, or other significant natural features
- Existing soil conditions and location of test pits and borings
- Zoning boundary lines, including overlays
- Location of all existing easements and rights-of-way

Proposed Site Plan with the following:

- Proposed structures, including distance from primary building façade(s) to property lines
- Ground floor area, and finished floor elevations for all buildings
- Any proposed geometric modifications to streets and intersections adjacent to site
- Location, dimensions and materials of all proposed driveways, vehicle, bicycle, & pedestrian access ways with corresponding curb lines
- Engineered specifications/ cross-sections for proposed driveways, sidewalks & paved areas
- Location and dimensions of proposed loading areas, including turning templates
- Proposed transit infrastructure with dimensions/ engineering specifications
- Location of vehicle and bicycle parking with dimensions and engineering specifications
- Location of all snow storage areas
- Exterior lighting (please see Technical Manual Sec. 12 for photometrics requirements)
- Location of fire hydrants

- Location of solid waste management receptacles
- Location of all proposed HVAC and mechanical equipment, including proposed screening, where applicable
- Location of proposed easements and rights-of-way, including dimensions
- Please utilize color-coding and/or hatches and shading to delineate changes between the pre and post development condition as needed

UTILITY PLAN including:

- Proposed electrical infrastructure
- Location, sizing and directional flows of all proposed sewer and stormwater infrastructure
- Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site
- Electric utility infrastructure

GRADING AND DRAINAGE PLAN including:

- Proposed grades
- Proposed stormwater management measures meeting Technical Manual (Section 5) standards
- Any proposed alteration of a watercourse or wetlands
- Any groundwater protection measures
- Proposed buffers and preservation measures for wetlands or significant natural features

LANDSCAPE PLAN including:

- Existing vegetation to be preserved and preservation measures
- Proposed landscaping, screening, and street trees, including caliper widths for trees
- Planting schedule, including street trees

ARCHITECTURAL PLANS AND RENDERINGS including:

- Exterior building elevations, color renderings, illustrations of all sides
- Axonometric and street-level views for structures greater than three stories in height
- Provide context drawings, if applicable (Design Manual, page 1)
- Floor plans

CONSTRUCTION MANAGEMENT PLAN including:

- Specifics on traffic control, sidewalk sheds, and pedestrian rerouting
- Include a drawing and written narrative

OTHER

- Details and cross-sections, as necessary

CITY OF PORTLAND
Planning & Urban Development Department

SUBDIVISION
GENERAL DOCUMENT AND DRAWINGS CHECKLIST
Please submit each document as a separate PDF file.
Please confirm by electronically checking the boxes in the left-hand column.

**** PLEASE FILL OUT AND UPLOAD THE ZONING ASSESSMENT TABLE AND WAIVER TABLE SEPARATELY AS NOTED BELOW ****

At the time of application submission, please contact the Department of Public Works regarding E-911 addressing of your project.

GENERAL APPLICATION DOCUMENTS	
Yes NA	**Project Description** • Cover letter with detailed project description
Yes NA	**Completed Checklist** (this document)
Yes NA	**Evidence of Right, Title, and Interest** • Deeds, leases, or purchase and sales agreements
Yes NA	**Evidence of State or Federal Approvals** • Permits or letters of non-jurisdiction, if applicable
Yes NA	**Zoning Assessment** (see Zoning Assessment Table) Summary of compliance with use and dimensional standards of the land use code
Yes NA	**Subdivision Standards Assessment** (see Article 15.4 of the land use code) • Summary of compliance with subdivision review standards of the land use code
Yes NA	**Existing and/or Proposed Easements or Covenants, applicable.** • Evidence of existing easements and any proposed easements
Yes NA	**Waiver Requests** (see Waiver Table) • Written request for waiver describing request and compliance with applicable waiver standards
Yes NA	**Financial Capability** • Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
Yes NA	**Technical Capability** • Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

SUBDIVISION
SUPPLEMENTAL SUBMISSIONS CHECKLIST

Provide assessment of compliance with standards and include supplemental documentation, as applicable.
Please submit each document as a separate PDF file.

Yes NA	• When private sewage systems are used, the results and supporting data of a soil test of each lot in the subdivision conducted by a soil evaluator licensed in the state.
Yes NA	• When the adequacy of the subdivision's load bearing capacity is in question, a geotechnical report with supporting data that includes the result of test borings shall be prepared by a professional engineer registered in the state and submitted.
Yes NA	• Price range of houses that will be built in the subdivision.
Yes NA	• Traffic impact analysis.
Yes NA	• High intensity soil survey, if required by the Planning Authority.
Yes NA	• Types and estimated quantities of solid waste to be generated by the development.
Yes NA	• A narrative describing all proposed buffer strips, their dimensions, and maintenance plans and responsibilities.
Yes NA	• A description of any wetlands, wildlife and fisheries habitats, archaeological sites or unusual natural areas located on or near the project site and a description of the methods that will be used to protect such area.
Yes NA	• Construction plan outlining the anticipated sequence of construction of the major features of the project including without limitation roads, retention basins, sewer lines, seeding and other erosion and sedimentation control measures, and pollution abatement measures and also setting forth the approximate dates for commencement and completion of the project.
Yes NA	• When conditions warrant, a program to control dust, erosion and sedimentation and/or vehicular traffic during construction.
~~Yes NA~~	• At the option of the subdivider, any other information that may be necessary for the full and proper consideration of the subdivision shall be submitted in writing.

SUBDIVISION
DRAWINGS CHECKLIST

Please submit each document as a separate PDF file.
All drawings must be submitted in a 24 x 36 sheet size.

SUBDIVISION PLAT (at a scale not more than 1"=60', unless lots are more than one acre in size)

1. Date, north point, title and graphic scale.

2. Names, addresses and stamp or certification, if applicable, of registered professional engineer, subdivider, and owner

3. Vicinity sketch (may be shown on separate plan);

4. Names of adjacent property owners with parcels over 25,000 square feet or names of adjacent subdivision;

5. Location and designation of any zoning district boundaries affecting the subdivision;

6. Total site data, including total area of the subdivision, total area in streets, total area in recreation or open space and number of house lots;

7. Based on a recent survey by the subdivider, existing contours at two foot intervals or as otherwise required by the Public Works Authority. Existing structures which are to remain will shall be delineated;

8. Tract boundary lines and property lines of lots, with accurate dimensions and either bearings or deflection angles. All lots shall be numbered;

9. Names of proposed streets, width of rights of way, typical cross section reservation, and depth of construction materials;

10. Locations, widths and purposes of other rights of way or easements to be recorded;

11. All appropriate street geometry information, including point of curvature, point of tangency, tangent distance, radii and interior angle, in standard engineering format;

12. Location of those utilities existing on or adjacent to the tract to be subdivided, including size and elevation of buried or underground utilities (may be shown on separate plan);

13. Designation of flood hazard areas, as defined by the National Flood Insurance Program and shown on the city flood hazard boundary map, as well as any other areas in the subdivision subject to inundation by stormwater or storm sewer overflow;

14. All potential wetlands within the proposed subdivision, regardless of the size of those wetlands;

15. Any river, stream or brook within or abutting the proposed subdivision. For purposes of

this section, "river, stream or brook" has the same meaning as in 38 M.R.S. § 480 B, Subsection 9.

16. Existing historic sites and structures which either appear on the National Register or are nominated to the National Register by the state historic preservation officer;

17. Proposed private and public utility system including water, gas, telephone, fire hydrants, and any other services which shall supply the area (may be shown on separate plan);

18. Sanitary sewer and storm drain plans and profiles showing size, kind and slope of pipe, proposed manhole rim and invert elevations and catch basin locations and drains (may be shown on separate plan);

19. Lighting plan showing the location, design, height and spacing from each other of the support poles, in accordance with standards and specifications established by the Public Works Authority (may be shown on separate plan);

20. Tree plan showing groups of existing, sizeable trees which the subdivider intends to preserve (may be shown on separate plan);

21. A detailed plan of the entire subdivision and the immediate vicinity showing all existing and proposed drainage both on- and off-site including drainage swales, ditches, etc., with directional flow arrows and approximate slope grades, and showing proposed finished "spot elevations" around the perimeter of the subdivision. Proposed drainage shall be shown as it may affect or restrict development on individual lots and with reference to improvements for which a performance guarantee is required under this article. Where deemed feasible by the Public Works Authority, proposed finished contours at intervals of two feet shall be provided on the drainage plan upon request (may be shown on separate plan);

22. All future phases and sections of the subdivision proposed by the subdivider (may be shown on separate plan);

23. Proposed parks and school sites, or other public open space that the developer proposes to convey to the city;

24. Streets and right of way monuments and property line markers;

25. Profiles of each street or way in the subdivision shall be shown on the subdivision plat. They shall be drawn to a longitudinal scale of 40 feet to one foot and a vertical scale of four feet to one inch. Such profiles shall include separate profiles of each side line and center line of the street or way. Any buildings abutting on the street shall be shown in standard engineering format as requested by the Public Works Authority.

26. Where submission drawings are available in electronic form, the applicant shall submit any available electronic CAD files with final plans.

Portland, Maine Yes. Life's good here.

Planning & Urban Development Department

ZONING ANALYSIS Relevant Zone(s) B2 - Community Business

All Projects: This project includes multiple lots, therefore we request you review sheet C-10 (Site Plan) to observe the conformance with the space and bulk standards.

	Required	Proposed
Lot Size	None	See C-10
Area Per Dwelling Unit	435 SF	See C-10
Minimum Street Frontage	20'	See C-10
Front Yard Minimum	10'	See C-10
Front Yard Maximum	10'	See C-10
Rear Yard	10'	See C-10
Yard Right	None	See C-10
Yard Left	None	See C-10
Side Street Setback	N/A	See C-10
Step Back	N/A	See C-10
Maximum Lot Coverage	N/A	See C-10
Minimum Lot Coverage	N/A	See C-10
Maximum Height	45'	See C-10
Open Space	N/A	See C-10
Maximum Impervious Area	80%	See C-10
Pavement Setback	N/A	N/A
Floor Area Ratio	N/A	N/A
Off Street Parking Spaces	None	See C-10
Loading Bays	N/A	N/A
Other 1		
Other 2		
Other 3		

Planned Residential Unit Developments (PRUD) Requirements

	Required	Proposed
Minimum Lot Size		
Minimum Lot Area per Dwelling		
Maximum # Units per Building		
Maximum Building Length		
Maximum Accessory Building Length		
Minimum Setbacks		
Minimum Building Separation		
Minimum Open Space		

Affordable Housing Density Bonuses (if applicable)

	Bonus Increase or Decrease	Maximum Allowable With Bonus	Proposed
Density	Increase	See Sheet C-10	See Sheet C-10
Height	Increase	See Sheet C-10	See Sheet C-10
Setback Reduction	Decrease	See Sheet C-10	See Sheet C-10
Recreation Space			
Maximum Accessory Building Length			
Minimum Setbacks			
Minimum Building Separation			
Minimum Open Space			
Explanatory Text 1 (optional): Project proposed 82 affordable housing units			
Explanatory Text 2 (optional): (100% affordable)			
Explanatory Text 3 (optional):			

OPTION AGREEMENT

THIS OPTION AGREEMENT (the "Agreement") made and entered into as of the 5th day of April, 2023 (the "Effective Date"), by and between WOODFORDS CONGREGATIONAL CHURCH OF THE UNITED CHURCH OF CHRIST, a Maine nonprofit corporation with a place of business and mailing address of 202 Woodford Street, Portland, Maine 04103 ("Grantor") and COMMUNITY HOUSING OF MAINE, INC., a Maine nonprofit corporation with a place of business and mailing address of One City Center, 4th Floor, Portland, Maine 04101 ("Grantee").

WITNESSETH:

WHEREAS, Grantor wishes to grant the option set forth below to Grantee on the terms and conditions set forth in this Agreement; and

NOW THEREFORE, in consideration of $5,000 paid by Grantee to Grantor (the "Initial Option Consideration") and the covenants and agreements set forth herein, the receipt and sufficiency of which are hereby acknowledged, Grantor and Grantee hereby agree as follows:

1. Grant of Option. Grantor hereby grants to Grantee, its successors and assigns, the exclusive and irrevocable option to purchase certain land and a portion of that certain existing building commonly known as the Parish House, all located on Woodfords Street, Portland, Maine, an amount of land sufficient to accommodate the construction of a new four (4) story building, which, together with the portion of the Parish House, will accommodate up to 85 residential units, with required frontage on public ways, all as determined pursuant to the City of Portland zoning ordinance, together with the fixtures and improvements thereon, all as more particularly shown on the drawing attached hereto as Exhibit A, being a portion of the real property and improvements conveyed to Grantor by deed of Woodfords Congregational Parish dated May 17, 2013 and recorded in the Cumberland County Registry of Deeds in Book 30671, Page 65 (the "Property"). The Property shall be conveyed to Grantee together with (i) a perpetual and non-exclusive appurtenant easement for ingress and egress by foot and vehicles and for the installation, maintenance, repair and replacement of utilities from Beacon Street to the Property over other land of the Grantor in a location mutually agreeable to Grantor and Grantee (the "Access Easement"), and (i) a perpetual appurtenant easement for the exclusive use of the parking area as shown on Exhibit A (the "Parking Lot Easement"). The Property shall also be conveyed subject to a reciprocal easement agreement concerning Grantor's and Grantee's use, maintenance and enjoyment of the Access Easement and the Parking Lot Easement, and the sharing of expenses associated therewith (the "Reciprocal Easement Agreement"). The scope of use and provisions of the Reciprocal Easement Agreement shall be mutually agreed to by the parties prior to the Closing Date (defined below) and is subject to approval by Grantee's lenders and investors. The parties further agree to negotiate and enter into an amendment to this Agreement within sixty (60) days of receipt of a boundary survey prepared by a professional land surveyor of Grantee's choosing, which amendment shall specify the precise boundaries of the Property and replace and supersede Exhibit A attached hereto. The boundary survey shall be subject to Grantor's approval, which

approval shall not be unreasonably delayed, conditioned, or withheld provided that the boundary survey is materially consistent with Exhibit A attached here. The amendment shall not have a material adverse effect upon Grantee's proposed development or the approvals necessary for such development or the conveyance contemplated herein. As the conveyance of the Property to Grantee will result in the creation of a subdivision under Maine law, Grantee shall pursue all necessary permits and approvals for the creation of such subdivision, at Grantee's sole cost and expense.

2. Expiration. This option shall expire twenty four (24) months from the date of execution of this Agreement, at midnight, Maine time (the "Option Period") unless earlier terminated or extended as set forth herein, or exercised by that date and time. Grantee may extend the Option Period for up to two (2) additional periods of six (6) months each by providing written notice to Grantor of its election to extend prior to the expiration of the then-current Option Period, together with an additional payment of $2,500 for each such extension, to be credited against the Purchase Price (the "Additional Option Consideration;" together with the Initial Option Consideration, the "Option Consideration").

3. Notice of Exercise; Failure to Exercise. This option may be exercised only by Grantee giving written notice of election to exercise ("Grantee's Notice of Election") to Grantor by nationally recognized overnight delivery service (such as Federal Express or UPS), addressed to Grantor at the address set forth at the beginning of this Agreement, or to such other address as Grantor may designate to Grantee in writing. Said notice shall be deemed to have been duly given if postmarked prior to the expiration date and time specified in Section 2 above. In the event that Grantee fails to exercise the option granted in this Agreement within the Option Period, as it may be extended, the Option Consideration shall be retained by Grantor, and thereafter neither Grantor nor Grantee shall have any further rights or claims against the other; provided, however, and notwithstanding anything to the contrary elsewhere in this Agreement, the Option Consideration is fully refundable to the Grantee until satisfactory completion of the environmental review process required by the United States Department of Housing and Urban Development, at which time the Option Consideration shall become non-refundable, unless Grantor defaults in its obligations hereunder beyond the expiration of all applicable notice, grace, and cure periods or is unable to transfer the Property to Grantee with good and marketable title free and clear of liens and encumbrances, except for the Permitted Exceptions (defined below) .

4. Exercise. In the event that Grantee timely and duly exercises the option granted in this Agreement, the following provisions shall be applicable:

(a) Purchase Price. At the Closing Date as defined below, Grantee shall pay to Grantor the sum of Four Hundred Fifty Thousand Dollars ($450,000), by wire transfer or bank cashier's check at closing (the "Purchase Price"). The Option Consideration shall be credited against the Purchase Price at closing.

(b) Title. Grantee shall examine title to the Property during the Option Period. Grantor shall cooperate with Grantee in good faith to cure any title conditions during the Option Period that are unsatisfactory to Grantee. Any title conditions not objected to by Grantee during the Option Period shall be deemed "Permitted Exceptions." On the Closing Date, title to the Property shall be good and marketable and free and clear of all liens, claims and encumbrances except for the

Permitted Exceptions, zoning restrictions, taxes for the current year which may be due and payable as of the Closing Date, and other easements, restrictions, and covenants that appeared of record during the Option Period and were not objected to by Grantor during the Option Period. In the event that title to the Property is not in accordance with the preceding sentence as of the Closing Date, Grantor shall be given a reasonable period of time, not to exceed thirty (30) days, after receipt of notice from Grantee in which to remedy any title defects. In the event that said defects cannot be corrected or remedied within said time period, or in the event that Grantor elects not to remedy same, then this Agreement shall terminate whereupon Grantor shall fully refund to Grantee the Option Consideration. Grantee may elect to close notwithstanding such defects as may exist at no cost or liability to Grantor.

(c) Closing. The closing under this Agreement shall take place not later than ninety (90) days after the date of Grantee's Notice of Election (the "Closing Date") at 10:00 AM, local time, at Grantee's counsel's office, or at such other time and place as Grantor and Grantee shall mutually agree upon in writing. At the closing, Grantor shall execute and deliver a Quitclaim Deed with Covenant as to the Property, a quitclaim bill of sale as to any Personal Property, the Reciprocal Easement Agreement, an assignment of leases, rents and security deposits (if any), an underground storage tank certification, such title insurance affidavits as may be required in order to omit from Grantee's title insurance policy all exceptions for parties in possession and mechanics' liens, REW and FIRTPA forms and such other affidavits, instruments and documents as Grantee may reasonable request and which are customary in commercial real estate transactions in Maine. The deed shall include the Access Easement and the Parking Easement in form and substance reasonably acceptable to Grantor and Grantee. If it shall be reasonable or necessary for the parties to create and declare a condominium on all or any portion of the Property and/or the larger property of which the Property is a part, the parties shall cooperate in good faith to execute and deliver such documents at closing as shall be reasonable and necessary to effectuate the foregoing.

(d) Adjustments, Prorations and Closing Costs. The recording fee for the deed and any expenses related to Grantee's financing will be paid for by Grantee. The parties shall pay their respective shares of the Maine real estate transfer tax in accordance with 36 M.R.S.A. § 4641-A. Real estate taxes shall be prorated as of the closing date on the basis of the latest available tax bill. Grantor is responsible for paying all past due property taxes, if any.

(e) Possession. Grantor shall deliver possession of the Property to Grantee at the closing, free and clear of all leases, tenancies or occupancies by any person.

(f) Risk of Loss. All risk of loss to the Property prior to the closing shall be on Grantor.

(g) Default; Remedies. In the event either party defaults under this Agreement, and such default is not cured within thirty (30) days of written notice thereof, the sole remedy of either party shall be to terminate this Agreement. In addition, if Grantor is the defaulting party, the Option Consideration shall immediately be returned to Grantee, and if the Grantee is the defaulting party, Grantor shall be entitled to retain the Option Consideration as liquidated damages and not as a penalty.

(h) Condition Precedent. Grantee's obligation to purchase the Property is subject to Grantee's full and complete satisfaction with all of the following:

i. There shall have been no material adverse change in or to the Property between the Effective Date and the Closing Date.

ii. Title to the Property shall be good and marketable, and the same shall be conveyed to the Grantee free and clear of all liens, claims and encumbrances except as provided in Section 4(b) above.

If the conditions described in subsections (i)-(ii) of this Section 5(h) are not satisfied as of the Closing Date, Grantee shall have the option of terminating this Agreement, whereupon the Option Consideration shall promptly be refunded to Grantee by the Grantor, and neither party shall any further obligation hereunder.

5. Inspection. Upon reasonable prior notice, Grantee and any prospective lender or investor of Grantee's shall have the right to enter the Property and perform, at Grantee's expense, any and all inspections, tests, surveys or other due diligence inquiries with respect to the Property as Grantee deems necessary or appropriate for a period of 120 days from the date of this Agreement (the "Due Diligence Period"). Grantee agrees to return the Property as nearly as possible to its original condition after any of such tests and inspections. Grantee shall indemnify Grantor for any property damage, bodily injury or death occurring by reason of such entry and/or testing. Grantor shall cooperate with Grantee in such inspections. All inspections shall occur at reasonable times agreed upon by Grantor and Grantee, and Grantee shall use good faith efforts not to interfere unreasonably with the use and enjoyment of the Property or the larger property of which the Property is a part by Grantor. In the event Grantee is not satisfied for any reason by the results of such due diligence inspections, Grantee shall have the option of terminating this Agreement by written notice to Grantor, and the Option Consideration shall promptly be refunded to Grantee. Without limiting the generality of the foregoing, this Agreement and Grantee's purchase of the Property are subject to a determination by Maine State Housing Authority ("MaineHousing") as to the desirability of the Property for Grantee's intended use as a result of the completion of the environmental review process required by the United States Department of Housing and Urban Development, and if such determination is unsatisfactory, at any time during the Option Period, Grantee may terminate this Agreement, whereupon the Option Consideration shall promptly be refunded to Grantee.

6. Assignment. Grantee may assign this Agreement and all its rights and obligations hereunder to an affiliate of Grantee without the prior written consent of Grantor; provided, however, that Grantee shall provide notice of such assignment within a reasonable period of time following such assignment. Upon notice of such assignment, Grantor agrees to look solely to such affiliate for performance of the obligations of the Grantee hereunder.

7. Brokerage. The parties represent to one another that neither has dealt with or had contact with any broker in connection with the transaction described in this Agreement. The parties shall indemnify, defend and hold harmless one another from and against any breach of the foregoing representation.

8. Recording of Option. Grantor and Grantee agree that this Option shall not be recorded. Grantor agrees upon request of Grantee to execute and tender for recording a memorandum summarizing the terms of this Agreement (except the Purchase Price).

9. Notices. Except as provided in Section 3 above, all notices, demands and other communications hereunder shall be in writing and shall be deemed to have been duly given on the date of service if served personally on the party to whom notice is to be given, or on the first business day after mailing if mailed to the party to whom notice is to be given by first class mail, postage prepaid, registered or certified, return receipt requested, or by nationally recognized overnight delivery service (such as Federal Express or UPS), addressed to the recipient at the addresses set forth at the beginning of this Agreement. Either party may change its address for purposes of this Section by giving the other party notice of the new address in the manner described herein.

10. Condition of Property as of the Closing Date. The parties agree that no work shall be done on the Property between the Effective Date and the date Grantee receives written notice of environmental clearance from MaineHousing. In the event Grantor takes any action on or near the Property before the Closing Date that is determined to be a "choice limiting action" and thus causes Grantee to lose either any MaineHousing funding or any project based vouchers awarded to it, Grantee shall have the option of terminating this Agreement in writing and receiving a full refund of the Option Consideration.

11. Miscellaneous. Time is of the essence hereof. This Agreement constitutes the entire agreement between Grantor and Grantee, there are no agreements or understandings between the parties except as set forth herein, and all prior agreements and understandings, including, are superseded by this Agreement. This Agreement will inure to the benefit of and bind the respective successors and assigns of Grantor and Grantee. As used in this Agreement, the singular number shall include the plural, the plural the singular, and the use of one gender shall be deemed applicable to all genders. This Agreement shall be governed by and construed in accordance with the laws of Maine. The recitals contained in this Agreement are deemed by the parties to be accurate statements of fact. If any provision of this Agreement is determined to be invalid or unenforceable, it shall not affect the validity or enforcement of the remaining provisions hereof.

[remainder of page left blank intentionally; signatures begin on next page]

IN WITNESS WHEREOF, Grantor and Grantee have executed this Option Agreement as of the day and year first written above.

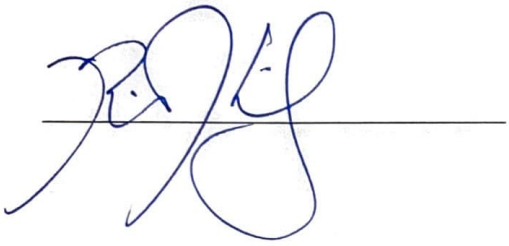
WITNESS:



WOODFORDS CONGREGATIONAL CHURCH OF THE UNITED CHURCH OF CHRIST, Grantor

By: _____
Name: JOHN E F ENGLAND
Title: MODERATOR

WITNESS:



COMMUNITY HOUSING OF MAINE, INC., Grantee

By: _____
Cullen Ryan, its Executive Director

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E. Summary of Written Easements

Exiting Easements:

There are no existing easements shown on the plan titled ALTA / NSPS Land Title Survey dated March 10, 2022, and last revised on October 12, 2023, prepared by Owen Haskell, Inc.

Proposed Easements:

There is a proposed access, utility, and maintenance easement located within the shared drive aisle onsite benefitting all (3) proposed lots. Please review the Subdivision Plat for additional information.

Standard to be Waived: Cite Ordinance or Technical Manual Standard	**Cite Standard Language:** Cite specific language of applicable Ordinance or Technical Manual Standard	**Waiver Being Sought:** Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	**Justification for Waiver:** Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Vehicle Parking Dimensions Figure I-16A	90 degree parking shall have a drive aisle width of 24'.	We are requesting a one-way parking lot drive aisle width of 23'.	Due to the site constraints and low turnover of residential uses, we believe the 23' wide drive aisle will be functional.

G. Financial Capacity

A letter from the Applicant confirming financial capacity is attached to this section.

Financing Capacity – Woodford

Community Housing of Maine (CHOM) serf-certifies that the organization has the financial capacity and experience to complete the Woodford development. CHOM has over 20 years of experience in real estate development, sustainable design, community planning, finance, and construction. CHOM has a demonstrated capacity to secure and assemble project financing from a broad range of local, state, and federal sources.

CHOM anticipates securing the remaining funds by the end of 2024, in accordance with MaineHousing's Low Income Housing Tax Credit Schedule (LIHTC). Assembly of financing is in the early stages and will be completed within the development timeline based upon CHOM's existing relationships and strong track record.

Pre-Development:

CHOM will self-finance the pre-development expenses with unrestricted funds and will then be reimbursed at the construction loan closing.

Construction Financing:

The project team has relationships with several banks and will be selecting a bank partner or MaineHousing for construction financing. Typical terms are expected for this loan, which will extend the duration of the construction period with interest payments at a market-based interest rate typical of such loans.

Low Income Housing Tax Credits Equity:

CHOM will apply this summer for a 9% allocation of LIHTC from MaineHousing. The tax credits will generate equity to fund the development. The MaineHousing LIHTC award will also include subsidy (payment deferred for 30 years at 0% interest) and a commitment to provide permanent debt. The project scores well for this application.

H. Technical Capacity

Community Housing of Maine (CHOM) Development Corporation was formed in 2003 and is the managing General Partner in eleven (11) limited partnerships. Each partnership was formed for the purpose of owning affordable rental housing created, in part, by an allocation of Low-Income Housing Tax Credits. Please refer to the attached CHOM Development Corporation Resume for additional information.

Acorn Engineering specializes in providing urban redevelopment, civil/site design, environmental services, municipal consulting and construction administration. Acorn Engineering, Inc. have successfully designed and permitted more than 20 level II/III (Major/Minor) projects in Portland during the past several years, including: Munjoy Heights, East Bayside Lofts, The Hiawatha, The Nightingale (Mercy Redevelopment), Winter Landing (CHOM Affordable Senior Housing), and The Equinox (CHOM Affordable Family Housing).

CWS Architects was founded in 1992 and has an extensive portfolio of multifamily housing, historic preservation, commercial and industrial buildings mostly concentrated in Southern and Central Maine. With numerous awards and over 75 residential developments with over 3,200 units completed, CWS is one of Northern New England's most respected residential apartment design firms. Notable local developments include the Passive House certified Village Centre Apartments in Brewer, 409 Cumberland, Oak Street Lofts (LEED Silver) and Elm Terrace (LEED Platinum) and the recently completed 57-unit Solterra (58 Boyd St Apts), all located in Portland.

CHOM Development Corporation Resume

CHOM Development Corporation was formed in 2003 and is the managing General Partner in eleven (11) limited partnerships. Each partnership was formed for the purpose of owning affordable rental housing created, in part, by an allocation of Low Income Housing Tax Credits.

Stevens Green



2004 / Stevens Green Associates, L.P.
4% bond financing and tax credits / 26 family units, 24,871 Sq. Ft., 5 Lovejoy Street, Rockland, Maine
New construction, $4.1 million total development cost
Delivered on time and slightly under budget / Benchmark as General Contractor by Select Bid
Initial occupancy December 2005
Architect: Ben Walter, CWS Architects
Construction Lender: Camden National Bank
Syndicator: Michael Associates, Ltd.
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation

Townhouses at Davis Island









2006 / Davis Island Housing Partners, L.P.
9% tax credits / 26 family units, 27,376 Sq. Ft., 45 US Route 1, Edgecomb, Maine
New construction, $5.5 million total development cost
Delivered early and on budget / Portland Builders as General Contractor by Select Bid
Initial occupancy October 2007
Architect: Ben Walter, CWS Architects
Construction Lender: Camden National Bank
Syndicator: Boston Capital Corporation
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation
Meets MaineHousing's green design requirements

Clearwater Bend









2007 / Reed Street Neighborhood Housing, L.P.
9% tax credits / 23 family units, 26,190 Sq. Ft., 27 Reed Street, Westbrook, Maine
New construction, $5.5 million total development cost
Delivered early and under budget / Benchmark as Construction Manager-at-Risk
Initial occupancy July 2008
Architect: Ben Walter, CWS Architects
Construction Lender: Camden National Bank
Syndicator: Boston Capital Corporation
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation
Meets MaineHousing's green design requirements

Maine Hall















2009 / Seminary Housing Partners, L.P.
9% tax credits / state and federal historic tax credits / 28 senior units, 25,350 Sq. Ft., 288 Union Street, Bangor, Maine
Acquisition and rehabilitation of historic brick building with new construction addition
$6 million total development cost
Delivered on time and on budget / Nickerson O'Day as Construction Manager-at-Risk
Initial occupancy August 2011
Architect: Ben Walter, CWS Architects
Construction Lender: People's United Bank
Syndicator: Boston Capital Corporation
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation
Certified by the U.S. Green Building Council (USGBC) and achieved Leadership in Energy and Environmental Design (LEED) Silver Certification

Elm Terrace



2010 / Children's Hospital Housing Partners, L.P.
9% tax credits / state and federal historic tax credits / 38 family units, 42,864 Sq. Ft., 68 High Street, Portland, Maine
Acquisition and rehabilitation of historic brick building with new construction addition
$10.5 million total development cost
Delivered on time and on budget / Wright-Ryan as Construction Manager-at-Risk
Initial occupancy February 2013
Architect: Ben Walter, CWS Architects
Construction Lender: TD Bank
Syndicator: Boston Capital Corporation
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation
Certified by the U.S. Green Building Council (USGBC) and achieved Leadership in Energy and Environmental Design (LEED) Platinum Certification

Danforth on High

















2011 / Danforth on High, L.P.
4% bond deal / 30 senior units, 23,450 Sq. Ft., 81 Danforth Street, Portland, Maine
New construction, $5.6 million total development cost
Delivered on time and under budget / Hebert Construction as General Contractor by Select Bid
Initial occupancy July 2013
Architect: David Lloyd, Archetype
Construction Lender: Gorham Savings Bank
Syndicator: Boston Capital Corporation
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation
Meets MaineHousing's green design requirements

Campbell Creek Village (formerly Harbor Pines and West Harbor Pines)






2012 / Campbell Creek Housing Partners, L.P.
4% bond financing and tax credits / USDA Rural Development Multifamily Revitalization Program
16 family units and 20 senior units, 31,165 Sq. Ft., Andrea Lane, Boothbay Harbor, Maine
Acquisition and occupied rehabilitation; $ 4.8 million total development cost
Delivered early and on budget / Great Falls Construction as General Contractor by Open Bid
Initial Occupancy September 2012 (occupied renovation)
Architect: Ben Walter, CWS Architects
Construction Lender: Maine State Housing Authority
Syndicator: Northern New England Housing Investment Fund
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation
Meets MaineHousing's green design requirements

Village Centre Family Apartments









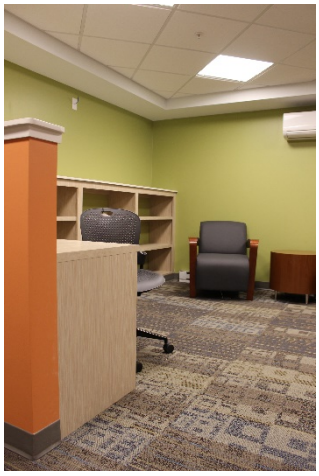












2015 / Village Centre Housing Partners, L.P.
9% tax credits / 48 family units, 54,886 Sq. Ft., 266 Center Street, Brewer, Maine
New construction, $9.5 million total development budget
Delivered on time and on budget / Wright-Ryan as Construction Manager-at-Risk
Initial occupancy April 2016
Architect: Ben Walter, CWS Architects
Construction Lender: TD Bank
Syndicator: Northern New England Housing Investment Fund
Architect: Ben Walter, CWS Architects
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation
Certified by the Passive House Institute US (PHIUS) achieving PHIUS+ 2015 Passive House certification.

Parish House







2016 / Parish House Associates, L.P.
State and federal historic tax credits / 6 units, 6,561 Sq. Ft., 27 Kennebec St., Bar Harbor, Maine
Acquisition and rehabilitation of historic brick building
$2.03 million development cost
Delivered on time and on budget / E. L. Shea as Construction Manager-at-Risk
Initial occupancy August 2017
Architect: George Lavigne, CWS Architects
Construction Lender: Camden National Bank
Investment Limited Partner: Camden National Bank
Property Manager: Community Housing of Maine
Project Manager: Erin Cooperrider for CHOM Development Corporation

Northfield Green



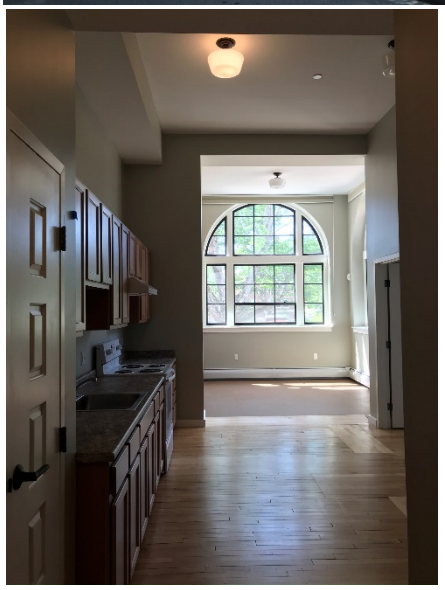




2017 / NFG Housing Partners, L.P.
4% tax credits / 201 units, 198,898 Sq. Ft., 145 Allen Ave., Portland, Maine
Occupied rehabilitation; $30 million development cost
Anticipated on time and on budget / Zachau Construction as Construction Manager-at-Risk
Initial occupancy December 2017 (occupied rehabilitation)
Architect: Ben Walter, CWS Architects
Construction Lender: TD Bank
Syndicator: Boston Capital Corporation
Property Manager: Preservation Management, Inc.
Project Manager: Erin Cooperrider for CHOM Development Corporation

Central Commons







2018 / Central Commons Housing Partners, L.P.
4% tax credits / state and federal historic tax credits / 29 senior units, 25,000 Sq. Ft., 6 Beech St., Hallowell, Maine
Acquisition and rehabilitation of historic brick building
$7.9 million development cost
On time and on budget / Wright-Ryan as Construction Manager-at-Risk
Initial occupancy in June 2020
Architect: Ryan Senatore Architects
Construction Lender: Bangor Savings Bank and Maine State Housing Authority
Syndicator: Evernorth (formerly Northern New England Housing Investment Fund (NNEHIF))
Property Manager: Preservation Management, Inc.
Project Manager: Bree LaCasse for CHOM Development Corporation

I. Conformity with Land Use Ordinance

The following outline is made in accordance with the City of Portland Code of Ordinances, Chapter 14 Land Use, Article V Section 14.6.1 through 14.6.4.

OVERVIEW

This project conforms with the majority of the applicable standards of Portland's Land Use Ordinance Section 14.6.1 through 14.6.4 as demonstrated in the following narrative.

14.6.1 Transportation Standards

A. Impact on Surrounding Street Systems:

a. The project will not generate 100 or more cars during peak hour; therefore a Traffic Movement Permit will not be required. The site is located on Woodford Street and can be accessed via Beacon Street and Woodford Street. The project will not create any significant hazard to safety on the surrounding street network.

b. This project is not expected to increase traffic flow. Congestion at the Woodford Street/Forest Avenue intersection is not anticipated.

B. Access and Circulation:

1) In general

a. The development will provide safe access and internal circulation for both pedestrians, vehicles and emergency vehicles as seen on the Site Plan and in accordance with the Technical Manual.

b. Continuous internal walkways will be provided and will connect to the proposed sidewalk along Woodford Street.

c. The proposed driveway is proposed to remain in the current location on Woodford Street and Beacon Street. There are no anticipated conflicts with vehicular turning movements.

d. The site does not feature drive-up services as mentioned in this section.

2) Loading and Servicing:

The Site has an existing drop off location south of the Parish House that is anticipated to remain functional as part of the proposed project.

3) Curbs and Sidewalks:

   a. The developments frontage on Woodford Street and Beacon Street contains curb and sidewalk. A brick sidewalk exists along Woodford Street and a section will be rebuilt with concrete part of the project as identified in the City's Sidewalk Material Policy.

   b. There is an existing sidewalk along Woodford Street and Beacon Street. Any curbing or sidewalk disturbed during construction is to be repaired and rebuilt as necessary in conformance with City standards.

   c. Not applicable

   d. Not applicable

C. Public Transit Access:

1) The Project is located 0.15 miles (765 ft) from the Forest Avenue bus stop.

2) Not applicable.

3) Not applicable.

D. Parking:

1) Vehicular Parking

   a. Per table 19-B: Categorial exceptions to off-street parking minimums, no off-street parking shall be required within ¼ mile of fixed route transit service. Please also refer to the provided Transportation Demand Management Plan for additional information, in conformance with the exception for transit proximate development.

   b. A Transportation Demand Management Plan is provided in Section T. No Parking Study is required as part of this project.

   c. Not applicable.

   d. The parking space and aisle dimensions are in conformance with the Technical Standards. Please refer to the Site Plan for more information.

2) Location and Required Number of Bicycle Parking Spaces:

   a. A minimum of 32 exterior bicycle parking spaces will be provided on site to serve the project. Please refer to the Site Plan for locations and details.

   b. Not applicable

3) Snow Storage:

   a. The Owner will be responsible for managing snow at their discretion and/or coordinating snow removal from the site when necessary.

   b. Snow storage areas will not encroach on parking, walkways, or stormwater management systems.

4) Electric Vehicle (EV) charging

   a. The project will provide EV charging per the City Standards. Please refer to the Site Plan for more information.

E. Transportation Demand Management (TDM):

1) A Transportation Demand Management (TDM) plan has been submitted as part of this application. Please see Section T. for additional information.

14.6.2 Environmental Quality Standards

A. Preservation of Significant Natural Features:

1. The site is primarily occupied by the existing church and parking lot and does not consist of any significant natural features. There are no known endangered species or plants existing on the site.

2. Not applicable

3. Not applicable

B. Landscape Preservation:

1) The site will limit disturbance of existing trees.

2) The project will include adequate measures to protect existing vegetation.

3) Not applicable.

4) A waiver is not requested.

5) Not applicable.

C. Site Landscaping and Buffers

1) Within the B2 zone, shade trees or plantings will be installed per the City of Portland Technical Manual standards.

2) Buffers

   a. All solid waste will be located towards the rear of the site and out of site from the public way.

   b. Not applicable

   c. The existing buffers are anticipated to remain along all residential abutters.

3) Parking Landscaping

   a. The Development is unable to plant 2 trees per 5 parking spaces (or 1 tree and 3 shrubs per 5 parking spaces) and requests to pay the proportionate cost into the tree fund.

   b. The parking lot does not exceed 40 uninterrupted parking spots.

   c. See above.

4) Street Trees

   a. Street trees within the right-of-way are not proposed due to the existing sidewalk constraints, however additional trees are proposed on the backside of the sidewalk within the private property. Please refer to the Site Plan for locations and planting schedule.

   b. The applicant requests to pay the proportionate cost into the tree fund.

D. Water Quality, Stormwater Management and Erosion Control:

   a. The site drainage will not be directed to flow or pond onto adjacent lots. The runoff created from the site will be collected, attenuated, and released at a rate that does not exceed the existing condition.

   b. Provisions are in place to ensure stormwater from the development will not exceed the pre-development flows.

   c. Not applicable

   d. A site-specific Stormwater Management Plan has been developed for the project to show compliance with Section 5 of the Technical Manual, including the basic standards of MEDEP Chapter 500. Please refer to sections J and K, the Erosion & Sedimentation Control and Stormwater Management Plans, respectively, for more information.

   e. The development is not anticipated to pose a contamination risk to groundwater during or after construction. The project will be serviced by a public wastewater system. The development will provide for adequate and

sanitary disposal of sewage in accordance with adequate the Technical Manual.

14.6.3 Public Infrastructure and Community Safety Standards

A. Consistency with City Master Plans:

a. The project has been designed to be consistent with the City's Zoning Ordinance and off-site infrastructure.

b. Not applicable.

B. Public Safety and Fire Prevention:

a. The site has been designed to promote safe and inviting public access.

b . Emergency access has been provided. Fire trucks and ambulances will be able to access all of the site and buildings.

C. Public Utilities

a . Requests for Ability to Serve letters have been sent to the respective companies. Responses are forthcoming and will be provided upon receipt.

b . The electrical service will be wired underground in the site via a new pole mounted transformer as shown on the Utility Plan.

c . The new sewer and stormwater infrastructure will meet the provisions of the Technical Manual.

d . The project will be served by connection to the public sewer system within Pine Street. The stormwater management system is designed to meet the standards of Chapter 500.

e . The project anticipates providing external solid waste storage with private hauling of the waste.

16.4.4 Site Design Standards

A. **Massing, Ventilation and Wind Impact**:

a. Please refer to Section O, Architectural Design Narrative.

B. Shadows:

a. The shadows created by the building will not influence public open spaces.

C. Snow and Ice Loading:

a. The structure will not distribute snow and ice onto adjacent properties.

D. View Corridors:

a. Not applicable

E. Historic Resources:

a. The development is not located in a historic district, historic landscape district or City designated landmark.

b. The development is not located adjacent to designated landmarks, historic district, or historic landscape district.

c. It is our understanding that there are no known archaeological resources that exist on site.

F. Exterior Lighting:

a. Site Lighting

i. Exterior lighting will be designed to meet the requirements of Section 12 of the Technical Manual.

ii. Any lighting that may adversely impact the abutting residential properties will feature house-side shielding.

b. Architectural and Specialty Lighting

i. No architectural or specialty lighting is proposed, at this time.

ii. No up-lighting is proposed, at this time.

c. Street Lighting

i. No new street lights are proposed.

G. Noise and Vibration:

a. All proposed heating, ventilation and air conditioning equipment, and emergency generators are to meet the applicable state and federal emissions requirements as defined by the Architect. They are to be located within the interior of the site or the top of the building and will also be screened when necessary.

H. Signage and Wayfinding:

a. All street and wayfinding signage shall meet the requirements of the Manual on Uniform Traffic Devices (MUTCD) and Division 22 of the City Code.

   i. The project is not located in a historic district or subject to Article IX.

   ii. Signage will complement the subject building and its immediate context.

   iii. Signage will only be related to vehicular access.

   iv. Signage will be facing downwardly to avoid glare and light spillover towards the sky.

   v. No proposed signs will be located along rooftops.

b. All street and wayfinding signage shall meet the requirements of the Manual on Uniform Traffic Devices (MUTCD) and Division 22 of the City Code.

I. Design Standards.

a. The project has been designed to meet the standards set forth in the B2 zone. Please refer to the Site Plan for more information on the Space & Bulk Standards.

I.1 Subdivision Standards Assessment

The following outline is made in accordance with the City of Portland Code of Ordinances, Chapter 14 Land Use, Article V Section 15.4

15.4.1 Standards of Review

A. The proposed project will not result in undue water of air pollution. The proposed project is not located near or within a flood plain and is at least 72 feet above the mean sea level. Refer to the Soil Report as well as the Erosion and Sedimentation Control Report for more information regarding the nature of soils and subsoils and their ability to adequately support waste disposal. Refer to Sheet C-30 for more information on the proposed drainage conditions and slope of land.

B. The proposed utility infrastructure is designed to provide an ample and sustainable water supply for the foreseeable needs of the subdivision.

C. An ability to serve letter sent to the Portland Water Department to confirm the project won't overburden the existing water supply and has sufficient capacity to serve the proposed project.

D. The proposed project is designed in accordance with the City of Portland Technical Manual– Section 5 – Portland Stormwater Management Standards and will not result in unreasonable soil erosion or reduction in the capacity of the land to hold water such that a dangerous or unhealthy condition may result.

E. The proposed project will not result in excessive highway or public road congestion, nor will it create unsafe conditions for the current or planned use of these routes.

F. The proposed project will utilize a proposed storm/sewer system to adequately serve the proposed building as well as the redeveloped portion of the existing Parish House. Proposed subsurface stormwater retention infrastructure will ensure the post development stormwater runoff will not overburden the existing stormwater system. In addition, an ability to serve letter sent to the Department of Public Works confirms that the project won't overburden the existing storm/sewer system within Woodford Street.

G. The proposed project will relocate and utilize an existing solid waste enclosure to serve the existing Woodfords Church as well as install a proposed solid waste enclosure to serve the proposed buildings. The project will not cause an unreasonable burden on the ability of the city to dispose of solid waste and sewage.

H. The proposed project will not have an adverse effect on the scenic/natural and historic beauty of the area. Refer to the architectural design narrative for more information. The proposed project is not located within a significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife. The proposed project does not contain rare and irreplaceable natural areas. The proposed does not have visual or physical access to the shoreline. The proposed project is not located within local historic districts.

I. The proposed project is in conformity with the Comprehensive Plan as previously indicated during the map amendment process for the property.

J. The subdivider has adequate financial and technical capacity to meet the standards of this subsection. Refer to the financial and technical capacity sections of this submission for more information.

K. The proposed project is not located within the watershed of any pond or lake or within 250 feet of any wetland, great pond, or river as defined in title 38, chapter 3, subchapter I, article 2B.

L. The proposed project will collect, treat and discharge stormwater to the combined storm/sewer system within Woodford Street to the greatest extent possible such that the quality and quantity of groundwater is not adversely affected.

M. The proposed project is not located within a flood prone area delineated by the Federal Emergency Management Agency's flood boundary and floodway maps.

N. The proposed project will provide adequate stormwater management via the existing drainage system within the Woodfords Church parking lot as well as updated stormwater infrastructure to serve the proposed development.

O. The proposed project does not have shore frontage on a river, stream, brook, great pond, or coastal wetland.

P. The proposed subdivision does not cross municipal boundaries.

A C O R N
ENGINEERING, INC.

STORMWATER MANAGEMENT REPORT

Prepared For:

Community Housing of Maine
One City Center, 4th Floor
Portland, ME 04101

Prepared By:

Acorn Engineering, Inc.
PO Box 3372
Portland, Maine 04104



December 2023

INTRODUCTION

Acorn Engineering, Inc. has been retained by Community Housing of Maine to provide civil engineering services for the proposed work located at 186 Woodford Street, Portland, ME 04103. The site is currently comprised of the existing Woodfords Church with surface parking and landscaping. The property consists of approximately 1.92 acres of land in Portland's Woodfords Corner neighborhood. The proposed project anticipated increasing the total impervious area by approximately 50 square feet, and is subject to stormwater treatment due to redevelopment of non-roof impervious area greater than 5,000 sf.

A stormwater analysis was prepared to demonstrate that the project will meet the requirements set forth by Maine DEP Chapter 500 Basic and General Standards and the following requirements from the City of Portland (the City):

- City of Portland Land Use Ordinance Article 14.6.2.D.
- City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards and Maine DEP Chapter 500 Stormwater Management.
- City of Portland Code of Ordinances Chapter 32 – Post-Construction Stormwater Management
- DPW Specific Standard: Provide a minimum detention volume of 1" of rainfall over the entire project redeveloped area being proposed on the parcel with a maximum outflow rate of 0.1 CFS per acre until the storage is maximized.

EXISTING CONDITIONS

The proposed project site is located at 186 Woodford Street, bounded by Woodford Street, and Beacon Street. An ALTA/NSPS Land Title Survey has been prepared by Owen Haskell, Inc., dated March 20, 2022, and last revised October 12, 2023.

The existing property is covered by approximately 75.3% impervious surfaces including the existing Woodfords Church, Parish House, pavement, and concrete.

The project team is not aware of the presence of any existing significant natural features located on the site. Given the urban setting and existing impervious surfaces, a field inventory of significant natural features was not undertaken. The project is not located within a watershed classified as an Urban Impaired Stream.

PROPOSED DEVELOPMENT

The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 40 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (82 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements.

Due to the proposed senior housing building construction within the existing parking lot storm drain network modifications are necessary. Proposed drainage improvements include catch basins, roof drains, and a StormTech Isolator ROW with a subsurface sand filter to provide treatment & storage onsite. Ultimately the proposed storm drain network outlets to the existing drainage system within Woodford Street.

The development will be served by the Portland Water District, underground power/cable/communications, natural gas and the municipal sewer system. The project anticipates incorporating Maine DEP approved stormwater Best Management Practices (BMP) to meet the General and Flooding Standards.

For an analysis on water quality, please refer to the following section.

GENERAL STANDARDS – WATER QUALITY

The proposed project was designed to provide primary water quality treatment through the use of an Underdrained Subsurface Sand Filter (USSF). The system has been designed in accordance with the MDEP Volume III BMPs Technical Design Manual, Chapter 7.3. Subsurface Sand Filters BMP, and the City of Portland Technical Manual (Section 5) Redevelopment Standards. The Municipal code states: *"All projects not subject to requirements of an existing Site Law or Stormwater Management Law Permit that include redevelopment of non-roof impervious area greater than 5,000 square-feet and are subject to City of Portland review shall provide stormwater quality treatment in accordance with the General Standards for no less than 50% of the redeveloped impervious area."*

Treatment Area

The development shall provide water quality treatment in accordance with the DEP Chapter 500 General Standards for no less than 50% of the redeveloped impervious area. Water quality treatment will be provided through the use of a subsurface sand filter and a stormtech Isolator ROW pretreatment device, which is an approved system per Appendix B of the Maine Stormwater BMP Manual.

Table 1 – Treatment Area

Existing Impervious Area	Proposed Impervious Area	Redeveloped Impervious Area	Redeveloped Impervious Area with Treatment
60,066 SF	60,108 SF	31,658	18,275 SF (57.7%)

Filter Area Sizing

A calculation for sand filter area is necessary to meet the requirements below the surface of the USSF. As defined in the Volume III: BMPs Technical Design Manual, Chapter 7, the surface area of the filter shall be no less than the sum of 5% of the tributary impervious area and 2% of the tributary vegetated area. The filter area is calculated by the following formula:

[(Imp. SF x 0.05) + (Veg. SF x 0.02)] = Filter Area (SF)

Please refer to Table 2 below for the required area calculations.

Table 2 – Total Filter Surface Area, displays the proposed USSF sizing requirement, actual size and the percentage of required area.

Table 2 – Total Filter Surface Area		
	Required Filter Area (SF)	Actual Filter Area (SF)
USSF	1,019	1,040

As shown, the size of the soil filter area will exceed the surface area requirements.

Isolator Row Sizing

The isolator row was sized based upon a letter from Mark Bergeron, Director of the MDEP Bureau of Land Resources, to StormTech dated July 29, 2016. The calculation that Mr. Bergeron references to determine the minimum number of stormwater chambers needed for the isolator row is defined as the one-year peak flow rate divided by the specific flow rate of the chamber. This rate was implemented into the HydroCAD model and divided by the flow rate of the SC-740 chamber (0.2 cfs). Please refer to Table 3 below which provides the isolator row sizing in comparison with the required amount.

Table 3 – Isolator Row Sizing			
	1-Year Peak Flow (cfs)	Required Chambers	Provided Chambers
USSF	0.8	4	6

The StormTech Isolator Row provides initial treatment of the larger sized pollutants. The model includes two catch basins, with two (2) - 24" pipes at each side of the isolator row. Access is provided at each catch basin, on both ends of the system, in addition to a 10" inspection port placed within the system. The design includes additional manifold pipes out of the catch basin into the StormTech system to further disperse flow throughout the system in the event the isolator row is at capacity.

Water Quality Volume

In accordance with the Volume III: BMPs Technical Design Manual, a water quality volume of 1.0 inches times the tributary impervious area plus 0.4 inches times the tributary

vegetated area is required to be treated by the USSF. The water quality volume is calculated by the following formula:

$$\left(\frac{\text{Imp. SF x 1.0"}}{\text{12"/1'}}\right) + \left(\frac{\text{Veg. SF x 0.4"}}{\text{12"/1'}}\right) = \text{Treatment Volume (CF)}$$

Table 4 – Water Quality Volume Table				
	Upgradient Landscaped Area (SF)	Upgradient Impervious Area (SF)	Total Treatment Volume Required (CF)	Treatment Volume Provided (CF)
USSF	5,238	18,275	1,697	3,038

The water quality treatment volume was confirmed by using the HydroCAD model. HydroCAD calculations are attached to this report to demonstrate the compliance. The storage volume within the crushed stone, chambers, and filter sand is added together to calculate the water quality volume.

FLOODING STANDARD – WATER QUANTITY

To meet the City's requirement of limiting the burden on the combined sewer main, the project is subject to provide a minimum detention volume of 1" of rainfall over the entire project redeveloped area being proposed on the parcel with a maximum outflow rate of 0.1 CFS per acre until the storage is maximized. The project will utilize a Stormtech Isolater ROW that will sit above crushed stone and a USSF to provide storage before being collected by an orifice-controlled underdrain and piped to the street.

See below table for the project redevelopment requirements and calculations for water quality volume.

Table 5 – DPW Detention Volume Requirement			
	Redeveloped Area (SF)	Total Detention Volume Required (CF)	Detention Volume Provided (CF)
USSF	36,433	3,036	3,038*
* Storage provided at 12" Bypass outlet pipe (76.80') within catch basin downstream of USSF / Isolator ROW BMP			

To meet the 0.1 CFS per acre requirement. A 1" orifice will be installed within the downgradient catch basin on the USSF underdrain outlet pipe. The 1" orifice will decrease the flow out of the USSF and as a result storage will be provided within the Stormtech Isolator ROWs. Once the detention volume required has been reached the stormwater will overflow into an 12" outlet pipe and enter the municipal system within Woodford Street.

The proposed project was modeled using HydroCAD to verify that the post-development conditions do not exceed the pre-development conditions. A 24-hour SCS Type III storm distribution for the 2, 10, and 25-year storm events were used. The corresponding rainfall amounts for these storms are 3.10", 4.60", and 5.80" respectively. Due to the numerous variables, and inherent inaccuracies with the modeling program used to calculate stormwater runoff it is custom at Acorn Engineering to round to the nearest whole number. However due to the small size of the project and the minimal existing flows, the stormwater runoff shall be rounded to the nearest tenth of a cubic feet per second (cfs).

Time of Concentration (Tc)

The times of concentration for subcatchments in both the pre and post conditions were calculated by entering the flow path with the associated ground cover and slopes. HydroCAD then calculated the Tc's and incorporated the total Tc for each subcatchment into the model. When the calculated Tc was less than six minutes (0.1 hours), a direct entry of six minutes was used as advised by the TR-55 model. Consistent with previous submissions and best practices, the sheet flow length for any Tc path was capped at 100 feet.

Curve Number (CN)

Within the pre-development model, the vegetated areas were considered fair grass, and impervious areas consisted of either roof of existing building or pavement from parking lot.

Pre-Development

- Pavement, Walkways, Roofs – CN 98
- 75% Grass Cover – Good, HSG A – CN 39

Post-Development

- Pavement, Walkways, Roofs – CN 98
- >75% Grass Cover (new landscaping) – Good, HSG A – CN 39

Pre-development Calculations

The pre-development model was broken into two separate subcatchments.

- Subcatchment 1 – This tributary area includes the south and east side of the parcel including the paved parking lot and adjacent landscaped areas. This area drains toward Woodford Street.
- Subcatchment 2 – This tributary area includes the north and west side of the parcel and includes mostly landscaped area with various paved walkways. This area drains toward Woodford Street.
- Subcatchment 3 – This tributary area includes the entire building footprint with a small landscape perimeter. This area drains toward Woodford Street.
- Subcatchment 4 – This tributary area is small and includes some landscape area to the rear (Southwest) of the site.

A pre-development watershed map developed for this project can be viewed in Attachment A and a copy of the HydroCAD calculations is included within Attachment C, of this report. Point of interest flow rates for the two sub catchments outlined above are as follows:

Table 6 – Pre-Development Peak Stormwater Flows			
	2-Year Storm Event (cfs)	10-Year Storm Event (cfs)	25-Year Storm Event (cfs)
Total Runoff	3.5	5.9	8.0

Post-development Calculations

The post-development model was broken into three separate sub catchments.

- Subcatchment 1 – This tributary area includes the north and east side of the parcel including a section of the paved parking lot, adjacent landscaped areas, and the new senior housing building. This area drains toward Woodford Street.
- Subcatchment 1.1 - This tributary area includes the south and east side of the parcel including a section of the paved parking lot and adjacent landscaped areas. This area drains toward the treatment BMP and is ultimately directed toward Woodford Street.
- Subcatchment 2 – This tributary area includes the north and west side of the parcel and includes mostly landscaped area with various paved walkways. This area drains toward Woodford Street.
- Subcatchment 3 – This tributary area includes the entire building footprint with a small landscape perimeter. This area drains toward Woodford Street.
- Subcatchment 4 – This tributary area is small and includes some landscape area to the rear (Southwest) of the site.

Total Peak flow rates for the post-development storm events are as follows:

Table 7 – Post-Development Peak Stormwater Flows			
	2-Year Storm Event (cfs)	10-Year Storm Event (cfs)	25-Year Storm Event (cfs)
Total Runoff	2.7	4.3	5.7

The post-development calculations include changes to the land use and the compensation provided by the stormwater BMPs. It should be noted that the project is also reducing the overall impervious area. As a result, the total peak flow rates in the post development are reduced in comparison to the total predevelopment flow rates for the 2, 10, & 25-year storms.

The following table represents a comparison of pre- development and post-development condition peak runoff rates for the proposed development and tributary area.

Table 9 – Comparison of Peak Flows						
POI	2-Year Storm Event (cfs)		10-Year Storm Event (cfs)		25-Year Storm Event (cfs)	
	Pre	Post	Pre	Post	Pre	Post
Total Runoff	3.5	2.7	5.9	4.3	8.0	5.7

A post-development watershed map developed for this project can be viewed in Attachment B, and a copy of the HydroCAD calculations is included within Attachment C of this report.

SOILS

Onsite soil information includes the following:

- Soil Conservation Service Medium Intensity Soil Survey for Cumberland County
- United States Department of Agriculture Web Soil Survey

Given the soils information, listed above, no onsite wastewater is proposed; the applicant does not intend to perform a more intense hydric soil boundary delineation because the waiver requirements set forth in the City of Portland Technical Manual – Section 7 – Soil Survey, Rev. 6/17/11 are met.

The area within and surrounding the project includes soil types listed in the table below. The susceptibility of soils to erosion is indicated on a relative "K" scale of values over a range of 0.02 to 0.69. Higher "K" values indicate more erodible soils.

Table 1 - "K" Value		
Soils Type	**Subsurface**	**Substratum**
Lyman-Tunbridge Complex	0.32 / 0.20	0.32 / 0.20
Windsor Loamy Sand	0.17	0.17

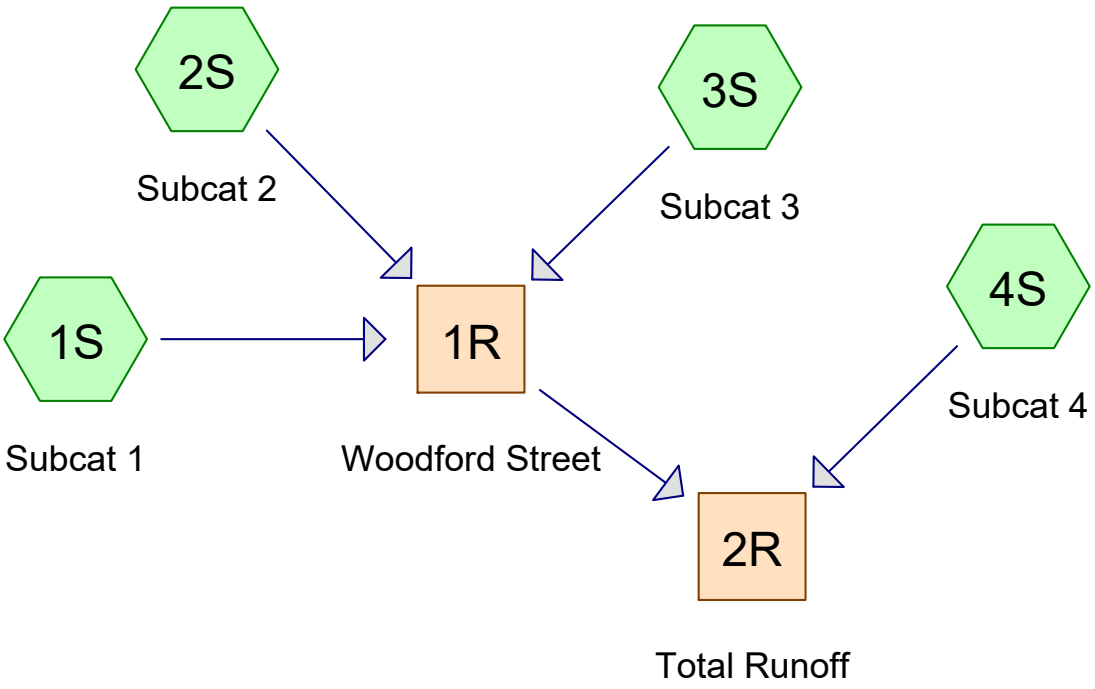
The soil "K" value for the soil, listed above, shows a low susceptibility to erosion. The site's susceptibility to erosion is sourced from the Soil Conservation Service Medium Intensity Soil Survey for Cumberland County.

CONCLUSION

The proposed development was designed to meet the requirements implemented by the MDEP under the Stormwater Management Statute (38 M.R.S.A. § 420-D) as well as the City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards. The proposed project as designed is not anticipated to cause flooding or erosion problems within the subject site, abutters' sites, nor within the right-of-way. Overall, the project will provide an improvement to stormwater runoff and overall management from several perspectives as outlined above.

ATTACHMENTS

Attachment A: Pre-Development Watershed Map
Attachment B: Post-Development Watershed Map
Attachment C: HydroCAD Calculations
Attachment D: Redevelopment Exhibit
Attachment E: Stormwater Inspection and Maintenance Plan
Attachment F: Medium Intensity Web Soil Survey



Subcat Reach Pond Link

Routing Diagram for PRE
Prepared by {enter your company name here}, Printed 12/22/2023
HydroCAD® 10.00-26 s/n 00620 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.545	39	>75% Grass cover, Good, HSG A (1S, 2S, 3S, 4S)
0.064	98	Paved Walkway (2S)
0.860	98	Pavement (1S)
0.454	98	Roof (3S)
1.924	**81**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.545	HSG A	1S, 2S, 3S, 4S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
1.379	Other	1S, 2S, 3S
1.924		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.545	0.000	0.000	0.000	0.000	0.545	>75% Grass cover, Good	1S, 2S, 3S, 4S
0.000	0.000	0.000	0.000	0.064	0.064	Paved Walkway	2S
0.000	0.000	0.000	0.000	0.860	0.860	Pavement	1S
0.000	0.000	0.000	0.000	0.454	0.454	Roof	3S
0.545	**0.000**	**0.000**	**0.000**	**1.379**	**1.924**	**TOTAL AREA**	

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Subcat 1 Runoff Area=46,626 sf 80.39% Impervious Runoff Depth=1.75"
Tc=6.0 min CN=86 Runoff=2.20 cfs 0.156 af

Subcatchment 2S: Subcat 2 Runoff Area=15,618 sf 17.84% Impervious Runoff Depth=0.11"
Tc=6.0 min CN=50 Runoff=0.01 cfs 0.003 af

Subcatchment 3S: Subcat 3 Runoff Area=20,807 sf 95.15% Impervious Runoff Depth=2.55"
Tc=6.0 min CN=95 Runoff=1.35 cfs 0.101 af

Subcatchment 4S: Subcat 4 Runoff Area=745 sf 0.00% Impervious Runoff Depth=0.00"
Tc=6.0 min CN=39 Runoff=0.00 cfs 0.000 af

Reach 1R: Woodford Street Inflow=3.55 cfs 0.261 af
Outflow=3.55 cfs 0.261 af

Reach 2R: Total Runoff Inflow=3.55 cfs 0.261 af
Outflow=3.55 cfs 0.261 af

Total Runoff Area = 1.924 ac Runoff Volume = 0.261 af Average Runoff Depth = 1.63"
28.32% Pervious = 0.545 ac 71.68% Impervious = 1.379 ac

Summary for Subcatchment 1S: Subcat 1

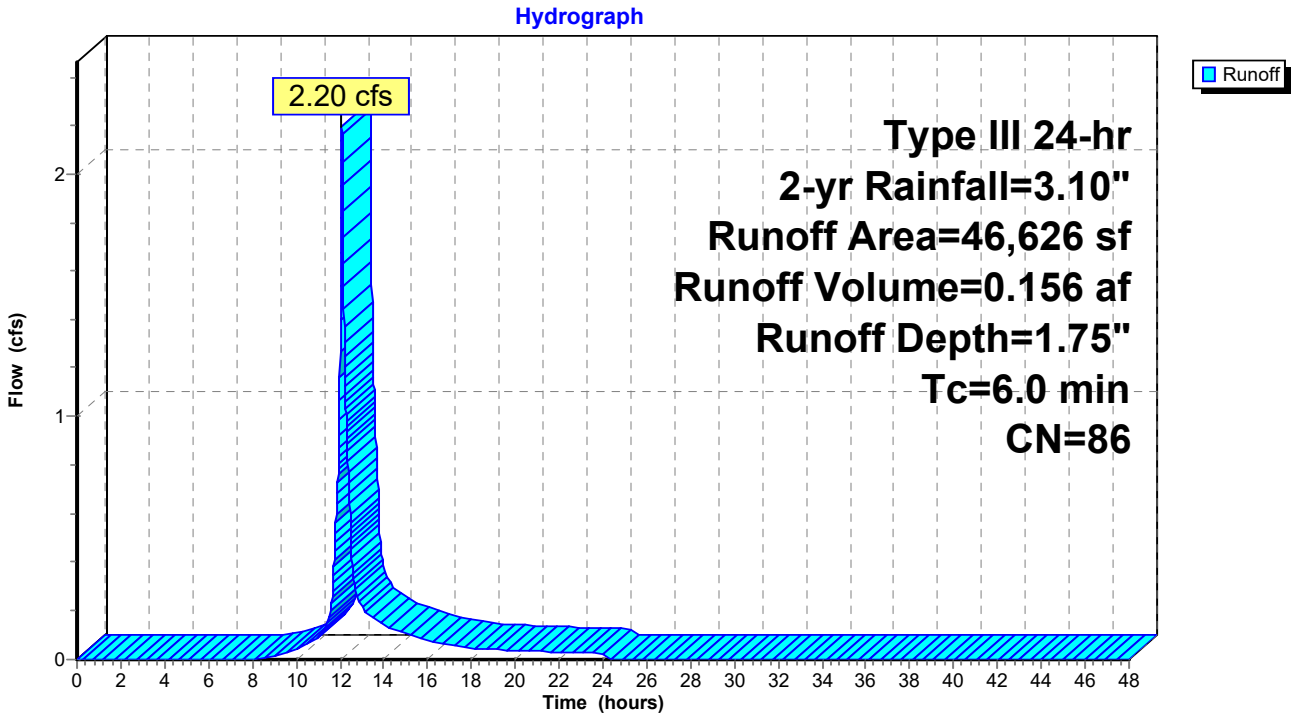
Runoff = 2.20 cfs @ 12.09 hrs, Volume= 0.156 af, Depth= 1.75"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

	Area (sf)	CN	Description
*	37,482	98	Pavement
	9,144	39	>75% Grass cover, Good, HSG A
	46,626	86	Weighted Average
	9,144		19.61% Pervious Area
	37,482		80.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Subcat 1



Summary for Subcatchment 2S: Subcat 2

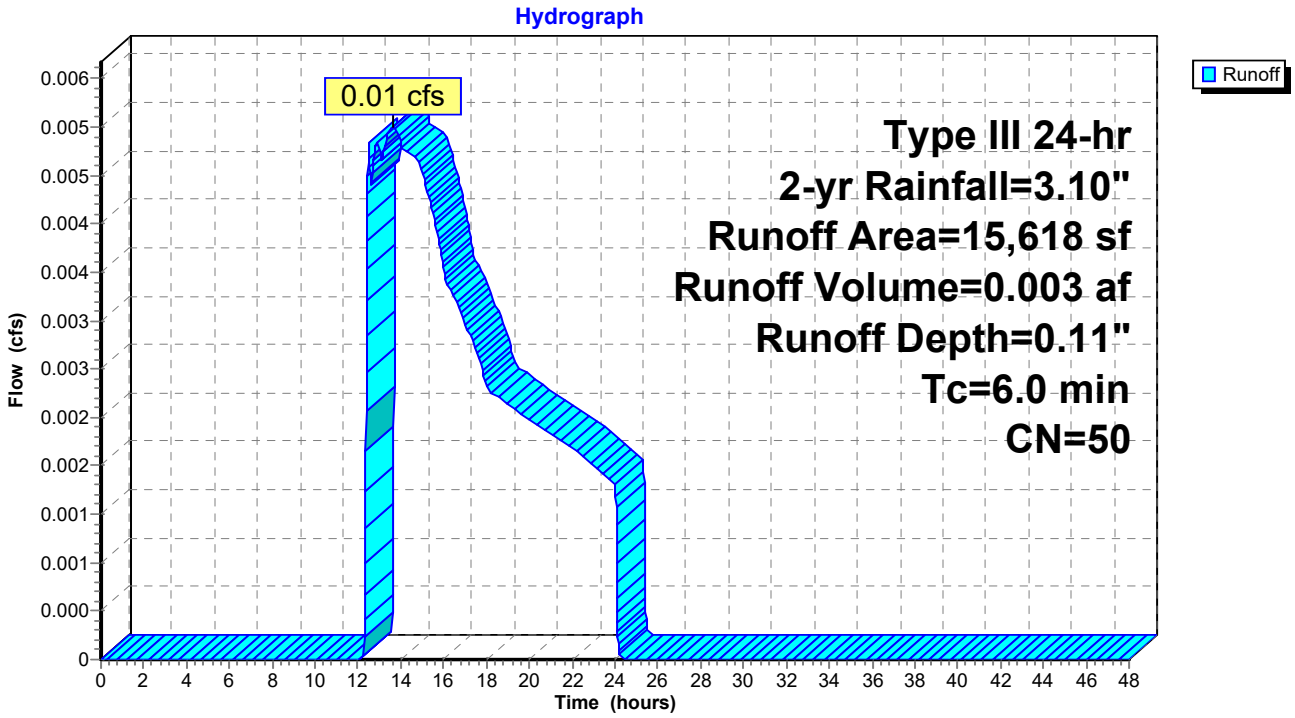
Runoff = 0.01 cfs @ 13.62 hrs, Volume= 0.003 af, Depth= 0.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

	Area (sf)	CN	Description
*	2,787	98	Paved Walkway
	12,831	39	>75% Grass cover, Good, HSG A
	15,618	50	Weighted Average
	12,831		82.16% Pervious Area
	2,787		17.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Subcat 2



Summary for Subcatchment 3S: Subcat 3

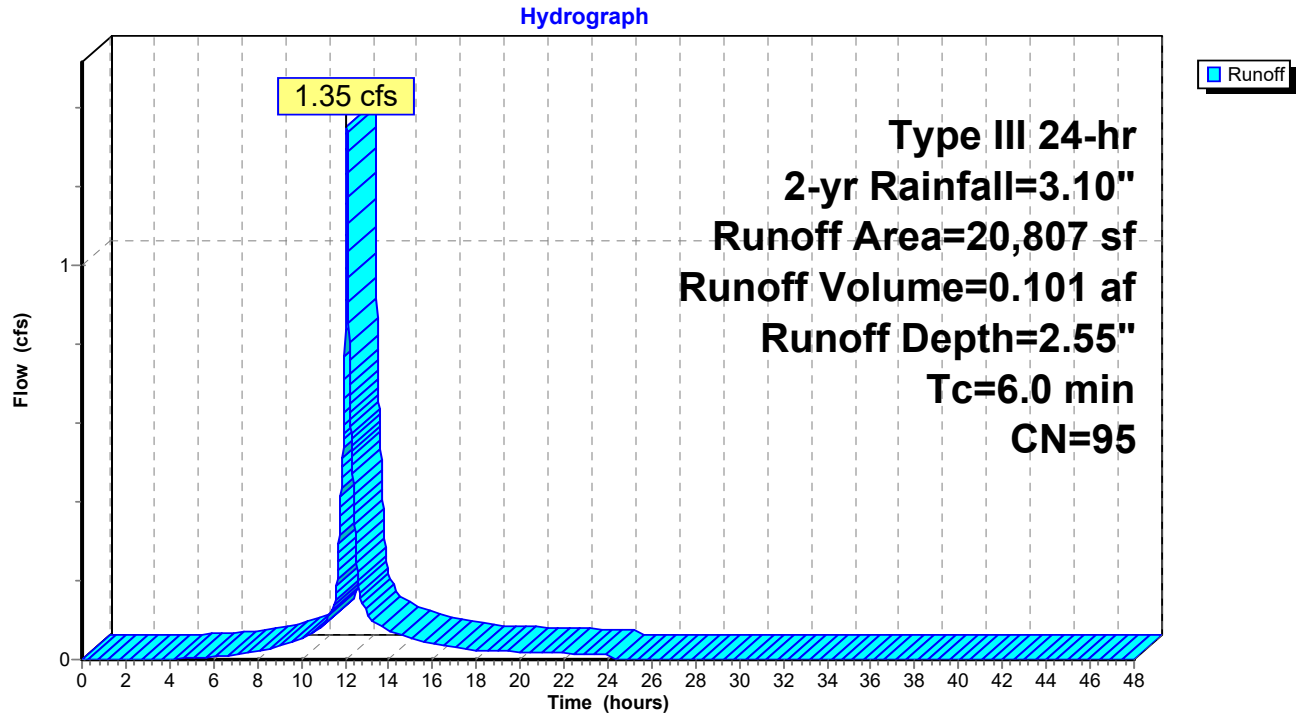
Runoff = 1.35 cfs @ 12.08 hrs, Volume= 0.101 af, Depth= 2.55"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

	Area (sf)	CN	Description
*	19,797	98	Roof
	1,010	39	>75% Grass cover, Good, HSG A
	20,807	95	Weighted Average
	1,010		4.85% Pervious Area
	19,797		95.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: Subcat 3



Summary for Subcatchment 4S: Subcat 4

[45] Hint: Runoff=Zero

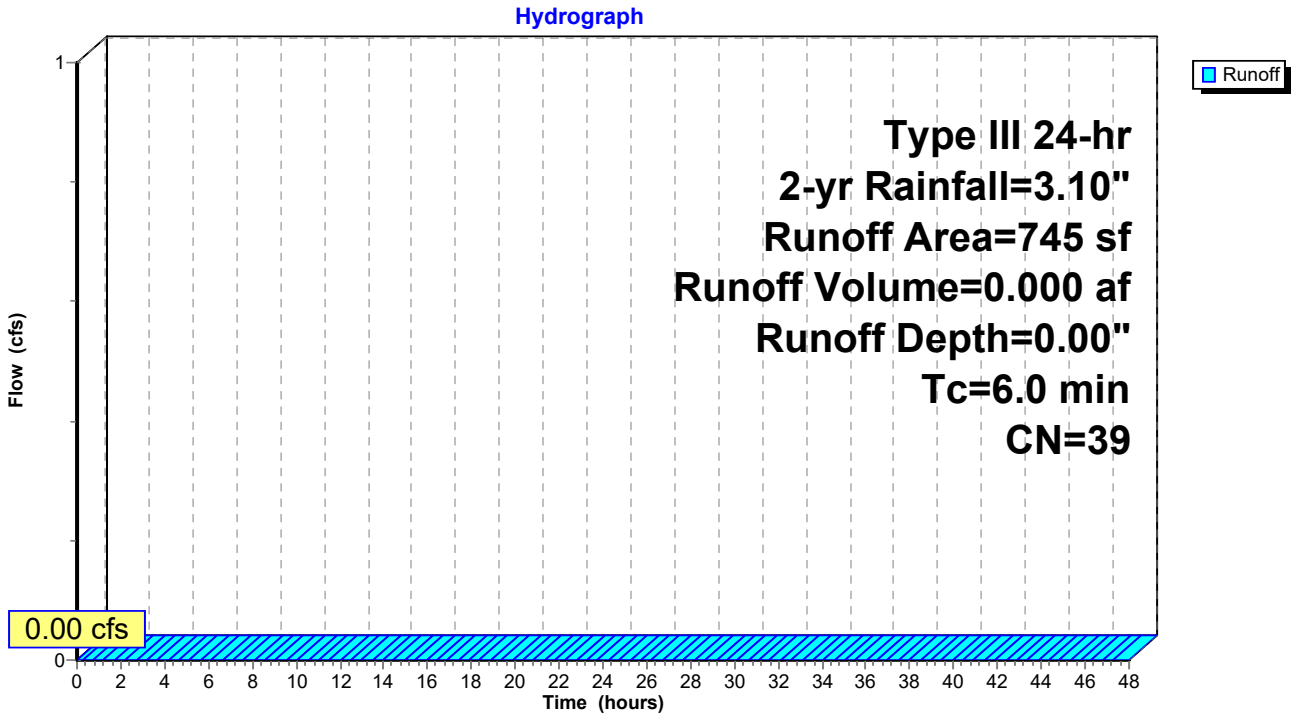
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

Area (sf)	CN	Description
745	39	>75% Grass cover, Good, HSG A
745		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 4S: Subcat 4



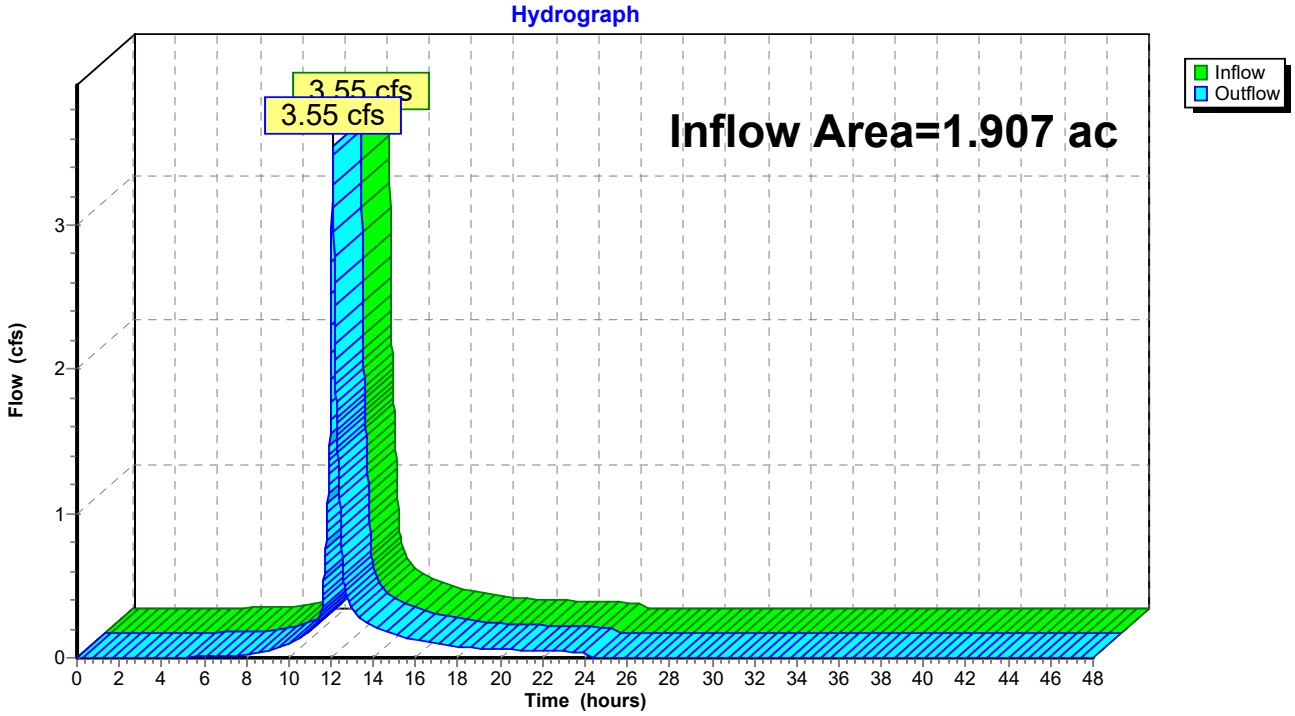
Summary for Reach 1R: Woodford Street

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.907 ac, 72.32% Impervious, Inflow Depth = 1.64" for 2-yr event
Inflow = 3.55 cfs @ 12.09 hrs, Volume= 0.261 af
Outflow = 3.55 cfs @ 12.09 hrs, Volume= 0.261 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 1R: Woodford Street



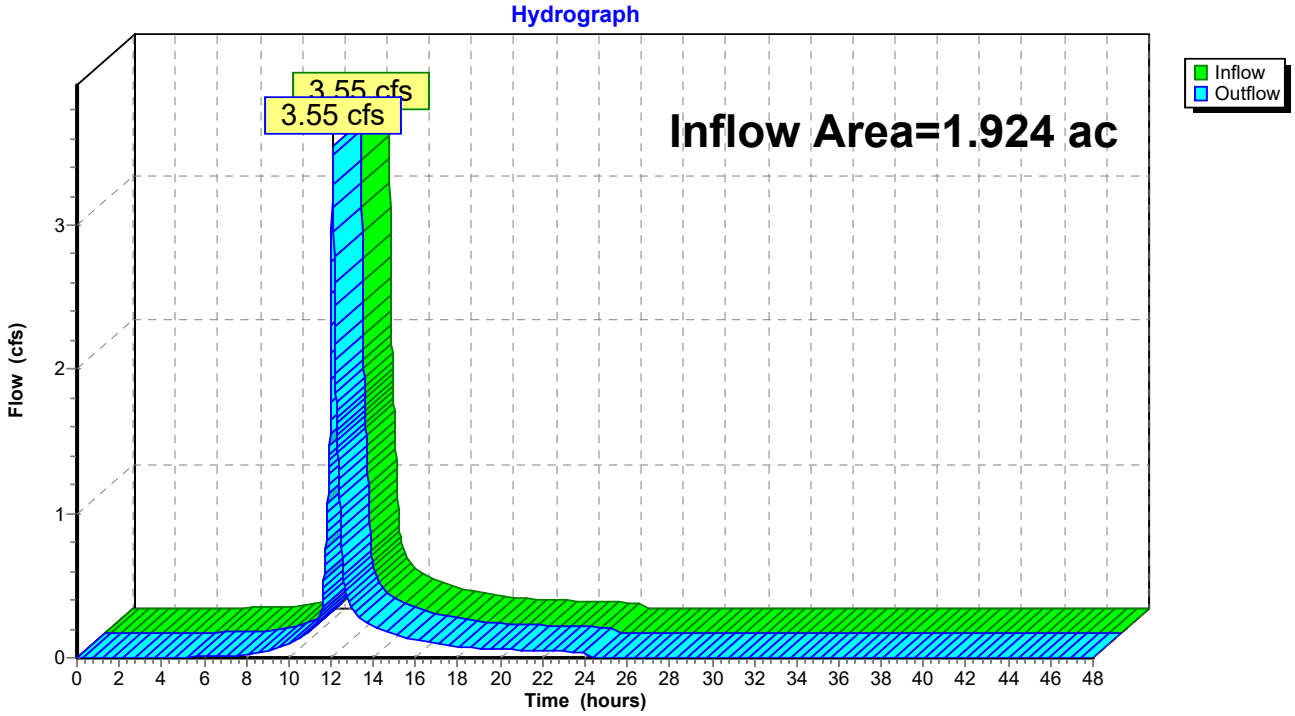
Summary for Reach 2R: Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.924 ac, 71.68% Impervious, Inflow Depth = 1.63" for 2-yr event
Inflow = 3.55 cfs @ 12.09 hrs, Volume= 0.261 af
Outflow = 3.55 cfs @ 12.09 hrs, Volume= 0.261 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Runoff



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Subcat 1 Runoff Area=46,626 sf 80.39% Impervious Runoff Depth=3.10"
Tc=6.0 min CN=86 Runoff=3.85 cfs 0.276 af

Subcatchment 2S: Subcat 2 Runoff Area=15,618 sf 17.84% Impervious Runoff Depth=0.54"
Tc=6.0 min CN=50 Runoff=0.12 cfs 0.016 af

Subcatchment 3S: Subcat 3 Runoff Area=20,807 sf 95.15% Impervious Runoff Depth=4.02"
Tc=6.0 min CN=95 Runoff=2.08 cfs 0.160 af

Subcatchment 4S: Subcat 4 Runoff Area=745 sf 0.00% Impervious Runoff Depth=0.13"
Tc=6.0 min CN=39 Runoff=0.00 cfs 0.000 af

Reach 1R: Woodford Street Inflow=6.02 cfs 0.452 af
Outflow=6.02 cfs 0.452 af

Reach 2R: Total Runoff Inflow=6.02 cfs 0.452 af
Outflow=6.02 cfs 0.452 af

Total Runoff Area = 1.924 ac Runoff Volume = 0.452 af Average Runoff Depth = 2.82"
28.32% Pervious = 0.545 ac 71.68% Impervious = 1.379 ac

Summary for Subcatchment 1S: Subcat 1

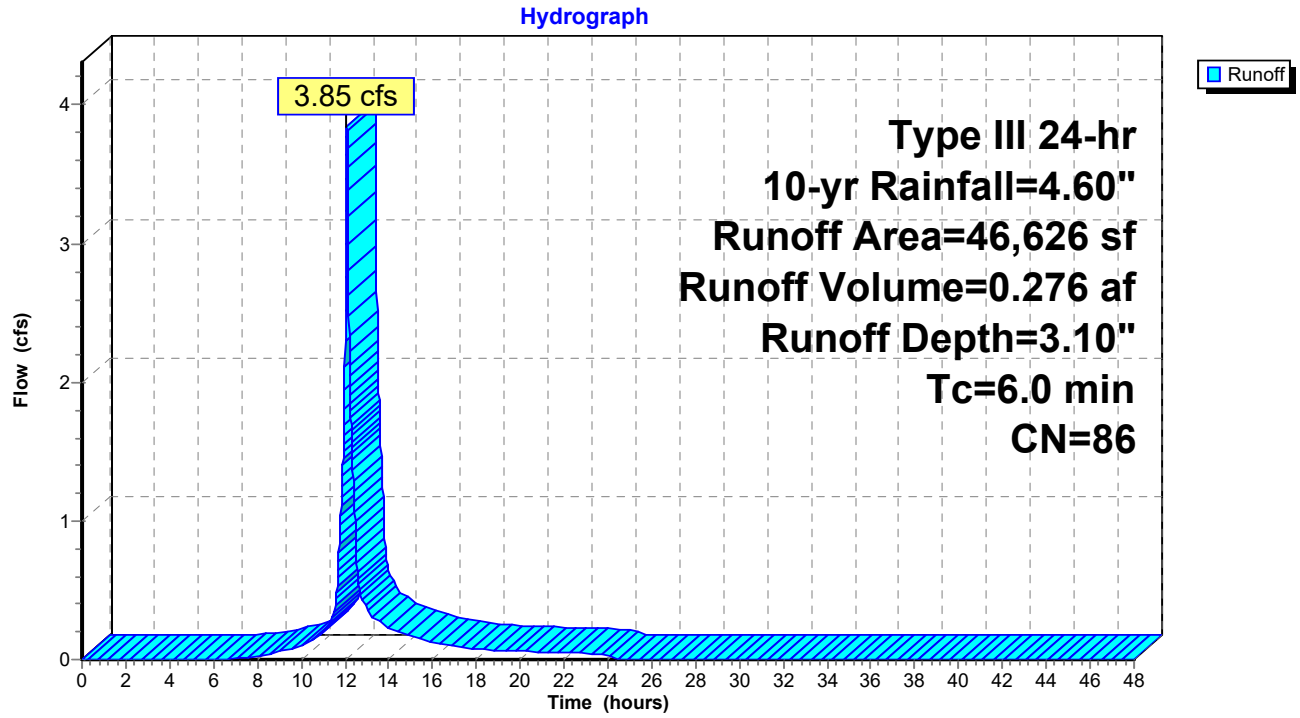
Runoff = 3.85 cfs @ 12.09 hrs, Volume= 0.276 af, Depth= 3.10"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

	Area (sf)	CN	Description
*	37,482	98	Pavement
	9,144	39	>75% Grass cover, Good, HSG A
	46,626	86	Weighted Average
	9,144		19.61% Pervious Area
	37,482		80.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Subcat 1



Summary for Subcatchment 2S: Subcat 2

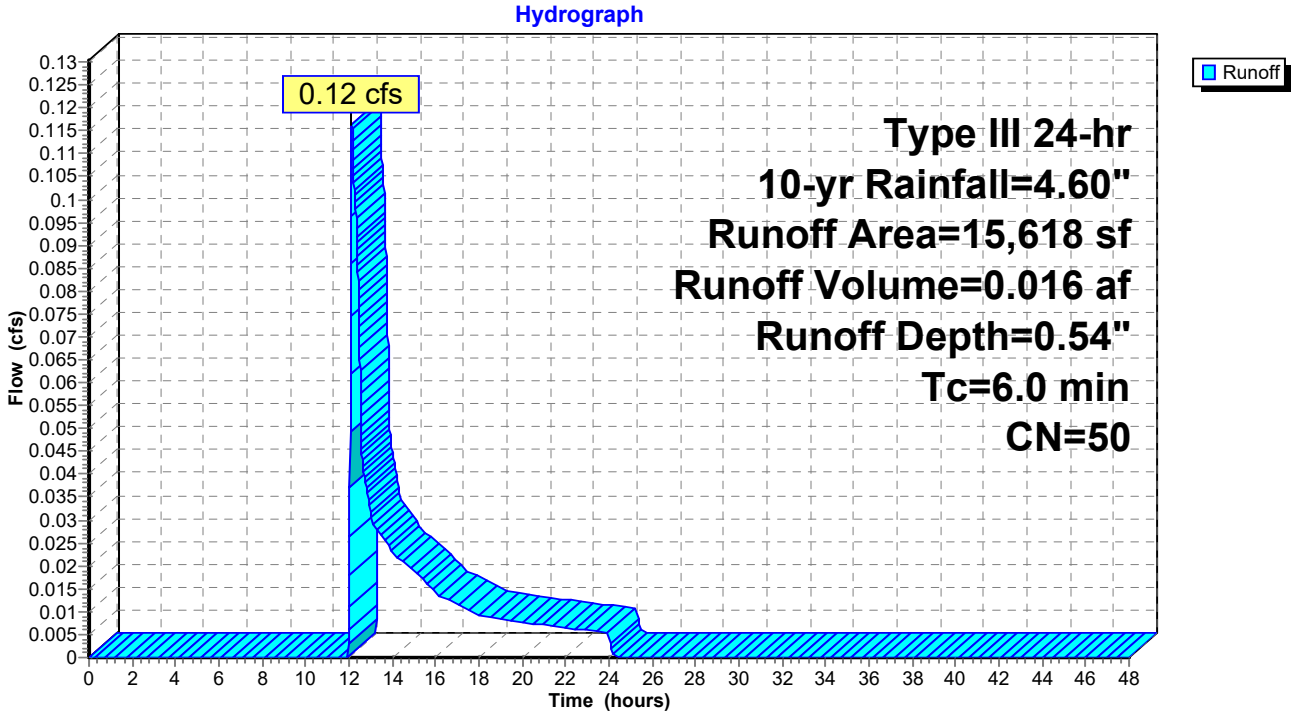
Runoff = 0.12 cfs @ 12.14 hrs, Volume= 0.016 af, Depth= 0.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

	Area (sf)	CN	Description
*	2,787	98	Paved Walkway
	12,831	39	>75% Grass cover, Good, HSG A
	15,618	50	Weighted Average
	12,831		82.16% Pervious Area
	2,787		17.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Subcat 2



Summary for Subcatchment 3S: Subcat 3

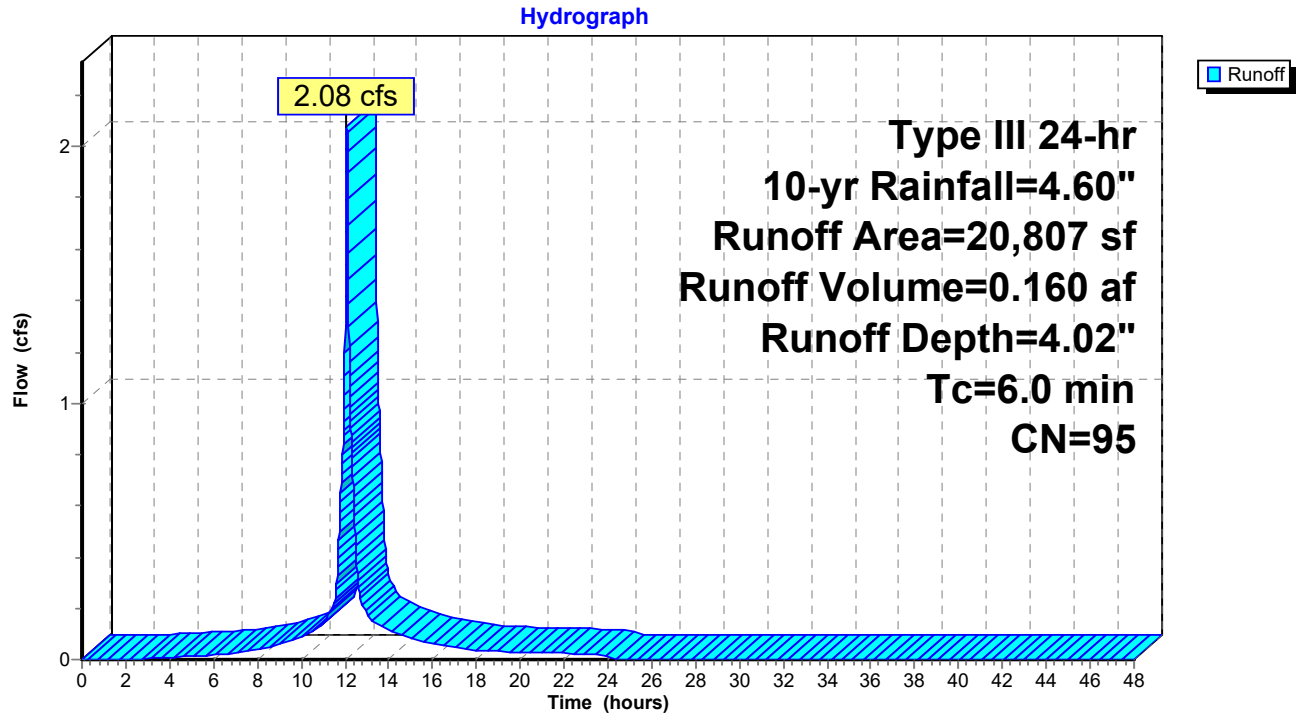
Runoff = 2.08 cfs @ 12.08 hrs, Volume= 0.160 af, Depth= 4.02"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

	Area (sf)	CN	Description
*	19,797	98	Roof
	1,010	39	>75% Grass cover, Good, HSG A
	20,807	95	Weighted Average
	1,010		4.85% Pervious Area
	19,797		95.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: Subcat 3



Summary for Subcatchment 4S: Subcat 4

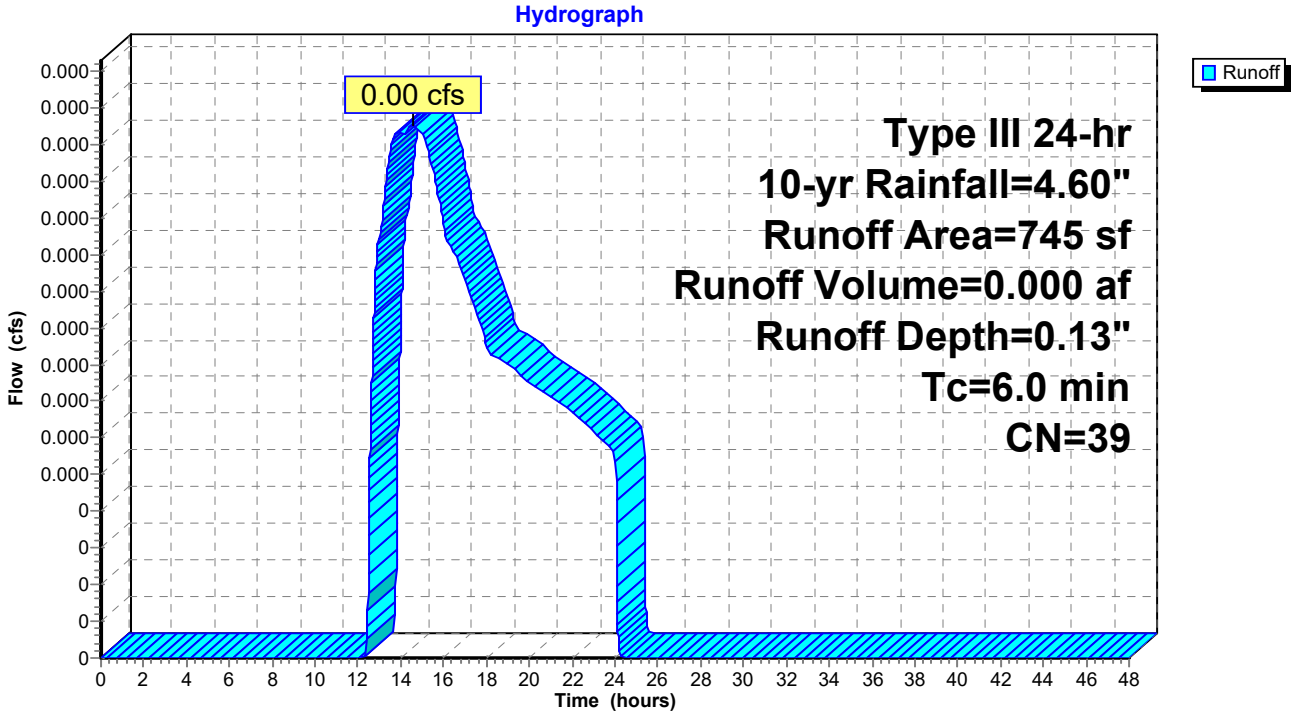
Runoff = 0.00 cfs @ 14.58 hrs, Volume= 0.000 af, Depth= 0.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

Area (sf)	CN	Description
745	39	>75% Grass cover, Good, HSG A
745		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 4S: Subcat 4



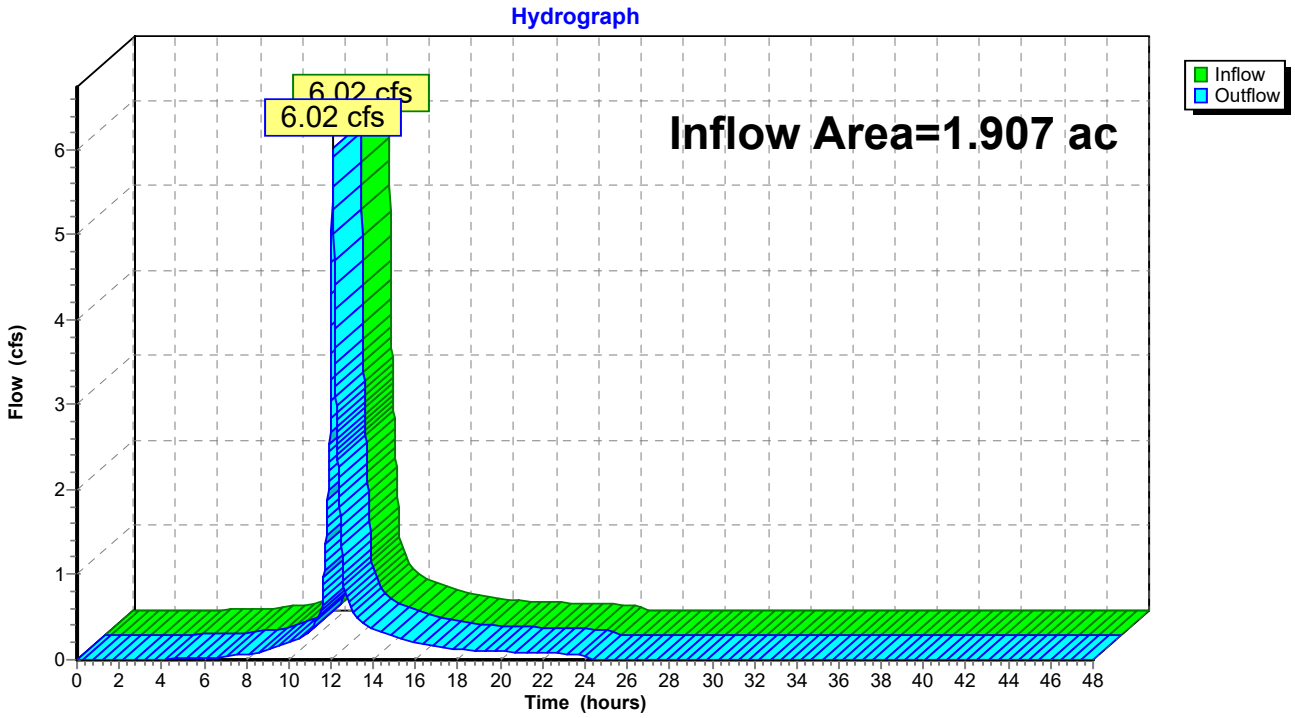
Summary for Reach 1R: Woodford Street

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.907 ac, 72.32% Impervious, Inflow Depth = 2.85" for 10-yr event
Inflow = 6.02 cfs @ 12.09 hrs, Volume= 0.452 af
Outflow = 6.02 cfs @ 12.09 hrs, Volume= 0.452 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 1R: Woodford Street



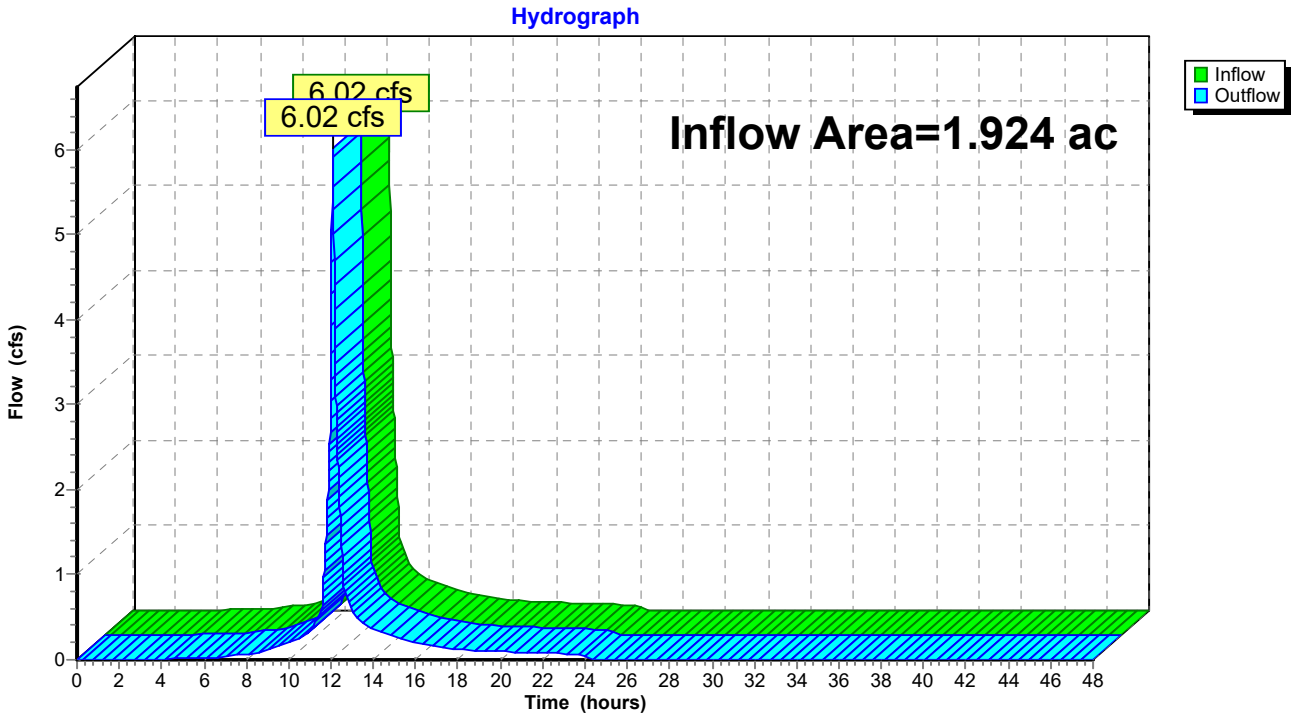
Summary for Reach 2R: Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.924 ac, 71.68% Impervious, Inflow Depth = 2.82" for 10-yr event
Inflow = 6.02 cfs @ 12.09 hrs, Volume= 0.452 af
Outflow = 6.02 cfs @ 12.09 hrs, Volume= 0.452 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Runoff



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Subcat 1 Runoff Area=46,626 sf 80.39% Impervious Runoff Depth=4.22"
Tc=6.0 min CN=86 Runoff=5.18 cfs 0.376 af

Subcatchment 2S: Subcat 2 Runoff Area=15,618 sf 17.84% Impervious Runoff Depth=1.05"
Tc=6.0 min CN=50 Runoff=0.34 cfs 0.031 af

Subcatchment 3S: Subcat 3 Runoff Area=20,807 sf 95.15% Impervious Runoff Depth=5.21"
Tc=6.0 min CN=95 Runoff=2.66 cfs 0.208 af

Subcatchment 4S: Subcat 4 Runoff Area=745 sf 0.00% Impervious Runoff Depth=0.39"
Tc=6.0 min CN=39 Runoff=0.00 cfs 0.001 af

Reach 1R: Woodford Street Inflow=8.16 cfs 0.615 af
Outflow=8.16 cfs 0.615 af

Reach 2R: Total Runoff Inflow=8.16 cfs 0.616 af
Outflow=8.16 cfs 0.616 af

Total Runoff Area = 1.924 ac Runoff Volume = 0.616 af Average Runoff Depth = 3.84"
28.32% Pervious = 0.545 ac 71.68% Impervious = 1.379 ac

Summary for Subcatchment 1S: Subcat 1

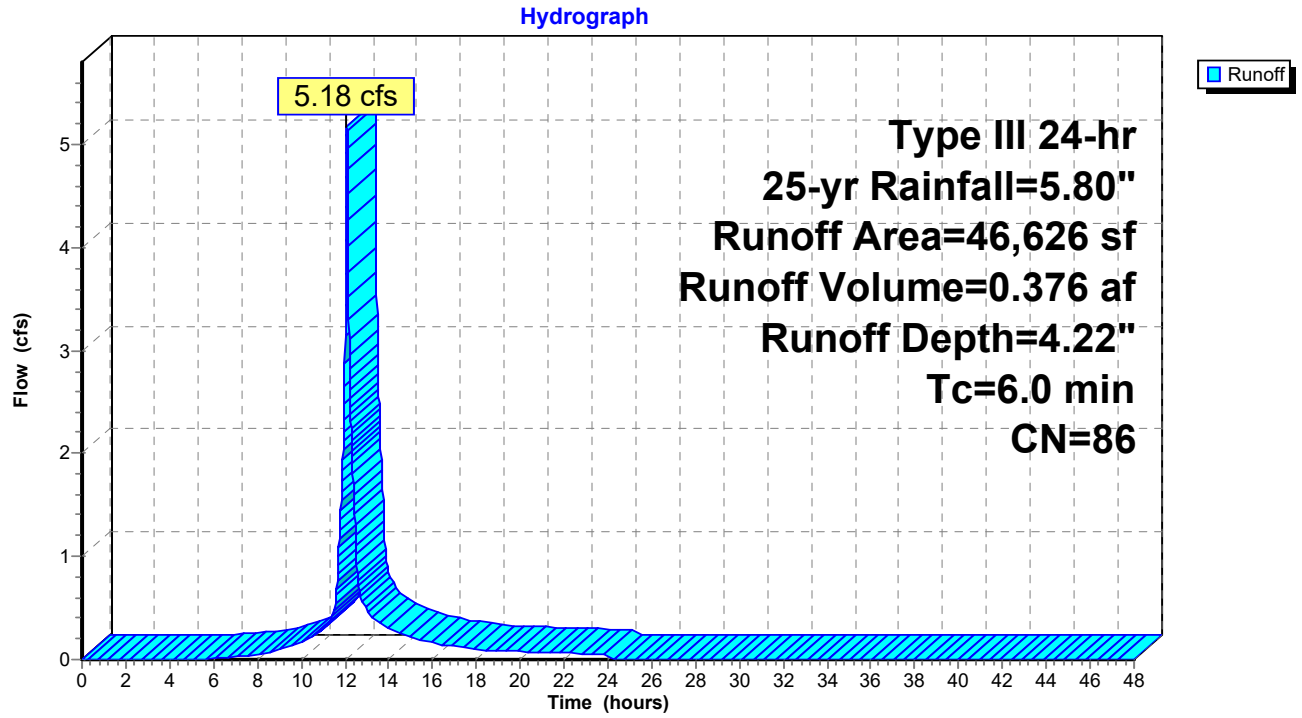
Runoff = 5.18 cfs @ 12.09 hrs, Volume= 0.376 af, Depth= 4.22"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
*	37,482	98	Pavement
	9,144	39	>75% Grass cover, Good, HSG A
	46,626	86	Weighted Average
	9,144		19.61% Pervious Area
	37,482		80.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Subcat 1



Summary for Subcatchment 2S: Subcat 2

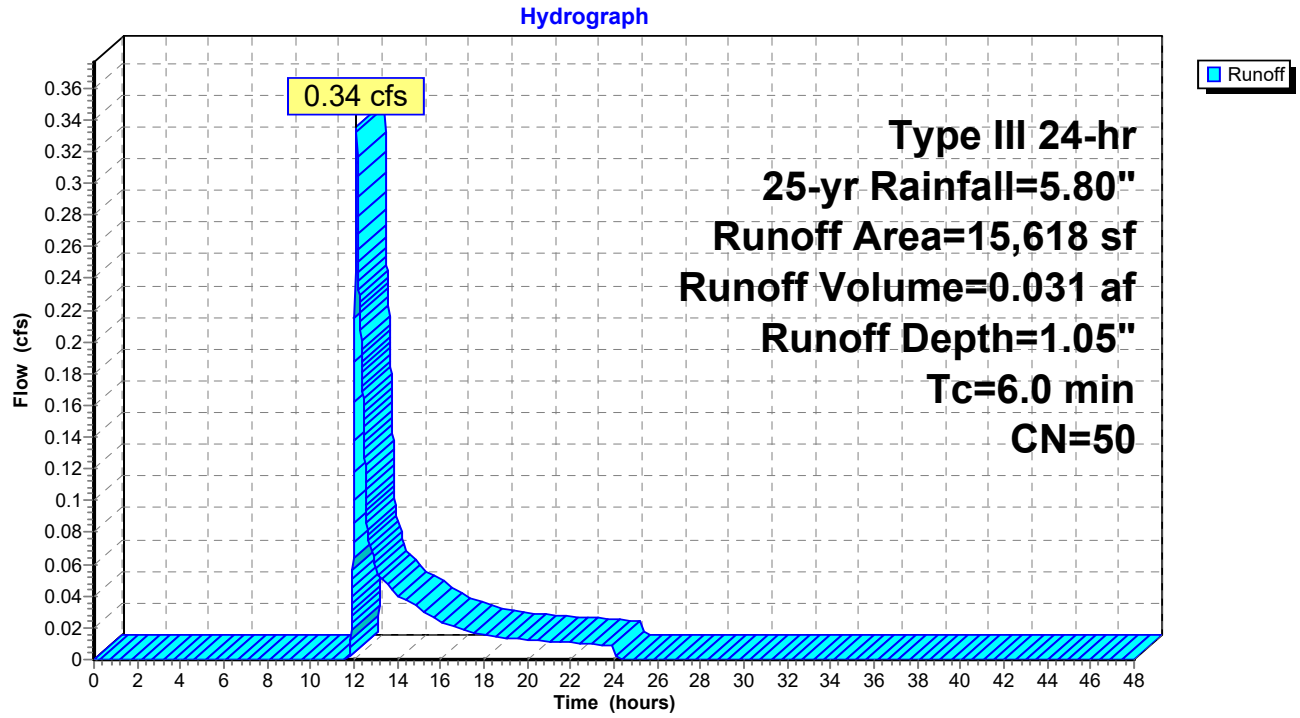
Runoff = 0.34 cfs @ 12.11 hrs, Volume= 0.031 af, Depth= 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
*	2,787	98	Paved Walkway
	12,831	39	>75% Grass cover, Good, HSG A
	15,618	50	Weighted Average
	12,831		82.16% Pervious Area
	2,787		17.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Subcat 2



Summary for Subcatchment 3S: Subcat 3

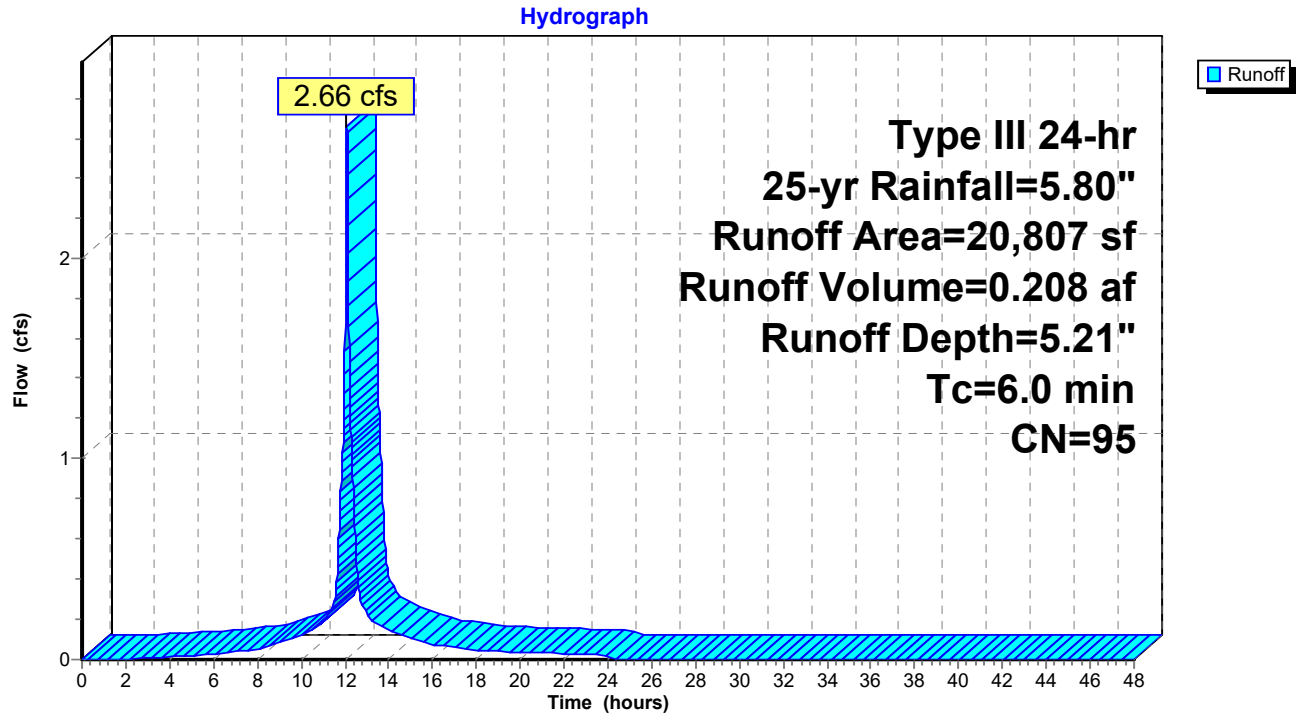
Runoff = 2.66 cfs @ 12.08 hrs, Volume= 0.208 af, Depth= 5.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
*	19,797	98	Roof
	1,010	39	>75% Grass cover, Good, HSG A
	20,807	95	Weighted Average
	1,010		4.85% Pervious Area
	19,797		95.15% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: Subcat 3



Summary for Subcatchment 4S: Subcat 4

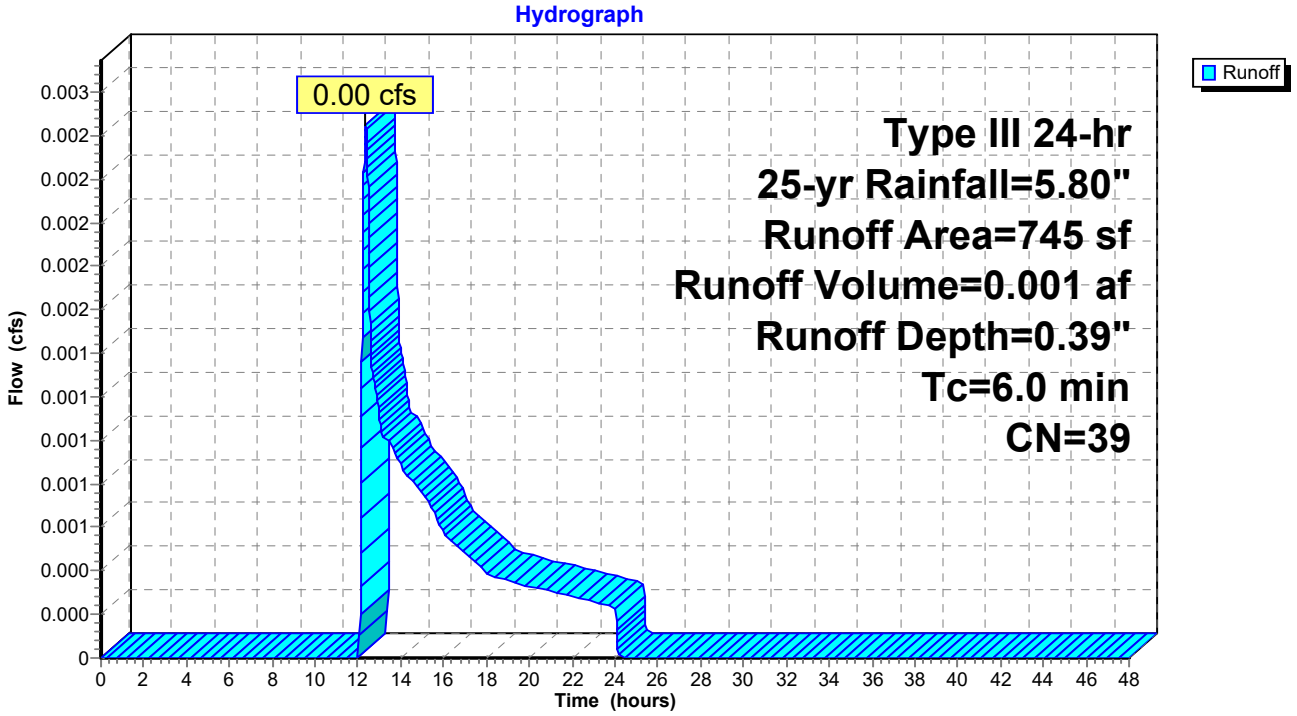
Runoff = 0.00 cfs @ 12.37 hrs, Volume= 0.001 af, Depth= 0.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
745	39	>75% Grass cover, Good, HSG A
745		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 4S: Subcat 4



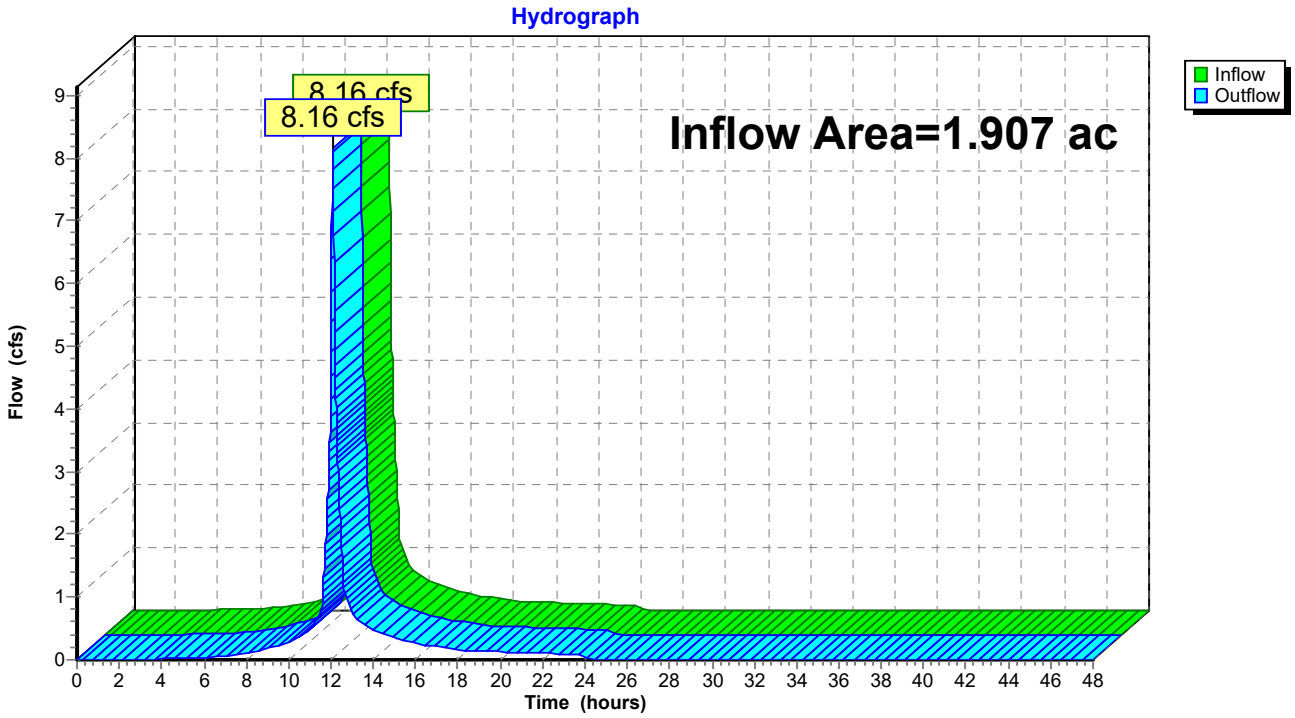
Summary for Reach 1R: Woodford Street

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.907 ac, 72.32% Impervious, Inflow Depth = 3.87" for 25-yr event
Inflow = 8.16 cfs @ 12.09 hrs, Volume= 0.615 af
Outflow = 8.16 cfs @ 12.09 hrs, Volume= 0.615 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 1R: Woodford Street



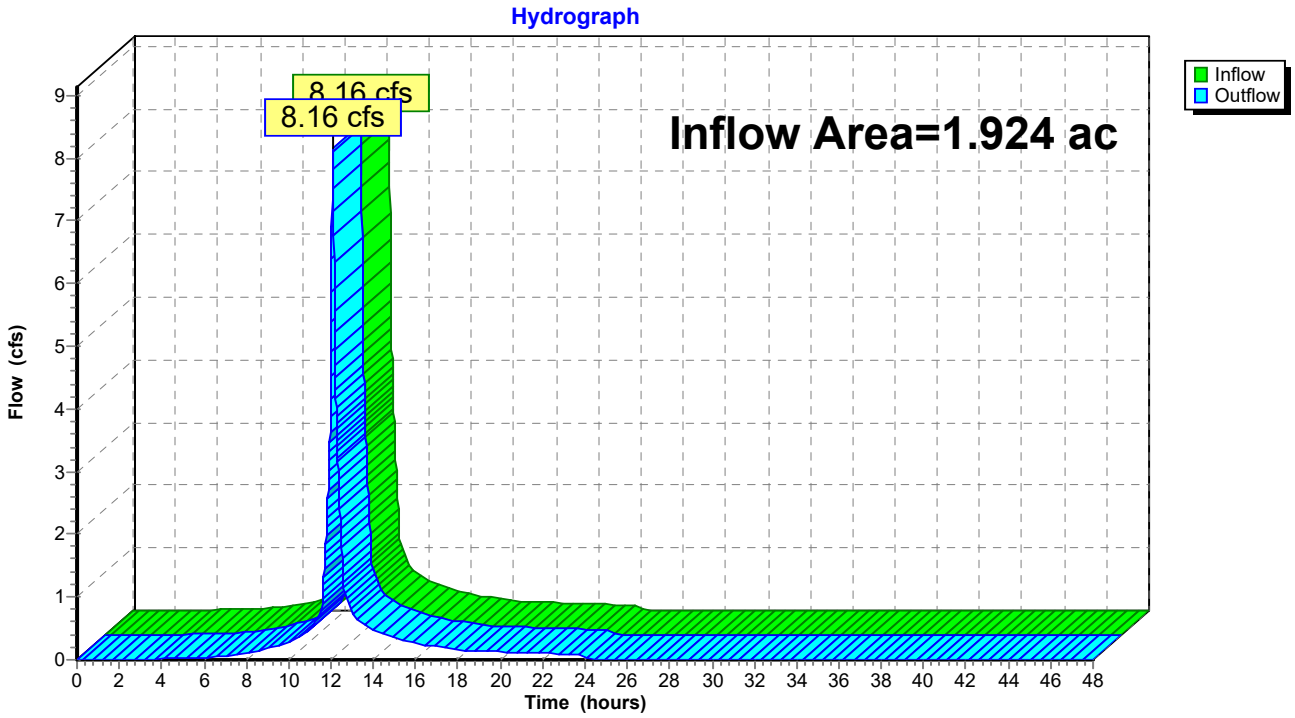
Summary for Reach 2R: Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.924 ac, 71.68% Impervious, Inflow Depth = 3.84" for 25-yr event
Inflow = 8.16 cfs @ 12.09 hrs, Volume= 0.616 af
Outflow = 8.16 cfs @ 12.09 hrs, Volume= 0.616 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Runoff



NOTE:

1. REFER TO STORMWATER REPORT AND SHEET C-30 FOR MORE INFORMATION.

P1 — STORMWATER POND

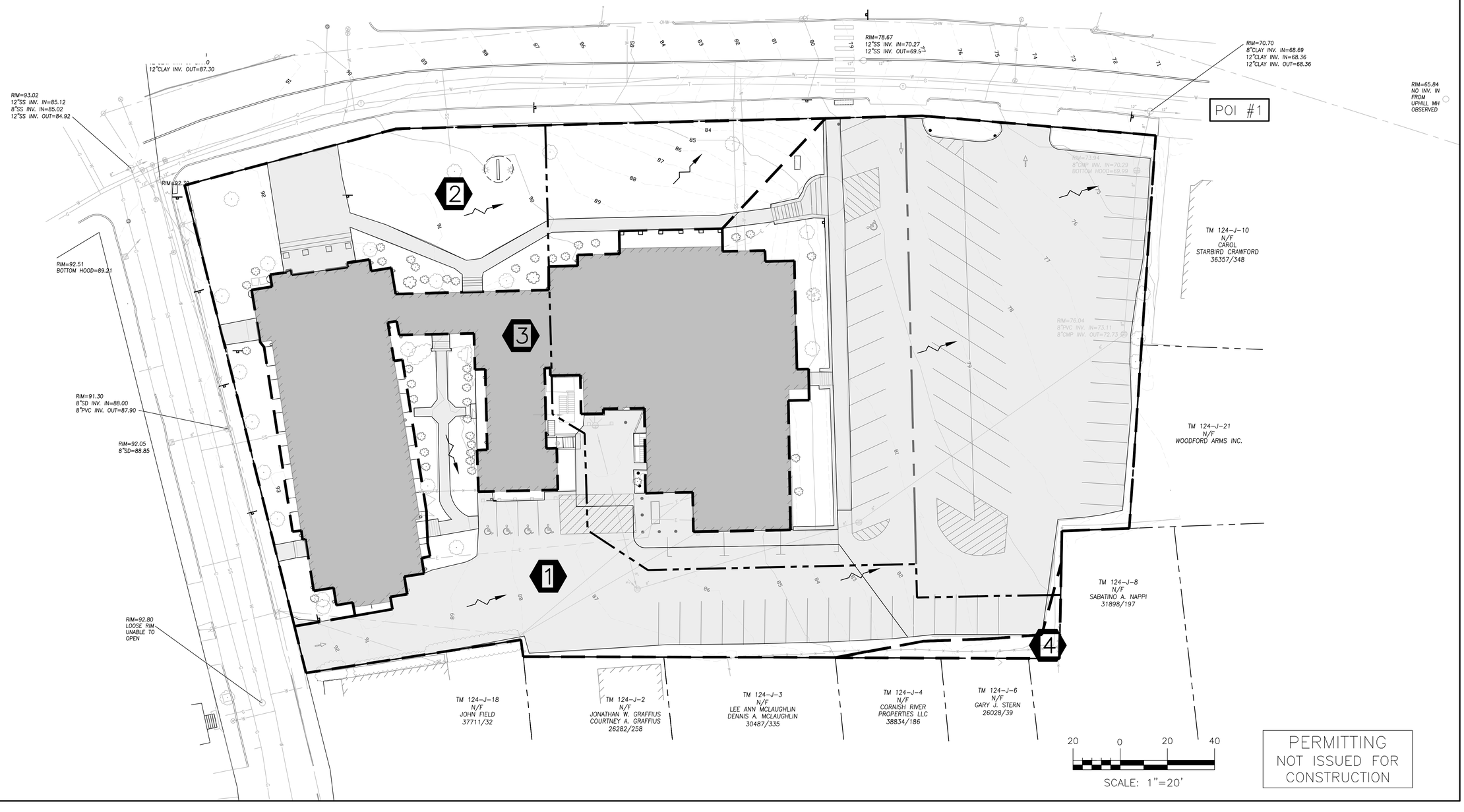
1 — SUBCATCHMENT NUMBER

SUBCATCHMENT EXTENTS

POI #1 — POINT OF INTEREST (POI)

FLOW LINE

N



PERMITTING
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
CSS	PFH	12/1/23
MAJOR SITE PLAN	PFH	12/21/23

DRAWING NAME: **PRE-DEVELOPMENT WATERSHED MAP**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT:
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

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ACORN ENGINEERING, INC.
P.O. BOX 3257 PORTLAND, MAINE 04104
(207) 775-2655

FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
PRE

NOTE:

1. REFER TO STORMWATER REPORT AND SHEET C-30 FOR MORE INFORMATION.

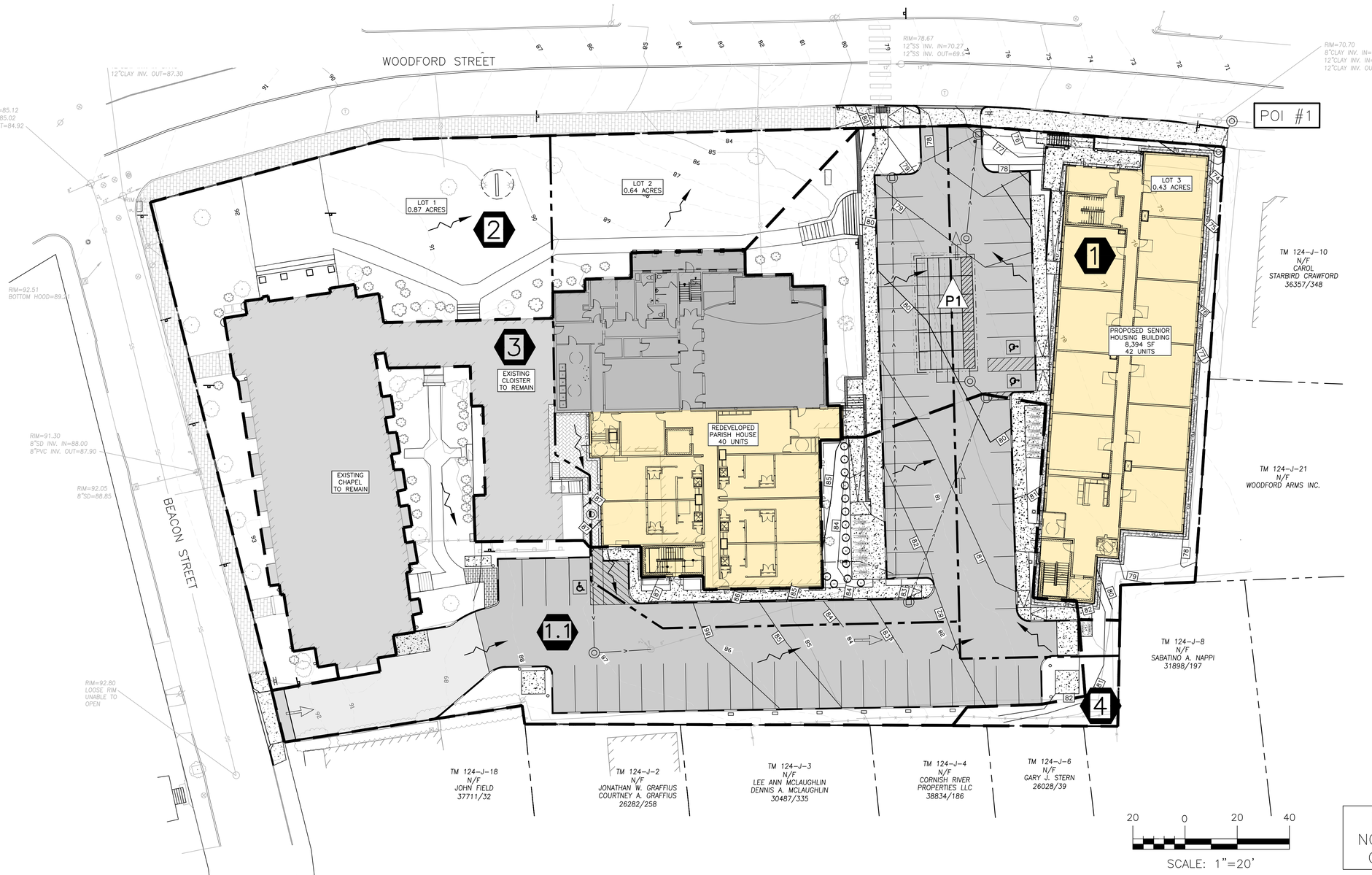
P1 — STORMWATER POND

1 — SUBCATCHMENT NUMBER

SUBCATCHMENT EXTENTS

POI #1 — POINT OF INTEREST (POI)

FLOW LINE



PERMITTING
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
CSS	PFH	12/1/23
MAJOR SITE PLAN	PFH	12/21/23
COMMENT RESPONSE	PFH	2/7/24

DRAWING NAME: **POST-DEVELOPMENT WATERSHED MAP**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT:
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

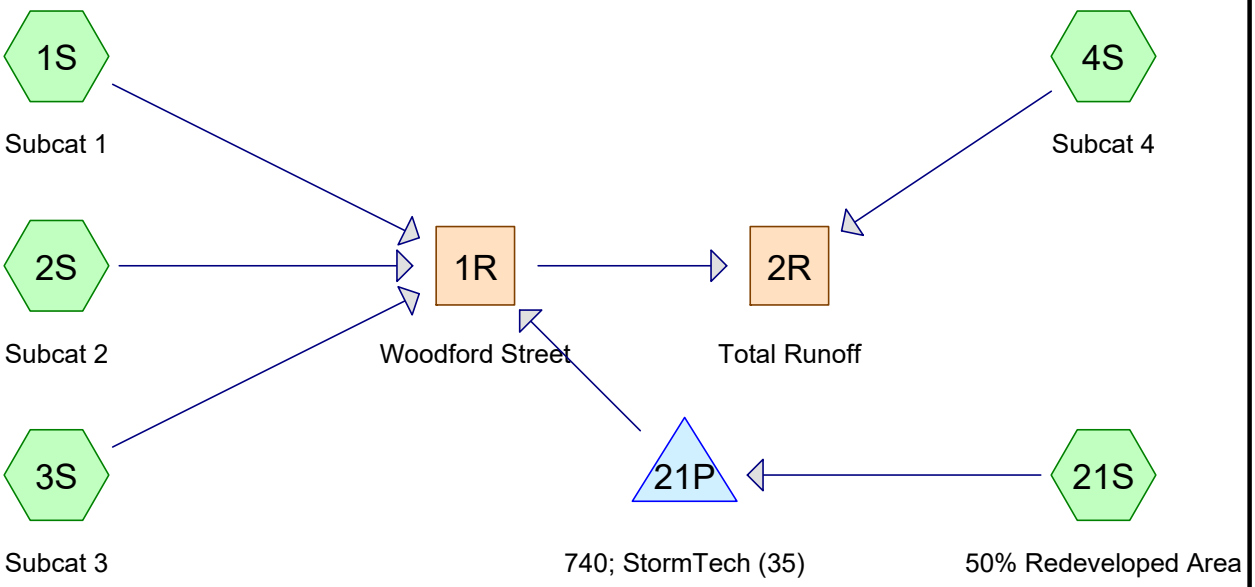
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FILE:	1200_CIVL
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CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
2/7/24

DRAWING NO.
POST



Subcat Reach Pond Link

Routing Diagram for POST_zms
Prepared by {enter your company name here}, Printed 12/22/2023
HydroCAD® 10.00-26 s/n 00620 © 2020 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.107	49	50-75% Grass cover, Fair, HSG A (1S, 3S)
0.437	39	>75% Grass cover, Good, HSG A (2S, 4S, 21S)
0.055	98	Concrete (1S)
0.017	98	Drip Edge Stone (1S)
0.026	98	Patio (3S)
0.064	98	Paved Walkway (2S)
0.471	98	Pavement (1S, 21S)
0.668	98	Roof (1S, 3S)
0.079	98	Walkways (21S)
1.924	**82**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.544	HSG A	1S, 2S, 3S, 4S, 21S
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
1.380	Other	1S, 2S, 3S, 21S
1.924		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.107	0.000	0.000	0.000	0.000	0.107	50-75% Grass cover, Fair	1S, 3S
0.437	0.000	0.000	0.000	0.000	0.437	>75% Grass cover, Good	2S, 4S, 21S
0.000	0.000	0.000	0.000	0.055	0.055	Concrete	1S
0.000	0.000	0.000	0.000	0.017	0.017	Drip Edge Stone	1S
0.000	0.000	0.000	0.000	0.026	0.026	Patio	3S
0.000	0.000	0.000	0.000	0.064	0.064	Paved Walkway	2S
0.000	0.000	0.000	0.000	0.471	0.471	Pavement	1S, 21S
0.000	0.000	0.000	0.000	0.668	0.668	Roof	1S, 3S
0.000	0.000	0.000	0.000	0.079	0.079	Walkways	21S
0.544	**0.000**	**0.000**	**0.000**	**1.380**	**1.924**	**TOTAL AREA**	

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Diam/Width (inches)	Height (inches)	Inside-Fill (inches)
1	21P	70.85	70.74	21.6	0.0051	0.012	12.0	0.0	0.0

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Subcat 1 Runoff Area=21,153 sf 80.36% Impervious Runoff Depth=1.91"
Tc=6.0 min CN=88 Runoff=1.08 cfs 0.077 af

Subcatchment 2S: Subcat 2 Runoff Area=15,618 sf 17.84% Impervious Runoff Depth=0.11"
Tc=6.0 min CN=50 Runoff=0.01 cfs 0.003 af

Subcatchment 3S: Subcat 3 Runoff Area=22,543 sf 97.80% Impervious Runoff Depth=2.76"
Tc=6.0 min CN=97 Runoff=1.53 cfs 0.119 af

Subcatchment 4S: Subcat 4 Runoff Area=965 sf 0.00% Impervious Runoff Depth=0.00"
Tc=6.0 min CN=39 Runoff=0.00 cfs 0.000 af

Subcatchment 21S: 50% Redeveloped Area Runoff Area=23,513 sf 77.72% Impervious Runoff Depth=1.67"
Tc=6.0 min CN=85 Runoff=1.06 cfs 0.075 af

Reach 1R: Woodford Street Inflow=2.66 cfs 0.275 af
Outflow=2.66 cfs 0.275 af

Reach 2R: Total Runoff Inflow=2.66 cfs 0.275 af
Outflow=2.66 cfs 0.275 af

Pond 21P: 740; StormTech (35) Peak Elev=75.25' Storage=1,815 cf Inflow=1.06 cfs 0.075 af
Outflow=0.05 cfs 0.075 af

Total Runoff Area = 1.924 ac Runoff Volume = 0.275 af Average Runoff Depth = 1.71"
28.27% Pervious = 0.544 ac 71.73% Impervious = 1.380 ac

Summary for Subcatchment 1S: Subcat 1

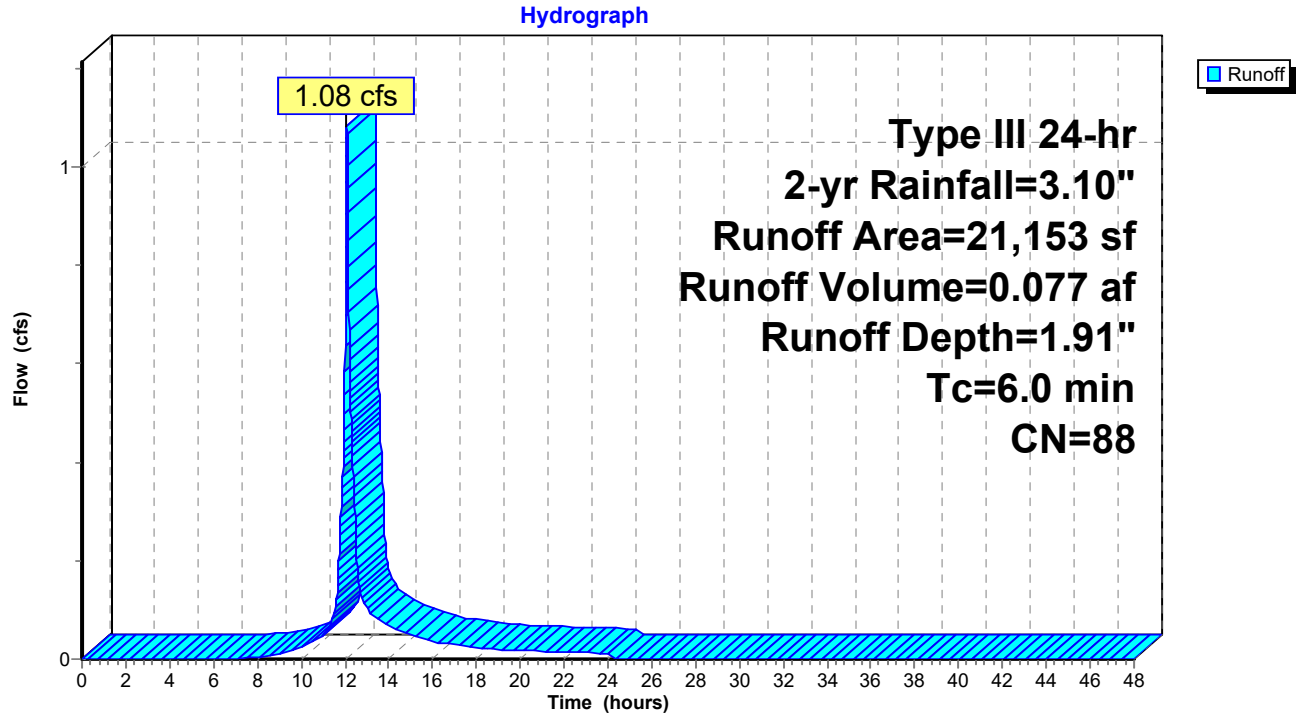
Runoff = 1.08 cfs @ 12.09 hrs, Volume= 0.077 af, Depth= 1.91"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

	Area (sf)	CN	Description
*	8,205	98	Roof
*	5,665	98	Pavement
*	2,409	98	Concrete
*	719	98	Drip Edge Stone
*	4,155	49	50-75% Grass cover, Fair, HSG A
	21,153	88	Weighted Average
	4,155		19.64% Pervious Area
	16,998		80.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Subcat 1



Summary for Subcatchment 2S: Subcat 2

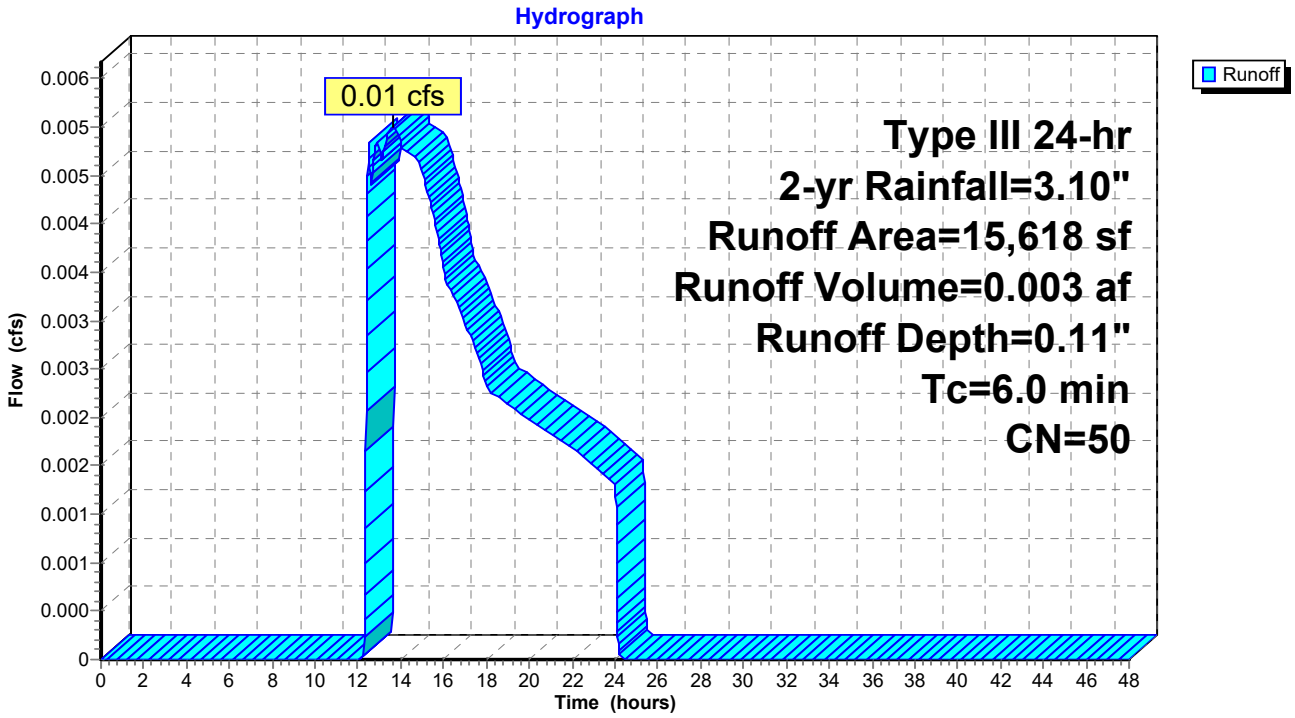
Runoff = 0.01 cfs @ 13.62 hrs, Volume= 0.003 af, Depth= 0.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

	Area (sf)	CN	Description
*	2,787	98	Paved Walkway
	12,831	39	>75% Grass cover, Good, HSG A
	15,618	50	Weighted Average
	12,831		82.16% Pervious Area
	2,787		17.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Subcat 2



Summary for Subcatchment 3S: Subcat 3

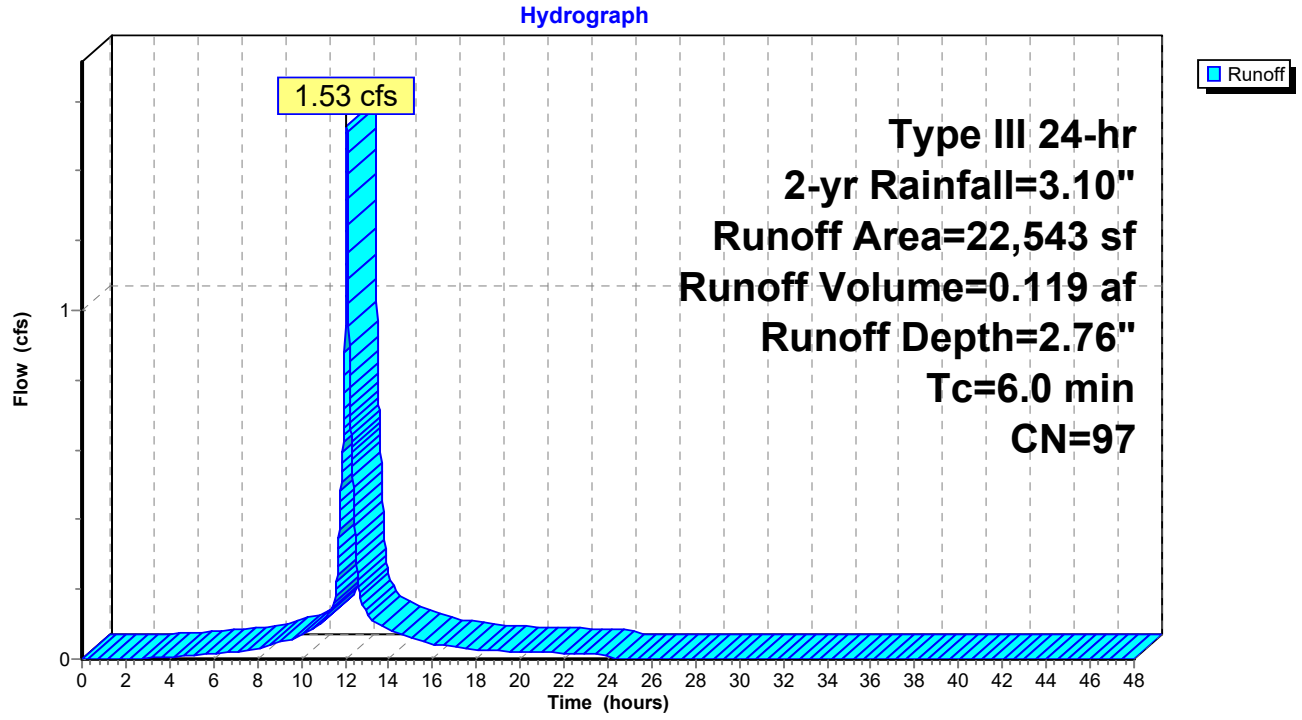
Runoff = 1.53 cfs @ 12.08 hrs, Volume= 0.119 af, Depth= 2.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

	Area (sf)	CN	Description
*	20,900	98	Roof
*	1,148	98	Patio
*	495	49	50-75% Grass cover, Fair, HSG A
	22,543	97	Weighted Average
	495		2.20% Pervious Area
	22,048		97.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: Subcat 3



Summary for Subcatchment 4S: Subcat 4

[45] Hint: Runoff=Zero

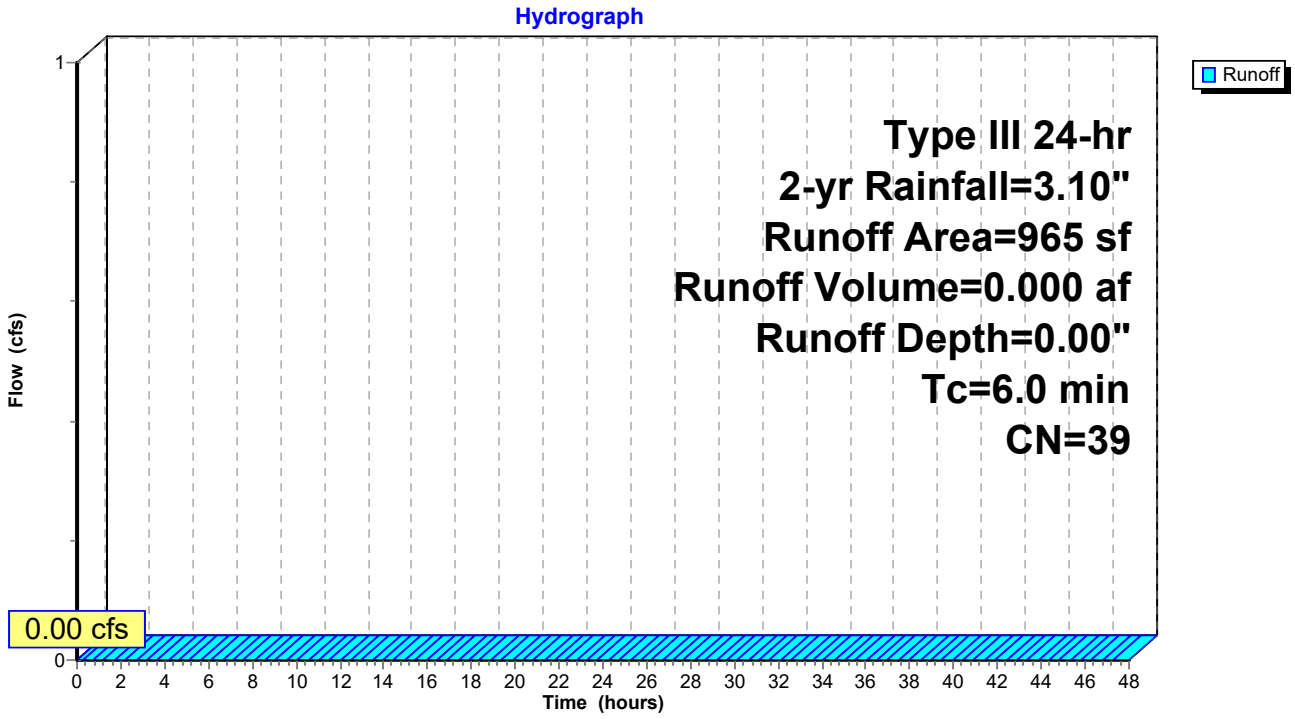
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

Area (sf)	CN	Description
965	39	>75% Grass cover, Good, HSG A
965		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 4S: Subcat 4



Summary for Subcatchment 21S: 50% Redeveloped Area

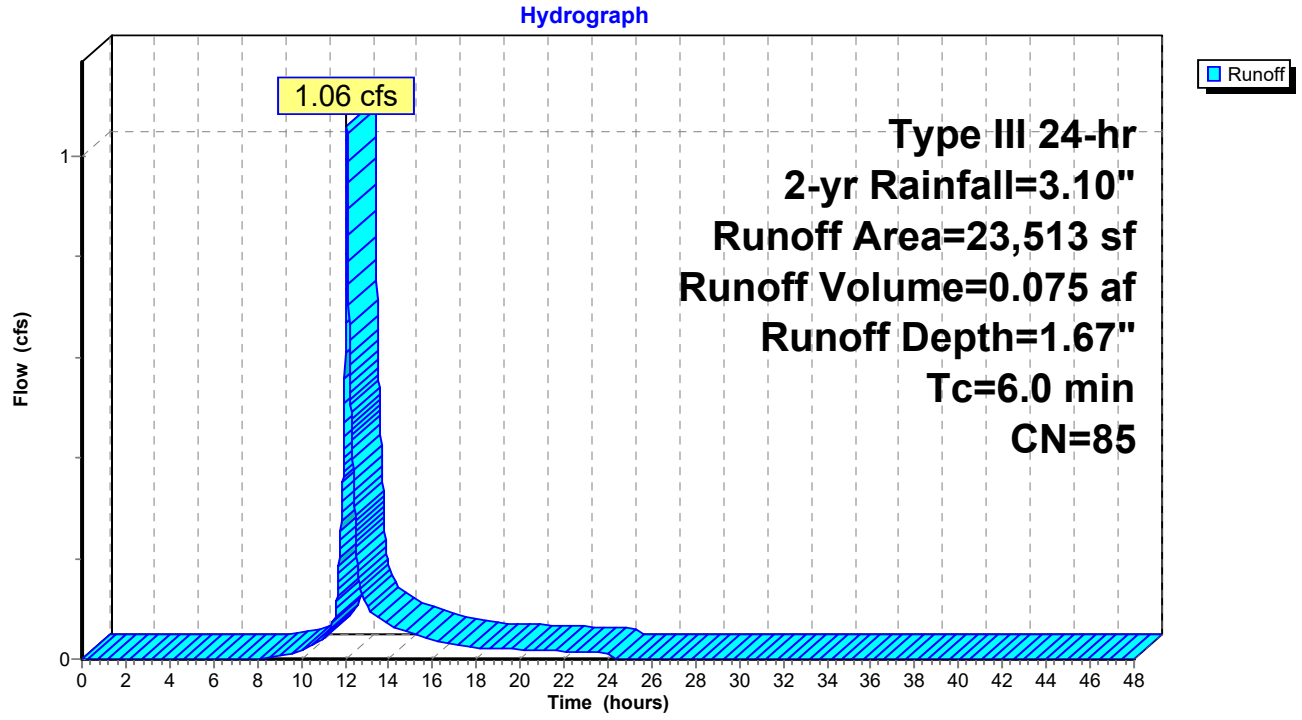
Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.075 af, Depth= 1.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 2-yr Rainfall=3.10"

	Area (sf)	CN	Description
*	14,841	98	Pavement
*	3,434	98	Walkways
	5,238	39	>75% Grass cover, Good, HSG A
	23,513	85	Weighted Average
	5,238		22.28% Pervious Area
	18,275		77.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 21S: 50% Redeveloped Area



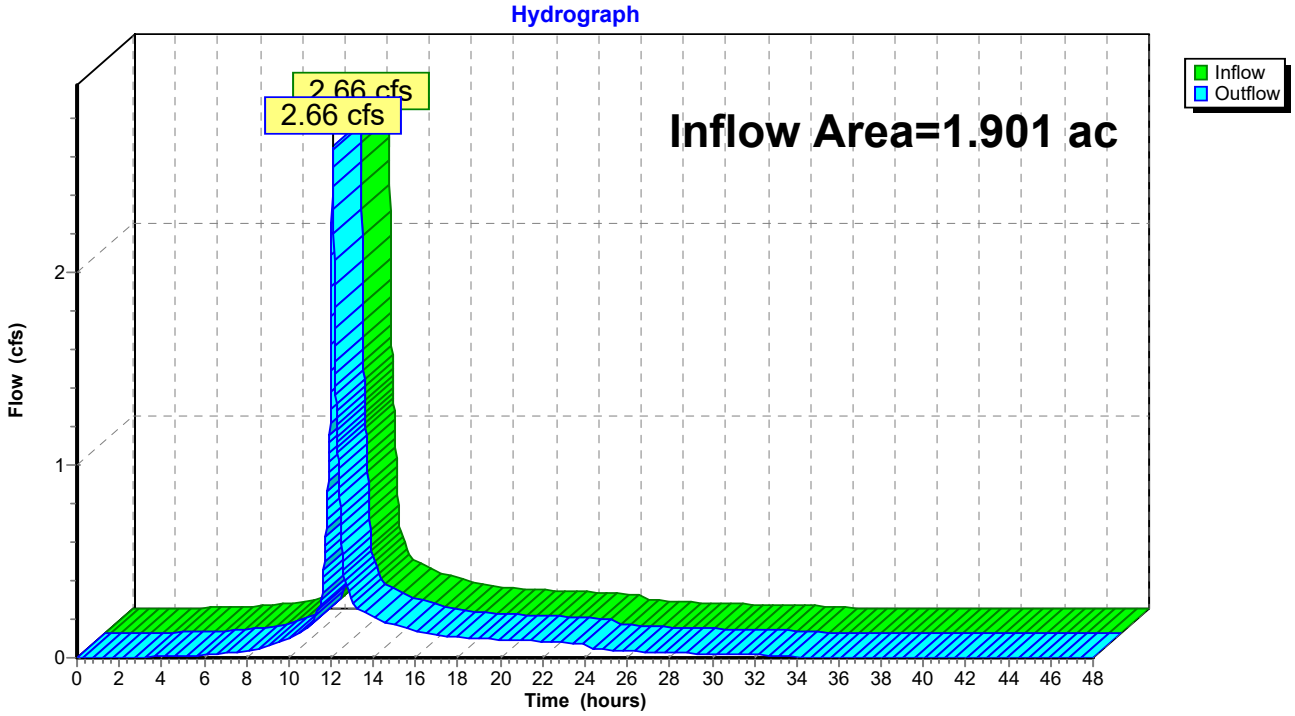
Summary for Reach 1R: Woodford Street

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.901 ac, 72.57% Impervious, Inflow Depth = 1.73" for 2-yr event
Inflow = 2.66 cfs @ 12.09 hrs, Volume= 0.275 af
Outflow = 2.66 cfs @ 12.09 hrs, Volume= 0.275 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 1R: Woodford Street



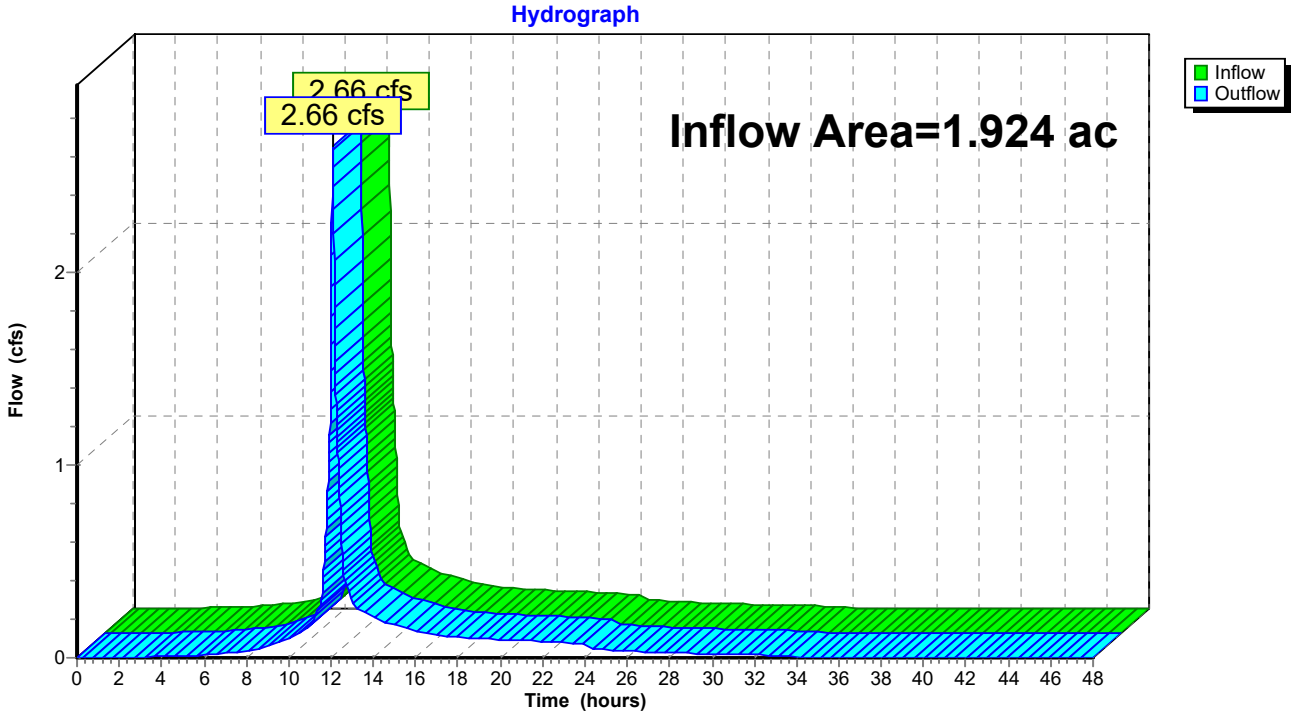
Summary for Reach 2R: Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.924 ac, 71.73% Impervious, Inflow Depth = 1.71" for 2-yr event
Inflow = 2.66 cfs @ 12.09 hrs, Volume= 0.275 af
Outflow = 2.66 cfs @ 12.09 hrs, Volume= 0.275 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Runoff



Summary for Pond 21P: 740; StormTech (35)

[44] Hint: Outlet device #2 is below defined storage

Inflow Area = 0.540 ac, 77.72% Impervious, Inflow Depth = 1.67" for 2-yr event
Inflow = 1.06 cfs @ 12.09 hrs, Volume= 0.075 af
Outflow = 0.05 cfs @ 14.86 hrs, Volume= 0.075 af, Atten= 95%, Lag= 166.2 min
Primary = 0.05 cfs @ 14.86 hrs, Volume= 0.075 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 75.25' @ 14.86 hrs Surf.Area= 4,308 sf Storage= 1,815 cf
Flood Elev= 78.70' Surf.Area= 4,341 sf Storage= 3,384 cf

Plug-Flow detention time= 390.1 min calculated for 0.075 af (100% of inflow)
Center-of-Mass det. time= 390.2 min (1,217.7 - 827.5)

Volume	Invert	Avail.Storage	Storage Description
#1	71.00'	416 cf	**Crushed Stone (Prismatic)**Listed below (Recalc) 1,040 cf Overall x 40.0% Voids
#2	72.00'	156 cf	**Course Gravel Transition Layer (Prismatic)**Listed below (Recalc) 520 cf Overall x 30.0% Voids
#3	72.50'	312 cf	**Sand Filter (Prismatic)**Listed below (Recalc) 1,560 cf Overall x 20.0% Voids
#4A	74.00'	1,122 cf	**25.25'W x 46.34'L x 3.50'H Field A Z=0.1** 4,183 cf Overall - 1,378 cf Embedded = 2,805 cf x 40.0% Voids
#5A	74.50'	1,378 cf	**ADS_StormTech SC-740 +Cap** x 30 Inside #4 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 30 Chambers in 5 Rows
		3,384 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
71.00	1,040	0	0
72.00	1,040	1,040	1,040

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
72.00	1,040	0	0
72.50	1,040	520	520

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
72.50	1,040	0	0
74.00	1,040	1,560	1,560

Device	Routing	Invert	Outlet Devices
#1	Primary	70.85'	**12.0" Round 12" SD** L= 21.6' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 70.85' / 70.74' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	70.85'	**1.0" Vert. Orifice on OCS Outlet** C= 0.600
#3	Device 1	76.55'	**12.0" Horiz. Bypass Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.05 cfs @ 14.86 hrs HW=75.25' (Free Discharge)
└**1=12" SD** (Passes 0.05 cfs of 5.89 cfs potential flow)
  ├**2=Orifice on OCS Outlet** (Orifice Controls 0.05 cfs @ 10.05 fps)
  └**3=Bypass Orifice** (Controls 0.00 cfs)

Pond 21P: 740; StormTech (35) - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

6 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 44.34' Row Length +12.0" End Stone x 2 = 46.34' Base Length
5 Rows x 51.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 25.25' Base Width
6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

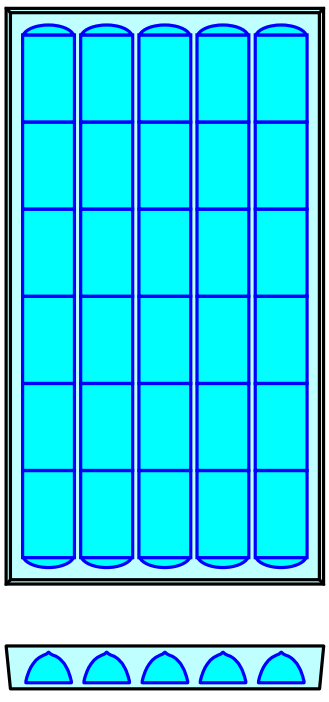
0.1 '/' Side-Z x Height = 4.2" Flare/Side
Base Length + Flare x 2 = 47.04' Top Length
Base Width + Flare x 2 = 25.95' Top Width

30 Chambers x 45.9 cf = 1,378.2 cf Chamber Storage

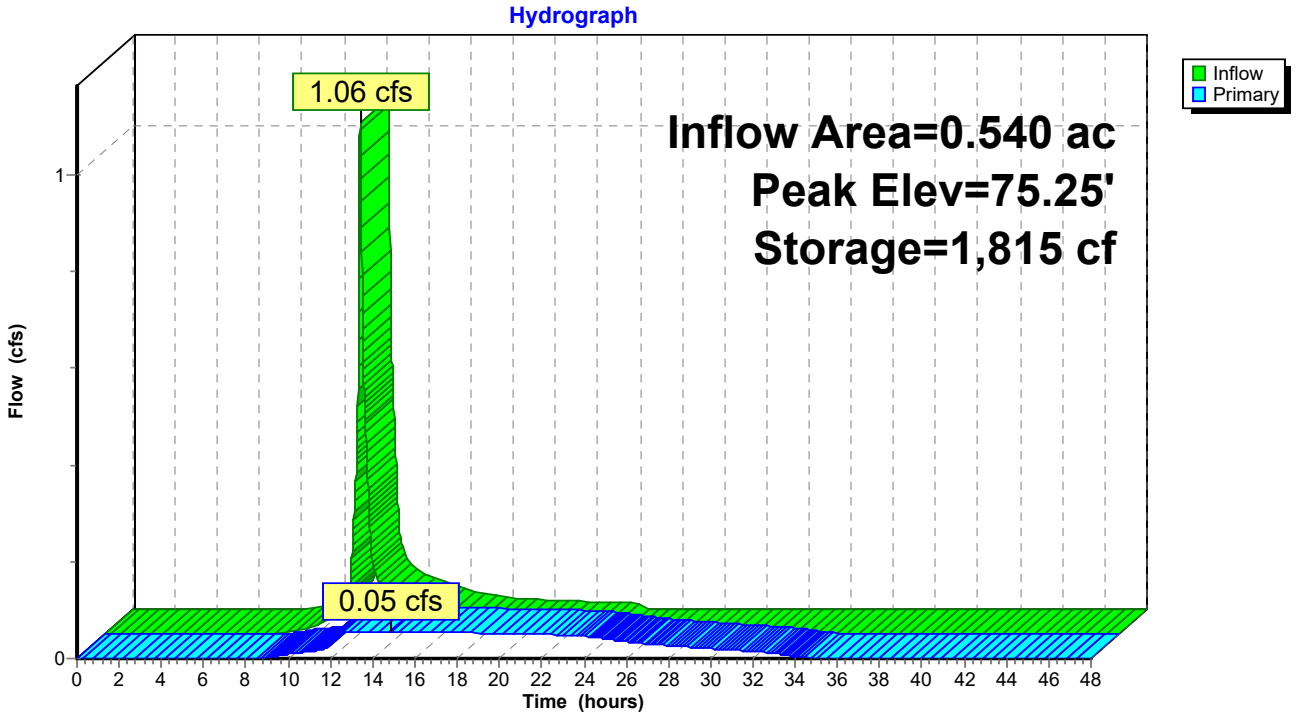
4,183.3 cf Field - 1,378.2 cf Chambers = 2,805.1 cf Stone x 40.0% Voids = 1,122.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,500.2 cf = 0.057 af
Overall Storage Efficiency = 59.8%
Overall System Size = 46.34' x 25.25' x 3.50'

30 Chambers
154.9 cy Field
103.9 cy Stone



Pond 21P: 740; StormTech (35)



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Subcat 1 Runoff Area=21,153 sf 80.36% Impervious Runoff Depth=3.29"
Tc=6.0 min CN=88 Runoff=1.84 cfs 0.133 af

Subcatchment 2S: Subcat 2 Runoff Area=15,618 sf 17.84% Impervious Runoff Depth=0.54"
Tc=6.0 min CN=50 Runoff=0.12 cfs 0.016 af

Subcatchment 3S: Subcat 3 Runoff Area=22,543 sf 97.80% Impervious Runoff Depth=4.25"
Tc=6.0 min CN=97 Runoff=2.31 cfs 0.183 af

Subcatchment 4S: Subcat 4 Runoff Area=965 sf 0.00% Impervious Runoff Depth=0.13"
Tc=6.0 min CN=39 Runoff=0.00 cfs 0.000 af

Subcatchment 21S: 50% Redeveloped Area Runoff Area=23,513 sf 77.72% Impervious Runoff Depth=3.00"
Tc=6.0 min CN=85 Runoff=1.89 cfs 0.135 af

Reach 1R: Woodford Street Inflow=4.29 cfs 0.467 af
Outflow=4.29 cfs 0.467 af

Reach 2R: Total Runoff Inflow=4.29 cfs 0.468 af
Outflow=4.29 cfs 0.468 af

Pond 21P: 740; StormTech (35) Peak Elev=76.65' Storage=2,947 cf Inflow=1.89 cfs 0.135 af
Outflow=0.38 cfs 0.135 af

Total Runoff Area = 1.924 ac Runoff Volume = 0.468 af Average Runoff Depth = 2.92"
28.27% Pervious = 0.544 ac 71.73% Impervious = 1.380 ac

Summary for Subcatchment 1S: Subcat 1

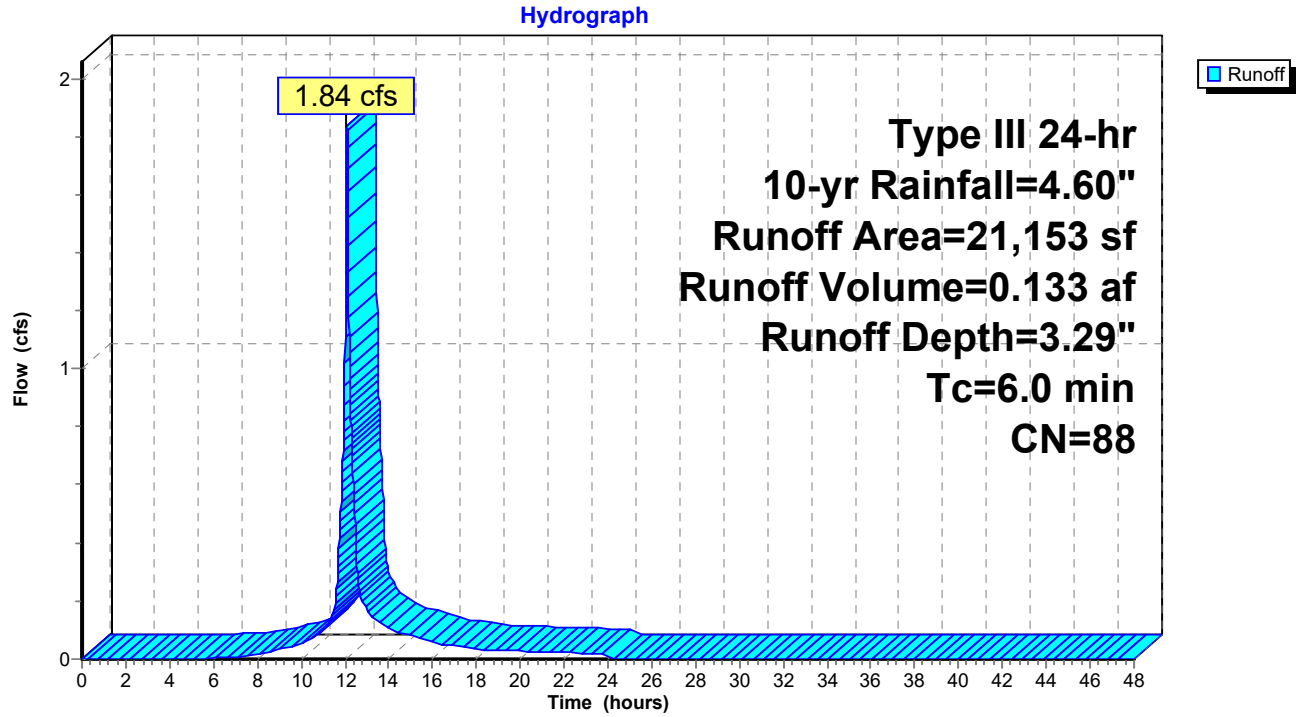
Runoff = 1.84 cfs @ 12.09 hrs, Volume= 0.133 af, Depth= 3.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

	Area (sf)	CN	Description
*	8,205	98	Roof
*	5,665	98	Pavement
*	2,409	98	Concrete
*	719	98	Drip Edge Stone
*	4,155	49	50-75% Grass cover, Fair, HSG A
	21,153	88	Weighted Average
	4,155		19.64% Pervious Area
	16,998		80.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Subcat 1



Summary for Subcatchment 2S: Subcat 2

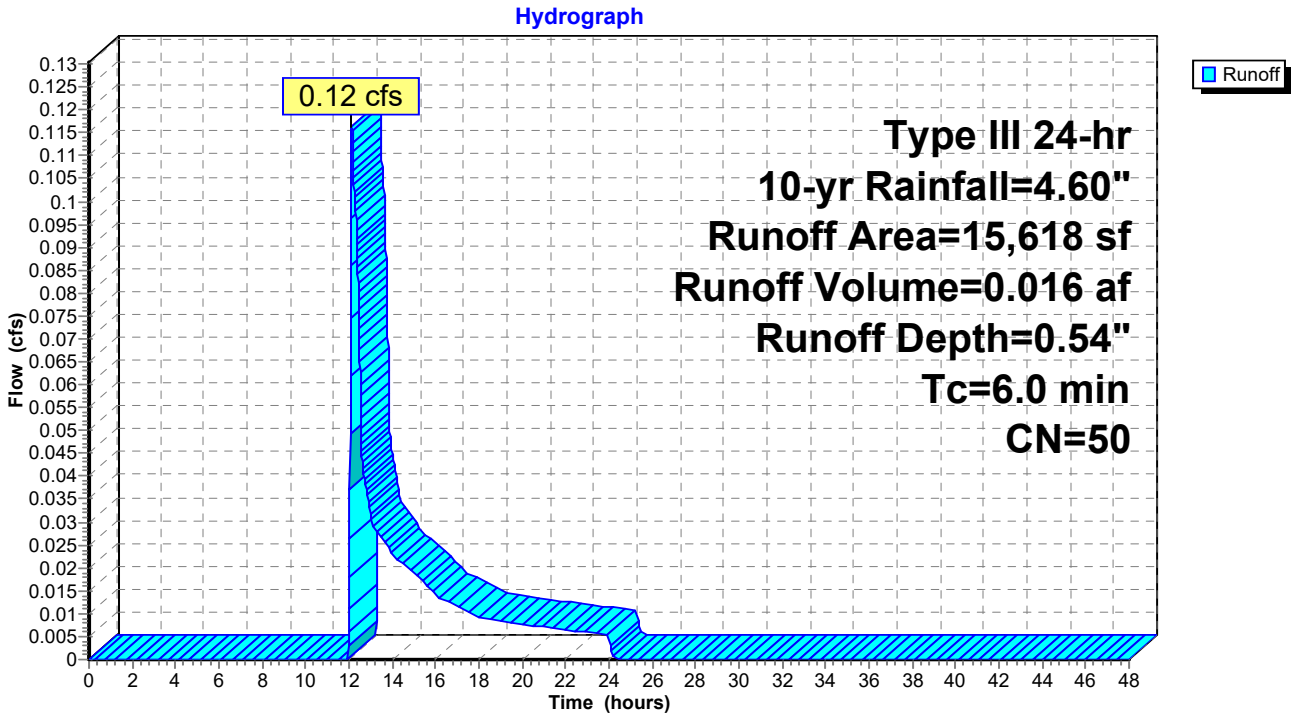
Runoff = 0.12 cfs @ 12.14 hrs, Volume= 0.016 af, Depth= 0.54"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

	Area (sf)	CN	Description
*	2,787	98	Paved Walkway
	12,831	39	>75% Grass cover, Good, HSG A
	15,618	50	Weighted Average
	12,831		82.16% Pervious Area
	2,787		17.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Subcat 2



Summary for Subcatchment 3S: Subcat 3

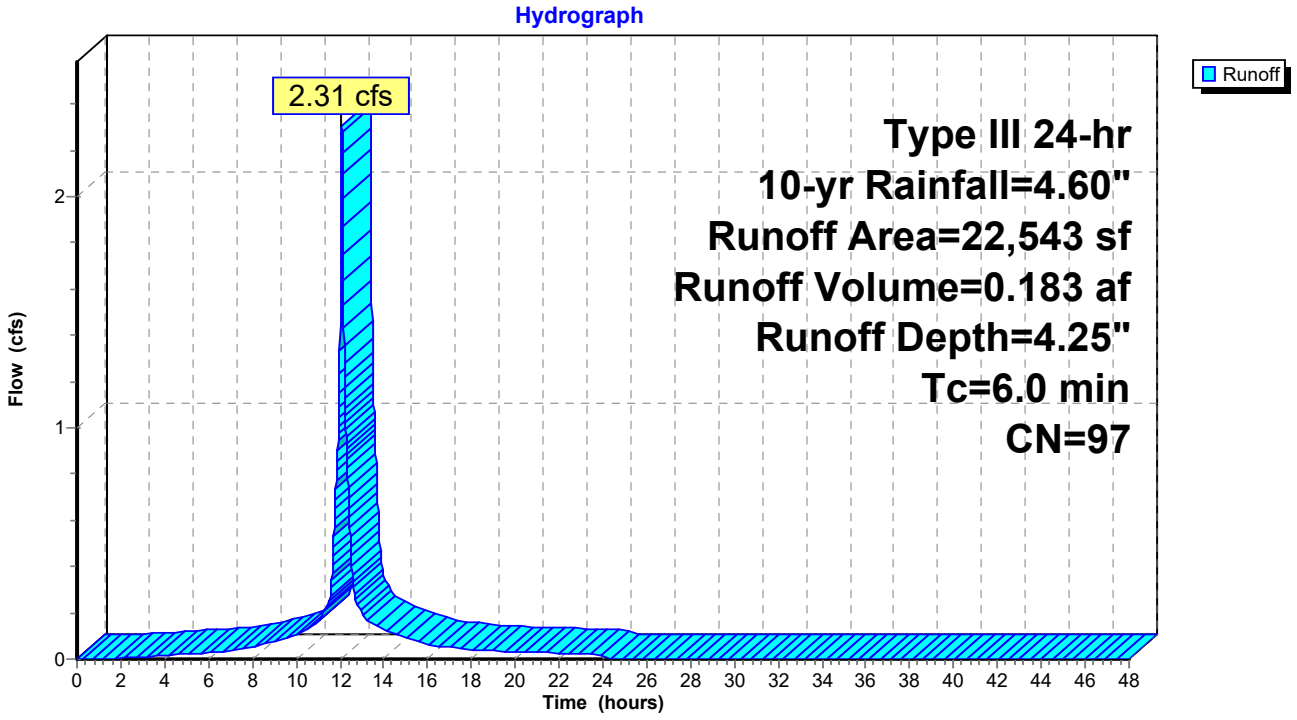
Runoff = 2.31 cfs @ 12.08 hrs, Volume= 0.183 af, Depth= 4.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

	Area (sf)	CN	Description
*	20,900	98	Roof
*	1,148	98	Patio
*	495	49	50-75% Grass cover, Fair, HSG A
	22,543	97	Weighted Average
	495		2.20% Pervious Area
	22,048		97.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: Subcat 3



Summary for Subcatchment 4S: Subcat 4

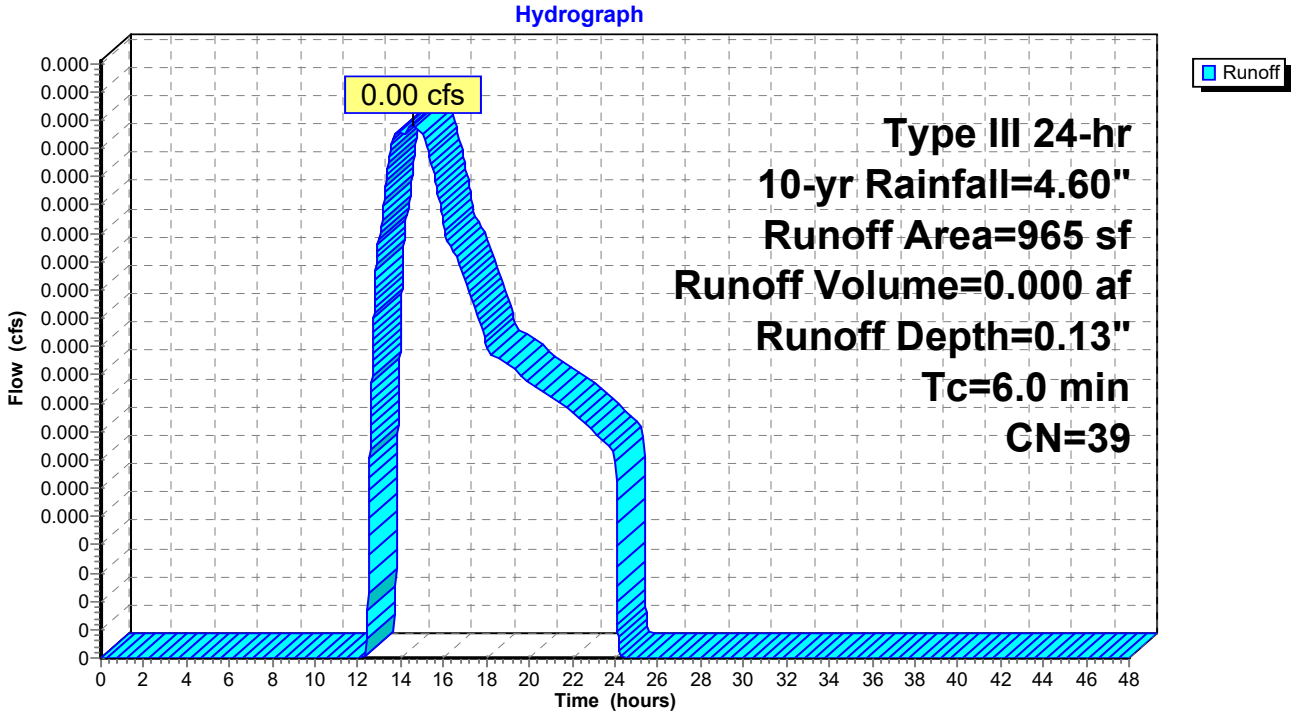
Runoff = 0.00 cfs @ 14.58 hrs, Volume= 0.000 af, Depth= 0.13"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

Area (sf)	CN	Description
965	39	>75% Grass cover, Good, HSG A
965		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 4S: Subcat 4



Summary for Subcatchment 21S: 50% Redeveloped Area

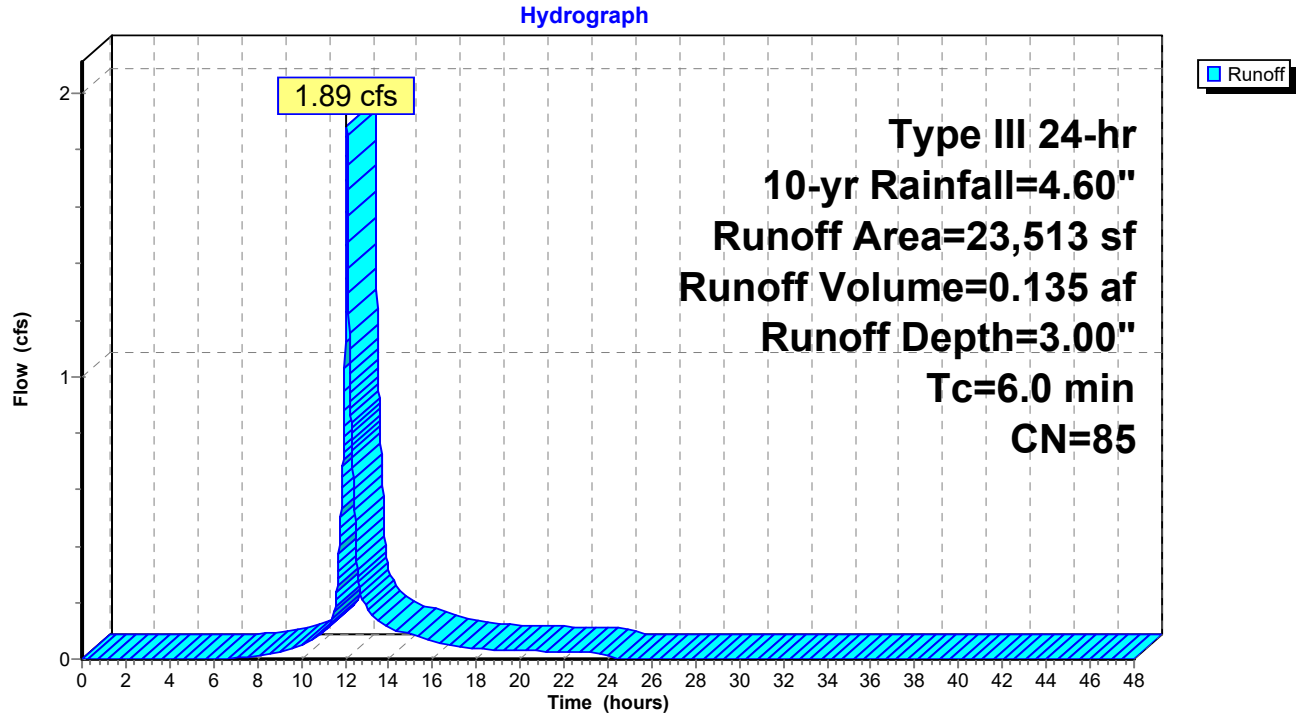
Runoff = 1.89 cfs @ 12.09 hrs, Volume= 0.135 af, Depth= 3.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-yr Rainfall=4.60"

	Area (sf)	CN	Description
*	14,841	98	Pavement
*	3,434	98	Walkways
	5,238	39	>75% Grass cover, Good, HSG A
	23,513	85	Weighted Average
	5,238		22.28% Pervious Area
	18,275		77.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 21S: 50% Redeveloped Area



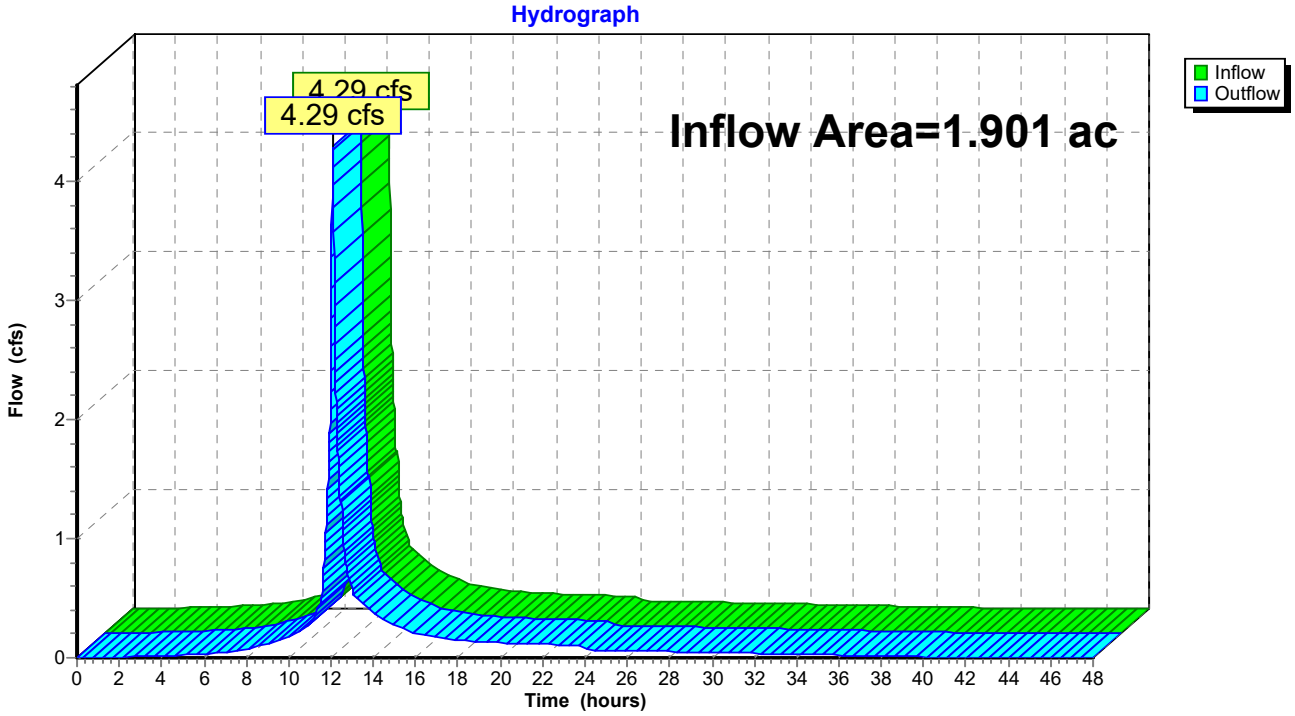
Summary for Reach 1R: Woodford Street

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.901 ac, 72.57% Impervious, Inflow Depth = 2.95" for 10-yr event
Inflow = 4.29 cfs @ 12.09 hrs, Volume= 0.467 af
Outflow = 4.29 cfs @ 12.09 hrs, Volume= 0.467 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 1R: Woodford Street



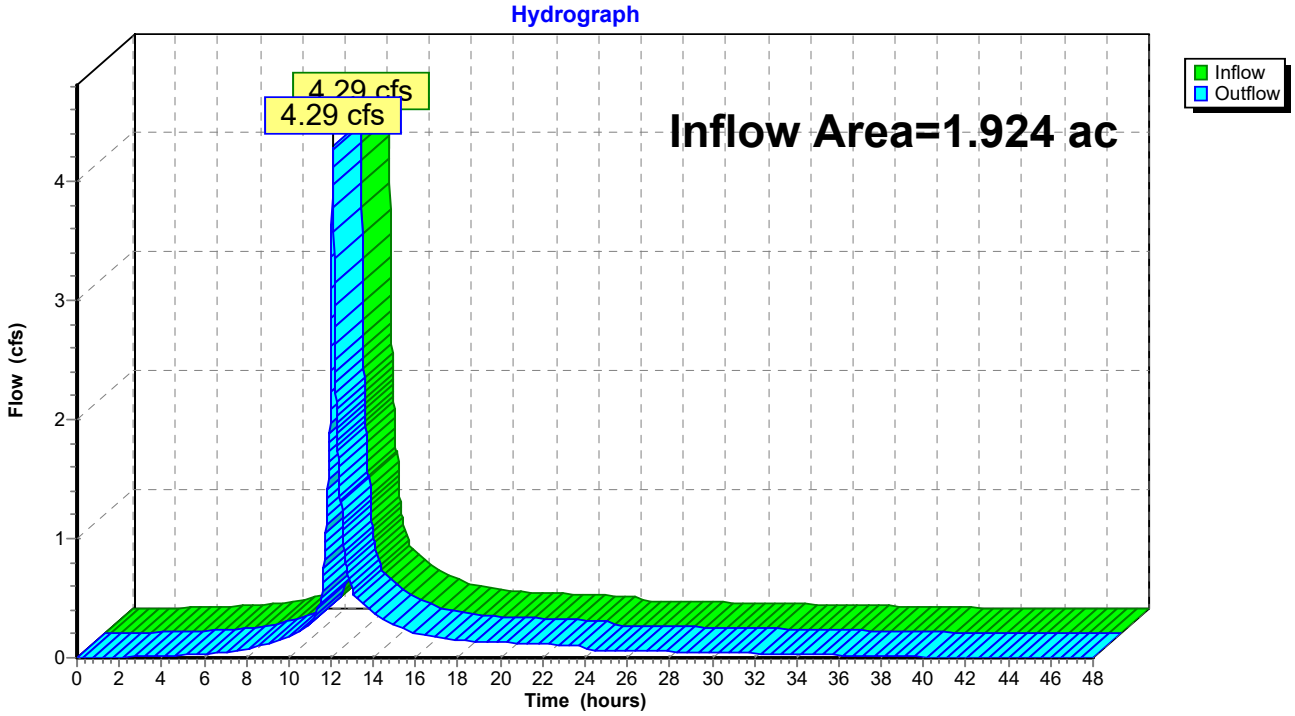
Summary for Reach 2R: Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.924 ac, 71.73% Impervious, Inflow Depth = 2.92" for 10-yr event
Inflow = 4.29 cfs @ 12.09 hrs, Volume= 0.468 af
Outflow = 4.29 cfs @ 12.09 hrs, Volume= 0.468 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Runoff



Summary for Pond 21P: 740; StormTech (35)

[44] Hint: Outlet device #2 is below defined storage

Inflow Area = 0.540 ac, 77.72% Impervious, Inflow Depth = 3.00" for 10-yr event
Inflow = 1.89 cfs @ 12.09 hrs, Volume= 0.135 af
Outflow = 0.38 cfs @ 12.52 hrs, Volume= 0.135 af, Atten= 80%, Lag= 26.2 min
Primary = 0.38 cfs @ 12.52 hrs, Volume= 0.135 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 76.65' @ 12.52 hrs Surf.Area= 4,328 sf Storage= 2,947 cf
Flood Elev= 78.70' Surf.Area= 4,341 sf Storage= 3,384 cf

Plug-Flow detention time= 464.9 min calculated for 0.135 af (100% of inflow)
Center-of-Mass det. time= 464.8 min (1,275.6 - 810.8)

Volume	Invert	Avail.Storage	Storage Description
#1	71.00'	416 cf	**Crushed Stone (Prismatic)**Listed below (Recalc) 1,040 cf Overall x 40.0% Voids
#2	72.00'	156 cf	**Course Gravel Transition Layer (Prismatic)**Listed below (Recalc) 520 cf Overall x 30.0% Voids
#3	72.50'	312 cf	**Sand Filter (Prismatic)**Listed below (Recalc) 1,560 cf Overall x 20.0% Voids
#4A	74.00'	1,122 cf	**25.25'W x 46.34'L x 3.50'H Field A Z=0.1** 4,183 cf Overall - 1,378 cf Embedded = 2,805 cf x 40.0% Voids
#5A	74.50'	1,378 cf	**ADS_StormTech SC-740 +Cap** x 30 Inside #4 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 30 Chambers in 5 Rows
		3,384 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
71.00	1,040	0	0
72.00	1,040	1,040	1,040

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
72.00	1,040	0	0
72.50	1,040	520	520

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
72.50	1,040	0	0
74.00	1,040	1,560	1,560

Device	Routing	Invert	Outlet Devices
#1	Primary	70.85'	**12.0" Round 12" SD** L= 21.6' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 70.85' / 70.74' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	70.85'	**1.0" Vert. Orifice on OCS Outlet** C= 0.600
#3	Device 1	76.55'	**12.0" Horiz. Bypass Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.38 cfs @ 12.52 hrs HW=76.65' (Free Discharge)
└─**1=12" SD** (Passes 0.38 cfs of 6.87 cfs potential flow)
  ├─**2=Orifice on OCS Outlet** (Orifice Controls 0.06 cfs @ 11.55 fps)
  └─**3=Bypass Orifice** (Weir Controls 0.31 cfs @ 1.02 fps)

Pond 21P: 740; StormTech (35) - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

6 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 44.34' Row Length +12.0" End Stone x 2 = 46.34' Base Length
5 Rows x 51.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 25.25' Base Width
6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

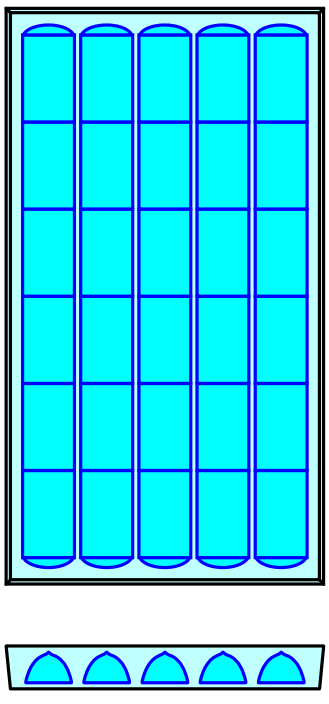
0.1 '/' Side-Z x Height = 4.2" Flare/Side
Base Length + Flare x 2 = 47.04' Top Length
Base Width + Flare x 2 = 25.95' Top Width

30 Chambers x 45.9 cf = 1,378.2 cf Chamber Storage

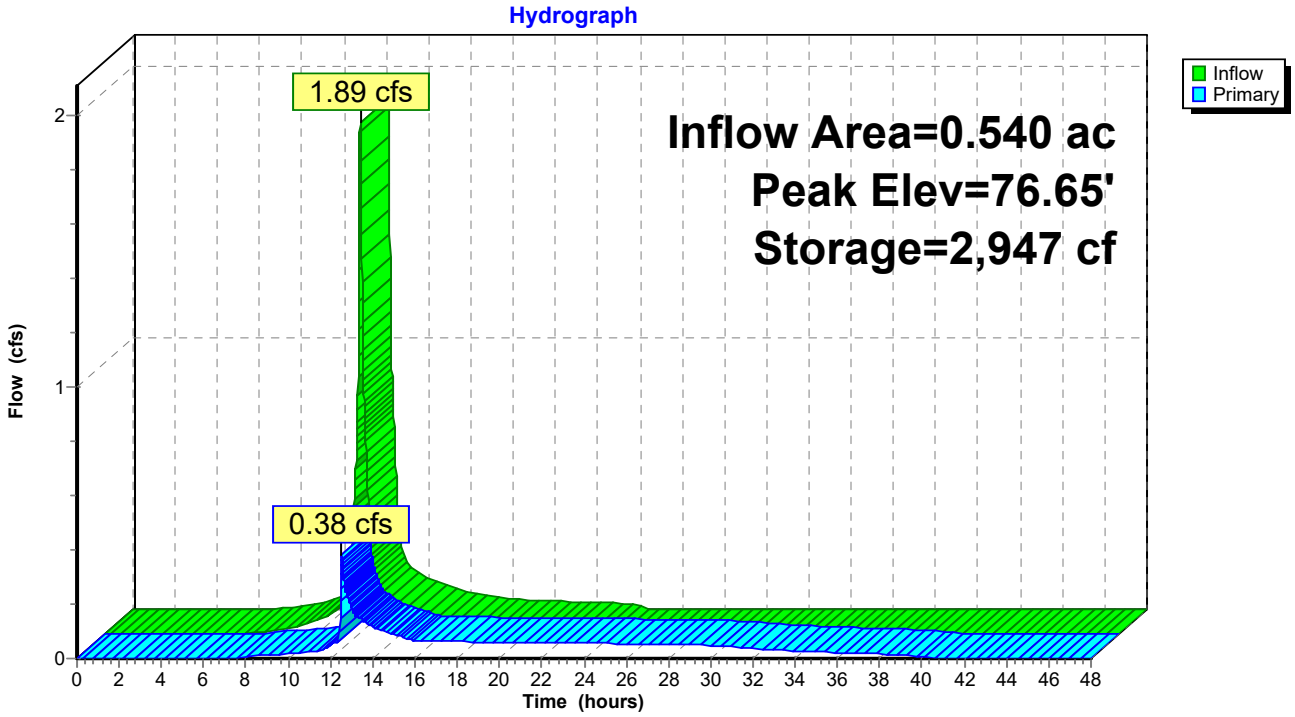
4,183.3 cf Field - 1,378.2 cf Chambers = 2,805.1 cf Stone x 40.0% Voids = 1,122.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,500.2 cf = 0.057 af
Overall Storage Efficiency = 59.8%
Overall System Size = 46.34' x 25.25' x 3.50'

30 Chambers
154.9 cy Field
103.9 cy Stone



Pond 21P: 740; StormTech (35)



Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment 1S: Subcat 1 Runoff Area=21,153 sf 80.36% Impervious Runoff Depth=4.43"
Tc=6.0 min CN=88 Runoff=2.44 cfs 0.179 af

Subcatchment 2S: Subcat 2 Runoff Area=15,618 sf 17.84% Impervious Runoff Depth=1.05"
Tc=6.0 min CN=50 Runoff=0.34 cfs 0.031 af

Subcatchment 3S: Subcat 3 Runoff Area=22,543 sf 97.80% Impervious Runoff Depth=5.44"
Tc=6.0 min CN=97 Runoff=2.93 cfs 0.235 af

Subcatchment 4S: Subcat 4 Runoff Area=965 sf 0.00% Impervious Runoff Depth=0.39"
Tc=6.0 min CN=39 Runoff=0.00 cfs 0.001 af

Subcatchment 21S: 50% Redeveloped Area Runoff Area=23,513 sf 77.72% Impervious Runoff Depth=4.11"
Tc=6.0 min CN=85 Runoff=2.56 cfs 0.185 af

Reach 1R: Woodford Street Inflow=5.75 cfs 0.631 af
Outflow=5.75 cfs 0.631 af

Reach 2R: Total Runoff Inflow=5.75 cfs 0.631 af
Outflow=5.75 cfs 0.631 af

Pond 21P: 740; StormTech (35) Peak Elev=76.83' Storage=3,052 cf Inflow=2.56 cfs 0.185 af
Outflow=1.55 cfs 0.185 af

Total Runoff Area = 1.924 ac Runoff Volume = 0.631 af Average Runoff Depth = 3.94"
28.27% Pervious = 0.544 ac 71.73% Impervious = 1.380 ac

Summary for Subcatchment 1S: Subcat 1

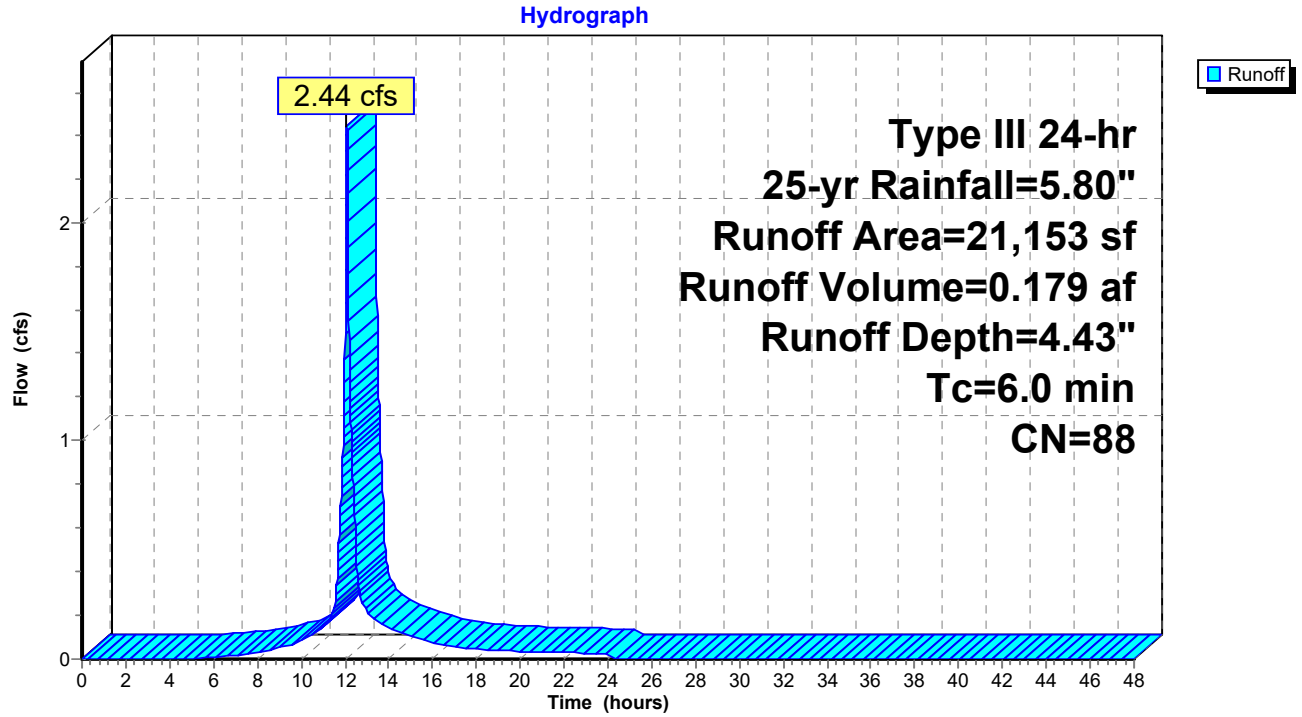
Runoff = 2.44 cfs @ 12.09 hrs, Volume= 0.179 af, Depth= 4.43"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
*	8,205	98	Roof
*	5,665	98	Pavement
*	2,409	98	Concrete
*	719	98	Drip Edge Stone
*	4,155	49	50-75% Grass cover, Fair, HSG A
	21,153	88	Weighted Average
	4,155		19.64% Pervious Area
	16,998		80.36% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 1S: Subcat 1



Summary for Subcatchment 2S: Subcat 2

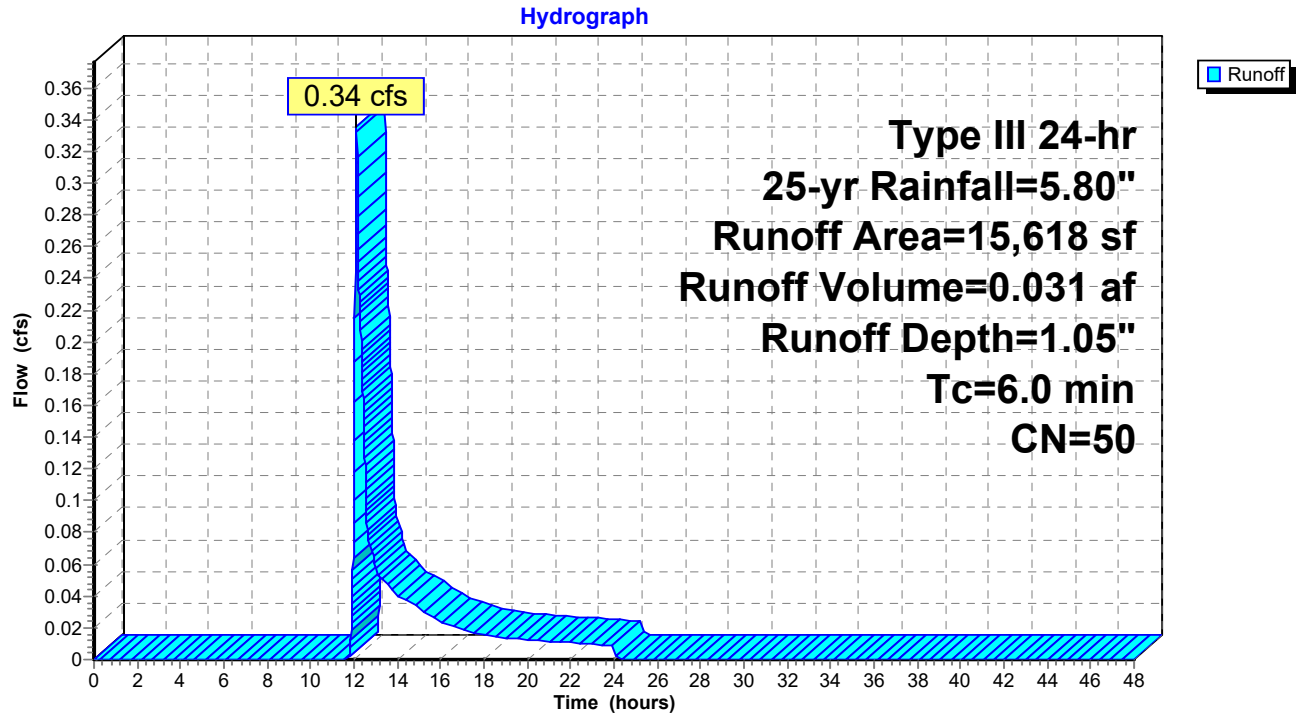
Runoff = 0.34 cfs @ 12.11 hrs, Volume= 0.031 af, Depth= 1.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
*	2,787	98	Paved Walkway
	12,831	39	>75% Grass cover, Good, HSG A
	15,618	50	Weighted Average
	12,831		82.16% Pervious Area
	2,787		17.84% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 2S: Subcat 2



Summary for Subcatchment 3S: Subcat 3

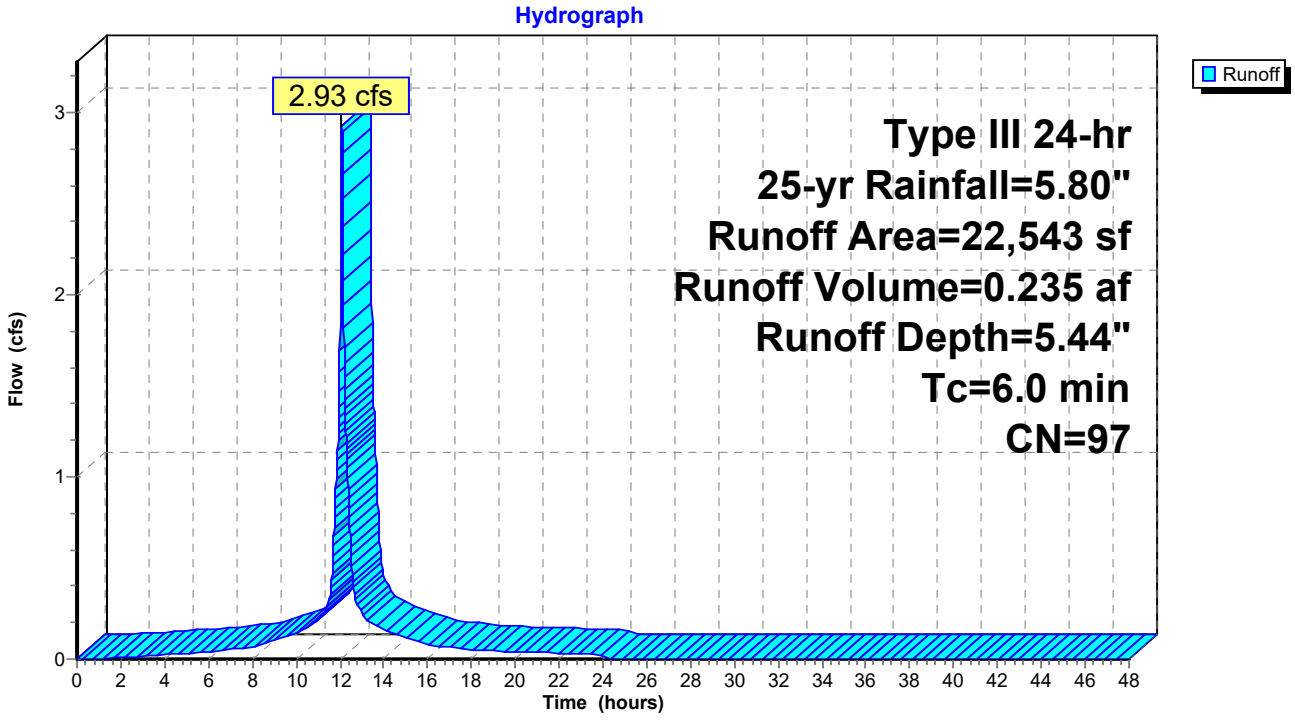
Runoff = 2.93 cfs @ 12.08 hrs, Volume= 0.235 af, Depth= 5.44"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
*	20,900	98	Roof
*	1,148	98	Patio
*	495	49	50-75% Grass cover, Fair, HSG A
	22,543	97	Weighted Average
	495		2.20% Pervious Area
	22,048		97.80% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 3S: Subcat 3



Summary for Subcatchment 4S: Subcat 4

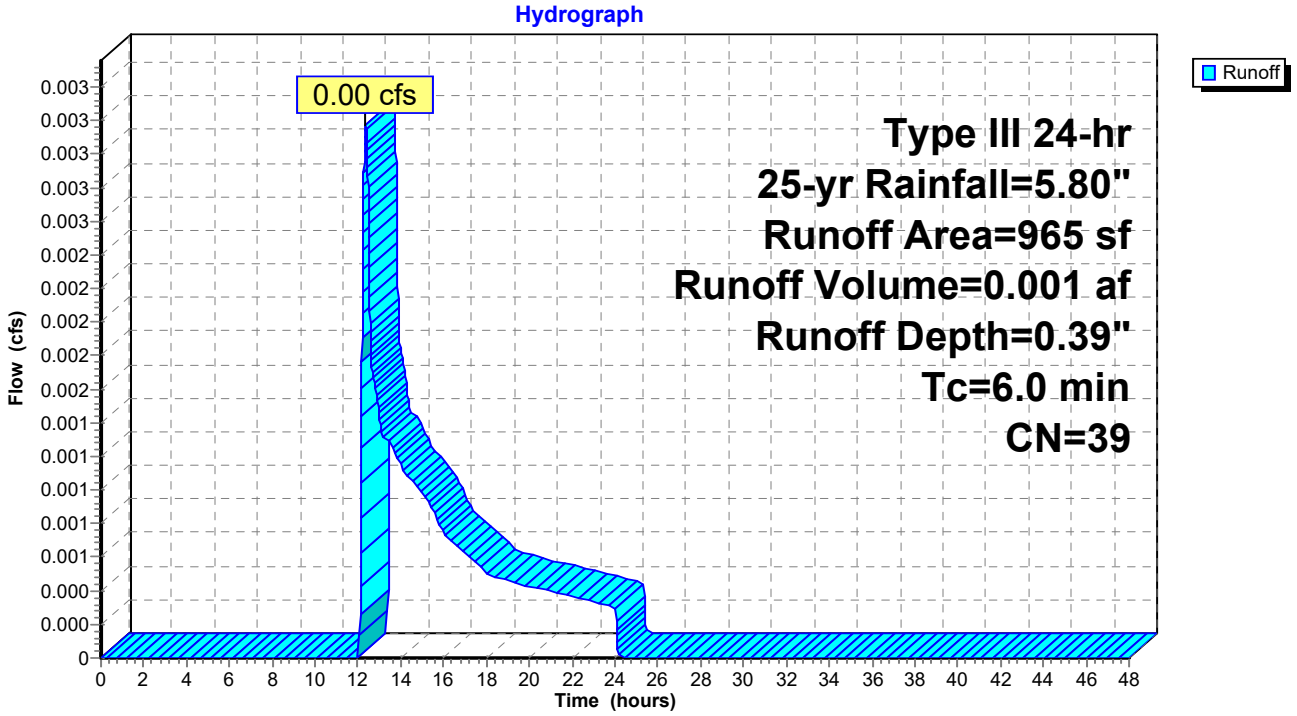
Runoff = 0.00 cfs @ 12.37 hrs, Volume= 0.001 af, Depth= 0.39"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
965	39	>75% Grass cover, Good, HSG A
965		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 4S: Subcat 4



Summary for Subcatchment 21S: 50% Redeveloped Area

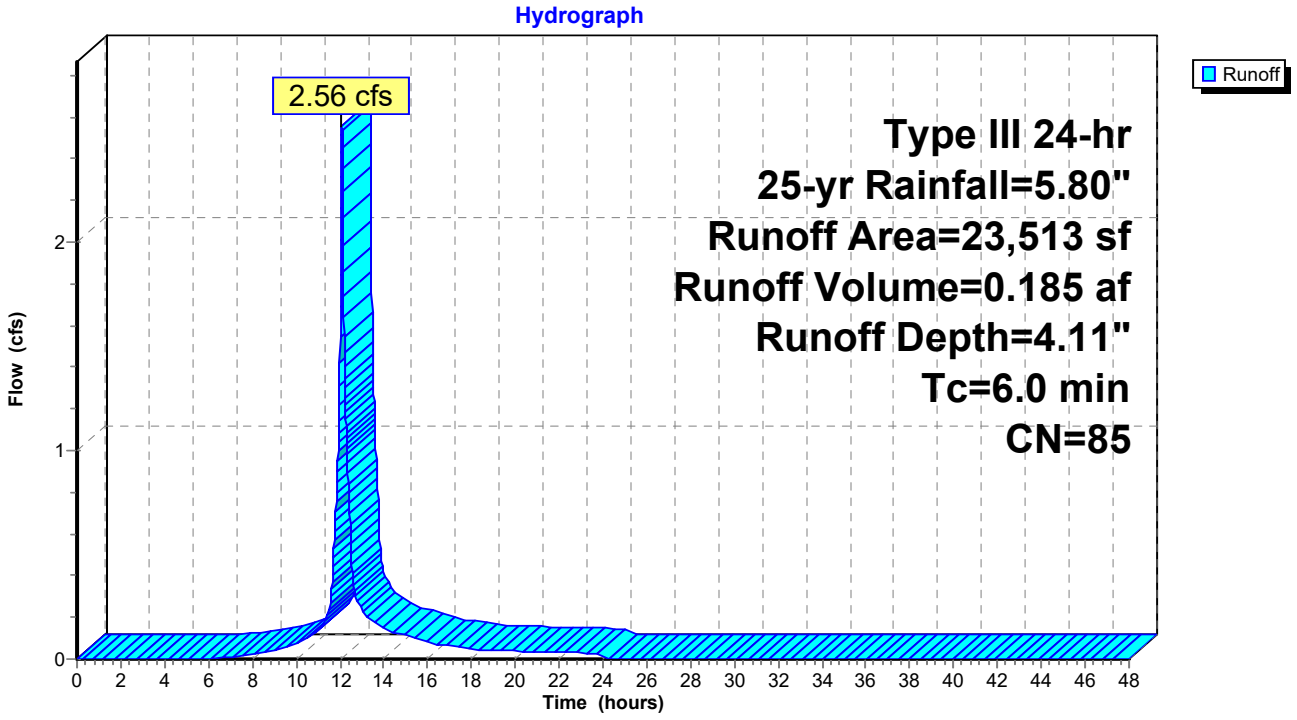
Runoff = 2.56 cfs @ 12.09 hrs, Volume= 0.185 af, Depth= 4.11"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
*	14,841	98	Pavement
*	3,434	98	Walkways
	5,238	39	>75% Grass cover, Good, HSG A
	23,513	85	Weighted Average
	5,238		22.28% Pervious Area
	18,275		77.72% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry,**

Subcatchment 21S: 50% Redeveloped Area



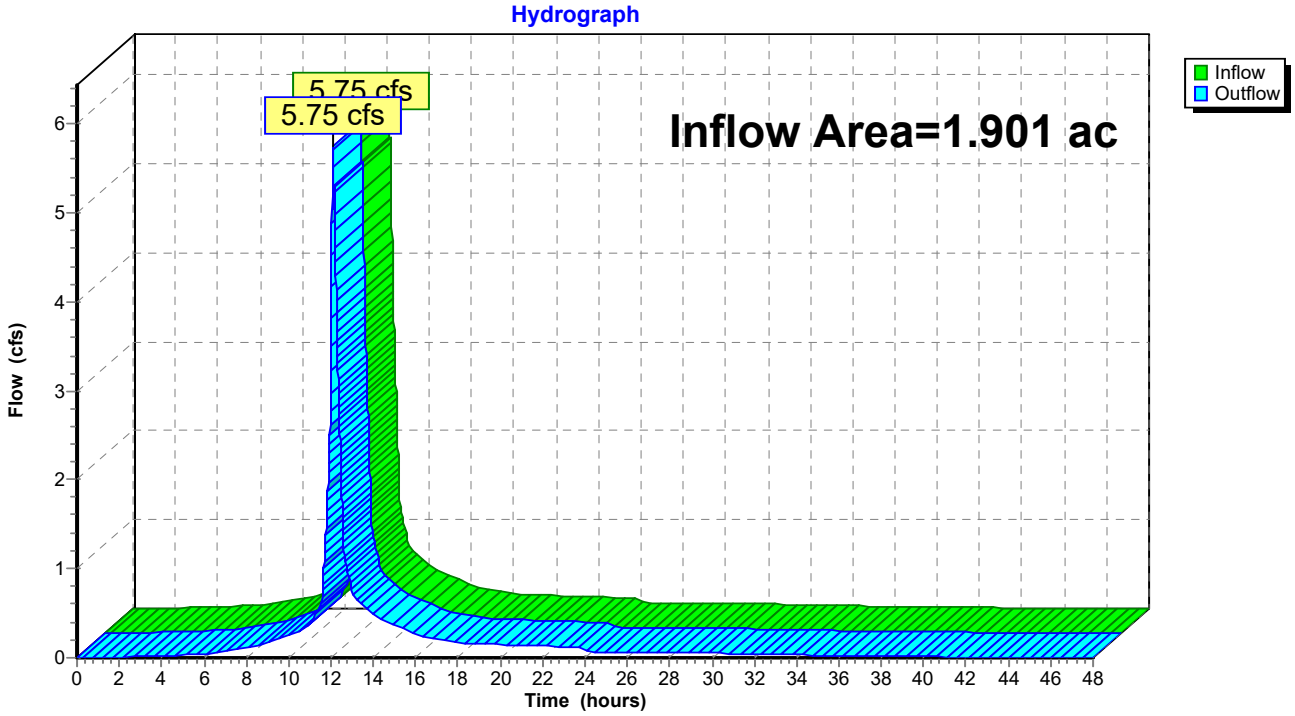
Summary for Reach 1R: Woodford Street

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.901 ac, 72.57% Impervious, Inflow Depth = 3.98" for 25-yr event
Inflow = 5.75 cfs @ 12.09 hrs, Volume= 0.631 af
Outflow = 5.75 cfs @ 12.09 hrs, Volume= 0.631 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 1R: Woodford Street



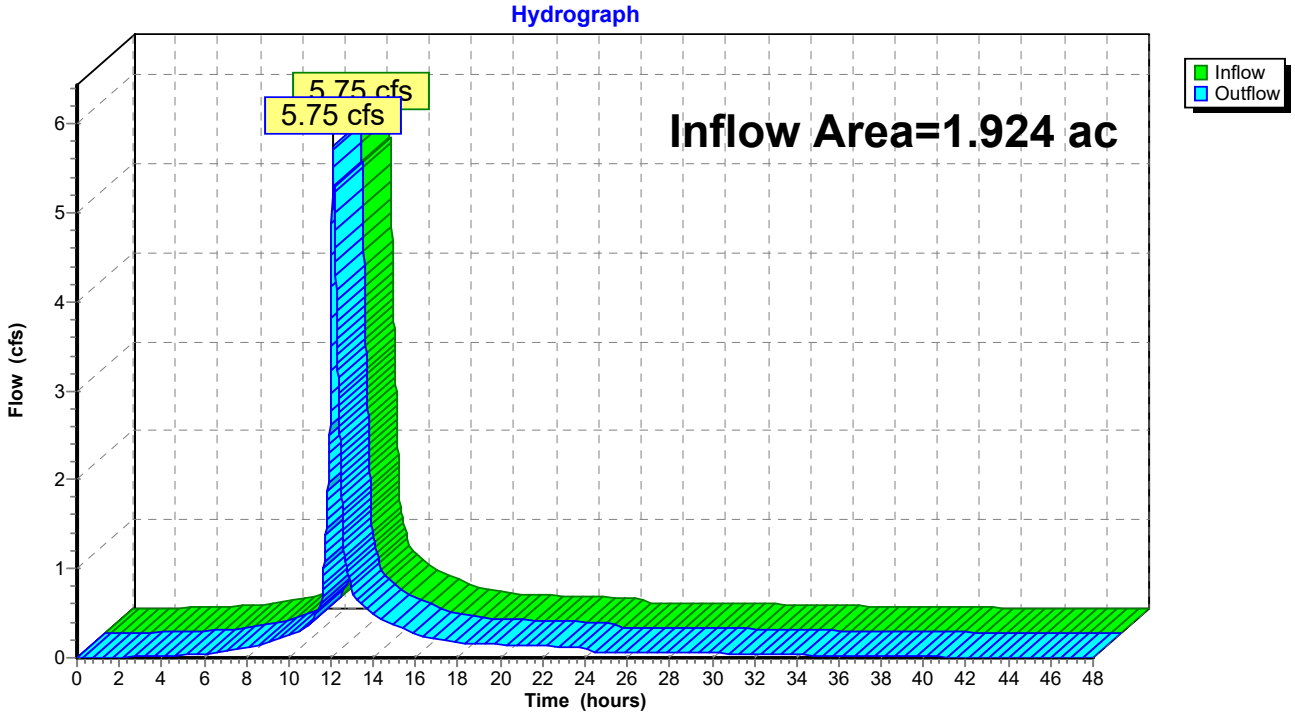
Summary for Reach 2R: Total Runoff

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 1.924 ac, 71.73% Impervious, Inflow Depth = 3.94" for 25-yr event
Inflow = 5.75 cfs @ 12.09 hrs, Volume= 0.631 af
Outflow = 5.75 cfs @ 12.09 hrs, Volume= 0.631 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Reach 2R: Total Runoff



Summary for Pond 21P: 740; StormTech (35)

[44] Hint: Outlet device #2 is below defined storage

Inflow Area = 0.540 ac, 77.72% Impervious, Inflow Depth = 4.11" for 25-yr event
Inflow = 2.56 cfs @ 12.09 hrs, Volume= 0.185 af
Outflow = 1.55 cfs @ 12.19 hrs, Volume= 0.185 af, Atten= 39%, Lag= 6.3 min
Primary = 1.55 cfs @ 12.19 hrs, Volume= 0.185 af

Routing by Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 76.83' @ 12.19 hrs Surf.Area= 4,331 sf Storage= 3,052 cf
Flood Elev= 78.70' Surf.Area= 4,341 sf Storage= 3,384 cf

Plug-Flow detention time= 372.2 min calculated for 0.185 af (100% of inflow)
Center-of-Mass det. time= 372.3 min (1,174.2 - 801.9)

Volume	Invert	Avail.Storage	Storage Description
#1	71.00'	416 cf	**Crushed Stone (Prismatic)**Listed below (Recalc) 1,040 cf Overall x 40.0% Voids
#2	72.00'	156 cf	**Course Gravel Transition Layer (Prismatic)**Listed below (Recalc) 520 cf Overall x 30.0% Voids
#3	72.50'	312 cf	**Sand Filter (Prismatic)**Listed below (Recalc) 1,560 cf Overall x 20.0% Voids
#4A	74.00'	1,122 cf	**25.25'W x 46.34'L x 3.50'H Field A Z=0.1** 4,183 cf Overall - 1,378 cf Embedded = 2,805 cf x 40.0% Voids
#5A	74.50'	1,378 cf	**ADS_StormTech SC-740 +Cap** x 30 Inside #4 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 30 Chambers in 5 Rows
		3,384 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
71.00	1,040	0	0
72.00	1,040	1,040	1,040

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
72.00	1,040	0	0
72.50	1,040	520	520

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
72.50	1,040	0	0
74.00	1,040	1,560	1,560

Device	Routing	Invert	Outlet Devices
#1	Primary	70.85'	**12.0" Round 12" SD** L= 21.6' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 70.85' / 70.74' S= 0.0051 '/' Cc= 0.900 n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf
#2	Device 1	70.85'	**1.0" Vert. Orifice on OCS Outlet** C= 0.600
#3	Device 1	76.55'	**12.0" Horiz. Bypass Orifice** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.55 cfs @ 12.19 hrs HW=76.83' (Free Discharge)
└─**1=12" SD** (Passes 1.55 cfs of 6.99 cfs potential flow)
  ├─**2=Orifice on OCS Outlet** (Orifice Controls 0.06 cfs @ 11.73 fps)
  └─**3=Bypass Orifice** (Weir Controls 1.49 cfs @ 1.72 fps)

Pond 21P: 740; StormTech (35) - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 +Cap (ADS StormTech® SC-740 with cap length)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

6 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 44.34' Row Length +12.0" End Stone x 2 = 46.34' Base Length
5 Rows x 51.0" Wide + 6.0" Spacing x 4 + 12.0" Side Stone x 2 = 25.25' Base Width
6.0" Base + 30.0" Chamber Height + 6.0" Cover = 3.50' Field Height

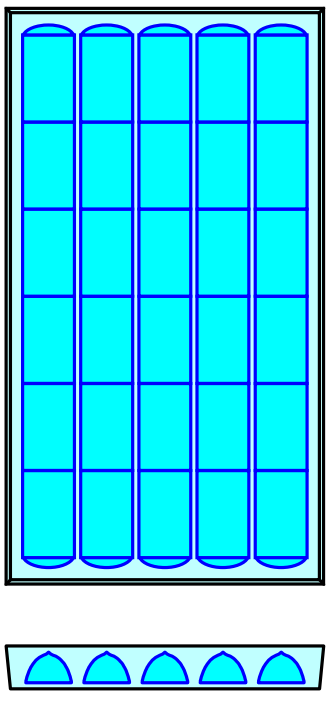
0.1 '/' Side-Z x Height = 4.2" Flare/Side
Base Length + Flare x 2 = 47.04' Top Length
Base Width + Flare x 2 = 25.95' Top Width

30 Chambers x 45.9 cf = 1,378.2 cf Chamber Storage

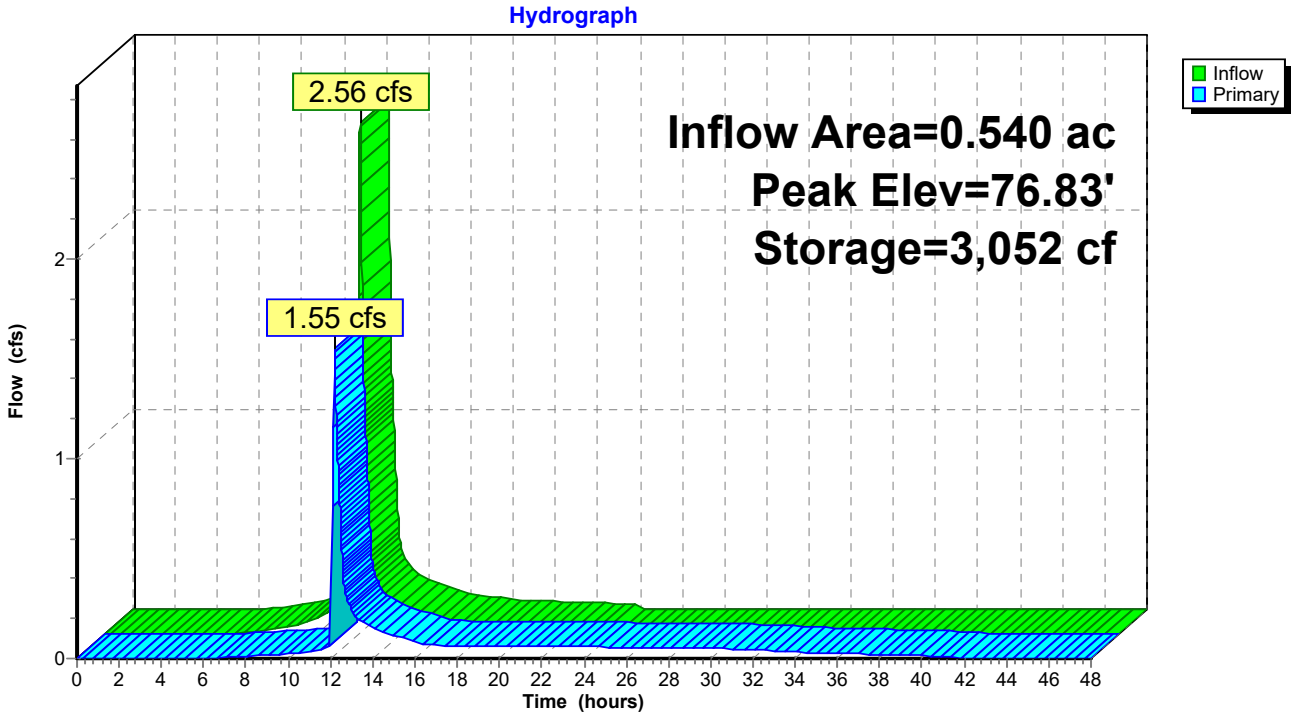
4,183.3 cf Field - 1,378.2 cf Chambers = 2,805.1 cf Stone x 40.0% Voids = 1,122.0 cf Stone Storage

Chamber Storage + Stone Storage = 2,500.2 cf = 0.057 af
Overall Storage Efficiency = 59.8%
Overall System Size = 46.34' x 25.25' x 3.50'

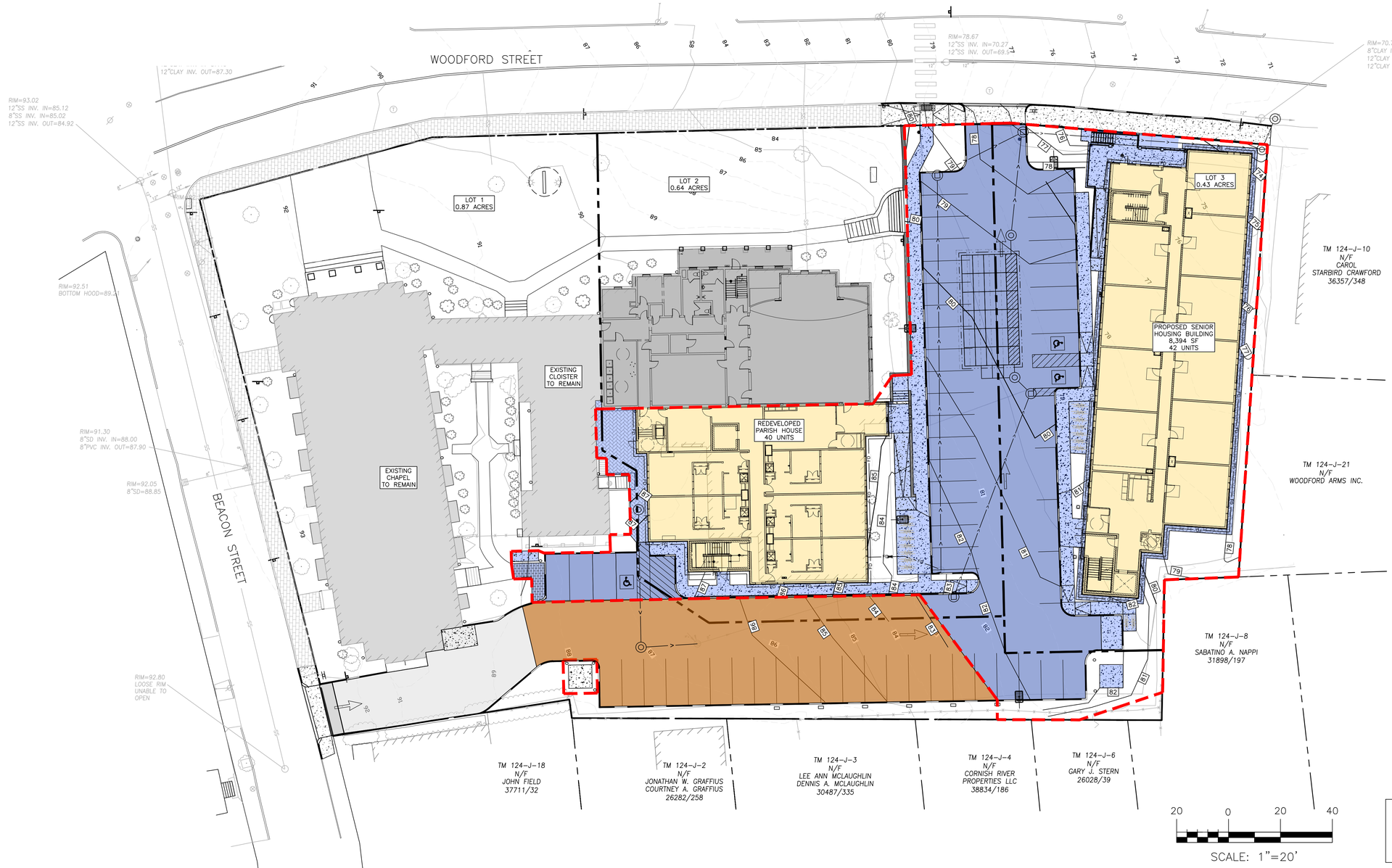
30 Chambers
154.9 cy Field
103.9 cy Stone



Pond 21P: 740; StormTech (35)



36,433 SF		APPROXIMATE LIMITS OF PROJECT REDEVELOPMENT
17,569 SF		REDEVELOPED PAVEMENT OR CONCRETE FOOTPRINT
14,035 SF		REDEVELOPED BUILDING FOOTPRINT
6,293 SF		MAINTENANCE – NOT INCLUDED IN IMPERVIOUS AREA OR REDEVELOPMENT CALCULATIONS
31,604 SF	=	TOTAL IMPERVIOUS AREA
15,802 SF	=	50% REDEVELOPED IMPERVIOUS AREA REQUIRED TO BE TREATED



PERMITTING
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
CSS	PFH	12/1/23
MAJOR SITE PLAN	PFH	12/21/23
COMMENT RESPONSE	PFH	2/7/24

DRAWING NAME: **REDEVELOPMENT EXHIBIT**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT:
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
PO BOX 224, KENNEBUNK, MAINE 04104
(207) 775-2655

USE OF THIS PLAN SHALL NOT BE MODIFIED WITHOUT THE WRITTEN PERMISSION OF ACORN ENGINEERING, INC. ANY MODIFICATIONS MADE TO THIS PLAN WITHOUT THE WRITTEN PERMISSION OF ACORN ENGINEERING, INC. SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
EX

ACORN ENGINEERING, INC.

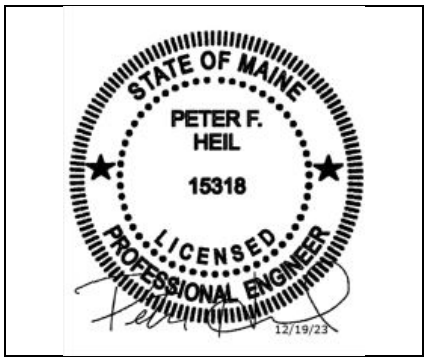
POST CONSTRUCTION - STORMWATER INSPECTION & MAINTENANCE PLAN

Prepared For:

Community Housing of Maine
One City Center, 4th Floor,
Portland Maine 04101

Prepared By:

Acorn Engineering, Inc.
PO Box 3372
Portland, Maine 04102



December 2023

RESPONSIBLE PARTY

The owner, Community Housing of Maine and/or their successor shall be responsible for contracting with a qualified stormwater professional to implement the Inspection and Maintenance Plan. The qualified stormwater professional shall maintain a stormwater log (report) summarizing inspections, maintenance, and corrective action taken. The Qualified Stormwater Professional shall annually submit the Stormwater Log to the Engineering Department prior to June 15th.

The following is an example of a qualified stormwater professional that the owner may contract through.

Organization: Peter Heil, PE
Acorn Engineering, Inc
Portland, Maine

Phone: (207) 775-2655

Qualifications:

- Maine Professional Engineering License #15318
- Maine DEP – Certified in Maintenance & Inspection of Stormwater BMP's Cert
- Maine DEP – Certified Third-Party Inspector
- Certified Professional in Erosion and Sediment Control (CPESC) Cert. #7071

The inspection and maintenance criteria are based upon the Maine DEP - Stormwater Management for Maine, Volume III: BMPs Technical Design Manual. Refer to the Grading and Drainage Plan for the location of the BMPs

PURPOSE

This Inspection and Maintenance Plan has been individually tailored to this parcel's stormwater infrastructure, site characteristics, and their respective opportunities and limitations related to reducing the pollutant load on the receiving watershed. The maintenance of a parcel's impervious surfaces and stormwater infrastructure is critical to extending the long-term performance and effectiveness of Best Management Practices (BMPs). The Inspection and Maintenance Plan represents the parcel's minimum activities to meet the permit requirements. The parcel shall still be subject to any applicable Civil Site Plans, Permit Applications, Erosion and Sedimentation Control Plans Reports, Stormwater Management Plans, Inspection and Maintenance Manuals, and all Municipal, State, and Federal rules. The applicant shall be responsible for retaining post construction and maintenance documents for at least 5 years.

OPERATION AND MAINTENANCE ACTIVITY

Catch Basins / Field Inlets:

Catch basins and field inlets shall be inspected to confirm that the structure is operating properly.

- Inspect the presence of accumulated sediment or debris any sediment shall be removed. The equipment shall meet the following minimum specifications; power jet and water source for washing down the storm drain, vacuum attachment for catch basin cleaning, and a liquid handling method to dewater the material.
- Sediment shall be removed when accumulation is within 6 inches of the outfall pipe invert. Legally dispose of accumulated sediment and debris from the bottom of the basin, inlet grates, and inflow channels to the basin.
- If the basin outlet is designed with a hood to trap floatable materials (e.g. Snout), check to ensure watertight seal is working.
- Appropriately dispose of all collected material.

Sweeping:

Annual sweeping of the parking lot following the snow melt, if necessary. Appropriately dispose of all collected material.

Storm Drains:

The storm drain shall be annually inspected for the presence of accumulated sediment or debris. Any sediment shall be removed as required.

- The equipment shall meet the following minimum specifications; power jet and water source for washing down the storm drain, vacuum attachment for catch basin cleaning, and a liquid handling method to dewater the material.
- Inspect and legally dispose of accumulated sediment and debris within the storm drains between basins. Liquids must be decanted on-site and returned to the catch basin.

Underdrained Subsurface Sand Filter and Stormtech Isolator ROW:

The maintenance of the underdrained subsurface sand filters shall be in accordance with the following activities identified below and the Stormwater Drainage System Maintenance Agreement included within Stormwater Report.

- The system should be inspected after every major storm in the first few months to ensure proper function. Thereafter, the filter should be inspected annually.
- Inspect and maintain the StormTech Isolator Row in accordance with the attached proprietary Operation and Maintenance Plan.

Vegetated Areas and Embankments:

Inspect all landscaped and or vegetated slopes and embankments on an annual basis. Vegetated areas with bare areas or sparse growth (<90% coverage) shall be revegetated. Mulch shall be applied to landscaped areas, as necessary. Dead or decaying landscaping (ground cover, shrubs, trees etc.) shall be replanted in accordance with the approved Site Plan

INSPECTION AND MAINTENANCE TABLE

Inspection and Maintenance Frequency	Spring or Yearly	Summer	Fall	As Necessary
Catch Basins	X			X
Vegetated Areas & Slopes	X			X
Underdrained subsurface sand filter & Stormtech Isolator ROW	X			X
Storm Drains	X			X
Sweeping	X			X

In the above chart, it is assumed the certified stormwater professional will inspect each item in the spring. Inspections outside of the spring visits can likely be conducted by the property manager.

ATTACHED

1. Isolator ROW Product Sheet
2. Isolator ROW Manual

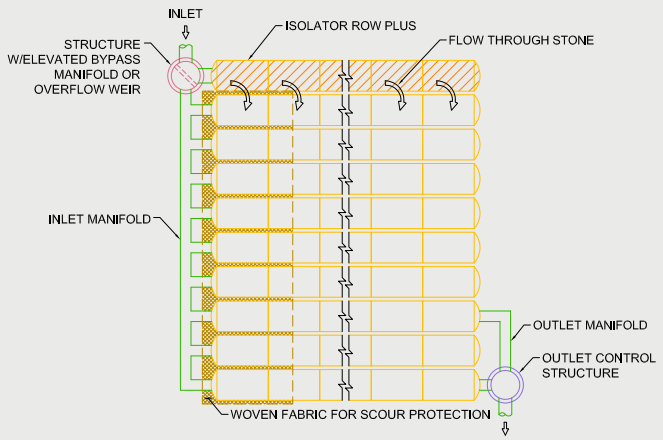
Isolator® Row Plus

The StormTech Isolator Row Plus is an enhancement to our proven water quality treatment system. This updated system is an NJCAT verified water quality treatment device that can be incorporated into any system layout.

Features

- Isolator Row Plus is now NJCAT verified. As a Manufactured Treatment Device it achieves over 81% TSS removal by filtration NJDEP Laboratory Protocol Assessment NJCAT Technology Verification.
- A patented Flamp™ (Flared End Ramp) provides a smooth transition from pipe invert to fabric bottom. The Flamp is attached to the inlet pipe inside the chamber end cap and improves chamber function over time by distributing sediment and debris that would otherwise collect at the inlet. It also serves to improve the fluid and solid flow back into the inlet pipe during maintenance and cleaning.
- Proprietary ADS Plus fabric maintains durability and sediment removal while allowing for higher water quality flow rates. A single layer of ADS Plus fabric is placed between the angular base stone and the Isolator Row Plus chambers.

Schematic of the StormTech Isolator Row Plus System



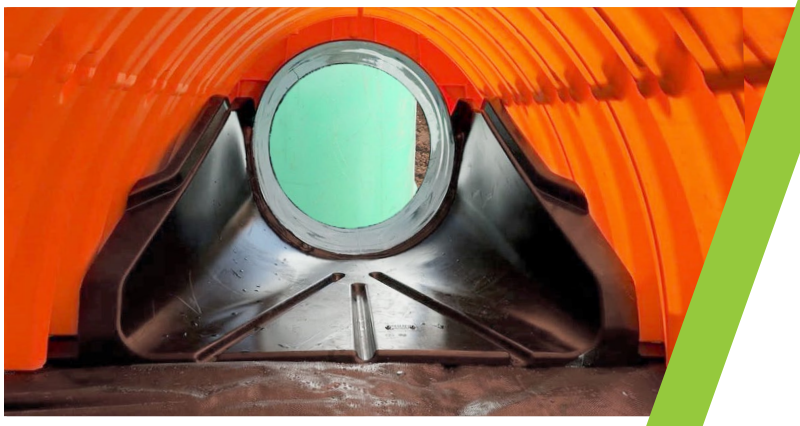
Technology Descriptions

The Isolator Row Plus is designed to capture the “first flush” runoff and offers the versatility to be sized on a volume or a flow basis. An upstream manhole not only provides access to the Isolator Row Plus but includes a high/low concept such that stormwater flow rates or volumes that exceed the capacity of the Isolator Row Plus bypass through a manifold to the other chambers. This is achieved with either an elevated bypass manifold or a high-flow weir. This creates a differential between the Isolator Row Plus row of chambers and the manifold to the rest of the system, thus allowing for settlement time in the Isolator Row Plus. After Stormwater flows through the Isolator Row Plus and into the rest of the StormTech chamber system it is either infiltrated into the soils below or passed at a controlled rate through an outlet manifold and outlet control structure.

Summary of Verified Claims[1]

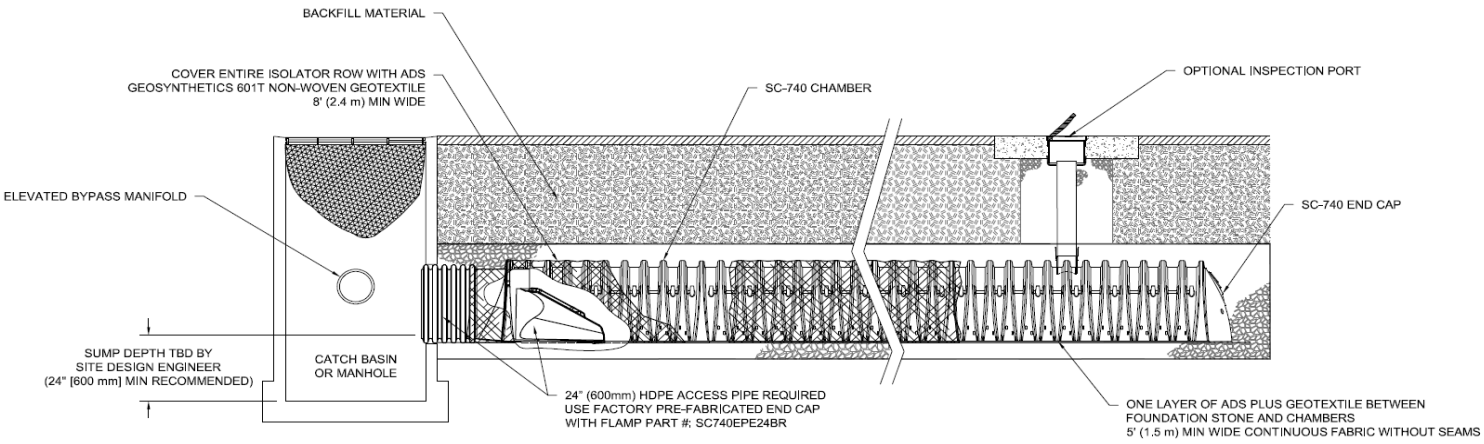
Treatment Rate (gpm/ft²)	4.1
Underlying Geotextile Layers	1
NJDEP Test Sediment	1-1000µ
Mean Particle Concentration (mg/L)	200
TSS Removal Efficiency	81%

[1] Verification testing of the StormTech SC-740 Isolator Row PLUS in accordance with NJDEP Laboratory protocol to access total suspended solids removal by filtration manufactured treatment device, 2013



StormTech Isolator Row Plus (not to scale)

Note: Non-woven fabric is only required over the chambers for the SC-310 and SC-740 chamber models.



Maintenance

The Isolator Row Plus was designed to reduce the cost of periodic maintenance. By “isolating” sediment to just one row of the StormTech system, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout.

Maintenance is accomplished with the JetVac® process. The JetVac process utilizes a high-pressure water nozzle to propel itself down the Isolator Row Plus while scouring and suspending sediment. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency.

StormTech Isolator Row Plus

Chamber Model	Chamber Storage	Chamber Footprint	Treatment Rate
SC-160LP	15.0 cf (0.42 m^3)	11.45 sf (1.06 m^2)	0.11 cfs (3.11 L/s)
SC-310	31.0 cf (0.88 m^3)	17.7 sf (1.64 m^2)	0.16 cfs (4.53 L/s)
SC-740	74.9 cf (2.12 m^3)	27.8 sf (2.58 m^2)	0.26 cfs (7.36 L/s)
DC-780	78.4 cf (2.22 m^3)	27.8 sf (2.58 m^2)	0.26 cfs (7.36 L/s)
MC-3500	175.0 cf (4.96 m^3)	42.9 sf (3.99 m^2)	0.40 cfs (11.32 L/s)
MC-4500	162.6 cf (4.60 m^3)	30.1 sf (2.80 m^2)	0.28 cfs (7.93 L/s)
MC-7200	267.3 cf (7.57 m^3)	50.0 sf (4.65 m^2)	0.45 cfs (12.74 L/s)

Installation

Installation of the stormwater treatment unit(s) shall be preformed per manufacture’s installation instructions. Such instructions can be obtained by calling Advanced Drainage Systems Inc. at (800) 821-6710 or by logging on to www.ads-pipe.com or www.stormtech.com

ADS “Terms and Conditions of Sale” are available on the ADS website, www.ads-pipe.com
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Isolator® Row Plus
O&M Manual



The Isolator® Row Plus

Introduction

An important component of any Stormwater Pollution Prevention Plan is inspection and maintenance. The StormTech Isolator Row Plus is a technique to inexpensively enhance Total Suspended Solids (TSS), Total Phosphorus (TP), Total Petroluem Hydrocarbons (TPH) and Total Nitrogen (TN) removal with easy access for inspection and maintenance.

The Isolator Row Plus

The Isolator Row Plus is a row of StormTech chambers, either SC-160, SC-310, SC-310-3, SC-740, DC-780, MC-3500, MC-4500 or MC-7200 models, are lined with filter fabric and connected to a closely located manhole for easy access. The fabric lined chambers provide for sediment settling and filtration as stormwater rises in the Isolator Row Plus and passes through the filter fabric. The open bottom chambers allow stormwater to flow both vertically out of the chambers. Sediments are captured in the Isolator Row Plus protecting the adjacent stone and chambers storage areas from sediment accumulation.

ADS Isolator Row and Plus fabric are placed between the stone and the Isolator Row Plus chambers. The woven geotextile provides a media for stormwater filtration, a durable surface for maintenance, prevents scour of the underlying stone and remains intact during high pressure jetting.

The Isolator Row Plus is designed to capture the “first flush” runoff and offers the versatility to be sized on a volume basis or a flow-rate basis. An upstream manhole provides access to the Isolator Row Plus and includes a high/low concept such that stormwater flow rates or volumes that exceed the capacity of the Isolator Row Plus bypass through a manifold to the other chambers. This is achieved with an elevated bypass manifold or a high-flow weir. This creates a differential between the Isolator Row Plus row of chambers and the manifold to the rest of the system, thus allowing for settlement time in the Isolator Row Plus. After Stormwater flows through the Isolator Row Plus and into the rest of the chamber system it is either exfiltrated into the soils below or passed at a controlled rate through an outlet manifold and outlet control structure.

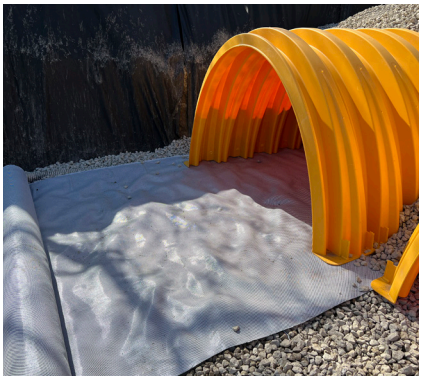
The Isolator Row Plus Flamp™ is a flared end ramp apparatus attached to the inlet pipe on the inside of the chamber end cap. The FLAMP provides a smooth transition from pipe invert to fabric bottom. It is configured to improve chamber function performance by enhancing outflow of solid debris that would otherwise collect at the chamber's end, or more difficult to remove and require confined space entry into the chamber area. It also serves to improve the fluid and solid flow into the access pipe during maintenance and cleaning and to guide cleaning and inspection equipment back into the inlet pipe when complete.

The Isolator Row Plus may be part of a treatment train system. The treatment train design and pretreatment device selection by the design engineer is often driven by regulatory requirements. Whether pretreatment is used or not, StormTech recommend using the Isolator Row Plus to minimize maintenance requirements and maintenance costs.

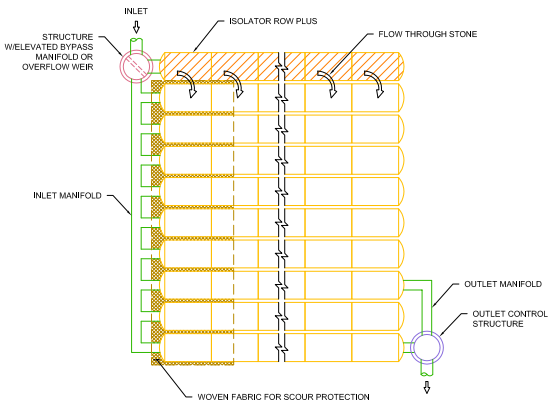
Note: *See the StormTech Design Manual for detailed information on designing inlets for a StormTech system, including the Isolator Row Plus.*



Looking down the Isolator Row PLUS from the manhole opening, ADS PLUS Fabric is shown between the chamber and stone base.



StormTech Isolator Row PLUS with Overflow Structure (not to scale)



Isolator Row Plus Inspection/Maintenance

Inspection

The frequency of inspection and maintenance varies by location. A routine inspection schedule needs to be established for each individual location based upon site specific variables. The type of land use (i.e. industrial, commercial, residential), anticipated pollutant load, percent imperviousness, climate, etc. all play a critical role in determining the actual frequency of inspection and maintenance practices.

At a minimum, StormTech recommends annual inspections. Initially, the Isolator Row Plus should be inspected every 6 months for the first year of operation. For subsequent years, the inspection should be adjusted based upon previous observation of sediment deposition.

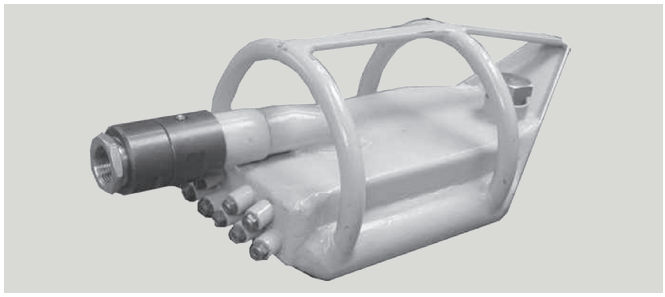
The Isolator Row Plus incorporates a combination of standard manhole(s) and strategically located inspection ports (as needed). The inspection ports allow for easy access to the system from the surface, eliminating the need to perform a confined space entry for inspection purposes.

If upon visual inspection it is found that sediment has accumulated, a stadia rod should be inserted to determine the depth of sediment. When the average depth of sediment exceeds 3 inches throughout the length of the Isolator Row Plus, clean-out should be performed.

Maintenance

The Isolator Row Plus was designed to reduce the cost of periodic maintenance. By “isolating” sediments to just one row, costs are dramatically reduced by eliminating the need to clean out each row of the entire storage bed. If inspection indicates the potential need for maintenance, access is provided via a manhole(s) located on the end(s) of the row for cleanout. If entry into the manhole is required, please follow local and OSHA rules for a confined space entry.

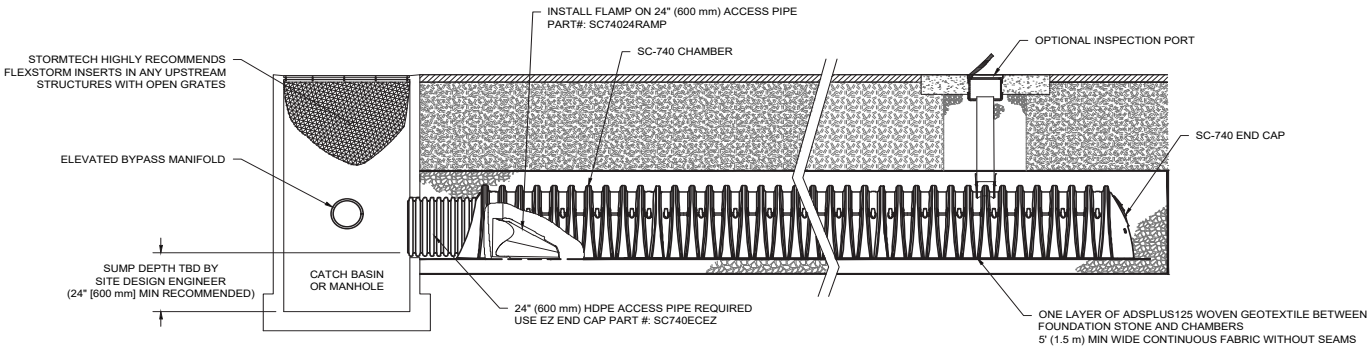
Maintenance is accomplished with the JetVac process. The JetVac process utilizes a high pressure water nozzle to propel itself down the Isolator Row Plus while scouring and suspending sediments. As the nozzle is retrieved, the captured pollutants are flushed back into the manhole for vacuuming. Most sewer and pipe maintenance companies have vacuum/JetVac combination vehicles. Selection of an appropriate JetVac nozzle will improve maintenance efficiency. Fixed nozzles designed for culverts or large diameter pipe cleaning are preferable. Rear facing jets with an effective spread of at least 45” are best. StormTech recommends a maximum nozzle pressure of 2000 psi be utilized during cleaning. JetVac reels can vary in length. For ease of maintenance, ADS recommends Isolator Row Plus lengths up to 200' (61 m). **The JetVac process shall only be performed on StormTech Isolator Row Plus that have ADS Plus Fabric (as specified by StormTech) over their angular base stone.**







StormTech Isolator Row PLUS (*not to scale*)



Isolator Row Plus Step By Step Maintenance Procedures

Step 1

Inspect Isolator Row Plus for sediment.

A) Inspection ports (if present)
   i. Remove lid from floor box frame
   ii. Remove cap from inspection riser
   iii. Using a flashlight and stadia rod,measure depth of sediment and record results on maintenance log.
   iv. If sediment is at or above 3 inch depth, proceed to Step 2. If not, proceed to Step 3.

B) All Isolator Row Plus
   i. Remove cover from manhole at upstream end of Isolator Row Plus
   ii. Using a flashlight, inspect down Isolator Row Plus through outlet pipe
      1. Mirrors on poles or cameras may be used to avoid a confined space entry
      2. Follow OSHA regulations for confined space entry if entering manhole
   iii. If sediment is at or above the lower row of sidewall holes (approximately 3 inches), proceed to Step 2.
   If not, proceed to Step 3.

Step 2

Clean out Isolator Row Plus using the JetVac process.

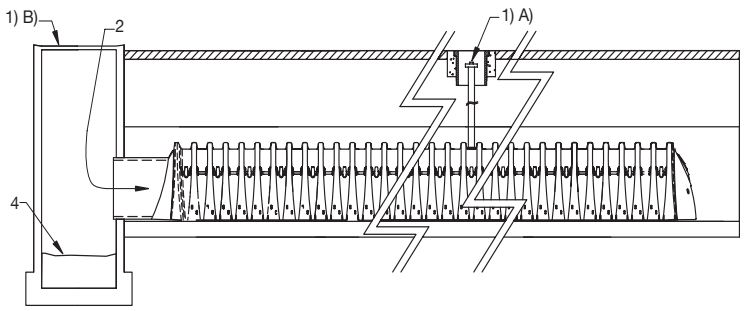
A) A fixed floor cleaning nozzle with rear facing nozzle spread of 45 inches or more is preferable
B) Apply multiple passes of JetVac until backflush water is clean
C) Vacuum manhole sump as required

Step 3

Replace all caps, lids and covers, record observations and actions.

Step 4

Inspect & clean catch basins and manholes upstream of the StormTech system.



Sample Maintenance Log

Date	Stadia Rod Readings		Sediment Depth (1)–(2)	Observations/Actions	Inspector
	Fixed point to chamber bottom (1)	Fixed point to top of sediment (2)			
3/15/11	6.3 ft	none		New installation. Fixed point is CI frame at grade	DJM
9/24/11		6.2	0.1 ft	Some grit felt	SM
6/20/13		5.8	0.5 ft	Mucky feel, debris visible in manhole and in Isolator Row PLUS, maintenance due	NV
7/7/13	6.3 ft		0	System jetted and vacuumed	DJM

adspipe.com
800-821-6710

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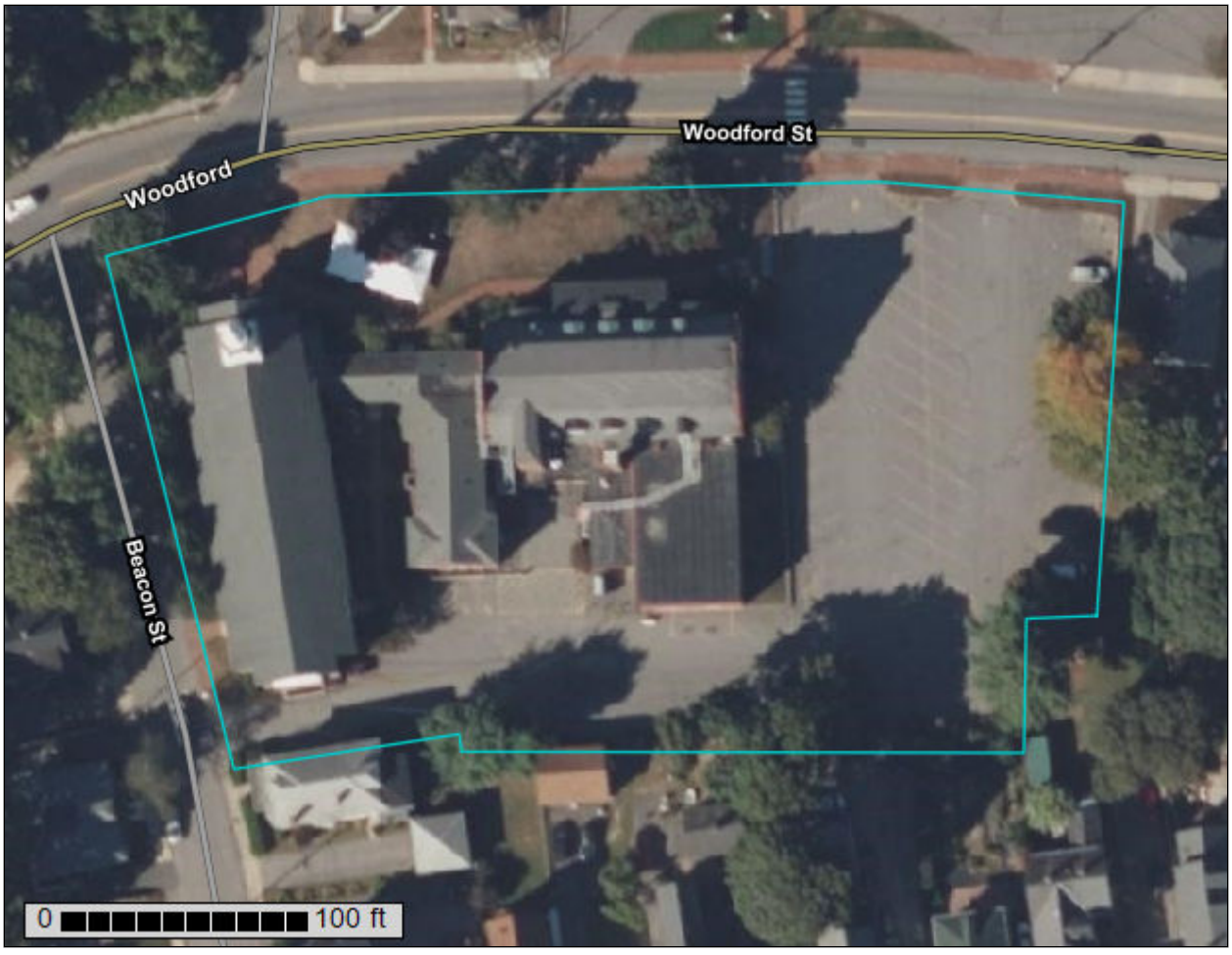
United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Cumberland County and Part of Oxford County, Maine



October 3, 2023

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.


70° 17' 17" W
70° 17' 10" W
43° 40' 15" N
43° 40' 12" N
396160
396170
396180
396190
396200
396210
396220
396230
396240
396250
396260
396270
396280
396290
396300
396310
4836130
4836120
4836110
4836100
4836090
4836080
4836070
4836060
4836050
4836040
Woodford
Beacon St
HrB
WmB
Soil Map may not be valid at this scale.
Map Scale: 1:688 if printed on A landscape (11" x 8.5") sheet.
N
Meters
0
10
20
40
60
Feet
0
30
60
120
180
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Cumberland County and Part of Oxford County, Maine
Survey Area Data: Version 20, Sep 5, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND

MAP INFORMATION

imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
HrB	Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky	0.2	10.4%
WmB	Windsor loamy sand, 0 to 8 percent slopes	1.7	89.6%
Totals for Area of Interest		**1.9**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however,

onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Cumberland County and Part of Oxford County, Maine

HrB—Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky

Map Unit Setting

National map unit symbol: 2x1cx
Elevation: 0 to 520 feet
Mean annual precipitation: 36 to 65 inches
Mean annual air temperature: 36 to 52 degrees F
Frost-free period: 90 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Lyman and similar soils: 50 percent
Tunbridge and similar soils: 30 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lyman

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or loamy supraglacial till derived from phyllite and/or loamy supraglacial till derived from mica schist

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loam
E - 3 to 5 inches: fine sandy loam
Bhs - 5 to 7 inches: loam
Bs1 - 7 to 11 inches: loam
Bs2 - 11 to 18 inches: channery loam
R - 18 to 79 inches: bedrock

Properties and qualities

Slope: 0 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.5 percent
Depth to restrictive feature: 11 to 24 inches to lithic bedrock
Drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: D
Ecological site: F144BY702ME - Shallow and Moderately-deep Till

Hydric soil rating: No

Description of Tunbridge

Setting

Landform: Ridges, hills
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Side slope, crest
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Loamy supraglacial till derived from granite and gneiss and/or loamy supraglacial till derived from phyllite and/or loamy supraglacial till derived from mica schist

Typical profile

Oe - 0 to 3 inches: moderately decomposed plant material
Oa - 3 to 5 inches: highly decomposed plant material
E - 5 to 8 inches: fine sandy loam
Bhs - 8 to 11 inches: fine sandy loam
Bs - 11 to 26 inches: fine sandy loam
BC - 26 to 28 inches: fine sandy loam
R - 28 to 79 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent
Surface area covered with cobbles, stones or boulders: 1.5 percent
Depth to restrictive feature: 21 to 41 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to high (0.00 to 14.03 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: C
Ecological site: F144BY702ME - Shallow and Moderately-deep Till
Hydric soil rating: No

WmB—Windsor loamy sand, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2w2x2
Elevation: 0 to 1,410 feet
Mean annual precipitation: 36 to 71 inches
Mean annual air temperature: 39 to 55 degrees F
Frost-free period: 140 to 240 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Windsor and similar soils: 85 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Windsor

Setting

Landform: Dunes, outwash plains, deltas, outwash terraces
Landform position (three-dimensional): Tread, riser
Down-slope shape: Convex, linear
Across-slope shape: Convex, linear
Parent material: Loose sandy glaciofluvial deposits derived from granite and/or loose sandy glaciofluvial deposits derived from schist and/or loose sandy glaciofluvial deposits derived from gneiss

Typical profile

Oe - 0 to 1 inches: moderately decomposed plant material
A - 1 to 3 inches: loamy sand
Bw - 3 to 25 inches: loamy sand
C - 25 to 65 inches: sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Excessively drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to very high (1.42 to 99.90 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water supply, 0 to 60 inches: Low (about 4.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2s
Hydrologic Soil Group: A
Ecological site: F144BY601ME - Dry Sand
Hydric soil rating: No

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ACORN ENGINEERING, INC.

K. EROSION & SEDIMENTATION CONTROL REPORT

Prepared For:

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Portland, Maine 04101

Prepared By:

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December 2023

INTRODUCTION

Acorn Engineering, Inc. has been retained by Community Housing of Maine to provide civil engineering services for the proposed work located at 186 Woodford Street, Portland, ME 04103. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 40 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (82 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements.

The following Erosion and Sedimentation Control Report was developed in accordance with the City of Portland Technical Manual – Section 5 – Portland Stormwater Management Standards and the Maine DEP Chapter 500 Stormwater Management Appendix A and B (1), Amended August 12, 2015. This narrative also meets the standards required in the Maine DEP's Erosion & Sediment Control BMP's Manual, revised in 2016.

1.0 EXISTING CONDITIONS

The proposed project is located at 186 Woodford Street. An ALTA / NSPS Land Title Survey has been prepared by Owen Haskell, Inc. on March 10, 2022 and last revised on October 12, 2023.

Abutting Uses:

- North B2 Zone — Commercial Services
- East B2 Zone — Residential
- South R5 Zone — Residential
- West R5 Zone — Residential

A large majority of the existing site is impervious surface that mainly includes buildings and parking lot. The average slope is moderate with grades dropping from the Southwest to Northeast across the site.

1.1 Existing Soils

Onsite soil information includes the following:

- Soil Conservation Service Medium Intensity Soil Survey for Cumberland County

Given the soils information, listed above, no onsite wastewater is proposed; the applicant does not intend to perform a more intense hydric soil boundary delineation because the waiver requirements set forth in the City of Portland Technical Manual – Section 7 – Soil Survey, Rev. 6/17/11;12/8/20 are met.

The area within and surrounding the project includes soil types listed in the table below. The susceptibility of soils to erosion is indicated on a relative "K" scale of values over a range of 0.02 to 0.69. Higher "K" values indicate more erodible soils.

Table 1 - "K" Value		
Soils Type	**Subsurface**	**Substratum**
Lyman-Tunbridge Complex	0.32 / 0.20	0.32 / 0.20
Windsor Loamy Sand	0.17	0.17

The soil "K" value for the soil, listed above, shows a low susceptibility to erosion. The site's susceptibility to erosion is from the Soil Conservation Service Medium Intensity Soil Survey for Cumberland County. Although soil "K" values for the soils show a moderate susceptibility to erosion, implementation of the proposed Erosion & Sedimentation Measures by the contractor will be of the utmost importance given the sustained slope throughout the site.

1.2 Existing Erosion Problems

There are no signs of erosion.

1.3 Critical Areas

There are no critical areas.

1.4 Protected Natural Resource

The client is not aware of the presence of any existing significant natural features located on the site as listed in Section 14-526 (b) 1. of the Land Use Code. The project is not located within a watershed classified as an Urban Impaired Stream by the Maine DEP.

1.5 Previous Construction Activity (5 years)

Acorn Engineering, Inc. is not aware of any construction related activities within the project limits within the past 5 years.

1.6 Timber Harvesting

Acorn Engineering, Inc. is not aware of any timber harvesting within the past five years.

2.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

As part of the site development, the following temporary and permanent erosion and sedimentation control devices shall be implemented. Devices shall be installed as described in this report or within the plan set. See the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices for further reference.

2.1 Temporary Erosion Control Measures

The following temporary erosion and sedimentation control measures are planned for the project's construction period:

2.1.1 Crushed stone stabilized construction entrances shall be placed at all access points to the project site where there are disturbed areas. The following specifications shall be followed at a minimum:

- Stone size shall be 2-3 inches or reclaimed or recycled concrete equivalent.
- The thickness of the entrance stone layer shall be no less than 6 inches.
- The entrance shall not be less than 20 feet wide, however not less than the full width of points where ingress or egress occurs. The length shall not be less than 50 feet in length.
- Geotextile fabric (woven or non-woven) shall be placed over the entire entrance area.
- The entrance/exit shall be maintained to the extent that it will prevent the tracking of sediment onto public roadways.

2.1.2 Siltation fence or erosion control berm shall be installed down gradient of any disturbed areas to trap runoff borne sediments until permanent stabilization is achieved. The silt fence or erosion control berm shall be installed per the details provided in the plan set and inspected before and immediately after each rainfall and at least daily during prolonged rainfall. Repairs shall be made if there are any signs of erosion or sedimentation below the fence line or berm. If there are signs of undercutting at the center or the edges, or impounding of large volumes of water behind the fence or berm, the barrier shall be replaced with a stone check dam.

2.1.3 Hay mulch including hydro seeding is intended to provide cover for denuded or seeded areas until revegetation is established. Mulch placed between April 15th and November 1st on slopes of less than 15 percent shall be covered by fabric netting and anchored with staples in accordance with the manufacturer's recommendation. Mulch placed between November 1st and April 15th on slopes equal to or steeper than 8 percent and equal to or flatter than 2:1 shall use mats or fabric netting and anchored with staples in accordance with the manufacturer's recommendation.

2.1.4 At any time of the year, all slopes greater than 3:1 shall be stabilized with Double Net Erosion Control Blanket Bionet SC150BN by North American Green or Approved Equal, or Erosion Control Mix Slope Protection as detailed within the plans.

2.1.5 Woodford Street shall be swept to control mud and dust from the construction site as necessary. Add additional stone to the stabilized construction entrance to minimize the tracking of material off the site and onto the surrounding roadways.

2.1.6 During demolition, clearing and grubbing operations, stone check dams shall be installed at any areas of concentrated flow. The maximum height of the check dam shall not exceed 2 feet. The center of the check dam shall be 6 inches below the outer edges of the dam. The contractor shall mulch the side slopes and install stone check dams for all newly excavated ditch lines within 24 hours of their creation.

2.1.7 Silt fence stake spacing shall not exceed 6 feet unless the fence is supported with 14-gauge wire in which case the maximum spacing shall not exceed 10 feet. The silt fence shall be "toed" into the ground.

2.1.8 Storm drain inlet protection shall be provided to storm drains using any of the following: hay bale drop inlet structures, silt fence drop inlet sediment filter, gravel and wire mesh drop inlet sediment filter, or curb inlet sediment filter. Barriers shall be inspected after every rainfall event and repaired as necessary. Sediments shall be removed when accumulation has reached ½ the design height.

2.1.9 Dust control shall be accomplished using any of the following: water, calcium chloride, stone, or an approved MDEP product. Dust control shall be applied as needed to accomplish dust control.

2.1.10 Temporary loam, seed, and mulching shall be used in areas where no other erosion control measure is used. Application rates for seeding are provided at the end of this report.

2.1.11 Stockpiles shall be stabilized within 7 days of formation unless a scheduled rain event occurs prior to the 7-day window, in which case the stockpile shall be stabilized prior to the rain event. Methods of stabilization shall be mulch, erosion control mix, or erosion control blankets/mats. Silt fence or a wood waste compost filter berm shall be placed downhill of any soil stockpile location.

2.1.12 For disturbance between November 1 and April 15, please refer to winter stabilization plan in this report and the Maine Erosion and Sediment Control BMP manual for further information.

2.1.13 It is of the utmost importance that stormwater runoff and potential sediment from the construction site be diverted around the proposed underdrains until the trench is backfilled.

2.2 Permanent Erosion Control Measures

The following permanent erosion control measures are intended for post disturbance areas of the project.

2.2.1 All disturbed areas during construction, not subject to other proposed conditions, shall receive a minimum 4" of loam, limed, and mulched. Erosion control blankets or mats shall be placed over the mulch in areas noted in paragraph 4.1 of this report.

2.2.2 All stormwater devices shall be installed, and tributary areas stabilized prior receiving stormwater.

2.2.3 Refer to the Maine Erosion and Sediment Control BMP manual for additional information.

3.0 EROSION AND SEDIMENTATION CONTROL PLAN

3.1 The Erosion and Sedimentation Control Plan is included within the plan set.

4.0 DETAILS AND SPECIFICATIONS

4.1 Erosion Control Details and Specifications are included in the plan set.

5.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

Winter Construction consists of earthwork disturbance between the dates of November 1 and April 15. If a construction site is not stabilized with pavement, a road gravel base, 75% mature vegetation cover or riprap by November 15, then the site shall be protected with over-winter stabilization. Any area not stabilized with pavement, vegetation, mulching, erosion control mix, erosion control mats, riprap, or gravel base on a road shall be considered open.

The contractor shall limit the work area to areas that work will occur in during the subsequent 15 days and so that it can be mulched one day prior to a snow event. The contractor shall stabilize work areas prior to opening additional work areas to minimize areas without erosion control measures.

The following measures shall be implemented during winter construction periods:

5.1 Sediment Barriers

During frozen conditions, sediment barriers may consist of erosion control mix berms or any other recognized sediment barriers as frozen soil prevents the proper installation of hay bales or silt fences.

5.2 Mulching

All areas shall be considered to be denuded until seeded and mulched. Hay and straw mulch shall be applied at a rate of 150 lb. per 1,000 square feet or 3 tons/acre (twice the normal accepted rate of 75-lbs./1,000 s.f. or 1.5 tons/acre) and shall be properly anchored. Erosion control mix must be applied with a minimum 4-inch thickness. Mulch shall not be spread on top of snow. The snow shall be removed down to a one-inch depth or less prior to application. After each day of final grading, the area shall be properly stabilized with anchored hay or straw or erosion control matting. An area shall be considered to have been stabilized when exposed surfaces have been either mulched or adequately anchored so that ground surface is not visible through the

mulch. Between the dates of November 1 and April 15, all mulch shall be anchored by either mulch netting, tracking or wood cellulose fiber. The cover will be considered sufficient when the ground surface is not visible through the mulch. After November 1st, mulch and anchoring of all exposed soil shall occur at the end of each final grading workday.

5.3 Soil Stockpiling

Stockpiles of soil or subsoil shall be mulched for over winter protection with hay or straw at twice the normal rate or with a four-inch layer of erosion control mix. This shall be done within 24 hours of stocking and re-established prior to any rainfall or snowfall.

5.4 Seeding

Between the dates of October 15th and April 1st, loam or seed shall not be required. During periods of above freezing temperatures finished areas shall be fine graded and either protected with mulch or temporarily seeded and mulched until the final treatment can be applied. If the date is after November 1st and if the exposed area has not been loamed, final grading with a uniform surface, then the area may be dormant seeded at a rate of 3 times higher than specified for permanent seed and then mulched.

Dormant seeding may be placed prior to the placement of mulch or erosion control blankets. If dormant seeding is used for the site, all disturbed areas shall receive 4" of loam and seed at an application rate of 5 lbs./1,000 s.f. All areas seeded during the winter shall be inspected in the spring for adequate catch. All areas insufficiently vegetated (less than 75% catch) shall be revegetated by replacing loam, seed and mulch. If dormant seeding is not used for the site, all disturbed areas shall be revegetated in the spring.

5.5 Over winter stabilization of disturbed soils

By September 15th, all disturbed soils on areas having a slope less than 15% shall be seeded and mulched. If the disturbed areas are not stabilized by this date, then one of the following actions shall be taken to stabilize the soil for late fall and winter:

- Stabilize the soil with temporary vegetation – By October 1st, seed the disturbed soil with winter rye at a seeding rate of 3lbs per 1,000 s.f., lightly mulch the seeded soil with hay or straw at 75 lbs per 1,000 s.f., and anchor the mulch with plastic netting. Monitor growth of the rye over the next 30 days. If the rye fails to grow at least three inches or fails to cover at least 75% of the disturbed soil before November 1st, then mulch the area for over-winter protection.

- Stabilize the soil with sod – Stabilize the disturbed soil with properly installed sod by October 1st. Proper installation includes pinning the sod onto the soil with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil.

- Stabilize the soil with mulch – By November 15th, mulch the disturbed soil by spreading hay or straw at a rate of at least 150 lbs per 1,000 s.f. on the area so that no soil is visible through the mulch. Immediately after applying the mulch, anchor the mulch with plastic netting to prevent wind from moving the mulch off the disturbed soil.

5.6 Over winter stabilization of disturbed slopes

All stone-covered slopes shall be constructed and stabilized by November 15th. All slopes to be vegetated shall be seeded and mulched by September 1st. A slope is considered a grade greater than 15%. If a slope to be vegetated is not stabilized by September 1st, then one of the following action shall be taken to stabilize the slope for late fall and winter:

- Stabilize the soil with temporary vegetation and erosion control mats – By October 1st the disturbed slope shall be seeded with winter rye at a seeding rate of 3 lbs per 1,000 s.f. and then install erosion control mats or anchored mulch over the seeding. If the rye fails to grow at least three inches or fails to cover at least 75% of the slope by November 1st, then the contractor shall cover the slope with a layer of erosion control mix or with stone riprap.

- Stabilize the soil with sod – The disturbed slope shall be stabilized with properly installed sod by October 1st. Proper installation includes the contractor pinning the sod onto the slope with wire pins, rolling the sod to guarantee contact between the sod and underlying soil, and watering the sod to promote root growth into the disturbed soil. The contractor shall not use late-season sod installation to stabilize slopes having a grade greater than 3H:1V or having groundwater seeps on the slope face.

- Stabilize the soil with erosion control mix – Erosion control mix shall be properly installed by November 15th. The contractor shall not use erosion control mix to stabilize slopes having grades greater than 2H:1V or having groundwater seeps on the slope face.

- Stabilize the soil with stone riprap – Place a layer of stone riprap on the slope by November 15th. A registered professional engineer shall be hired to determine the stone size needed for stability on the slope and to design a filter layer for underneath the riprap.

6.0 INSPECTION AND MAINTENANCE

A person with knowledge of erosion and stormwater control, including the standards and conditions in the permit, shall conduct periodic visual inspections of installed erosion control measures. The frequency of inspection shall occur at least once every two weeks, as well as after a "storm event". A "storm event" shall consist 0.5 inches of rain within a 24-hour period. The following Erosion and Sediment Control - Best Management Practices (BMP's) shall inspected in the manner as described.

6.1 Sediment Barriers

Hay bale barriers, silt fences and filter berms shall be inspected and repaired for the following if there are any signs of erosion or sedimentation below them. If there are signs of undercutting at the center or the edges of the barrier, or impounding of large volumes of water behind them, sediment barriers shall be replaced with a temporary check dam. Should the fabric on a silt fence or filter barrier decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, the fabric shall be replaced promptly. Sediment deposits should be removed when deposits reach approximately one-half the height of the barrier. Filter berms should be reshaped as needed. Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared and seeded.

6.2 Stabilized Stone Construction Entrances

The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way. When the control pad becomes ineffective, the stone shall be removed along with the collected soil material and redistributed on site in a stable manner. The entrance should then be reconstructed. The contractor shall sweep or wash pavement at exits, which have experienced mud-tracking on to the pavement or traveled way. When washing is required, it shall be done on an area stabilized with aggregate, which drains into an approved sediment trapping device. All sediment shall be prevented from entering storm drains, ditches, or waterways.

6.3 Mulched Areas

All mulches must be inspected periodically, in particular after rainstorms, to check for rill erosion. If less than 90% of the soil surface is covered by mulch, additional mulch shall be immediately applied. Nets must be inspected after rain events for dislocation or failure. If washouts or breakage occur, re-install the nets as necessary after repairing damage to the slope. Where mulch is used in conjunction with ornamental plantings, inspect periodically throughout the year to determine if mulch is maintaining coverage of the soil surface. Repair as needed.

6.4 Dust Control

When temporary dust control measures are used, repetitive treatment shall be applied as needed to accomplish control.

6.5 Stormwater Appurtenances

All underdrains, storm drains, and catch basins need to be operating effectively and free of debris.

6.6

Erosion and Sedimentation Control Inspections:

Acorn Engineering has personnel qualified to conduct Erosion and Sedimentation Control Inspections. For further information, contact:

Contact: Peter Heil, PE
Telephone: (207) 775-2655

Qualifications:

- Maine Professional Engineering License #15318
- Maine DEP - Certified in Maintenance & Inspection of Stormwater BMP's
- Maine DEP – Certified Third-Party Inspector
- Certified Professional in Erosion and Sediment Control (CPESC) Cert. #7071

The Contractor has sole responsibility for complying with the Erosion and Sedimentation Report/Plan, including control of fugitive dust. The Contractor shall be responsible for any monetary penalties resulting from failure to comply with these standards.

7.0 IMPLEMENTATION SCHEDULE

The following implementation sequence is intended to maximize the effectiveness of the above described erosion control measures. Contractors should avoid overexposing disturbed areas and limit the amount of stabilization area.

1. Install a stabilized construction entrance in all locations where construction traffic will enter and exit the site.
2. Install perimeter silt fence or erosion control berm.
3. Commence installation of drainage infrastructure.
4. Install all other erosion control devices as necessary throughout the remainder of this schedule.
5. Commence earthwork operations, associated with the roadway construction.
6. Commence installation of utilities.
7. Continue earthwork and grading to subgrade as necessary for construction.
8. Complete installation of drainage infrastructure, as well as other utility work.
9. Complete remaining earthwork operations.
10. Install sub-base and base gravels in paved areas.
11. Install paving, curbing and brickwork.
12. Loam, lime, fertilize, seed and mulch disturbed areas and complete all landscaping.
13. Once the site is stabilized, 90% catch of grass has been obtained, or mulching of landscape areas is complete, remove all temporary erosion control measures.
14. Touch up areas without a vigorous catch of grass with loam and seed.
15. Complete site signage and striping.
16. Execute proper maintenance of all temporary and permanent erosion control measures throughout the project.

The above implementation sequence should be generally followed by the site contractor. However, the contractor may construct several items simultaneously. The contractor shall submit to the owner a schedule of the completion of the work. If the contractor is to commence the construction of more than one item above, they shall limit the amount of exposed areas to those areas in which work is expected to be undertaken during the following 30 days.

The contractor shall re-vegetate disturbed areas as rapidly as possible. All areas shall be permanently stabilized within 7 days of final grading or before a storm event. The contractor shall incorporate planned inlets and drainage systems as early as possible into the construction phase.

8.0 CONCLUSION

The above erosion control narrative is intended to minimize the development impact by implementing temporary and permanent erosion control measures. The contractor shall also refer to the Maine Erosion and Sediment Control BMP manual for additional information.

9.0 ATTACHMENTS

- Temporary Seeding Plan
- Permanent Seeding Plan

TEMPORARY SEEDING PLAN

Site Preparation

The seeded areas shall be feasibly graded out to provide the use of equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. If necessary, the site may require additional temporary erosion control measures outlined in the Erosion Control report.

Seedbed Preparation

Fertilizer shall be applied to the site at a rate of 13.8 pounds per 1,000 square feet. The composition of the fertilizer shall be 10-10-10 (N-P2O5-K2O) or equivalent.

Limestone shall be applied to the site at a rate of 138 pounds per 1,000 square feet.

Seeding

The composition and amount of temporary seed applied to a site shall be determined by the following table:

Seed	Pounds / 1,000 S.F.	Recommended Seeding Dates
Winter Rye	2.57	Aug-15 to Oct-1
Oats	1.84	Apr-1 to Jul-1 Aug-15 to Sep-15
Annual Ryegrass	0.92	Apr-1 to Jul-1
Sudangrass	0.92	May-15 to Aug-15
Perennial	0.92	Aug-15 to Sep-15

Mulching

Mulch shall be applied at a rate of 70 lbs – 90 lbs per 1,000 square feet. The mulch shall be installed at a minimum depth of 4 inches. The seeded area shall be mulched immediately after seed is applied. Mulching during the winter season shall be double the normal amount.

Conclusion

Please refer to the Maine Erosion and Sediment Control BMP manual for additional information pertaining to temporary seeding and mulching.

PERMANENT SEEDING PLAN

Site Preparation

The seeded areas shall be feasibly graded out to provide the use of equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. If necessary, the site may require additional temporary erosion control measures outlined in the Erosion Control report.

Seedbed Preparation

Fertilizer shall be applied to the site at a rate of 13.8 pounds per 1,000 square feet. The composition of the fertilizer shall be 10-10-10 (N-P2O5-K2O) or equivalent.

Limestone shall be applied to the site at a rate of 138 pounds per 1,000 square feet.

Seeding

The composition and amount of permanent seed applied to a site shall be determined by the following table:

Seed	Pounds / 1,000 S.F.
Kentucky Bluegrass	0.46
Creeping Red Fescue	0.46
Perennial Ryegrass	0.11
Total	1.03

Mulching

Mulch shall be applied at a rate of 70 lbs – 90 lbs per 1,000 square feet. The mulch shall be installed at a minimum depth of 4 inches. The seeded area shall be mulched immediately after seed is applied. Mulching during the winter season shall be double the normal amount.

Recommendations

Permanent seeding is recommended to be completed in the spring. Later summer seeding is allowed if completed prior to September 1st. If seeding cannot be accomplished during the periods recommended for permanent seeding, then the contractor shall perform temporary seeding per the temporary seeding plan.

Conclusion

Please refer to the Maine Erosion and Sediment Control BMP manual for additional information pertaining to permanent seeding and mulching.

ACORN ENGINEERING, INC.

Chief Gautreau
City of Portland Fire Department
380 Congress St.
Portland, ME 04101

December 22, 2023

Subject: 186 Woodford Street – Fire Department Checklist
Section L of Application

On behalf of Community Housing of Maine, the design team is pleased to respond to the Portland Fire Department Site Review Checklist.

1. Name, address, telephone number of applicant:

   Community Housing of Maine
   One City Center, 4th Floor,
   Portland, ME 04101
   (207) 879-0347

2. Name address, telephone number of architect:

   CWS Architecture
   246 US-1, Unit 2a
   Scarborough, Maine 04074
   207-774-4441

3. Proposed uses of any structures [NFPA and IBC classification]

   NFPA: Apartment / IBC: R-2

4. Square footage of all structures, including decks [total and per story]

Existing

Existing Building		
Total	Approx. 24,600	**gfa**

Proposed

Church to Remain		
Total	Approx. 10,600	**gfa**

Parish House		
1st Floor	9,518	sf
2nd Floor	9,400	sf
3rd Floor	9,400	sf
4th Floor	7,812	sf
Total	Approx. 36,130	**gfa**

Senior Housing Building		
1st Floor	8,118	sf
2nd Floor	8,208	sf
3rd Floor	8,208	sf
4th Floor	8,208	sf
Total	Approx. 32,742	**gfa**

5. Elevation of all structures

   The proposed 4-story structure's height will be below the allowable 45 feet within the B-2 zoning district. Please refer to the building elevations provided by the Architect for additional information.

6. Proposed fire protection of all structures

   The proposed buildings will have a sprinkler system per code. Fire flows and requirements for system storage or booster pumping are subject to the fire designer which will be performed prior to the request for a building permit.

7. Hydrant locations

   a. An existing hydrant is located southwest of the existing building on the corner of Beacon Street and Revere Street. Additionally, there are two hydrants location on Woodford Street, one to the east and one to the west of the project (see hydrant map below). Hydrant flow data from the Portland Water District once received may be made available to the Fire Department upon request.



8. Water main size and location

   The existing Woodfords Church will continue to utilize the existing water service connection from the main within Woodford Street. The proposed parish house redevelopment and new senior hosing residential building will be serviced by a proposed 2" domestic water service connection as well as a 6" fire suppression service from the existing water main within Woodford Street. The size of the water main within Woodford Street is unknown at this time.

9. Access to all structures [min. 2 sides]

   Access to the structure is provided directly on Woodford Street and from the parking lot that circulates around the site.

NFPA 1 – Chapter 18 Fire Department Access and Water Supply

18.2 Fire Department Access:

The project site is located in a heavily developed area and is fronted by a public street. The following pavement street width is currently available:

- Woodford Street: 33 feet
- Beacon Street: 26 feet

Per NFPA 1 – Chapter 18.2.3.3.1, there will be public street access within 50 feet of at least one exterior door. Per NFPA 1 – Chapter 18.2.3.2.2.1, all first story floors shall be located not more than 450 feet from a Fire Department access road.

City of Portland Technical Manual – Section 3 Public Safety

3.4.1 Every dead-end roadway more than one hundred fifty (150') feet in length shall provide a turnaround at the closed end. Turnarounds shall be designed to facilitate future street connectivity and shall always be designed to the right (refer to Figure I-5).

Response: There are no dead-end roadway conditions more than one hundred fifty feet in length included as part of the proposed project.

3.4.2 Where possible, developments shall provide access for Fire Department vehicles to at least two sides of all structures. Access may be from streets, access roads, emergency access lanes, or parking areas.

Response: Access to structures onsite is provided directly from Woodford Street/Beacon Street and from the internal parking lot. See the Site Plan for additional information.

3.4.3 Building setbacks, where required by zoning, shall be adequate to allow for emergency vehicle access and related emergency response activities and shall be evaluated based on the following factors:

- *Building Height.*
- *Building Occupancy.*
- *Construction Type.*
- *Impediments to the Structures.*
- *Safety Features Provided.*

Response: The proposed development layout has contemplated emergency access conditions and provides for safe and efficient access along the public street for emergency vehicles.

3.4.4. Fire Dept. access roads shall extend to within 50' of an exterior door providing access to the interior of the structure.

Response: The building will be provided with exterior doors that will be within 50' of a Fire Department access route, namely Woodford Street or Beacon Street.

3.4.5. Site access shall provide a minimum of nine (9) feet clearance height to accommodate ambulance access.

Response: The proposed site maintains the required clearance height of nine feet in all cases.

3.4.6. Elevators shall be sized to accommodate an 80 x 24-inch stretcher.

Response: elevators will be sized to accommodate an 80 x 24-inch stretcher.

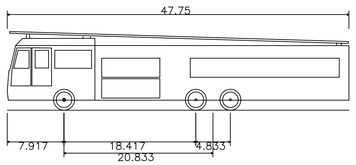
3.4.7. All structures are required to display the assigned street number. Numbers shall be clearly visible from the public right of way.

Response: The site's address is 186 Woodford Street in Portland Maine. The final address locations will be coordinated with public works as part of the proposed subdivision application process.

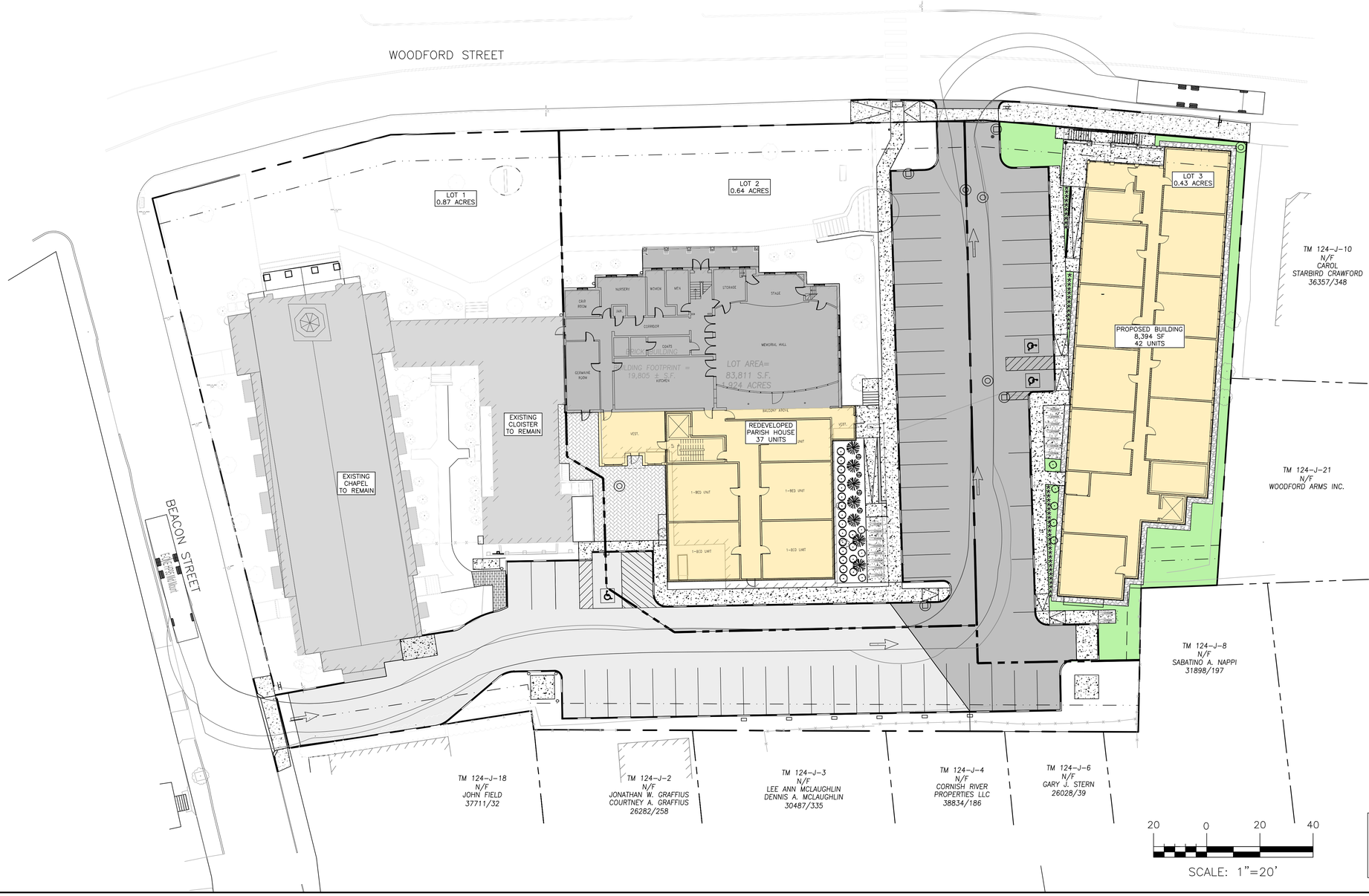
Thank you for your review. Please let me know if you have any additional questions or comments.
Sincerely,



Peter Heil, P.E.
Project Manager
Acorn Engineering, Inc.



E-ONE HP95 Mid Mount	
Overall Length	47.750ft
Overall Width	8.333ft
Overall Body Height	11.000ft
Min Body Ground Clearance	1.393ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Max Wheel Angle	45.00°



PERMITTING
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23

DRAWING NAME: **TURNING EXHIBIT**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT:
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT PERMISSION FROM ACORN ENGINEERING, INC. AND THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
P.O. BOX 3237, PORTLAND, MAINE 04104
(207) 775-2655

FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

DRAWING NO.
EX

M. Calculation of Wastewater Flowrate for 186 Woodford Street

The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 37 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (79 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to create a new lot division separating the existing church from the rest of the development onsite. The land containing the Parish House and the new affordable housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

Based upon Section 4 of the *Maine Subsurface Wastewater Disposal Rules*, the table below outlines the proposed flow. We have negated the existing church from the calculations as the flows are anticipated to remain the same or decrease as a result of the proposed redevelopment.

Estimate of Anticipated Daily Flows			
Development	Unit Size	Gallons per Day per Unit	Total Gallons per Day (GPD)
Existing Flow			
Church	-	-	-
Total Gallons per Day (Existing)			**-**
Proposed Flow			
Redeveloped Parish House (37 Units)	1-Bedroom	120 GPD/ Unit	4,440 GPD
Proposed Senior Housing Building (42 Units)	1-Bedroom / Studio	120 GPD/ Unit	5,040 GPD
Church	-	-	No change
Total Gallons per Day (Proposed)			**9,480 GPD**
Net Change			**+9,480 GPD**
*Values based on Chapter 241 State of Maine: Subsurface Wastewater Disposal Rules, most recent edition			

The proposed project is anticipated to increase the net flow by approximately 9,480 gallons per day (GPD).

CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Portland Dept. of Public Works -
Water Resources
212 Canco Road
Portland, Maine 04103

Bradley Roland, P.E.
Water Resources Division
Department of Public Works
212 Canco Road
Portland, ME 04103

Date: 12/22/23

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: 186 Woodford Street, Portland, Maine 04103

Chart Block Lot Number: Map 124, Block J, Lot 5

Proposed Use: Two Affordable Housing Buildings & Church
Previous Use: Church & Parking Lot
Existing Sanitary Flows: Unknown GPD
Existing Process Flows: 0 GPD
Description and location of City sewer that is to receive the proposed building sewer lateral.

Woodford Street (12" Sanitary Sewer)

Site Category:
- Commercial *(see part 4 below)* ☐
- Industrial *(complete part 5 below)* ☐
- Governmental ☐
- Residential ☑
- Other *(specify)* Church ☑

Clearly, indicate the proposed connections, on the submitted plans.

2. Please, Submit Contact Information.

City Planner's Name: Matthew Grooms Phone: 207-874-8719
Owner/Developer Name: Community Housing of Maine - Brian Kilgallen
Owner/Developer Address: One City Center, 4th Floor, Portland, Maine, 04101
Phone: 207-879-0347 Fax: E-mail: brain@chomhousing.org
Engineering Consultant Name: Acorn Engineering - Peter F. Heil, PE
Engineering Consultant Address: 500 Washington Avenue, Portland, Maine, 04103 (Suite #2)
Phone: 207-775-2655 Fax: E-mail: pheil@acorn-engineering.com

Note: Consultants and Developers should allow +/- 15 days, for capacity status, prior to Planning Board Review.

3. Please, Submit Domestic Wastewater Design Flow Calculations.

Estimated Domestic Wastewater Flow Generated: Net increase: 9,480 GPD
Peaking Factor/ Peak Times: Diurnal
Specify the source of design guidelines: *(i.e.__"Handbook of Subsurface Wastewater Disposal in Maine," "Plumbers and Pipe Fitters Calculation Manual," __ Portland Water District Records, __ Other (specify)*
Handbook of Subsurface Wastewater Disposal in Maine

Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet.

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: N/A

Size of External Grease Interceptor: _____

Retention Time: _____

Peaking Factor/ Peak Times: _____

Note: In determining your restaurant process water flows, and the size of your external grease interceptor, please use The Uniform Plumbing Code. Note: In determining the retention time, sixty (60) minutes is the minimum retention time. Note: Please submit detailed calculations showing the derivation of your restaurant process water design flows, and please submit detailed calculations showing the derivation of the size of your external grease interceptor, either in the space provided below, or attached, as a separate sheet.

5. Please, Submit Industrial Process Wastewater Flow Calculations

Estimated Industrial Process Wastewater Flows Generated: N/A GPD

Do you currently hold Federal or State discharge permits? Yes ____ No ____

Is the process wastewater termed categorical under CFR 40? Yes ____ No ____

OSHA Standard Industrial Code (SIC): *(http://www.osha.gov/oshstats/sicser.html)*

Peaking Factor/Peak Process Times: _____

Note: On the submitted plans, please show where the building's domestic sanitary sewer laterals, as well as the building's industrial-commercial process wastewater sewer laterals exits the facility. Also, show where these building sewer laterals enter the city's sewer. Finally, show the location of the wet wells, control manholes, or other access points; and, the locations of filters, strainers, or grease traps.

Note: Please submit detailed calculations showing the derivation of your design flows, either in the space provided, or attached, as a separate sheet.

N. Lighting

Existing mounted lighting on the Church is anticipated to remain. All new construction will have exterior lighting at egresses and will be down shaded and dark sky compliant. Please refer to the Photometric Plan and attached cut sheets for additional information.

Swaney Lighting
PO Box 1597
Scarborough ME 04070
Phone: (207) 883-7100
Fax: (207) 885-9606

Date: Dec 19, 2023

Job Name
WOODFORD STREET HOUSING
SLA23-57191
PORTLAND ME

Bid Date
Dec 13, 2023

Submittal Date
Dec 19, 2023

Transmittal

Swaney Lighting
PO Box 1597
Scarborough ME 04070
Phone: (207) 883-7100
From: Therese Freeman X-103

Project **WOODFORD STREET HOUSING**
Quote# SLA23-57191
Location PORTLAND ME
Contact:

ATTACHED WE ARE SENDING YOU 1 COPY OF THE FOLLOWING ITEM:

- ☐ Drawings
- ☐ Prints
- ☐ Plans
- ☐ Specifications
- ☐ Information
- ☒ Submittals

Other:

THESE ARE TRANSMITTED FOR:

- ☐ Prior Approval
- ☒ Approval
- ☐ Approval as Submitted
- ☐ Approval as Noted
- ☐ Resubmittal for Approval
- ☐ Corrections
- ☐ Your Use
- ☐ Review and Comment
- ☐ Record

Bids due on:
Other:

Type	MFG	Part
A4	BEACON PRODUCTS	VP-1-160L-100-3K7-4W-UNV-A-DBT
A4	BEACON PRODUCTS	SSSB20-40A-1-B3-DBT-VM2
S4	BEACON PRODUCTS	VP-1-160L-50-3K7-4W-UNV-A-DBT-BC
S4	BEACON PRODUCTS	SSSB20-40A-1-B3-DBT-VM2
DL	PRESCOLITE	LTR-4RD-H-SL10L-DM1 / LTR-4RD-T-SL30K8XW-S
WP	KIM	CY1-15-3K7-1-1D-UNV-DBT-R-FPP

BEACON design . performance . technology

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Area/Site

VIPER LUMINAIRE

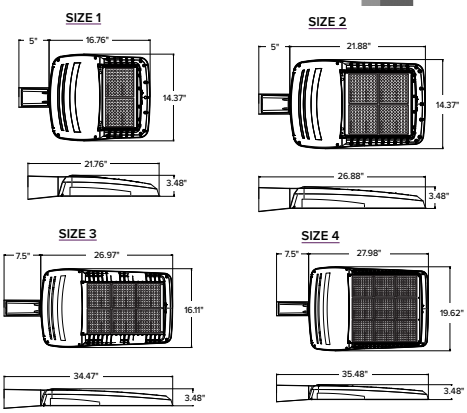
FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealership, retail, commercial, and campus parking lots
- Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction
- Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G
- Control options including photo control, occupancy sensing, NX Lighting Controls™, LightGRID+ and 7-Pin with networked controls
- New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail
- Field interchangeable mounting provides additional flexibility after the fixture has shipped

c UL us IP65 DLC LISTED DLC LISTED PREMIUM ida DARK SKY APPROVED 2016 BAA TAA

MICRO STRIKE | OPTICS STRIKE





CONTROL TECHNOLOGY

NX CONNECT NX WIRED NX WIRELESS LIGHTGRID+

SERVICE PROGRAMS

STOCK QS10

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with 1000 hour powder coat paint finish
- External hardware is corrosion resistant

OPTICS

- Micro Strike Optics (160, 320, 480, or 720 LED counts) maximize uniformity in applications and come standard with mid-power LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 2
- Strike Optics (36, 72, 108, or 162 LED counts) provide best in class distributions and maximum pole spacing in new applications with high powered LEDs. Strike optics are held in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3
- Both optics maximize target zone illumination with minimal losses at the house-side, reducing light trespass issues. Additional backlight control shields and house side shields can be added for further reduction of illumination behind the pole
- One-piece silicone gasket ensures a weatherproof seal
- Zero up-light at 0 degrees of tilt
- Field rotatable optics

INSTALLATION

- Mounting patterns for each arm can be found on page 11
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option (ASQU) or accessory for square and round poles
- All mounting hardware included
- Knuckle arm fitter option available for 2-3/8" OD tenon
- For products with EPA less than 1 mounted to a pole greater that 20ft, a vibration damper is recommended

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40˚C to 40˚C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/ IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options cannot be combined

CONTROLS

- Photo control, occupancy sensor programmable controls, and Zigbee wireless controls available for complete on/off and dimming control
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)

CONTROLS (CONTINUED)

- 0- 10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard
- NX Lighting Controls™ available with in fixture wireless control module, features dimming and occupancy sensor
- LightGRID+ available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin configuration

	EPA				
	VP1 (Size 1)	VP2 (Size 2)	VP3 (Size 3)	VP4 (Size 4)	Config.
Single Fixture	0.454	0.555	0.655	0.698	
Two at 180	0.908	1.110	1.310	1.396	
Two at 90	0.583	0.711	0.857	0.948	
Three at 90	1.037	1.266	1.512	1.646	
Three at 120	0.943	1.155	1.392	1.680	
Four at 90	1.166	1.422	1.714	1.896	

CERTIFICATIONS

- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations listed in this document are DLC® qualified. Refer to http://www.designlights.org for the most up-to-date list.
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40˚C ambient temperatures
- 1.5 G rated for ANSI C136.31 high vibration applications
- Fixture is IP65 rated
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) and Trade Agreements Act (FAR 52.225-11). See Buy America(n) Solutions (link to https://www.currentlighting.com/resources/america-solutions).

WARRANTY

- 5 year warranty

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Area/Site

VIPER LUMINAIRE

MICROSTRIKE OPTICS – ORDERING GUIDE

Gray Shading = Service Program Limit of 15 luminaires

QS10

Example: VP–2–320L-145–3K7–2–R–UNV–A3–BLT

CATALOG # VP – – – – – – – – – – –

Series	Optic Platform	Size	Light Engine		CCT/CRI		Distribution		Optic Rotation		Voltage	
VP Viper	Micro Strike	1 Size 1	160L-35 [6]	5500 lumens	AP	AP-Amber Phosphor Converted	2	Type 2	BLANK No Rotation		UNV	120-277V
			160L-50 [6]	7500 lumens	27K8	2700K, 80 CRI	3	Type 3	L	Optic rotation left	120	120V
			160L-75	10000 lumens	3K7	3000K, 70 CRI	4F	Type 4 Forward	R	Optic rotation right	208	208V
			160L-100	12500 lumens	3K8	3000K, 80 CRI	4W	Type 4 Wide			240	240V
			160L-115	15000 lumens	35K8	3500K, 80 CRI	5QW	Type 5 Square Wide			277	277V
			160L-135	18000 lumens	3K9	3000K, 90 CRI					347	347V
			160L-160	21000 lumens	4K7	4000K, 70 CRI					480	480V
		2 Size 2	320L-145	21000 lumens	4K8	4000K, 80 CRI						
			320L-170	24000 lumens	4K9	4000K, 90 CRI						
			320L-185	27000 lumens	5K7	5000K, 70 CRI						
			320L-210	30000 lumens	5K8	5000K, 80 CRI						
			320L-235	33000 lumens								
			320L-255	36000 lumens								
			320L-315 [6]	40000 lumens								
		3 Size 3	480L-285	40000 lumens								
			480L-320	44000 lumens								
			480L-340	48000 lumens								
			480L-390	52000 lumens								
			480L-425	55000 lumens								
			480L-470	60000 lumens								
		4 Size 4	720L-435	60000 lumens								
			720L-475	65000 lumens								
			720L-515	70000 lumens								
			720L-565 [6]	75000 lumens								
			720L-600 [6]	80000 lumens								
			CLO	Custom Lumen Output [1]								

Mounting		Color		Options		Network Control Options	
A	Arm mount for square pole/flat surface (B3 Drill Pattern) (Does not include round pole adapter)	BLT	Black Matte Textured	F	Fusing	NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming [1,3,4]
A_	Arm mount for round pole [2]	BLS	Black Gloss Smooth	2PF	Dual Power Feed	NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming [1,3,4]
ASQU	Universal arm mount for square pole. Can be used with B3 or S2 Drill Pattern	DBT	Dark Bronze Matte Textured	2DR	Dual Driver	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor [3,4]
A_U	Universal arm mount for round pole [2]	DBS	Dark Bronze Gloss Smooth	TE	Tooless Entry	WIR	LightGRID+ In-Fixture Module [3,4]
AAU	Adjustable arm for pole mounting (universal drill pattern)	GTT	Graphite Matte Textured	BC	Backlight Control [8]	WIRSC	LightGRID+ Module and Occupancy Sensor [3,4]
AA_U	Adjustable arm mount for round pole [2]	LGS	Light Grey Gloss Smooth	TB	Terminal Block	**Stand Alone Sensors**	
ADU	Decorative upswept Arm (universal drill pattern)	LGT	Light Grey Gloss Textured			BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
AD_U	Decorative upswept arm mount for round pole [2]	PSS	Platinum Silver Smooth			BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
MAF	Mast arm fitter for 2-3/8" OD horizontal arm	WHT	White Matte Textured			BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens
K	Knuckle	WHS	White Gloss Smooth			7PR	7-Pin Receptacle [4]
T	Trunnion	VGT	Verde Green Textured			7PR-SC	7-Pin Receptacle with shorting cap [4]
WB	Wall Bracket, horizontal tenon with MAF	**Color Option**				3PR	3-Pin twist lock [4]
WM	Wall mount bracket with decorative upswept arm	CC	Custom Color			3PR-SC	3-Pin receptacle with shorting cap [4]
WA	Wall mount bracket with adjustable arm					3PR-TL	3-Pin PCR with photocontrol [4]
						Programmed Controls	
						SCP-_F	Sensor Control Programmable, 8F or 40F [9]
						ADD	AutoDim Timer Based Dimming [4]
						ADT	AutoDim Time of Day Dimming [4]
						Photocontrols	
						PC	Button Photocontrol [4,7]

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
2 – Replace "_" with "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.5"-6.5" OD pole
3 – Networked Controls cannot be combined with other control options
4 – Not available with 2PF option
5 – Not available with Dual Driver option
6 – Some voltage restrictions may apply when combined with controls
7 – Not available with 480V
8 – BC not available on 4F and type 5 distributions
9 – At least one SCPREMOTE required to program SCP motion sensor. Must select 8ft or 40ft.

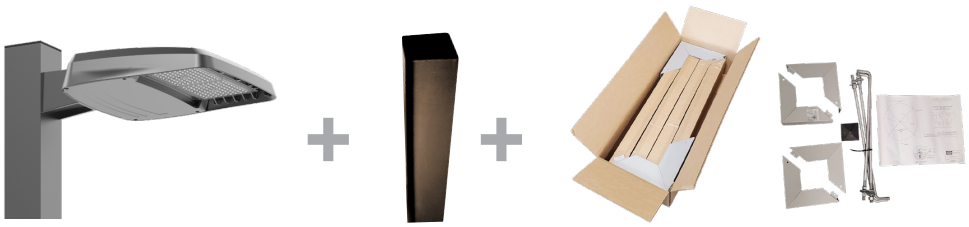
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VIPER Area/Site

VIPER LUMINAIRE

VIPER POLE EXPRESS COMBO – ORDERING GUIDE



Catalog Number	Pole	Single or Double Head	Fixture	Lumens*	Wattage	Distribution	CCT/CRI	Mounting	Finish
VP-1-160-4K-3-LS-S20	20' Square Straight Steel	Single	VP-1-160-4K-3-LS	19584	158W	Type 3	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-3-LS-S20-2X	20' Square Straight Steel	Double	VP-1-160-4K-3-LS	19584	158W	Type 3	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-4F-LS-S20	20' Square Straight Steel	Single	VP-1-160-4K-4F-LS	19426	158W	Type 4F	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-4F-LS-S20-2X	20' Square Straight Steel	Double	VP-1-160-4K-4F-LS	19426	158W	Type 4F	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-3-LS-S25	25' Square Straight Steel	Single	VP-1-160-4K-3-LS	19584	158W	Type 3	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-3-LS-S25-2X	25' Square Straight Steel	Double	VP-1-160-4K-3-LS	19584	158W	Type 3	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-4F-LS-S25	25' Square Straight Steel	Single	VP-1-160-4K-4F-LS	19426	158W	Type 4F	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-4F-LS-S25-2X	25' Square Straight Steel	Double	VP-1-160-4K-4F-LS	19426	158W	Type 4F	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-3-LS-S20	20' Square Straight Steel	Single	VP-1-160-5K-3-LS	19499	158W	Type 3	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-3-LS-S20-2X	20' Square Straight Steel	Double	VP-1-160-5K-3-LS	19499	158W	Type 3	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-4F-LS-S20	20' Square Straight Steel	Single	VP-1-160-5K-4F-LS	19186	158W	Type 4F	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-4F-LS-S20-2X	20' Square Straight Steel	Double	VP-1-160-5K-4F-LS	19186	158W	Type 4F	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-3-LS-S25	25' Square Straight Steel	Single	VP-1-160-5K-3-LS	19499	158W	Type 3	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-3-LS-S25-2X	25' Square Straight Steel	Double	VP-1-160-5K-3-LS	19499	158W	Type 3	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-4F-LS-S25	25' Square Straight Steel	Single	VP-1-160-5K-4F-LS	19186	158W	Type 4F	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-4F-LS-S25-2X	25' Square Straight Steel	Double	VP-1-160-5K-4F-LS	19186	158W	Type 4F	5000K/70CRI	Universal Arm	Dark Bronze Textured

VIPER POLE EXPRESS COMBO – STOCK LUMINAIRE SKUS

Catalog Number	Lumens	LPW	Distribution	Wattage	CCT/CRI	Voltage	Mounting	Finish
VP-1-160-4K-3-LS	19584	123.9	3	158W	4000K/70CRI	120-277V	Universal Arm with RPA (A3U)	Dark Bronze Textured
VP-1-160-4K-4F-LS	19426	122.9	4F	158W	4000K/70CRI	120-277V	Universal Arm with RPA (A3U)	Dark Bronze Textured
VP-1-160-5K-3-LS	19499	123.4	3	158W	5000K/70CRI	120-277V	Universal Arm with RPA (A3U)	Dark Bronze Textured
VP-1-160-5K-4F-LS	19186	121.4	4F	158W	5000K/70CRI	120-277V	Universal Arm with RPA (A3U)	Dark Bronze Textured

VIPER POLE EXPRESS COMBO – ACCESSORIES

Catalog Number	Description
VM14DB	Vibration Dampener, mounts to top of pole for reduced vibration



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VIPER Area/Site

VIPER LUMINAIRE

DATE: LOCATION:

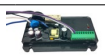
TYPE: PROJECT:

CATALOG #:

OUTDOOR LIGHTING CONTROLS OPTIONS

CONTROLS FUNCTIONALITY

LIGHTGRID+ LIGHTING CONTROLS MOBILE APP

	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
NX Wireless	NXOFM1R1D-UNV	NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming	✓	✓	✓	Paired with external control	✓	✓	✓	✓	–		NXOFM-1R1D-UV
	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	✓	✓	✓	–	–	✓	✓	✓	–		NXRM2-H
	NXWS12F	NX Networked Wireless Enabled Integral NXSMP2-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	12ft		NXSMP2-OMNI-O
	NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	16ft		NXSMP2-LMO
	NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	40ft		NXSMP2-HMO
LightGRID+	WIR	LightGRID+ In-Fixture Module	✓	–	✓	–	–	✓	✓	Gateway	–		WIR
	WIR-RME-L	LightGRID+ On Fixture Module	✓	–	✓	–	–	✓	✓	Gateway	–		WIR-RME-L
	WIRSC	LightGRID+ Module and Occupancy Sensor	✓	✓	✓	✓	✓	✓	✓	Gateway	14ft - 40ft		BTMSP
Independent	BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	12ft		BTSMP-OMNI-O
	BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	14ft		BTSMP-LMO
	BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	40ft		BTSMP-HMO

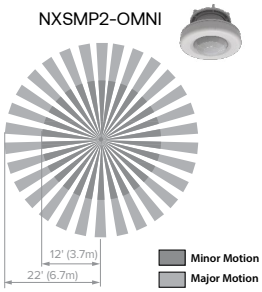
DEFAULT SETTINGS

NX Wireless	
Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	15 Minutes
Occupied Dim Level	100%
Unoccupied Dim Level	0%
Daylight Sensor	Disabled
Bluetooth	Enabled
2.4GHz Wireless Mesh	On
"Passcode Factory Passcode: HubbN3T!"	Enabled

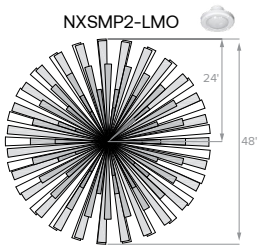
Stand Alone	
Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	8 Minutes
Occupied Dim Level	100%
Unoccupied Dim Level	50%
Daylight Sensor	Disabled

NX WIRELESS COVERAGE PATTERNS

NXSMP2-OMNI



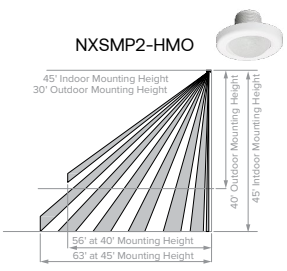
NXSMP2-LMO





Sensor Lens Coverage and Detection Patterns When Mounted at 8ft with Low Mount Lens

NXSMP2-HMO



Sensor Lens Coverage and Detection Patterns When Mounted at 40ft and 45ft with Standard Lens

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VIPER Area/Site

VIPER LUMINAIRE

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

NX LIGHTING CONTROLS FREE APP

CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)



The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enable luminiares and program NX system settings.

Apple App: https://apps.apple.com/us/app/nx-lighting-controls/id962112904

Google Play: https://play.google.com/store/apps/details?id=io.cordova.NXBTR&hl=en_US&gl=US

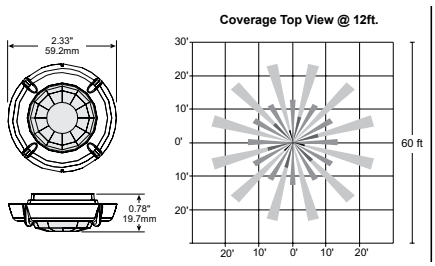
Apple App Google Play

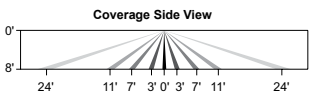
OUTDOOR LIGHTING CONTROLS OPTIONS

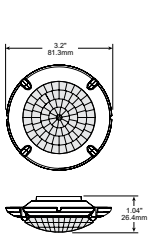
CONTROLS FUNCTIONALITY

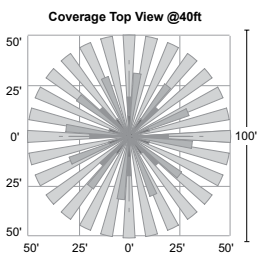
	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height	
Independent	SCP_F	Sensor Control Programmable, 8F or 40F	–	–	–	✓	✓	✓	✓	–	8ft or 40ft	SCP_F
	ADD	AutoDIM Timer Based Dimming	–	–	✓	–	–	–	✓	–	–	ADD
	ADT	AutoDIM Time of Day Dimming	–	–	✓	–	–	–	✓	–	–	ADT
	7PR	7-Pin Receptacle	–	–	Paired with external control	–	Paired with external control	–	Paired with external control	–	–	7PR
	7PR-SC	7-Pin Receptacle with shorting cap	–	–	–	–	–	–	–	–	–	7PR-SC
	3PR	3-Pin twist lock	–	–	–	–	–	–	Paired with external control	–	–	3PR
	3PR-SC	3-Pin Receptacle with shorting cap	–	–	–	–	–	–	–	–	–	3PR-SC
	3PR-TL	3-Pin with photocontrol	–	–	–	–	✓	–	✓	–	–	3PR-TL

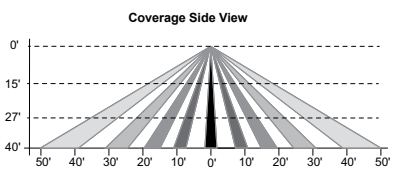
COVERAGE PATTERNS FOR SCP_F











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VIPER Area/Site

VIPER LUMINAIRE

PROGRAMMED CONTROLS

ADD-AutoDim Timer Based Options

- Light delay options from 1-9 hours after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1-9 hours after the light has been dimmed previously.

EX: ADD-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	1-9 Hours	6 - Delay 6 hours
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50% brightness
Auto-Dim Return	Delay 0-9 Hours	R6 - Return to full output after 6 hours

ADT-AutoDim Time of Day Based Option

- Light delay options from 1AM-9PM after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1AM-9PM after the light has been dimmed previously.

EX: ADT-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	12-3 AM and 6-11 PM	6 - Dim at 6PM
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50%
Auto-Dim Return	12-6 AM and 9-11P	R6 - Return to full output at 6AM

DELIVERED LUMENS

For delivered lumens, please see Lumens Data PDF on www.Currentlighting.com

PROJECTED LUMEN MAINTENANCE

Ambient Temp.	0	25,000	*TM-21-11 36,000	50,000	100,000	Calculated L_{70} (Hours)
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.841	–
3000K	0.977	0.861	0.647
3500K	–	0.900	–
4000K	1	0.926	0.699
5000K	1	0.937	0.791
AP-Amber Phosphor Converted Multiplier			
Amber	0.710		

Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	0.9	0.81	0.62
3000K	0.933	0.853	0.659
3500K	0.959	0.894	0.711
4000K	1	0.9	0.732
5000K	1	0.9	0.732
Monochromatic Amber Multiplier			
Amber	See Amber Spec Sheet		

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VIPER Area/Site

VIPER LUMINAIRE

ELECTRICAL DATA: MICRO STRIKE

# OF LEDS	160						
NOMINAL WATTAGE	35	50	75	100	115	135	160
SYSTEM POWER (W)	34.9	50.5	72.1	97.2	111.9	132.2	157.8
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	0.29	0.42	0.63	0.83	0.96	1.13	1.33
208	0.17	0.24	0.36	0.48	0.55	0.65	0.77
240	0.15	0.21	0.31	0.42	0.48	0.56	0.67
277	0.13	0.18	0.27	0.36	0.42	0.49	0.58
347	0.10	0.14	0.22	0.29	0.33	0.39	0.46
480	0.07	0.10	0.16	0.21	0.24	0.28	0.33

# OF LEDS	320						
NOMINAL WATTAGE	145	170	185	210	235	255	315
SYSTEM POWER (W)	150	166.8	185.7	216.2	240.9	261.5	312
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	1.21	1.42	1.54	1.75	1.96	2.13	2.63
208	0.70	0.82	0.89	1.01	1.13	1.23	1.51
240	0.60	0.71	0.77	0.88	0.98	1.06	1.31
277	0.52	0.61	0.67	0.76	0.85	0.92	1.14
347	0.42	0.49	0.53	0.61	0.68	0.73	0.91
480	0.30	0.35	0.39	0.44	0.49	0.53	0.66

# OF LEDS	480					
NOMINAL WATTAGE	285	320	340	390	425	470
SYSTEM POWER (W)	286.2	316.7	338.4	392.2	423.2	468
INPUT VOLTAGE (V)	CURRENT (Amps)					
120	2.38	2.67	2.83	3.25	3.54	3.92
208	1.37	1.54	1.63	1.88	2.04	2.26
240	1.19	1.33	1.42	1.63	1.77	1.96
277	1.03	1.16	1.23	1.41	1.53	1.70
347	0.82	0.92	0.98	1.12	1.22	1.35
480	0.59	0.67	0.71	0.81	0.89	0.98

# OF LEDS	720				
NOMINAL WATTAGE	435	475	515	565	600
SYSTEM POWER (W)	429.3	475	519.1	565.2	599.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	3.63	3.96	4.29	4.71	5.00
208	2.09	2.28	2.48	2.72	2.88
240	1.81	1.98	2.15	2.35	2.50
277	1.57	1.71	1.86	2.04	2.17
347	1.25	1.37	1.48	1.63	1.73
480	0.91	0.99	1.07	1.18	1.25

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VIPER Area/Site

VIPER LUMINAIRE

ELECTRICAL DATA: STRIKE

# OF LEDS	36				
NOMINAL WATTAGE	39	55	85	105	120
SYSTEM POWER (W)	39.6	56.8	83.6	108.2	120.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.33	0.46	0.71	0.88	0.96
208	0.19	0.26	0.41	0.50	0.55
240	0.16	0.23	0.35	0.44	0.48
277	0.14	0.20	0.31	0.38	0.42
347	0.11	0.16	0.24	0.30	0.33
480	0.08	0.11	0.18	0.22	0.24

# OF LEDS	72				
NOMINAL WATTAGE	115	145	180	210	240
SYSTEM POWER (W)	113.7	143.2	179.4	210.2	241.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	1.00	1.21	1.50	1.75	1.79
208	0.58	0.70	0.87	1.01	1.03
240	0.50	0.60	0.75	0.88	0.90
277	0.43	0.52	0.65	0.76	0.78
347	0.35	0.42	0.52	0.61	0.62
480	0.25	0.30	0.38	0.44	0.45

# OF LEDS	108				
NOMINAL WATTAGE	215	250	280	325	365
SYSTEM POWER (W)	214.8	250.8	278.3	324.7	362.6
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	2.00	2.08	2.33	3.04	2.67
208	1.15	1.20	1.35	1.75	1.54
240	1.00	1.04	1.17	1.52	1.33
277	0.87	0.90	1.01	1.32	1.16
347	0.69	0.72	0.81	1.05	0.92
480	0.50	0.52	0.58	0.76	0.67

# OF LEDS		162				
NOMINAL WATTAGE	320	365	405	445	485	545
SYSTEM POWER (W)	322.1	362.6	403.6	445.1	487.1	543.9
INPUT VOLTAGE (V)		CURRENT (Amps)				
120	2.71	2.67	3.38	3.71	4.04	4.54
208	1.56	1.54	1.95	2.14	2.33	2.62
240	1.35	1.33	1.69	1.85	2.02	2.27
277	1.17	1.16	1.46	1.61	1.75	1.97
347	0.94	0.92	1.17	1.28	1.40	1.57
480	0.68	0.67	0.84	0.93	1.01	1.14

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VIPER Area/Site

VIPER LUMINAIRE

DATE: LOCATION:

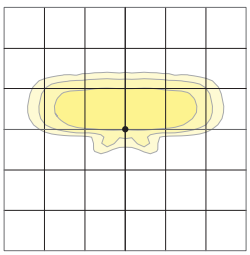
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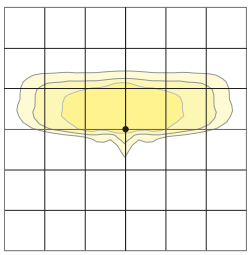
MICRO STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see website photometric test reports.

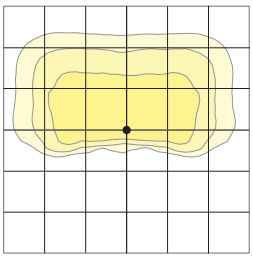
Type 2



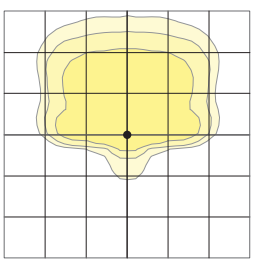
Type 3



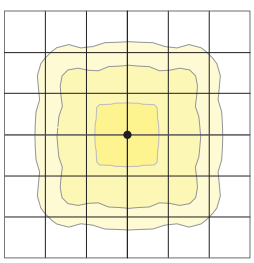
Type 4 Wide



Type 4F



Type 5QW



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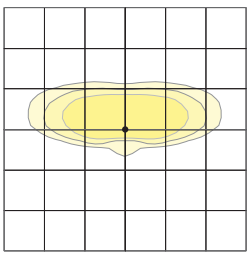
VIPER Area/Site

VIPER LUMINAIRE

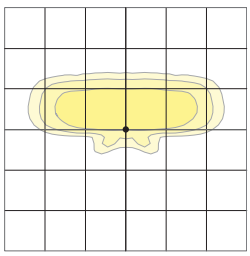
OPTIC STRIKE PHOTOMETRY

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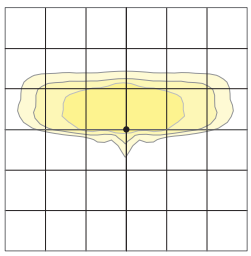
Type FR – Front Row/Auto Optic



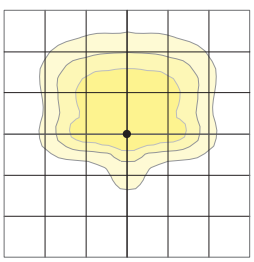
Type 2



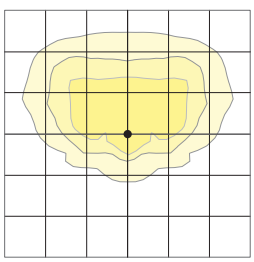
Type 3



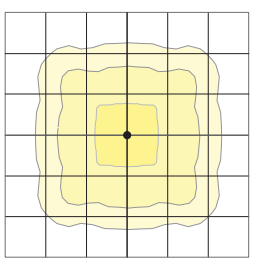
Type 4 Forward



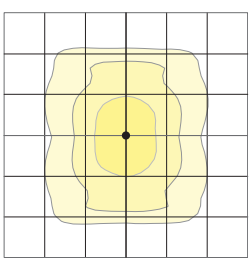
Type 4 Wide



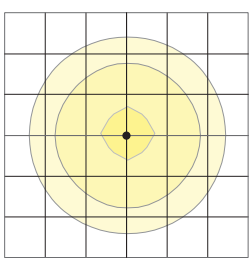
Type 5QM



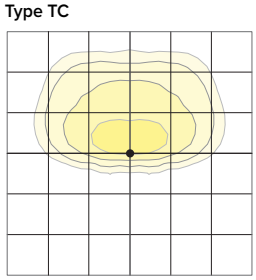
Type 5RW (rectangular)



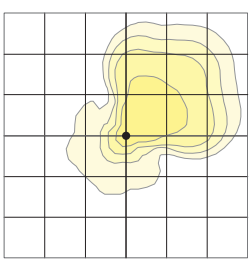
Type 5W (round wide)



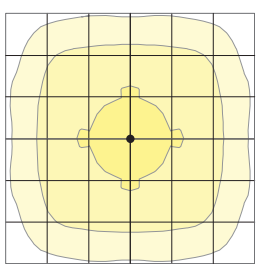
Type TC



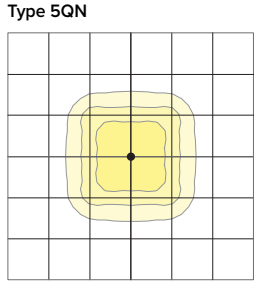
Type Corner



Type 5QW



Type 5QN



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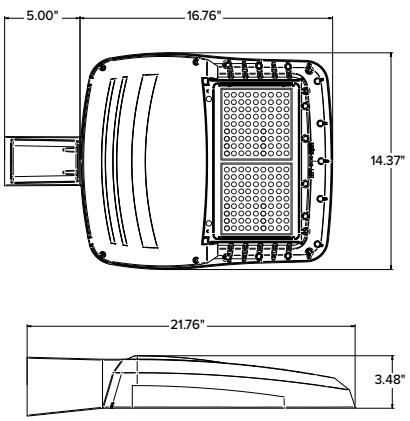
CATALOG #:

VIPER Area/Site

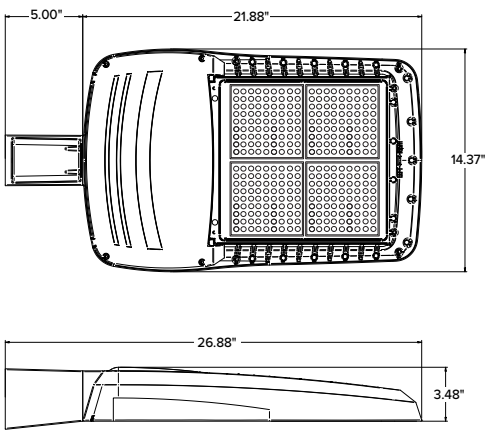
VIPER LUMINAIRE

DIMENSIONS

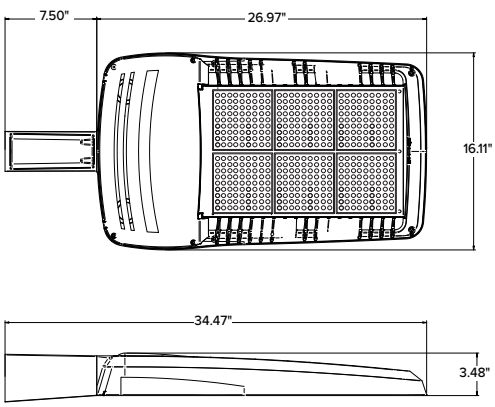
SIZE 1



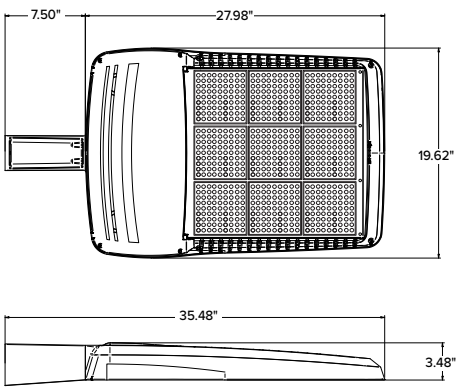
SIZE 2



SIZE 3



SIZE 4



	EPA				
	VP1 (Size 1)	VP2 (Size 2)	VP3 (Size 3)	VP4 (Size 4)	Config.
Single Fixture	0.454	0.555	0.655	0.698	
Two at 180	0.908	1.110	1.310	1.396	
Two at 90	0.583	0.711	0.857	0.948	
Three at 90	1.037	1.266	1.512	1.646	
Three at 120	0.943	1.155	1.392	1.680	
Four at 90	1.166	1.422	1.714	1.896	

	Weight	
	lbs	kgs
VP1 (Size 1)	13.7	6.2
VP2 (Size 2)	16.0	7.26
VP3 (Size 3)	25.9	11.7
VP4 (Size 4)	30.8	13.9

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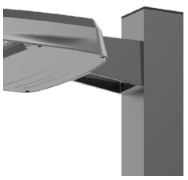
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VIPER Area/Site

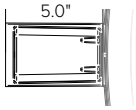
VIPER LUMINAIRE

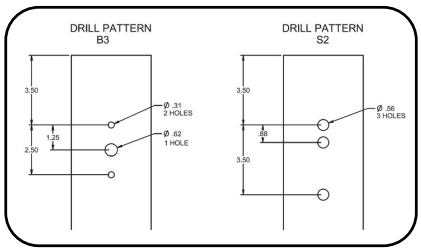
MOUNTING

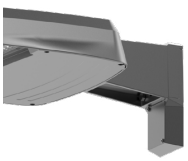


A–STRAIGHT ARM MOUNT

Fixture ships with integral arm for ease of installation. Compatible with Current Outdoor B3 drill pattern for ease of installation on square poles. For round poles add applicable suffix (2/3/4/5)

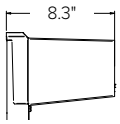


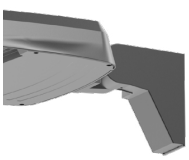




ASQU–UNIVERSAL ARM MOUNT

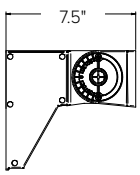
Universal mounting block for ease of installation. Compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2. For round poles add applicable suffix (2/3/4/5)

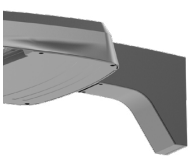




AAU–ADJUSTABLE ARM FOR POLE MOUNTING

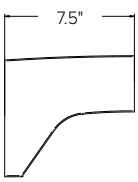
Rotatable arm mounts directly to pole. Compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2 and B3. For round poles add applicable suffix (2/3/4/5). Rotatable in 15˚ aiming angle increments. Micro Strike configurations have a 45° aiming limitation.
Strike configurations have a 30° aiming limitation.

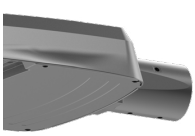




ADU–DECORATIVE UPSWEPT ARM

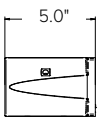
Upswept Arm compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2. For round poles add applicable suffix (2/3/4/5).

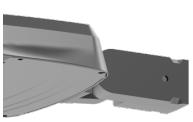




MAF–MAST ARM FITTER

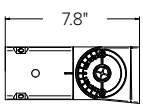
Fits 2-3/8" OD horizontal tenons.

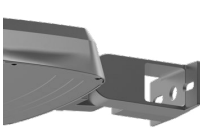




K–KNUCKLE

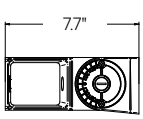
Knuckle mount 15˚ aiming angle increments for precise aiming and control, fits 2-3/8" tenons or pipes. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.





T–TRUNNION

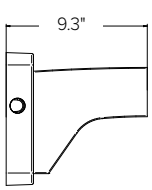
Trunnion for surface and crossarm mounting using (1) 3/4" or (2) 1/2" size through bolts. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.





WM–WALL MOUNT

Compatible with universal arm mount, adjustable arm mount, and decorative arm mount. The WA option uses the same wall bracket but replaces the decorative arm with an adjustable arm.



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VIPER Area/Site

VIPER LUMINAIRE

DATE: LOCATION:

TYPE: PROJECT:

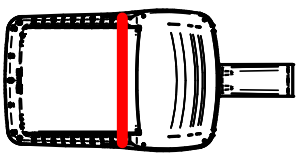
CATALOG #:

ADDITIONAL INFORMATION (CONTINUED)

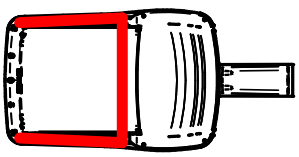
HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES

HSS has a depth of 5" for all Viper sizes
Not to be used with Occupancy Sensors as the shield may block the light to the sensor.

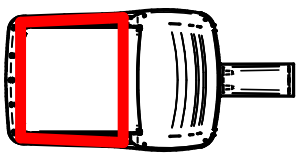
VPR2x HSS-90-B-xx



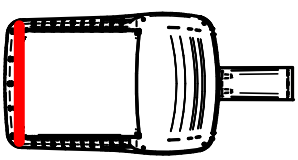
VPR2x HSS-270-BSS-xx



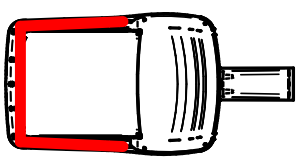
VPR2x HSS-360-xx



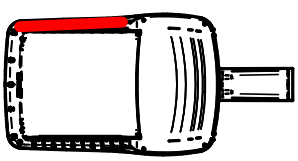
VPR2x HSS-90-F-xx



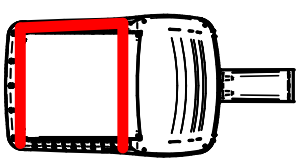
VPR2x HSS-270-FSS-xx



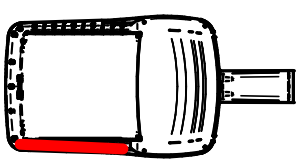
VPR2x HSS-90-S-xx



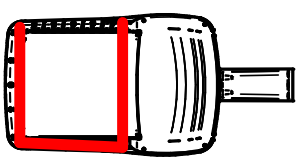
VPR2x HSS-270-FSB-xx



VPR2x HSS-90-S-xx



VPR2x HSS-270-FSB-xx



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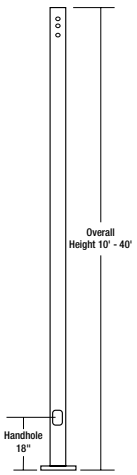
DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SSS-B Series Poles

SQUARE STRAIGHT STEEL



APPLICATIONS

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION

- SHAFT: One-piece straight steel with square cross section, flat sides and minimum 0.23" radius on all corners; Minimum yield of 46,000 psi (ASTM-A500, Grade B); Longitudinal weld seam to appear flush with shaft side wall; Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- BASE COVER: Two-piece square aluminum base cover included standard
- POLE CAP: Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE: Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

  Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38

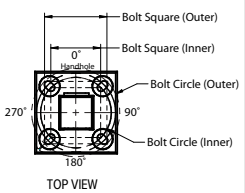
  1 x 36 x 4 — TAB-36-M38

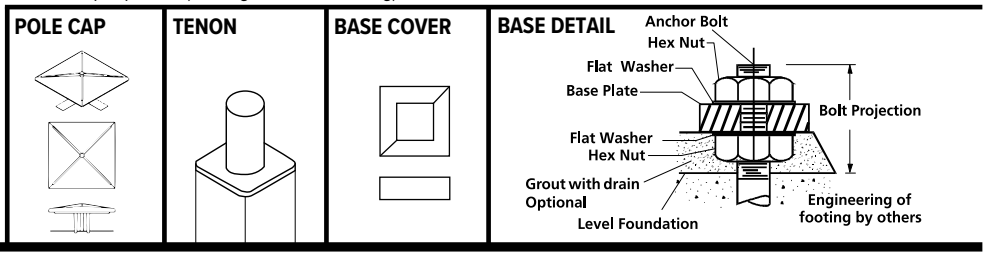
FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over “white metal” steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in multiple standard colors; Custom colors available; RAL number preferable

WAREHOUSE ‘STOCKED’ POLES:

- SSSH20-40A-4-HV-DB-RDC, SSSH25-40A-4-HV-DB-RDC and SSSH30-50B-4-HV-DB-RDC
- The HV designation in the above catalog numbers is a combination drill pattern of the Current S2 pattern and the Beacon B3/B4 Viper pattern (rectangular arm mounting)





ORDERING INFORMATION

ORDERING EXAMPLE:

Reference page 2 for available configurations

SSS -B - 25 - 40 - A/B/C - 2L - B3 - BLT - UL

SERIES

SSS-B Square Straight Steel Pole Beacon

HEIGHT

Reference page 2 Ordering matrix

20

SHAFT

Reference page 2 Ordering matrix

40

THICKNESS

Reference page 2 Ordering matrix

A

MOUNTING

- **1** Single arm mount
- **2** Two fixtures at 180˚
- **2L** Two fixtures at 90˚
- **3T** Three fixtures at 90˚
- **4** Four fixtures at 90˚
- **TA** Tenon (2.38” OD x 4” Tall)
- **TB** Tenon (2.88” OD x 4” Tall)
- **TC** Tenon (3.5” OD x 6” Tall)
- **TR**[1] Removable Tenon (2.375 x 4.25)
- **OT** Open Top (includes pole cap)

FINISH

- **BLT** Black Matte Textured
- **BLS** Black Gloss Smooth
- **DBT** Dark Bronze Matte Textured
- **DBS** Dark Bronze Gloss Smooth
- **GTT** Graphite Matte Textured
- **LGS** Light Grey Gloss Smooth
- **PSS** Platinum Silver Smooth
- **WHT** White Matte Textured
- **WHS** White Gloss Smooth
- **VGT** Verde Green Textured

Color Option

- **CC** Custom Color

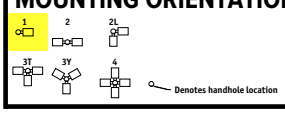
OPTIONS

- **GFI**[2] 20 Amp GFCI Receptacle and Cover
- **EHH**[2] Extra Handhole
- **C05**[2] .5” Coupling
- **C07**[2] .75” Coupling
- **C20**[2] 2” Coupling
- **MPB**[2] Mid-pole Luminaire Bracket
- **VM2** 2nd mode vibration damper
- **LAB** Less Anchor Bolts
- **UL** UL Certified

DRILL PATTERN

- **B1** Cruzer, “AM” arm
- **B3** 2 bolt (2-½” spacing), Viper “A” arm
- **S2** 2 bolt (3-½” spacing), Viper “AD” arm

MOUNTING ORIENTATION



1 Removable tenon used in conjunction with side arm mounting. First specify desired arm configuration followed by the **“TR”** notation. Example: **SSS-B-25-40-A-1-B1-TR-BBT**

2 Specify option location using logic found on page 2 **(Option Orientation)**

3 VM1 recommended on poles 20’ and taller with EPA of less than 1.

ACCESSORIES - Order Separately

Catalog Number	Description
VM1[3]	1st mode vibration damper
VM2SXX	2nd mode vibration damper

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SSS-B Series Poles

SQUARE STRAIGHT STEEL

DATE: LOCATION:

TYPE: PROJECT:

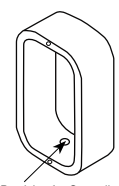
CATALOG #:

ORDERING INFORMATION Cont.

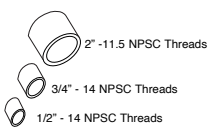
Catalog Number	Height		Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Circle (range)	Bolt Square (range)	Base Plate Square	Anchor bolt size	Bolt Projection	Pole weight
	Feet	Meters									
SSS-B-10-40-A-XX-XX	10	3.0	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	77
SSS-B-12-40-A-XX-XX	12	3.7	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	90
SSS-B-14-40-A-XX-XX	14	4.3	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	103
SSS-B-16-40-A-XX-XX	16	4.9	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	116
SSS-B-18-40-A-XX-XX	18	5.5	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	129
SSS-B-20-40-A-XX-XX	20	6.1	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	142
SSS-B-25-40-A-XX-XX	25	7.6	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	175
SSS-B-14-40-B-XX-XX	14	4.3	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	152
SSS-B-16-40-B-XX-XX	16	4.9	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	171
SSS-B-18-40-B-XX-XX	18	5.5	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	190
SSS-B-20-40-B-XX-XX	20	6.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	209
SSS-B-25-40-B-XX-XX	25	7.6	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	257
SSS-B-30-40-B-XX-XX	30	9.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	304
SSS-B-16-50-B-XX-XX	16	4.9	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	219
SSS-B-18-50-B-XX-XX	18	5.5	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	243
SSS-B-20-50-B-XX-XX	20	6.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	267
SSS-B-25-50-B-XX-XX	25	7.6	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	327
SSS-B-30-50-B-XX-XX	30	9.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	387
SSS-B-25-50-C-XX-XX	25	7.6	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	427
SSS-B-30-50-C-XX-XX	30	9.1	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	507
SSS-B-20-60-B-XX-XX	20	6.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	329
SSS-B-25-60-B-XX-XX	25	7.6	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	404
SSS-B-30-60-B-XX-XX	30	9.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	479
SSS-B-35-60-B-XX-XX	35	10.7	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	554
SSS-B-40-60-B-XX-XX	40	12.2	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	629

NOTE Factory supplied template must be used when setting anchor bolts. Beacon Products will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

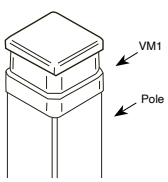
EHH - EXTRA HANDHOLE



C05 - C07 - C20 - COUPLING



VM1 - VIBRATION DAMPER 1ST MODE



Field Installed Pole Top damper designed to reduce pole top deflection or sway. VM1 is recommended for pole systems 25' and taller with a total EPA of 1.0 or less.

VM2 - VIBRATION DAMPER 2ND MODE



Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

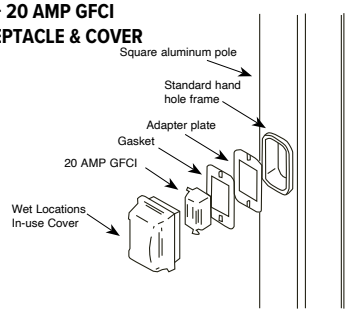
VM2SXX - VIBRATION DAMPER 2ND MODE



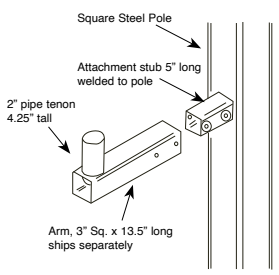
VM2S08 – 8'
VM2S12 – 12'
VM2S16 – 16'
VM2S20 – 20'
VM2S24 – 24'

Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

GFI – 20 AMP GFCI RECEPTACLE & COVER

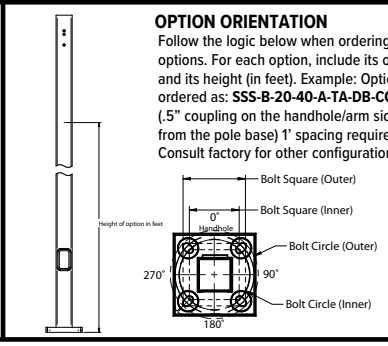


MPB - MID POLE BRACKET



OPTION ORITENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: **SSS-B-20-40-A-TA-DB-C05-0-15** (.5" coupling on the handhole/arm side of pole, 15 feet up from the pole base) 1' spacing required between option. Consult factory for other configurations.



For more information about pole vibration and vibration dampers, please consult our website.
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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SSS-B Series Poles

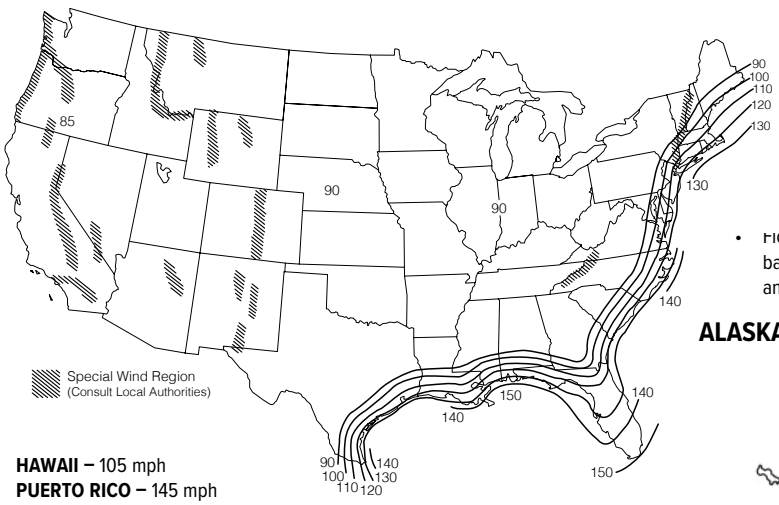
SQUARE STRAIGHT STEEL

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

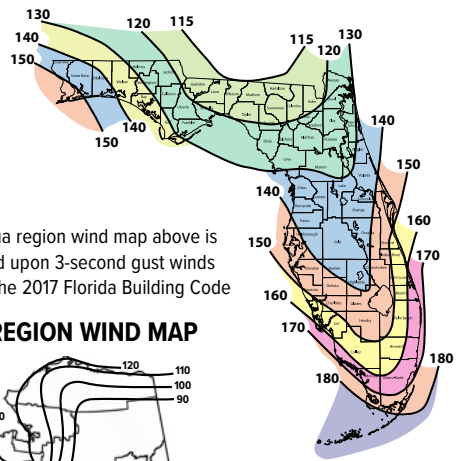
ASCE7-05 WIND MAP



HAWAII – 105 mph

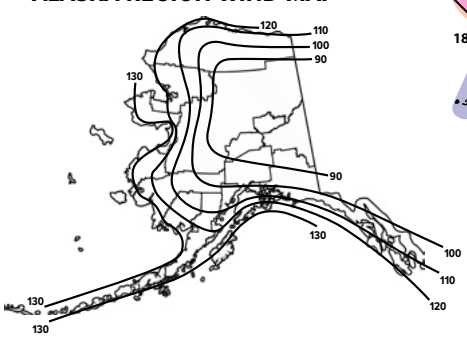
PUERTO RICO – 145 mph

FLORIDA REGION WIND MAP



- Florida region wind map above is based upon 3-second gust winds and the 2017 Florida Building Code

ALASKA REGION WIND MAP



ASCE 7-05 wind map EPA Load Rating - 3 second gust wind speeds (Use for all locations except Florida)										
Catalog Number	**85**	**90**	**100**	**105**	**110**	**120**	**130**	**140**	**145**	**150**
SSS-B-10-40-A	25.0	25.0	25.0	22.8	20.6	17.0	14.2	11.9	11.0	10.1
SSS-B-12-40-A	25.0	25.0	20.0	18.0	16.1	13.2	10.8	8.9	8.1	7.4
SSS-B-14-40-A	23.1	20.4	16.1	14.3	12.8	10.2	8.2	6.6	5.9	5.3
SSS-B-16-40-A	19.0	16.7	13.0	11.5	10.1	7.9	6.2	4.7	4.1	3.6
SSS-B-18-40-A	15.6	13.6	10.0	9.0	7.8	5.9	4.4	3.1	2.6	2.1
SSS-B-20-40-A	12.7	10.9	7.9	6.9	5.9	4.2	2.8	1.7	1.3	0.9
SSS-B-25-40-A	7.3	5.9	3.8	2.9	2.1	0.8	NR	NR	NR	NR
SSS-B-14-40-B	25.0	25.0	23.3	20.8	18.6	15.1	12.3	10.2	9.2	8.4
SSS-B-16-40-B	25.0	24.9	19.4	17.3	15.4	12.3	9.9	8.0	7.2	6.4
SSS-B-18-40-B	24.0	20.8	16.1	14.2	12.5	9.8	7.7	6.1	5.3	4.7
SSS-B-20-40-B	20.2	17.5	13.2	11.6	10.1	7.7	5.9	4.4	3.8	3.2
SSS-B-25-40-B	12.8	11.0	7.9	6.7	5.5	3.7	2.3	1.2	0.7	NR
SSS-B-30-40-B	8.0	6.6	4.1	3.1	2.2	0.8	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	24.8	20.1	16.5	13.6	12.3	11.2
SSS-B-18-50-B	25.0	25.0	25.0	22.9	20.4	16.4	13.2	10.7	9.6	8.6
SSS-B-20-50-B	25.0	25.0	21.3	18.9	16.7	13.2	10.4	8.1	7.2	6.3
SSS-B-25-50-B	20.7	17.8	13.3	11.5	9.8	7.2	5.0	3.3	2.6	1.9
SSS-B-30-50-B	13.5	11.3	7.7	6.2	4.9	2.8	1.1	NR	NR	NR
SSS-B-25-50-C	25.0	25.0	19.4	17.1	15.1	11.7	9.0	6.9	6.0	5.1
SSS-B-30-50-C	20.1	17.3	12.7	10.9	9.3	6.6	4.5	2.8	2.1	1.4
SSS-B-20-60-B	25.0	25.0	25.0	25.0	25.0	20.2	16.1	12.9	11.5	10.3
SSS-B-25-60-B	25.0	25.0	20.6	18.0	15.6	11.8	8.7	6.2	5.2	4.2
SSS-B-30-60-B	21.4	18.1	12.9	10.7	8.8	5.7	3.3	1.3	NR	NR
SSS-B-35-60-B	14.0	11.3	6.9	5.2	3.6	1.0	NR	NR	NR	NR
SSS-B-40-60-B	8.1	5.8	2.2	nr	NR	NR	NR	NR	NR	NR

Florida Building Code 2017 EPA Load Rating - 3 second gust wind speeds (Use for Florida only)								
Catalog Number	**115**	**120**	**130**	**140**	**150**	**160**	**170**	**180**
SSS-B-10-40-A	25.0	25.0	25.0	25.0	21.4	18.4	15.9	13.9
SSS-B-12-40-A	25.0	25.0	23.6	19.8	16.7	14.2	12.1	10.4
SSS-B-14-40-A	25.0	23.1	19.0	15.7	13.1	10.9	9.1	7.6
SSS-B-16-40-A	20.8	18.7	15.2	12.3	10.1	8.2	6.7	5.4
SSS-B-18-40-A	16.8	15.0	11.9	9.4	7.5	5.9	4.5	3.4
SSS-B-20-40-A	13.6	11.9	9.2	7.1	5.3	3.9	2.7	1.7
SSS-B-25-40-A	7.4	6.2	4.1	2.5	1.1	NR	NR	NR
SSS-B-14-40-B	25.0	23.6	19.4	16.1	13.4	11.2	9.4	7.8
SSS-B-16-40-B	21.4	19.2	15.6	12.7	10.4	8.5	6.9	5.6
SSS-B-18-40-B	17.2	15.4	12.2	9.7	7.7	6.1	4.7	3.6
SSS-B-20-40-B	13.9	12.3	9.5	7.3	5.5	4.1	2.9	1.9
SSS-B-25-40-B	7.7	6.4	4.3	2.6	1.3	NR	NR	NR
SSS-B-30-40-B	3.2	2.1	NR	NR	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	25.0	21.4	18.2	15.5
SSS-B-18-50-B	25.0	25.0	25.0	24.4	20.4	17.0	14.2	11.9
SSS-B-20-50-B	25.0	25.0	24.4	19.9	16.3	13.4	11.0	8.9
SSS-B-25-50-B	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-B	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-25-50-C	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-C	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-20-60-B	25.0	25.0	25.0	21.9	17.8	14.5	11.7	9.4
SSS-B-25-60-B	23.8	20.9	16.1	12.3	9.2	6.6	4.5	2.8
SSS-B-30-60-B	14.6	12.3	8.4	5.3	2.8	0.8	NR	NR
SSS-B-35-60-B	7.5	5.6	2.4	NR	NR	NR	NR	NR
SSS-B-40-60-B	1.8	NR	NR	NR	NR	NR	NR	NR

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SSS-B Series Poles

SQUARE STRAIGHT STEEL

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

NOTES

Wind-speed Website disclaimer:
Current has no connection to the linked website and makes no representations as to its accuracy. While the information presented on this third-party website provides a useful starting point for analyzing wind conditions, Current has not verified any of the information on this third party website and assumes no responsibility or liability for its accuracy. The material presented in the windspeed website should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. Current does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the windspeed report provided by this website. Users of the information from this third party website assume all liability arising from such use. Use of the output of these referenced websites do not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the windspeed report. http://windspeed.atcouncil.org

NOTES

- Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The tables for allowable pole EPA are based on the ASCE 7-05 Wind Map or the Florida Region Wind Map for the 2010 Florida Building Code. The Wind Maps are intended only as a general guide and cannot be used in conjunction with other maps. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. Responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty
- Wind speeds and listed EPAs are for ground mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards
- Wind Induced Vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings.
- Extreme Wind Events like, Hurricanes, Typhoons, Cyclones, or Tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Area/Site

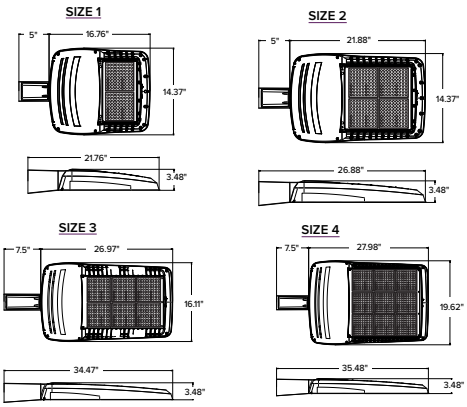
VIPER LUMINAIRE

FEATURES

- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealership, retail, commercial, and campus parking lots
- Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction
- Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G
- Control options including photo control, occupancy sensing, NX Lighting Controls™, LightGRID+ and 7-Pin with networked controls
- New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail
- Field interchangeable mounting provides additional flexibility after the fixture has shipped

MICRO STRIKE | OPTICS STRIKE





CONTROL TECHNOLOGY

CONNECT WIRED WIRELESS LIGHTGRID+

SERVICE PROGRAMS

STOCK QS10

SPECIFICATIONS

CONSTRUCTION

- Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with 1000 hour powder coat paint finish
- External hardware is corrosion resistant

OPTICS

- Micro Strike Optics (160, 320, 480, or 720 LED counts) maximize uniformity in applications and come standard with mid-power LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 2
- Strike Optics (36, 72, 108, or 162 LED counts) provide best in class distributions and maximum pole spacing in new applications with high powered LEDs. Strike optics are held in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3
- Both optics maximize target zone illumination with minimal losses at the house-side, reducing light trespass issues. Additional backlight control shields and house side shields can be added for further reduction of illumination behind the pole
- One-piece silicone gasket ensures a weatherproof seal
- Zero up-light at 0 degrees of tilt
- Field rotatable optics

INSTALLATION

- Mounting patterns for each arm can be found on page 11
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option (ASQU) or accessory for square and round poles
- All mounting hardware included
- Knuckle arm fitter option available for 2-3/8" OD tenon
- For products with EPA less than 1 mounted to a pole greater that 20ft, a vibration damper is recommended

ELECTRICAL

- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40˚C to 40˚C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/ IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options cannot be combined

CONTROLS

- Photo control, occupancy sensor programmable controls, and Zigbee wireless controls available for complete on/off and dimming control
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)

CONTROLS (CONTINUED)

- 0- 10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard
- NX Lighting Controls™ available with in fixture wireless control module, features dimming and occupancy sensor
- LightGRID+ available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin configuration

	EPA				
	VP1 (Size 1)	VP2 (Size 2)	VP3 (Size 3)	VP4 (Size 4)	Config.
Single Fixture	0.454	0.555	0.655	0.698	
Two at 180	0.908	1.110	1.310	1.396	
Two at 90	0.583	0.711	0.857	0.948	
Three at 90	1.037	1.266	1.512	1.646	
Three at 120	0.943	1.155	1.392	1.680	
Four at 90	1.166	1.422	1.714	1.896	

CERTIFICATIONS

- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations listed in this document are DLC® qualified. Refer to http://www.designlights.org for the most up-to-date list.
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40˚C ambient temperatures
- 1.5 G rated for ANSI C136.31 high vibration applications
- Fixture is IP65 rated
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product meets federal procurement law requirements under the Buy American Act (FAR 52.225-9) and Trade Agreements Act (FAR 52.225-11). See Buy America(n) Solutions (link to https://www.currentlighting.com/resources/america-solutions).

WARRANTY

- 5 year warranty

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

VIPER Area/Site

VIPER LUMINAIRE

MICROSTRIKE OPTICS – ORDERING GUIDE

Gray Shading = Service Program Limit of 15 luminaires

QS10

Example: VP–2–320L-145–3K7–2–R–UNV–A3–BLT

CATALOG #

VP –

Series	Optic Platform	Size	Light Engine		CCT/CRI		Distribution		Optic Rotation		Voltage	
VP Viper	Micro Strike	**1** Size 1	**160L-35** [6]	5500 lumens	**AP**	AP-Amber Phosphor Converted	**2**	Type 2	**BLANK** No Rotation		**UNV**	120-277V
			160L-50 [6]	7500 lumens	**27K8**	2700K, 80 CRI	**3**	Type 3	**L**	Optic rotation left	**120**	120V
			160L-75	10000 lumens	**3K7**	3000K, 70 CRI	**4F**	Type 4 Forward	**R**	Optic rotation right	**208**	208V
			160L-100	12500 lumens	**3K8**	3000K, 80 CRI	**4W**	Type 4 Wide			**240**	240V
			160L-115	15000 lumens	**35K8**	3500K, 80 CRI	**5QW**	Type 5 Square Wide			**277**	277V
			160L-135	18000 lumens	**3K9**	3000K, 90 CRI					**347**	347V
			160L-160	21000 lumens	**4K7**	4000K, 70 CRI					**480**	480V
		2 Size 2	**320L-145**	21000 lumens	**4K8**	4000K, 80 CRI						
			320L-170	24000 lumens	**4K9**	4000K, 90 CRI						
			320L-185	27000 lumens	**5K7**	5000K, 70 CRI						
			320L-210	30000 lumens	**5K8**	5000K, 80 CRI						
			320L-235	33000 lumens								
			320L-255	36000 lumens								
			320L-315 [6]	40000 lumens								
		3 Size 3	**480L-285**	40000 lumens								
			480L-320	44000 lumens								
			480L-340	48000 lumens								
			480L-390	52000 lumens								
			480L-425	55000 lumens								
			480L-470	60000 lumens								
		4 Size 4	**720L-435**	60000 lumens								
			720L-475	65000 lumens								
			720L-515	70000 lumens								
			720L-565 [6]	75000 lumens								
			720L-600 [6]	80000 lumens								
			CLO	Custom Lumen Output [1]								

– | Mounting | | Color | | Options | | Network Control Options | |
|---|---|---|---|---|---|---|---|
| **A** | Arm mount for square pole/flat surface (B3 Drill Pattern) (Does not include round pole adapter) | **BLT** | Black Matte Textured | **F** | Fusing | **NXWS16F** | NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming [1,3,4] |
| **A_** | Arm mount for round pole [2] | **BLS** | Black Gloss Smooth | **2PF** | Dual Power Feed | **NXWS40F** | NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming [1,3,4] |
| **ASQU** | Universal arm mount for square pole. Can be used with B3 or S2 Drill Pattern | **DBT** | Dark Bronze Matte Textured | **2DR** | Dual Driver | **NXW** | NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor [3,4] |
| **A_U** | Universal arm mount for round pole [2] | **DBS** | Dark Bronze Gloss Smooth | **TE** | Tooless Entry | **WIR** | LightGRID+ In-Fixture Module [3,4] |
| **AAU** | Adjustable arm for pole mounting (universal drill pattern) | **GTT** | Graphite Matte Textured | **BC** | Backlight Control [8] | **WIRSC** | LightGRID+ Module and Occupancy Sensor [3,4] |
| **AA_U** | Adjustable arm mount for round pole [2] | **LGS** | Light Grey Gloss Smooth | **TB** | Terminal Block | **Stand Alone Sensors** | |
| **ADU** | Decorative upswept Arm (universal drill pattern) | **LGT** | Light Grey Gloss Textured | | | **BTS-14F** | Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens |
| **AD_U** | Decorative upswept arm mount for round pole [2] | **PSS** | Platinum Silver Smooth | | | **BTS-40F** | Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens |
| **MAF** | Mast arm fitter for 2-3/8" OD horizontal arm | **WHT** | White Matte Textured | | | **BTSO-12F** | Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens |
| **K** | Knuckle | **WHS** | White Gloss Smooth | | | **7PR** | 7-Pin Receptacle [4] |
| **T** | Trunnion | **VGT** | Verde Green Textured | | | **7PR-SC** | 7-Pin Receptacle with shorting cap [4] |
| **WB** | Wall Bracket, horizontal tenon with MAF | **Color Option** | | | | **3PR** | 3-Pin twist lock [4] |
| **WM** | Wall mount bracket with decorative upswept arm | **CC** | Custom Color | | | **3PR-SC** | 3-Pin receptacle with shorting cap [4] |
| **WA** | Wall mount bracket with adjustable arm | | | | | **3PR-TL** | 3-Pin PCR with photocontrol [4] |
| | | | | | | **Programmed Controls** | |
| | | | | | | **SCP-_F** | Sensor Control Programmable, 8F or 40F [9] |
| | | | | | | **ADD** | AutoDim Timer Based Dimming [4] |
| | | | | | | **ADT** | AutoDim Time of Day Dimming [4] |
| | | | | | | **Photocontrols** | |
| | | | | | | **PC** | Button Photocontrol [4,7] |

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
2 – Replace "_" with "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.5"-6.5" OD pole
3 – Networked Controls cannot be combined with other control options
4 – Not available with 2PF option
5 – Not available with Dual Driver option
6 – Some voltage restrictions may apply when combined with controls
7 – Not available with 480V
8 – BC not available on 4F and type 5 distributions
9 – At least one SCPREMOTE required to program SCP motion sensor. Must select 8ft or 40ft.

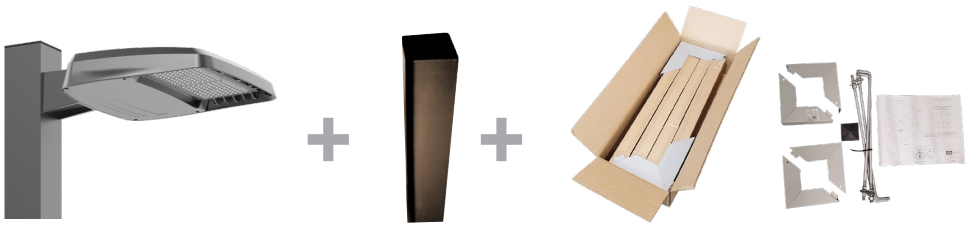
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VIPER Area/Site

VIPER LUMINAIRE

VIPER POLE EXPRESS COMBO – ORDERING GUIDE



Catalog Number	Pole	Single or Double Head	Fixture	Lumens*	Wattage	Distribution	CCT/CRI	Mounting	Finish
VP-1-160-4K-3-LS-S20	20' Square Straight Steel	Single	VP-1-160-4K-3-LS	19584	158W	Type 3	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-3-LS-S20-2X	20' Square Straight Steel	Double	VP-1-160-4K-3-LS	19584	158W	Type 3	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-4F-LS-S20	20' Square Straight Steel	Single	VP-1-160-4K-4F-LS	19426	158W	Type 4F	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-4F-LS-S20-2X	20' Square Straight Steel	Double	VP-1-160-4K-4F-LS	19426	158W	Type 4F	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-3-LS-S25	25' Square Straight Steel	Single	VP-1-160-4K-3-LS	19584	158W	Type 3	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-3-LS-S25-2X	25' Square Straight Steel	Double	VP-1-160-4K-3-LS	19584	158W	Type 3	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-4F-LS-S25	25' Square Straight Steel	Single	VP-1-160-4K-4F-LS	19426	158W	Type 4F	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-4K-4F-LS-S25-2X	25' Square Straight Steel	Double	VP-1-160-4K-4F-LS	19426	158W	Type 4F	4000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-3-LS-S20	20' Square Straight Steel	Single	VP-1-160-5K-3-LS	19499	158W	Type 3	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-3-LS-S20-2X	20' Square Straight Steel	Double	VP-1-160-5K-3-LS	19499	158W	Type 3	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-4F-LS-S20	20' Square Straight Steel	Single	VP-1-160-5K-4F-LS	19186	158W	Type 4F	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-4F-LS-S20-2X	20' Square Straight Steel	Double	VP-1-160-5K-4F-LS	19186	158W	Type 4F	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-3-LS-S25	25' Square Straight Steel	Single	VP-1-160-5K-3-LS	19499	158W	Type 3	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-3-LS-S25-2X	25' Square Straight Steel	Double	VP-1-160-5K-3-LS	19499	158W	Type 3	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-4F-LS-S25	25' Square Straight Steel	Single	VP-1-160-5K-4F-LS	19186	158W	Type 4F	5000K/70CRI	Universal Arm	Dark Bronze Textured
VP-1-160-5K-4F-LS-S25-2X	25' Square Straight Steel	Double	VP-1-160-5K-4F-LS	19186	158W	Type 4F	5000K/70CRI	Universal Arm	Dark Bronze Textured

VIPER POLE EXPRESS COMBO – STOCK LUMINAIRE SKUS

Catalog Number	Lumens	LPW	Distribution	Wattage	CCT/CRI	Voltage	Mounting	Finish
VP-1-160-4K-3-LS	19584	123.9	3	158W	4000K/70CRI	120-277V	Universal Arm with RPA (A3U)	Dark Bronze Textured
VP-1-160-4K-4F-LS	19426	122.9	4F	158W	4000K/70CRI	120-277V	Universal Arm with RPA (A3U)	Dark Bronze Textured
VP-1-160-5K-3-LS	19499	123.4	3	158W	5000K/70CRI	120-277V	Universal Arm with RPA (A3U)	Dark Bronze Textured
VP-1-160-5K-4F-LS	19186	121.4	4F	158W	5000K/70CRI	120-277V	Universal Arm with RPA (A3U)	Dark Bronze Textured

VIPER POLE EXPRESS COMBO – ACCESSORIES

Catalog Number	Description
VM14DB	Vibration Dampener, mounts to top of pole for reduced vibration



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VIPER Area/Site

VIPER LUMINAIRE

DATE: LOCATION:

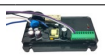
TYPE: PROJECT:

CATALOG #:

OUTDOOR LIGHTING CONTROLS OPTIONS

CONTROLS FUNCTIONALITY

LIGHTGRID+ NX LIGHTING CONTROLS MOBILE APP

	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components	
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height		
NX Wireless	NXOFM1R1D-UNV	NX 7-Pin Twist-Lock® with NX Networked Wireless Radio, Integral Automatic Dimming Photocell, Integral Single Pole Relay with Dimming, and Bluetooth Programming	✓	✓	✓	Paired with external control	✓	✓	✓	✓	–		NXOFM-1R1D-UV
	NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor	✓	✓	✓	–	–	✓	✓	✓	–		NXRM2-H
	NXWS12F	NX Networked Wireless Enabled Integral NXSMP2-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	12ft		NXSMP2-OMNI-O
	NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	16ft		NXSMP2-LMO
	NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming	✓	✓	✓	✓	✓	✓	✓	✓	40ft		NXSMP2-HMO
LightGRID+	WIR	LightGRID+ In-Fixture Module	✓	–	✓	–	–	✓	✓	Gateway	–		WIR
	WIR-RME-L	LightGRID+ On Fixture Module	✓	–	✓	–	–	✓	✓	Gateway	–		WIR-RME-L
	WIRSC	LightGRID+ Module and Occupancy Sensor	✓	✓	✓	✓	✓	✓	✓	Gateway	14ft - 40ft		BTMSP
Independent	BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	12ft		BTSMP-OMNI-O
	BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	14ft		BTSMP-LMO
	BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens	–	–	–	✓	✓	✓	✓	✓	40ft		BTSMP-HMO

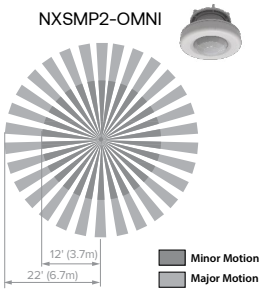
DEFAULT SETTINGS

NX Wireless	
Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	15 Minutes
Occupied Dim Level	100%
Unoccupied Dim Level	0%
Daylight Sensor	Disabled
Bluetooth	Enabled
2.4GHz Wireless Mesh	On
"Passcode Factory Passcode: HubbN3T!"	Enabled

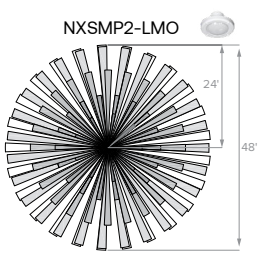
Stand Alone	
Occupancy Sensor	Enabled
Occupancy Sensor Sensitivity	7
Occupancy Sensor Timeout	8 Minutes
Occupied Dim Level	100%
Unoccupied Dim Level	50%
Daylight Sensor	Disabled

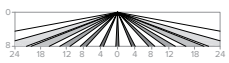
NX WIRELESS COVERAGE PATTERNS

NXSMP2-OMNI



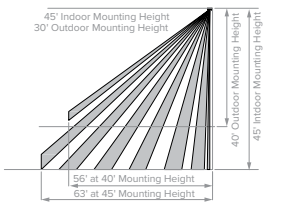
NXSMP2-LMO





Sensor Lens Coverage and Detection Patterns When Mounted at 8ft with Low Mount Lens

NXSMP2-HMO



Sensor Lens Coverage and Detection Patterns When Mounted at 40ft and 45ft with Standard Lens

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VIPER Area/Site

VIPER LUMINAIRE

DATE: LOCATION:

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CATALOG #:

NX LIGHTING CONTROLS FREE APP

CONTROLS TECH SUPPORT 800-888-8006 (7:00 AM - 7:00 PM)



The NX Lighting Controls App is free to use mobile application for programming both NX Lighting Controls System or Standalone Bluetooth Sensors. The mobile app allows you to configure devices, discover and setup wireless enable luminiares and program NX system settings.

Apple App: https://apps.apple.com/us/app/nx-lighting-controls/id962112904

Google Play: https://play.google.com/store/apps/details?id=io.cordova.NXBTR&hl=en_US&gl=US

Apple App

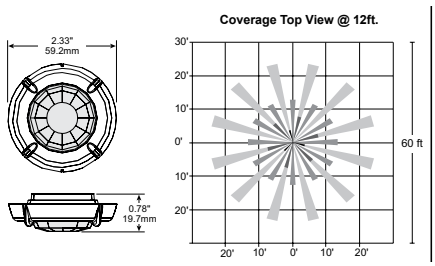
Google Play

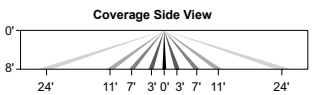
OUTDOOR LIGHTING CONTROLS OPTIONS

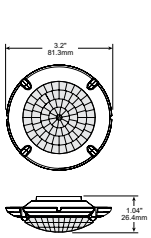
CONTROLS FUNCTIONALITY

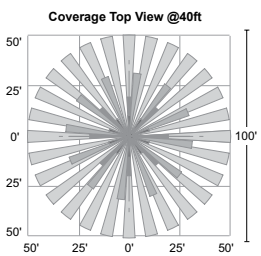
	Control Option Ordering Logic & Description		Control Option Functionality									Control Option Components
			Networkable	Grouping	Scheduling	Occupancy/ Motion	Daylight Harvesting	0-10V Dimming	On/Off Control	Bluetooth App Programming	Sensor Height	
Independent	SCP_F	Sensor Control Programmable, 8F or 40F	–	–	–	✓	✓	✓	✓	–	8ft or 40ft	SCP_F
	ADD	AutoDIM Timer Based Dimming	–	–	✓	–	–	–	✓	–	–	ADD
	ADT	AutoDIM Time of Day Dimming	–	–	✓	–	–	–	✓	–	–	ADT
	7PR	7-Pin Receptacle	–	–	Paired with external control	–	Paired with external control	–	Paired with external control	–	–	7PR
	7PR-SC	7-Pin Receptacle with shorting cap	–	–	–	–	–	–	–	–	–	7PR-SC
	3PR	3-Pin twist lock	–	–	–	–	–	–	Paired with external control	–	–	3PR
	3PR-SC	3-Pin Receptacle with shorting cap	–	–	–	–	–	–	–	–	–	3PR-SC
	3PR-TL	3-Pin with photocontrol	–	–	–	–	✓	–	✓	–	–	3PR-TL

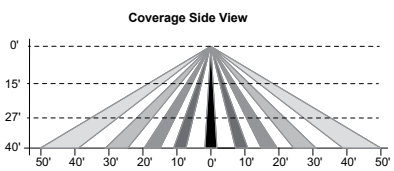
COVERAGE PATTERNS FOR SCP_F











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VIPER Area/Site

VIPER LUMINAIRE

PROGRAMMED CONTROLS

ADD-AutoDim Timer Based Options

- Light delay options from 1-9 hours after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1-9 hours after the light has been dimmed previously.

EX: ADD-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	1-9 Hours	6 - Delay 6 hours
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50% brightness
Auto-Dim Return	Delay 0-9 Hours	R6 - Return to full output after 6 hours

ADT-AutoDim Time of Day Based Option

- Light delay options from 1AM-9PM after the light is turned on to dim the light by 10-100%. To return the luminaire to its original light level there are dim return options from 1AM-9PM after the light has been dimmed previously.

EX: ADT-6-5-R6

ADD Control Options	Configurations Choices	Example Choice Picked
Auto-Dim Options	12-3 AM and 6-11 PM	6 - Dim at 6PM
Auto-Dim Brightness	10-100% Brightness	5 - Dim to 50%
Auto-Dim Return	12-6 AM and 9-11P	R6 - Return to full output at 6AM

DELIVERED LUMENS

For delivered lumens, please see Lumens Data PDF on www.Currentlighting.com

PROJECTED LUMEN MAINTENANCE

Ambient Temp.	0	25,000	*TM-21-11 36,000	50,000	100,000	Calculated L_{70} (Hours)
25°C / 77°F	1.00	0.97	0.96	0.95	0.91	408,000
40°C / 104°F	0.99	0.96	0.95	0.94	0.89	356,000

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

Ambient Temperature		Lumen Multiplier
0°C	32°F	1.03
10°C	50°F	1.01
20°C	68°F	1.00
25°C	77°F	1.00
30°C	86°F	0.99
40°C	104°F	0.98

Micro Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	–	0.841	–
3000K	0.977	0.861	0.647
3500K	–	0.900	–
4000K	1	0.926	0.699
5000K	1	0.937	0.791
AP-Amber Phosphor Converted Multiplier			
Amber	0.710		

Strike Lumen Multiplier			
CCT	70 CRI	80 CRI	90 CRI
2700K	0.9	0.81	0.62
3000K	0.933	0.853	0.659
3500K	0.959	0.894	0.711
4000K	1	0.9	0.732
5000K	1	0.9	0.732
Monochromatic Amber Multiplier			
Amber	See Amber Spec Sheet		

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VIPER Area/Site

VIPER LUMINAIRE

ELECTRICAL DATA: MICRO STRIKE

# OF LEDS	160						
NOMINAL WATTAGE	35	50	75	100	115	135	160
SYSTEM POWER (W)	34.9	50.5	72.1	97.2	111.9	132.2	157.8
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	0.29	0.42	0.63	0.83	0.96	1.13	1.33
208	0.17	0.24	0.36	0.48	0.55	0.65	0.77
240	0.15	0.21	0.31	0.42	0.48	0.56	0.67
277	0.13	0.18	0.27	0.36	0.42	0.49	0.58
347	0.10	0.14	0.22	0.29	0.33	0.39	0.46
480	0.07	0.10	0.16	0.21	0.24	0.28	0.33

# OF LEDS	320						
NOMINAL WATTAGE	145	170	185	210	235	255	315
SYSTEM POWER (W)	150	166.8	185.7	216.2	240.9	261.5	312
INPUT VOLTAGE (V)	CURRENT (Amps)						
120	1.21	1.42	1.54	1.75	1.96	2.13	2.63
208	0.70	0.82	0.89	1.01	1.13	1.23	1.51
240	0.60	0.71	0.77	0.88	0.98	1.06	1.31
277	0.52	0.61	0.67	0.76	0.85	0.92	1.14
347	0.42	0.49	0.53	0.61	0.68	0.73	0.91
480	0.30	0.35	0.39	0.44	0.49	0.53	0.66

# OF LEDS	480					
NOMINAL WATTAGE	285	320	340	390	425	470
SYSTEM POWER (W)	286.2	316.7	338.4	392.2	423.2	468
INPUT VOLTAGE (V)	CURRENT (Amps)					
120	2.38	2.67	2.83	3.25	3.54	3.92
208	1.37	1.54	1.63	1.88	2.04	2.26
240	1.19	1.33	1.42	1.63	1.77	1.96
277	1.03	1.16	1.23	1.41	1.53	1.70
347	0.82	0.92	0.98	1.12	1.22	1.35
480	0.59	0.67	0.71	0.81	0.89	0.98

# OF LEDS	720				
NOMINAL WATTAGE	435	475	515	565	600
SYSTEM POWER (W)	429.3	475	519.1	565.2	599.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	3.63	3.96	4.29	4.71	5.00
208	2.09	2.28	2.48	2.72	2.88
240	1.81	1.98	2.15	2.35	2.50
277	1.57	1.71	1.86	2.04	2.17
347	1.25	1.37	1.48	1.63	1.73
480	0.91	0.99	1.07	1.18	1.25

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VIPER Area/Site

VIPER LUMINAIRE

ELECTRICAL DATA: STRIKE

# OF LEDS	36				
NOMINAL WATTAGE	39	55	85	105	120
SYSTEM POWER (W)	39.6	56.8	83.6	108.2	120.9
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	0.33	0.46	0.71	0.88	0.96
208	0.19	0.26	0.41	0.50	0.55
240	0.16	0.23	0.35	0.44	0.48
277	0.14	0.20	0.31	0.38	0.42
347	0.11	0.16	0.24	0.30	0.33
480	0.08	0.11	0.18	0.22	0.24

# OF LEDS	72				
NOMINAL WATTAGE	115	145	180	210	240
SYSTEM POWER (W)	113.7	143.2	179.4	210.2	241.7
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	1.00	1.21	1.50	1.75	1.79
208	0.58	0.70	0.87	1.01	1.03
240	0.50	0.60	0.75	0.88	0.90
277	0.43	0.52	0.65	0.76	0.78
347	0.35	0.42	0.52	0.61	0.62
480	0.25	0.30	0.38	0.44	0.45

# OF LEDS	108				
NOMINAL WATTAGE	215	250	280	325	365
SYSTEM POWER (W)	214.8	250.8	278.3	324.7	362.6
INPUT VOLTAGE (V)	CURRENT (Amps)				
120	2.00	2.08	2.33	3.04	2.67
208	1.15	1.20	1.35	1.75	1.54
240	1.00	1.04	1.17	1.52	1.33
277	0.87	0.90	1.01	1.32	1.16
347	0.69	0.72	0.81	1.05	0.92
480	0.50	0.52	0.58	0.76	0.67

# OF LEDS		162				
NOMINAL WATTAGE	320	365	405	445	485	545
SYSTEM POWER (W)	322.1	362.6	403.6	445.1	487.1	543.9
INPUT VOLTAGE (V)		CURRENT (Amps)				
120	2.71	2.67	3.38	3.71	4.04	4.54
208	1.56	1.54	1.95	2.14	2.33	2.62
240	1.35	1.33	1.69	1.85	2.02	2.27
277	1.17	1.16	1.46	1.61	1.75	1.97
347	0.94	0.92	1.17	1.28	1.40	1.57
480	0.68	0.67	0.84	0.93	1.01	1.14

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VIPER Area/Site

VIPER LUMINAIRE

DATE: LOCATION:

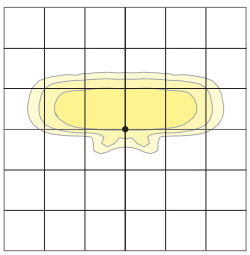
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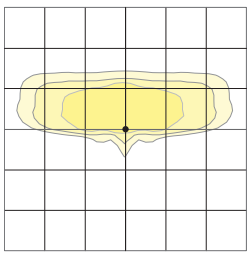
MICRO STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see website photometric test reports.

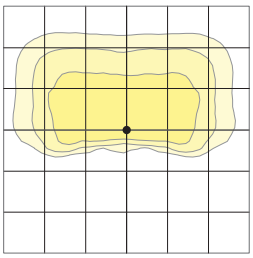
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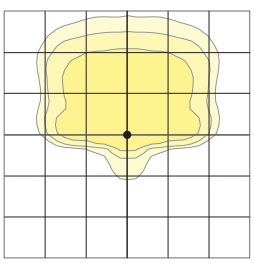
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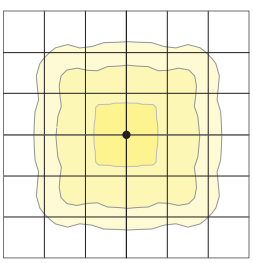
Type 4 Wide



Type 4F



Type 5QW



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VIPER Area/Site

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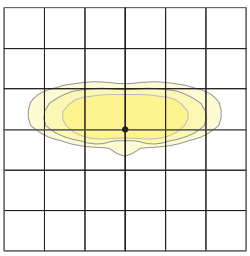
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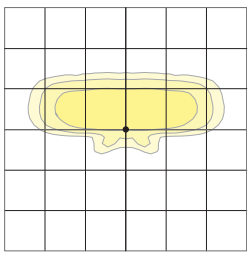
OPTIC STRIKE PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see website photometric test reports.

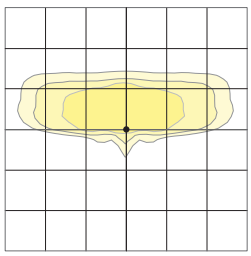
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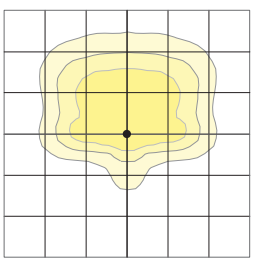
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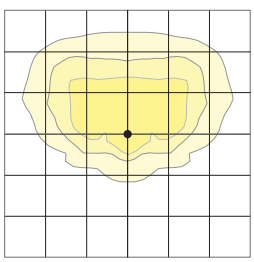
Type 3



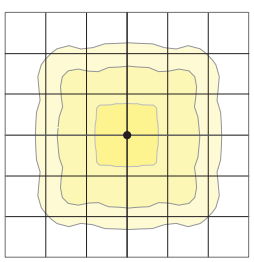
Type 4 Forward



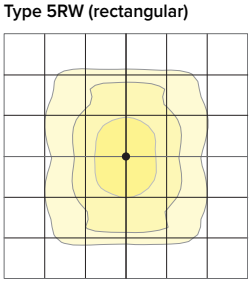
Type 4 Wide



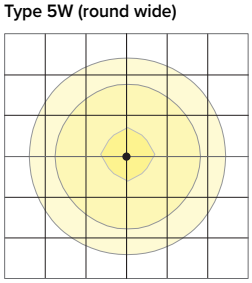
Type 5QM



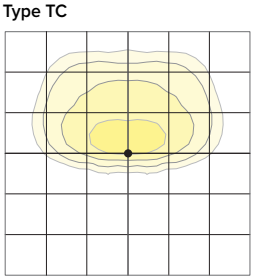
Type 5RW (rectangular)



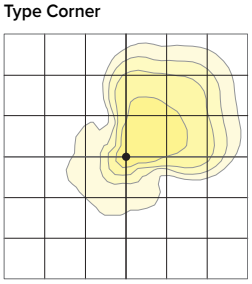
Type 5W (round wide)



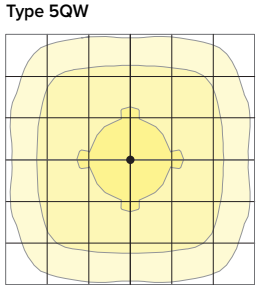
Type TC



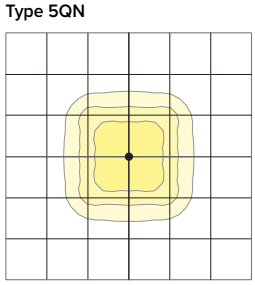
Type Corner



Type 5QW



Type 5QN



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VIPER Area/Site

VIPER LUMINAIRE

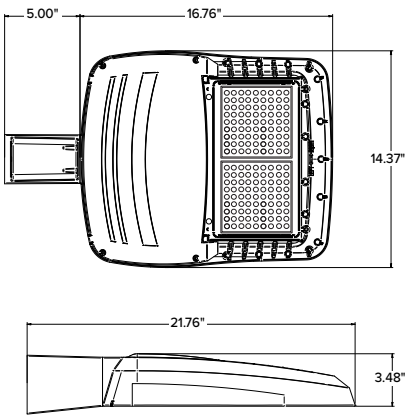
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TYPE: | PROJECT:

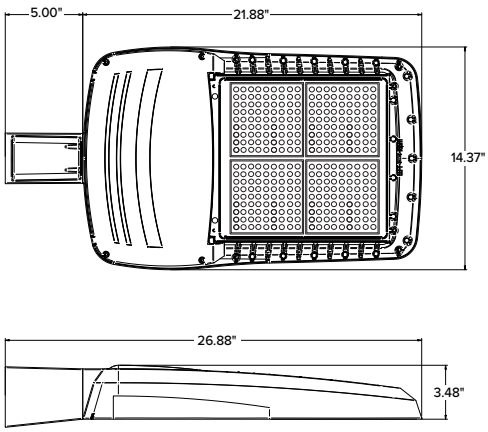
CATALOG #:

DIMENSIONS

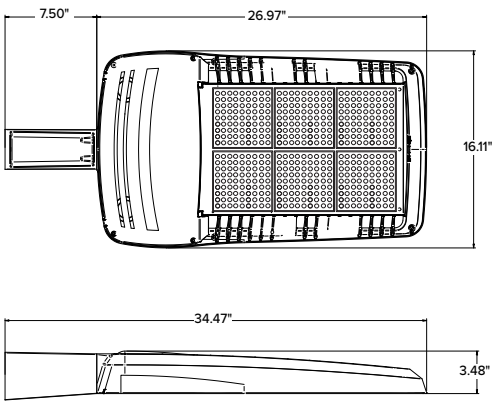
SIZE 1



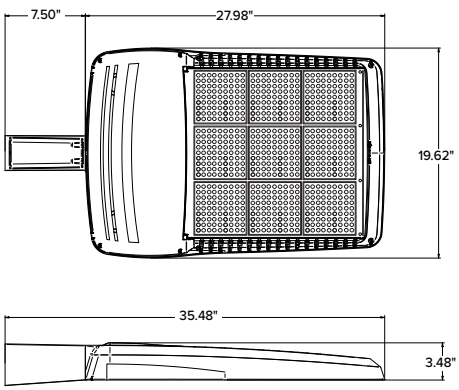
SIZE 2



SIZE 3



SIZE 4



	EPA				
	VP1 (Size 1)	VP2 (Size 2)	VP3 (Size 3)	VP4 (Size 4)	Config.
Single Fixture	0.454	0.555	0.655	0.698	
Two at 180	0.908	1.110	1.310	1.396	
Two at 90	0.583	0.711	0.857	0.948	
Three at 90	1.037	1.266	1.512	1.646	
Three at 120	0.943	1.155	1.392	1.680	
Four at 90	1.166	1.422	1.714	1.896	

	Weight	
	lbs	kgs
VP1 (Size 1)	13.7	6.2
VP2 (Size 2)	16.0	7.26
VP3 (Size 3)	25.9	11.7
VP4 (Size 4)	30.8	13.9

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DATE: LOCATION:

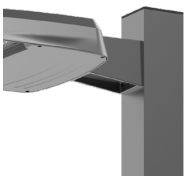
TYPE: PROJECT:

CATALOG #:

VIPER Area/Site

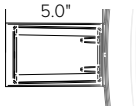
VIPER LUMINAIRE

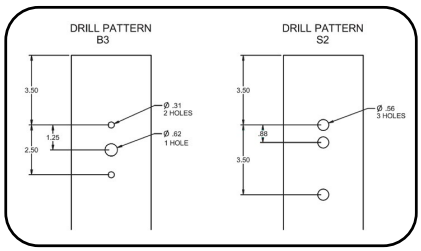
MOUNTING

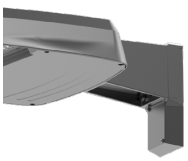


A–STRAIGHT ARM MOUNT

Fixture ships with integral arm for ease of installation. Compatible with Current Outdoor B3 drill pattern for ease of installation on square poles. For round poles add applicable suffix (2/3/4/5)

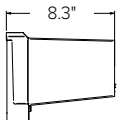


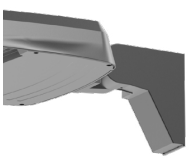




ASQU–UNIVERSAL ARM MOUNT

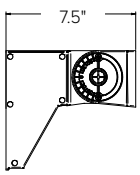
Universal mounting block for ease of installation. Compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2. For round poles add applicable suffix (2/3/4/5)

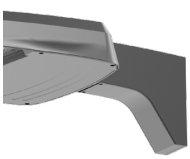




AAU–ADJUSTABLE ARM FOR POLE MOUNTING

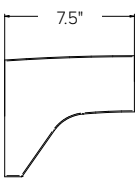
Rotatable arm mounts directly to pole. Compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2 and B3. For round poles add applicable suffix (2/3/4/5). Rotatable in 15˚ aiming angle increments. Micro Strike configurations have a 45° aiming limitation.
Strike configurations have a 30° aiming limitation.

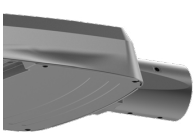




ADU–DECORATIVE UPSWEPT ARM

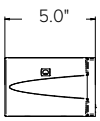
Upswept Arm compatible with drill patterns from 1.5" to 5.25" and Current drill pattern S2. For round poles add applicable suffix (2/3/4/5).

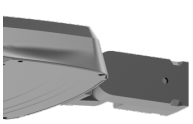




MAF–MAST ARM FITTER

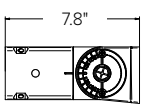
Fits 2-3/8" OD horizontal tenons.

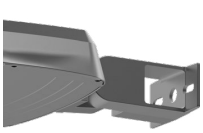




K–KNUCKLE

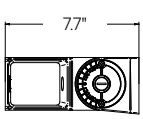
Knuckle mount 15˚ aiming angle increments for precise aiming and control, fits 2-3/8" tenons or pipes. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.





T–TRUNNION

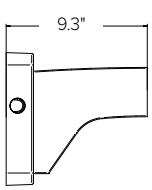
Trunnion for surface and crossarm mounting using (1) 3/4" or (2) 1/2" size through bolts. Micro Strike configurations have a 45° aiming limitation. Strike configurations have a 30° aiming limitation.





WM–WALL MOUNT

Compatible with universal arm mount, adjustable arm mount, and decorative arm mount. The WA option uses the same wall bracket but replaces the decorative arm with an adjustable arm.



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DATE: LOCATION:

TYPE: PROJECT:

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VIPER Area/Site

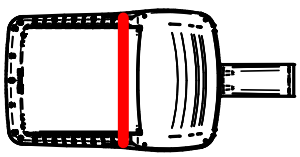
VIPER LUMINAIRE

ADDITIONAL INFORMATION (CONTINUED)

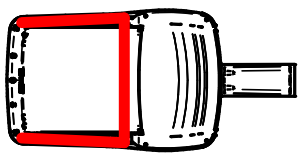
HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES

HSS has a depth of 5" for all Viper sizes
Not to be used with Occupancy Sensors as the shield may block the light to the sensor.

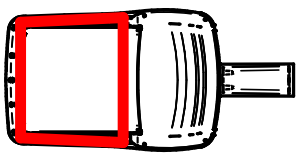
VPR2x HSS-90-B-xx



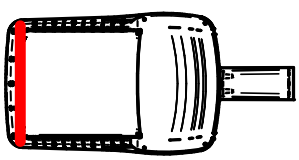
VPR2x HSS-270-BSS-xx



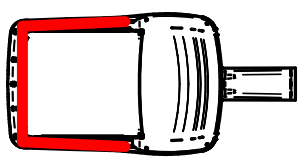
VPR2x HSS-360-xx



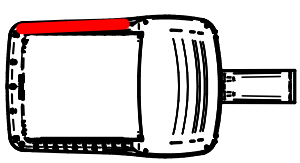
VPR2x HSS-90-F-xx



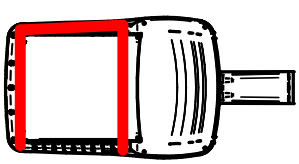
VPR2x HSS-270-FSS-xx



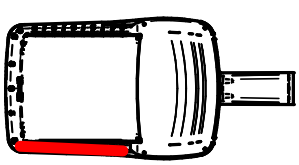
VPR2x HSS-90-S-xx



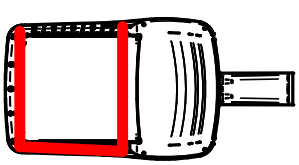
VPR2x HSS-270-FSB-xx



VPR2x HSS-90-S-xx



VPR2x HSS-270-FSB-xx



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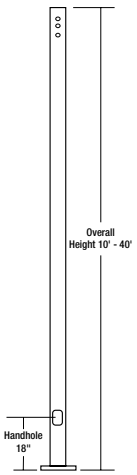
DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

SSS-B Series Poles

SQUARE STRAIGHT STEEL



APPLICATIONS

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION

- SHAFT: One-piece straight steel with square cross section, flat sides and minimum 0.23" radius on all corners; Minimum yield of 46,000 psi (ASTM-A500, Grade B); Longitudinal weld seam to appear flush with shaft side wall; Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- BASE COVER: Two-piece square aluminum base cover included standard
- POLE CAP: Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE: Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

  Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38

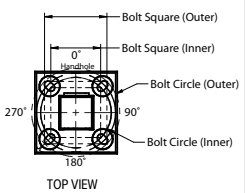
  1 x 36 x 4 — TAB-36-M38

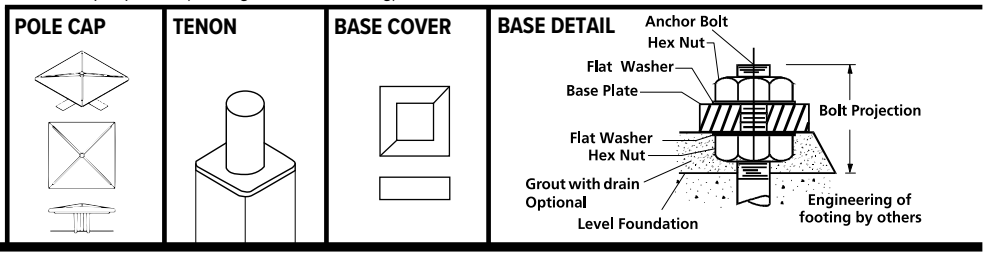
FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over “white metal” steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in multiple standard colors; Custom colors available; RAL number preferable

WAREHOUSE ‘STOCKED’ POLES:

- SSSH20-40A-4-HV-DB-RDC, SSSH25-40A-4-HV-DB-RDC and SSSH30-50B-4-HV-DB-RDC
- The HV designation in the above catalog numbers is a combination drill pattern of the Current S2 pattern and the Beacon B3/B4 Viper pattern (rectangular arm mounting)





ORDERING INFORMATION

ORDERING EXAMPLE:

Reference page 2 for available configurations

SSS -B - 25 - 40 - A/B/C - 2L - B3 - BLT - UL

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	FINISH	OPTIONS
SSS-B Square Straight Steel Pole Beacon	Reference page 2 Ordering matrix **20**	Reference page 2 Ordering matrix **40**	Reference page 2 Ordering matrix **A**	**1** Single arm mount **2** Two fixtures at 180˚ **2L** Two fixtures at 90˚ **3T** Three fixtures at 90˚ **4** Four fixtures at 90˚ **TA** Tenon (2.38” OD x 4” Tall) **TB** Tenon (2.88” OD x 4” Tall) **TC** Tenon (3.5” OD x 6” Tall) **TR**[1] Removable Tenon (2.375 x 4.25) **OT** Open Top (includes pole cap)	**BLT** Black Matte Textured **BLS** Black Gloss Smooth **DBT** Dark Bronze Matte Textured **DBS** Dark Bronze Gloss Smooth **GTT** Graphite Matte Textured **LGS** Light Grey Gloss Smooth **PSS** Platinum Silver Smooth **WHT** White Matte Textured **WHS** White Gloss Smooth **VGT** Verde Green Textured **Color Option** **CC** Custom Color	**GFI**[2] 20 Amp GFCI Receptacle and Cover **EHH**[2] Extra Handhole **C05**[2] .5” Coupling **C07**[2] .75” Coupling **C20**[2] 2” Coupling **MPB**[2] Mid-pole Luminaire Bracket **VM2** 2nd mode vibration damper **LAB** Less Anchor Bolts **UL** UL Certified

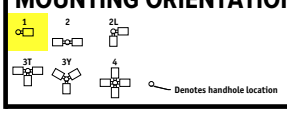
DRILL PATTERN

B1 Cruzer, “AM” arm

B3 2 bolt (2-½” spacing), Viper “A” arm

S2 2 bolt (3-½” spacing), Viper “AD” arm

MOUNTING ORIENTATION



1 Removable tenon used in conjunction with side arm mounting. First specify desired arm configuration followed by the **“TR”** notation. Example: **SSS-B-25-40-A-1-B1-TR-BBT**

2 Specify option location using logic found on page 2 **(Option Orientation)**

3 VM1 recommended on poles 20’ and taller with EPA of less than 1.

ACCESSORIES - Order Separately

Catalog Number	Description
VM1[3]	1st mode vibration damper
VM2SXX	2nd mode vibration damper

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SSS-B Series Poles

SQUARE STRAIGHT STEEL

DATE: LOCATION:

TYPE: PROJECT:

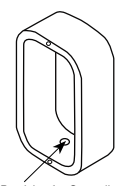
CATALOG #:

ORDERING INFORMATION Cont.

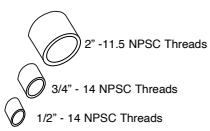
Catalog Number	Height		Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Circle (range)	Bolt Square (range)	Base Plate Square	Anchor bolt size	Bolt Projection	Pole weight
	Feet	Meters									
SSS-B-10-40-A-XX-XX	10	3.0	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	77
SSS-B-12-40-A-XX-XX	12	3.7	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	90
SSS-B-14-40-A-XX-XX	14	4.3	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	103
SSS-B-16-40-A-XX-XX	16	4.9	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	116
SSS-B-18-40-A-XX-XX	18	5.5	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	129
SSS-B-20-40-A-XX-XX	20	6.1	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	142
SSS-B-25-40-A-XX-XX	25	7.6	4" square	0.125"	9"	8" - 10"	5.66" - 7.07"	9"	3/4" x 30" x 3"	3.5	175
SSS-B-14-40-B-XX-XX	14	4.3	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	152
SSS-B-16-40-B-XX-XX	16	4.9	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	171
SSS-B-18-40-B-XX-XX	18	5.5	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	190
SSS-B-20-40-B-XX-XX	20	6.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	209
SSS-B-25-40-B-XX-XX	25	7.6	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	257
SSS-B-30-40-B-XX-XX	30	9.1	4" square	.188"	11"	10" - 12"	7.07" - 8.48"	10.50"	3/4" x 30" x 3"	3.5	304
SSS-B-16-50-B-XX-XX	16	4.9	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	219
SSS-B-18-50-B-XX-XX	18	5.5	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	243
SSS-B-20-50-B-XX-XX	20	6.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	267
SSS-B-25-50-B-XX-XX	25	7.6	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	327
SSS-B-30-50-B-XX-XX	30	9.1	5" square	.188"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	387
SSS-B-25-50-C-XX-XX	25	7.6	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	427
SSS-B-30-50-C-XX-XX	30	9.1	5" square	.25"	11"	10.25" - 13.25"	7.25" - 9.37"	11.50"	1" x 36" x 4"	4.5	507
SSS-B-20-60-B-XX-XX	20	6.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	329
SSS-B-25-60-B-XX-XX	25	7.6	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	404
SSS-B-30-60-B-XX-XX	30	9.1	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	479
SSS-B-35-60-B-XX-XX	35	10.7	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	554
SSS-B-40-60-B-XX-XX	40	12.2	6" square	.188"	12"	11.00" - 13.25"	7.81" - 9.37"	12.25"	1" x 36" x 6"	4.5	629

NOTE Factory supplied template must be used when setting anchor bolts. Beacon Products will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

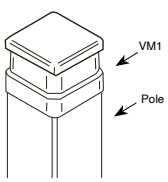
EHH - EXTRA HANDHOLE



C05 - C07 - C20 - COUPLING



VM1 - VIBRATION DAMPER 1ST MODE



Field Installed Pole Top damper designed to reduce pole top deflection or sway. VM1 is recommended for pole systems 25' and taller with a total EPA of 1.0 or less.

VM2 - VIBRATION DAMPER 2ND MODE



Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

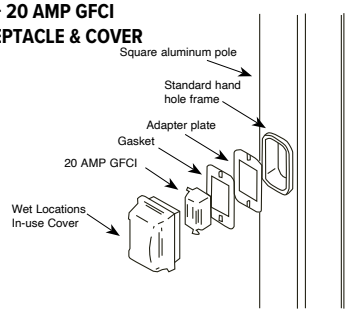
VM2SXX - VIBRATION DAMPER 2ND MODE



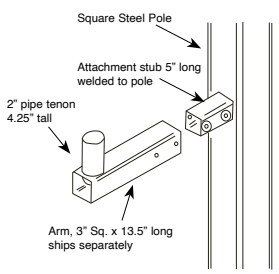
VM2S08 – 8'
VM2S12 – 12'
VM2S16 – 16'
VM2S20 – 20'
VM2S24 – 24'

Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

GFI – 20 AMP GFCI RECEPTACLE & COVER

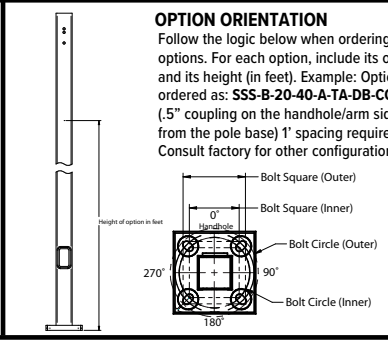


MPB - MID POLE BRACKET



OPTION ORIENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: **SSS-B-20-40-A-TA-DB-C05-0-15** (.5" coupling on the handhole/arm side of pole, 15 feet up from the pole base) 1' spacing required between option. Consult factory for other configurations.



For more information about pole vibration and vibration dampers, please consult our website.
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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SSS-B Series Poles

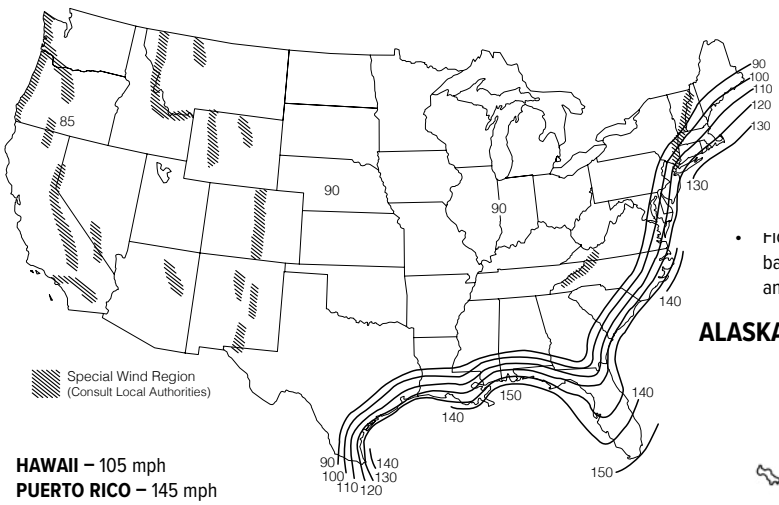
SQUARE STRAIGHT STEEL

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

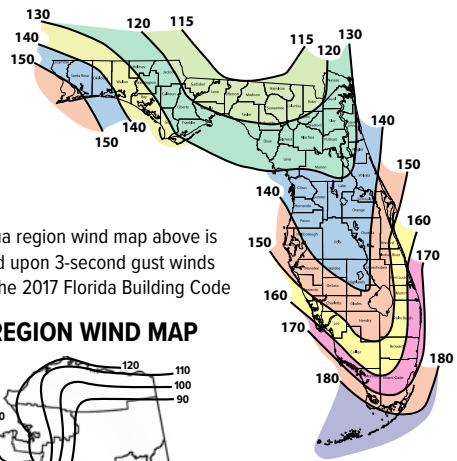
ASCE7-05 WIND MAP



HAWAII – 105 mph

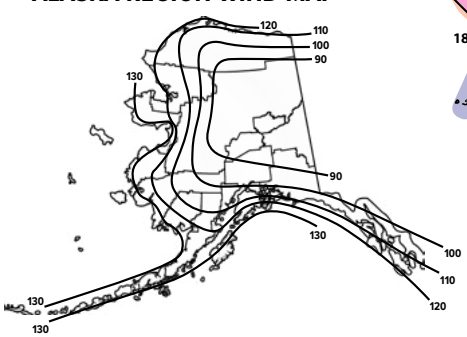
PUERTO RICO – 145 mph

FLORIDA REGION WIND MAP



- Florida region wind map above is based upon 3-second gust winds and the 2017 Florida Building Code

ALASKA REGION WIND MAP



ASCE 7-05 wind map EPA Load Rating - 3 second gust wind speeds (Use for all locations except Florida)										
Catalog Number	**85**	**90**	**100**	**105**	**110**	**120**	**130**	**140**	**145**	**150**
SSS-B-10-40-A	25.0	25.0	25.0	22.8	20.6	17.0	14.2	11.9	11.0	10.1
SSS-B-12-40-A	25.0	25.0	20.0	18.0	16.1	13.2	10.8	8.9	8.1	7.4
SSS-B-14-40-A	23.1	20.4	16.1	14.3	12.8	10.2	8.2	6.6	5.9	5.3
SSS-B-16-40-A	19.0	16.7	13.0	11.5	10.1	7.9	6.2	4.7	4.1	3.6
SSS-B-18-40-A	15.6	13.6	10.0	9.0	7.8	5.9	4.4	3.1	2.6	2.1
SSS-B-20-40-A	12.7	10.9	7.9	6.9	5.9	4.2	2.8	1.7	1.3	0.9
SSS-B-25-40-A	7.3	5.9	3.8	2.9	2.1	0.8	NR	NR	NR	NR
SSS-B-14-40-B	25.0	25.0	23.3	20.8	18.6	15.1	12.3	10.2	9.2	8.4
SSS-B-16-40-B	25.0	24.9	19.4	17.3	15.4	12.3	9.9	8.0	7.2	6.4
SSS-B-18-40-B	24.0	20.8	16.1	14.2	12.5	9.8	7.7	6.1	5.3	4.7
SSS-B-20-40-B	20.2	17.5	13.2	11.6	10.1	7.7	5.9	4.4	3.8	3.2
SSS-B-25-40-B	12.8	11.0	7.9	6.7	5.5	3.7	2.3	1.2	0.7	NR
SSS-B-30-40-B	8.0	6.6	4.1	3.1	2.2	0.8	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	24.8	20.1	16.5	13.6	12.3	11.2
SSS-B-18-50-B	25.0	25.0	25.0	22.9	20.4	16.4	13.2	10.7	9.6	8.6
SSS-B-20-50-B	25.0	25.0	21.3	18.9	16.7	13.2	10.4	8.1	7.2	6.3
SSS-B-25-50-B	20.7	17.8	13.3	11.5	9.8	7.2	5.0	3.3	2.6	1.9
SSS-B-30-50-B	13.5	11.3	7.7	6.2	4.9	2.8	1.1	NR	NR	NR
SSS-B-25-50-C	25.0	25.0	19.4	17.1	15.1	11.7	9.0	6.9	6.0	5.1
SSS-B-30-50-C	20.1	17.3	12.7	10.9	9.3	6.6	4.5	2.8	2.1	1.4
SSS-B-20-60-B	25.0	25.0	25.0	25.0	25.0	20.2	16.1	12.9	11.5	10.3
SSS-B-25-60-B	25.0	25.0	20.6	18.0	15.6	11.8	8.7	6.2	5.2	4.2
SSS-B-30-60-B	21.4	18.1	12.9	10.7	8.8	5.7	3.3	1.3	NR	NR
SSS-B-35-60-B	14.0	11.3	6.9	5.2	3.6	1.0	NR	NR	NR	NR
SSS-B-40-60-B	8.1	5.8	2.2	nr	NR	NR	NR	NR	NR	NR

Florida Building Code 2017 EPA Load Rating - 3 second gust wind speeds (Use for Florida only)								
Catalog Number	**115**	**120**	**130**	**140**	**150**	**160**	**170**	**180**
SSS-B-10-40-A	25.0	25.0	25.0	25.0	21.4	18.4	15.9	13.9
SSS-B-12-40-A	25.0	25.0	23.6	19.8	16.7	14.2	12.1	10.4
SSS-B-14-40-A	25.0	23.1	19.0	15.7	13.1	10.9	9.1	7.6
SSS-B-16-40-A	20.8	18.7	15.2	12.3	10.1	8.2	6.7	5.4
SSS-B-18-40-A	16.8	15.0	11.9	9.4	7.5	5.9	4.5	3.4
SSS-B-20-40-A	13.6	11.9	9.2	7.1	5.3	3.9	2.7	1.7
SSS-B-25-40-A	7.4	6.2	4.1	2.5	1.1	NR	NR	NR
SSS-B-14-40-B	25.0	23.6	19.4	16.1	13.4	11.2	9.4	7.8
SSS-B-16-40-B	21.4	19.2	15.6	12.7	10.4	8.5	6.9	5.6
SSS-B-18-40-B	17.2	15.4	12.2	9.7	7.7	6.1	4.7	3.6
SSS-B-20-40-B	13.9	12.3	9.5	7.3	5.5	4.1	2.9	1.9
SSS-B-25-40-B	7.7	6.4	4.3	2.6	1.3	NR	NR	NR
SSS-B-30-40-B	3.2	2.1	NR	NR	NR	NR	NR	NR
SSS-B-16-50-B	25.0	25.0	25.0	25.0	25.0	21.4	18.2	15.5
SSS-B-18-50-B	25.0	25.0	25.0	24.4	20.4	17.0	14.2	11.9
SSS-B-20-50-B	25.0	25.0	24.4	19.9	16.3	13.4	11.0	8.9
SSS-B-25-50-B	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-B	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-25-50-C	21.8	19.3	15.0	11.5	8.8	6.5	4.7	3.1
SSS-B-30-50-C	13.7	11.7	8.2	5.5	3.3	1.5	NR	NR
SSS-B-20-60-B	25.0	25.0	25.0	21.9	17.8	14.5	11.7	9.4
SSS-B-25-60-B	23.8	20.9	16.1	12.3	9.2	6.6	4.5	2.8
SSS-B-30-60-B	14.6	12.3	8.4	5.3	2.8	0.8	NR	NR
SSS-B-35-60-B	7.5	5.6	2.4	NR	NR	NR	NR	NR
SSS-B-40-60-B	1.8	NR	NR	NR	NR	NR	NR	NR

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SSS-B Series Poles

SQUARE STRAIGHT STEEL

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

NOTES

Wind-speed Website disclaimer:
Current has no connection to the linked website and makes no representations as to its accuracy. While the information presented on this third-party website provides a useful starting point for analyzing wind conditions, Current has not verified any of the information on this third party website and assumes no responsibility or liability for its accuracy. The material presented in the windspeed website should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. Current does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the windspeed report provided by this website. Users of the information from this third party website assume all liability arising from such use. Use of the output of these referenced websites do not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the windspeed report. http://windspeed.atcouncil.org

NOTES

- Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The tables for allowable pole EPA are based on the ASCE 7-05 Wind Map or the Florida Region Wind Map for the 2010 Florida Building Code. The Wind Maps are intended only as a general guide and cannot be used in conjunction with other maps. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. Responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty
- Wind speeds and listed EPAs are for ground mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards
- Wind Induced Vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings.
- Extreme Wind Events like, Hurricanes, Typhoons, Cyclones, or Tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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prescolite

LTR-4RD

LITEISTRY 4" ROUND DOWNLIGHT

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LITEISTRY

FEATURES

- 4" architectural LED downlight delivering 600 – 4000 lm
- Five beam distributions from 0.3 to 1.2 Spacing Criteria
- Quiet reflector appearance with superior 50° optical cutoff
- 2700K – 5000K, 80+ and 90+ CRI options
- Available for New Construction (non-IC), IC and Chicago Plenum applications
- Variety of dimming protocol options including 0–10V, DALI, DMX, and Lutron EcoSystem
- NX Lighting Controls wired and wireless controls capability available



WET LOCATION · C SA US · ENERGY STAR · BUY AMERICAN SOLUTIONS See Certification Specifications · IP66** · IK10** · IP69K**

** Select models

SERVICE PROGRAMS

STOCK QS10

CONTROL TECHNOLOGY

NX LIGHTING CONTROLS

SPECIFICATIONS

CONSTRUCTION

- Standard Non-IC. Chicago Plenum and IC options
- Painted black durable steel platform with pre-installed bar hangers
- Pre-wired junction box with snap-on covers for easy access
- Snap-in connection from driver compartment allows easy installation
- Light Engine connections use plenum rated (CMP) cable

OPTICS

- Visually pleasing 50° cutoff to source and source image
- The light distribution is free of distracting bright spots or pixelation and the perimeter has a smooth transition
- Optical grade silicone lens integral to light engine
- High purity spun aluminum reflector, self-flanged
- Flush Mount flange option with mud-in ring available
- Large selection of anodized finishes and colors
- Painted cones and flange options available

ELECTRICAL

- Chip-on-board LED with 2 SDCM
- Multiple CCTs, 80+ or 90+ CRI
- Long LED life: L90 at >55,000 hours (TM-21)
- Universal voltage 120V–277V driver, 347V optional
- UL Class 2, inherent short circuit and overload protection
- Flicker free 0-10V dimming with 1% or <1% performance
- DALI, DMX, and Lutron EcoSystem options
- Integral and remote emergency controller and battery pack options available
- NX or Lutron control options available
- Refer to additional spec sheets for information on SpectraSync™ Tunable White or Dim-to-Warm solutions

INSTALLATION

- Accommodates ceiling thickness up to 2" (See DIMENSIONS section for details)
- Universal adjustable mounting brackets also accept 0.5" EMT conduit or 1.5" or 0.75" lathing channel (by others) or Prescolite accessory bar hangers (B24 or B6)
- Light Engine/Driver fully serviceable from above or below the ceiling

CERTIFICATIONS

- cCSAus certified to UL 1598
- Suitable for wet locations, covered ceiling. EM/ EMR: Suitable for damp locations.
- EM/EMR: Certified under UL 924 standard for emergency lighting and power equipment
- When used with CE Bezel Trim Accessories: IP66/IP69K rating; also meets IK10 per IEC 60068-2-75 impact testing
- Approved for 8 (4 in/4 out) No. 12AWG conductors rated for 90°C through wiring
- ENERGY STAR® certified models available (For list and additional information, visit http://www.energystar.gov)
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction. Materials under Trade Agreements effective 6/6/2020.

WARRANTY

- 5 year warranty

KEY DATA	
Lumen Range	600-4000
Wattage Range	8-52
Efficacy Range (LPW)	90-99*
Reported Life (Hours)	L90 / >55,000
Input Current (mA)	65-433 (120V)

*Based on Specular, 35K, 80 CRI

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prescolite

LTR-4RD

LITEISTRY 4" ROUND DOWNLIGHT

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

Gray Shading = Service Program STOCK QS10 Limit of 150 Luminaries

ORDERING GUIDE

Example: LTR–4RD–H–SL10L–DM1–LTR–4RD–T–SL35K8MD–S

CATALOG # _____

HOUSING

LTR-4RD-H –

Aperture/Shape/Function		Lumen Package		Lumen Output		Driver Options		Control Options		Voltage		Housing Options	
LTR-4RD-H	4" Round Downlight New Construction Housing	**SL**	Standard Lumen	**06L**	600	**DM1**	0-10V Dimming to 1%	**NXE**	NX Wired Dual RJ45 SmartPORTS, without Sensor [3]	*Standard 120-277V*		**CP**	Chicago Plenum [7,9]
				10L	1000	**DM01**	0-10V Dimming to < 1%	**NXW**	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor [3]	**34**	347V [6]	**IC**	IC rated [8,9]
		ML	Medium Lumen	**15L**	1500	**DMX**	DMX with RDM dimming to < 0.1%					**EM**	Emergency Battery Pack with integral test switch and indicator light [9]
				20L	2000	**DALI**	DALI Dimming to 1%					**EMR**	Emergency Battery Pack with remote test switch and indicator light [9]
				25L	2500	**EDM**	Lutron Hi-Lume EcoSystem Dimming to 1% [2]					**DTS**	Device Transfer Switch with Dimming Bypass [9,11]
		HL	High Lumen	**30L**	3000	**DM00**	Lutron Athena compatible driver [15]	**AWNR**	Lutron Athena Enabled [15]			**GTD**	Generator Transfer Device [9]
				35L	3500							**F**	Fuse
				40L	4000								

TRIM

LTR-4RD-T –

Aperture/Shape/Function		Lumen Package		CCT		CRI		Distribution	
LTR-4RD-T	4" Round Downlight Light Engine/Trim Assembly	**SL**	Standard Lumen	**27K**	2700K	**8**	80+CRI	**VNR**	Very Narrow (0.3 SC/20°) [13]
		ML	Medium Lumen	**30K**	3000K	**9**	90+CRI	**NR**	Narrow (0.4 SC/29°)
		HL	High Lumen	**35K**	3500K			**MD**	Medium (0.7 SC/44°)
				40K	4000K			**WD**	Wide (0.9 SC/61°)
				50K	5000K [1]			**XW**	Extra Wide (1.2 SC/78°)

TRIM CONTINUED

Reflector Finish		Reflector Color		Flange Color Options		Lower Trim Options		Reflector Options	
Finish not applicable with painted reflectors (WC or BC)		*Standard Clear*		*Standard matches reflector color*		**EM**	Pre-punched reflector for EM integral test switch and indicator	**AM**	Antimicrobial Coating [5]
S	Specular	**CG**	Champagne Gold	**WT**	White Flange [4]	**FM**	Flush Mount Mud-in Ring [10]		
SS	Semi-Specular	**BL**	Black	**BT**	Black Flange [4]	**WF**	Wide Flange		
MFC	American Matte™	**LW**	Light Wheat						
VS	Softglow®	**PW**	Pewter						
VSS	SoftSheen™	**WC**	Painted White Cone and Flange						
		BC	Painted Black Cone and Flange						

Accessories	
☐ **B24**	Set of two (2) 24" bar hangers for T-bar ceilings
☐ **B6**	Set of two bar hangers for ceiling joist up to 24" centers
☐ **FMR4-R**	Flush Mount Mud-In Ring Accessory, 4" Round
☐ **LiteGear**	LiteGear® Inverter, 125VA-250VA
☐ **LPS Series**	LightPower Micro-Inverter, 20VA-55VA
☐ **MOR4-R-WH**	Metal Oversized Ring, 4" Round, White (8.25" outside diameter)
☐ **MOR4-R-BL**	Metal Oversized Ring, 4" Round, Black (8.25" outside diameter)
☐ **LTR-SCA4-__**	Sloped Ceiling Adapter, 4", White [12]

(See next page for Bezel Trim Accessories for Complex Environments) [14]

Notes:
1. 5000K available in 80+ CRI only.
2. EDM, available in 10L-35L.
3. NX requires DM1 driver option.
4. WT not needed for WC, BT not needed for BC.
5. AM available with WC or Specular Clear (S or SWT). Consult factory for other colors.
6. 347V available for 06L-30L; requires DM1 driver; not available with Controls, EM, EMR, DTS, GTD or F.
7. CP available up to 35L; not available with DMX, Controls, or EMR options.
8. IC available up to 20L; not available with Controls options.
9. Housing options (except Fuse) not available in combination.
10. Flush Mount Flange (FM) requires FMR accessory (sold separately).
11. DTS available with DM1, DM01, DALI, or DM00.
12. Specify slope angle 5°-35° in 5° increments. Not available with EM, WF, or FM options.
13. VNR available up to 30L.
14. See next page for option restrictions when using with bezel trim accessories.
15. DM00 must be selected with AWNR Lutron Athena controls option.

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DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

LTR-4RD

LITEISTRY 4" ROUND DOWNLIGHT

ACCESSORIES CONTINUED

Bezel Trim Accessories

For more demanding environments, LITEISTRY™ offers bezel trim accessories that can be field installed onto standard housing/trim assemblies and are available with antimicrobial trim finish and/or vandal resistant hardware options.

FEATURES:

- Marine grade die cast aluminum bezel trim with low-copper alloy for durability
- Shatter resistant, 1/4" clear polycarbonate lens, completely flush for easy wipe down
- Closed cell silicone gasket protects against dust and water ingress
- Suitable for wet locations, covered ceiling
- IP66/IP69K rated (room side) when properly installed per installation instructions
- Meets IK10 per IEC 60068-2-75 impact testing
- Optional anti-microbial (AM) trim finish



WET LOCATION IP66 IK10 IP69K

Complex Environment (Includes stainless steel Philips head screws)	
☐ LTR-4RD-CE-WT	Bezel Trim Accessory, IP66/IP69K, 4" Round, White
☐ LTR-4RD-CE-WTAM	Bezel Trim Accessory, IP66/IP69K, 4" Round, White Antimicrobial

Vandal Resistant (Includes stainless steel Torx® screws with tamper resistant center pin reject)	
☐ LTR-4RD-CEVR-WT	Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 4" Round, White
☐ LTR-4RD-CEVR-WTAM	Bezel Trim Accessory, Vandal Resistant/IP66/IP69K, 4" Round, White Antimicrobial

Dimensional Data	
Aperture Opening	Ø 4.00" (101.6 mm)
Overall Flange	Ø 7.67" (194.8 mm)
Trim Height	0.42" (10.7 mm)
Ceiling Cutout	Ø 6.50" (165.1 mm)
Ceiling Thickness	0.50" to 2.00" (12.7 mm to 50.8 mm)

Notes:
1 Available up to 4000 Max Lumens.
2 Not available in combination with EM, FM, or WF options.
3 Not available in combination with FMR, LTR-MOR or LTR-SCA accessories.
4 Refer to all Installation Instructions for complete details.

CONTROLS

NX Lighting Controls:

Supports applications in a variety of deployment options. Integrates with and enables a wide array of luminaires including those with SpectraSync™ Color Tuning Technology.

NX LIGHTING CONTROLS

NX INTEGRATED CONTROLS REFERENCE								
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0–10V Dimming	On/off Control	Bluetooth® App Programming
NX Networked – Wired								
NXE	N/A	Yes	Yes	No	No	Yes	Yes	Requires NXBTC[1]
NX Networked – Wireless								
NXW[2]	N/A	Yes	Yes	No	No	Yes	Yes	Yes

1 NXBTC needs to be plugged into an available NX SmartPort™ on the fixture network
2 Programming via App requires factory assistance

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LTR-4RD

LITEISTRY 4" ROUND DOWNLIGHT

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

PERFORMANCE DATA TABLE

Performance data provided below is for 3500K, 80 CRI with Specular Clear reflector finish/color

Lumen Package	Nominal Lumens	Distribution	"Delivered Lumens"	Watts	LPW
06L	600	Very Narrow	691	7.6	91
		Narrow	785	7.8	101
		Medium	726	7.8	93
		Wide	664	7.8	85
		Extra Wide	644	7.8	83
10L	1000	Very Narrow	1132	11.8	96
		Narrow	1255	12.0	105
		Medium	1160	12.0	97
		Wide	1062	12.0	89
		Extra Wide	1030	12.0	86
15L	1500	Very Narrow	1623	17.2	94
		Narrow	1795	18.6	97
		Medium	1660	18.6	89
		Wide	1519	18.6	82
		Extra Wide	1474	18.6	79
20L	2000	Very Narrow	2032	22.4	91
		Narrow	2238	22.5	99
		Medium	2152	22.5	96
		Wide	2059	22.5	92
		Extra Wide	2028	22.5	90
25L	2500	Very Narrow	2447	28.6	86
		Narrow	2985	27.8	107
		Medium	2760	27.8	99
		Wide	2526	27.8	91
		Extra Wide	2451	27.8	88
30L	3000	Very Narrow	2855	35.9	80
		Narrow	3583	34.6	104
		Medium	3313	34.6	96
		Wide	3032	34.6	88
		Extra Wide	2941	34.6	85
35L	3500	Narrow	4280	42.9	100
		Medium	3957	42.9	92
		Wide	3622	42.9	84
		Extra Wide	3514	42.9	82
40L	4000	Narrow	4885	51.5	95
		Medium	4517	51.5	88
		Wide	4134	51.5	80
		Extra Wide	4011	51.5	78

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DATE: LOCATION:

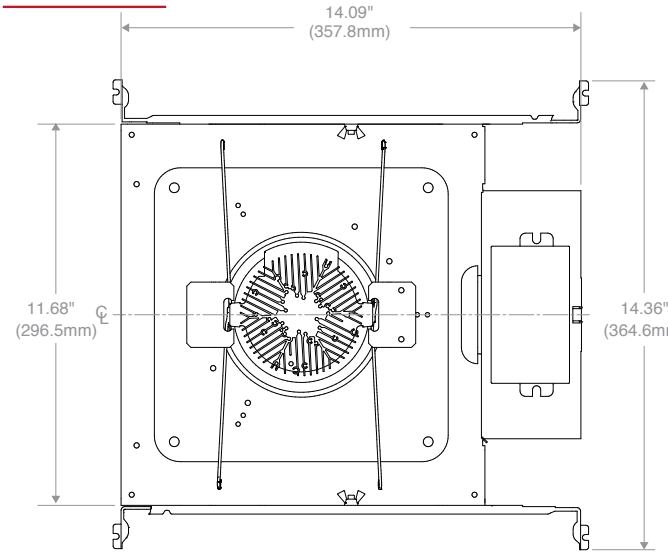
TYPE: PROJECT:

CATALOG #:

LTR-4RD

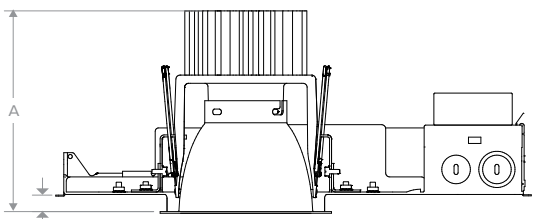
LITEISTRY 4" ROUND DOWNLIGHT

DIMENSIONS



Top View

LTR-4RD-H New Construction

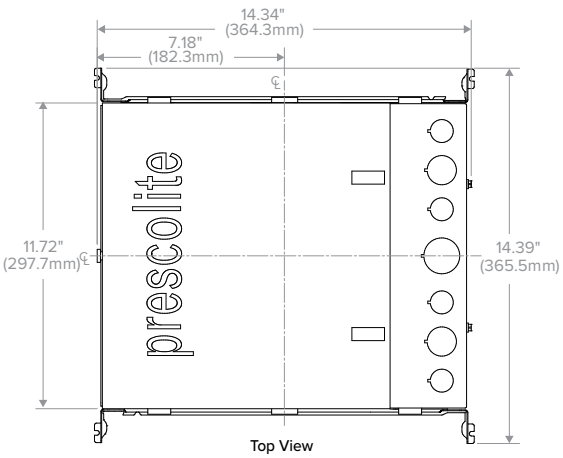


Dimensional Data		
Aperture		4.00" (101.6mm)
Flange:	Standard	5.25" (133.4mm)
	Flush Mount	4.50" (114.3mm)
	With Bezel Trim Accessory**	Ø 7.67" (194.8 mm)
Ceiling Cutout:	Standard	5.00" (127.0mm)
	Flush Mount	5.12" (130.0mm)
	With Bezel Trim Accessory**	Ø 6.50" (165.1 mm)
Ceiling Thickness:	Standard or w/SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)
	With Bezel Trim Accessory**	0.50" to 2.00" (12.7 mm to 50.8 mm)

Lumen Package	"A"
06L-15L	4.97" (126.2mm)
20L-30L	6.15" (156.2mm)
35L-40L	7.33" (186.2mm)

SCA Sloped Ceiling Adapter accessory available, see LTR-SCA specification sheet and installation instructions for dimensional data and other details.

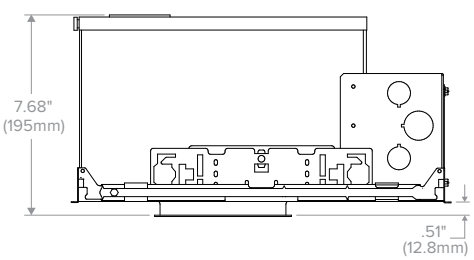
** For complete details on Bezel Trim Accessories, see Accessory section on Page 3 and Bezel Trim Installation Instructions on currentlighting.com/prescolite.



Top View

Dimensional Data		
Aperture		4.00" (101.6mm)
Flange:	Standard	5.25" (133.4mm)
	Flush Mount	4.50" (114.3mm)
Ceiling Cutout:	Standard	5.00" (127.0mm)
	Flush Mount	5.12" (130.0mm)
Ceiling Thickness:	Standard or w/ SCA 5-20° slope	0.50" to 2.00" (12.7mm to 50.8mm)
	With SCA 25-35° slope	0.50" to 1.75" (12.7mm to 44.6mm)

SCA Sloped Ceiling Adapter accessory available, see LTR-SCA specification sheet and installation instructions for dimensional data and other details.



LTR-4RD-H IC/CP

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LTR-4RD

LITEISTRY 4" ROUND DOWNLIGHT

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

PHOTOMETRY

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8VNR-S

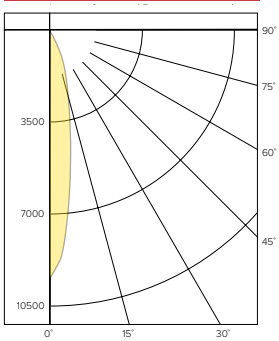
LUMINAIRE DATA

Test No.	**20.01331**
Description	**2000 lm, Very Narrow, 3500K, 80 CRI**
Delivered Lumens	**2032**
Watts	**22.4W**
Efficacy	**91**
Mounting	**Recessed**
Spacing Criterion	**0.3**
Beam Angle (FWHM)	**20**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2011	99.0
0-60	2032	100.0
0-90	2032	100.0
0-180	2032	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	9388
5	7360
15	2780
25	1073
35	198
45	20
55	0
65	0
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	3489
55°	0
65°	0
75°	0
85°	0

*Candela/Square Meter

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8NR-S

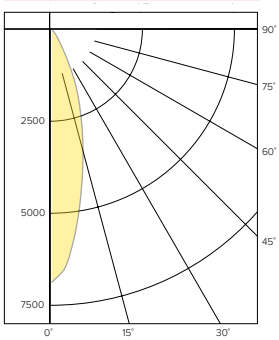
LUMINAIRE DATA

Test No.	**19.00532**
Description	**2000 lm, Narrow, 3500K, 80 CRI**
Delivered Lumens	**2238**
Watts	**22.5W**
Efficacy	**99.3**
Mounting	**Recessed**
Spacing Criterion	**0.4**
Beam Angle (FWHM)	**29**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2208	98.6
0-60	2237	99.9
0-90	2238	100.0
0-180	2238	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	6877
5	6035
15	3284
25	1313
35	260
45	26
55	3
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	4535
55°	645
65°	292
75°	0
85°	0

*Candela/Square Meter

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8MD-S

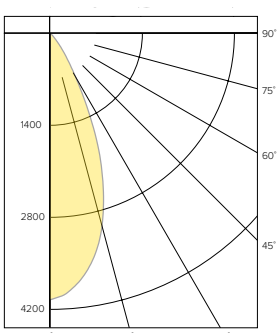
LUMINAIRE DATA

Test No.	**19.00533**
Description	**2000 lm, Medium, 3500K, 80 CRI**
Delivered Lumens	**2152**
Watts	**22.5W**
Efficacy	**95.6**
Mounting	**Recessed**
Spacing Criterion	**0.7**
Beam Angle (FWHM)	**44**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	2113	98.2
0-60	2151	99.9
0-90	2152	100.0
0-180	2152	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	4053
5	3893
15	3037
25	1493
35	366
45	34
55	3
65	1
75	0
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	5931
55°	645
65°	292
75°	0
85°	0

*Candela/Square Meter

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LTR-4RD

LITEISTRY 4" ROUND DOWNLIGHT

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

PHOTOMETRY CONTINUED

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8WD-S

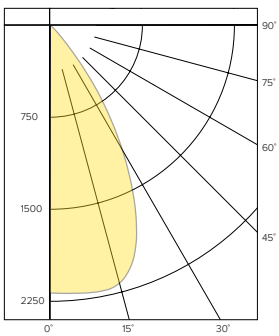
LUMINAIRE DATA

Test No.	**19.00534**
Description	**2000 lm, Wide, 3500K, 80 CRI**
Delivered Lumens	**2059**
Watts	**22.5W**
Efficacy	**91.6**
Mounting	**Recessed**
Spacing Criterion	**0.9**
Beam Angle (FWHM)	**61**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1983	96.3
0-60	2056	99.8
0-90	2059	100.0
0-180	2059	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	2201
5	2210
15	2051
25	1504
35	692
45	169
55	10
65	3
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	11338
55°	1075
65°	584
75°	477
85°	0

*Candela/Square Meter

LTR-4RD-H-ML20L-DM1 / LTR-4RD-T-ML35K8XW-S

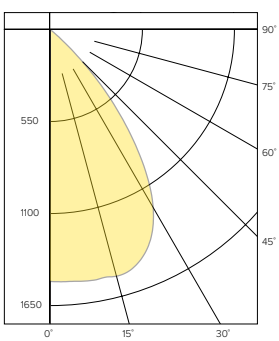
LUMINAIRE DATA

Test No.	**19.00535**
Description	**2000 lm, Extra Wide, 3500K, 80 CRI**
Delivered Lumens	**2028**
Watts	**22.5W**
Efficacy	**90.2**
Mounting	**Recessed**
Spacing Criterion	**1.2**
Beam Angle (FWHM)	**78**

ZONAL LUMEN SUMMARY

Zone	Lumens	% Luminaire
0-40	1794	88.5
0-60	2025	99.8
0-90	2028	100.0
0-180	2028	100.0

POLAR GRAPH



CANDELA DISTRIBUTION

Degree	Candela
0	1235
5	1252
15	1392
25	1454
35	1010
45	256
55	6
65	2
75	1
85	0
90	0

LUMINANCE DATA*

Vertical Angle	Average
45°	44656
55°	1290
65°	584
75°	231
85°	477

*Candela/Square Meter

LUMEN MULTIPLIER

Option	27K8	30K8	35K8	40K8	50K8	27K9	30K9	35K9	40K9
Multiplier	0.94	0.98	1.00	1.01	1.02	0.81	0.84	0.85	0.85

Photometrics are published below at a nominal 3500 Kelvin, 80+ CRI. This table may be used to approximate the lumen values at different Kelvin temperatures. Power consumption would stay the same.

REFLECTOR FINISH MULTIPLIER (Based on Clear (Standard) Color)

Option	Specular (S)	Semi-Specular (SS)	American Matte (MFC)	Softglow (VS)	Softsheen (VSS)
Multiplier	1	1	0.984	0.888	0.938

REFLECTOR COLOR MULTIPLIER (Based on Semi-Specular (SS) Finish)

Option	Clear (Standard)	Champagne Gold (CG)	Black (BL)	Light Wheat (LW)	Pewter (PW)	White Cone (WC)	Black Cone (BC)
Multiplier	1	0.974	0.444	0.861	0.915	0.984	0.442

Multiply FINISH x COLOR to calculate other reflector finish and color combinations. Example: SoftGlow Pewter (VSPW) = 0.888 (VS) x 0.915 (PW) = 0.813

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LTR-4RD

LITEISTRY 4" ROUND DOWNLIGHT

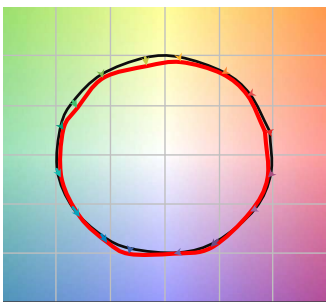
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TYPE: PROJECT:

CATALOG #:

TM-30 DATA

COLOR VECTOR GRAPHIC 3500K, 90 CRI



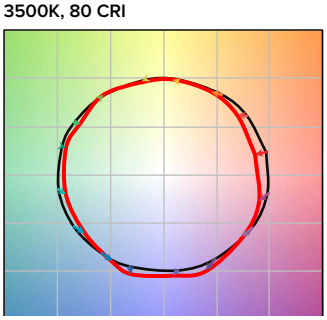
Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC 3500K, 90 CRI



TEST RESULTS - 3500K		
Value	80+ CRI	90+ CRI
R_f	84	88
R_g	95	95
CCT (K)	3411	3419
D_{UV}	0.0015	0.0042
x	0.4120	0.4147
y	0.3974	0.4052
CIE R_a	84	93
CIE R_9	11	62

COLOR VECTOR GRAPHIC 3500K, 80 CRI



Reference Illuminant — Test Source

COLOR DISTORTION GRAPHIC 3500K, 80 CRI



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LTR-4RD

LITEISTRY 4" ROUND DOWNLIGHT

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

ELECTRICAL DATA

DRIVER DATA		
Input Voltage	120-277 V	347 V
Input Frequency	50/60 Hz	50/60 Hz
Power Factor	≥0.90	≥0.90
THD	<20%	<20%
EMI Filtering (FCC 47 CFR Part 15)	Class A	Class A

* Values for DM1 option shown, values for other dimming options may vary.

ADDITIONAL INFORMATION

Dimming Compatibility
For more details and recommended dimmer list, see Dimming Compatibility Information on currentlighting.com/prescolite.

DMX
See instruction sheet on currentlighting.com/prescolite for connection & installation information.

Central Inverters
For full fixture output in back-up mode, we recommend you visit currentlighting.com/dual-lite.com for your Central Lighting Inverter options. Please contact your local Current representative for any assistance with proper sizing and loading of your inverter selection. Central lighting inverters must be ordered separately.

Bezel Trim Accessories for Complex Environments
See installation instructions on currentlighting.com/prescolite for complete details.

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KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

CY1

ARCHITECTURAL AREA/SITE

CYPHER™

FEATURES

- Integral Battery Backup Option
- 360° Light Distribution
- RGBW or Static White Luminous Front Option
- Multiple Fascia Options and Finishes
- 4G Vibration Tested

3000K and warmer CCTs only



Cypher 9"

CONTROL TECHNOLOGY

SPECIFICATIONS

CONSTRUCTION

- Main housing shroud is made of fabricated 5052-H32 aluminum alloy
- Housing mounting interface has a stamped silicone gasket
- Luminaire housing is free of any visible heat fins, hardware or fasteners
- Bracketry and hardware is stainless steel
- Luminaire finish consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish
- Luminaire finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance

LED/OPTICS

- LEDs are mounted to a metal printed circuit board assembly (MCPCB) with a uniform conformal coating over the panel surface and electrical features
- Optical lenses is clear injection molded PMMA acrylic
- Optical array is recessed in order to shield each LED optic across the length of the aperture
- Optical array is sealed for IP66 rating
- Secondary lens is impact resistant 5/32" tempered glass

INSTALLATION

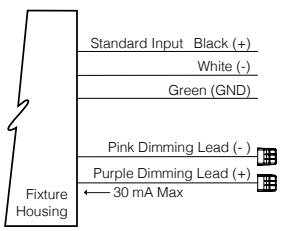
- JUNCTION BOX: Standard with zinc-plated, quick-mount junction box plate that mounts directly to 4" J-Box
- Mounting plate features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates

INSTALLATION (CONTINUED)

- Fixture attaches by two Allen-head hidden fasteners for tamper resistance
- Optional mounting arrangements utilize a die-cast mounting adaptor to allow for surface conduit and through branch wiring
- Housing is able to hang freely in an open service position for inspection of internal wire connections. Once in service position, the housing shall be able to be removed for service by lifting the assembly up off the rear mounting plate and disconnecting the wiring plugs
- •Driver assembly is mounted to a prewired internal tray with quick disconnects for removal

ELECTRICAL

- Drivers are in direct contact with the die-cast aluminum housing across the entire surface area of the widest face for maximum thermal transfer
- "Thermal Shield", primary side, thermister provides protection for the sustainable life of LED module and electronic components
- Drivers have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaires have integral surge protection that shall be U.L. recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of 372J. Surge protection device shall be wired in series
- Drivers are 0-10V dimming control with a dimming range of 100%-10%. Drivers are U.L. listed. All luminaires shall accept 120-277 volt input and have integral surge protection."Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components



ELECTRICAL (CONTINUED)

- Integral battery backup provides emergency path of egress lighting for the required 90 minutes for -20°C ambient environments
- Luminaire are capable of operating at 100% brightness in a 40°C environment. Both driver and optical array shall have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C

CONTROLS

- Button photocontrol for dusk to dawn energy savings
- Photocell is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others. Photocell adapter shall include an internal twist lock receptacle. Photocell by others

continued on page 3

KEY DATA	
LUMEN RANGE	1,353–2,752
WATTAGE RANGE	17–26
EFFICACY RANGE (LPW)	75–116
WEIGHT	Refer to page 5

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KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

CY1

ARCHITECTURAL AREA/SITE

ORDERING GUIDE

Example: CY1-15-3K7-1-2D-UNV-BLS-F-RGBW-FPP-PCU-SF

CATALOG #

Series-Output (Base)	CCT-CRI	Model (Light Engine) [1]	Main Distribution (Down)	Secondary Distribution (Up, Sides)	Voltage
CY1-15 15W, 1500 nominal lumens	**27K8** 2700K, 80CRI	**1** DownLight Only	**1** IES Type I	**1** IES Type I	**UNV** 120-277V
CY1-25 25W, 2500 nominal lumens	**3K7** 3000K, 70CRI	**2** 50/50 Down/Up, **Down/Up distributions must match**	**2** IES Type II	**2** IES Type II	
	3K8 3000K, 80CRI	**3** 90/10 Down/Up	**3** IES Type III	**3** IES Type III	
	4K7 4000K, 70CRI	**4** 25/25/25/25 Split, **Down/Up/ Side Distributions must match**	**4** IES Type IV	**4** IES Type IV	
	4K8 4000K, 80CRI	**5** 70/10/10/10 Spit, **Top/Side distributions must match**	**SP** 15° Spot/Column	**SP** 15° Spot/Column	
	5K7 5000K, 70CRI		**WG** 60° Wall Graze	**WG** 60° Wall Graze	
			1D Type 1 Diffused	**PB** [2] Pencil Beam	
			2D Type 2 Diffused	**1D** Type 1 Diffused	
			3D Type 3 Diffused	**2D** Type 2 Diffused	
			4D Type 4 Diffused	**3D** Type 3 Diffused	
				4D Type 4 Diffused	

Base Housing Finish	Fascia Form [1]	Luminous Front [4]	Fascia Panel [5]	Control Options	Options
BLS Black Gloss Smooth	**F** Flat	**Blank** Standard None	**FPP** Full Panel Painted	**PCU** Universal Button Photocell (120-277V)	**EM** [7] Battery Backup Unit -20° C
BLT Black Matte Textured	**R** Radius/Curved	**RGBW** RGBW Luminous Front	**FPS** Full Panel Stainless Steel		**SF** Single Fuse (120, 277)
DBS Dark Bronze Gloss Smooth	**T** Triangle/Wedge	**LFSW** Static White Luminous Front	**FPC** Full Panel Copper		**DF** Double Fuse (208, 240)
DBT Dark Bronze Matte Textured	**E** Rounded/Edge		**OPP** [6] Open Panel Painted		**SCB** Surface Conduit Box
GTT Graphite Matte Textured	**C** Circle/Curved		**OPS** [6] Open Panel Stainless Steel		
LGS Light Gray Gloss Smooth	**CB** Cylinder Balanced		**OPC** [6] Open Panel Copper		
LGT Light Gray Matte Textured	**CT** Cylinder Tall		**4PP** [6] 4-Square Panel Painted		
PSS Platinum Silver Gloss Smooth	**CBM** [8] Custom Building Material Mount Ghost Fascia		**4PS** [6] 4-Square Panel Stainless Steel		
VGT Verde Green Matte Textured			**4PC** 4-Square Panel Copper		
WHS White Gloss Smooth			**PPP** Perforated Panel Painted		
WHT White Matte Textured			**PPS** Perforated Panel Stainless Steel		
Color Options			**PPC** Perforated Panel Copper		
CC [3] Custom Color					

Notes:

1 Consult factory for custom distributions. See Distribution Matrix on page 4 restrictions

2 PB distribution is available for 90/10 and 70/10/10/10 models only. Not all combinations are recommended. See Distribution Matrix on page 2 for restrictions.

3 Consult factory for custom color, marine and corrosive finish

4 RGBW and LFSW luminous fronts are only available with open, four square and perforated fascia panels

5 Flat and Radius Fascia forms only. Painted panels by default match base housing finish/color. Consult factory for custom panel finishes.

6 Luminous front is required to select the Open Panel and 4-Square Panel fascia panels.

7 Battery Backup not available with Triangle and Rounded Edge Fascia Forms.

8 Custom Building Material Mount Ghost Fascia option allows the Cypher to blend seamlessly into the building architecture by matching the finish of the architectural background. See page 5 for dimensions and contact factory for additional information.

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KIM LIGHTING®

DATE: LOCATION:

TYPE: PROJECT:

CATALOG #:

CY1

ARCHITECTURAL AREA/SITE

SPECIFICATIONS (CONTINUED)

CONTROL (CONTINUED)

- Each fixture comes equipment with a dual control driver that supports Bluetooth® operation of individual fixtures or DMX control of an entire system of fixtures.

Bluetooth®:

- Free Bluetooth® Apps are available for Apple iOS and Google Android mobile devices and are downloadable via the Internet at Apple App Store or Google Play.
- Modular wiring harness in the service area provides user access to the dimming circuitry via DMX.

DMX:

- Fully DMX/RDM Compatible
- Utilizes 4 DMX Channels per fixture

DMX MAP

- Start Address – Red
- Start Address +1 – Green
- Start Address +2 – Blue
- Start Address +3 – White

DMX Addressing is performed by using a compatible RDM handheld unit or via the Bluetooth® App.

- Performed by using a compatible RDM handheld unit or via the Bluetooth® App

DMX WIRING COLOR CODE

- Red Wire – DMX +
- Brown Wire – DMX-
- Yellow Wire – Shield/Ground
- DMX termination must be achieved by adding a DMX terminator to the last fixture in a Daisy-Chain. Fixture does not auto terminate.
- Kim Lighting is proud to offer the Pharos Architectural Controls DMX Controllers and Touch screens. See Pharos Spec Sheet for more details.
  See the Pharos® Spec Sheet for more details.

MOBILE APP:

- Mobile App specification in additional information section.
- Mobile App. dimming range from 0% to 100% through the use of Current RGBW app (available on IOS and Android).
- Color selection and adjustment.
- Camera function for color matching.
- Intensity slider for dimming/ramping up.
- Save and rename up to 10 presets.
- Group and rename fixtures.
- Fixture is password protected, refer to instructions to set unique password.

DMX 512 pharos

CERTIFICATIONS

- Luminaire is listed with UL for outdoor, wet location use, UL1598, UL 8750 and Canadian CSA Std. C22.2 no.250
- IP66 rated assembly
- IDA approved, 3000K and warmer CCTs only
- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations listed in this document are DLC® qualified. Refer to http://www.designlights.org for the most up-to-date list.
- ANSI C136.31-2010 4G Vibration tested and compliant
- Complies with “Americans with Disabilities Act” or "ADA" on select versions for low mounting height applications (fixtures extend maximum of 4 inches from wall for mounting heights of 80 inches or less)
- Emergency battery back options are California Energy Commission (CEC) Title 20 Compliant

WARRANTY

- 5 year warranty

Bluetooth®

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ANDROID APP ON Google play Available on the App Store

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KIM LIGHTING®

DATE: LOCATION:

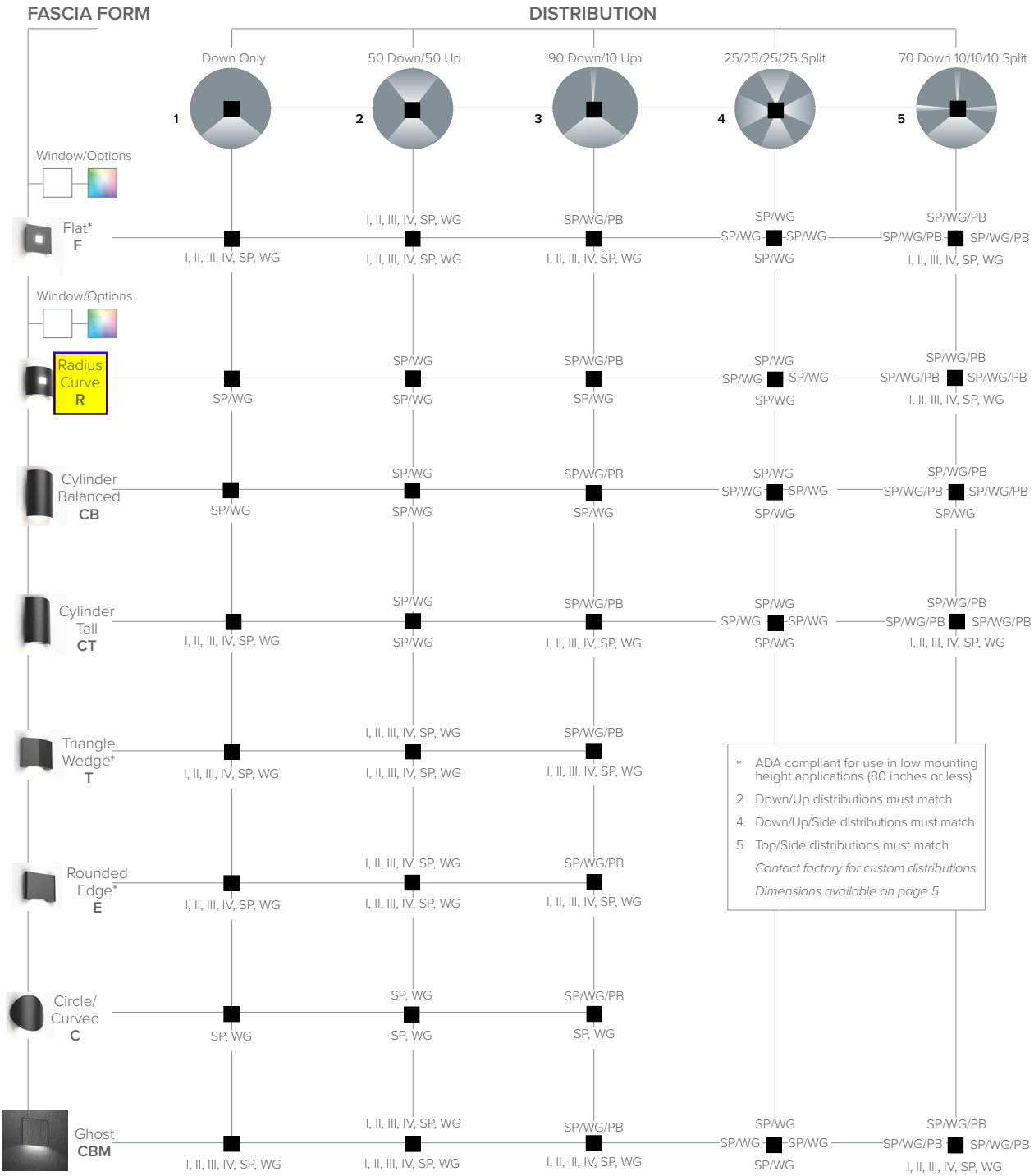
TYPE: PROJECT:

CATALOG #:

CY1

ARCHITECTURAL AREA/SITE

DISTRIBUTION MATRIX



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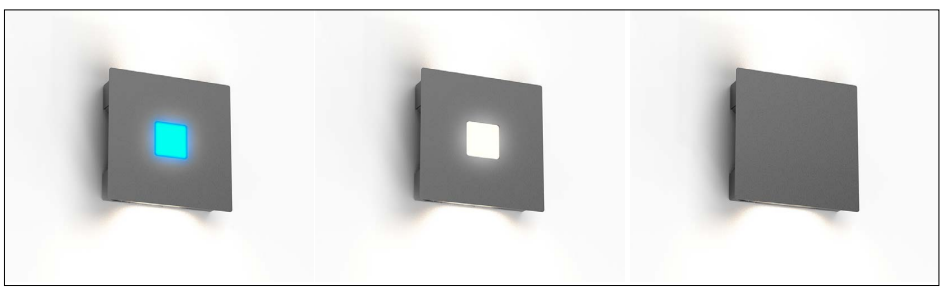
KIM LIGHTING®

CY1

ARCHITECTURAL AREA/SITE

FASCIA

FLAT



CURVE



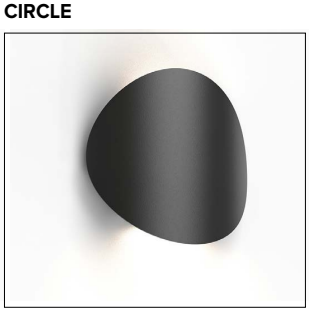
ROUNDED EDGE



TRIANGLE



CIRCLE



CYLINDER TALL



CYLINDER BALANCED



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KIM LIGHTING®

DATE: LOCATION:

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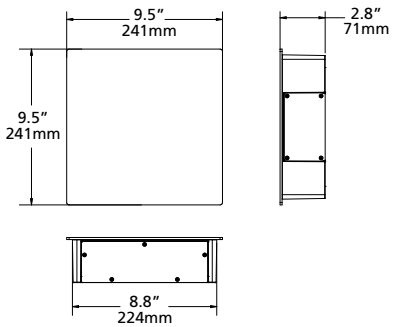
CATALOG #:

CY1

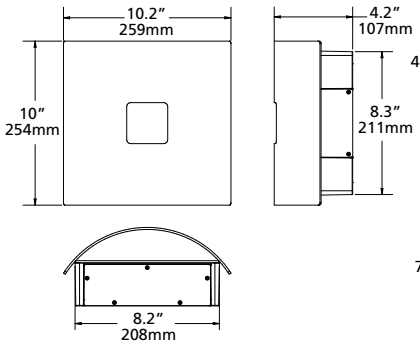
ARCHITECTURAL AREA/SITE

DIMENSIONS

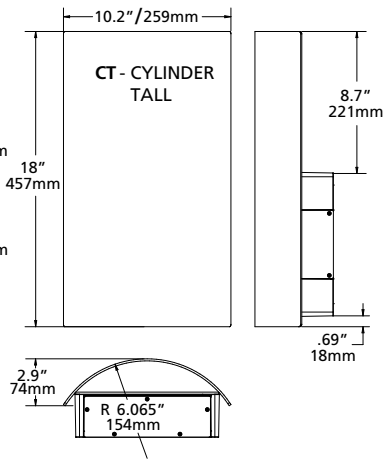
F - FLAT
ADA approved.



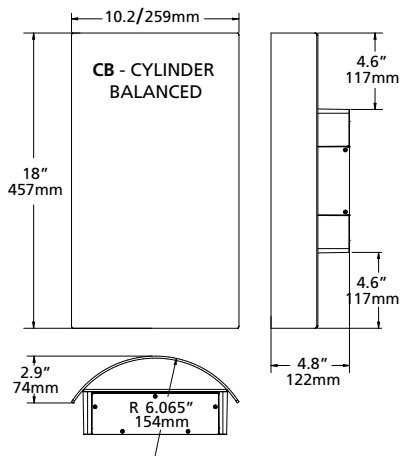
R - RADIUS/CURVED



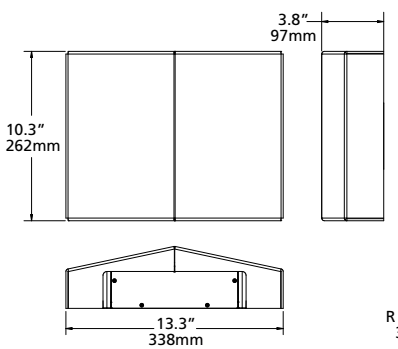
CT - CYLINDER TALL



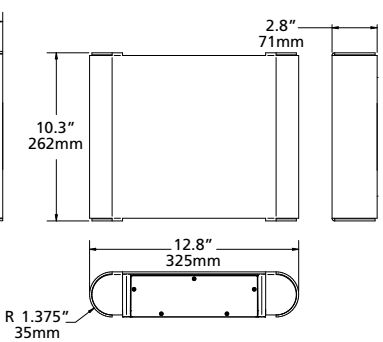
CB - CYLINDER BALANCED



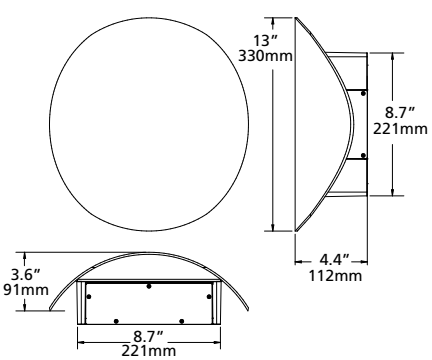
T - TRIANGLE/WEDGE
ADA approved.



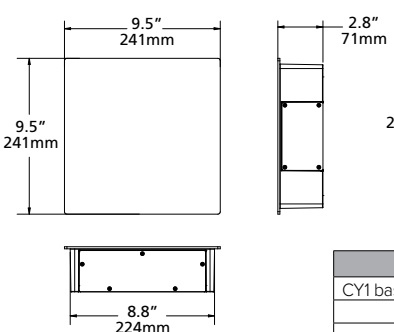
E - ROUNDED EDGE
ADA approved.



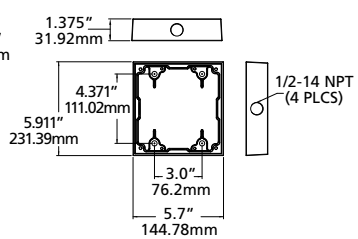
C - CIRCLE/CURVED



CBM - CUSTOM BUILD MATERIAL MOUNT GHOST FASCIA



SCB - SURFACE CONDUIT BOX



CY1 WEIGHT		FIXTURE + FASCIA WEIGHT	
CY1 base fixture	6.5 lb		
F	2 lb	CY1 + F	8.5 lb
R	2 lb	CY1 + R	8.5 lb
CB	3 lb	CY1 + CB	9.5 lb
CT	3 lb	CY1 + CT	9.5 lb
T	3 lb	CY1 + T	9.5 lb
E	3 lb	CY1 + E	9.5 lb
C	2 lb	CY1 + C	8.5 lb

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KIM LIGHTING®

DATE: LOCATION:

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CATALOG #:

CY1

ARCHITECTURAL AREA/SITE

DELIVERED LUMENS

Nominal Output (Lm)	System Watts	Distribution	3000K 70CRI					4000K 70CRI					5000K 70CRI				
			Lumen	Bug Rating			Efficancy (Lm/W)	Lumen	Bug Rating			Efficancy (Lm/W)	Lumen	Bug Rating			Efficancy (Lm/W)
				B	U	G			B	U	G			B	U	G	
1,500	17	Type 1	1825	0	0	0	107	1928	0	0	0	113	1923	0	0	0	113
		Type 2	1638	0	0	0	96	1730	0	0	0	102	1726	0	0	0	102
		Type 3	1661	0	0	1	98	1755	0	0	1	103	1750	0	0	1	100
		Type 4	1668	0	0	0	98	1762	0	0	0	104	1757	0	0	0	103
		Wall Graze	1871	1	0	0	110	1976	1	0	0	116	1971	1	0	0	114
		Spot/Column	1701	2	0	0	100	1797	2	0	0	106	1792	2	0	0	103
		Type 1 Diffused	1547	1	0	0	91	1634	1	0	0	96	1629	1	0	0	96
		Type 2 Diffused	1493	1	0	0	88	1577	1	0	0	93	1573	1	0	1	93
		Type 3 Diffused	1353	1	0	0	80	1429	1	0	0	84	1425	1	0	0	84
		Type 4 Diffused	1521	1	0	0	89	1607	1	0	0	95	1602	1	0	1	94
2,500	26	Type 1	2390	0	0	0	92	2524	0	0	0	97	2517	0	0	0	96
		Type 2	2120	1	0	1	82	2239	1	0	1	86	2233	1	0	1	85
		Type 3	2117	1	0	1	80	2236	1	0	1	85	2229	1	0	1	85
		Type 4	2201	1	0	1	85	2325	1	0	1	89	2319	1	0	1	88
		Wall Graze	2605	2	0	0	100	2752	2	0	0	106	2744	2	0	0	104
		Spot/Column	2346	2	0	0	90	2478	2	0	0	95	2471	2	0	0	94
		Type 1 Diffused	2225	1	0	1	86	2350	1	0	1	90	2344	1	0	1	89
		Type 2 Diffused	1958	1	0	1	75	2068	1	0	1	80	2062	1	0	1	79
		Type 3 Diffused	1946	1	0	1	75	2056	1	0	1	79	2050	1	0	1	78
		Type 4 Diffused	2016	1	0	1	78	2129	1	0	1	82	2123	1	0	1	80

ELECTRICAL CHARACTERISTICS

LUMEN PACKAGE	SYSTEM WATTAGE (W)	LINE VOLTAGE		INPUT (A)				MIN. POWER FACTOR	MAX THD (%)	DIMMING RANGE	SOURCE/SINK CURRENT (MA)		ABSOLUTE VOLTAGE RANGE ON 0-10V (+) PURPLE	
		VAC	HZ	120	208	240	277				MIN.	MAX.	MIN.	MAX.
1,500	17	120-277	50/60	0.14	0.08	0.07	0.06	>0.9	20	10% to 100%	0 mA	1 mA	0V	10V
2,500	26			0.22	0.13	0.11	0.09							

TM-21 LIFETIME CALCULATION (500mA)

LUMEN PACKAGE	AMBIENT ENVIRONMENT °C	PROJECTED LUMEN MAINTENANCE (KHRS)					REPORTED L70
		15	25	50	60 (TM-21)	100	
2,500	25	98%	97%	94%	92%	87%	>60Khrs.
	40	95%	93%	89%	87%	80%	

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O. Architectural Design Narrative

Please find attached the design narrative completed by CWS Architecture.

CWS ARCHITECTURE + INTERIOR DESIGN

December 11, 2023 **DRAFT**

Architectural Design Narrative for 186 Woodford Street
Reuse/Renovation/Addition: Woodfords Church Parish House Senior Apartments
New: Senior Apartment Building to the Woodfords Senior Apartments
Developer: Community Housing of Maine

Community Housing of Maine has entered into a mutually beneficial agreement with Woodfords Church to procure and redevelop the existing Parish House portion of the Woodfords Church Site into a Senior Housing Community on a subdivided parcel from the existing site. This redevelopment will change the use of the new Senior Housing parcel from Office and Assembly uses to Senior Apartments that will retain the existing Memorial Hall in the Parish House as an Assembly use. Together, it is anticipated that the redeveloped parcel will provide ~79 senior units in the two proposed buildings (1. Renovation/Addition; and 2. New Construction).

Design Approach and Character:

1. **Parish House Apartments (Renovation w/Rear Addition)**: The renovation/addition of the existing Parish House structure has been designed to retain/preserve the existing Parish House's aesthetic, color scheme and character facing Woodfords Street and the Parking lot with no noticeable changes to the facades and roof forms. The existing Gymnasium (presumed to be a very early addition to the Parish House) will be a) removed, and b) replaced with a new 4-level apartment wing designed to respect and reinforce a campus design character and detailing between the Parish House Addition and the New Senior Apartment Building. The buildings will include 37 0- and 1-bedroom units. The three-color scheme of the addition and New Senior Apartment building compliments the three-color scheme of the Parish House. The Parish House Apartments will have three (3) entrances accessed by campus residents form a) the 'formal' front entrance facing Woodfords Street, b) a new HC accessible side parking lot entrance facing the new Senior Apartment Building, and c) a new HC Accessible rear entrance vestibule accessed from a new outdoor patio area.
2. **New Senior Apartment Building**: The new 4-level senior 42 1 bedroom unit apartment building's details are designed to match the design character of the rear addition to the Parish House Apartments, and vice versa, to reinforce a uniform campus design character. The primary 'formal' entrance will face Woodford Street and be accessed from both Woodford Street and the parking lot, and will include an outdoor 'covered porch' to reinforce the existing residential character of the neighborhood. A secondary entrance directly across from the Parish House parking lot entrance will provide a convenient connection between the two building. Both entrances will be handicap accessible.

P. Utilities

Please see below for the proposed utility breakdown as part of the redevelopment of 186 Woodford Street.

Water:

The existing domestic and sprinkler water services from the water main within Woodford Street are anticipated to continue to serve the existing Woodfords Church as part of the project. A proposed 2" domestic and 6" fire suppression service tapped off the water main within Woodford Street are anticipated to serve the proposed Senior Housing building. A proposed 2" domestic and 6" fire suppression service tapped off the water main within Woodford Street are anticipated serve the redeveloped portion of the Parish House.

Sewer:

The existing sewer service connections are anticipated to continue to serve the existing church. Two separate 6" domestic sewer service connections from the existing 12" sewer main within Woodford Street are anticipated serve the Parish House Redevelopment and the Proposed Senior Housing Building.

Stormwater:

The existing stormdrain network is proposed to be modified to accommodate the proposed senior housing building that is to be constructed within the existing parking lot. Roof drains, foundation drains, catch basins, and a stormtech isolater ROW with a subsurface sand filter BMP will be installed and connect to the modified storm drain network that ultimately discharges to Woodford Street.

The project includes reducing the impervious area onsite, effectively lowering the peak runoff. Additionally, the project will redevelop non-roof impervious greater than 5,000 sf and due to the DPW's requirement of "providing a minimum detention volume of 1" of rainfall over the entire project redeveloped area being proposed on the parcel with a maximum outflow rate of 0.1 CFS per acre until the storage is maximized" treatment and storage will be provided onsite in the form of a stormtech isolater ROW and subsurface sand filter BMP. Please refer to the Stormwater Management Report for additional information.

UGE/T/C:

It is proposed to maintain the existing services for Woodfords Church as part of the project. It is proposed to install riser poles on Woodfords Street and run three phase overhead primary & telecom across Woodford Street and transition underground at the project's frontage. The project includes two separate buildings (the proposed senior housing building and the redeveloped parish house) that are anticipated to be serviced by separate 9x'9' padmount transformers onsite. External metering is anticipated for the parish house and the senior housing building. External pedestal locations will be provided for each buildings respective telecommunication service.

Gas:

There is no proposed gas service for this project.

Ability to serve letters have been sent out to the respective utility companies in accordance with the City of Portland Code of Ordinances Chapter 14 Land Use Code. Responses received thus far from the utility companies can be found attached.

ACORN ENGINEERING, INC.

Charter Communications
Attn: Mr. Mark Pelletier
118 Johnson Road
Portland, Maine 04102

December 6, 2023

Subject: 186 Woodford Street Redevelopment
Re: Ability to Serve Request

Mr. Pelletier:

On behalf of Community Housing of Maine (CHOM), we are pleased to submit the following request for Charter Communication's ability to serve at a proposed project at 186 Woodford Street in Portland, Maine. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 37 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (79 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to create a new lot division separating the existing church from the rest of the development onsite. The land containing the Parish House and the new affordable housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

The existing telecom connections are anticipated to continue to serve the existing church. Two separate underground telecom conduit services are proposed to service the Parish House Redevelopment and the Proposed Senior Housing Building. Please refer to the attached Utility Plan for additional information.

1. Additional information, such as utility mapping within Woodford Street and Beacon Street.
2. Easements for services currently crossing the proposed development.
3. Alternative connection locations from the property to the existing communication system.
4. Charter's proposed infrastructure improvements within the project vicinity.
5. Charter's ability to serve the project.

I have attached an ALTA / NSPS Land Title Survey created by Owen Haskell, Inc., to facilitate your review, as well as a preliminary utility plan developed by our office. Please do not hesitate to contact me or the office for any questions or clarifications.

Sincerely,



Peter Heil, PE
Project Manager
Acorn Engineering, Inc.

A C O R N
ENGINEERING, INC.

Central Maine Power Company
Attn: Katherine Dumont
162 Canco Road
Portland, Maine 04103

December 6, 2023

Subject: 186 Woodford Street Redevelopment
Re: Ability to Serve Request

Katherine,

On behalf of Community Housing of Maine (CHOM), we are pleased to submit the following request for Central Maine Power's ability to serve at a proposed project at 186 Woodford Street in Portland, Maine. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 37 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (79 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to create a new lot division separating the existing church from the rest of the development onsite. The land containing the Parish House and the new affordable housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

It is proposed to maintain the existing service for Woodfords Church as part of the project. It is proposed to install riser poles on Woodfords Street and run three phase overhead primary across Woodford Street and transition underground electric at the project's frontage. The project includes two separate structures (the proposed senior housing building and the redeveloped parish house) that are anticipated to be serviced by separate 9x'9' padmount transformers onsite. External metering is anticipated for the parish house and the senior housing building.

On behalf of the client, we are requesting the following information:

1. Additional information, such as utility mapping confirming single and three-phase power locations along Woodford Street and Beacon Street.
2. Existing easements for underground services currently crossing the proposed development.
3. Alternative connection locations from the development to the existing system.
4. CMP's proposed infrastructure improvements within the project vicinity.
5. CMP's ability to serve the project.
6. Access requirements to the CMP meters.
7. Please send a list of communication/telecom providers that are located on the utility pole in front of the 186 Woodford Street Building

I have attached an ALTA / NSPS Land Title Survey created by Owen Haskell, Inc., to facilitate your review, as well as a preliminary utility plan developed by our office. Forthcoming electrical loading computations and final metering will be performed by the project's M.E.P designer &/or architect. Please do not hesitate to contact me or the office for any questions or clarifications.

Sincerely,



Peter Heil, PE
Project Manager
Acorn Engineering, Inc.

Pete Heil

From: Dumont, Katherine <Katherine.Dumont@cmpco.com>
Sent: Tuesday, December 5, 2023 3:02 PM
To: Pete Heil
Subject: CMP Three Phase Service Process and Ability to Serve Letter 186 Woodford St Portland Maine
Attachments: Easement_Information_Worksheet.doc; Standard Easement Sample.pdf; blank W9.pdf; August 2022 EDET.xlsx

Peter Heil
PO Box 3372
Portland, ME 04104

RE: CHOM
186 Woodford Street Portland, Maine
Letter of Ability to Serve Request

SAP TBD
Project Description:

This letter is in regards to your project located at 186 Woodford Street in Portland. The project is looking t construct a 42-unit affordable senior housing in the existing parking lot. CMP has the ability to serve this project.

CMP has the ability to serve the proposed project in accordance with our CMP Handbook (web link below). We can provide you the desired pad or pole mounted transformers per your request and city approval, in accordance with our CMP Handbook of Standard Requirements. If you have any questions on the process, or need help in completion of the documents, please contact CMP at 800-565-3181.

Here is our typical process for getting your three phase or CT rated single phase service installed. If you have any questions, please let us know. The underlined links will redirect you to the appropriate site for additional information.

Service Milestones for Three Phase Services and CT Rated Single Phase Services. There are additional requirements for primary metered Solar Service Installations listed in the Chapter 324 Interconnections section below. Please refer to CMP Installation Checklists for other installations.

- Call 800-750-4000 option 4 to establish a new account (if needed) and an SAP work order. Please provide both of these to me.
- Submit Load information. Please complete the attached EDET (excel file) using load information. Please complete this and email back to me. If the loads are over 500 kw, more in depth load studies may be required with our Distribution Planning and Transmission Planning Departments. Be advised that these will involve more detailed load information, a load study agreement (signed contract), as well as other items. This additional study process may add up to two additional months to completion of the job.
- Submit the easement information worksheet, including where any CMP structures may be on ANY private property (Poles, Wires, Anchors). You are responsible for obtaining all information for all required easements. Please complete this form and either email or fax back to me.
- Submit any electronic drawings (PDF (preferred) or DWG files) of the site layout and proposed electrical connections.
- For Primary Metered installations (including PV), please have the access road in for pole staking.
- Preliminary meetings with CMP Advisor and Engineer to determine details of job (I will need to schedule with your electrician/contractor-please let me know who this is)

- Field planner design appointment scheduled once the preliminary information is complete. This will allow us to cost out the job and develop a CMP Invoice. The invoice is typically generated 5-6 weeks after the design appointment. This expires after 90 days from the invoice date.
- Submit completed W9 so that your bill can be properly processed. This is a new CMP process.
- CMP submits invoice to the customer for payment (typically via email). Payment received from customer.
- Easements (based on easement information worksheet) sent out, signed and originals returned to CMP.
- Job scheduled for completion after the electrical inspection has been received.

This process can take several months, depending upon several factors including transformer or materials delivery, return of completed paperwork, and other jobs in the system that may be ahead of yours. In addition, contact with the other utilities, including telephone and cable, should be commenced as soon as practical. They may have additional work or charges in addition to the CMP work required to bring your project on line.

As you may be aware, there are global supply chain issues impacting the utility industry. CMP is closely monitoring and managing their inventory in order to serve our customers. Larger padmount transformers may not be readily available for the date that you will need to be energized. Please consider this as part of your construction plan. The energy service advisor will continue to work closely with you and let you know as soon as the transformer becomes available. Should you have any questions or concerns throughout this process, please do not hesitate to contact your ESA directly at the number or email provided.

Please complete the attached forms (the specific instructions are on each form) and email them back to me at your earliest convenience.

For your convenience, here is a link to the CMP Website which contains our Handbook with details on most service requirements: CMP Handbook of Standard Requirements An additional resource is our Distribution Construction Standards: CMP Distribution Construction Standards CMP Distribution Construction Standards.

You will be responsible for installing the customer connections, conduits, and metering in accordance with the CMP Handbook of Standard Requirements The transformer will be sized based on your submitted load sheets.

Your deposit amount will be typically based on an estimated two month bill, calculated from your completed load sheet unless otherwise determined by CMP.

In addition, we have recently added on an online map that shows single phase and three phase power locations within CMP. Here is that link: CMP ArcGIS Information

Metering:

All metering (including locations) must be preapproved by CMP. If you have any questions, please consult the CMP Handbook of Standard Requirements

Chapter 324 Interconnections:

Please be advised that if you plan to install solar/wind/hydro generation, you must complete an application under the MPUC mandated Chapter 324 Interconnection Standards. If you go to Chapter 324 Interconnection Standards and follow the instructions for the Small Generator Interconnection Procedures, CMP can do this work in parallel to your service request that will be handled by me. If you project is under 660 KW You will be able to have a Customer Net Energy Billing contract. Information concerning Customer Net Energy Billing can be accessed thru the Chapter 324 website or by clicking here: Net Energy Billing

Reallocation/Line Extensions:

Recently, changes were made to the three-phase construction policy, which require CMP to reallocate construction costs paid by customers. If applicable, those projects identified as “developments” do not qualify for reallocation of funds. Please see this document at our website for details about the reallocation conditions. Any reallocation charges will be specifically denoted on your invoice. The website address for this is: PolyphaseLineExtension.

This line extension will be part of Central Maine Power’s distribution system. In the event the property served under this Agreement is sold or otherwise conveyed, all rights and obligations of the Agreement shall stay with the property. Please note that if you rent or lease this property to another and you want to receive the reimbursement payments, you must make special arrangements with the Central Maine Power Company. Otherwise, any reimbursement payments will be sent to the “Customer” taking service at the service location.

Electricity Supplier Information:

Central Maine Power Company (CMP) will provide your facility with electric delivery service. If you don’t already have a provider, you will need to make arrangements with a competitive electricity provider in order to receive electricity supply for your facility. In the event you fail to choose a competitive electricity provider, you will receive Standard Offer service arranged by the Maine Public Utilities Commission. If you wish to be served by a competitive electricity provider immediately upon establishment of delivery service, you must arrange for this service directly through your chosen competitive electricity provider, who must enroll your account no later than 5 PM on the business day prior initiation of delivery service by CMP. An up-to-date list of competitive suppliers can be found at the:

1. Maine Public Utilities Commission (MPUC) web site- **Maine PUC**
2. By calling the MPUC at (207) 287-3831

Attachments:

Excel Load Sheet (EDET)
Easement Worksheet and Sample Standard Easement
W9

Central Maine Power
An Avangrid company

Katherine Dumont
Energy Service Specialist
162 Canco Rd
Portland, ME 04103

207-242-5744
katherine.dumont@cmpco.com

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ACORN ENGINEERING, INC.

Consolidated Communications
Attn: Mr. Jay Cunha
5 Davis Farm Road
Portland, Maine 04103

December 6, 2023

Subject: 186 Woodford Street Redevelopment
Re: Ability to Serve Request

Mr. Cunha:

On behalf of Community Housing of Maine (CHOM), we are pleased to submit the following request for Consolidated Communication's ability to serve at a proposed project at 186 Woodford Street in Portland, Maine. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 37 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (79 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to create a new lot division separating the existing church from the rest of the development onsite. The land containing the Parish House and the new affordable housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

The existing telecom connections are anticipated to continue to serve the existing church. Two separate underground telecom conduit services from Woodford Street are proposed to service the Parish House Redevelopment and the Proposed Senior Housing Building. Please refer to the attached Utility Plan for additional information.

1. Additional information, such as utility mapping within Woodford Street and Beacon Street.
2. Easements for services currently crossing the proposed development.
3. Alternative connection locations from the property to the existing communication system.
4. Consolidated's proposed infrastructure improvements within the project vicinity.
5. Consolidated's ability to serve the project.

I have attached an ALTA / NSPS Land Title Survey created by Owen Haskell, Inc., to facilitate your review, as well as a preliminary utility plan developed by our office. Please do not hesitate to contact me or the office for any questions or clarifications.

Sincerely,



Peter Heil, PE
Project Manager
Acorn Engineering, Inc.

ACORN ENGINEERING, INC.

Department of Public Works
Attn: Bradley Roland
212 Canco Road
Portland, Maine 04103

December 6, 2023

Subject: 186 Woodford Street Redevelopment
Re: Ability to Serve Request

Mr. Roland:

On behalf of Community Housing of Maine (CHOM), we are pleased to submit the following request for Portland Department of Public Work's ability to serve at a proposed project at 186 Woodford Street in Portland, Maine. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 37 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (79 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to create a new lot division separating the existing church from the rest of the development onsite. The land containing the Parish House and the new affordable housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

The existing sewer service connections are anticipated to continue to serve the existing church. Two separate 6" domestic sewer service connections from the existing 12" sewer main within Woodford Street are anticipated serve the Parish House Redevelopment and the Proposed Senior Housing Building. Please refer to the attached Utility Plan for additional information.

Based upon Section 4 of the *Maine Subsurface Wastewater Disposal Rules*, the table below outlines the proposed flow. We have negated the existing church from the calculations as the flows are anticipated to remain the same or decrease as a result of the proposed redevelopment.

Estimate of Anticipated Daily Flows			
Development	Unit Size	Gallons per Day per Unit	Total Gallons per Day (GPD)
Existing Flow			
Church	-	-	Unknown
Total Gallons per Day (Existing)			-
Proposed Flow			
Redeveloped Parish House (37 Units)	1-Bedroom	120 GPD/ Unit	4,440 GPD

Proposed Senior Housing Building (42 Units)	1-Bedroom / Studio	120 GPD/ Unit	5,040 GPD
Church	-	-	No change
Total Gallons per Day (Proposed)			**9,480 GPD**
Net Change			**+9,480 GPD**
*Values based on Chapter 241 State of Maine: Subsurface Wastewater Disposal Rules, most recent edition			

The proposed project is anticipated to increase the net flow by approximately 9,480 gallons per day (GPD). It should be noted that these values were developed using conservative estimates from the State of Maine Subsurface Wastewater Disposal Rules. We will provide any changes to the anticipated sewage demand as the project design progresses.

On behalf of the client, we are requesting the following information:

1. Any additional information, such as utility mapping within Woodford Street and Beacon Street and confirmation of the location and size of the services to the existing property and the size and material of the main within Woodford Street and Beacon Street.
2. DPW's proposed infrastructure improvements within the project vicinity.
3. DPW's ability to serve the project.
4. Any project related offsite sewer main improvements.

I have attached an ALTA / NSPS Land Title Survey created by Owen Haskell, Inc., to facilitate your review, as well as a preliminary utility plan developed by our office. Please do not hesitate to contact me or the office for any questions or clarifications.

Sincerely,



Peter Heil, PE
Project Manager
Acorn Engineering, Inc.

ACORN ENGINEERING, INC.

First Light
Attn: Mike Ellingwood
14 Resilient Circle
Brunswick, ME 04011

December 6, 2023

Subject: 186 Woodford Street Redevelopment
Re: Ability to Serve Request

Mr. Ellingwood:

On behalf of Community Housing of Maine (CHOM), we are pleased to submit the following request for First Light's ability to serve at a proposed project at 186 Woodford Street in Portland, Maine. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 37 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (79 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to create a new lot division separating the existing church from the rest of the development onsite. The land containing the Parish House and the new affordable housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

The existing telecom connections are anticipated to continue to serve the existing church. Two separate underground telecom conduit services are proposed to service the Parish House Redevelopment and the Proposed Senior Housing Building. Please refer to the attached Utility Plan for additional information.

On behalf of the client, we are requesting the following information:

1. Additional information, such as utility mapping within Woodford Street and Beacon Street as well as abutting properties, and/or existing service connections.
2. Alternative connection locations from the property to the existing communication system.
3. First Light's proposed infrastructure improvements within the project vicinity.
4. First Light's ability to serve the project.

I have attached an ALTA/NSPS Land Title Survey created by Owen Haskell inc., and a proposed preliminary Utility Plan from our office to facilitate your review. Please do not hesitate to contact me or the office for any questions or clarifications.

Sincerely,



Peter Heil, PE
Project Manager
Acorn Engineering, Inc.

A C O R N
ENGINEERING, INC.

Portland Water District
Attn: MEANS Department
225 Douglass Street
Portland, Maine 04104

December 20, 2023

Subject: 186 Woodford Street Redevelopment
Re: Ability to Serve Request

To Whom It May Concern:

On behalf of Community Housing of Maine (CHOM), we are pleased to submit the following request for Portland Water District's ability to serve at a proposed project at 186 Woodford Street in Portland, Maine. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 37 affordable housing units. It is anticipated that the senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (79 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to create a new lot division separating the existing church from the rest of the development onsite. The land containing the Parish House and the new affordable housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

The existing domestic and sprinkler water services from the water main within Woodford Street are anticipated to continue to serve the existing Woodfords Church as part of the project. A proposed 2" domestic and 6" fire suppression service tapped off the water main within Woodford Street are anticipated to serve the proposed Senior Housing building. A proposed 2" domestic and 6" fire suppression service tapped off the water main within Woodford Street are anticipated serve the redeveloped portion of the Parish House. Please refer to the Utility Plan for additional information.

Based upon Section 4 of the *Maine Subsurface Wastewater Disposal Rules*, the table below outlines the proposed flow. We have negated the existing church from the calculations as the flows are anticipated to remain the same or decrease as a result of the proposed redevelopment.

Estimate of Anticipated Daily Flows			
Development	Unit Size	Gallons per Day per Unit	Total Gallons per Day (GPD)
Existing Flow			
Church	-	-	Unknown
Total Gallons per Day (Existing)			-

Proposed Flow			
Redeveloped Parish House (37 Units)	1-Bedroom	120 GPD/ Unit	4,440 GPD
Proposed Senior Housing Building (42 Units)	1-Bedroom / Studio	120 GPD/ Unit	5,040 GPD
Church	-	-	No Change
Total Gallons per Day (Proposed)			**9,480 GPD**
Net Change			**+9,480 GPD**
*Values based on Chapter 241 State of Maine: Subsurface Wastewater Disposal Rules, most recent edition			

The proposed project is anticipated to increase the net flow by approximately 9,480 gallons per day (GPD). It should be noted that these values were developed using conservative estimates from the State of Maine Subsurface Wastewater Disposal Rules. We will provide any changes to the anticipated sewage demand as the project design progresses.

On behalf of the client, we are requesting the following information:

1. Additional information, such as utility mapping within Woodford Street and Beacon Street and confirmation of the location and size of the services to the existing property.
2. PWD's proposed infrastructure improvements within the project vicinity.
3. Flow data for adjacent hydrants.
4. PWD's ability to serve the project.
5. Any project related offsite water main improvements.

I have attached a fixture count and an ALTA / NSPS Land Title Survey created by Owen Haskell, Inc., to facilitate your review, as well as a preliminary utility plan developed by our office. Please do not hesitate to contact me or the office for any questions or clarifications.

Sincerely,

Peter Heil, PE
Project Manager
Acorn Engineering, Inc.

Q. Construction Management Plan

Project Address: 186 Woodford Street, Portland, ME

Project Description:

The project proposes to convert a portion of the existing Woodfords Church building into a affordable housing residential building. Additionally, a new senior housing residential building will be constructed in the location of the existing parking lot. Each building includes associated utility, parking and landscaping improvements as part of the proposed project.

Project Team Summary:

Owner:	Community Housing of Maine
General Contractor:	TBD
Civil Engineer:	Acorn Engineering, Inc.
Architect:	CWS Architecture
Structural Engineer:	TBD

The Owner/GC and all subcontractors will work with the City of Portland and adjacent landowners to minimize any project impacts.

The GC will remain responsible for enforcement of all compliance with 1) all contract plans and specifications in their scope of work and 2) all site working conditions and safety requirements, day and night, for both persons and property, in each case for the duration of their work. These include OSHA, NIOSH, U.S. EPA, local ordinance and any other applicable governmental regulations. Both the Owner/GC and any subcontractors will remain responsible for safeguarding the general public.

The GC shall review all permits and conditions associated with the project. The GC will prepare a Construction Management Plan their means and methods to be taken during construction.

The following outline has been developed in accordance with the City of Portland Construction Management Plan General Template and shall be referenced by the GC during construction.

A. Construction Management Principles

The control of noise, vibrations, ground movement, truck traffic, and other construction related factors will be of utmost importance. Care shall be taken to minimize these effects in the best interest of neighbors and the general public. GC to ensure that work hours conform to the City of Portland's Ordinance.

B. Development Review of Construction Management Plan

Logistics and safety program shall be submitted at or prior to the preconstruction meeting by the GC with all pertinent information required by the Maine Department of Transportation's Traffic Control Plan Standard Specification 652.3.3.

C. Performance Guarantees, Inspection Fees, Preconstruction Meeting, and Permits

Guarantees and fees will be paid at the time of the respective application. Sections 14-530 and 13-532 will be complied with all necessary permits will be obtained prior to work.

1. Street Opening and Street Occupancy Permits:

   Required permits regarding street opening and occupancy will be obtained from the Department of Public Works. The requests shall conform to the approved Construction Management Plan.

2. Blasting:

   Although not anticipated, if blasting occurs, it shall conform to Article VIII. In Chapter 14 of the City Code and Section 3.7 in the City's Technical Manual.

3. Building Code:

   Employ the best practices, as applicable, of Chapter 33 Safeguards During Construction, from the 2009 International Building Code.

D. Construction Administration and Communication

The Contractor will work closely with adjacent abutters, businesses, and all parties informed, as far in advance as possible, of scheduled work, particularly work anticipated to cause significant noise, vibrations, or dust. Communication in order to comply with all agreements, ordinances, and special permits will be of the utmost importance. Contractor contact information shall be posted on a sign on the construction fence along Woodford Street frontage. Additional signage necessary for communication shall be provided but will be temporary and removed upon completion of the project. The contact information for the project personnel is:

Brian Kilgallen
Community Housing of Maine
(207) 879-0347

GC and Subcontractor information will be posted along Woodford Street frontage once contracted.

E. Construction Schedule

The GC shall submit a construction timeline at or prior to the preconstruction meeting. Construction may occur during the daytime hours as defined in Section 17-18 of the Construction Activities for Building permit and City Code Section 25-129, Noise, dust and debris. Between September 1 and May 31, the following year, no person shall engage in construction activities generating noise exceeding 50 decibels, between the hours of 7 pm and 7 am of the following day within 500 feet of any buildings. From June 1 to August 31, construction activity may continue until 8 pm. No construction activity shall begin before 8 am on a Saturday, Sunday, or legal holiday. Extended hours or night work may be

requested for special circumstances and street utility work if needed. These requests will be subject to approval by the Public Works Authority.

Due to the limited space within the project parcel, deliveries will need to be stored in an alternate location or deliveries must be small enough to fit within the property. Deliveries will be scheduled between 7 am and 5 pm.

The estimated timeframe of the proposed project is outlined below:

Project Start Date:	2024
Project End Date:	2026

A more detailed work schedule shall be provided by the GC at or before the pre-construction meeting with the City.

F. Security & Public Safety

1. The GC will provide all fencing and other barriers, with the intent of separating pedestrian and vehicle circulation from the construction site. Construction entrances per detail shall be installed.

2. Structures undergoing construction, alteration, or demolition operations, including those in underground locations, shall comply with NFPA 1 Chapter 16. *Safeguarding Construction, Alteration, and Demolition Operations.*

3. Fire Safety Program: Prior to construction, an overall construction and demolition fire safety program shall be developed. Essential items to be emphasized include the following:
    - Good Housekeeping
    - On-site security
    - Installation of new fire protection systems as construction progresses
    - Preservation of existing systems during demolition
    - Organization and training of an on-site fire brigade
    - Development of a pre-fire plan with the local fire department
    - Rapid communication
    - Consideration of special hazards resulting from previous occupancies
    - Protection of existing structures and equipment from exposure fires resulting from construction, alteration, and demolition operations.

4. Blasting, if required, shall conform with all measures of Article VIII. Regulation of Explosives in the Land Use Code and Section 3.7 Standards for Blasting and Regulation of Explosives in Portland's Technical Manual.

5. Temporary security lighting shall be shown on the Construction Management Plan, and all fixtures shall be full cutoffs.

G. Construction Permitting and Traffic Control Plans

1. Construction Activity in Public Streets

Construction activity in the public right-of-way shall be compliant with Chapter 25 Article VII of the City Code. At no time will it be permissible for construction activity including delivery vehicle to close or block streets or affect public safety access without prior notice and approval of the Department of Public Works.

2. Sewer and Stormwater

   Sewer and stormwater system connections are controlled by Chapters 24 and 32 of the City code of Ordinance. Required permits for new connections and/or abandonment of existing connections are available through the Street Opening Clerk at the Department of Public Works. Rules and Regulations for these utility systems are available through the City Engineer's office of the Department of Public Works and in Section II of the Technical Manual. This will apply to the new connections within Woodford Street.

3. Traffic Control Plans

   Construction activity that impacts the existing public street system must be controlled to protect the safety of the construction workers and all modes of the traveling public. The contractor shall submit a satisfactory "Maintenance of Traffic" (MOT) plan prior to any street opening permit approval. This document shall contain all pertinent information from the Maine Department of Transportation's Traffic Control Plan Standard Specification 652.3.3.

   The MOT will address the work required for utility connections in Woodford Street. Traffic will be channelized utilizing drums and cones. Proper signage will be installed prior to the through work zone. Alternating traffic will be controlled with flaggers. Trenches will be patched with pavement daily.

   The MOT plan shall provide for the safe passage of the public through or along the construction work zone. It may be permissible to close a portion of Woodford Street during utility connections and/or detour a mode of traffic when absolutely necessary for safety. All requests shall be subject to City approval. MOT plans shall employ the appropriate techniques and devices as called for in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). In addition:

   - Construction speed signing may be used as needed to slow traffic.
   - Traffic Control signs shall not be placed where they would create any obstructions to bicycles or pedestrians.
   - Flaggers will be utilized when necessary.

   All existing modes of travel in the work zone area shall be accommodated if impacted by the activity. The safe passage of pedestrians, bicyclists, transit providers, and motorists are of equal importance when planning and laying out the work zone; no pre-existing travel mode may be eliminated without the express approval of the Department of Public Works. The MOT should also address on-street parking impacts, including deliveries and parking for adjoining businesses and property owners, analysis of roadway capacity or diversion capacity if street closure or change to roadway capacity is required, and coordination with other on-going or future construction or utility projects in the vicinity.

- Traffic control bicycle and pedestrian facilities or routes through work zones shall be maintained until the bicycle and pedestrian facilities or routes are ready for safe operation. Traffic control will not be removed to allow auto travel at the expense of bicycle and pedestrians.
- Barrier systems utilized to separate the construction activity from the public street and /or sidewalk shall not inhibit sight distances, particularly for visibility of pedestrians and bicyclists.
- ADA compliance in all capacities shall be maintained.

Use of public parking spaces on Beacon Street shall not be permissible. The blockage of any portion of sidewalk for the purpose of construction activity shall require an occupancy permit and appropriate fee as assessed by the Department of Public Works.

H. Site Management and Controls

1. Regular trash and debris shall be managed appropriately, and its removal shall comply with all local, state, and federal regulations.

2. Street cleaning and sweeping shall be followed as outlined in the erosion and sedimentation control notes and report. Damage to the street shall be avoided and shall be the responsibility of the contractor.

3. Dust shall be controlled and shall comply with Section 25-129 and the erosion and sedimentation control notes, plan, and details.

4. Noise shall be controlled and shall comply with Section 17-18 and Section 25-129.

5. Rodent Control shall be provided, if applicable, by a professional exterminator and shall be consistent with Chapter 22 of the City Code.

6. Snow and Ice Removal shall be provided. Pursuant to Section 25-173, the Contractor shall ensure a safe means of travel within the work zone by the following steps:

    a. Snow/ice removal or commence automatically from 1" or greater of snow or ice
    b. Remove snow as needed within the work zone, including parking spaces. Driveways and site lines shall not be blocked by piles of snow.
    c. Clear all walks and ramps within the work zone
    d. Sand or salt as needed
    e. Clear all basin or drainage to help snow melt
    f. The above steps shall be carried out Sunday-Saturday including holidays.

I. Erosion Control and Preservation of Trees

1. The Contractor shall install all erosion and sedimentation controls as outlined in the plan set, and the approved erosion and sedimentation control report, prior to the pre-construction meeting for inspection by the City. The Contractor shall regularly inspect the control measures, no less than weekly and after storm events (0.5" or more in 24 hours). Additionally, temporary or permanent stormwater management systems shall be inspected and maintained to ensure working order. The Contractor shall document all inspection activities and corrective actions and be prepared to provide these

documents for inspection by the City, Maine Department of Environmental Protection (MDEP) or the U.S. Environmental Protection Agency (EPA) upon request.

2. Due to the existing sparse landscaping on site, no protection during construction will be necessary.

3. Stored materials shall be identified and avoid being located under/near trees.

J. Construction Staging Area

1. The Contractor shall submit a plan with locations depicted for the location of material staging areas, the location of on-site temporary construction trailers, the location of on-site truck delivery holding areas, the location of on-site truck washing stations, masonry mixing stations, the general location of the construction security fence and the general location of temporary construction dumpsters. This plan shall be submitted at or prior to the pre-construction meeting. Any open storage areas shall be shown on the plan.

2. Delivery Truck Holding Areas On-Site: The majority of materials delivered to the site will be scheduled such that they are able to be off-loaded immediately. On days when the construction activities require multiple truck deliveries, these deliveries will be carefully scheduled so that there is always adequate on-site area for the holding of trucks until they can be unloaded. Once at the site all vehicles will be brought within the fence line and will make every attempt to avoid queuing on public streets. If, for any reason, on-site holding of trucks is not feasible, an off-site location must be designated and shown on the submitted plan referenced above in J.1.

3. All deliveries for materials shall comply with the City's noise requirements.

K. Parking During Construction

1. Adequate parking for construction workers shall be provided on site or arrangements for off-street parking at an off-site location shall be provided.

2. Truck Routes and Volumes: The following quantities are estimated as part of the reconstruction:

    - Gravel & Stone – Approx. 600 CY. Earthwork subcontractor(s) pit to project site.
    - Hot Mix Asphalt – Approx. 235 tons. Paving subcontractor(s) pit to project site.

L. Dewatering Plans

1. A basic dewatering plan for any construction work is required and shall be submitted by the Contractor. The plan must cover construction sites where groundwater is not expected but the impact of rainwater may require dewatering. The plan must include operating procedures, equipment to be used, including filters, erosion and sediment control measures, or other methods of removing sediment from approved discharges.

2. For construction work that will require frequent dewatering of groundwater from site, a dewatering plan must be prepared by the Contractor and approved by the Department

of Public Works. Groundwater and/or soil testing may be required to determine course of action if treatment is necessary. Approval for all discharges to City infrastructure is required. The proposed plan must address the following:

- Project duration, discharge location, storage equipment on-site, dewatering schematic, and emergency contact.
- General requirements include trained staff on-site for all approve discharges and required site log for documentation of all discharges.
- Storage and/or treatment process should include proper settling time and maintain proper use of filtering medium as required.
- Contingency/maintenance plan for all dewatering equipment devices and filtration mediums.

Any water that is removed from an excavation must be pumped from a perforated device buried in crush stone prior discharge and/or prior to storage and treatment. There will be no discharge allowed during precipitation events.

M. Special Measures as Necessary

No special measures are necessary for the proposed reconstruction.

R. Solid Waste Disposal

An existing solid waste container is located in the southwestern corner of the existing parking lot on site. The solid waste container is anticipated to be slightly relocated and continue to service the existing church.

The proposed affordable housing buildings will utilize a new solid waste container located on the southeastern corner of the parking lot. A private hauler will be contracted for removal services.

S. Parking Analysis

Per Land Use Code Section 19 Off Street Parking Table 19-B Categorical Exceptions to Off-Street Parking Minimums, Transit Proximate Development and Uses: No off-street parking shall be required within 1/4 mile of a fixed route transit service. New uses more than 10,000 SF taking advantage of this exception shall be required to provide a Transportation Demand Management Plan if they use this provision in lieu of parking requirements.

Please refer to the attached Traffic Management Demand for additional information.

TRANSPORTATION DEMAND MANAGEMENT PLAN

186 WOODFORD STREET, PORTLAND, MAINE



Submitted for Community Housing of Maine

by Levine Planning Strategies, LLC

December 2023

LEVINE PLANNING STRATEGIES
Tools for Building Communities

Project Overview

On behalf of Community Housing of Maine, we are pleased to submit a Transportation Demand Management (TDM) Plan for the proposed below-market affordable housing project located at 186 Woodford Street. The site is in the B-2 zoning district.

The project involves construction of a new multistory residential building with 79 residential units on an existing parking lot. No additional on-street parking is being proposed.

By providing a robust TDM plan, this project aims to significantly reduce the number of tenants who choose to rent off-site spaces or utilize street parking. In addition, by not incorporating on-site parking into the cost of the development will allow financial feasibility within the cost constraints of affordable housing finance programs.

A Transportation Demand Management Plan is required for this project per the Portland Land Use Code Table 19.b: " No off-street parking shall be required within ¼ mile of fixed route transit service. New uses or changes of use of more than 10,000 SF taking advantage of this exception shall be required to provide a Transportation Demand Management Plan if they use this provision in lieu of parking requirements."

For ease of review, we have drafted this TDM plan generally following the format of the City's Technical Manual Section 17.3. ("Transportation Demand Management.")

Transportation Narrative

This project is located in the Woodfords Corner neighborhood, with a myriad of transportation options that lend themselves towards transportation demand management. Woodfords Corner is identified as an "enhance" node identified in *Portland's Plan*. The building is located close to the METRO Route 2 and not far from the Route 4, 9A/B and Husky Lines. In addition, via Route 2, the South Portland Bus Service offers nearby service to South Portland locations.

Roadways

As mentioned above, this project is located on Woodford Street, between Forest Avenue and Stevens Avenue. These streets are designed to provide multimodal access, with good sidewalk connections that are generally compliant with accessibility standards. Bicycle accommodations, while good, could be improved along all these corridors, though new bike lanes on Stevens Avenue have provided significant new options for bikers.



Figure 1: 186 Woodford Street on City Map

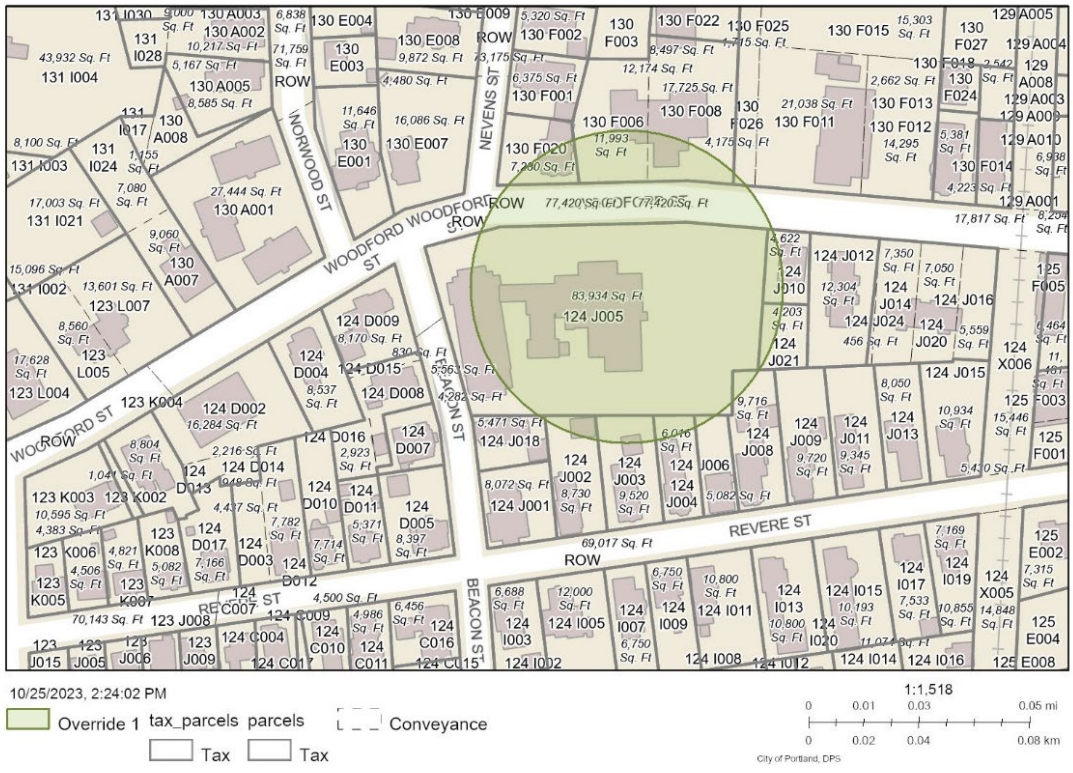
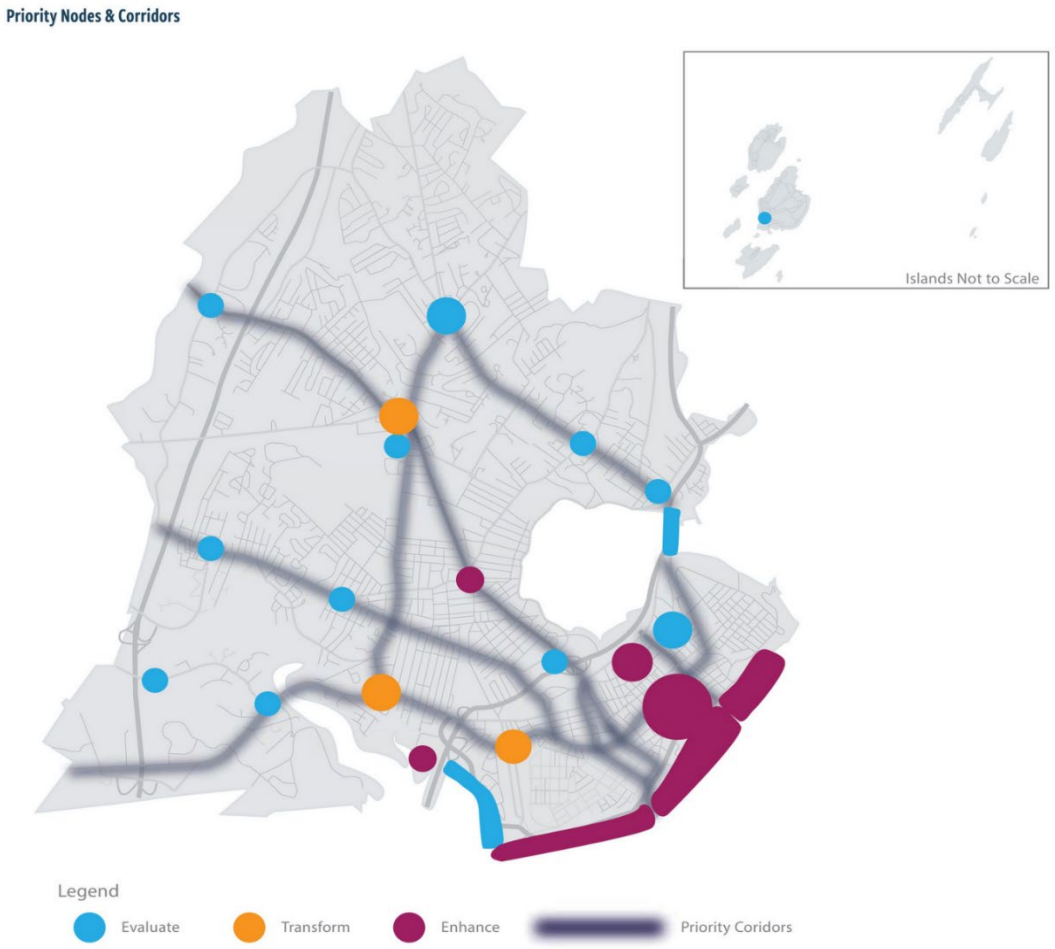


Figure 2: 196 Woodford Street on Tax Map



Transit

Very few developments are in as good a position as this one to take advantage of existing transit.

This project is served well by the Greater Portland Transit District's system. The Route 2 is just a block away and the Route 4 and Husky Line stop nearby, as do the Route 9A/B Loop.

The Gorham-Westbrook-Portland Rapid Transit project is being led by the Greater Portland Council of Governments to assess the potential for rapid transit service along that general corridor. All of the alternatives under consideration pass relatively close to 186 Woodford Street, increasing the mobility options for residents. Three of the top four alternatives use Stevens Avenue or Forest Avenue.

In addition, the South Portland Bus Service operates routes via transfer from this area to destinations across the Casco Bay Bridge, including Southern Maine Community College and services and offices in South Portland.

Ridership recovery since the start of the COVID pandemic in 2020 has been very strong, reaching approximately 80 to 90 percent of 2019 levels.

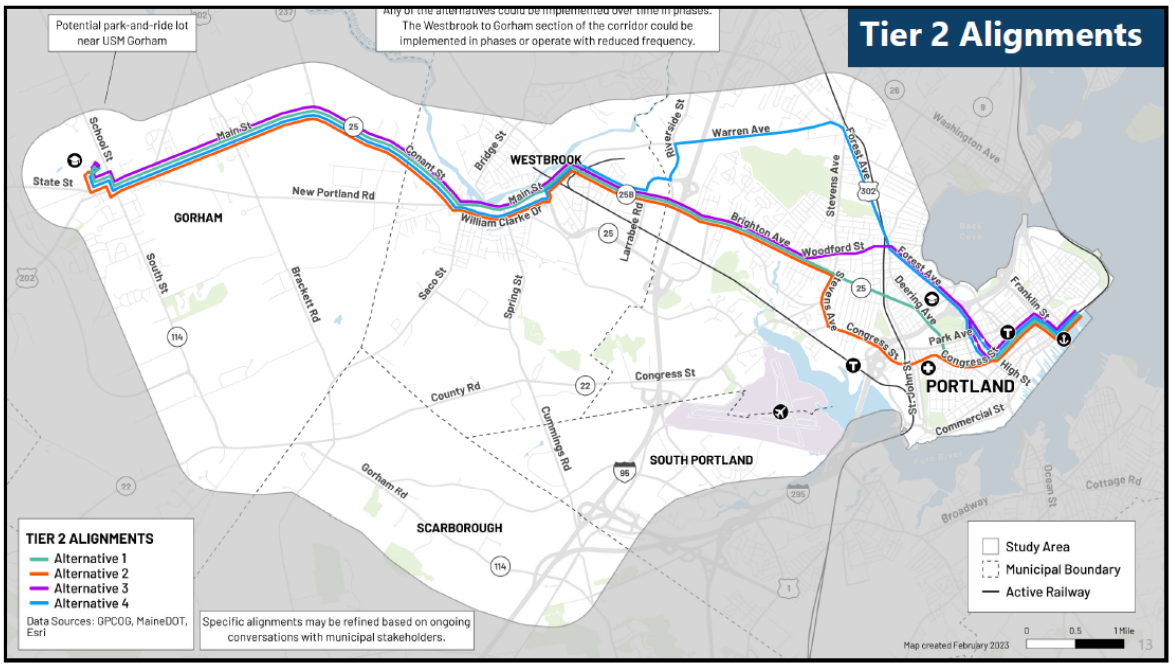


Figure 3: Alignments under Consideration for the Gorham-Westbrook-Portland Rapid Transit project

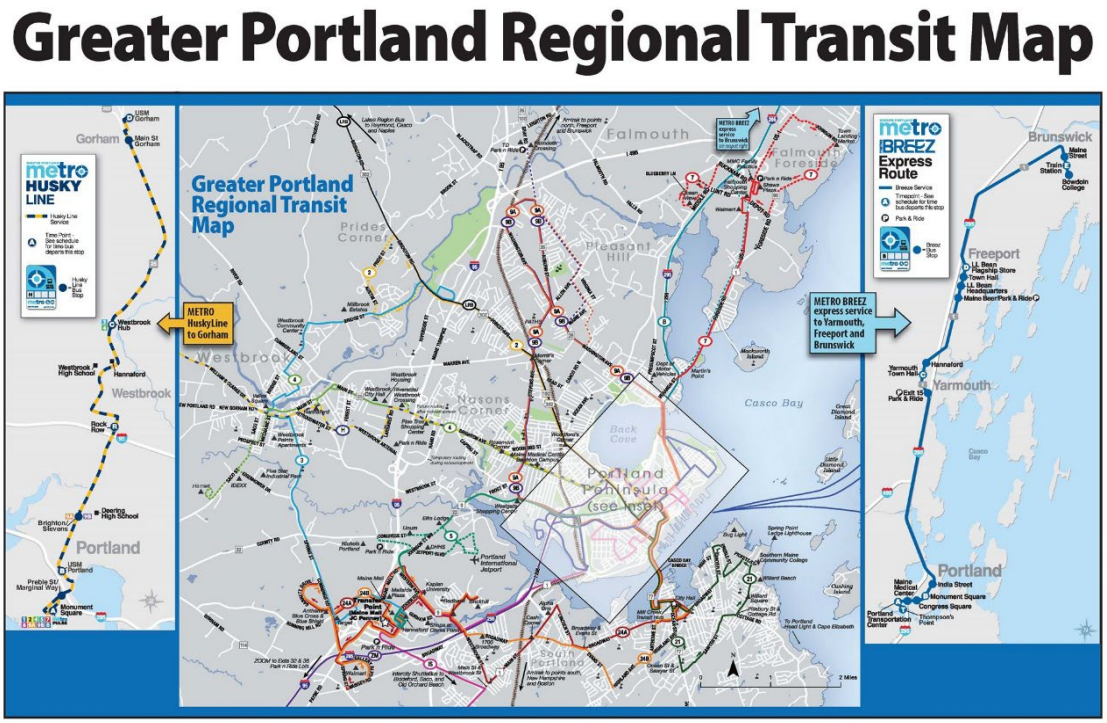
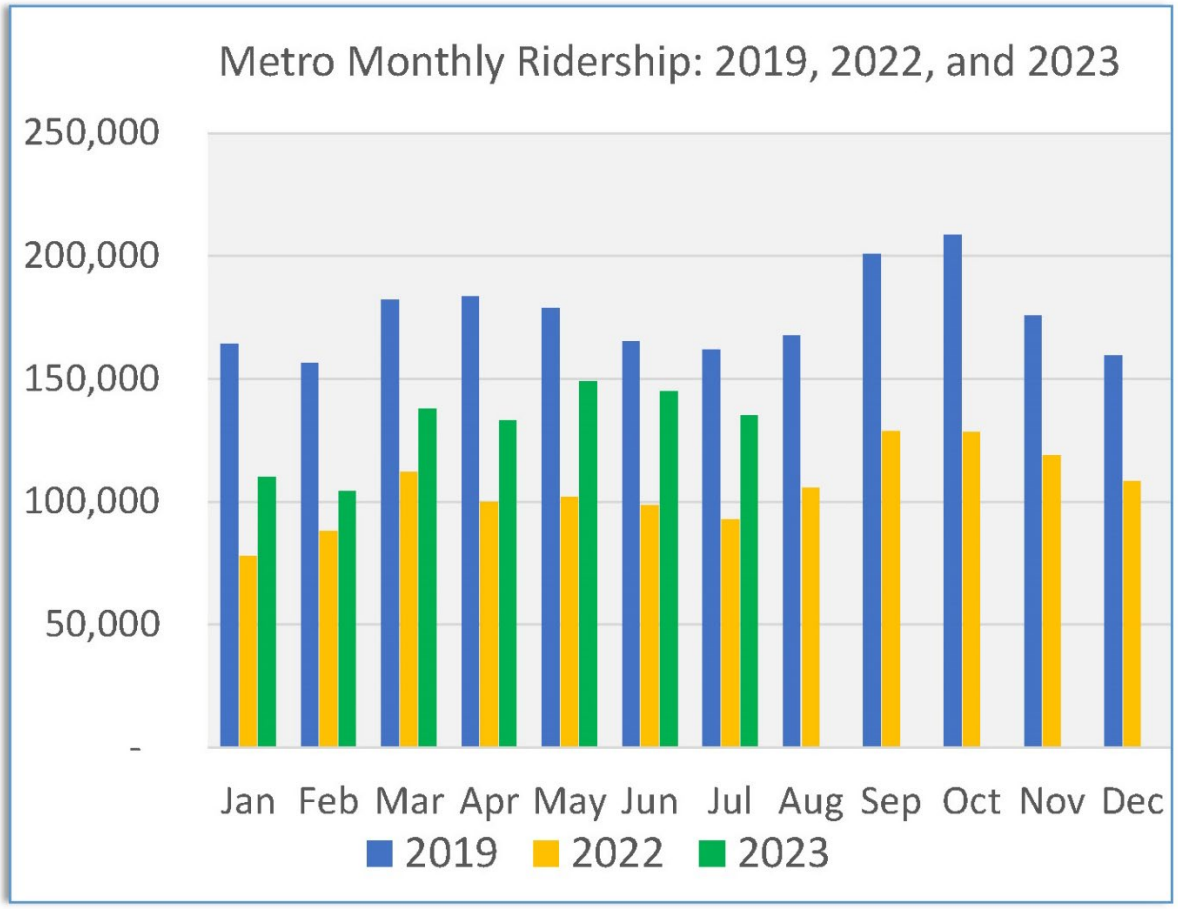
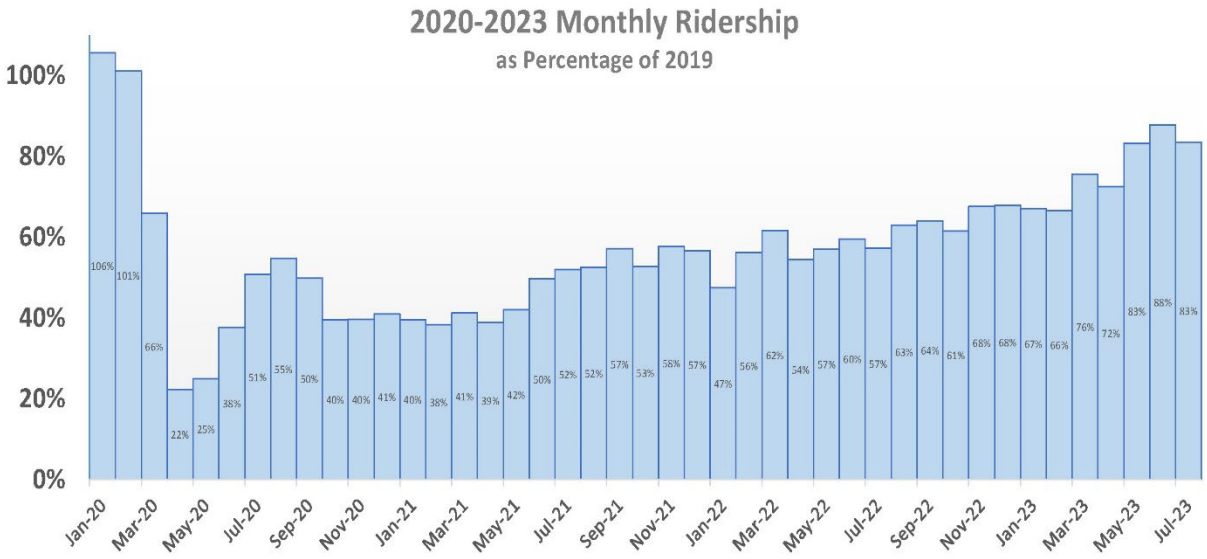


Figure 4: Greater Portland METRO's transit network





Figures 5a and 6b: Ridership recovery on METRO routes since the start of the pandemic



Figure 6: New Portland Bikeshare Station Nearby

Bicycle and Pedestrian Facilities

As mentioned above, all the nearby roadways have sidewalks on both sides. Accessibility is generally acceptable on these sidewalks, with tip downs generally provided. Many of these sidewalks are cleared in the winter as part of Portland Downtown's services. Some of the brick surfaces are not ideal in the rain or snow for those with limited mobility, making Portland Downtown's services particularly important.

The area has excellent bike facilities. The Back Cove Trail nearby offers safe, grade-separated access to the Peninsula. In addition, the City recently partnered with Tandem Mobility to launch a bike sharing system. That system offers both conventional and e-bikes for general use. In 2023, a new Portland Bikeshare station opened nearby at Revere Street and Deering Avenue.

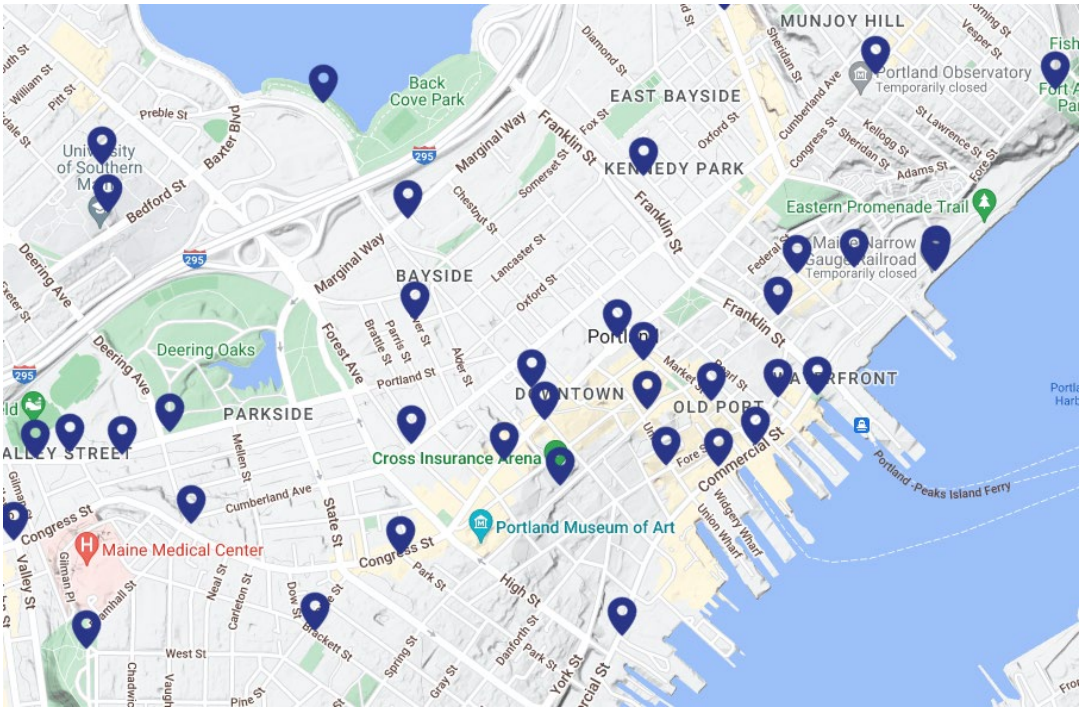


Figure 7: Other Portland Bikeshare Stations near 196 Woodford Street providing connectivity

Walkability

The Woodfords Corner area has been the subject of a great deal of public investment to improve mobility by foot. The transportation system was entirely rebuilt in the last ten years to improve sidewalks, crossings, and public spaces. In addition, this past fall, crossings were tightened in two places nearby to improve pedestrian safety. An active local organization, the Active Transportation Committee of the Friends of Woodfords Corner, works to improve multimodal transportation options generally in the area.





Figure 8: The Active Transportation Committee of the Friends of Woodfords Corner, working with the City, has been activating streetscapes as well as raising awareness of walking, biking and transit

Characteristics of Likely Residents and Workers

In thinking through who may be likely to live in this building, it makes sense to first look at who currently lives in the neighborhood. Census Tracts 15 and 18 include much of the surrounding neighborhood. For that reason, we've looked at data from the 2021 American Community Survey 5-year data from the U.S. Census. That data provides a sense of some key characteristics of likely residents, with respect to car ownership, household size and commuting patterns. This data informs the best TDM strategies for this development.

In Tract 15, almost 40% of all households have just one vehicle available. In Tract 18, that number is just over 25%. The proximity of key assets, such as downtown amenities, jobs, and supermarkets, make this a good place to live car-free, or car-light.

As shown in Figure 9 below, many workers in these Census tracts walk to work, work from home, or use alternative modes to get to work. Less than 2/3 of the workers in these tracts drive to work.

The uses in the remaining church buildings will attract a combination of pass-by visitors – who simply added a visit as part of another trip – and those making special trips to visit. Those trips will be accommodated through a mix of automobile trips, walking, biking, and transit. Restaurant visitors who choose to drive will have on-street parking options as well as local garages, though given the residential density downtown and in West Bayside many visitors will walk.

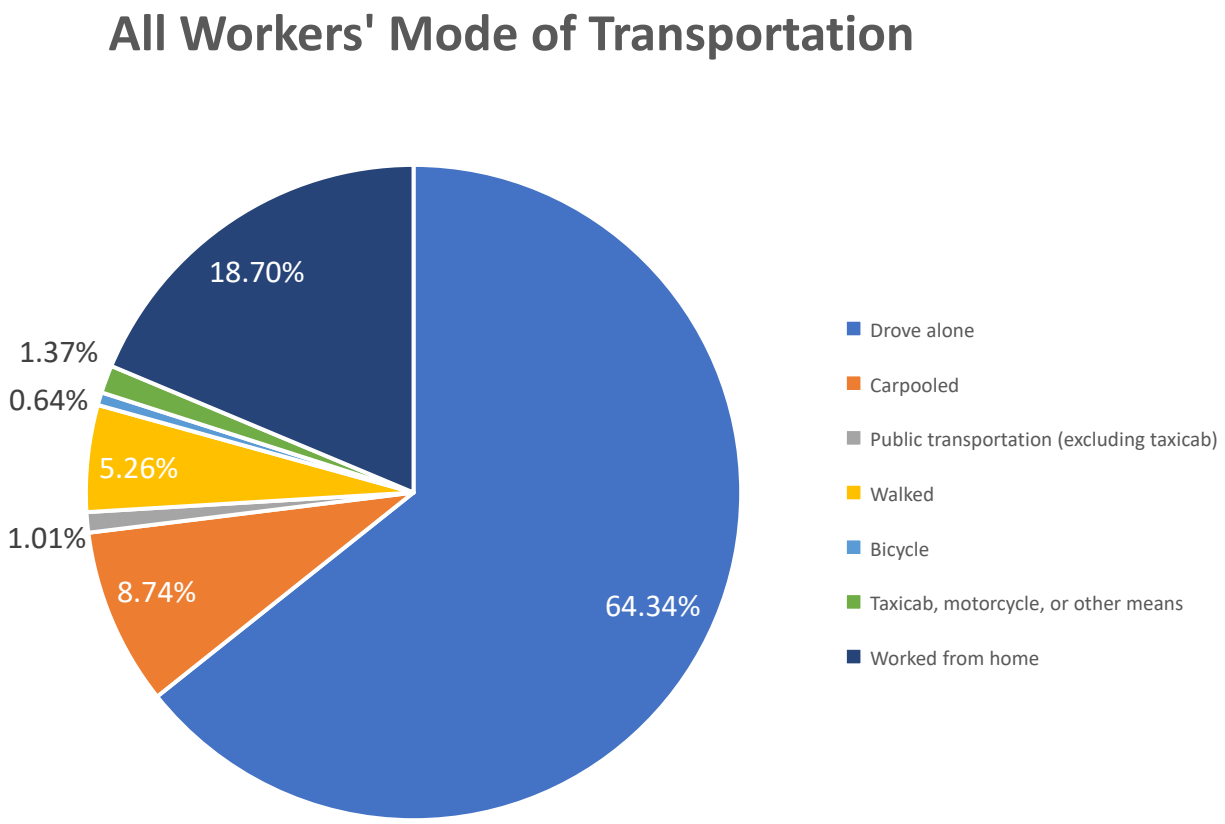


Figure 9: Commuting modes for workers in Census Tracts 15 and 18 (2021 5-Year American Community Survey)

TDM Administrator

The TDM Administrator for this project will be:

Brian Kilgallen (he/him)
Development Officer
Community Housing of Maine
One City Center, 4th Floor
Portland, Maine 04101
(207) 879-0347
brian@chomhousing.org

Mr. Kilgallen may work with property management to implement details of this TDM plan but will be the one-stop contact when needed.

Resident and Employee Survey

To gauge the effectiveness of this TDM plan – and to adjust it if needed – the TDM Administrator will conduct an annual survey of residents in the building as well as employees of the ground level spaces.

This survey will be conducted electronically using contact information on file with the management office for each unit. It will include questions on:

- Vehicle ownership and parking location
- Modes of transportation for commuting, household chores, and recreation
- Interest in carpooling or otherwise sharing transportation expenses with other tenants to reduce trips
- Barriers to vehicle trip reduction best practices, such as bicycle use and transit ridership, and
- Other transportation needs and/or interests of tenants.

Those tenants and employees that express interest in sharing information for carpooling or other trip reduction purposes will have their information provided to others who have also expressed interest.

The results of this survey will be provided to the City's Planning & Urban Development Department using a form like the one provided on the City's web site (see Attachment.) The survey will remain substantively consistent from year to year, to allow the results to be used to monitor the effectiveness of this TDM plan and allow for adjustments as needed.

Trip Generation and Parking Supply

This project's trip generation rates were determined using the following ITE Trip Generation Land Use Code:

- ✓ LUC 223 Affordable Housing – Income Limits

In total, the development is expected to generate 81 trips at morning peak hour and 49 at evening peak hour. Those figures are based on a typical development without nearby amenities. For this project, there is likely to be some trip-chaining, or combining of separate trips. We would also expect significant walking and biking trips as part of the coffee shop/drive through morning trip generation.

Research has shown that parking demand in transit-oriented developments such as this one can be as little as one-fifth the ITE supply guideline (see, for example, Ewing et al, *Landscape & Urban Planning* 160 (2017) 69-78.) We believe that, given the project's location, the decoupling of parking costs from rents, and the robust measures proposed in this TDM plan, the parking generation of this project can be accommodated in nearby lots and overnight on-street parking with limited negative impacts. For those who may need it, there is on-street parking on Woodford Street as well as other locations nearby.

Mode Shift Targets

The mode and distance of these trips is likely to vary from a typical housing development in Maine. In many cases, most of the trips generated would involve long individual vehicle trips. However, in this case, with good TDM strategies in place, most of the expected trips from residences and commercial spaces will be on foot, on bike, or on transit. This project sets the following mode split targets as per the City TDM guidelines:

Mode Split Targets

	Baseline	3-5 Year Target	7 Year Target
Drive Alone	64%	55%	46%
Carpool/Vanpool	9%	12%	15%
Transit	1%	3%	5%
Bicycle	1%	2%	3%
Walk	5%	6%	7%
Other	20%	22%	24%

Mode Shift Strategies

As a residential building with units best suited to one to three persons, this project will have different mode shift strategies than commercial buildings, or even residential buildings with larger units.

The mode shift strategies for this development are focused on the needs of likely tenants, including younger workers in a variety of fields and older single persons seeking the convenience of a downtown location.

These strategies are designed to respond to the following needs:

- Convenience
- Cost-effectiveness
- Leverage of downtown location, and
- Pushing of information to users rather than expecting them to pull information from on-line sources.

Shift strategies will include education as well as provision of convenient alternatives.

A key part of this TDM plan is to convey clear, compelling and accurate information to tenants and visitors as to the transportation options available other than driving. As part of a welcome packet, all new tenants will be provided information including the following:

- Transit maps, schedules, and information about real-time transit trackers
- Information about transportation providers, including transit operators, transportation-as-a-service (TAAS) companies, and other options to avoid driving
- A building-wide ride board to allow tenants to share trips, and
- Information on bike routes, parking infrastructure, and other incentives.

This educational packet will be provided online as well, so tenants and visitors can refer to it at any time.

Monitoring

As mentioned above, there is a TDM Administrator designated for this development who will be responsible for monitoring this plan. Following an annual survey of residents, the TDM Administrator will report results to the City's Department of Planning & Urban Development and propose modifications to this plan to make it more effective, if need. This reporting will also be helpful in

reviewing future TDM plans, as we expect that additional developments will propose using the option in Table 19-B in the future.

The report for this development will include, at a minimum, the following:

1. Building occupation
2. Mode split, and
3. Suggested enhancements to transit, bicycle and pedestrian infrastructure.

TDM Action Steps

The core actions of this TDM Plan are consistent with, and in many cases exceed, the recommended actions in the Technical Manual. These action steps will result in trip and parking demand reductions that meet the goals listed. In addition, by providing residents with transportation options that reduce per-capita emissions, these steps will have external benefits that will improve the quality of the air in downtown Portland and help address the goals of the *One Climate Future* plan. Finally, by reducing vehicle trips in individual vehicles, this TDM Plan will save the City and state money by reducing the wear and tear on city streets.

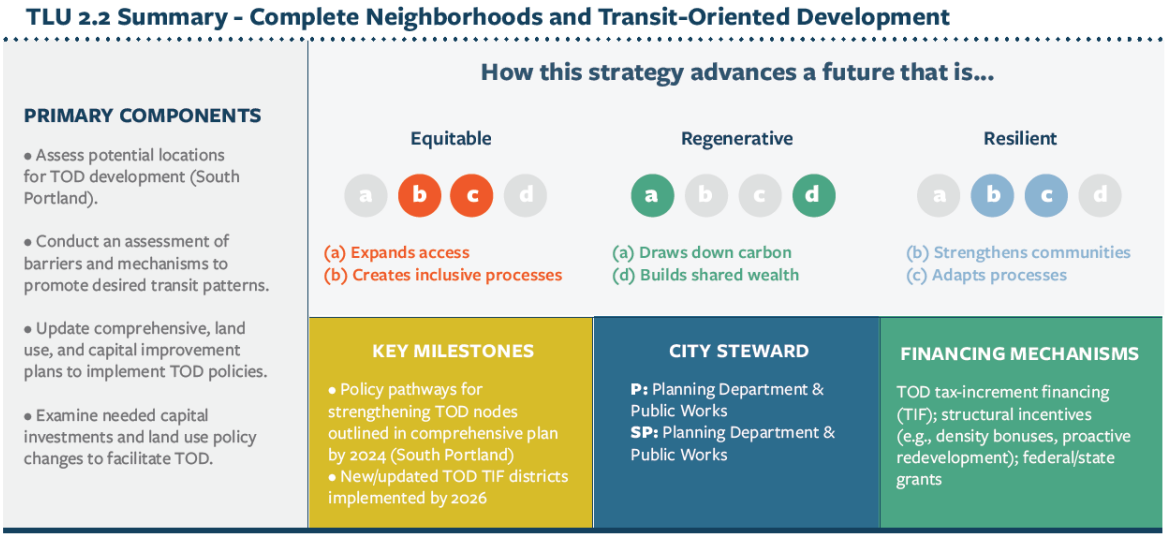


Figure 10: Portland's Climate Action Plan calls for infill development such as this project (Source: One Climate Future, p. 151)

1. **Infrastructure**
    a. Transit Lounge: With the closest transit stops nearby, it will be easy for tenants to access the Route 2 and other lines. The developer will work with METRO to develop a "transit lounge" in the lobby that provides a comfortable place to wait for buses, with posted schedules and, as noted below, cost-effective real-time transit arrival information as current technology permits.
    b. Transit Information: As has become a best practice in transit-oriented developments in other cities, real-time transit information is key. The developer will plan to provide cost-effective transit information to residents.
    c. Bicycle Parking: This development will provide at least 32 bicycle parking spaces available to residents.
    d. Bike Repair Station: The development will offer a bike repair station for the use of residents, located conveniently in a common area.

2. Incentives

a. Unbundled Parking: As mentioned above, the cost of parking has been "unbundled" from the cost of developing and operating the building. Tenants who choose not to own their own vehicle are then able to enjoy the full benefit of a reduction in their housing and transportation cost by not having to pay for a parking space.

b. Transit Incentives: Research has shown that moving into a new home is a chance for residents to try new transportation options. To make sure that new tenants are aware of, and have incentives to try, transit, will provide all new tenants with easy access to the Umo app for use on METRO, BSOOB Transit and/or South Portland Bus Service. All new tenants will also receive $25 pre-loaded onto their Umo account to allow them to try transit options and develop new habits (or continue previous ones) in this location. For tenants without smartphones, a METRO fare card loaded with $50 will be provided.

c. Car and Bike Sharing: While Portland currently does not have a car-sharing vendor, should one become available, the owners commit to working with the City to provide a carsharing vehicle nearby. Similarly, they agree to working with the City as it seeks to expand Portland Bikeshare nearby and will provide new tenants with a one-month membership in Portland Bikeshare so they can try it out (not to exceed current cost of $15.)

d. Telecommuting: This building will be wired with broadband infrastructure that meets the build-to standard of the Maine Connectivity Authority and ConnectMaine, to encourage telecommuting as a trip reduction strategy.

3. Education

a. Information: As part of a welcome packet, all new tenants will be provided information including the following:
   - Transit maps, schedules, and information about real-time transit trackers
   - Information about transportation providers, including transit operators, transportation-as-a-service (TAAS) companies, and other options to avoid driving
   - A building-wide ride board to allow tenants to share trips, and
   - Information on bike routes, parking infrastructure, and other incentives.
   - This educational packet will be provided online as well, so tenants and visitors can refer to it at any time.

b. Recognition: To recognize and provide positive reinforcement for resident TDM efforts, the building management will also provide an annual recognition of leaders in trip reduction from the building.

ACORN ENGINEERING, INC.

Planning Division
City of Portland, Maine
389 Congress Street, 4th Floor
Portland, ME 04101

February 6, 2024

Subject: Woodfords Affordable Housing Major Site Plan Neighborhood Meeting

I, Peter Heil, hereby certify that a neighborhood meeting was held on January 31, 2024 at 186 Woodford Street at 5:30 pm.

I also certify that on January 19, 2024, invitations were mailed to the following:

1. All addresses on the mailing list provided by the Planning Division which includes property owners within 500 feet of the proposed development.
2. Residents on the "interested parties" list.

Sincerely,

Peter F. Heil, P.E.
Project Manager
Acorn Engineering, Inc.

Included with this certification are:

1. Copy of the invitation sent
2. Sign-in sheet
3. Meeting minutes

ACORN ENGINEERING, INC.

Dear Neighbor: January 19th, 2024

On behalf of Community Housing of Maine (CHOM), we are pleased to invite you to a neighborhood meeting to discuss the Major Site Plan & Subdivision Application for the proposed redevelopment of 202 (aka 186) Woodford Street. The project proposes to construct a 42-unit affordable senior housing building in the location of the existing parking lot and partially demolish and rebuild/renovate the existing Parish House to contain 37 affordable housing units. The senior housing building will contain all single bedroom units while the Parish House will be a mixture of single bedroom and studio units. (79 affordable housing units total for the project). The project also includes various parking, utility, and landscape improvements. Lastly, the project proposes to separate the existing church, parish house, and senior housing building into three individual lots. The land containing the Parish House and the senior housing building will be owned and maintained by CHOM and the church will continue to function as a place of worship under existing ownership.

A sign-in sheet will be circulated, and a record of the meeting will be taken. Both the sign-in sheet and record will be submitted to the Planning Board. If you have any questions, please call (207) 775-2655.

Meeting Location: Woodfords Congregation Church – Lounge Room
186 Woodford Street, Portland, ME 04101
Meeting Date/Time: Wednesday, January 31, 2024 at 5:30 p.m.

Note: Under the City of Portland land use code, an applicant for a major site plan, master development plan, subdivision of over five lots, or zoning map amendment is required to hold a neighborhood meeting within 30 days of an application being deemed complete and no less than seven calendar days before a public hearing. Should you wish to offer additional comments on this proposed development, you may forward them by e-mail to planning@portlandmaine.gov or by mail to the Planning and Urban Development Department, Planning Division, 4th Floor, 389 Congress Street Portland, ME 04101.

Woodford Street Affordable Housing
1/31/24 | 5:30 pm

Sign-in Sheet

Name	Email
Amy Johnson	Amyfjohn@gmail.com
John England	Jefengland@gmail.com
Robin Carter	Robinbcarter@gmail.com
Margery Pattison	Email Not Provided
Greg Byrer	Email Not Provided
Joe O'Donnell	Jodennel@maine.rr.com
Carol E. Fletcher	Fletcher.caroleve@gmail.com
Wendall M Fletcher	Gbartlett5@Gmail.com
Mary Standford	Email Not Provided
Stephen Bithe	Bithelaw@Gmail.com
John Field	Fieldgeology@Gmail.com

Project Team	
Brian Kilgallen	brian@chomhousing.org
Zach Stevens, P.E.	zstevens@acorn-engineering.com
David Horne, E.I.	dhorne@acorn-engineering.com
Peter F. Heil, P.E.	pheil@acorn-engineering.com
Ben Walter	bwalter@cwsarch.com

ACORN ENGINEERING, INC.

CHOM Woodfords Senior Apartments
Major Site Plan Application

Neighborhood Meeting Minutes

January 31, 2024 / 5:30 pm
186 Woodford Street – Memorial Hall

Project Team Attendees:

Brian Kilgallen (BK): Developer/Presenter – (CHOM)

Pete Heil (PH): Project Manager/Presenter (Acorn Engineering)

Zachary Stevens (ZS): Civil Engineer/Presenter (Acorn Engineering)

David Horne (DH): Civil Engineer/Note Taker (Acorn Engineering)

Ben Walter (BW): Architect/Presenter (CWS)

The meeting started at approximately 5:30 pm.

Presentation:

Brian Kilgallen:

- Introduction of project team and Community Housing of Maine (CHOM).
    - The project will utilize the space that was previously under-utilized. Allow the congregation to fully take advantage of the space they have.

Pete Heil/ Zachary Stevens:

- Introduction to meeting and sign in sheet
    - Next step after this meeting is Planning Board meeting at City Hall on February 13th.
    - Project overview
        - The parcel was recently rezoned to the B2 zone.
        - The project proposes a new senior housing building as well as redeveloping the existing parish house. Both of which will have to conform to the B2 zoning district.
        - The exisitng parcel will be subdivided into three (3) lots.
        - There are no parking spaces required as part of this project, however, 57 parking spaces will be provided and 3 will be ADA. Exterior bike parking will also be provided.

- New street frontage improvement including street trees as well as sidewalk improvements. One curb cut will be closed as part of the project.
- The stormwater on site will be treated via a sub-surface sand filter.

Ben Walter:

- Presentation of the new building floorplans and amenities, community space.
  - Renderings of new building
  - Discussed potential landscaping on building frontage.
- The whole site slopes down towards Woodford Street which requires a stair entrance at the front of the building.
- The parish house floorplans.
  - A portion of the parish house will remain the same including the memorial hall.
  - The rear portion of the building will be reconstructed and converted into units as well as the floors above memorial hall.
- The parish house design character.
  - Provide new materials that replicate the color schemes of what is already existing. Maintain the character of the church, rhythm of the windows and elevations of the building.
  - Fiber cement siding as well as thin brick siding provide a historic look while incorporating modern technology for durability.
- 3-D renderings show how you will not be able to easily notice the parish house addition from the street.
- The proposed building as well as the parish house addition will be 100% electric.

Comments, Questions & Answers:

Please note that the following questions and answers were not recorded verbatim and aim to represent and summarize the actual questions, answers, and discussion that took place at the meeting.

Neighbor: How will the new buildings be heated?

- **Brian**: The building will be heated via heat pumps.

Neighbor: Are you concerned with the electrical billing rates since the building is all electric?

- **Brian**: We are always concerned with the costs of building, but sustainability is more important to CHOM.

Neighbor: Will the taxpayer have to pick up the cost of an electric building on the grid?

- **Brian**: We pay for all the heat and hot water for the building. If you add more renewable energy to the grid, you only have to pay for the maintenance of it.

Neighbor: I live at 175 Beacon Street which is adjacent to the church. Will the construction noise be an issue? Also, how will the parking be handled. Will there be more traffic through the beacon street entrance?

- **Brian**: In terms of noise of construction, the building will be constructed in panels which helps reduce construction noise. It's not quiet but we work with contractors who have the highest standard of construction to ensure the building process will be done right the first

time. The contractor will create a construction management plan that will set a high standard for construction practices. You will also always be able to contact me with any questions during construction. As for parking, we have found time and time again that projects provide too much parking. We believe most residents will not have a car and there is a public transit station in Woodfords Corner. Despite this, the project will have ample parking space for friends and family visiting, and church members.

Neighbor: What is the timeline for construction?
- **Brian**: 16-18 months. Most of which will happen inside the building.

Neighbor: Could you explain the landscaping plan more?
- **Brian**: We are working with the city and a landscape architect to get some outdoor space that people can use that will not interfere with the space that is utilized by the Church.

Neighbor: Are the units age restricted?
- **Brian**: Yes, they are age restricted to 55 and over. All the units are going to be senior housing units.
-

Neighbor: Will there be metro passes provided for the residents?
- **Brian**: We are interested in the options of providing metro passes to residents.

Neighbor: How will the shared parking lot work?
- **Brian**: Most of the parking spaces will be available to people who need them. However, there will be spaces dedicated to residents.

Neighbor: How many parking spaces will there be?
- **Brian**: 57.

Neighbor: Will there be a dedicated bus stop in front of the building?
- **Neighbor (On the Metro Board)**: There is no service on Woodford Street. We *are* looking into it but I'm not optimistic there will be a Woodford Street line. Woodfords corner has been rebuilt to provide safer street crossing for people taking the bus.

Neighbor: Are the apartments relatively the same dimensions?
- **Brian**: The layout of units in the proposed senior housing building are very similar. The parish house has a more variety of shaped units.

Neighbor: Are they all 1-bedroom units?
- **Brian**: The majority are 1-bedroom units, there are a couple of studio units.

Neighbor: Will there be pets allowed?
- **Brian**: Generally, pets are allowed if they are service animals.

Neighbor: How will the front of the new building look?
- **Brian**: (displaying renders of the new buildings front entrance) We are working to provide some more character to the building by adding color and landscaping.

Neighbor: Have you thought about an elevated porch out front of the building?
- **Brian**: Yes, there is a porch out front of the building.

Neighbor: Have you considered having a brick façade on more sides of the proposed building?
- **Brian**: We will investigate that option.

Neighbor: Are there any opportunities for outdoor recreation space?
- **Brian**: We have given guidance to the LA to provide outdoor recreation area. The project is located within 1000 feet of two different parks in Portland.

Brain: I want to note that Memorial Hall will also be upgraded as part of the project. We don't want to create a community space that will go dark after we leave it. We will maintain a campus for activity.

Neighbor: Who can live here?
- **Brian**: You need to be over 55 years of age and meet the low-income requirements.

Neighbor: Will there be health services provided at the building?
- **Brian**: We have not coordinated that yet but are working with a myriad of non-profits to be the vessel for them to get work done.

Brain: Thank you all for coming. If there is anything else, you need from me do not hesitate to reach out.

The meeting concluded at approximately 6:20 pm.

The abovementioned material was as interpreted and recorded from handwritten notes. Please note and relay any discrepancies or disputed information in the recorded minutes to the below address so that they can be reviewed, revised, and resubmitted, as necessary.

Recorded by,



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CHOM
Community Housing of Maine

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Development Officer

Maya Balassa – City Planner
Department of Planning & Urban Development
City Hall, 389 Congress Street, 4th Floor
Portland, Maine 04101

January 31st, 2024

Re: 186 Woodford Street Parking Management Letter

Dear Maya,

Shared use parking is an important Traffic Demand Management (TDM) strategy that will be employed by Community Housing of Maine (CHOM) on the redeveloped parcel now occupied by Woodfords Congregational Church as identified in the previously provided TDM plan. The parking management plan will maximize use of the parking spaces around the site for the use of the future residential tenants, as well as continued access to the Church parishioners.

Representatives from CHOM and their property management team will be available to help assist residents and coordinate parking with the Church. Unbundled parking, leased separately from the units, is also an important TDM strategy and a part of the plan for the property. Successful management of all parking spaces that are a part of the property is in the best interest of the neighborhood and the property owner and an important part of this urban residential development.

Sincerely,

Brian Kilgallen
Development Officer
Community Housing of Maine

ACORN ENGINEERING, INC.

Maya Balassa – City Planner
Department of Planning & Urban Development
City Hall, 389 Congress Street, 4th Floor
Portland, Maine 04101

February 7, 2024

Subject: Woodford Street Affordable Housing Redevelopment
186 Woodford Street, Portland, ME
Comment Response Letter

On behalf of Community Housing Of Maine (CHOM), we are pleased to respond to the comments that we received dated January 26th, 2024, related to the proposed affordable housing redevelopment project located at 186 Woodford Street in Portland, ME.

General Review Comments

Permits/ Other Requirements

Overview *– A access, utility, and maintenance easement is proposed within the shared drive aisle onsite benefiting all three proposed lots, seen of the Subdivision Plat.*

Comment *– Please provide the finalized easement, once created. This can be a condition of approval.*

Response – Understood. We request finalized easements are a condition of approval to be provided prior to a Certificate of Occupancy.

Zoning

Overview *– The site is located within the B-2 zone. Alongside the proposed development, the applicant is proposing to subdivide the site into three properties- each of which is required to meet zoning requirements.*

Comment *– Regarding the Parish House, Plan A1.10 shows the front part of the ground floor having Memorial hall with a stage, and balcony, a kitchen and two rooms labeled Germaine Room and Crib Room. The first floor includes the balcony of the memorial hall, a kitchenette and a lounge. The proposed use of this building is 37 dwelling units. Who is going to be using Memorial Hall, the kitchens and the other rooms mentioned above?*

Response – The Parish house footprint has been minorly adjusted, and the proposed unit count has increased from 37 units to 40 units. Please refer to the updated Site Plan and architectural plan set for new details and additional information on the updated footprint. Memorial Hall will be used by community members as a performance place for Stages and

various other groups to hold meetings. This is a continuation of the current use of the space. The Kitchen is only used to warm snacks and small meals. The other rooms will be used as storage.

Comment *– The height for the new addition to the Parish House and the height for the new building are both given as 44'. The applicant needs to provide an average grade calculation for both buildings and include the average grade line on the elevations.*

Response – Please refer to the grading plan for the building height calculations. See Sheet C-30 for additional information, as well as updated elevations showing the average grade line and average grade building height.

Comments Related to Transportation Standards

Impact on Surrounding Street Systems

Overview *– The applicant is proposing to change the traffic pattern to a one way, entering the site from Beacon Street and exiting on Woodford Street.*

Comment *– The applicant shall review the entire sidewalk along their frontage and repair all identified hazards within the pedestrian walkway to ensure ADA compliance. These areas shall be depicted on a plan.*

Response – Understood, with this response, we are requesting a site walk with the Department of Public Works to walk the existing sidewalk with them and identify hazards within the pedestrian walkway to identify any specific areas that will need to be addressed the City and development team. Please let us know some dates/times that would work with the City.

Comment *– The applicant shall consolidate any proposed service trenches (where possible) to have one final trench repair. The proposed trenches shall be repaired per the Minor Excavation Pavement Repair Details (prior to paving the finished surface) found in the Rules and Regulations for Excavation Activity. Update the plans and detail sheets to show these requirements.*

Response – The plans have been updated to minimize trench cuts per the minor excavation pavement repair detail. We are requesting one trench cut for the senior housing building and a second trench cut for the parish house renovation. See sheet C-20 for additional information.

Comment *– If the existing sidewalk grades are not compliant at the property line, then the limits of sidewalk replacement shall be extended to include a 5 foot minimum transition zone from the proposed 2% to the existing sidewalk slope.*

Response – We believe the this condition does not exist in the proposed finish grading, however we can review further during the future site walk with the Department of Public Works to identify hazards within the pedestrian walkway.

Comment *– The applicant shall dimension existing conditions in the ROW in addition to proposed improvements on the plan view sheets. For example ROW, street, lanes sidewalk, esplanade driveways (and other improvements) widths as well as when a width changes.*

Response – Existing condition widths have been added to the site plan. See sheet C-10 for additional information.

Comment *– The proposed 3 foot bituminous strip on the driveway does not meet the current City standard and shall not exceed a 1 foot bituminous strip. Update the plans and detail sheets to meet the requirements of City Driveway Apron standards I-9 and I-10. CAD files can be obtained upon request.*

Response – Understood. The bituminous strip located at the driveway entrance has been reduced to 1' in width and we are no longer requesting a waiver. See Sheet C-10 and C-41 for additional information.

Access and Circulation

Overview *– There is an existing sidewalk along the frontage of Woodford Street. There are currently two curb cuts along Woodford Street to the site that are proposed to be reduced to one, exit only driveway. The new 42-unit building has the main entrance along Woodford Street with two stairs up to the front porch, with an ADA ramp along the side leading to the front entrance. There is sidewalk proposed around the rear and side of the reconstructed 37 unit building that leads to Woodford Street. Internal sidewalks are proposed to be 5 feet wide.*

Comment *– The plans do not show a clear ADA pedestrian route from Woodford Street to the 42-unit building. Please adjust the site plan to show safe pedestrian routing. Staff are happy to meet and discuss ideas to accomplish this.*

Response – An ADA route has been added to the site plan to clarify the internal ADA pedestrian route and how it connects to the public sidewalk on Woodford Street. See Sheet C-10 for additional information.

Comment *– To minimize traffic impacts to Beacon Street, the site could include two-way circulation aisles so that traffic can enter the site from Woodford Street. The one-way driveway on Beacon Street would still need to remain. If the one-way circulation plan is to remain, the applicant shall implement angled parking spaces.*

Response – The project proposes one-way access throughout the site and continue to provide 90-degree parking to maximize the off-street parking. Angled parking would result in reduced total number of parking spaces on site. Additional signage is proposed on the site plan to clarify the intent of the vehicle maneuverability and direct vehicular traffic through the site.

Comment *– I support a waiver for parking lot aisle width given expected low vehicle turnover. This applies to a two-way traffic circulation system. If angled parking spaces are implemented, a waiver may not be required.*

Response – Understood, thank you.

Comment *– The warning signs at the existing crosswalk on Woodford Street shall be upgraded to meet current MUTCD standards.*

Response – It is our understanding that the two existing crosswalk locations on Woodford Street were recently upgraded to meet MUTCD standards. If additional / new signs are required, we request DPW provide specific information on which signs need to be replaced, and what specific new sign(s) will need to be installed. This could also be reviewed/discussed with DPW during the requested site walk. The plans can be updated as required as part of the next submission package.

Parking

Overview *– The applicant is utilizing the exception to off-street parking minimum per table 19-B, allowing no off-street parking required within a quarter mile of transit. The applicant has submitted a Transportation Demand Management. Despite using the parking exception, the applicant is proposing 53 parking spaces (3 ADA, 3 compact).*
The applicant is proposing 12 EV charging parking spaces along the rear of the site.
32 bike parking spaces are proposed for the housing units near entrances.

Comment *– It is unclear how the parking spaces will be allocated between the existing and proposed uses and therefore I would suggest a parking management plan be provided. The applicant should also note if there are any site plan requirements for Jones, Rich, and Hutchins Funeral Home for use of the proposed parking area for overflow parking.*

Response – Please refer to the attached Parking Management Letter to address the parking space allocation between the existing and proposed uses. We would also clarify that the project is proposing 57 parking spaces (3 ADA, 12 EV) and 34 exterior bike parking spaces. We are unaware of any formal site plan requirements for the funeral home for the use of the proposed parking area for overflow parking.

Comments Related to Environmental Quality Standards

Preservation of Significant Natural Features

Overview *– There are three trees along the eastern edge that are proposed to be removed.*

Comment *– Please add preservation details to all existing trees proposed to remain within the area of disturbance.*

Response – A note has been added to the construction management plan to protect trees located within or adjacent to areas of disturbance. See Sheet C-03 for additional information.

Comment *– Please include DBH and species of existing trees on the property survey.*

- *Please indicate which existing trees are proposed for removal and which are designated for preservation.*

Response – Understood. Please refer to sheet C-03 for tree DBH and species.

Site Landscaping and Buffers

Overview *– The project is proposing four maple trees. Internally, the applicant is proposing 36 shrubs and 99 perennials. The project is proposing 42 plantings of Common Ivy and 14 plantings of Great Masterwort, which are both non-native. The project is required to plant 79 street trees. For remaining trees that cannot feasibly fit in the site, a fee-in-leiu of 400$ per tree is acceptable alternative.*

Comment *– Please update the landscaping plan to replace the ivy with a native perennial.*

Response – The plant table located on the site plan has been updated to incorporate native perennials. See Sheet C-10 for additional information.

Comment *– It appears that additional trees within 20 feet of the right of way could be added to the site.*

Response – The plans have been updated to add an addition street tree within 20 feet of the ROW for a total of (5) new street trees.

Comment *– Maples are no longer a suitable tree due to their percentage of the canopy and risk of loss from an invasive beetle. Please choose a different native approved tree.*

Response – The proposed tree trees have been updated to Northern Red Oak. Please see Sheet C-10 for additional information.

Comment *– The narrative states the development is unable to meet the 2 trees per 5 spaces parking lot landscaping standard. Paying into the tree fund can be part of meeting the standard, but please add additional landscaping to work towards the standard- staff are supportive of reducing parking space count to meet the standard, especially since the applicant is using proximity to transit to eliminate onsite parking requirement.*

Response – Some additional landscaping is provided on the update C-10 Site Plan, please refer to the plan for an updated planting schedule. We've tried to maximize the amount of plantings to meet the code to the greatest extent practical, but are still unable to meet the full requirements due to parking and subsurface utility conflicts. We understand a pay-in-lieu fee will still be required.

Comment *– Please refrain from using maple species as proposed street trees*

- *The greater Portland area is oversaturated with maple tree species leaving the city extremely vulnerable to infestation by Asian Longhorned Beetle.*
  - *The large grassy area and absence of overhead infrastructure create the opportunity to choose from several large growth form tree species that would compliment the existing maple trees on site*

Response – The proposed tree trees have been updated to Northern Red Oak. Please see Sheet C-10 for additional information.

Comment *– Street Tree Requirement:*

- *79 Residential Units * 1 tree/unit = 79 street trees*
  - *Credit will be given for any new trees planted within 20' of the public ROW*
- *Tree Fund Contribution*
  - *79 required trees – 4 proposed new plantings = 75 remaining trees*
    - *75 trees *400/tree = $30,000 contributions to the tree fund in lieu of planting the remaining 75 required street trees.*
  - *The cost of site improvements that create a more hospitable environment for trees can be deducted from the in-lieu contribution amount of $30K*
    - *Installing dedicated mulch rings around existing and newly planted trees*
    - *Providing decimation and soil amendments (compost) for existing trees*
      - *Air spading the root zone of existing trees and applying compost.*

Response – Notes have been added to C-10 to specify installing dedicated mulch rings around existing and newly planted trees, as well as providing decimation and soil amendments for existing trees, including air spading the root zone of existing trees and applying compost. The plan has also been updated to propose (5) street trees at this time. We also note, the total number of units has increased to 82 proposed units. We request that the final impact fee is calculated prior to the final planning board meeting, including incorporating credits associated with the landscaping measures identified above.

Water Quality, Stormwater Management and Erosion Control

Overview *– The applicant is proposing underground stormwater detention to treat 57% of the redeveloped non-roof impervious area with a StormTech subsurface sand filter.*

Comment *– Private connections into municipal catch basin structures are not permitted per technical manual standard 2.9.7. The private storm drain should be connected directly to the Woodford Street storm drain line with a new manhole.*

Response – Understood. A new connection to the Woodford Street municipal storm drain system with a new drain manhole is proposed, as the proposed connection is >8" per City standards. See Sheet C-30 for additional information.

Comment *– The applicant should clarify the pipe size being proposed for the storm drain connecting into the Woodford Street storm drain pipe. The plans show conflicting information.*

Response – The pipe size has been clarified and shown as 12". See Sheet C-30 for additional information.

Comment *– Per DPW's request the applicant has provided adequate stormwater detention volume and flow control for this project.*

Response – Understood, thank you for the review.

Comment *– The project is required to comply with Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 for stormwater management. The Applicant has proposed a subsurface sand filter for stormwater management on the site. The system will provide for treatment of greater than 50% of the non-roof redeveloped impervious area on the site and will provide storage as required by the City. They've provided an inspection and maintenance plan, and will ultimately need a stormwater maintenance agreement.*

Response – Understood, thank you for the review.

Comment *– The outlet control structure detail should be updated to include all of the proposed pipes, the isolator row pipe connection is not shown. The detail also calls for a frame and cover that are no longer manufactured.*

Response – The outlet control structure detail has been updated to reflect all of the inverts as shown on the grading plan. The frame and cover detail has also been updated. See Sheets C-30 and C-46 for additional information.

Comment *– The piping and grading around the proposed F-Basin at the northeast corner should be clarified. Notes call for both 8" and 12" pipe exiting this structure. The contours in the area also appear to show that the grade is a couple of feet higher than what is called out as the structure's rim. The pipe out of this structure ties into an existing manhole in the street, and based on the inverts provided and a 12-inch pipe, there will be only 1.25 feet of cover at the manhole, although it's noted that the existing pipes into the manhole appear to have similar amounts of cover. Adequate insulation should be used, and there will need to be care taken with the installation of the curbing as it appears that it will be close to the top of the pipe.*

Response – Thank you for the comment. The pipe size, insulation, and grading has been clarified. See Sheet C-30 for additional information.

Comment *– The Applicant has noted that they've made requests for utility ability to serve. They've received confirmation from CMP, and have noted they will provide others upon receipt.*

Response – Thank you for the comment.

Comment *– Based on my recent experience with PWD, they will require the demolition of the existing water service back to the main in the street, which will require some pavement repair at that location on Woodford Street.*

Response – We are currently coordinating with PWD and will retire the existing water service per their standards.

Comments Related to Public Infrastructure + Community Safety Standards

Public Utilities

Comment *– Please submit ability to serve confirmation when received by the applicant.*

Response – Understood, all utility ability to serve letters will be provided upon receipt.

Comments Related to Site Design Standards

Snow and Ice Loading

Overview *– The applicant has stated that snow storage areas will not encroach on parking, walkways, or stormwater management systems.*

Comment *– Please identify these snow storage locations on the site plan.*

Response – During large snow events, the property owner will have to remove snow from the parcel. A note has been added to C-10 Site Plan stating the same.

Exterior Lighting

Overview *– Lighting is proposed around the residential building and surface parking.*

Comment *– In the Technical Manual, the maximum foot-candle for surface parking lots is 4 and the maximum foot-candle for site lighting is 5. Please adjust photometric plan to meet the maximum foot candle standard.*

Response – We will coordinate with the lighting designer and follow up with a revised photometric plan once updated with our future site plan submission prior to the final hearing.

Comment *– Please provide cutsheet details of proposed lighting to confirm they are full-cutoff and they are meeting color temperature standards.*

Response – We will coordinate with the lighting designer and follow up with revised cut sheet details once available and provide with our future site plan submission prior to the final hearing.

Comment *– The lighting trespass standard in the Tech Manual, states that lighting shall not exceed .1 along the property line. Lighting along the rear property line should show house-side shielding in the details. Please update photometric plan accordingly.*

Response – We will coordinate with the lighting designer and follow up with a revised photometric plan once updated with our future site plan submission prior to the final hearing.

Noise and Vibration

Comment *– Please show where the heating, ventilation, and air conditioning equipment is located and provide details for how it will be screened.*

Response – Please refer to the attached updated architectural plans which show the HVAC equipment to be installed in the center of the roof with screening around the units.

Signage and Wayfinding

Comment *– Please clarify if any signage is proposed.*

Response – The project includes "enter only" and "exit only" and "do not enter" signage to help clarify the one-way access throughout the site. Callouts for the locations of the new signage are shown on the Site Plan. Please refer to Sheet C-10 for additional information.

Comments Related to Subdivision Review Standards

Has Sufficient Water Available

Overview *– The applicant has requested ability to serve confirmation from the Portland Water District.*

Updates Requested *– Please submit ability to serve confirmation when received.*

Response – Understood, the ability to serve letter from PWD will be provided upon receipt.

Will Not Cause an Unreasonable Burden for the City to Dispose of Solid Waste

Updates Requested *– Please add additional information about how waste will be disposed of.*

Response – A private hauler will remove waste on a scheduled basis. At this phase of the project a specific company solid waste removal company has not been contacted.

Will Not Have Undue Adverse Effect on the Scenic or Natural Beauty of the Area

Overview *– The site is currently a parking lot. The new building is subject to design review of a multi-family in the B-2 Community Business zone.*

Updates Requested *– Please respond to design review comments.*

Response – Please see below for additional information and responses.

Will Provide for Adequate Stormwater Management

Overview *– The project is proposing a subsurface stormwater treatment system under the parking lot to store and treat stormwater before slowly releasing into the City system within Woodford Street.*

Updates Requested *– See site plan comments regarding stormwater management.*

Response – Please see above for additional information.

Design Review Comments

Comment *– The proposed Senior Housing building is located along the street frontage of Woodford Street with an internal program that includes a main entrance lobby and residential units. The Applicant shall specify the transparent visible transmittance (VT) of .7 or greater for windows adjacent to the public sidewalk along Woodford Street at the north elevation for Staff review.*

Response – The applicant agrees to provide window glazing with a visible transmittance (VT) of .7 or greater for public entry space windows adjacent to the public sidewalk along Woodford Street at the north elevation.

Comment *– The proposed Senior Housing building is oriented towards Woodfords Street with the main entrance and porch. Staff finds that the proposed floor elevation is not directly accessible from the public sidewalk, and recommends that the Applicant lower the finished floor elevation of the lobby to match the adjacent sidewalk elevation and allow for a flush main entrance and porch to the public sidewalk. In addition, Staff finds the proposed staircases to access the porch elevation at 81.35' does not create an active presence along the sidewalk at the Senior Housing building, and recommends the Applicant create an internal stair transition accessible for residences to mitigate a change in finished floor elevation.*

Response – Due to the substantial grade change between the front and rear of the site, it is not feasible to enter the building 'at grade' facing Woodford Street without loosing the ability to incorporate any first-floor residential units since the grade slopes up quickly toward the rear of the site. This would then raise the first occupiable floor with residential units 6' above the site's internal grade making a rear entrance inaccessible. Additionally, elevated first floor porches with substantial exterior front entry stairs are a character defining element of the Woodfords Corner neighborhood. As such, we propose maintaining the proposed floor elevations and engaging the pedestrian experience at grade level via a robustly landscaped outdoor pedestrian sitting area. The updated plans incorporate this approach.

Comment *– The proposed building materials for the Senior Housing include fiber cement lap siding and panel in three tones, brick, metal trim, fiberglass windows and PVD siding as an accent at the front porch. Staff recommends a replacement of the PVD siding at the front porch for a longevity material, such as fiber cement and fiberglass columns, to reduce the amount of overall building materials.*

Response – The applicant proposes using painted fiberglass columns. The applicant assumes the PVD comment is in reference to the vertical PVC slats below and trimming the front entry porch. The space below the front entry porch is proposed to be 'open' (ventilated) similar to the traditional painted residential porches in the neighborhood, albeit with somewhat more contemporary detailing and materials selected for long term durability and low maintenance. To achieve this character and longevity, the space below the porch will be 'vented' via 3 ½" vertical boards with a 1/2" open air space between each board. We are concerned that unrestrained fiber cement vertical slats are brittle and easily broken, whereas 1" thick PVC is very durable, will hold paint for a very long time, will not rot and is forgiving with respect to damage. For all these reasons, painted PVC has become the durable long-life alternative to traditional wood trim' for the past 15 years. When executed correctly, painted PVC looks just like painted wood, with the added benefit of a very long lifespan, exceptional durability and limited maintenance. We are proposing that the entire porch cladding system be painted to achieve a consistent traditional appearance.

Comment *– The proposed development plan includes the Senior Housing building abutting residential properties at the side and rear and surface parking abutting residential properties. The Applicant has not provided sufficient screening at abutting properties and Staff recommends the addition of a densely planted landscape buffer and/or fencing to screen vehicles parked, in addition to add fencing along the east property line to screen abutting residential properties.*

Response – Additional planted landscape buffering has been proposed along the rear property line behind the parking areas to help screen and buffer between the abutting residential properties and the parking area. Due to the building location, grade differential, and screening associated with the dumpster enclosure and transformer, the parking area is not anticipated to be visual from the properties to the east, and no fencing is proposed along the eastern property line.

Comment *– The proposed Senior Housing building is oriented towards Woodfords Street with the main entrance and porch. Staff finds that the proposed floor elevation is not directly accessible from the public sidewalk, and recommends that the Applicant lower the finished floor elevation of the lobby to match the adjacent sidewalk elevation and allow for a flush main entrance and porch to the public sidewalk. In addition, Staff recommends an external stair that would connect from the public sidewalk on Woodford Street to the building entrance located at the west elevation.*

Response – Due to the substantial grade change between the front and rear of the site, it is not feasible to enter the building 'at grade' facing Woodford Street without loosing the ability to incorporate any first-floor residential units since the grade slopes up quickly toward the rear of the site. This would then raise the first occupiable floor with residential units 6' above the site's internal grade making a rear entrance inaccessible. Additionally, elevated first floor porches with substantial exterior front entry stairs are a character defining element of the Woodfords Corner neighborhood. As such, we propose maintaining the proposed floor elevations and engaging the pedestrian experience at grade level via a robustly landscaped outdoor pedestrian sitting area. The updated plans incorporate this approach.

***Comment** – Staff finds the proposed staircases to access the porch elevation at 81.35' does not create an active presence along the sidewalk at the Senior Housing building, and recommends the Applicant create an internal stair transition accessible for residences to mitigate a change in finished floor elevation. Staff recommends the Applicant revise the south elevation to account for the removal of external stairs and modify the porch, awning and bay projection accordingly.*

Response – Due to the substantial grade change between the front and rear of the site, it is not feasible to enter the building 'at grade' facing Woodford Street without loosing the ability to incorporate any first-floor residential units since the grade slopes up quickly toward the rear of the site. This would then raise the first occupiable floor with residential units 6' above the site's internal grade making a rear entrance inaccessible. Additionally, elevated first floor porches with substantial exterior front entry stairs are a character defining element of the Woodfords Corner neighborhood. As such, we propose maintaining the proposed floor elevations and engaging the pedestrian experience at grade level via a robustly landscaped outdoor pedestrian sitting area. The updated plans incorporate this approach.

***Comment** – Staff finds that the proposed Senior Housing building is located appropriately towards Woodford Street, however requests the Applicant create a stronger relationship for the main entrance by lowering the finish floor elevation to meet Woodford Street grade.*

Response – Due to the substantial grade change between the front and rear of the site, it is not feasible to enter the building 'at grade' facing Woodford Street without loosing the ability to incorporate any first-floor residential units since the grade slopes up quickly toward the rear of the site. This would then raise the first occupiable floor with residential units 6' above the site's internal grade making a rear entrance inaccessible. Additionally, elevated first floor porches with substantial exterior front entry stairs are a character defining element of the Woodfords Corner neighborhood. As such, we propose maintaining the proposed floor elevations and engaging the pedestrian experience at grade level via a robustly landscaped outdoor pedestrian sitting area. The updated plans incorporate this approach.

***Comment** – The proposed development locates the new Senior Housing building towards the street, Staff is requesting that the Applicant remove the proposed staircases that parallel the sidewalk and lower the lobby finish floor elevation to sidewalk grade to engage with the public street and allow residents an accessible entry directly from the public sidewalk.*

Response – Due to the substantial grade change between the front and rear of the site, it is not feasible to enter the building 'at grade' facing Woodford Street without loosing the ability to incorporate any first-floor residential units since the grade slopes up quickly toward the rear of the site. This would then raise the first occupiable floor with residential units 6' above the site's internal grade making a rear entrance inaccessible. Additionally, elevated first floor porches with substantial exterior front entry stairs are a character defining element of the Woodfords Corner neighborhood. As such, we propose maintaining the proposed floor elevations and engaging the pedestrian experience at grade level via a robustly landscaped outdoor pedestrian sitting area. The updated plans incorporate this approach.

Comment *– Staff is requesting that the Applicant prepare a narrative and/or exhibit to clearly state the proposed open space on the site. Staff has concerns about the allocation of open space and accessibility to these open spaces for the residents and recommends clearly visible and accessible walkways, crosswalks and surfaces that promote a comfortable outdoor experience.*

Response – The applicant has engaged the services of a Landscape Architect to better use and define the open space. More information will be provided in the next submission package ahead of the final plan hearing. The goal is to use the outdoor space by respecting the existing church grounds. The location of the development also allows easy access to multiple nearby city parks including the Back Cove Trail, Barrows Park, and Heseltine Park.

Comment *– Staff finds the development provides ample windows and internal storage throughout the Senior Housing building. Staff finds the Redeveloped Parish House includes windows for each unit, however requests the Applicant resubmit architectural floor plans and elevations to match the proposed arrangement of windows.*

Response – See attached updated architectural floor plans and elevations to address the arrangement of windows.

Comment *– The proposed development plan includes surface parking abutting residential properties, Staff finds that the Applicant has not provided sufficient screening at abutting properties and Staff recommends the addition of a densely planted landscape buffer and/or fencing to screen vehicles parked for adjacent properties.*

Response – Additional planted landscape buffering has been proposed along the rear property line behind the parking areas to help screen and buffer between the abutting residential properties and the parking area. Due to the building location, grade differential, and screening associated with the dumpster enclosure and transformer, the parking area is not anticipated to be visual from the properties to the east, and no fencing is proposed along the eastern property line.

Please let us know if you have any additional questions or comments.

Sincerely,



Pete F. Heil, P.E.
Project Manager
Acorn Engineering, Inc.

WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT

COMMUNITY HOUSING OF MAINE
PORTLAND, MAINE

LEGEND

EXISTING

REFER TO THE EXISTING CONDITIONS PLAN FOR ADDITIONAL INFORMATION

PROPOSED

UNDERDRAIN	
GREEN SPACE	
UTILITY PAVEMENT CUTS	
STRIPING	
SEDIMENTATION BARRIER	ECB — ECB
EDGE OF EX. PAVEMENT	
CURB	
SIGN	
LAMP OR LIGHT POLE	
UTILITY POLE	
GUY WIRE	
WATER VALVE	
FIRE HYDRANT	
SEWER MANHOLE	
CATCH BASIN	
DRAIN MANHOLE	
UNDERGROUND ELECTRIC LINE	UGE — UGE
UNDERGROUND WATER LINE	UW
MINOR CONTOURS (1 FT)	84
MAJOR CONTOURS (5 FT)	85
GAS LINE	
STORM DRAIN LINE	
SEWER LINE	S — S
EXISTING/PROPOSED BUILDING	
OVERHEAD ELECTRICAL/TELEPHONE/CABLE	
PROPERTY LINE	
SETBACKS	

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CALL BEFORE YOU DIG
1-888-DIG-SAFE
1-888-344-7233

UTILITIES

SEWER

DEPARTMENT OF PUBLIC WORKS (DPW)
250 CANCO ROAD
PORTLAND, MAINE 04101
CONTACT: BRADLEY ROLAND, P.E.
(207) 874-8840

WATER

PORTLAND WATER DISTRICT
225 DOUGLASS STREET
PO BOX 3553
PORTLAND, MAINE 04104
ATTN: MEANS DIVISION
(207) 774-5961

ELECTRIC

CENTRAL MAINE POWER COMPANY (CMP)
162 CANCO ROAD
PORTLAND, MAINE 04103
CONTACT: KATHERINE DUMONT
(207) 828-2882

CABLE

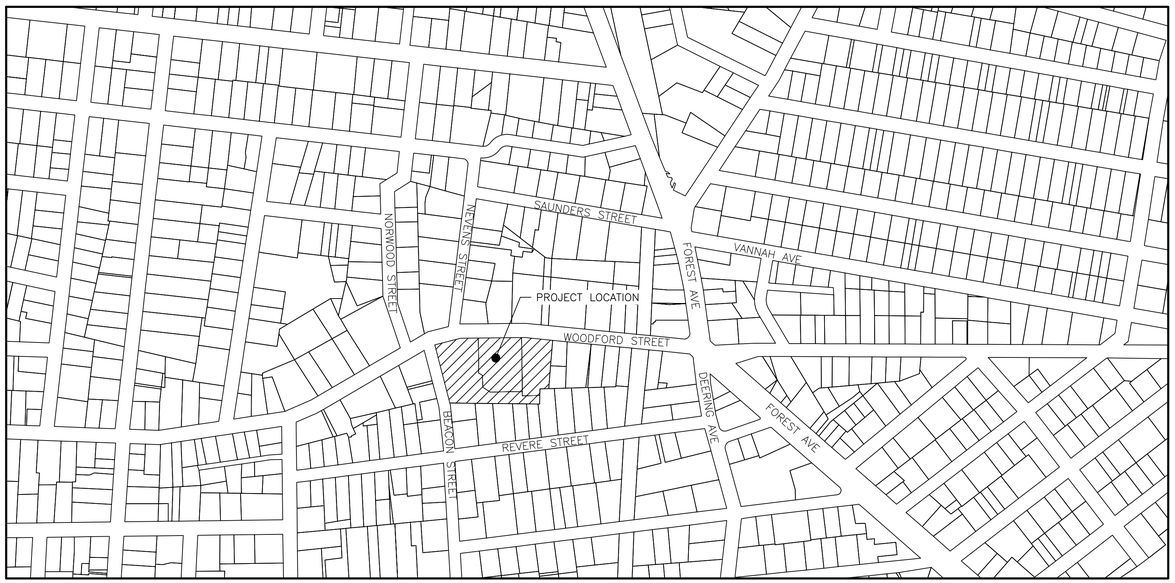
SPECTRUM CABLE
118 JOHNSON ROAD
PORTLAND, MAINE, 04102
CONTACT: STEVEN HOLMES
(207) 631-1618

TELEPHONE

CONSOLIDATED COMMUNICATIONS
(FORMERLY FAIRPOINT)
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
CONTACT: JAY CUNHA
(207) 745-9363

FIBER

FIRST LIGHT
41 STATE STREET
ALBANY NY, 12207
CONTACT: MIKE ELLINGWOOD
(207)-462-2759



VICINITY MAP
SCALE: NTS

PROJECT TEAM

DEVELOPER

COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR,
PORTLAND MAINE, 04101
CONTACT: BRIAN KILGALLEN
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ARCHITECT

CWS ARCHITECTURE
264 U.S. ROUTE 1, SUITE 100-2A
SCARBOROUGH, ME, 04074
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(207) 774-4441

SURVEYOR

OWEN HASKELL, INC
390 U.S. ROUTE 1,
FALMOUTH, MAINE, 04105
CONTACT: RANDY R. LOUBIER PLS
(207) 774-0424

CIVIL ENGINEER:

ACORN ENGINEERING, INC.
500 WASHINGTON AVE
PORTLAND, MAINE
CONTACT: PETER HEIL, P.E.
(207) 775-2655

MEP:

BENNETT ENGINEERING
P.O. BOX 297
FREEPORT, MAINE 04032
CONTACT: WILLIAM S. BENNETT, PE
(207) 865-1800

ABBREVIATIONS

PARTIAL LIST OF ABBREVIATIONS AND THEIR CORRESPONDING MEANING. PLEASE CONTACT THE ENGINEER FOR ANY CLARIFICATION

APPROX.	APPROXIMATE
BC	BOTTOM OF CURB
BMP	BEST MANAGEMENT PRACTICE
BOT.	BOTTOM
CAD	COMPUTER AIDED DESIGN
CB	CATCH BASIN
CF	CUBIC FOOT
CIP	CAST IN PLACE
CL	CENTERLINE
CM	CONSTRUCTION MANAGER
CMP	CENTRAL MAINE POWER
CONC.	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARD
DI	DUCTILE IRON PIPE
DIA.	DIAMETER
DIM.	DIMENSION
EA.	EACH
ELEC.	ELECTRICAL
ELEV.	ELEVATION
EQUIV.	EQUIVALENT
EST.	ESTIMATE
EX.	EXISTING
FFE	FINISH FLOOR ELEVATION
FT.	FEET
HDPE	HIGH DENSITY POLY ETHYLENE
ID	INNER DIAMETER
IN.	INCH
INV.	INVERT
L	LENGTH
MAX.	MAXIMUM
MDEP	MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
MDOT	MAINE DEPARTMENT OF TRANSPORTATION
M.E.P	MECHANICAL, ELECTRICAL, PLUMBING DESIGNER
MFG.	MANUFACTURED
MH	MANHOLE
MIN.	MINIMUM
O.C.	ON CENTER
OD	OUTSIDE DIAMETER
OHE/T/C	OVERHEAD ELECTRIC/TELEPHONE/CABLE
PC	PRECAST
PE	PROFESSIONAL ENGINEER
PL	PROPERTY LINE
PLS	PROFESSIONAL LAND SURVEYOR
PROP.	PROPOSED
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
PWD	PORTLAND WATER DISTRICT
R	RADIUS
RD	ROOF DRAIN
RET.	RETAINING
ROW	RIGHT OF WAY
S	SLOPE
SD	STORM DRAIN
SDR	STANDARD DIMENSION RATIO
SF	SQUARE FEET
SMH	SEWER MANHOLE
SPEC.	SPECIFICATION
TC	TOP OF CURB
TW	TOP OF WALL
TYP.	TYPICAL
UD	UNDERDRAIN
UGE	UNDERGROUND ELECTRIC
VIF	VERIFY IN FIELD

STATE OF MAINE — WILLIAM H. SAVAGE — 11419 — 1/18/24 — LICENSED PROFESSIONAL ENGINEER

STATE OF MAINE — PETER F. HEIL — 15318 — LICENSED PROFESSIONAL ENGINEER

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: COVER SHEET & LEGEND
PROJECT NAME: WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT
186 WOODFORD STREET, PORTLAND, MAINE
CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

THESE PLANS SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. AND ANY UNAUTHORIZED ALTERATIONS OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC
500 WASHINGTON AVE
PORTLAND, MAINE 04104
PO BOX 3367
(207) 775-2655

FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

DRAWING NO.
C-01

GENERAL NOTES:

1. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANIES AND DIG SAFE AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION FOR UTILITIES. OTHERWISE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES AND LOCATE ANY POTENTIAL CONFLICTS WITH THE APPROVED PLANS PRIOR TO CONSTRUCTION.

2. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL EROSION CONTROL MEASURES SHOWN ON THE PLAN. IF DEEMED NECESSARY BY THE OWNER OR OWNER'S REPRESENTATIVE (IF APPLICABLE), ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED AT NO ADDITIONAL COST TO THE OWNER.

3. THE CONTRACTOR SHALL PREPARE THEIR OWN MATERIAL SCHEDULE BASED ON THE PLANS AND FIELD VERIFICATION BY THE CONTRACTOR. ALL MATERIAL SCHEDULES SHOWN WITHIN THE PLAN SET ARE FOR GENERAL INFORMATION ONLY.

4. ALL CONSTRUCTION METHODS, TESTING AND MATERIALS SHALL CONFORM TO THE MAINE DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, THE CITY OF PORTLAND AND SERVICING UTILITY REQUIREMENTS, IF ANY. IN CASES WHERE THESE CONFLICT THE MOST STRINGENT SPECIFICATION SHALL APPLY AT NO ADDITIONAL COST TO THE OWNER.

5. THE SITE CONTRACTOR SHALL MAINTAIN A SET OF PAPER AND CAD DRAWINGS WHICH SHALL RECORD THE ACTUAL LOCATION, DIMENSIONS, ELEVATIONS, MATERIALS OF THEIR WORK, INDICATING THEREON ALL VARIATIONS FROM THE CONTRACT DRAWINGS. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH ONE COMPLETE SET OF REPRODUCIBLE RECORD DRAWINGS, IN .DWG FORMAT AND PAPER, STAMPED ''AS-BUILT''. IF AUTOCAD CAPABILITY IS NOT AVAILABLE, EXCLUDE FROM BID IN WRITING.

6. THE CONTRACTOR WILL REMAIN SOLELY AND COMPLETELY RESPONSIBLE FOR ENFORCEMENT OF AND COMPLIANCE WITH 1) ALL CONTRACT PLANS AND SPECIFICATIONS, 2) APPLICABLE INTERNATIONAL BUILDING CODE REQUIREMENTS, AND 3) ALL SITE WORKING CONDITIONS AND SAFETY REQUIREMENTS, DAY AND NIGHT, FOR BOTH PERSONS AND PROPERTY, IN EACH CASE BOTH BY THE CONTRACTOR AND ITS SUBCONTRACTORS. THESE INCLUDE ALL OSHA, NIOSH, U.S. EPA AND ANY OTHER APPLICABLE GOVERNMENTAL REGULATIONS.

7. EXISTING CONDITIONS, BOUNDARY SURVEY, AND TOPOGRAPHY FROM THE PLAN TITLED ALTA/NSPS LAND TITLE SURVEY BY **OWEN HASKELL INC. FOR COMMUNITY HOUSING OF MAINE, LAST REVISED 10/12/23.**

8. SUBSURFACE DATA HAVE BEEN OBTAINED BY **THE GEOTECHNICAL ENGINEER** AND SHALL BE INCLUDED IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL ALSO REVIEW THE REPORT PRIOR TO SUBMITTING A BID.

9. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCESS TO THE SITE AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY MARKINGS, SIGNAGE AND INCIDENTALS TO MAINTAIN A SAFE VEHICLE AND PEDESTRIAN ACCESS THOUGH THE LIFE OF THE PROJECT. THE CONTRACTOR SHALL NOTIFY THE PORTLAND PUBLIC SAFETY DIVISION ROUTINELY REGARDING TEMPORARY IMPACTS OR CHANGES TO SITE ACCESS CONDITIONS.

10. **CONSTRUCTION MANAGEMENT PLAN AND SITE LOGISTICS NARRATIVE** SHALL BE REFERRED TO FOR ANTICIPATED PROJECT SCHEDULE AND CLOSURES. TRAFFIC CONTROL SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

11. CONTRACTOR TO DETERMINE SOIL CLASSIFICATION INDEPENDENTLY FOR TRENCH, SHORING, AND OTHER SIMILAR CONSTRUCTION MEANS AND METHODS APPLICATIONS.

12. NO HOLES, TRENCHES, OR STRUCTURES SHALL BE LEFT OPEN OR UNATTENDED OVERNIGHT IN ANY AREA ACCESSIBLE TO THE PUBLIC OR WITHIN THE PUBLIC RIGHT-OF-WAY.

13. THE CONTRACTOR SHALL CONDUCT A PRE-CONSTRUCTION SURVEY OF INTERIOR SUBGRADE AND ABOVE GRADE ACCESSIBLE WALLS, CEILINGS, FLOORS, ROOF AND VISIBLE EXTERIOR AS VIEWED FROM THE GRADE LEVEL. THIS SHALL BE COMPLETED AT A MINIMUM ADJACENT STRUCTURES. PROVIDE A COPY OF THE SURVEY TO THE OWNER. DOCUMENT WITH PICTURES AT A MINIMUM.

14. **THE CONTRACTOR SHALL PROVIDE A GPS MODEL OF THE PROPERTY TO PROVIDE TO ACORN ENGINEERING.**

15. THE CONTRACTOR SHALL SURVEY ROCK SURFACE PRIOR TO EXCAVATION AND DEVELOP VOLUME CALCULATIONS TO SHARE WITH THE ENGINEER, ACORN ENGINEERING INC. (ACORN), IF ANY.

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES AND SHRUBS ON THE PROJECT WHICH ARE NOT TO BE REMOVED.

17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY TRENCH PAVEMENT THAT HAS EXPERIENCED EXCESSIVE SETTLEMENT, CRACKING, OR OPENING OF JOINTS. REPAIRS MAY INCLUDE OVERLAY. REMOVAL OF WORK MAY BE NECESSARY AFTER THE FINAL ACCEPTANCE OF WORK OR PRIOR TO THE END OF THE WARRANTY PERIOD. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.

CIVIL SITE NOTES:

1. THE CONTRACTOR SHALL SUBMIT IN WRITING ANY REQUESTS TO ACORN TO MODIFY THE CONTRACT DOCUMENTS.

2. ALL SHOP, ERECTION, AND CONSTRUCTION DRAWINGS SHALL BE CHECKED AND STAMPED BY THE CONTRACTOR PRIOR TO SUBMISSION FOR ACORN'S REVIEW. ANY UNCHECKED OR NON-STAMPED SUBMITTALS WILL BE RETURNED WITHOUT REVIEW.

3. CONTRACTOR SHALL THOROUGHLY INSPECT AND SURVEY EXISTING STRUCTURES AND SITE TO VERIFY CONDITIONS THAT AFFECT THE WORK SHOWN ON THE DRAWINGS. CONTRACTOR TO NOTIFY ACORN OF ANY DISCREPANCIES PRIOR TO PROCEEDING.

4. DETAILS SHOWN APPLY TO ALL SIMILAR CONDITIONS UNLESS OTHERWISE INDICATED.

5. ALTHOUGH ALL DUE DILIGENCE HAS BEEN APPLIED TO MAKE THE DRAWINGS AS COMPLETE AS POSSIBLE, NOT ALL DETAILS ARE ILLUSTRATED, NOR IS EVERY EXCEPTION CONDITION ADDRESSED WITHIN THE CONTRACT DOCUMENTS.

6. ALL PROPRIETARY CONNECTIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF ALL WORK, INCLUDING DIMENSION AND LAYOUT VERIFICATION, MATERIALS COORDINATION, SHOP DRAWING REVIEW, AND THE WORK OF ANY SUBCONTRACTORS.

8. UNLESS OTHERWISE SPECIFICALLY INDICATED, THE DRAWINGS DO NOT DESCRIBE OR DIRECT MEANS OR METHODS OF CONSTRUCTION.

9. THE CONTRACTOR, IN THE PROPER SEQUENCE, SHALL PERFORM OR SUPERVISE ALL WORK NECESSARY TO ACHIEVE THE FINAL COMPLETED STRUCTURE, AND TO PROTECT THE STRUCTURE, WORKMEN, AND OTHERS DURING THE CONSTRUCTION. SUCH WORK SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR EXCAVATION, FORMWORK, SCAFFOLDING, SAFETY DEVICES AND PROGRAMS OF ALL KINDS, SUPPORT AND BRACING FOR CRANES AND OTHER ERECTION EQUIPMENT.

10. DO NOT BACKFILL AGAINST RETAINING WALLS UNTIL SUPPORTING SLABS AND FLOOR FRAMING ARE IN PLACE AND SECURELY ANCHORED, UNLESS ADEQUATE BRACING IS PROVIDED. PRIOR TO BACKFILLING, CONCRETE SHALL BE CURED PER STRUCTURAL ENGINEER'S SPECIFICATIONS.

11. TEMPORARY BRACING SHALL REMAIN IN PLACE UNTIL ALL FLOORS, WALLS, ROOFS AND OTHER SUPPORTING ELEMENTS ARE IN PLACE, IF APPLICABLE.

12. ALL PAVEMENT JOINTS SHALL BE SAWCUT AND APPLIED WITH TACK COAT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.

13. ACORN BEARS NO RESPONSIBILITY FOR THE ABOVE ITEMS, AND SITE OBSERVATION VISITS DO NOT IN ANY WAY INCLUDE INSPECTION OF THEM.

14. EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SUBPART P OF 29 CRF PART 1926.650-.652 (CONSTRUCTION STANDARD FOR EXCAVATIONS).

15. ALL TRENCH PAVEMENT REPAIR SHALL BE COMPLETED WITH THE USE OF A STREET PAVER WITH A SCREED WIDTH CAPABLE OF SPANNING THE FULL WIDTH OF THE TRENCH UNLESS OTHERWISE AUTHORIZED BY THE ENGINEER.

SPECIAL INSPECTION NOTES

1. ALL SITE SOILS-RELATED WORK AND FOOTING EXCAVATIONS PRIOR TO PLACING FORMS SHALL BE REVIEWED BY THE PROJECT GEOTECHNICAL ENGINEER.

2. ALL SITE DRAINAGE-RELATED WORK SHALL BE REVIEWED BY ACORN.

3. NORMAL REVIEWS BY LOCAL BUILDING DEPARTMENT. NOTIFY 48 HOURS PRIOR TO REQUIRED REVIEW.

4. REQUIRED SPECIAL INSPECTIONS PER I.B.C. SECTION 1705.6 BY AN APPROVED SPECIAL INSPECTOR RETAINED BY OWNER. CONTRACTOR TO COORDINATE SPECIAL INSPECTIONS.

5. SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING SPECIAL INSPECTION.

   5.1. DUTIES AND RESPONSIBILITIES OF THE SPECIAL INSPECTOR SHALL BE TO OBSERVE AND/OR TEST THE WORK ASSIGNED AND OUTLINE ABOVE FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION.

   5.2. THE SPECIAL INSPECTOR SHALL FURNISH REGULAR REPORTS TO THE BUILDING OFFICIAL, THE ARCHITECT AND ENGINEER OF RECORD, AND OTHER DESIGNATED PERSONS. PROGRESS REPORTS FOR CONTINUOUS INSPECTION SHALL BE FURNISHED WEEKLY. INDIVIDUAL REPORTS OF PERIODIC INSPECTIONS SHALL BE FURNISHED WITHIN ONE WEEK OF INSPECTION DATES. THE REPORTS SHALL NOTE UNCORRECTED DEFICIENCIES, AND NET CHANGES TO THE APPROVED CONSTRUCTION DOCUMENTS AUTHORIZED BY THE ENGINEER OF RECORD.

   5.3. THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT WITHIN TEN DAYS OF THE FINAL INSPECTION STATING WHETHER THE WORK REQUIRING A SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE AND BELIEF, IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THE APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE. WORK NOT IN COMPLIANCE SHALL BE NOTED IN THE REPORT.

   5.4. SPECIAL INSPECTOR SHALL BE EMPLOYED BY COMMUNITY HOUSING OF MAINE AND COORDINATED BY THE CONTRACTOR.

LAYOUT NOTES:

1. MONUMENTS DELINEATING PROPERTY LINES OR RIGHT OF WAYS SHALL NOT BE DISTURBED DURING CONSTRUCTION OPERATIONS. IN THE CASE A MONUMENT IS DISTURBED, AT THE CONTRACTOR'S EXPENSE, THE MONUMENT SHALL BE RESET TO ITS ORIGINAL LOCATION AND ELEVATION BY A LICENSED PROFESSIONAL LAND SURVEYOR.

2. ALL DIMENSIONS ON THE FOLLOWING SHEETS TAKE PRECEDENT OVER SCALED DIMENSIONS. EACH DRAWING WITH A BAR SCALE MEANS THAT THE DRAWING/DETAIL HAS BEEN SCALED AS ACCURATELY AS POSSIBLE, AND THE BAR SCALE IS FOR GENERAL REFERENCE ONLY. IF NO BAR SCALE IS PRESENT, THEN THERE IS NO SCALE TO THAT DRAWING/DETAIL. AT NO TIME SHOULD DRAWINGS BE SCALED FROM. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, SPECIFICATIONS AND THE FIELD CONDITION SHALL BE IMMEDIATELY REPORTED TO ACORN FOR FURTHER DIRECTIONS BEFORE ANY ADDITIONAL WORK PROCEEDS.

3. SIGNAGE, STRIPING, AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).

4. ALL TRAFFIC CONTROL SIGNS INDICATED ON THE SITE LAYOUT PLAN ARE TO MEET ALL REQUIREMENTS & CONDITIONS OF THE CITY OF PORTLAND, MAINE DEPARTMENT OF TRANSPORTATION AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

5. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A LICENSED PROFESSIONAL LAND SURVEYOR TO PROVIDE A MINIMUM OF TWO TEMPORARY BENCHMARKS WITHIN THE SITE AND TO LOCATE PROPOSED STRUCTURE CORNERS.

6. CONTRACTOR TO ENSURE THAT ACCESS, INCLUDING BUT NOT LIMITED TO WALKWAYS, DRIVEWAYS, AND MAILBOXES ADJACENT TO THE PROJECT REMAIN FUNCTIONAL AND AVAILABLE FOR USE AT ALL TIMES.

PERMITTING NOTES

1. THIS PROJECT IS SUBJECT TO THE TERMS AND CONDITIONS OF A MAJOR **SITE PLAN & SUBDIVISION APPLICATION FOR THE CITY OF PORTLAND.**

2. THE CONTRACTOR SHALL REVIEW THE ABOVE REFERENCED PERMITS PRIOR TO SUBMITTING A BID FOR THIS PROJECT, AND INCLUDE COSTS AS NECESSARY TO COMPLY WITH THE CONDITIONS OF THESE PERMITS.

3. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY REQUIRES A STREET OPENING PERMIT FROM THE **CITY OF PORTLAND**. ADDITIONALLY, COORDINATE WITH THE DEPARTMENT OF PUBLIC WORKS.

GRADING AND DRAINAGE NOTES:

1. TOPSOIL STRIPPED FROM THE SITE THAT IS SUITABLE FOR REUSE AS LOAM (MEETS THE REQUIREMENTS WITHIN SECTION 615 OF THE MDOT STANDARD SPECIFICATIONS, MOST RECENT VERSION AND IS FREE OF TRACEABLE AMOUNTS OF CONTAMINANTS) SHALL BE STOCKPILED WITHIN THE PROPOSED LIMIT OF WORK AREA. THE CONTRACTOR SHALL NOT ASSUME THAT ANY STRIPPED TOPSOIL WILL BE ACCEPTABLE FOR REUSE WITH THEIR ESTIMATE.

2. THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY; NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING. DEWATERING SHALL INCLUDE TREATMENT OF SILT THROUGH THE USE OF A DIRTBAG BY ACF ENVIRONMENTAL OR APPROVED EQUIVALENT. FLOWS FROM DEWATERING ACTIVITIES SHALL NOT BE DISCHARGED INTO SANITARY SEWERS. **SEE BORING LOGS FOR ADDITIONAL INFORMATION.**

3. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ANY EASEMENT OR TEMPORARY CONSTRUCTION RIGHTS AS NECESSARY BY PRIVATE ADJACENT LAND OWNERS. THE CONTRACTOR SHALL NOT DISTURB ANY SOIL BEYOND THE PROPERTY LINE WITHOUT NOTIFYING AND OBTAINING SUCH EASEMENT OR TEMPORARY CONSTRUCTION RIGHT FROM THE ADJACENT LAND OWNERS. PRIOR TO THE CONTRACTOR PRICING THE WORK, THEY SHALL PROVIDE ACORN WITH PROOF OF SUCH EASEMENT OR TEMPORARY RIGHTS. SHOULD EASEMENTS OR TEMPORARY RIGHTS NOT BE AVAILABLE, THE CONTRACTOR SHALL INCLUDE COST FOR BRACING AND SHORING AS NECESSARY.

4. THE MINIMUM SLOPE SHALL MEET OR EXCEED 1.0% IN ALL CASES WHERE NOT NOTED ON THE GRADING PLAN. SLOPES IDENTIFIED ON THE GRADING PLAN TAKE PRECEDENT. ALL SLOPES SHALL BE AWAY FROM BUILDINGS AND TOP OF PAVEMENT SHALL BE AT OR BELOW EXISTING FINISH FLOOR ELEVATIONS.

5. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST **GEOTECHNICAL REPORT PREPARED BY THE PROJECT GEOTECHNICAL ENGINEER.**

6. CONTRACTOR TO REVIEW EXISTING SOIL CONDITIONS, TEST PITS, AND BORINGS. THERE WILL BE NO ADDITIONAL PAYMENT FOR UNSUITABLE SOILS.

7. ALL STORM DRAIN PIPE SHALL BE SMOOTH BORE INTERIOR PROVIDING A MANNINGS ROUGHNESS COEFFICIENT OF N=0.012 OR LESS.

8. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.

9. NATIVE SOILS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LIMIT THE DISTURBANCE TO SUBGRADE SOILS. SHOULD THE SUBGRADE BECOME YIELDING OR DIFFICULT TO WORK, CONTACT ACORN. THE DISTURBED AREAS SHALL BE EXCAVATED AND BACKFILLED WITH COMPACTED SELECT FILL OR CRUSHED STONE AT NO ADDITIONAL EXPENSE TO THE OWNER.

10. ALL SUBGRADE PREPARATION IS SUBJECT TO THE RECOMMENDATIONS OF THE PROJECT **GEOTECHNICAL** ENGINEER, IF APPLICABLE.

EROSION CONTROL NOTES:

1. DISTURBED AREAS ARE DEFINED AS THOSE SURFACES WHERE EXISTING VEGETATION OR STRUCTURES HAVE BEEN REMOVED, EXPOSING NATIVE SOIL TO THE ELEMENTS.

2. ALL ROUTINE WORK ACTIVITIES SHALL BE CONDUCTED IN SUCH A WAY TO LIMIT THE AMOUNT OF DISTURBED AREA AT ONE TIME TO THE EXTENT PRACTICABLE.

3. PRIOR TO THE START OF ANY CLEARING/LAND DISTURBING ACTIVITIES, THE CONTRACTOR SHALL INSTALL APPLICABLE EROSION CONTROL DEVICES SUCH AS PERIMETER SILT FENCE, AND OTHER APPLICABLE MEASURES. IN THE EVENT THE CONTRACTOR IS NOT SURE A EROSION CONTROL MEASURE SHOULD BE IMPLEMENTED, THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD TO CONFIRM IMPLEMENTATION OF ANY EROSION CONTROL DEVICES.

4. ALL GROUND AREAS GRADED FOR CONSTRUCTION SHALL BE GRADED, LOAMED, SEEDED AND MULCH SHALL BE APPLIED AS SOON AS POSSIBLE WITHIN 7 DAYS FOLLOWING THE COMPLETION OF ANY SOIL DISTURBANCE, AND PRIOR TO ANY STORM EVENT.

5. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED TO THE SATISFACTION OF THE CITY. THE CONTRACTOR SHALL REFERENCE THE APPROVED EROSION AND SEDIMENTATION CONTROL REPORT FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES IN ADDITION TO THE PLAN SET. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE D.E.P.'S PERMIT CONDITIONS, FINDINGS OF FACT AND ORDER (IF ANY), AND THE CURRENT MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

6. PRIOR TO PAVING, THE CONTRACTOR SHALL REMOVE ALL SEDIMENT FROM STORM DRAINS, CATCH BASINS, AND APPURTENANCES.

7. REFER TO THE EROSION CONTROL DETAILS & NOTES FOR ADDITIONAL INFORMATION.

UTILITY NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED UPON RECORDS OF VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO TEST PIT TO DETERMINE THE EXACT LOCATION AND ELEVATION OF UTILITIES TO COORDINATE WITH THE PROPOSED CONNECTIONS OR CROSSING. ANY DISCREPANCIES SHALL BE IMMEDIATELY REPORTED TO ACORN FOR FURTHER DIRECTIONS BEFORE ANY ADDITIONAL WORK PROCEEDS.

2. **CONTRACTOR TO BYPASS EXISTING SEWER FLOW CONTROL AT CONNECTION TO EXISTING SYSTEM AT NO ADDITIONAL COST.**

3. CONTRACTOR SHALL, AT NO ADDITIONAL COST TO THE OWNER, CONDUCT EXPLORATORY EXCAVATIONS AT LOCATIONS WHERE PROPOSED EXCAVATION WILL INTERSECT WITH EXISTING UTILITIES, PRIOR TO THE ORDERING OF STRUCTURES.

4. ALL NEW SANITARY MANHOLES SHALL BE VACUUM TESTED AND SHOWN TO PASS PRIOR TO BACKFILLING. TESTING SHALL BE COMPLETED IN ACCORDANCE WITH TECHNICAL REPORT #16 (TR-16): GUIDES FOR THE DESIGN OF WASTEWATER TREATMENT WORKS, PREPARED BY THE NEW ENGLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION.

5. SEWER MANHOLES SHALL BE 4' ID UNLESS OTHERWISE STATED ON THE PLANS.

6. CONTRACTOR TO PROVIDE 5.5' OF COVER FROM TOP OF PIPE TO FINISH GRADE FOR WATER MAINS.

7. THRUST BLOCKS SHALL BE USED FOR THRUST RESTRAINT ON WATER MAINS. DETAIL AND LIMITS FOR THRUST BLOCKS ARE SHOWN WITHIN THE PLAN SET.

8. WATER INFRASTRUCTURE SHALL BE TESTED IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT DOCUMENT ''WATER AND SEWER CONSTRUCTION SPECIFICATIONS AND PROCEDURE'', MOST RECENT REVISION.

9. ALL REQUIRED FITTINGS FOR THE WATER MAIN ARE NOT SHOWN ON DRAWINGS. CONTRACTOR SHALL FURNISH AND INSTALL ALL NECESSARY FITTINGS REQUIRED TO CONSTRUCT THE WATER MAIN IN ACCORDANCE WITH **CITY OF PORTLAND**, STATE OF MAINE, AND AMERICAN WATER WORKS ASSOCIATION STANDARDS AND REGULATIONS.

10. CONTRACTOR SHALL COORDINATE WORK REGARDING ANY WATER MAIN CONNECTION AND WATER MAIN SHUTDOWN WITH THE PORTLAND WATER DISTRICT AT LEAST SEVEN (7) DAYS PRIOR TO CONSTRUCTION.

11. ALL WATER PIPE INSTALLATION SHALL CONFORM WITH THE **PORTLAND WATER DISTRICT** SPECIFICATIONS AND PROCEDURES, MOST RECENT EDITION.

12. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

13. SEWER, GAS, TELEPHONE, ELECTRICITY, CABLE, WATER AND ANY OTHER UTILITY CONNECTIONS SHALL BE REVIEWED BY PLUMBING, ELECTRICAL, AND MECHANICAL DESIGNER FOR CONSISTENCY WITH THEIR PLANS PRIOR TO CONSTRUCTION.

14. COORDINATE EXIT POINT FOR SECONDARY UTILITY SERVICES WITH THE ARCHITECT/ELECTRICAL ENGINEER. SECONDARY LINE LOCATIONS NOT PROVIDED BY ACORN WITHIN THE UTILITY PLAN.

15. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL THE NECESSARY PERMITS FOR THE INSTALLATION OF THE UTILITIES AND STORMDRAINS WITHIN THE PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL SUBMIT A MAINTENANCE OF TRAFFIC PLAN TO THE CITY IN ACCORDANCE WITH **THE CITY OF PORTLAND TECHNICAL MANUAL** PRIOR TO ANY WORK.

16. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL BOXES, FITTINGS, CONNECTORS, COVER PLATES AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL AT NO EXTRA EXPENSE TO THE OWNER.

17. ALL UTILITY PIPES SHALL SLOPE UNIFORMLY BETWEEN ELEVATIONS INDICATED ON THE DRAWINGS. NO CRESTS OR SAGS IN THE PIPING WILL BE PERMITTED. ALL HORIZONTAL AND VERTICAL BENDS IN PRESSURIZED PIPE LINES SHALL BE SUITABLY RESTRAINED WITH THRUST BLOCKS OR RETAINER GLANDS. RETAINER GLANDS ALLOWED FOR DUCTILE IRON PIPE ONLY. PROVIDE ALL BENDS, HORIZONTAL AND VERTICAL, AS REQUIRED TO MEET THE GRADES AND ALIGNMENTS INDICATED ON THE DRAWINGS.

18. ALL WASTEWATER PIPING, EXCLUDING BUILDING DRAINS, AND ALL PRESSURIZED PIPING, TO INCLUDE WATER MAINS, INSTALLED BENEATH STRUCTURES SHALL BE ENCASED IN CONCRETE.

19. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS AND ADDITIONAL PIPE AS REQUIRED TO ENSURE A COMPLETE AND PROPERLY FUNCTIONING CONNECTION. CONTRACTOR TO VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. ADAPTERS AND FITTINGS ARE INCIDENTAL TO THE PIPE INSTALLATION.

20. WHENEVER POSSIBLE, WATER LINES SHOULD BE INSTALLED OVER WASTEWATER LINES. A MINIMUM SEPARATION OF 18 INCHES BETWEEN THE BOTTOM OF THE WATER LINE AND THE TOP OF THE WASTEWATER LINE SHALL BE MAINTAINED WHERE POSSIBLE. WHERE A WATER LINE CROSSES UNDER THE WASTEWATER LINE, A FULL LENGTH OF WASTEWATER PIPE SHALL BE CENTERED ABOVE THE WATER LINE SO THAT BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE,

21. THE CONTRACTOR SHALL BE ANTICIPATE THAT THE NATIVE SILT AND CLAY SOILS WILL NOT BE SUITABLE FOR PIPE TRENCH BACKFILL IN PAVED AREAS.

22. GROUNDWATER SHALL BE CONTROLLED TO A LEVEL OF AT LEAST ONE FOOT BELOW SUBGRADE OF THE PIPE OR STRUCTURE. THE CONTRACTOR SHALL MAINTAIN THE LOWERED GROUNDWATER LEVEL UNTIL CONSTRUCTION HAS BEEN COMPLETED TO SUCH AN EXTENT THAT THE STRUCTURES OR PIPES WILL NOT BE FLOATED OR OTHERWISE DAMAGED.

23. EXCAVATION TO SUBRADE IN NATIVE SILT AND CLAY SHALL BE COMPLETED WITH A SMOOTH EDGE BUCKET TO MINIMIZE SUBGRADE DISTURBANCE.

24. ALL ADJUSTMENTS TO FINISHED GRADE ARE TO BE COMPLETED BY THE CONTRACTOR. THE CONTRACTOR SHALL CONFIRM STRUCTURES THAT REQUIRE ADJUSTMENT WITH THE ENGINEER OR OWNERS REPRESENTATIVE PRIOR TO ADJUSTING FRAMES.

DEMOLITION NOTES:

1. THE FOLLOWING ITEMS ARE TYPICAL OF MATERIAL WHICH MAY BE ON SITE:
   - ROCK AND CONCRETE FOUNDATIONS
   - CONCRETE SLABS
   - BITUMINOUS ASPHALT PAVEMENT
   - CONCRETE PADS AND BLOCKS
   - FENCE POST AND FENCING
   - UNDERGROUND UTILITY LINES
   - ABOVE AND OR BELOW FUEL OIL AND PROPANE GAS TANKS
   - STORM DRAIN PIPES AND APPURTENANCE STRUCTURES
   - OTHER TRASH & MISCELLANEOUS SOLID WASTES

2. THE CONTRACTOR IS ADVISED TO VISIT THE SITE TO CONFIRM DEMOLITION ITEMS SINCE THE LIST IS NOT INCLUSIVE OF THE SITE CONDITIONS WHICH MAY BE ENCOUNTERED

3. ALL DISPOSAL OF DEMOLITION DEBRIS OR WASTE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS. CONTRACTORS SHALL PROVIDE OWNER WITH APPROPRIATE "BILLS OF LADING" DEMONSTRATING PROPER DISPOSAL OF ALL MATERIALS.

4. **THE CLIENT HAS NOT REQUESTED NOR HAS ACORN COMPLETED A PHASE I – ENVIRONMENTAL SITE ASSESSMENT FOR THE PROPERTY.**

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR	BY	DATE
CSS	PFH	12/1/23
MAJOR SITE PLAN	PFH	12/21/23

DRAWING NAME: **GENERAL NOTES**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT:
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

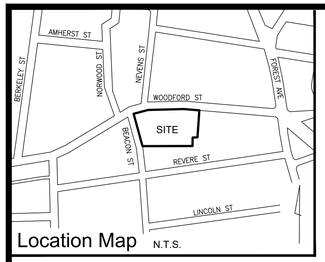
THESE PLANS SHALL NOT BE MODIFIED IN ANY WAY WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY UNAUTHORIZED MODIFICATIONS OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC
70 ZOO ROAD, KENNEBUNK, MAINE 04043
PO BOX 592, (207) 775-2655

FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-02



Location Map N.T.S.

Flood Zone Note

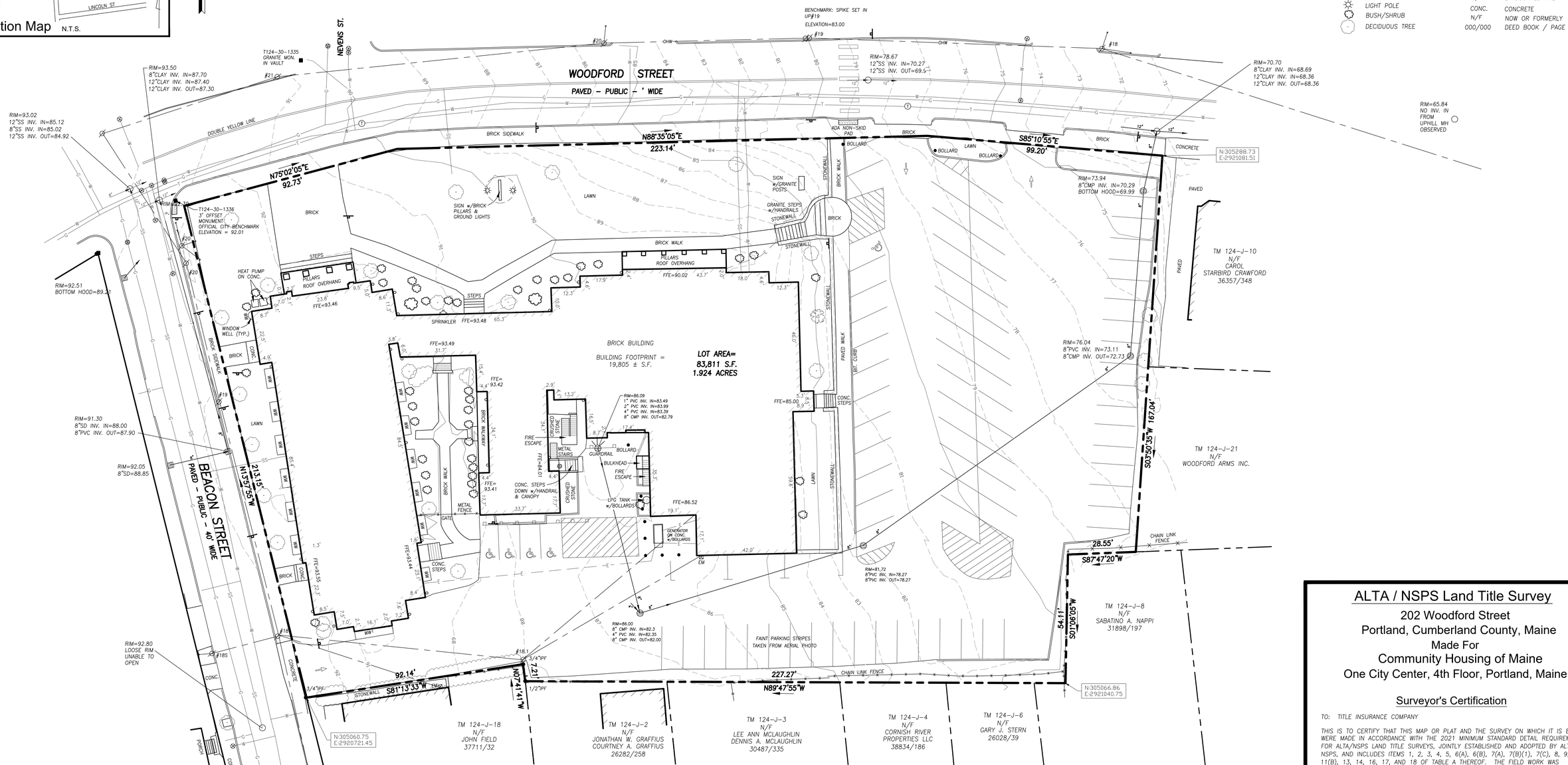
BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE C (AREAS OF MINIMAL FLOODING) OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 230051 0013B, WHICH BEARS AN EFFECTIVE DATE OF JULY 17, 1986 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

Zoning Information

ZONES: B1, B2, R5

Legend

●	IRON PIPE OR ROD FOUND	⊐⊏	GUARDRAIL
■	MONUMENT FOUND	═══	CURB
⌀	UTILITY POLE	-x-x-	FENCE
○	MANHOLE	OHW	OVERHEAD WIRES
EM	ELECTRIC METER	W	WATER LINE
	SIGN	G	GAS LINE
●	BOLLARDS	T	TELEPHONE
	CATCH BASIN	90	1' CONTOUR
	HYDRANT	FFE	FINISHED FLOOR ELEVATION
	WATER VALVE OR SHUTOFF	W/W	WINDOW WELL
	GAS VALVE	L/S	LANDSCAPED AREA
	LIGHT POLE	CONC.	CONCRETE
	BUSH/SHRUB	N/F	NOW OR FORMERLY
	DECIDUOUS TREE	000/000	DEED BOOK / PAGE



SCALE : 1" = 20'

0' 10' 20' 40'

Plan References

1. CITY OF PORTLAND STREET RIGHT OF WAY RECORDS.
2. PROPERTY IN PORTLAND MAINE BELONGING TO HEIRS OF G. W. SMITH SURVEYED BY E. C. JORDAN & CO. AS RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 17, PAGE 9.
3. CONDOMINIUM PLAT, 174–176 BEACON STREET CONDOMINIUM, #174–176 BEACON STREET, PORTLAND, MAINE MADE FOR RECORD OWNERS BURAK SEZEN AND SONYA LACHANGE JANUARY 3, 2022 BY OWEN HASKELL, INC.
4. PLAN OF LAND IN PORTLAND, MAINE FOR WOODSFORDS CONGREGATIONAL PARISH, JUNE 1, 1977 BY OWEN HASKELL, INC.
5. SURVEY PLAN OF WOODFORD ARMS CONDOMINIUM, WOODFORDS STREET, PORTLAND, MAINE MADE FOR VILLAGE ASSOCIATES, PORTLAND, MAINE DEC. 9, 1980 REV. 1 5/23/86 BY OWEN HASKELL, INC.
6. PLAN OF PROPERTY IN PORTLAND, MAINE MADE FOR WOODFORDS CONGREGATIONAL CHURCH JUNE 5, 1956 REVISED MARY 17, 1999 BY H.I. & E.C. JORDAN.

Utility Note

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES. CALL 1-888-DIGSAFE AT LEAST THREE BUSINESS DAYS BEFORE PERFORMING ANY CONSTRUCTION. DUE TO OSHA CONFINED SPACE REQUIREMENTS, ALL INVERTS AND PIPE SIZES MUST BE VERIFIED PRIOR TO ANY CONSTRUCTION.

General Notes

1. OWNER OF RECORD: WOODFORDS CONGREGATIONAL CHURCH OF THE UNITED CHURCH OF CHRIST
   CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 30671 PAGE 65
2. LOCUS IS SHOWN AS LOT 5 BLOCK J ON CITY OF PORTLAND'S ASSESSORS MAP 124.
3. BEARINGS ARE BASED ON CITY CONTROL POINTS SHOWN.
4. ELEVATIONS ARE BASED ON CITY DATUM.
5. THERE ARE 80 REGULAR SPACES AND 5 HANDICAP SPACES, FOR A TOTAL OF 85 PARKING SPACES.
6. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, BUILDING ADDITIONS, OR RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS WAS OBSERVED.
7. NO PROPOSED CHANGES IN STREET LINES IS KNOWN BY THIS SURVEYOR.
8. THE SEWER SERVICE LOCATIONS ARE APPROXIMATE BASED ON CITY PLANS.

ALTA / NSPS Land Title Survey

202 Woodford Street
Portland, Cumberland County, Maine
Made For
Community Housing of Maine
One City Center, 4th Floor, Portland, Maine

Surveyor's Certification

TO: TITLE INSURANCE COMPANY

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 6(A), 6(B), 7(A), 7(B)(1), 7(C), 8, 9, 10, 11(B), 13, 14, 16, 17, AND 18 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON FEBRUARY 23, 2022, WITH ADDITIONAL LOCATION ON OCTOBER 11, 2023.

RANDY R. LOUBIER
PROFESSIONAL LAND SURVEYOR NO. 2407

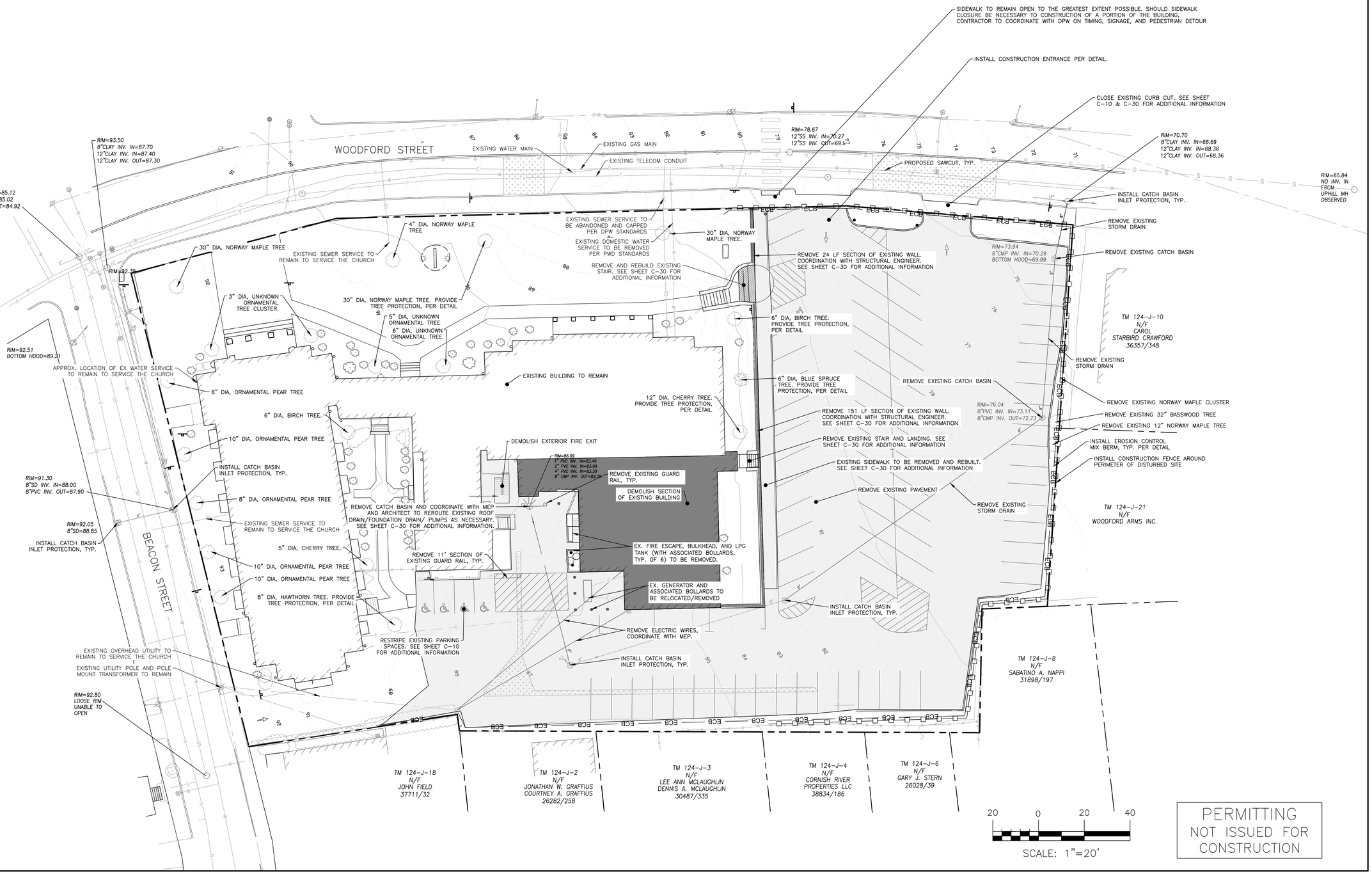
DATE OF PLAT OR MAP: MARCH 10, 2022
DATE OF LAST REVISION: OCTOBER 12, 2023

OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS
390 U.S. ROUTE 1, UNIT 10, FALMOUTH, ME 04105 TEL. 207-774-0424

DRAWN BY: RRL / JLW	FIELD BOOK: FILE		JOB NO. 2021-365 P
CHECKED BY: RRL	SCALE: 1" = 20'		DRWG. NO. 1

GENERAL NOTES:

1. EXISTING ASPHALT TO BE REMOVED SHALL BE STRIPPED AND PROPERLY DISPOSED OF OFFSITE.
2. ALL DISPOSAL OF DEMOLITION DEBRIS OR WASTE SHALL BE IN ACCORDANCE WITH ALL LOCAL, STATE, & FEDERAL REGULATIONS. CONTRACTOR SHALL PROVIDE OWNER WITH APPROPRIATE "BILLS OF LADING" TO DEMONSTRATE PROPER DISPOSAL OF ALL MATERIALS.
3. SITE DEMOLITION SHALL NOT OCCUR UNTIL PROPER ABATEMENT PROCEDURES HAVE OCCURRED. ABATEMENT, IF NECESSARY, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANIES AND DIG SAFE AT LEAST 72 HOURS PRIOR TO EXCAVATION TO REQUEST EXACT FIELD LOCATION FOR UTILITIES. OTHERWISE IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE LOCATION OF UNDERGROUND UTILITIES AND LOCATE POTENTIAL CONFLICT WITH THE APPROVED PLANS PRIOR TO CONSTRUCTION.
5. ALL CONSTRUCTION SIGNAGE IS TEMPORARY AND WILL BE REMOVED AT PROJECT COMPLETION. FINAL SIGNAGE WORDING AND PLACEMENT LOCATION TO BE ACCEPTED BY THE CITY.
6. SEDIMENT BARRIERS TO BE PLACED DIRECTLY ON THE FRONT AND SIDE PROPERTY LINES, DOWN GRADIENT OF THE PROPOSED PROJECT WORK PER DETAIL; FENCES ARE OFFSET OF THE PROPERTY LINES AS SHOWN ON THE PLAN FOR CLARITY PURPOSES AND DO NOT NECESSARILY DEPICT THE PHYSICAL LOCATION.
7. CONTRACTOR SHALL PLACE CATCH BASIN INLET PROTECTION ON CATCH BASINS AND FIELD INLETS DOWN-GRADIENT OF ALL NON-STABILIZED SURFACES, PER DETAIL.
8. DEMOLITION PLAN IS NOT INCLUSIVE OF ALL EXISTING ITEMS TO BE REMOVED AS PART OF SITE CONSTRUCTION INCLUDING BUT NOT LIMITED TO LANDSCAPING, UTILITIES, WORK WITHIN THE ROW, ETC. ALL DEMOLITION WORK SHALL BE IN ACCORDANCE WITH THE CITY OF PORTLAND REGULATIONS.
9. CONTRACTOR TO BE RESPONSIBLE FOR PROVIDING OFF-SITE PARKING TO EMPLOYEES; ON-SITE PARKING WILL NOT BE PROVIDED OR GUARANTEED. CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING THE APPROPRIATE PERMITS FROM THE CITY FOR CLOSING ANY ON-STREET PARKING SPACES DURING THE CONSTRUCTION PERIOD.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR SNOW REMOVAL ALONG CONSTRUCTION FENCE AND GATE.
11. CONTRACTOR TO SUBMIT A DEWATERING PLAN FOR REVIEW AND APPROVAL TO THE DEPARTMENT OF PUBLIC WORKS PRIOR TO THE PRE-CONSTRUCTION MEETING, DURING THE BUILDING PERMIT APPLICATION PROCESS, OR PRIOR TO ADVANCED SITE WORK. CONTACT THE DEPARTMENT OF PUBLIC WORKS FOR ADDITIONAL INFORMATION AND CURRENT REGULATIONS.



PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: **CONSTRUCTION MANAGEMENT PLAN**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT:
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

THESE PLANS SHALL NOT BE MODIFIED WITHOUT THE WRITTEN AUTHORIZATION OF ACORN ENGINEERING, INC. ANY MODIFICATIONS MADE TO THESE PLANS WITHOUT THE WRITTEN AUTHORIZATION OF ACORN ENGINEERING, INC. SHALL BE DONE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
70 COMMERCIAL STREET, SUITE 104
PO BOX 7234, PORTLAND, MAINE 04104
(207) 775-2655

FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
2/7/24

DRAWING NO.
C-03

SPACE AND BULK STANDARDS

ZONE: B2 – COMMUNITY BUSINESS	REQUIRED	EXISTING	LOT 1	PROPOSED LOT 2	PROPOSED LOT 3
MIN. LOT AREA	NONE	83,811 SF	37,208 SF	27,961 SF	18,641 SF
MIN. LOT AREA PER DWELLING UNIT (OFF–PENINSULA)*	1,000 SF / UNIT 400 SF/ UNIT*	N/A	N/A	753*	444*
BUILDING (PRINCIPAL): MAX. FRONT SETBACK	10'**	46.10'	EX. 46.10'	45.61'	3.78'
BUILDING MIN. SIDE SETBACK	NONE	11.56'	11.56'	0'	5.67'
BUILDING MIN. REAR SETBACK	10' 0'*	24.42'	24.42'	11.80'	18.56'
BUILDING MIN. SIDE STEPBACK ABOVE 35'	5'	–	–	N/A	N/A
BUILDING MIN. REAR STEPBACK ABOVE 35'	15'	–	–	N/A	N/A
MIN. STREET FRONTAGE	20'	628.22'	369.13'	152.56'	106.52'
LOT COVERAGE	N/A	24.1%	28.3%	37.0%	44.0%
MAX. BUILDING HEIGHT	45' 70'*	N/A	N/A	41.07'	46.26' *
IMPERVIOUS SURFACE RATIO	RESIDENTIAL: NONE	75.3%	66.0%	75.1%	88.3%

* PER CITY OF PORTLAND LAND USE CODE, TABLE 18–C: BONUSES FOR ELIGIBLE PROJECTS: (75% LOW INCOME UNITS GRANTS A 2.5X BONUS DENSITY FROM THE BASE OF 1,000 SF/UNIT TO 400 SF/UNIT) & (GRANTS 10' SETBACK REDUCTIONS) & (GRANTS AN ADDITIONAL 25' BUILDING HEIGHT).

PARKING SUMMARY

	UNITS	SPACES REQUIRED	EXISTING	PROPOSED	PROPOSED EV
MULTIFAMILY	82	1 SPACE PER DWELLING UNIT = 82 SPACES*	–	–	–
PLACES OF ASSEMBLY	APPROX. 5,200SF FLOOR AREA	1 SPACE PER 150 SF OF FLOOR AREA = 35 SPACES	–	–	–
ADA (8'X18')	–	–	5	2	–
ADA (11'X20')	–	–	–	1	–
STANDARD (9'X18')	–	–	36	10	–
LOW TURNOVER (8.5' X 18')	–	–	0	37	12
COMPACT (8' X 15')	–	–	–	3	–
PARALLEL (8' X 20')	–	–	3	4	–
ANGLED 60° (9' X 18')	–	–	41	0	–
TOTAL SPACES	–	117*	85	57*	12

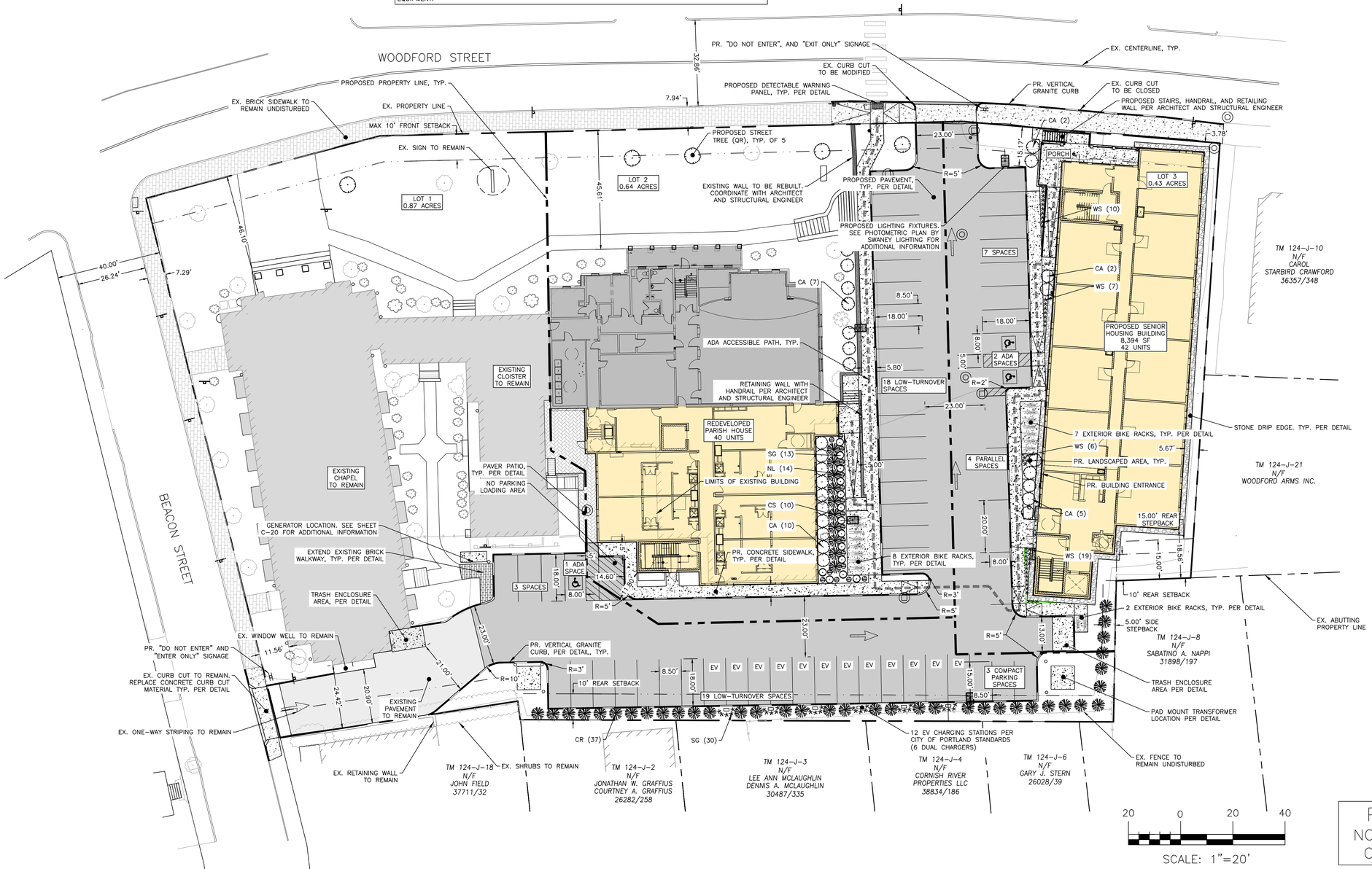
* PER THE CITY OF PORTLAND LAND USE CODE, TABLE 19–B: CATEGORICAL EXCEPTIONS TO OFF–STREET PARKING MINIMUMS.
1. NO OFF STREET PARKING SHALL BE REQUIRED FOR NON RESIDENTIAL USES IN THE B–2 ZONE.
2. NO OFF–STREET PARKING SHALL BE REQUIRED WITHIN 1/4 MILE OF FIXED ROUTE TRANSIT SERVICE. NEW USES OR CHANGES OF USE OF MORE THAN 10,000 SF TAKING ADVANTAGE OF THIS EXCEPTION SHALL BE REQUIRED TO PROVIDE A TRANSPORTATION DEMAND MANAGEMENT PLAN IF THEY USE THIS PROVISION IN LIEU OF PARKING REQUIREMENTS.
3. AFFORDABLE HOUSING: THE PLANNING BOARD MAY ESTABLISH A PARKING REQUIREMENT WITHIN THAT IS LESS THAN 1 SPACE PER AFFORDABLE HOUSING UNIT REGARDLESS OF SIZE OF STRUCTURE.
** IN ACCORDANCE WITH SECTION 14.6.1 OF THE CITY OF PORTLAND LAND USE CODE, AND SECTION 1.14 OF THE PORTLAND TECHNICAL MANUAL, NEW PARKING LOTS WITH FIVE OR MORE SPACES SHALL INCLUDE ENERGIZED ELECTRICAL OUTLETS OR INSTALLED CHARGERS CAPABLE OF PROVIDING LEVEL 2 ELECTRIC VEHICLE CHARGING OR HIGHER TO 20% OF PARKING SPACES. REMAINING SPACES MUST BE SERVED BY SUFFICIENT CONDUIT, WIRING, AND ELECTRICAL SERVICE TO ALLOW FOR FUTURE INSTALLATION OF ELECTRIC VEHICLE SUPPLY EQUIPMENT.

GENERAL NOTES:

1. ALL SIDEWALK AND VERTICAL GRANITE CURB TO BE REPLACED SHALL BE REBUILT TO CITY OF PORTLAND STANDARD.
2. ALL PAVEMENT STRIPING AND MARKINGS SHALL COMPLY TO CITY OF PORTLAND STANDARDS.
3. ANY ASPHALT TO BE REMOVED SHALL BE STRIPPED AND PROPERLY DISPOSED OF OFFSITE.
4. CURB TO BE REMOVED, STOCKPILED AND RESET IN ACCORDANCE WITH DETAIL. BROKEN CURB SHALL BE PROPERLY DISPOSED OF AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
5. ALL RAMPS TO CONFORM TO ADA GUIDELINES. SLOPE SHALL NOT EXCEED 1 INCH PER FOOT.
6. ALL SITE SIGNAGE TO COMPLY WITH MUTCD STANDARDS. CONTRACTOR TO COORDINATE AND INSTALL.
7. FOLLOWING COMPLETION OF CONSTRUCTION, THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND MANAGEMENT OF DRIVEWAYS, SITE LIGHTING, TRASH REMOVAL AND SNOW REMOVAL.
8. CONTRACTOR SHALL VERIFY BOTTOM AND TOP OF CURB ELEVATIONS ALONG BUILDING FRONTAGES PRIOR TO CONSTRUCTION OF THE FOUNDATIONS. CONTACT ENGINEER PRIOR TO CONSTRUCTION IF DISCREPANCIES ARE FOUND.
9. DURING LARGE SNOW EVENTS, THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR SNOW REMOVAL FOR THE PARCEL
10. PLAN REFERENCE
    10.1. PLAN TITLED ALTA/NSPS LAND TITLE SURVEY MADE BY OWEN HASKELL, INC., FOR COMMUNITY HOUSING OF MAINE, LAST REV. 10/12/2023.
11. LANDSCAPE NOTES
    11.1. INSTALLING DEDICATED MULCH RINGS AROUND EXISTING AND NEWLY PLANTED TREES
    11.2. PROVIDING DECIMATION AND SOIL AMENDMENTS (COMPOST) FOR EXISTING TREES
    11.3. AIR SPADING THE ROOT ZONE OF EXISTING TREES AND APPLYING COMPOST

PLANT SCHEDULE

ID	BOTANICAL NAME	COMMON NAME	QTY	SIZE
TREES				
QR	QUERCUS RUBA	NORTHERN RED OAK	5	2" CAL
SHRUBS				
CS	CORNUS SERICEA	RED TWG DOGWOOD	10	3 GAL.
CA	CLETHRA ALNIFOLIA	RUBY SPICE SUMMERSWEET	26	3 GAL.
CR	CORNUS RACEMOSA	GRAY DOGWOOD	37	3 GAL.
PERENNIALS				
NL	NARROW–LEAVED BLUE–EYED GRASS	SISYRINCHIUM ANGUSTIFOLIUM	14	1 GAL.
WS	WOODLAND STONECROP	SEDUM TERNATUM	42	1 GAL.
SG	PANICUM SWITCH GRASS	VIRGATUM 'CHEYENNE SKY'	43	1 GAL



PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: SITE PLAN
PROJECT NAME: WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT
186 WOODFORD STREET, PORTLAND, MAINE
CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
P.O. BOX 2165, SOUTH PORTLAND, MAINE 04104
(207) 775–2655

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STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
2/7/24

DRAWING NO.
C-10

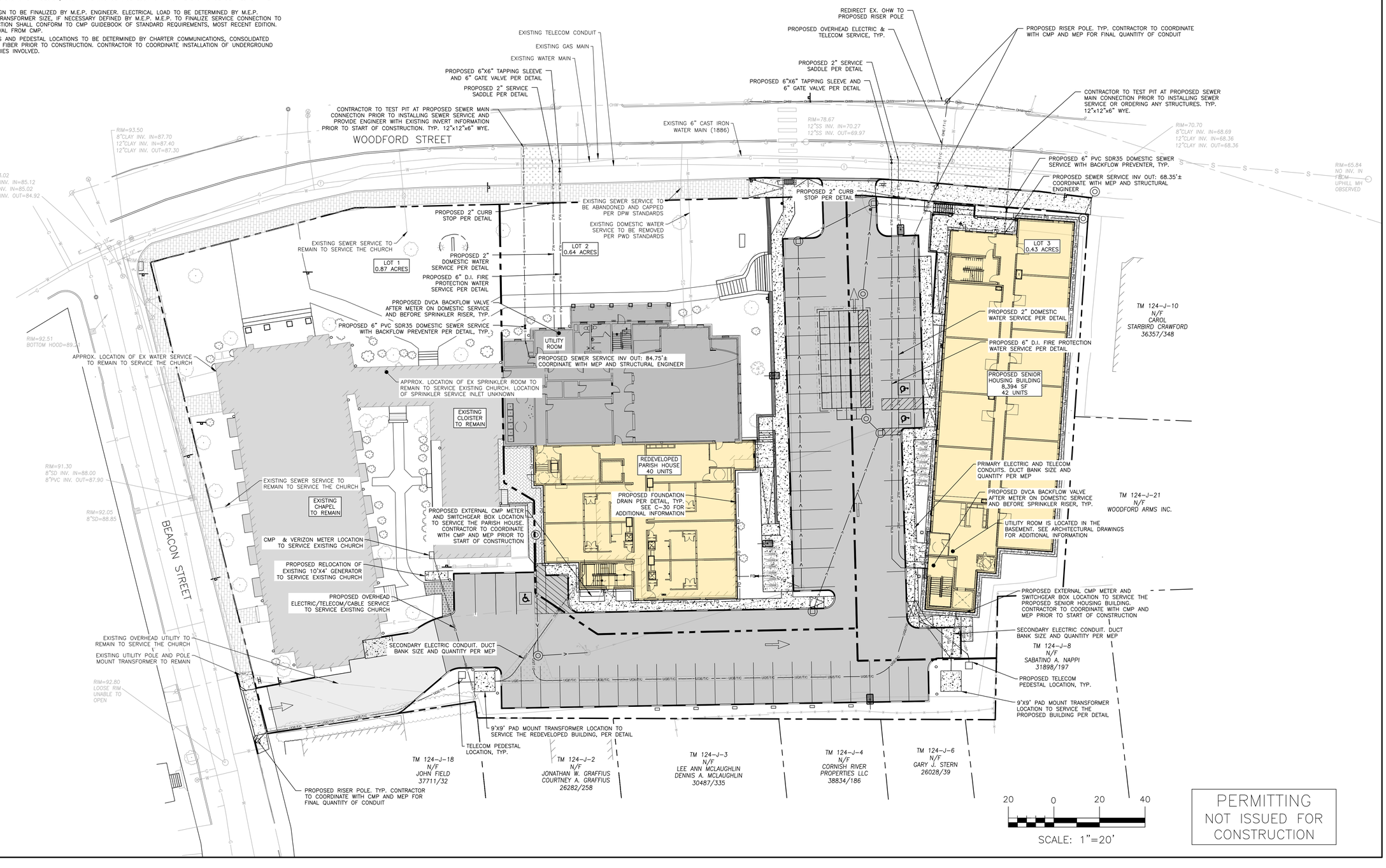
GENERAL NOTES:

1. LOCATION OF PROPOSED CONNECTIONS ARE APPROXIMATE. CONTRACTOR TO CONTACT ENGINEER IF FIELD INFORMATION VARIES FROM INFORMATION ON PLANS.
2. CONTRACTOR IS TO BE CAUTIONED THAT CERTAIN LOCATIONS AND/OR ELEVATIONS OF EXISTING UTILITIES HAVE BEEN PROVIDED THROUGH UTILITY COORDINATION OR OTHER OBSERVATIONS. INFORMATION IS NOT TO BE RELIED UPON AS EXACT OR COMPLETE. CONTRACTOR TO FIELD VERIFY AND COORDINATE WITH UTILITY COMPANY AND DIG SAFE NO LESS THAN 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS INDICATED IN THE CONTRACT DOCUMENTS. CONTRACTOR TO NOTIFY ENGINEER OF ANY DIFFERENTIATIONS FROM EXISTING CONDITIONS, INCLUDING UTILITY INFORMATION, PRIOR TO ANY CHANGES.
3. FOR ALL UTILITIES, ACORN ENGINEERING DESIGN LIMITS END AT EXTERIOR WALL OF BUILDING. METERING OF UTILITIES TO BE COMPLETED BY M.E.P. UNLESS SPECIFIED OTHERWISE.
4. CONTRACTOR TO COORDINATE WITH ARCHITECT ON FINAL UTILITY CONNECTIONS WITHIN THE BUILDING.
5. SEWER UTILITIES: CONTRACTOR TO COORDINATE WITH ARCHITECT FOR FINAL SERVICE CONNECTION. SEWER UTILITIES TO BE CONSTRUCTED IN ACCORDANCE WITH CITY OF PORTLAND TECHNICAL STANDARDS. VALVE FOR BACKFLOW PREVENTION SHALL BE INSTALLED WITHIN THE THE PROPERTY LINES FOR EACH CITY SEWER CONNECTION. CONTACT ENGINEER IF INVERT FIELD CONDITIONS VARY FROM DESIGN.
6. WATER UTILITIES: FINAL PIPE SIZING PROVIDED BY M.E.P. ENGINEER AND FIRE PROTECTION DESIGNER. INTERNAL METERING, BACKFLOW PREVENTION, AND PRESSURE REDUCERS TO BE COMPLETED BY M.E.P. ENGINEER. DOMESTIC WATER PIPE SIZES WILL DETERMINE THE FINAL WATER METERING OPTIONS. METER MAY BE SMALLER THAN PROPOSED WATER MAIN. WATER METERING, PRESSURE REDUCER AND BACKFLOW PREVENTION TO BE IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT STANDARDS. CONTRACTOR TO FOLLOW METERING GUIDELINES OF THE PORTLAND WATER DISTRICT AND CITY OF PORTLAND.
7. GAS UTILITIES: PROJECT GAS LOAD, GAS UTILITY DESIGN, AND FINAL GAS SERVICE LOCATION AND METERS TO BE DEFINED BY M.E.P. AND IN ACCORDANCE WITH UNITIL.
8. ELECTRIC UTILITIES: ELECTRIC DESIGN TO BE FINALIZED BY M.E.P. ENGINEER. ELECTRICAL LOAD TO BE DETERMINED BY M.E.P. ENGINEER. METER LOCATION AND TRANSFORMER SIZE, IF NECESSARY DEFINED BY M.E.P. M.E.P. TO FINALIZE SERVICE CONNECTION TO BUILDING. ALL ELECTRIC CONSTRUCTION SHALL CONFORM TO CMP GUIDEBOOK OF STANDARD REQUIREMENTS, MOST RECENT EDITION. DESIGN SUBJECT TO FINAL APPROVAL FROM CMP.
9. CABLE AND TELEPHONE PULLBOXES AND PEDESTAL LOCATIONS TO BE DETERMINED BY CHARTER COMMUNICATIONS, CONSOLIDATED COMMUNICATIONS AND FIRST LIGHT FIBER PRIOR TO CONSTRUCTION. CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND UTILITIES WITH ALL UTILITY COMPANIES INVOLVED.

MINIMUM HORIZONTAL UTILITY SEPARATION

UTILITY	UGE/T/C	WATER	SEWER	GAS	STORMWATER
UGE/T/C	–	6'	5'	4'	6'
WATER	6'	–	5'*	6'	3'
SEWER	5'	5'*	–	5'	10'
GAS	4'	6'	5'	–	3'
STORMWATER	6'	3'	10'	3'	–

*PERMISSIBLE ONLY IF SEWER IS LAID MIN. 18" BELOW WATER SERVICE; OTHERWISE, 10' OF HORIZONTAL SEPARATION MUST BE MAINTAINED.



PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: UTILITY PLAN
PROJECT NAME: WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT
186 WOODFORD STREET, PORTLAND, MAINE
CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

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ACORN ENGINEERING, INC
PO BOX 222 KENNEBUNK, MAINE 04104
(207) 775-2655

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DRAWN BY:	DSH
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STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
2/7/24

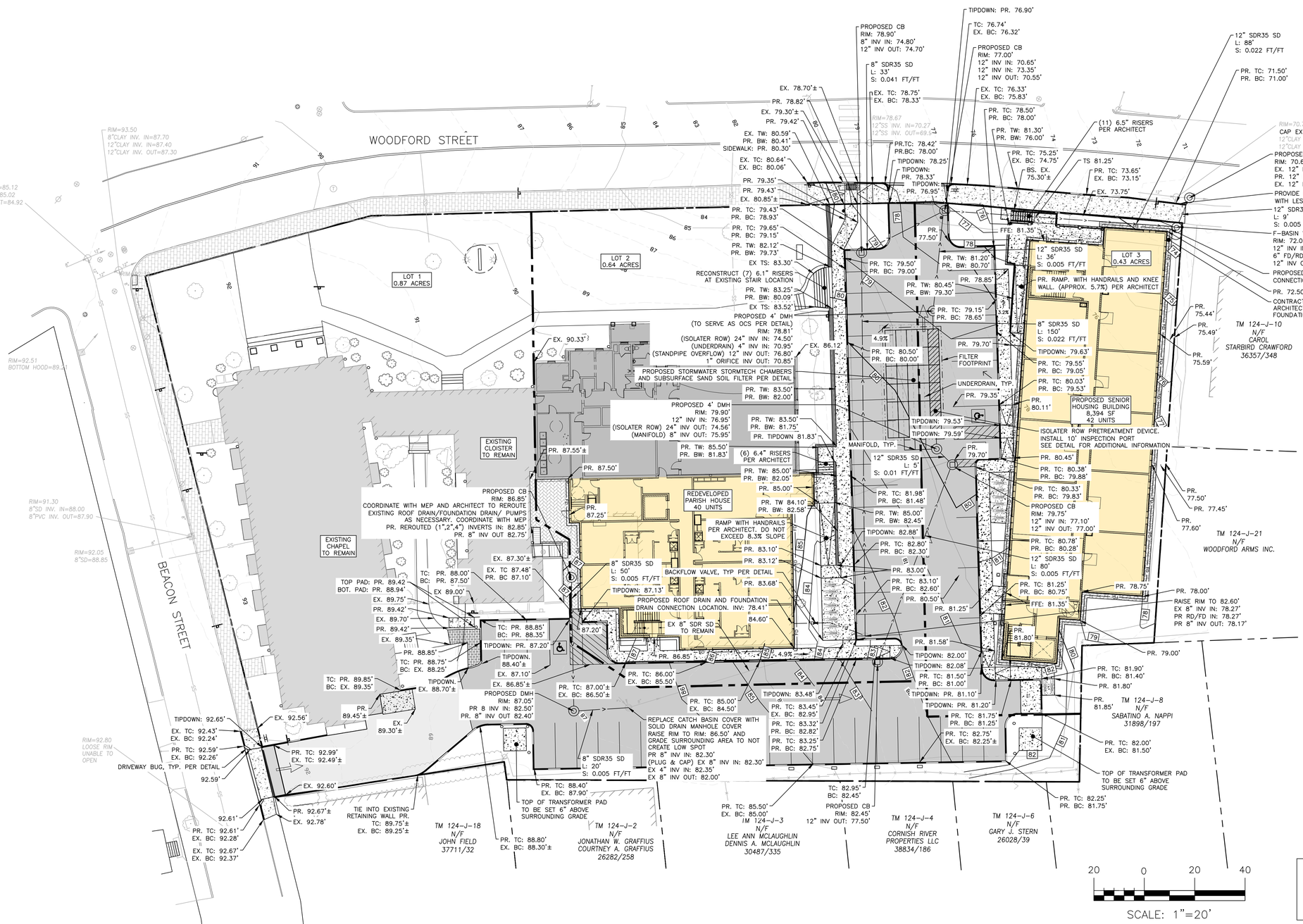
DRAWING NO.
C-20

GENERAL NOTES:

1. ALL WORK WITHIN THE CITY STREET RIGHT OF WAY SHALL MEET CITY OF PORTLAND TECHNICAL MANUAL STANDARDS.
2. DESIGN OF TEMPORARY SOIL RESTRAINT MEASURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IF NECESSARY FOR CONSTRUCTION.
3. CONTRACTOR SHALL ENSURE THAT UNDERDRAINS ARE CONSTRUCTED WITH POSITIVE OUTLET TO PROPOSED CONNECTIONS.
4. CATCH BASIN INLET PROTECTION TO BE INSTALLED WITHIN ANY STRUCTURES DOWNGRADIENT OF ACTIVE CONSTRUCTION.
5. SEDIMENTATION BARRIERS ARE TO BE INSTALLED DOWNGRADIENT OF ALL ACTIVE CONSTRUCTION WORK PER DETAIL. BARRIERS TO NOT EXTEND PAST PROPERTY LINES; BARRIERS SHOWN OFFSET FROM PROPERTY LINES ON PLANS FOR VISUAL PURPOSES ONLY.
6. CONTRACTOR SHALL VERIFY BOTTOM AND TOP OF CURB ELEVATIONS ALONG BUILDING FRONTAGES PRIOR TO CONSTRUCTION OF THE FOUNDATIONS. CONTACT ENGINEER PRIOR TO CONSTRUCTION IF DISCREPANCIES ARE FOUND.

SENIOR HOUSING BUILDING ELEVATION
NORTH: 81.35'
EAST: 72.50'
SOUTH: 78.00'
WEST: 81.80'
AVERAGE GRADE: 78.42'
FFE: 81.35'
TOP OF BUILDING ELEVATION: 125.35'
BUILDING HEIGHT: 46.93'
MAX ALLOWABLE HEIGHT: 70'

PARISH HOUSE BUILDING ELEVATION
NORTH: 90.33'
EAST: 86.12'
SOUTH: 84.60'
WEST: 87.20'
AVERAGE GRADE: 87.06'
FFE: 85.00'
TOP OF BUILDING ELEVATION: 129.00'
BUILDING HEIGHT: 41.94'
MAX ALLOWABLE HEIGHT: 70'



PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: **GRADING PLAN**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

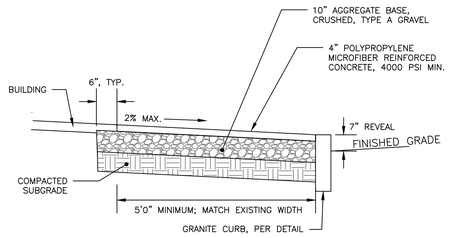
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ACORN ENGINEERING, INC.
ONE CITY CENTER, 4TH FLOOR PORTLAND, ME 04101
PO BOX 3331 (207) 775-2655

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STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
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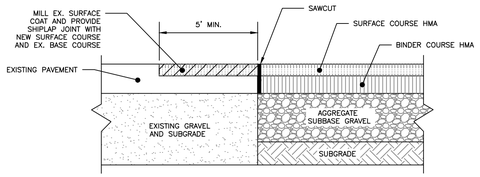
1. AT A MINIMUM, TESTING SHALL CONSIST OF ENTRAINED AIR AND SLUMP TESTS ON SITE PRIOR TO POURING THE SIDEWALKS. ENTRAINED AIR TESTS SHALL BE DONE IN ACCORDANCE WITH AASHTO T152. TEST FIRST TWO LOADS AND EVERY THIRD LOAD THEREAFTER PROVIDED CONSISTENT RESULTS ARE ACHIEVED.
2. SLABS SHALL BE PLACED ALTERNATELY IN LENGTHS NOT TO EXCEED 30 FEET OR AS DIRECTED AND SHALL BE SEPARATED BY AN EXPANSION JOINT OF PREFORMED EXPANSION FILLER ½ INCH IN THICKNESS.
3. WHEN CONSTRUCTED ADJACENT TO A BUILDING, RETAINING WALL OR OTHER FIXED STRUCTURE, A ½ INCH THICK PREFORMED JOINT FILLER SHALL BE USED BETWEEN THE SLAB AND THE STRUCTURE.
4. THE SIDEWALK SURFACE SHALL BE SCORED INTO BLOCK UNITS NO GREATER THAN 40 SQUARE FEET AS DIRECTED. THE DEPTH OF THE SCORING SHALL BE AT LEAST ONE QUARTER OF THE THICKNESS OF THE SLAB.
5. ANY MATCHING INTO EXISTING SIDEWALKS SHALL BE DONE SO WITH A CLEAN VERTICAL FACE CONNECTION.
6. THE SURFACE SHALL BE FINISHED TO PRODUCE A BROOMLIKE "BRUSHED" PATTERN. NO PLASTERING OF THE SURFACE WITH MORTAR WILL BE PERMITTED. THE FINISH SHALL RESULT IN A SURFACE OF UNIFORM TEXTURE AND COLOR. ALL OUTSIDE EDGES OF THE SLAB AND ALL JOINTS SHALL BE ROUNDED WITH A ½ INCH RADIUS EDGING TOOL.
7. CONCRETE SHALL BE CURED FOR 72 HOURS. CURING SHALL BE BY MEANS OF THOMPSON'S WATER SEAL AS MANUFACTURED BY E.A. THOMPSON CO., INC. OF MEMPHIS, TENNESSEE, BOILED LINSEED OIL, WHITE PIGMENTED CURING COMPOUND, OR BY OTHER APPROVED METHODS. CONCRETE SIDEWALK TO BE SEALED WITH CONSOLIDECK SALTGUARD WB OR APPROVED EQUAL 28 DAYS AFTER PLACEMENT. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION.
8. GENERAL CONTRACTOR TO COLLECT DELIVERY SLIPS AND TRANSFER TO THE OWNER.
9. REFER TO CITY OF PORTLAND CONCRETE SPECIFICATIONS SECTION 608 FOR MORE INFORMATION.



REINFORCED CONCRETE SIDEWALK
NOT TO SCALE

NOTES:

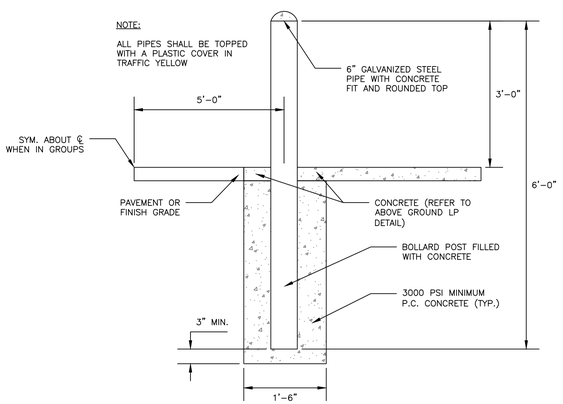
1. SAWCUT EXISTING PAVEMENT AND REMOVE 5' STRIP OF EXISTING PAVEMENT TO CREATE A UNIFORM AND RIGID BUTT JOINT TO CREATE SHIPLAP JOINTS BETWEEN THE PAVEMENT LAYERS.
2. APPLY BITUMINOUS TACK COAT AT AN APPLICATION RATE OF 0.10 TO 0.14 GALLONS PER SQUARE YARD TO EXISTING PAVEMENT JOINTS AND SURFACES PRIOR TO PLACEMENT OF NEW BITUMINOUS PAVEMENT.
3. THE NEW PAVEMENT SECTION SHALL MEET "PAVEMENT PROFILE DETAIL" AT A MINIMUM OR THE EXISTING PAVEMENT AND AGGREGATE BASE AND SUBBASE DEPTH WHICHEVER IS GREATER.



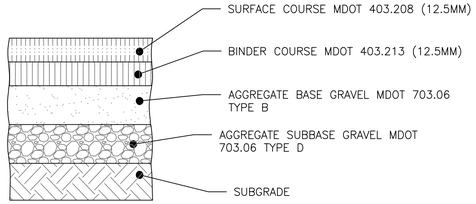
PAVEMENT SAWCUT WITH SHIPLAP JOINTS DETAIL
NOT TO SCALE

NOTE:

ALL PIPES SHALL BE TOPPED WITH A PLASTIC COVER IN TRAFFIC YELLOW



PIPE BOLLARD
NOT TO SCALE

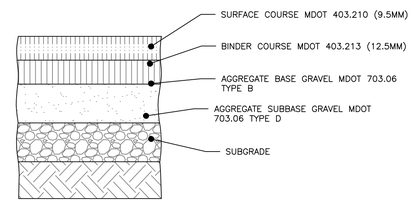


NOTES:

1. COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557
2. SURFACE AND AGGREGATE MATERIALS SHALL MEET THE CITY OF PORTLAND STANDARDS IN ADDITION TO MDOT STANDARDS.

THICKNESS OF LAYERS	
STANDARD	LAYERS
2"	SURFACE COURSE MDOT 403.208 (12.5mm)
3"	BINDER COURSE MDOT 403.213 (12.5mm)
3"	AGGREGATE BASE GRAVEL MDOT 703.06 TYPE A
18"	AGGREGATE SUBBASE GRAVEL MDOT 703.06 TYPE D

CITY OF PORTLAND ARTERIAL BITUMINOUS PAVEMENT PROFILE
NOT TO SCALE

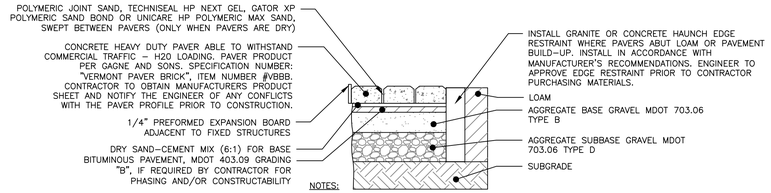


NOTES:

1. COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557
2. SURFACE AND AGGREGATE MATERIALS SHALL MEET THE CITY OF PORTLAND STANDARDS IN ADDITION TO MDOT STANDARDS.

THICKNESS OF LAYERS	
STANDARD	LAYERS
1-1/2"	SURFACE COURSE MDOT 403.210 (9.5mm)
2"	BINDER COURSE MDOT 403.213 (12.5mm)
3"	AGGREGATE BASE GRAVEL MDOT 703.06 TYPE A
15"	AGGREGATE SUBBASE GRAVEL MDOT 703.06 TYPE D

PRIVATE PAVEMENT PROFILE
NOT TO SCALE



NOTES:

1. COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557
2. SURFACE AND AGGREGATE MATERIALS SHALL MEET THE CITY OF BIDDEFORD STANDARDS IN ADDITION TO MDOT STANDARDS.
3. JOINT SAND COMPRESSION STRENGTH: PROVEN RESISTANCE TO COMPRESSION OF 550 PSI AFTER DRYING FOR 7 DAYS UNDER CONTROLLED CONDITIONS (73 DEGREE F AT 50% HUMIDITY)

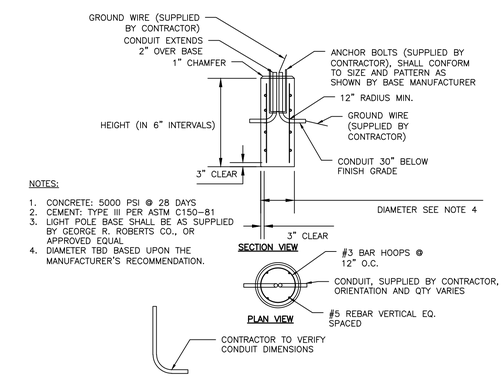
GRADATION REQUIREMENTS FOR JOINT SAND		
SIEVE SIZE	NATURAL SAND PERCENT PASSING	MANUFACTURED SAND PERCENT PASSING
NO. 4 (4.75mm)	100	100
NO. 8 (2.36mm)	95-100	95-100
NO. 16 (1.18mm)	70-100	70-100
NO. 30 (0.60mm)	40-75	40-75
NO. 50 (0.30mm)	10-30	20-40
NO. 100 (0.15mm)	2-15	10-25
NO. 200 (0.075)	0-1	0-10

THICKNESS OF LAYERS	
STANDARD	LAYERS
3.149"	CONCRETE PAVER (DEPTH TBD BASED UPON MANUFACTURER)
1"	DRY SAND-CEMENT MIX (6:1)
2"	BITUMINOUS MDOT 403.09 GRADING "B"
3"	AGGREGATE BASE GRAVEL MDOT 703.06 TYPE B
15"	AGGREGATE SUBBASE GRAVEL MDOT 703.06 TYPE D

PAVER PROFILE
NOT TO SCALE

SCHEDULE	
MIN DIAMETER	MIN EMBEDMENT
1.5'	5'

REVEALS	
APPLICATIONS	REVEAL
STREET/SIDEWALK	4"



NOTES:

1. CONCRETE: 5000 PSI @ 28 DAYS
2. CEMENT: TYPE III PER ASTM C150-81
3. LIGHT POLE BASE SHALL BE AS SUPPLIED BY GEORGE R. ROBERTS CO., OR APPROVED EQUAL
4. DIAMETER TBD BASED UPON THE MANUFACTURER'S RECOMMENDATION.

LIGHT POLE BASE
NOT TO SCALE

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CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: SITE DETAILS - 1
PROJECT NAME: WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT
186 WOODFORD STREET, PORTLAND, MAINE
CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

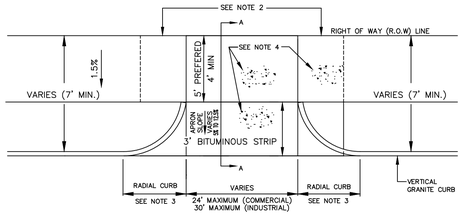
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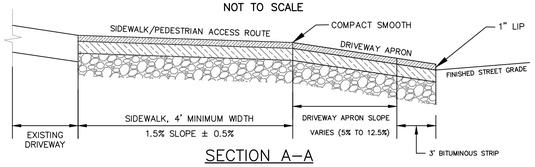
STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-40



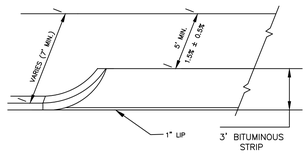
WOODFORD STREET DRIVEWAY APRON LAYOUT

NOT TO SCALE



SECTION A–A

NOT TO SCALE



NOTES:

1. MATCH EXISTING GRADE AT R.O.W LINE. WHERE REQUIRED TO MEET A.D.A. AND DRIVEWAY APRON SLOPE REQUIREMENTS, A CONSTRUCTION EASEMENT MAY BE REQUIRED.
2. IF MATCHING THE EXISTING GRADE AT ROW CAUSES APRON SLOPE TO EXCEED RECOMMENDED %, SIDEWALK TRANSITION AREAS MAY BE ADDED, BUT SHALL NOT EXCEED 8.33%.
3. DRIVEWAY CURB RADIUS SHALL NOT BE LARGER THAN REQUIRED BY THE SITE'S DESIGN VEHICLE.
4. ALL MATERIALS IN ROW TO COMPLY WITH CITY'S SIDEWALK & DRIVEWAY MATERIAL POLICY. CONCRETE IN DRIVEWAY APRONS, WHERE APPLICABLE.

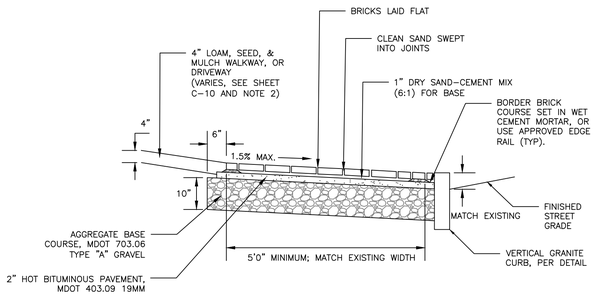
NOTES:

1. BRICKS TO BE USED:

   NEW CONSTRUCTION:
   4"x8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA. LACHANCE ITEM #193623;. PINE HALL PATHWAY PAVER BRICK.

   REPAIR/MAINTENANCE TO EXISTING BRICK SIDEWALKS:
   VERMONT BACKER SUPPLIED BY GAGNE AND SONS SPECIFICATION NUMBER: "VERMONT PAVER BRICK", ITEM NUMBER #VBBB

2. INSTALL BRICK FLUSH UP TO BUILDING, PAVEMENT, STAIRS, CONCRETE SURFACES, CURB OR LANDSCAPED AREAS.

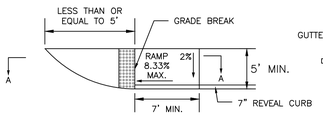


BRICK SIDEWALK WITH BITUMINOUS BASE DETAIL

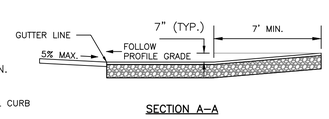
NOT TO SCALE

NOTES:

1. ALL PEDESTRIAN RAMPS SHALL COMPLY WITH ADA STANDARDS.
2. PEDESTRIAN RAMP CROSS SLOPE SHALL BE A MAXIMUM OF 2%.
3. ADJACENT SURFACE TO PEDESTRIAN RAMP SHALL BE FLUSH WITH THE BOTTOM OF THE PEDESTRIAN RAMP.
4. DETECTABLE WARNINGS SHALL SPAN THE WIDTH OF THE PEDESTRIAN RAMP.
5. FOR USE ONLY WHEN NO SIDEWALK IS PRESENT ON THE SIDE ROAD.



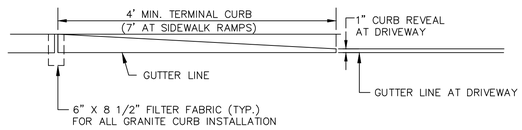
PLAN VIEW



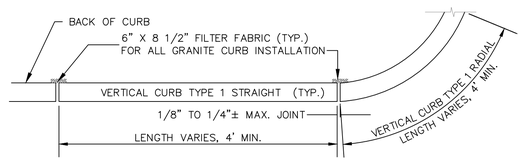
SECTION A–A

SIDE STREET PEDESTRIAN RAMP DETAIL

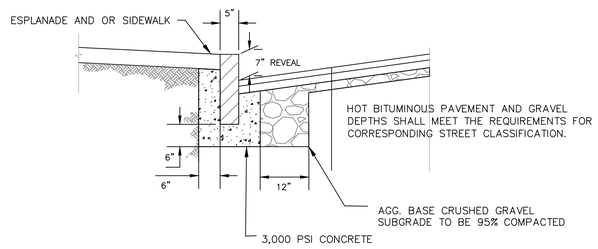
NOT TO SCALE



TERMINAL CURB PROFILE



VERTICAL GRANITE CURB PLAN VIEW



VERTICAL GRANITE CURB CROSS SECTION

NOTES:

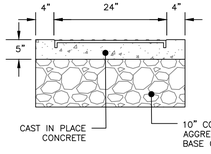
1. INDIVIDUAL PIECES OF CURB SHORTER THAN 4 L.F. ARE NOT ALLOWED, WITH THE EXCEPTION OF RADIAL CURB.
2. THE MINIMUM HEIGHT OF THE CONCRETE BACKING SHALL BE 10–INCHES OR TO THE BOTTOM OF THE HOT MIX ASPHALT PAVEMENT, WHICHEVER IS GREATER, MEASURED FROM THE BOTTOM OF CURB.
3. CURBING SHALL BE SET IN A 6–INCH BED OF POURED IN PLACE 3,000 PSI CONCRETE MIX.
4. WOODEN SHIMS MAY BE USED TO SET CURB.

VERTICAL GRANITE CURB

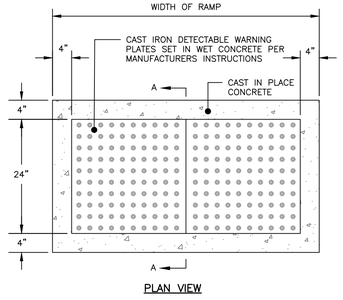
NOT TO SCALE

NOTES:

1. ALL DETECTABLE WARNING PLATES SHALL BE UNCOATED CAST IRON. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
2. CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MDOT CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
3. TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
4. SIZE: THE DETECTABLE WARNING PLATES SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION TO THE STREET.
5. ORIENTATION: THE DETECTABLE WARNING PANEL SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE. THE PANEL SHALL BE ORIENTED TO THE DIRECTION OF TRAVEL AS IDENTIFIED BY THE POINT OF EGRESS.



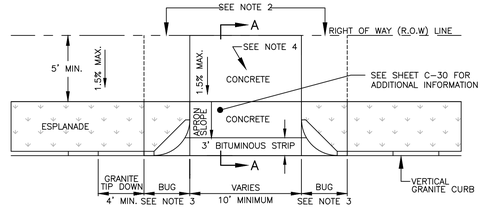
SECTION A–A



PLAN VIEW

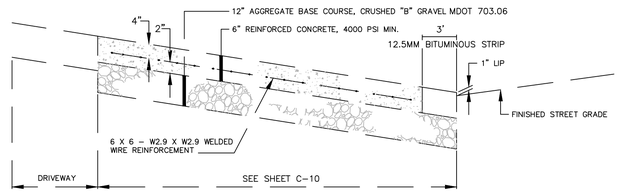
SIDEWALK RAMP DETECTABLE WARNING PANEL

NOT TO SCALE



NOTES:

1. MATCH EXISTING GRADE AT R.O.W LINE. WHERE REQUIRED TO MEET A.D.A. AND DRIVEWAY APRON SLOPE REQUIREMENTS, A CONSTRUCTION EASEMENT MAY BE REQUIRED.
2. IF MATCHING THE EXISTING GRADE AT ROW CAUSES APRON SLOPE TO EXCEED RECOMMENDED %, SIDEWALK TRANSITION AREAS MAY BE ADDED, BUT SHALL NOT EXCEED 8.33%.
3. TWO–FOOT RADIUS CORNER GRANITE PIECES ("BUGS") ARE REQUIRED AT LOW–VOLUME DRIVEWAYS UNLESS OTHERWISE DIRECTED BY DPW. AT OTHER DRIVEWAYS, STANDARD FLARE/TIPDOWN TREATMENTS SHALL BE USED.
4. ALL MATERIALS TO COMPLY WITH CITY'S SIDEWALK & DRIVEWAY MATERIAL POLICY.

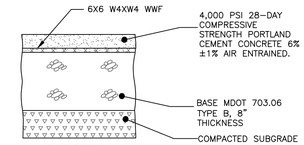


BEACON STREET DRIVEWAY APRON

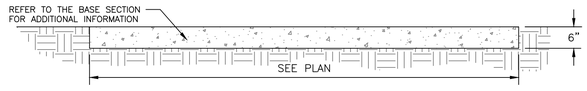
NOT TO SCALE

NOTES:

1. PROOFROLL AND COMPACT SUBGRADE
2. COMPACT AGGREGATES TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D–1557.
3. FINISH WITH A STIFF, COARSE, FIBER BROOM.
4. REFER TO PLANS FOR DIMENSIONS.



BASE SECTION

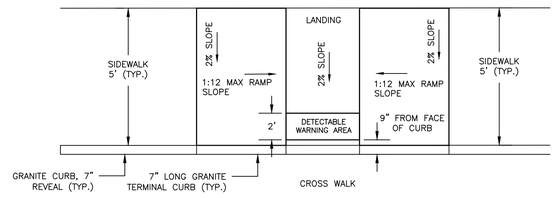


CONCRETE PAD DETAIL

NOT TO SCALE

NOTES:

1. ALL RAMPS SHALL COMPLY WITH ADA STANDARDS
2. GRANITE CURB ADJACENT TO RAMP SHALL BE FLUSH WITH STREET
3. SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY



PARALLEL SIDEWALK RAMP LAYOUT FOR SIDEWALK WITHOUT ESPLANADE

NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: **SITE DETAILS – 2**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

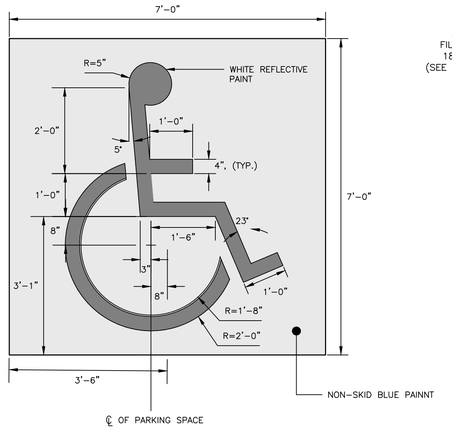
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ACORN ENGINEERING, INC.
PO BOX 3294 ANSON, MAINE 04104
(207) 775–2655

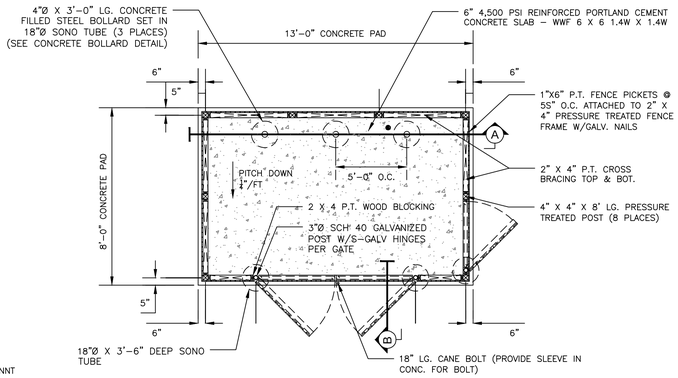
FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

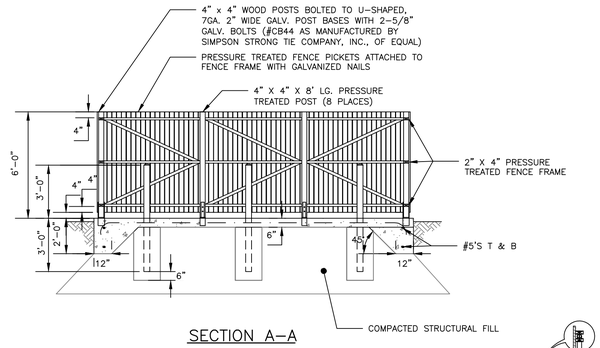
DRAWING NO.
C-41



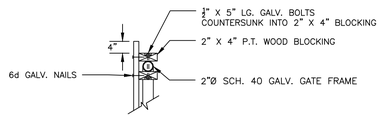
INTERNATIONAL BARRIER FREE SYMBOL
NOT TO SCALE



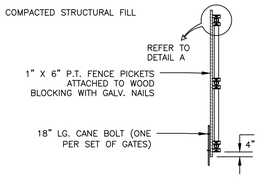
DUMPSTER ENCLOSURE PLAN AND DETAILS
NOT TO SCALE



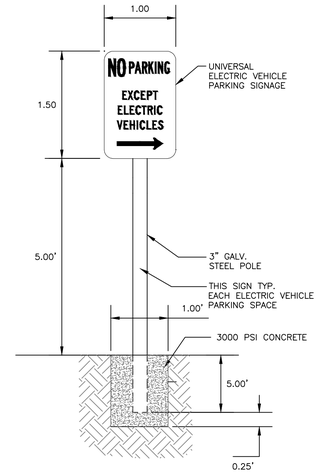
SECTION A–A



DETAIL A



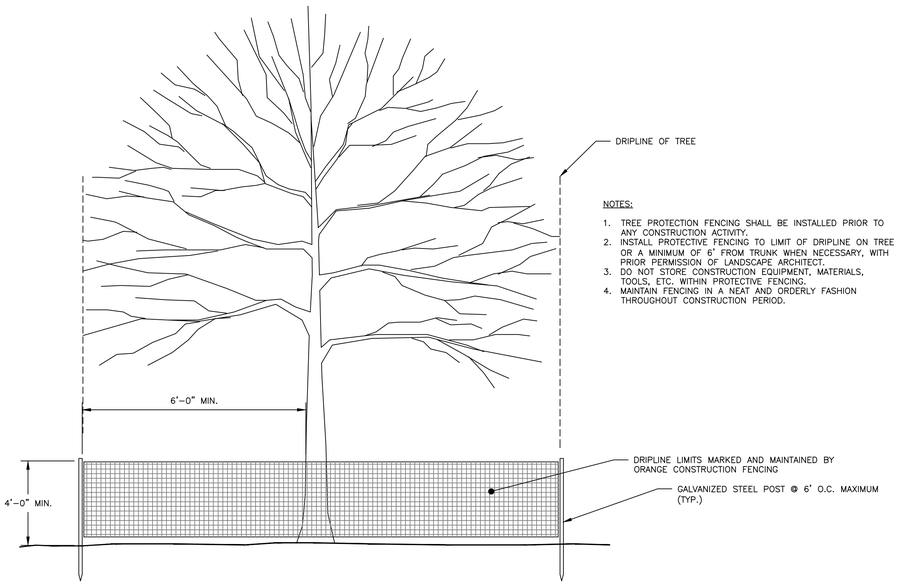
SECTION B–B



NOTES:

1. ALL ASPECTS OF RESERVED PARKING SIGN CONSTRUCTION SHALL BE IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 OR MOST RECENT EDITION
2. SIGN SHALL BE CONSTRUCTED AS SIGN R7-111 UNDER THE "PARKING AND STANDING SIGNS AND PLAQUES" (R7 SERIES) WITHIN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 OR MOST RECENT EDITION.
3. SIGN POST CONSTRUCTION AND MOUNTING SHALL BE IN ACCORDANCE WITH CHAPTER 2A OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 2009 OR MOST RECENT EDITION.

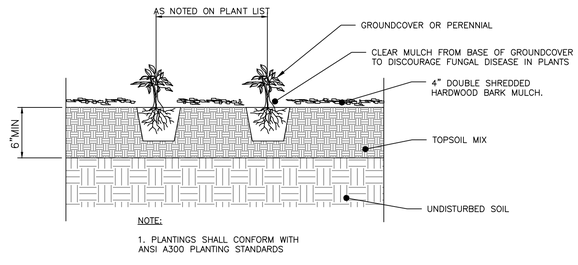
ELECTRIC VEHICLE PARKING SIGN
NOT TO SCALE



NOTES:

1. TREE PROTECTION FENCING SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITY.
2. INSTALL PROTECTIVE FENCING TO LIMIT OF DRIPLINE ON TREE OR A MINIMUM OF 6' FROM TRUNK WHEN NECESSARY, WITH PRIOR PERMISSION OF LANDSCAPE ARCHITECT.
3. DO NOT STORE CONSTRUCTION EQUIPMENT, MATERIALS, TOOLS, ETC. WITHIN PROTECTIVE FENCING.
4. MAINTAIN FENCING IN A NEAT AND ORDERLY FASHION THROUGHOUT CONSTRUCTION PERIOD.

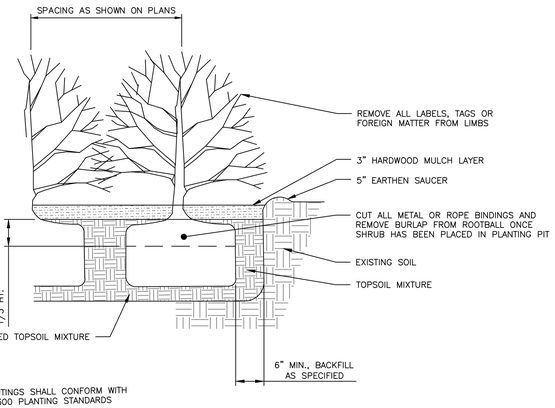
TREE PROTECTION DETAIL
NOT TO SCALE



NOTE:

1. PLANTINGS SHALL CONFORM WITH ANSI A300 PLANTING STANDARDS

PERENNIAL PLANTING DETAIL
NOT TO SCALE



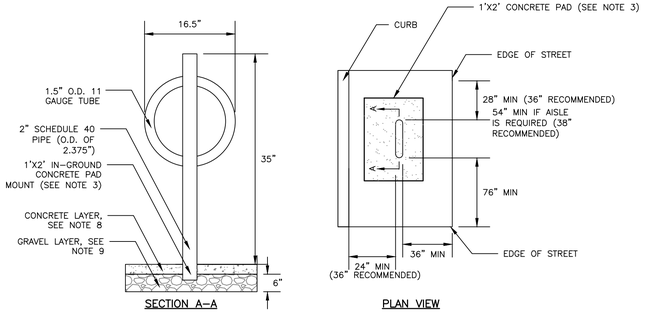
NOTE:

1. PLANTINGS SHALL CONFORM WITH ANSI A300 PLANTING STANDARDS

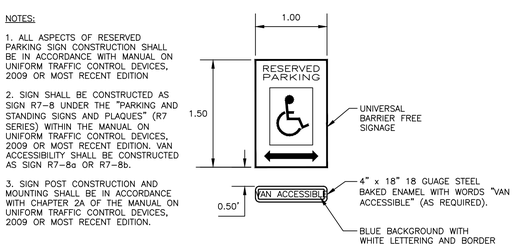
SHRUB PLANTING DETAIL
NOT TO SCALE

NOTES:

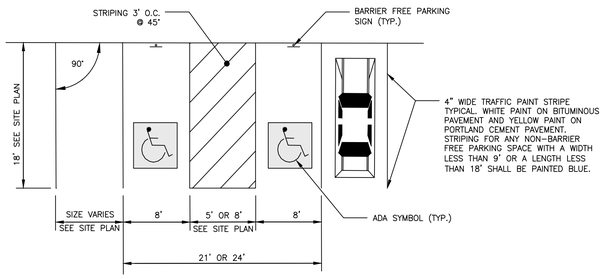
1. BICYCLE RACK SHALL BE "DERO BIKE HITCH", AS MANUFACTURED BY DERO BIKE RACKS.
2. BICYCLE RACK SHALL HAVE CAPACITY FOR TWO BICYCLES.
3. BICYCLE RACK PARTS SHALL BE OF UNIFORM COLOR AND SHALL BE FINISHED IN ACCORDANCE WITH PRODUCT SPECIFICATION.
4. BICYCLE RACK SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S MOST RECENT INSTALLATION RECOMMENDATIONS, AND SHALL BE INSTALLED WITH AN IN-GROUND MOUNT UNLESS OTHERWISE APPROVED BY ENGINEER.
5. MINIMUM OFFSETS SHOWN. MANUFACTURER'S RECOMMENDED OFFSETS SHALL BE ENFORCED WHERE POSSIBLE.
6. MINIMUM DISTANCE BETWEEN BICYCLE RACKS SHALL BE 24". RECOMMENDED DISTANCE BETWEEN BICYCLE RACKS SHALL BE 38".
7. ALL OFFSETS ARE FROM OUTSIDE EDGES OF ITEMS.
8. CONCRETE SHALL BE 4000 PSI @28 DAYS. BOTTOM OF CONCRETE SHALL BE AT TOP OF SIDEWALK GRAVEL ELEVATION, DEPTH VARIES APPROX. 4"-7".
9. GRAVEL LAYER SHALL BE INSTALLED IN ACCORDANCE WITH CONCRETE SIDEWALK DETAIL, AND SHALL BE MAINEDOT 703.06 TYPE B.



DERO BIKE HITCH
NOT TO SCALE



BARRIER FREE PARKING SIGN
NOT TO SCALE



PARKING SPACE DIMENSIONS
NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23

DRAWING NAME: **SITE DETAILS – 3**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

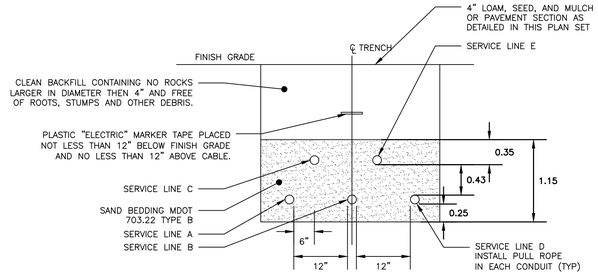
ACORN ENGINEERING, INC.
ENGINEERING, INC.
PO BOX 3287, PORTLAND, MAINE 04104
(207) 775-2655

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FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-42



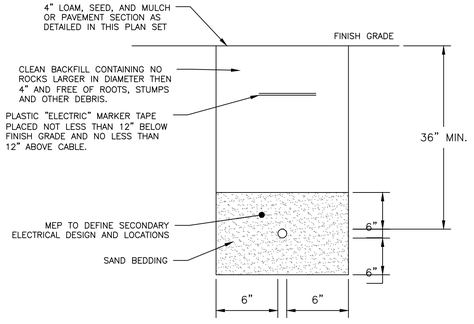
CONDUIT TYPE				
SERVICE	CONDUIT SIZE	GRASS AND PAVED AREAS	UTILITY	REMARKS
A	4"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE 1
B	4"	SCHEDULE 40 PVC ELECTRICAL GRADE	PRIMARY POWER	SEE NOTE 1
C	2–4"	SCHEDULE 40 PVC	COMMUNICATION	–
D	5"	SCHEDULE 40 PVC ELECTRICAL GRADE	SPARE	SEE NOTE 1
E	2–4"	SCHEDULE 40 PVC	CABLE	–

NOTES:

1. ONE CONDUIT CAPPED FOR SPARE, PROVIDE GALVANIZED STEEL LONG SWEEP AT RISER POLE AND EXTEND GALVANIZED CONDUIT TO 10" ABOVE GRADE AT POLE WITH STAND–OFF BRACKETS.
2. MINIMUM SEPARATION OF 24 INCHES BETWEEN PRIMARY CABLE/CONDUIT AND GAS LINES SHALL BE MAINTAINED.
3. CONDUITS WITHIN THE CITY RIGHT–OF–WAY SHALL BE ENCASED IN CONCRETE.
4. FINAL SIZE OF CONDUITS TO BE SPECIFIED BY MEP, ELECTRICIAN, OR DESIGN/BUILD ELECTRICAL CONTRACTOR.

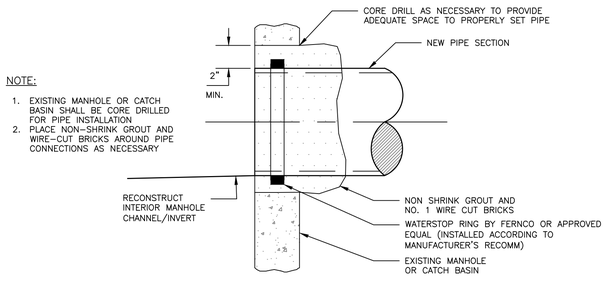
UTILITY TRENCH – PRIMARY AND SECONDARY POWER, TELEPHONE, AND CABLE

NOT TO SCALE



SECONDARY ELECTRICAL TRENCH

NOT TO SCALE

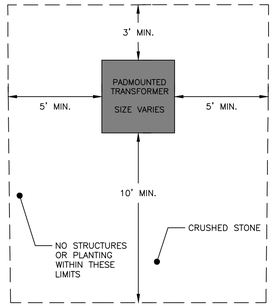


NOTE:

1. EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION
2. PLACE NON–SHRINK GROUT AND WIRE–CUT BRICKS AROUND PIPE CONNECTIONS AS NECESSARY

NEW PIPE TO EXISTING STRUCTURE CONNECTION DETAIL

NOT TO SCALE

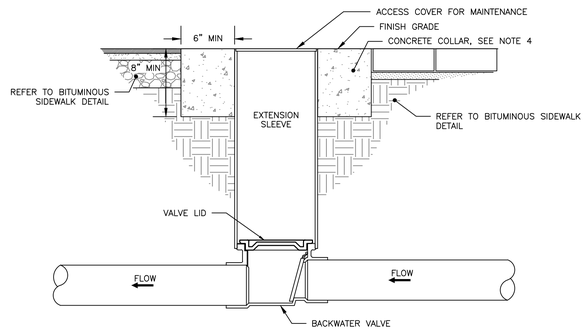


NOTES:

1. WHERE DANGER OF FLOW OR TRAFFIC DAMAGE EXISTS, BARRIERS CONSISTING OF CONCRETE FILLED 6 INCH IPS STEEL POSTS SET 4 FEET DEEP SHALL BE PROVIDED FOR PROTECTION (PRESSURE TREATED 6X6 INCH MIN. TIMBER POSTS MAY BE SUBSTITUTED IN RESIDENTIAL AREAS). POSTS SHALL NOT INTERFERE WITH TRANSFORMER ACCESS. GENERALLY THE POSTS SHALL BE LOCATED NEAR THE CORNERS OF THE TRANSFORMERS.
2. THE SETBACKS DEPICT CLEARANCES FROM OBSTRUCTIONS INCLUDING TREES, SHRUBS, AND FENCES.
3. THERE SHALL BE NO OPENINGS IN THE BUILDING WALL IN BACK OF, BESIDE, OR OVER THE TRANSFORMER UNLESS THE TRANSFORMER IS A MIN. OF 10 FEET FROM THE BUILDING.
4. SIDE CLEARANCES FROM DOORS OR WINDOWS SHALL NOT BE LESS THAN 10 FEET.
5. THERE SHALL BE A MIN. OF 10 FEET BETWEEN THE TRANSFORMER AND ANY GAS METER/REGULATOR, GAS RELIEF VALVE, GAS VENT DISCHARGE, GAS FILLING CONNECTION, OR PROPANE TANK. SOME INSURANCE COMPANIES MAY REQUIRE INCREASED CLEARANCES.
6. TRANSFORMER SHALL BE LOCATED FAR ENOUGH AWAY FROM BUILDING OVERHANGS SO THAT THEY WILL NOT BE SUBJECT TO DAMAGE BY FALLING ICE AND SNOW.
7. IF TRANSFORMER IS NOT INSTALLED IMMEDIATELY UPON THE INSTALLATION OF THE CABLE IN THE PAD, THE CONTRACTOR SHALL PROVIDE AND INSTALL A CMP APPROVED CONCRETE, STEEL, OR FIBERGLASS COVER OVER THE PAD OPENING TO ELIMINATE EXPOSURE OF THE CABLE.

CMP TRANSFORMER SETBACKS

NOT TO SCALE



NOTES:

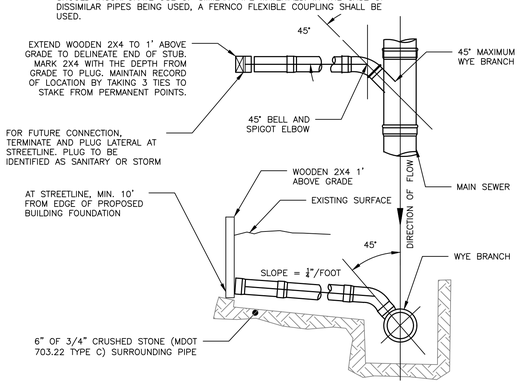
1. BACKFLOW VALVE TO BE PROVIDED BY AGRI DRAIN CORPORATION OR AN APPROVED EQUAL.
2. VALVE TO BE INSTALLED TO MANUFACTURER'S SPECIFICATIONS AND COMPLY WITH RULES AND REGULATIONS OF THE CITY OF PORTLAND TECHNICAL MANUAL.
3. VALVE SHALL BE INSTALLED WITH A VALVE BOX AND COVER TO PROVIDE EASY ACCESS AND MAINTENANCE; VALVE COVER SHALL STATE 'SEWER' ON LID FLUSH TO SURFACE. REFER TO VALVE & BOX COVER DETAIL FOR ADDITIONAL INFORMATION.
4. CONCRETE COLLAR AT A MINIMUM 24–HOUR COMPRESSIVE STRENGTH OF 3,000 PSI.

BACKFLOW VALVE ASSEMBLY

NOT TO SCALE

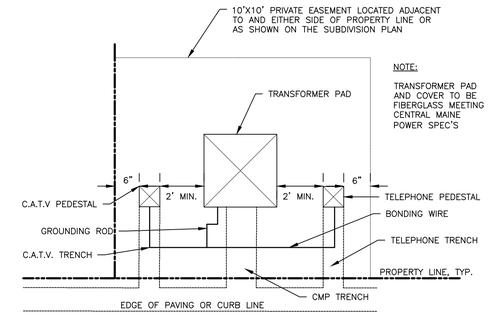
NOTES:

1. LOCATION WITH WARNING TAPE SHALL BE INSTALLED OVER CENTERLINE OF PIPE AT A MAXIMUM OF 24 INCHES BELOW FINISH GRADE.
2. SITE CONTRACTOR TO COORDINATE CONNECTION OF SEWER LATERAL TO HOUSEHOLD PLUMBING WITH ARCHITECTURAL CONTRACTOR
3. CONNECTION OF PROPOSED SEWER LATERAL TO HOUSEHOLD PLUMBING SHOULD INCORPORATE USE OF SIMILAR PIPE MATERIALS. IN THE CASE OF DISSIMILAR PIPES BEING USED, A FERNCO FLEXIBLE COUPLING SHALL BE USED.



SEWER AND STORM DRAIN TEE/WYE CONNECTION DETAIL

NOT TO SCALE



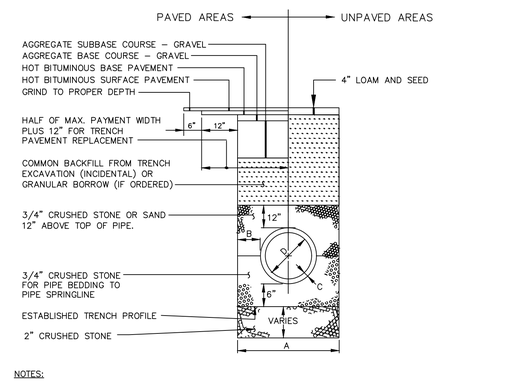
TYPICAL TRANSFORMER DETAIL

NOT TO SCALE

NOTES:

DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.

ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.



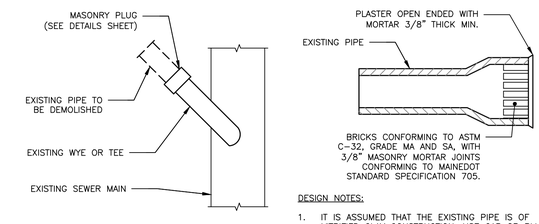
NOTES:

1. ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
2. IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
3. DIMENSION B SHALL BE SUFFICIENT TO ALLOW CRUSH STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE; BUT IN ALL CASES DIMENSION B SHALL BE AT LEAST 9".
4. DIMENSION A IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION A SHALL BE BASED ON PIPE DIAMETER D, AS SET FORTH IN THE FOLLOWING TABLE.

PIPE DIAMETER, D (INCHES)	MAX. TRENCH WIDTH, A (FEET)
4 – – – –	4.0
6	4.0
8	4.0
10	4.0
12	5.0
15	5.0
18 – – – –	5.0
21	5.0
24	6.0
27	6.0
30	6.0
36 – – – –	6.0
42	7.0
48	7.0

TYPICAL PIPE TRENCH INSTALLATION

NOT TO SCALE



DESIGN NOTES:

1. IT IS ASSUMED THAT THE EXISTING PIPE IS OF VITRIFIED CLAY CONSTRUCTION. USE CAP OR PLUG FOR PVC PIPE

MASONRY PLUG DETAIL

NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23

DRAWING NAME: **UTILITY DETAILS – 1**

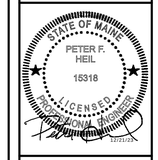
PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT:
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

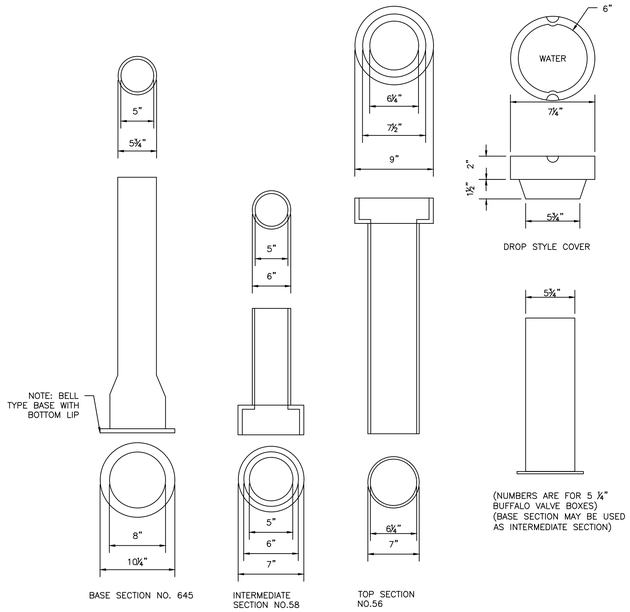
ACORN ENGINEERING, INC.
ENGINEERING, INC.
ACORN
PO BOX 3437 PORTLAND, MAINE 04104
(207) 775–2655

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FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS



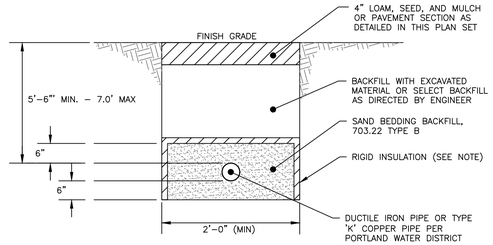
DRAWING NO.
C-43



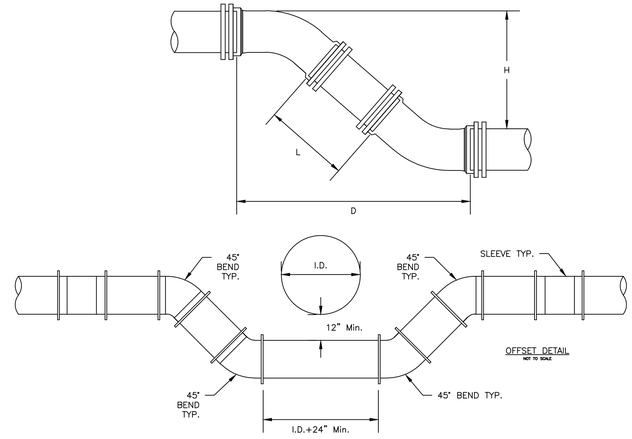
VALVE BOX & COVER
NOT TO SCALE

NOTES:

1. THE WATER TRENCH SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PORTLAND WATER DISTRICT STANDARD DETAILS & SPECIFICATIONS.
2. IF LESS THAN 5'-6" OF COVER IS NECESSARY ADD 1 INCH OF "BLUE DOW" RIGID INSULATION FOR EVERY 12" LESS COVER.
3. 12" MIN. HORIZONTAL CLEARANCE BETWEEN PIPES IN JOINT TRENCH.



WATER SERVICE TRENCH SECTION DETAIL
NOT TO SCALE

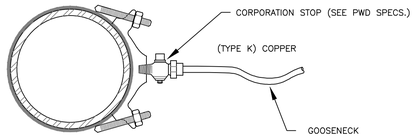


	8" PIPE	
H	D	L
12"	1' 7-1/2"	0' 9-1/2"
13"	1' 8-1/2"	0' 10-7/8"
14"	1' 9-1/2"	1' 0-5/16"
15"	1' 10-1/2"	1' 1-11/16"
16"	1' 11-1/2"	1' 3-1/16"
17"	2' 0-1/2"	1' 4-9/16"
18"	2' 1-1/2"	1' 5-15/16"
19"	2' 2-1/2"	1' 7-3/8"
20"	2' 3-1/2"	1' 8-13/16"
21"	2' 4-1/2"	1' 10-3/16"
22"	2' 5-1/2"	1' 11-5/8"
23"	2' 6-1/2"	2' 1"
24"	2' 7-1/2"	2' 2-7/16"
25"	2' 8-1/2"	2' 3-7/8"
26"	2' 9-1/2"	2' 5-1/4"
27"	2' 10-1/2"	2' 6-11/16"
28"	2' 11-1/2"	2' 8-1/8"
29"	3' 0-1/2"	2' 9-1/2"
30"	3' 1-1/2"	2' 10-15/16"
31"	3' 2-1/2"	3' 0-5/16"
32"	3' 3-1/2"	3' 1-3/4"
33"	3' 4-1/2"	3' 3-3/16"
34"	3' 5-1/2"	3' 4-9/16"
35"	3' 6-1/2"	3' 6"
36"	3' 7-1/2"	3' 7-7/16"
37"	3' 8-1/2"	3' 8-13/16"
38"	3' 9-1/2"	3' 10-1/4"
39"	3' 10-1/2"	3' 11-11/16"
40"	3' 11-1/2"	4' 1-1/16"
41"	4' 0-1/2"	4' 2-1/2"
42"	4' 1-1/2"	4' 3-7/8"
43"	4' 2-1/2"	4' 5-5/16"
44"	4' 3-1/2"	4' 6-3/4"
45"	4' 4-1/2"	4' 8-1/8"
46"	4' 5-1/2"	4' 9-9/16"
47"	4' 6-1/2"	4' 10-15/16"
48"	4' 7-1/2"	5' 0-3/8"
49"	4' 8-1/2"	5' 1-13/16"
50"	4' 9-1/2"	5' 3-3/16"
51"	4' 10-1/2"	5' 4-5/8"
52"	4' 11-1/2"	5' 6-1/16"
53"	5' 0-1/2"	5' 7-7/16"
54"	5' 1-1/2"	5' 8-7/8"
55"	5' 2-1/2"	5' 10-5/16"

NOTE:

DIMENSIONS APPLICABLE FOR SIGMA COMPACT BENDS. FOR TYLER COMPACT BENDS, ADD 1/2" TO "D" DIMENSION AND SUBTRACT 1/2" FROM "L" DIMENSION. FOR OTHER FITTINGS REFER TO MANUFACTURER'S RECOMMENDATIONS.

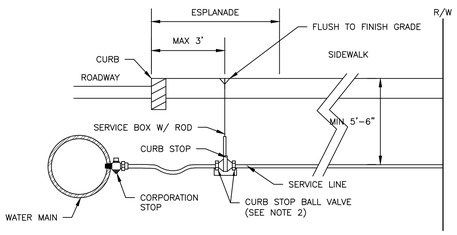
TYPICAL MAIN OFFSET
NOT TO SCALE



SERVICE SADDLE: 1-1/2" AND 2" C.C. THREAD
NOT TO SCALE

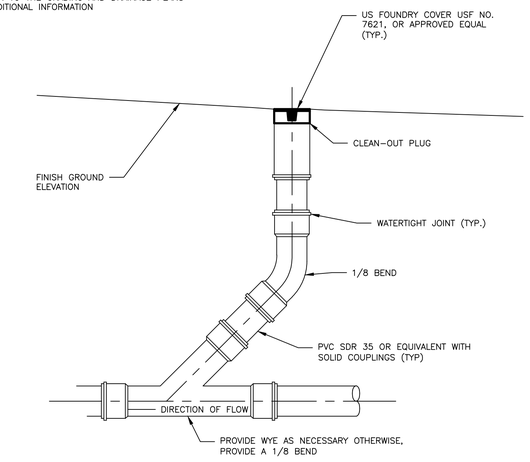
NOTES:

1. ALL MATERIALS AND INSTALLATION PROCEDURES MUST COMPLY WITH PORTLAND WATER DISTRICT (PWD) SPECIFICATIONS.
2. CURB STOP BALL VALVE TO BE MADE OF COPPER OR BRASS UNLESS OTHERWISE NOTED BY THE PORTLAND WATER DISTRICT.
3. SERVICE LINE TO BE MADE OF TYPE K COPPER.
4. CONCRETE BLOCKING SHALL BE ADDED TO THE BASE OF THE CURB STOP TO PROVIDE STRUCTURAL SUPPORT FOR THE CURB STOP AND SERVICE BOX.
5. CURB STOP TO BE INSTALLED IN PERVIOUS AREAS TO THE GREATEST EXTENT FEASIBLE. FOR LOTS IN WHICH THE CURB STOP MUST BE LOCATED IN A SIDEWALK OR DRIVEWAY, CONTRACTOR TO CONTACT PWD FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
6. CONTRACTOR TO COIL ACCESS PIPE ON PRIVATE PROPERTY PRIOR TO CONNECTION TO HOUSE. ACCESS PIPE TO BE ADEQUATELY MARKED IF BURIED OR PROTECTED IF STORED ABOVE GROUND.

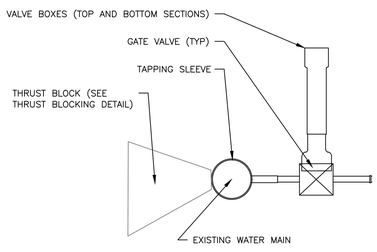


TYPICAL SERVICE CONNECTION
NOT TO SCALE

DESIGN NOTES:
1. REFER TO THE GRADING AND DRAINAGE PLANS FOR ADDITIONAL INFORMATION

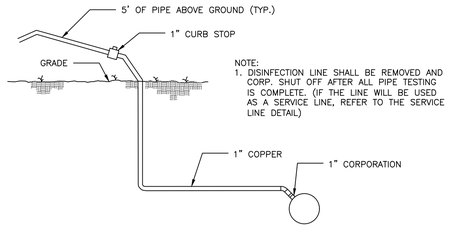


CLEANOUT DETAIL
NOT TO SCALE

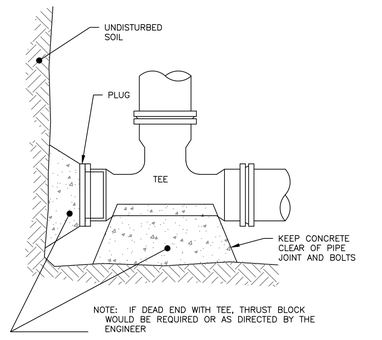


SIDE VIEW

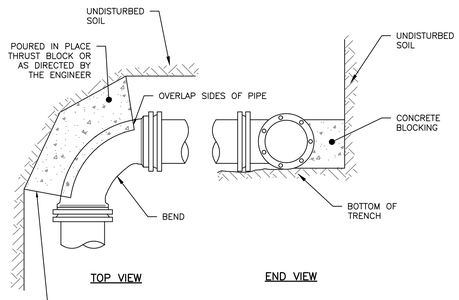
TAPPING SLEEVE AND VALVE
NOT TO SCALE



DISINFECTION LINE DETAIL
NOT TO SCALE



END SECTION



TOP VIEW | END VIEW

REGULAR BEND

THRUST BLOCKING
NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR | BY | DATE
CSS | PFH | 12/1/23
MAJOR SITE PLAN | PFH | 12/21/23

DRAWING NAME: **UTILITY DETAILS - 2**
PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE
CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

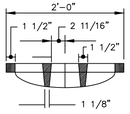
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ACORN ENGINEERING, INC.
PO BOX 3257 PORTLAND, MAINE 04104
(207) 775-2655

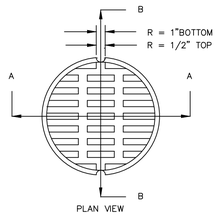
FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

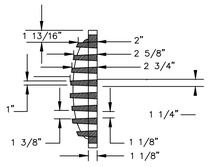
DRAWING NO.
C-44



SECTION A–A



PLAN VIEW



SECTION B–B

GRATE DETAIL

NOTES:

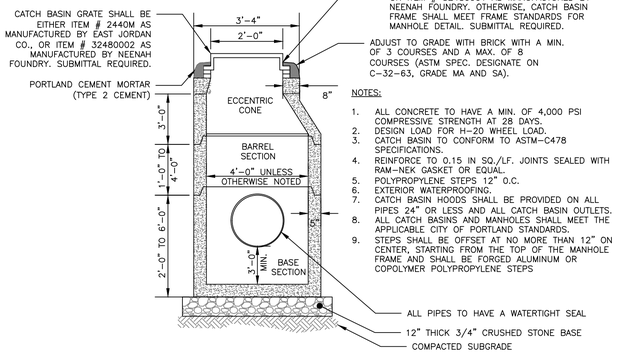
1. APPROVED CATCH BASIN FRAMES:
   1.1. EAST JORDAN = 7375Z
   1.2. NEENAH = R-3248
   1.3. OR APPROVED EQUAL
2. APPROVED CATCH BASIN GRATES
   2.1. EAST JORDAN = 2440M
   2.2. NEENAH = R-3248
   2.3. OR APPROVED EQUAL

SECTION A–A

SECTION B–B

FRAME DETAIL

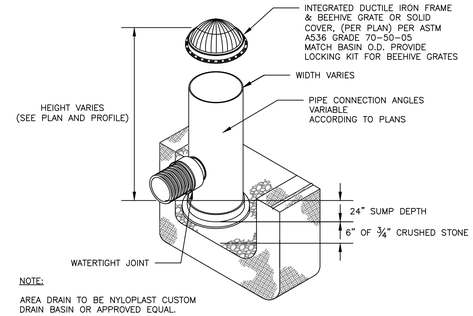
CATCH BASIN FRAME & GRATE
NOT TO SCALE



NOTES:

1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.15 IN SQ./LF. JOINTS SEALED WITH RAM-NEK GASKET OR EQUAL.
5. POLYPROPYLENE STEPS 12" O.C.
6. EXTERIOR WATERPROOFING.
7. CATCH BASIN HOODS SHALL BE PROVIDED ON ALL PIPES 24" OR LESS AND ALL CATCH BASIN OUTLETS.
8. ALL CATCH BASINS AND MANHOLES SHALL MEET THE APPLICABLE CITY OF PORTLAND STANDARDS.
9. STEPS SHALL BE OFFSET AT NO MORE THAN 12" ON CENTER, STARTING FROM THE TOP OF THE MANHOLE FRAME AND SHALL BE FORGED ALUMINUM OR COPOLYMER POLYPROPYLENE STEPS

PRECAST CATCH BASIN/ DRAINAGE MANHOLE
NOT TO SCALE



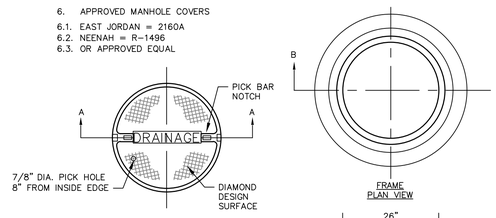
NOTE:

AREA DRAIN TO BE NYLOPLAST CUSTOM DRAIN BASIN OR APPROVED EQUAL.

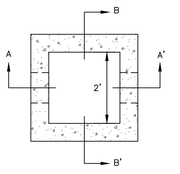
BEEHIVE DRAIN DETAIL
NOT TO SCALE

NOTES:

1. ALL MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE, LOCATED 8" FROM THE CENTER OF THE COVER
2. ALL SANITARY AND STORMWATER/DRAIN MANHOLE COVERS SHALL BE 24" x 5".
3. ALL SANITARY MANHOLE COVERS AND SHALL HAVE "SEWER" CAST INTO THE COVER.
4. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
5. APPROVED MANHOLE FRAMES:
   5.1. EAST JORDAN = 1690Z
   5.2. NEENAH = R-1496
   5.3. OR APPROVED EQUAL
6. APPROVED MANHOLE COVERS
   6.1. EAST JORDAN = 2160A
   6.2. NEENAH = R-1496
   6.3. OR APPROVED EQUAL



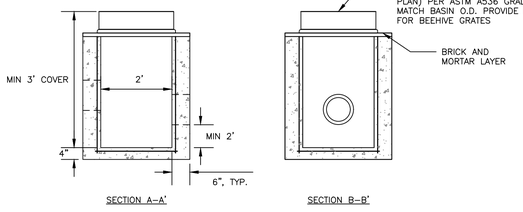
CAST IRON MANHOLE COVER AND FRAME
NOT TO SCALE



TOP VIEW

NOTES:

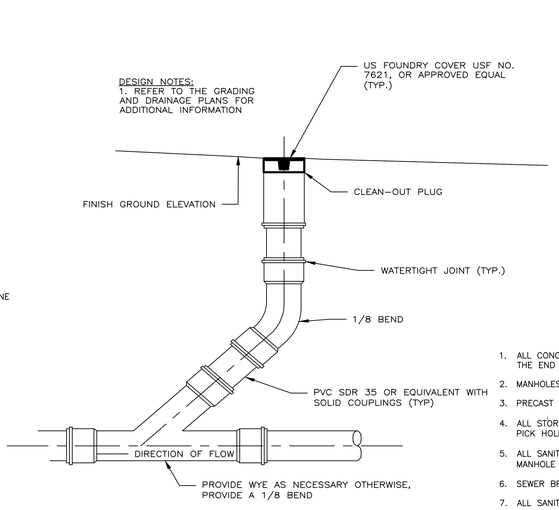
1. CATCH BASIN TO BE PRECAST AS A SINGLE PORTLAND CEMENT CONCRETE UNIT, AS MANUFACTURED BY AMERICAN CONCRETE INDUSTRIES OR AN APPROVED EQUAL.
2. FRAME AND GRATE TO BE NEEHAN FOUNDRY ENTERPRISES R-4826 OR AN APPROVED EQUAL.
3. REBAR FRAMING TO BE #4, MIN 8" O.C. OR AN APPROVED EQUAL.
4. DIAMETER OF DRAINAGE HOLE TO BE 3" LARGER THAN THE INSIDE DIAMETER OF A FLEXIBLE PIPE OR THE OUTSIDE DIAMETER OF RIGID PIPE.



SECTION A–A'

SECTION B–B'

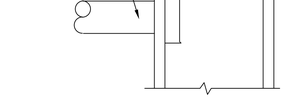
'TYPE F' PRECAST CATCH BASIN
NOT TO SCALE



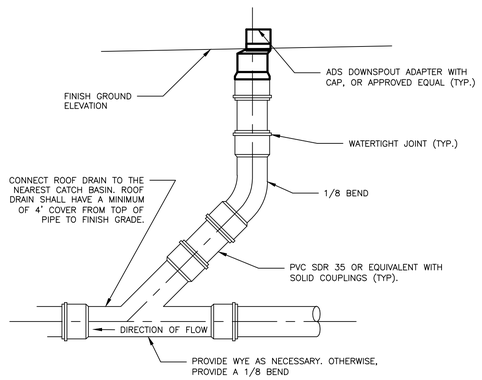
CLEANOUT DETAIL
NOT TO SCALE

NOTES:

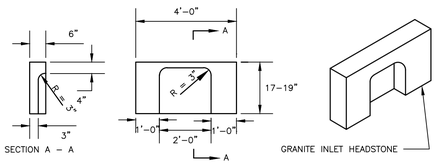
1. INSTALL HOOD ON ALL OUTLETS 24" OR LESS.
2. PREFERRED STYLE DESIGNED TO ELIMINATE CEMENTING OF THE TRAP.
3. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION REQUIREMENTS.



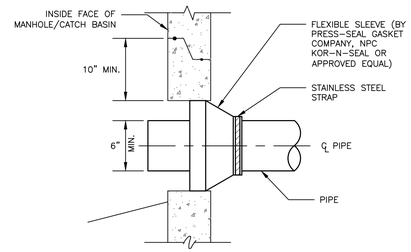
CATCH BASIN HOOD DETAIL
NOT TO SCALE



ROOF DRAIN DETAIL
NOT TO SCALE



4' GRANITE HEADSTONE FOR CATCH BASIN INLET
NOT TO SCALE



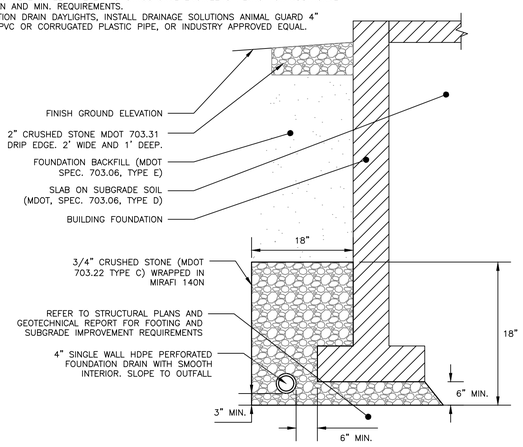
NEW DRAINAGE PIPE TO NEW DRAINAGE STRUCTURE CONNECTION DETAIL
NOT TO SCALE

1. ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 lbs. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
2. MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
3. PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478.
4. ALL STORM AND SEWER MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE ⅞" DIAMETER DRILLED PICK HOLE LOCATED 8" FROM THE CENTER OF THE COVER.
5. ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
6. SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
7. ALL SANITARY MANHOLES SHALL HAVE A WATERPROOFING COATING APPLIED TO THE EXTERIOR SURFACE.
8. CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35.
9. EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.
10. ALL CATCH BASIN OUTLETS SHALL BE INSTALLED WITH A CATCH BASIN HOOD.
11. HYDROCARBON ABSORBENT BOOM IN ALL CATCH BASINS REQUIRED BY CONTRACTOR FOLLOWING PAVING. OWNER TO MAINTAIN/REPLACE FOR 1-YEAR FOLLOWING FINAL PAVEMENT.

GENERAL NOTES FOR STORM MANHOLES AND CATCH BASINS

NOTES:

1. REFER TO THE BUILDING ARCHITECTS AND STRUCTURAL ENGINEERING PLANS FOR THE BUILDING FOUNDATION, BACKFILL, ROOF DRAIN, SIDEWALK AND OTHER DETAILS.
2. PERFORATIONS IN UNDERDRAIN PIPE SHALL BE ORIENTED DOWN.
3. INSTALL STONE DRIP EDGE IN A LOCATIONS SUBJECT TO ROOF RUNOFF. WIDTH SHALL BE A MIN. 12" BEYOND THE PROJECTION OF THE ROOF EVE.
4. FOUNDATION WALL FOOTINGS SHALL BE CONSTRUCTED TO A MIN. DEPTH OF 4 FT BELOW ADJACENT FINISH GRADE UNLESS OTHERWISE SPECIFIED BY THE GEOTECHNICAL ENGINEER OR STRUCTURAL ENGINEER. REFER TO STRUCTURAL ENGINEERS PLANS FOR ADDITIONAL INFORMATION AND MIN. REQUIREMENTS.
5. IF FOUNDATION DRAIN DAYLIGHTS, INSTALL DRAINAGE SOLUTIONS ANIMAL GUARD 4" EXTERNAL PVC OR CORRUGATED PLASTIC PIPE, OR INDUSTRY APPROVED EQUAL.



FOUNDATION DRAIN DETAIL
NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: **DRAINAGE DETAILS**

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

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STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-45

MANUFACTURER'S NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

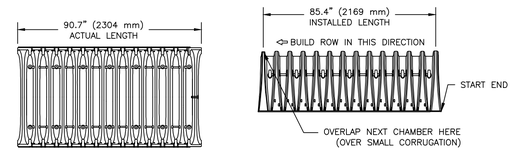
1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS.
   STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM – 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

MANUFACTURER'S NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT. THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.



NOMINAL CHAMBER SPECIFICATIONS

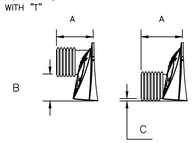
SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

ALL STUBS SHALL BE PLACED AT BOTTOM OF END CAP
SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH
WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL
INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

NOTE: ALL DIMENSIONS ARE NOMINAL



STORMTECH SC-740 TECHNICAL SPECIFICATIONS

NOT TO SCALE

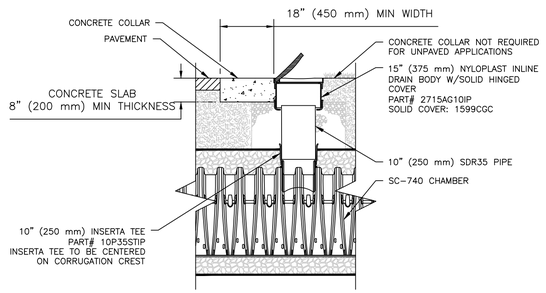
PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

MANUFACTURER'S NOTES: SC-740 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-740.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/% THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

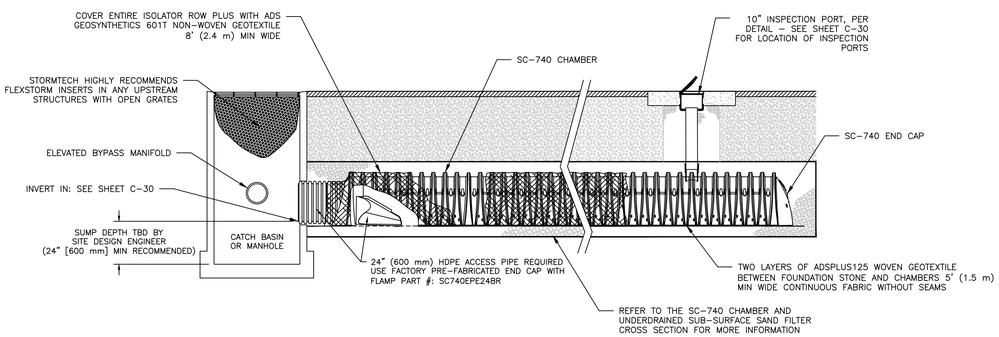
ENGINEER'S NOTES:

1. THE LAYOUT AND DIMENSION OF THE SUBSURFACE DETENTION MAY BE MODIFIED WITH AN ENGINEER APPROVED EQUIVALENT WHICH PROVIDES EQUAL DETENTION STORAGE AND WATER QUALITY TREATMENT.
2. THE SUBSURFACE DETENTION SHALL BE INSPECTED BY THE DESIGN ENGINEER AT THE FOLLOWING INTERVALS:
   - AFTER PRELIMINARY CONSTRUCTION OF THE SUBSURFACE DETENTION GRADES
   - ONE SITE VISIT DURING THE INSTALLATION OF THE IMPERVIOUS LINER
   - ONE SITE VISIT AFTER THE UNDERDRAINS ARE INSTALLED BUT BEFORE THEY ARE BACKFILLED
   - DURING THE CONSTRUCTION OF THE SAND FILTER LAYER
   - DURING THE INSTALLATION OF THE STORMTECH ISOLATOR ROW
   - BEFORE BACKFILLING THE STORMTECH UNITS
3. THE FIRST YEAR OF MAINTENANCE SHALL BE PERFORMED BY THE MANUFACTURER TO ENSURE THAT THE SYSTEM IS OPERATING ACCORDING TO THE ESTABLISHED SPECIFICATIONS.
4. REFERENCE THE MANUFACTURER'S GUIDE FOR THE OPERATION AND MAINTENANCE PLAN.



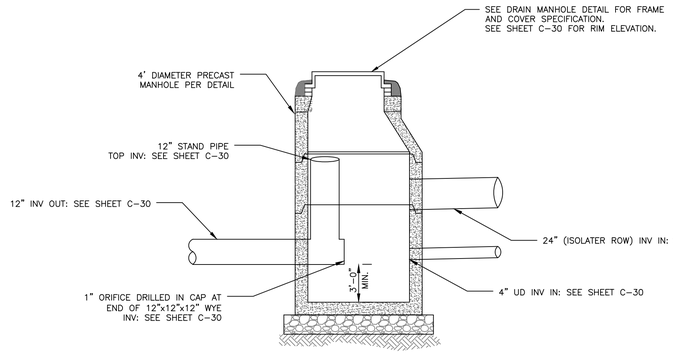
STORMTECH SC-740 10" (250 mm) INSPECTION PORT DETAIL

NOT TO SCALE



ISOLATOR ROW - PROFILE VIEW

NOT TO SCALE

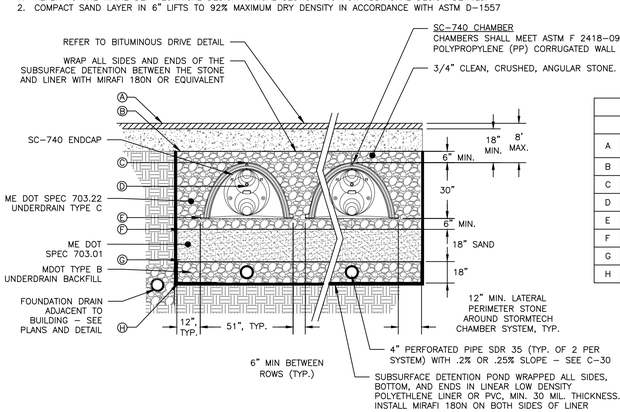


OUTLET CONTROL STRUCTURE

NOT TO SCALE

NOTES:

1. REFER TO THE MAINE DEP TECHNICAL DESIGN MANUAL SECTION 7.3 FOR ADDITIONAL DESIGN DETAILS.
2. COMPACT SAND LAYER IN 6" LIFTS TO 92% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557



SCHEDULE		
	ITEM	ELEVATION
A	FINISHED GRADE	SEE SHEET C-30
B	TOP OF CRUSHED STONE	77.50'
C	TOP OF CHAMBER	77.00'
D	OVERFLOW INVERT	75.88'
E	BOTTOM OF CHAMBER	74.50'
F	TOP OF SAND	74.00'
G	BOTTOM OF SAND	72.50'
H	BOTTOM OF SYSTEM	71.00'

UNDERDRAINED SUB-SURFACE SAND FILTER TYPICAL CROSS SECTION

NOT TO SCALE

ISOLATOR ROW PLUS INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

ISOLATOR ROW NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23
COMMENT RESPONSE	PFH 2/7/24

DRAWING NAME: STORMWATER BMP DETAILS
PROJECT NAME: WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT
186 WOODFORD STREET, PORTLAND, MAINE
CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

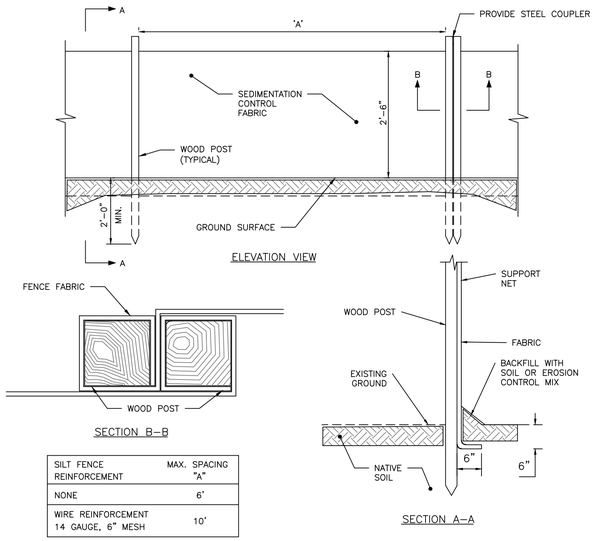
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15318
LICENSED PROFESSIONAL ENGINEER

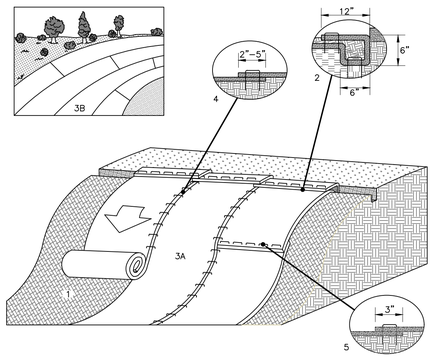
DRAWING NO.
C-46



SILT FENCE REINFORCEMENT	MAX. SPACING "A"
NONE	6'
WIRE REINFORCEMENT 14 GAUGE, 6" MESH	10'

SILTATION FENCE DETAIL

NOT TO SCALE



SLOPE INSTALLATION DETAIL

1. PREPARE SOIL BEFORE INSTALLING ROLLED EROSION CONTROL PRODUCTS (ECB), INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE ECB IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF ECB EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE ECB WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO THE COMPACTED SOIL AND FOLD THE REMAINING 12" PORTION OF ECB BACK OVER THE SEED AND COMPACTED SOIL. SECURE ECB OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE ECB.
3. ROLL THE ECB (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. ECB WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL ECB MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE.
4. THE EDGES OF PARALLEL ECB MUST BE STAPLED WITH APPROXIMATELY 2" – 5" OVERLAP DEPENDING ON THE ECB TYPE.
5. CONSECUTIVE ECB SPLICED DOWN THE SLOPE MUST BE END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE ECB WIDTH.

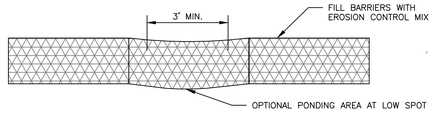
NOTE:
IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE ECB.

EROSION CONTROL BLANKET SLOPE INSTALLATION

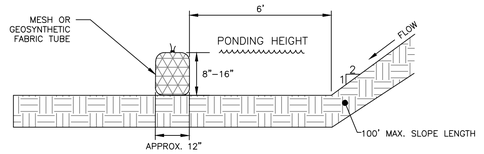
NOT TO SCALE

NOTES:

1. FULL CONTACT WITH THE GROUND IS CRITICAL TO PREVENT SHORT CIRCUITING UNDER THE TUBE – THE GROUND SURFACE SHOULD BE SMOOTH AND LEVEL. IN WOODED AREAS, PROTRUDING ROOTS AND DEBRIS MAY NEED TO BE REMOVED. IN GRASSED AREAS, THE GRASS NEEDS TO BE EITHER MOWED OR COMPRESSED DOWN.
2. STAKING MAY BE NECESSARY ON STEEP SLOPES.
3. UPON FINAL STABILIZATION, THE TUBE CAN BE CUT OPEN AND THE MATERIAL SPREAD OUT ONTO THE GROUND. THE MESH MATERIAL SHOULD BE REMOVE.
4. LOOSE COMPOST MAY BE BACKFILLED ALONG THE UPSLOPE SIDE OF THE COMPOST FILTER SOCK, FILLING THE SEAM BETWEEN THE SOIL SURFACE AND THE DEVICE, IMPROVING FILTRATION AND SEDIMENT RETENTION.



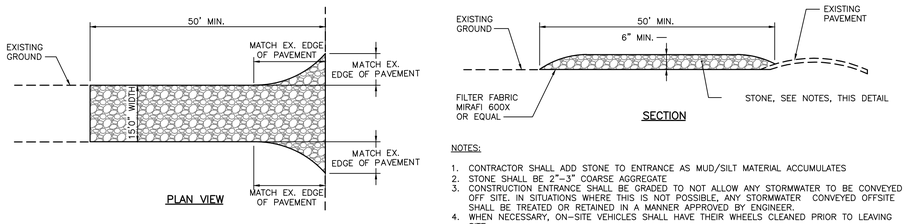
FRONT VIEW



SIDE VIEW

FILTER SOCK DETAIL

NOT TO SCALE



NOTES:

1. CONTRACTOR SHALL ADD STONE TO ENTRANCE AS MUD/SILT MATERIAL ACCUMULATES
2. STONE SHALL BE 2"–3" COARSE AGGREGATE
3. CONSTRUCTION ENTRANCE SHALL BE GRADED TO NOT ALLOW ANY STORMWATER TO BE CONVEYED OFF SITE. IN SITUATIONS WHERE THIS IS NOT POSSIBLE, ANY STORMWATER CONVEYED OFFSITE SHALL BE TREATED OR RETAINED IN A MANNER APPROVED BY ENGINEER.
4. WHEN NECESSARY, ON-SITE VEHICLES SHALL HAVE THEIR WHEELS CLEANED PRIOR TO LEAVING SITE.
5. CONSTRUCTION ENTRANCE SHALL BE GRADED IN A MANNER THAT PREVENTS TRACKING OF SEDIMENTS ONTO PUBLIC RIGHT-OF-WAY

STABILIZED CONSTRUCTION ENTRANCE

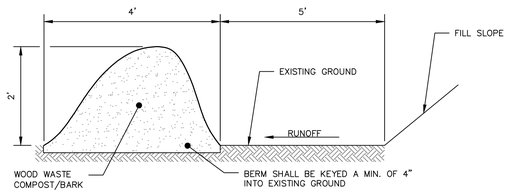
NOT TO SCALE

NOTES:

1. THE EROSION CONTROL MIX SHALL CONFORM TO THE FOLLOWING STANDARDS AND IN ACCORDANCE WITH THE MAINE DOT CHAPTER 700, SECTION 717.04(D):

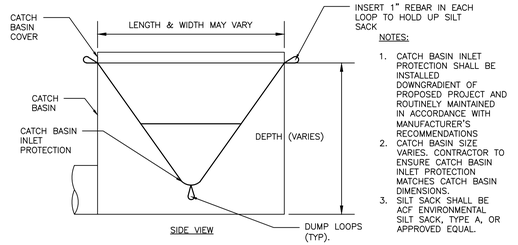
1.1. pH BETWEEN 5.0 – 8.0
1.2. PARTICLE SIZE (BY WEIGHT):
1.2.1. 100% PASSING A 150 MM (6 IN) SCREEN
1.2.2. 75 TO 85% PASSING A 19 MM (0.75 IN) SCREEN
1.3. SOLUBLE SALTS CONTENT < 4.0 MMHOS/CM
1.4. ORGANIC MATTER 20 TO 100% , DRY WEIGHT BASIS

2. THE BERM SHOULD BE PLACED, UNCOMPACTED, ALONG A RELATIVELY LEVEL CONTOUR, WHEN NECESSARY THE BERM MAY BE PLACED PERPENDICULAR TO THE SLOPE ALONG THE PROPERTY LINE TO CONTAIN THE SEDIMENT PROVIDED A BERM IS LOCATED AT THE BASE OF THE SLOPE.
3. THE BERM MAY BE USED IN LIEU OF SILTATION FENCE, AT THE TOE OF SHALLOW SLOPES, ON FROZEN GROUND, LEDGE OUT CROPS, VERY ROOTED FORESTED AREA OR AT THE EDGE OF GRAVEL PARKING AREAS.
4. WHERE A BERM IS USED AT THE BASE OF A SLOPE GREATER THAN 8%, ANOTHER MEASURE SHALL BE USED IN CONJUNCTION WITH A BERM, SUCH AS A SILT FENCE.
5. BERMS SHALL REMAIN IN PLACE UNTIL UPSTREAM AREA IS STABILIZED OR 90% CATCH OF VEGETATION IS ATTAINED. BERMS SHALL BE REMOVED OFFSITE OR BY SPREADING SUCH THAT NATIVE EARTH CAN BE SEEN BELOW.



EROSION CONTROL MIX BERM DETAIL

NOT TO SCALE



NOTES:

1. CATCH BASIN INLET PROTECTION SHALL BE INSTALLED DOWNGRADIENT OF PROPOSED PROJECT AND ROUTINELY MAINTAINED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
2. CATCH BASIN SIZE VARIES. CONTRACTOR TO ENSURE CATCH BASIN INLET PROTECTION MATCHES CATCH BASIN DIMENSIONS.
3. SILT SACK SHALL BE ACF ENVIRONMENTAL SILT SACK, TYPE A, OR APPROVED EQUAL.

CATCH BASIN INLET PROTECTION

NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR	BY DATE
CSS	PFH 12/1/23
MAJOR SITE PLAN	PFH 12/21/23

DRAWING NAME: **EROSION & SEDIMENTATION CONTROL** DETAILS

PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE

CLIENT:
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.
THESE PLANS SHALL NOT BE MODIFIED OR ASSIGNED TO ANY THIRD PARTY WITHOUT THE PRIOR WRITTEN PERMISSION AND APPROPRIATE COMPENSATION TO ACORN ENGINEERING, INC. ANY UNAUTHORIZED MODIFICATION OR REUSE OF THESE PLANS BY ANYONE OTHER THAN ACORN ENGINEERING, INC. OR FOR ANY PROJECT OTHER THAN THE ONE FOR WHICH THEY WERE PREPARED SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
ANDREW J. ANDERSON, MAINE 04104
PO BOX 327 (207) 775-2655

FILE:	1200_CIVL
JN:	1200
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DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
12/21/23

DRAWING NO.
C-47

1.0 EROSION CONTROL MEASURES AND SITE STABILIZATION

AS PART OF THE SITE DEVELOPMENT, THE FOLLOWING TEMPORARY AND PERMANENT EROSION AND SEDIMENTATION CONTROL DEVICES SHALL BE IMPLEMENTED. DEVICES SHALL BE INSTALLED AS DESCRIBED IN THIS REPORT OR WITHIN THE PLAN SET. SEE THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES FOR FURTHER REFERENCE.

1.1 TEMPORARY EROSION CONTROL MEASURES

THE FOLLOWING TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES ARE PLANNED FOR THE PROJECT'S CONSTRUCTION PERIOD:

1.1.1 CRUSHED STONE STABILIZED CONSTRUCTION ENTRANCES SHALL BE PLACED AT ALL ACCESS POINTS TO THE PROJECT SITE WHERE THERE ARE DISTURBED AREAS. THE FOLLOWING SPECIFICATIONS SHALL BE FOLLOWED AT A MINIMUM:
- STONE SIZE SHALL BE 2–3 INCHES, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- THE THICKNESS OF THE ENTRANCE STONE LAYER SHALL BE NO LESS THAN 6 INCHES.
- THE ENTRANCE SHALL NOT BE LESS THAN 20 FEET WIDE, HOWEVER NOT LESS THAN THE FULL WIDTH OF POINTS WHERE INGRESS OR EGRESS OCCURS. THE LENGTH SHALL NOT BE LESS THAN 50 FEET IN LENGTH.
- GEOTEXTILE FABRIC (WOVEN OR NON–WOVEN) SHALL BE PLACED OVER THE ENTIRE ENTRANCE AREA.
- THE ENTRANCE/EXIT SHALL BE MAINTAINED TO THE EXTENT THAT IT WILL PREVENT THE TRACKING OF SEDIMENT ONTO PUBLIC ROAD WAYS.

1.1.2 FILTER SOCKS SHALL BE INSTALLED DOWN GRADIENT OF ANY DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL PERMANENT STABILIZATION IS ACHIEVED. THE FILTER SOCKS SHALL BE INSTALLED PER THE DETAILS PROVIDED IN THE PLAN SET AND INSPECTED BEFORE AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE SOCKS. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE SOCKS, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM.

1.1.3 HAY MULCH INCLUDING HYDRO SEEDING IS INTENDED TO PROVIDE COVER FOR DENUDED OR SEEDED AREAS UNTIL REVEGETATION IS ESTABLISHED. MULCH PLACED BETWEEN APRIL 15TH AND NOVEMBER 1ST ON SLOPES OF LESS THAN 15 PERCENT SHALL BE COVERED BY FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION. MULCH PLACED BETWEEN NOVEMBER 1ST AND APRIL 15TH ON SLOPES EQUAL TO OR STEEPER THAN 8 PERCENT AND EQUAL TO OR FLATTER THAN 2:1 SHALL USE MATS OR FABRIC NETTING AND ANCHORED WITH STAPLES IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

1.1.4 AT ANY TIME OF THE YEAR, ALL SLOPES GREATER THAN 3:1 SHALL BE STABILIZED WITH DOUBLE NET EROSION CONTROL BLANKET BIONET SC150BN BY NORTH AMERICAN GREEN OR APPROVED EQUAL, OR EROSION CONTROL MIX SLOPE PROTECTION AS DETAILED WITHIN THE PLANS.

1.1.5 MUD AND DUST FROM THE SITE TRACKED ONTO WOODFORD STREET AND BEACON STREET SHALL BE REMOVED BY VACUUMING, PRIOR TO A PREDICTED RAIN EVENT, AND AS OTHERWISE DEEMED NECESSARY. ADD ADDITIONAL STONE TO THE STABILIZED CONSTRUCTION ENTRANCE TO MINIMIZE THE TRACKING OF MATERIAL OFF THE SITE AND ONTO THE SURROUNDING ROADWAYS.

1.1.6 DURING DEMOLITION, CLEARING AND GRUBBING OPERATIONS, STONE CHECK DAMS SHALL BE INSTALLED AT ANY AREAS OF CONCENTRATED FLOW. THE MAXIMUM HEIGHT OF THE CHECK DAM SHALL NOT EXCEED 2 FEET. THE CENTER OF THE CHECK DAM SHALL BE 6 INCHES BELOW THE OUTER EDGES OF THE DAM. THE CONTRACTOR SHALL MULCH THE SIDE SLOPES AND INSTALL STONE CHECK DAMS FOR ALL NEWLY EXCAVATED DITCH LINES WITHIN 24 HOURS OF THEIR CREATION.

1.1.8 STORMDRAIN INLET PROTECTION SHALL BE PROVIDED TO STORMDRAINS THROUGH THE USE OF ANY OF THE FOLLOWING: HAY BALE DROP INLET STRUCTURES, SILT FENCE DROP INLET SEDIMENT FILTER, GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER, OR CURB INLET SEDIMENT FILTER. BARRIERS SHALL BE INSPECTED AFTER EVERY RAINFALL EVENT AND REPAIRED AS NECESSARY. SEDIMENTS SHALL BE REMOVED WHEN ACCUMULATION HAS REACHED ½ THE DESIGN HEIGHT.

1.1.9 DUST CONTROL SHALL BE ACCOMPLISHED BY THE USE OF ANY OF THE FOLLOWING: WATER, CALCIUM CHLORIDE, STONE, OR AN APPROVED MDEP PRODUCT. DUST CONTROL SHALL BE APPLIED AS NEEDED TO ACCOMPLISH DUST CONTROL.

1.1.10 TEMPORARY LOAM, LIMED AND MULCH SHALL BE USED IN AREAS WHERE NO OTHER EROSION CONTROL MEASURE IS USED. APPLICATION RATES FOR SEEDING ARE PROVIDED AT THE END OF THIS REPORT.

1.1.11 STOCKPILES SHALL BE STABILIZED WITHIN 7 DAYS OF FORMATION UNLESS A SCHEDULED RAIN EVENT OCCURS PRIOR TO THE 7 DAY WINDOW, IN WHICH CASE THE STOCKPILE SHALL BE STABILIZED PRIOR TO THE RAIN EVENT. METHODS OF STABILIZATION SHALL BE MULCH, EROSION CONTROL MIX, OR EROSION CONTROL BLANKETS/MATS. SILT FENCE OR A WOOD WASTE COMPOST FILTER BERM SHALL BE PLACED DOWNHILL OF ANY SOIL STOCKPILE LOCATION.

1.1.12 FOR DISTURBANCE BETWEEN NOVEMBER 1 AND APRIL 15, PLEASE REFER TO WINTER STABILIZATION PLAN IN THIS REPORT AND THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR FURTHER INFORMATION.

1.1.13 IT IS OF THE UTMOST IMPORTANCE THAT STORMWATER RUNOFF AND POTENTIAL SEDIMENT FROM THE CONSTRUCTION SITE BE DIVERTED AROUND THE PROPOSED UNDERDRAINS UNTIL TRENCH IS BACKFILLED.

1.2 PERMANENT EROSION CONTROL MEASURES

THE FOLLOWING PERMANENT EROSION CONTROL MEASURES ARE INTENDED FOR POST DISTURBANCE AREAS OF THE PROJECT.

1.2.1 ALL DISTURBED AREAS DURING CONSTRUCTION, NOT SUBJECT TO OTHER PROPOSED CONDITIONS, SHALL RECEIVE A MINIMUM 4" OF LOAM, LIMED, AND MULCHED. EROSION CONTROL BLANKETS OR MATS SHALL BE PLACED OVER THE MULCH IN AREAS NOTED IN PARAGRAPH 4.1 OF THIS REPORT.
1.2.2 ALL STORMWATER DEVICES SHALL BE INSTALLED AND TRIBUTARY AREAS STABILIZED PRIOR RECEIVING STORMWATER.
1.2.3 REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

2.0 EROSION AND SEDIMENTATION CONTROL PLAN

2.1 THE EROSION AND SEDIMENTATION CONTROL PLAN IS INCLUDED WITHIN THE PLAN SET.

3.0 DETAILS AND SPECIFICATIONS

3.1 EROSION CONTROL DETAILS AND SPECIFICATIONS ARE INCLUDED IN THE PLAN SET.

4.0 STABILIZATION PLAN FOR WINTER CONSTRUCTION

WINTER CONSTRUCTION CONSISTS OF EARTHWORK DISTURBANCE BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15. IF A CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 90% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15, THEN THE SITE SHALL BE PROTECTED WITH OVER–WINTER STABILIZATION. ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MIX, EROSION CONTROL MATS, RIPRAP, OR GRAVEL BASE ON A ROAD SHALL BE CONSIDERED UNSTABILIZED.

THE CONTRACTOR SHALL LIMIT THE WORK AREA TO AREAS THAT WORK WILL OCCUR IN DURING THE SUBSEQUENT 15 DAYS AND SO THAT IT CAN BE MULCHED ONE DAY PRIOR TO A SNOW EVENT. THE CONTRACTOR SHALL STABILIZE WORK AREAS PRIOR TO OPENING ADDITIONAL WORK AREAS TO MINIMIZE AREAS WITHOUT EROSION CONTROL MEASURES.

THE FOLLOWING MEASURES SHALL BE IMPLEMENTED DURING WINTER CONSTRUCTION PERIODS:

4.1 SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS, FILTER SOCKS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES OR SILT FENCES.

4.2 MULCHING

ALL AREAS SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75–LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW SHALL BE REMOVED DOWN TO A ONE–INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA SHALL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

4.3 SOIL STOCKPILING

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR–INCH LAYER OF EROSION CONTROL MIX. THIS SHALL BE DONE WITHIN 24 HOURS OF STOCKING AND RE–ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.

4.4 SEEDING

BETWEEN THE DATES OF OCTOBER 15TH AND APRIL 1ST, LOAM OR SEED SHALL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS NOT BEEN LOAMED, FINAL GRADING WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.

DORMANT SEEDING MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH OR EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5 LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER SHALL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 90% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.

4.5 OVER WINTER STABILIZATION OF DISTURBED SOILS

BY SEPTEMBER 15TH, ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15% SHALL BE SEEDED AND MULCHED. IF THE DISTURBED AREAS ARE NOT STABILIZED BY THIS DATE, THEN ONE OF THE FOLLOWING ACTIONS SHALL BE TAKEN TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION – BY OCTOBER 1ST, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3LBS PER 1,000 S.F., LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 LBS PER 1,000 S.F., AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1ST, THEN MULCH THE AREA FOR OVER–WINTER PROTECTION.

- STABILIZE THE SOIL WITH SOD – STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.

- STABILIZE THE SOIL WITH MULCH – BY NOVEMBER 15TH, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 LBS PER 1,000 S.F. ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

4.6 OVER WINTER STABILIZATION OF DISTURBED SLOPES

ALL STONE–COVERED SLOPES SHALL BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15TH. ALL SLOPES TO BE VEGETATED SHALL BE SEEDED AND MULCHED BY SEPTEMBER 1ST. A SLOPE IS CONSIDERED A GRADE GREATER THAN 15%. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1ST, THEN ONE OF THE FOLLOWING ACTION SHALL BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS – BY OCTOBER 1ST THE DISTURBED SLOPE SHALL BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 LBS PER 1,000 S.F. AND THEN INSTALL EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 90% F THE SLOPE BY NOVEMBER 1ST, THEN THE CONTRACTOR SHALL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR WITH STONE RIPRAP.

- STABILIZE THE SOIL WITH SOD – THE DISTURBED SLOPE SHALL BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1ST. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR SHALL NOT USE LATE–SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 3H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

- STABILIZE THE SOIL WITH EROSION CONTROL MIX – EROSION CONTROL MIX SHALL BE PROPERLY INSTALLED BY NOVEMBER 15TH. THE CONTRACTOR SHALL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAN 2H:1V OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

- STABILIZE THE SOIL WITH STONE RIPRAP – PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15TH. A REGISTERED PROFESSIONAL ENGINEER SHALL BE HIRED TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

5.0 INSPECTION AND MAINTENANCE

- A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROLS, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT PERIODIC VISUAL INSPECTIONS OF INSTALLED EROSION CONTROL MEASURES. THE FREQUENCY OF INSPECTION SHALL OCCUR AT LEAST ONCE EVERY TWO WORKING WEEKS, AS WELL AS AFTER A "STORM EVENT". A "STORM EVENT" SHALL CONSIST OF 0.5 INCHES OF RAIN OR SNOWMELT WITHIN A 24 HOUR PERIOD. THE FOLLOWING EROSION AND SEDIMENT CONTROL – BEST MANAGEMENT PRACTICES (BMP'S) SHALL INSPECTED IN THE MANNER AS DESCRIBED. THE SCOPE OF INSPECTIONS INCLUDE DISTURBED AND IMPERVIOUS AREAS, MATERIAL STORAGE AREAS, VEHICLE ACCESS POINTS & ANY OTHER EROSION CONTROL MEASURES NOT DIRECTLY LISTED. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO ENSURE EROSION CONTROL MEASURES PERFORM AS DESIGNED. IF CORRECTIVE ACTION IS REQUIRED, THE REPAIR WORK SHALL BE STARTED BY NO LATER THAN THE END OF THE FOLLOWING WORKDAY AND COMPLETED WITHIN ONE WEEK, OR BEFORE THE NEXT PREDICTED "STORM EVENT." THE CONTRACTOR SHALL PROVIDE ALL NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING INSPECTION DATES AND NECESSARY WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS SPECIFIED IN THIS PLAN SET.

5.1 SEDIMENT BARRIERS

HAY BALE BARRIERS, SILT FENCES AND FILTER BERMS SHALL BE INSPECTED AND REPAIRED FOR THE FOLLOWING IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES OF THE BARRIER, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY CHECK DAM. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE–HALF THE HEIGHT OF THE BARRIER. FILTER BERMS SHOULD BE RESHAPED AS NEEDED. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

5.2 STABILIZED STONE CONSTRUCTION ENTRANCES

THE EXIT SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS–OF–WAY. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL AND REDISTRIBUTED ON SITE IN A STABLE MANNER. THE ENTRANCE SHOULD THEN BE RECONSTRUCTED. THE CONTRACTOR SHALL SWEEP OR WASH PAVEMENT AT EXITS, WHICH HAVE EXPERIENCED MUD–TRACKING ON TO THE PAVEMENT OR TRAVELED WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

5.3 MULCHED AREAS

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR RILL EROSION. IF LESS THAN 90% OF THE SOIL SURFACE IS COVERED BY MULCH, ADDITIONAL MULCH SHALL BE IMMEDIATELY APPLIED. NETS MUST BE INSPECTED AFTER RAIN EVENTS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, RE–INSTALL THE NETS AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE. REPAIR AS NEEDED.

5.4 DUST CONTROL

WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHALL BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.

5.5 STORMWATER APPURTENANCES

ALL UNDERDRAINS, STORM DRAINS, AND CATCH BASINS NEED TO BE OPERATING EFFECTIVELY AND FREE OF DEBRIS.

5.6 THE APPLICANT BEARS THE RESPONSIBILITY OF MAINTAINING FOR AT LEAST FIVE (5) YEARS, THE INSPECTION FORMS AND DOCUMENTATION OF CORRECTIVE ACTIONS TAKEN DURING CONSTRUCTION.

5.7 EROSION AND SEDIMENTATION CONTROL INSPECTIONS:

ACORN ENGINEERING HAS PERSONNEL QUALIFIED TO CONDUCT EROSION AND SEDIMENTATION CONTROL INSPECTIONS. FOR FURTHER INFORMATION CONTACT:

CONTACT: PETER HEIL, PE
TELEPHONE: (207) 775–2655

QUALIFICATIONS:

Ø MAINE PROFESSIONAL ENGINEERING LICENSE #15318
Ø MAINE DEP – CERTIFIED IN MAINTENANCE & INSPECTION OF STORMWATER BMP'S CERT
Ø MAINE DEP – CERTIFIED THIRD–PARTY INSPECTOR
Ø CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL (CPESC) CERT. #7071

THE CONTRACTOR HAS SOLE RESPONSIBILITY FOR COMPLYING WITH THE EROSION AND SEDIMENTATION REPORT/PLAN, INCLUDING CONTROL OF FUGITIVE DUST. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MONETARY PENALTIES RESULTING FROM FAILURE TO COMPLY WITH THESE STANDARDS.

6.0 IMPLEMENTATION SCHEDULE

THE FOLLOWING IMPLEMENTATION SEQUENCE IS INTENDED TO MAXIMIZE THE EFFECTIVENESS OF THE ABOVE DESCRIBED EROSION CONTROL MEASURES. CONTRACTORS SHOULD AVOID OVEREXPOSING DISTURBED AREAS AND LIMIT THE AMOUNT OF STABILIZATION AREA.

1. INSTALL A STABILIZED CONSTRUCTION ENTRANCE IN ALL LOCATIONS WHERE CONSTRUCTION TRAFFIC WILL ENTER AND EXIT THE SITE.
2. INSTALL PERIMETER SILT FENCE OR EROSION CONTROL BERM.
3. INSTALL ALL OTHER EROSION CONTROL DEVICES AS NECESSARY THROUGHOUT THE REMAINDER OF THIS SCHEDULE.
4. COMMENCE INSTALLATION OF DRAINAGE INFRASTRUCTURE.
5. RELOCATE EXISTING UTILITIES.
6. COMMENCE EARTHWORK OPERATIONS, WALL AND FOUNDATION INSTALLATION.
7. COMMENCE INSTALLATION OF UTILITIES.
8. CONTINUE EARTHWORK AND GRADING TO SUBGRADE AS NECESSARY FOR CONSTRUCTION.
9. COMPLETE INSTALLATION OF DRAINAGE INFRASTRUCTURE, AS WELL AS OTHER UTILITY WORK.
10. COMPLETE REMAINING EARTHWORK OPERATIONS.
11. INSTALL SUB–BASE AND BASE GRAVELS IN PAVED AREAS.
12. INSTALL PAVING, CURBING AND BRICKWORK.
13. LOAM, LIME, FERTILIZE, SEED AND MULCH DISTURBED AREAS AND COMPLETE ALL LANDSCAPING.
14. ONCE THE SITE IS STABILIZED, 90% CATCH OF GRASS HAS BEEN OBTAINED, OR MULCHING OF LANDSCAPE AREAS IS COMPLETE REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
15. TOUCH UP AREAS WITHOUT A VIGOROUS CATCH OF GRASS WITH LOAM AND SEED.
16. COMPLETE SITE SIGNAGE AND STRIPING.
17. EXECUTE PROPER MAINTENANCE OF ALL TEMPORARY AND PERMANENT EROSION CONTROL MEASURES THROUGHOUT THE PROJECT.

THE ABOVE IMPLEMENTATION SEQUENCE SHOULD BE GENERALLY FOLLOWED BY THE SITE CONTRACTOR. HOWEVER, THE CONTRACTOR MAY CONSTRUCT SEVERAL ITEMS SIMULTANEOUSLY. THE CONTRACTOR SHALL SUBMIT TO THE OWNER A SCHEDULE OF THE COMPLETION OF THE WORK. IF THE CONTRACTOR IS TO COMMENCE THE CONSTRUCTION OF MORE THAN ONE ITEM ABOVE, THEY SHALL LIMIT THE AMOUNT OF EXPOSED AREAS TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDERTAKEN DURING THE FOLLOWING 30 DAYS.

THE CONTRACTOR SHALL RE–VEGETATE DISTURBED AREAS AS RAPIDLY AS POSSIBLE. ALL AREAS SHALL BE PERMANENTLY STABILIZED WITHIN 7 DAYS OF FINAL GRADING OR BEFORE A STORM EVENT. THE CONTRACTOR SHALL INCORPORATE PLANNED INLETS AND DRAINAGE SYSTEMS AS EARLY AS POSSIBLE INTO THE CONSTRUCTION PHASE.

7.0 CONCLUSION

THE ABOVE EROSION CONTROL NARRATIVE IS INTENDED TO MINIMIZE THE DEVELOPMENT IMPACT BY IMPLEMENTING TEMPORARY AND PERMANENT EROSION CONTROL MEASURES. THE CONTRACTOR SHALL ALSO REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION.

SEEDING PLAN

SITE PREPARATION

THE SEEDED AREAS SHALL BE FEASIBLY GRADED OUT TO PROVIDE THE USE OF EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. IF NECESSARY, THE SITE MAY REQUIRE ADDITIONAL TEMPORARY EROSION CONTROL MEASURES OUTLINED IN THE EROSION CONTROL REPORT.

SEEDBED PREPARATION

FERTILIZER SHALL BE APPLIED TO THE SITE AT A RATE OF 13.8 POUNDS PER 1,000 SQUARE FEET. THE COMPOSITION OF THE FERTILIZER SHALL BE 10–10–10 (N–P205–K20) OR EQUIVALENT. FERTILIZER SHALL NOT BE APPLIED TO INFILTRATION BASIN ONCE AMENDED.

LIMESTONE SHALL BE APPLIED TO THE SITE AT A RATE OF 138 POUNDS PER 1,000 SQUARE FEET.

SEEDING

THE COMPOSITION AND AMOUNT OF TEMPORARY SEED APPLIED TO A SITE SHALL BE DETERMINED BY THE FOLLOWING TABLE:

TEMPORARY SEED APPLICATION RATES

SEED	LBS / ACRE	RECOMMENDED SEEDING DATES
WINTER RYE	2.57	8/15 TO 10/1
OATS	1.84	4/1 TO 7/1 8/15 TO 9/15
ANNUAL RYGRASS	0.92	4/1 TO 7/1
SUDANGRASS	0.92	5/15 TO 8/15
PERENNIAL	0.92	8/15 TO 9/15
TOTAL	7.17 LBS/ACRE	

PERMANENT SEED APPLICATION RATES

SEED	LBS / ACRE
KENTUCKY BLUEGRASS	20.00
CREEPING RED FESCUE	20.00
PERENNIAL RYEGRASS	4.80
TOTAL	44.8 LBS/ACRE

MULCHING

MULCH SHALL BE HARDWOOD AND APPLIED AT A RATE OF 70 LBS – 90 LBS PER 1,000 SQUARE FEET. THE MULCH SHALL BE INSTALLED AT A MINIMUM DEPTH OF 4 INCHES. THE SEEDED AREA SHALL BE MULCHED IMMEDIATELY AFTER SEED IS APPLIED. MULCHING DURING THE WINTER SEASON SHALL BE DOUBLE THE NORMAL AMOUNT. REFER TO DETAIL FOR MORE INFORMATION.

CONCLUSION

PLEASE REFER TO THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL FOR ADDITIONAL INFORMATION PERTAINING TO TEMPORARY SEEDING AND MULCHING.

HOUSEKEEPING

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1–800–482–0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1–800–452–4664 WHICH IS AVAILABLE 24 HOURS A DAY. FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT : HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGSPILLRESP/

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE–TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

SEE APPENDIX D FOR LICENSE BY RULE STANDARDS FOR INFILTRATION OF STORMWATER.

NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465–C(1).

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUD

SPACE AND BULK STANDARDS

ZONE: B2 – COMMUNITY BUSINESS	REQUIRED	EXISTING	LOT 1	PROPOSED LOT 2	PROPOSED LOT 3
MIN. LOT AREA	NONE	83,811 SF	37,289 SF	27,883 SF	18,641 SF
MIN. LOT AREA PER DWELLING UNIT (OFF–PENINSULA)*	1,000 SF / UNIT 400 SF / UNIT*	N/A	N/A	753*	444*
BUILDING (PRINCIPAL): MAX. FRONT SETBACK	10'**	46.10'	EX. 46.10'	45.61'	3.78'
BUILDING MIN. SIDE SETBACK	NONE	11.56'	11.56'	0'	5.67'
BUILDING MIN. REAR SETBACK	10' 0'*	24.42'	24.42'	16.55'	20.05'
BUILDING MIN. SIDE STEPBACK ABOVE 35'	5'	–	–	N/A	N/A
BUILDING MIN. REAR STEPBACK ABOVE 35'	15'	–	–	N/A	N/A
MIN. STREET FRONTAGE	20'	628.22'	369.13'	152.56'	106.52'
LOT COVERAGE	N/A	24.1%	28.3%	37.0%	44.0%
MAX. BUILDING HEIGHT	45' 70'*	N/A	N/A	41.96'	46.76'*
IMPERVIOUS SURFACE RATIO	RESIDENTIAL: NONE	75.3%	66.0%	75.1%	88.3%

* PER CITY OF PORTLAND LAND USE CODE, TABLE 18–C: BONUSES FOR ELIGIBLE PROJECTS: (75% LOW INCOME UNITS GRANTS A 2.5X BONUS DENSITY FROM THE BASE OF 1,000 SF/UNIT TO 400 SF/UNIT) & (GRANTS 10' SETBACK REDUCTIONS) & (GRANTS AN ADDITIONAL 25' BUILDING HEIGHT).

SURVEY GENERAL NOTES

1. OWNER OF RECORD: WOODFORDS CONGREGATIONAL CHURCH OF THE UNITED CHURCH OF CHRIST
   CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 30671 PAGE 65
2. LOCUS IS SHOWN AS LOT 5 BLOCK J ON CITY OF PORTLAND'S ASSESSORS MAP 124.
3. BEARINGS ARE BASED ON CITY CONTROL POINTS SHOWN. BEARINGS ARE BASED ON CITY CONTROL POINTS SHOWN.
4. ELEVATIONS ARE BASED ON CITY DATUM. ELEVATIONS ARE BASED ON CITY DATUM.
5. THERE ARE 80 REGULAR SPACES AND 5 HANDICAP SPACES, FOR A TOTAL OF 85 PARKING SPACES.
6. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, BUILDING ADDITIONS, OR RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS WAS OBSERVED.
7. NO PROPOSED CHANGES IN STREET LINES IS KNOWN BY THIS SURVEYOR.
8. THE SEWER SERVICE LOCATIONS ARE APPROXIMATE BASED ON CITY PLANS.

PARKING SUMMARY

	UNITS	SPACES REQUIRED	EXISTING	PROPOSED	PROPOSED EV
MULTIFAMILY	79	1 SPACE PER DWELLING UNIT = 79 SPACES*	–	–	–
PLACES OF ASSEMBLY	APPROX. 5,200SF FLOOR AREA	1 SPACE PER 150 SF OF FLOOR AREA = 35 SPACES	–	–	–
ADA (8'X18')	–	–	5	2	–
ADA (11'X20')	–	–	–	1	1
STANDARD (9'X18')	–	–	36	10	–
LOW TURNOVER (8.5' X 18')	–	–	0	37	12
COMPACT (8' X 15')	–	–	–	3	–
PARALLEL (8' X 20')	–	–	3	4	–
ANGLED 60° (9' X 18')	–	–	41	0	–
TOTAL SPACES	–	114*	85	57*	13

* PER THE CITY OF PORTLAND LAND USE CODE, TABLE 19–B: CATEGORICAL EXCEPTIONS TO OFF–STREET PARKING MINIMUMS.
1. NO OFF STREET PARKING SHALL BE REQUIRED FOR NON RESIDENTIAL USES IN THE B–2 ZONE.
2. NO OFF–STREET PARKING SHALL BE REQUIRED WITHIN 1/4 MILE OF FIXED ROUTE TRANSIT SERVICE, NEW USES OR CHANGES OF USE OF MORE THAN 10,000 SF TAKING ADVANTAGE OF THIS EXCEPTION SHALL BE REQUIRED TO PROVIDE A TRANSPORTATION DEMAND MANAGEMENT PLAN IF THEY USE THIS PROVISION IN LIEU OF PARKING REQUIREMENTS.
3. AFFORDABLE HOUSING: THE PLANNING BOARD MAY ESTABLISH A PARKING REQUIREMENT WITHIN THAT IS LESS THAN 1 SPACE PER AFFORDABLE HOUSING UNIT REGARDLESS OF SIZE OF STRUCTURE

** IN ACCORDANCE WITH SECTION 14.6.1 OF THE CITY OF PORTLAND LAND USE CODE, AND SECTION 1.14 OF THE PORTLAND TECHNICAL MANUAL, NEW PARKING LOTS WITH FIVE OR MORE SPACES SHALL INCLUDE ENERGIZED ELECTRICAL OUTLETS OR INSTALLED CHARGERS CAPABLE OF PROVIDING LEVEL 2 ELECTRIC VEHICLE CHARGING OR HIGHER TO 20% OF PARKING SPACES. REMAINING SPACES MUST BE SERVED BY SUFFICIENT CONDUIT, WIRING, AND ELECTRICAL SERVICE TO ALLOW FOR FUTURE INSTALLATION OF ELECTRIC VEHICLE SUPPLY EQUIPMENT.

GENERAL NOTES:

1. FOR INFORMATION REGARDING THE PROPOSED SITE, UTILITIES, AND GRADING, REFER TO THE SITE PLAN, C–10, C–20, C–30, MOST RECENT VERSION.
2. AS OF 12/18/2023, THE SITE IS BOUNDED BY THE B2 ZONE.
3. EXISTING PROPERTY LINES OBTAINED FROM THE PLAN TITLED "ALTA / NSPS LAND TITLE SURVEY" PREPARED BY OWEN HASKELL, INC. DATED 3/10/2022 AND LAST REVISED 10/12/2023.
4. LOCUS PARCELS DO NOT FALL IN A SPECIAL FLOOD HAZARD AREA PER FEMA FLOOD INSURANCE RATE MAP COMMUNITY–PANEL NUMBER 2300510013B, INDEX DATED 7/17/1986.
5. THIS SHEET IS THE SUBDIVISION PLAT FOR THE CREATION OF UP TO SEVENTY–NINE (79) DWELLING UNITS ON THE SUBJECT PROPERTIES.
6. THE OWNER SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND MANAGEMENT OF DRIVEWAYS, SIDEWALKS, STORMWATER DEVICES, SITE LIGHTING, TRASH REMOVAL, RETAINING WALLS, AND SNOW REMOVAL.
7. FINAL PROPERTY LINES, LOT AREAS, AND EASEMENT METES & BOUNDS COMPLETED BY ACORN ENGINEERING, INC.
8. BEARINGS SHOWN HEREON ARE IN REFERENCE TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802–NAD83.
9. ELEVATIONS DEPICTED HEREON ARE IN REFERENCE TO THE CITY OF PORTLAND VERTICAL DATUM WHICH APPROXIMATES THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

APPROVED: PORTLAND PLANNING AUTHORITY
STAFF: DATE:

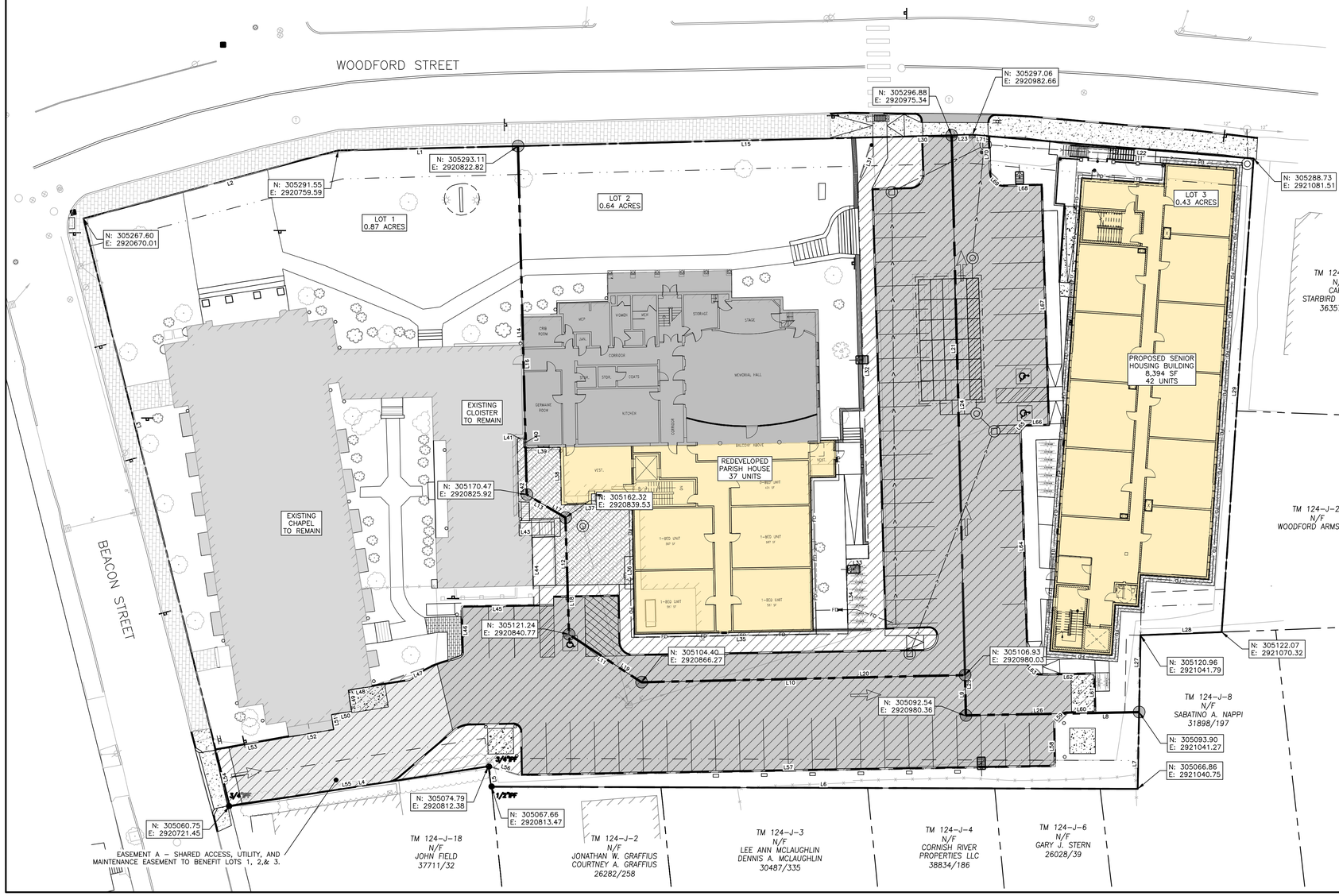
EASEMENT 'A' TABLE		
LINE	BEARING	DISTANCE
L30	S88°35'05"W	35.06'
L31	S17°32'23"W	17.37'
L32	S1°38'51"E	131.78'
L33	S88°33'23"W	7.90'
L34	S1°26'37"E	26.23'
L35	S89°02'13"W	75.22'
L36	N0°57'47"W	47.01'
L37	S89°02'13"W	24.88'
L38	N1°05'38"W	20.27'
L39	S89°02'15"W	12.70'
L40	N1°23'29"W	3.26'
L41	S88°36'31"W	2.37'
L42	S1°19'26"E	34.12'
L43	N88°26'43"E	4.40'
L44	S1°33'17"E	24.40'
L45	S89°05'32"W	25.60'
L46	S1°11'16"E	17.25'
L47	S70°40'02"W	33.56'
L48	S81°05'45"W	8.44'
L49	S9°10'28"E	7.55'

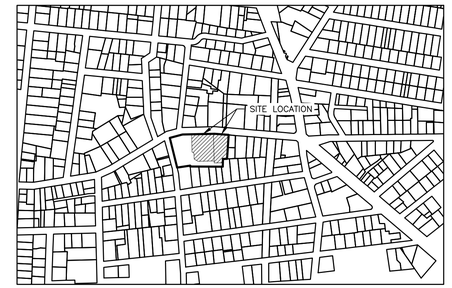
EASEMENT 'A' TABLE		
LINE	BEARING	DISTANCE
L50	S80°44'14"W	7.24'
L51	S9°22'15"E	5.29'
L52	S80°37'45"W	15.98'
L53	S79°44'33"W	26.51'
L54	S13°19'09"E	20.08'
L55	N81°23'14"E	92.74'
L56	S74°15'23"E	11.86'
L57	N89°02'09"E	188.00'
L58	N0°57'51"W	14.21'
L59	N44°02'05"E	6.36'
L60	N89°02'09"E	9.95'
L61	N1°05'13"W	14.00'
L62	S89°02'10"W	18.91'
L63	N46°20'35"W	6.32'
L64	N1°43'19"W	81.30'
L65	N43°16'41"E	2.12'
L66	N88°16'41"E	8.49'
L67	N1°43'26"W	85.00'
L68	S88°16'34"W	13.50'
L69	N46°43'26"W	6.36'

LOT 1		
Line #	Length	Direction
L1	63.25'	S88° 35' 05"W
L2	92.73'	S75° 02' 05"W
L3	213.15'	S13° 57' 55"E
L4	92.14'	N81° 13' 33"E
L5	7.21'	S7° 41' 41"E
L6	227.27'	S89° 47' 55"E
L7	27.04'	N1° 06' 05"E
L8	60.93'	S88° 53' 59"W
L9	14.21'	N1° 16' 35"W
L10	113.79'	S88° 43' 25"W
L11	30.56'	N56° 33' 18"W
L12	41.10'	N1° 43' 54"W
L13	15.86'	N59° 05' 21"W
L14	122.68'	N1° 26' 52"W

LOT 2		
Line #	Length	Direction
L15	152.56'	S88° 35' 05"W
L16	122.68'	S1° 26' 52"E
L17	15.86'	S59° 05' 21"E
L18	41.10'	S1° 43' 54"E
L19	30.56'	S56° 33' 18"E
L20	113.79'	N88° 43' 25"E
L21	190.00'	N1° 24' 55"W

LOT 3		
Line #	Length	Direction
L22	99.20'	N85° 10' 55"W
L23	7.32'	S88° 35' 05"W
L24	190.00'	S1° 24' 55"E
L25	14.21'	S1° 16' 35"E
L26	60.93'	N88° 53' 59"E
L27	27.07'	N1° 06' 05"E
L28	28.55'	N87° 47' 20"E
L29	167.04'	N3° 50' 35"E





VICINITY MAP

SCALE: 1" = 500'

LEGEND

- PR. PAVEMENT
- EX. PAVEMENT
- CURB
- BUILDING
- CONCRETE
- PR. PROPERTY LINE
- EX. PROPERTY LINE
- NEW PROPERTY PIN

STATE OF MAINE, CUMBERLAND, ss
REGISTRY OF DEEDS

RECEIVED _____

AT ____ hr. ____ min. ____ m AND RECORDED

IN PLAN BOOK _____, PAGE

ATTEST: _____
REGISTER

THIS SURVEY CONFORMS TO THE CURRENT STANDARDS OF PRACTICE SET FORTH BY THE MAINE STATE BOARD OF LICENSURE FOR LAND SURVEYORS.

RANDY R. LOUBIER, MAINE P.L.S. #2407 DATE:
OWEN HASKELL, INC.

20 0 20 40
SCALE: 1"=20'

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

DEVELOPER:

COMMUNITY HOUSING OF MAINE
CONTACT: BRIAN KILGALLEN
PORTLAND, MAINE 04101
(207) 879–0347

CIVIL ENGINEER:

ACORN ENGINEERING, INC.
PORTLAND, MAINE
CONTACT: PETER F HEIL, P.E.
(207) 775–2655

SURVEYOR:

OWEN HASKELL, INC.
FALMOUTH, MAINE
CONTACT: RANDY R. LOUBIER, P.L.S.
(207) 774–0424

ISSUED FOR	BY	DATE
CSS	PFH	12/1/23
MAJOR SITE PLAN	PFH	12/21/23

DRAWING NAME: **SUBDIVISION PLAT – 186 WOODFORD STREET PORTLAND**
PROJECT NAME: **WOODFORD STREET AFFORDABLE HOUSING REDEVELOPMENT**
186 WOODFORD STREET, PORTLAND, MAINE
CLIENT: COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR, PORTLAND, MAINE, 04101

ACORN ENGINEERING, INC.

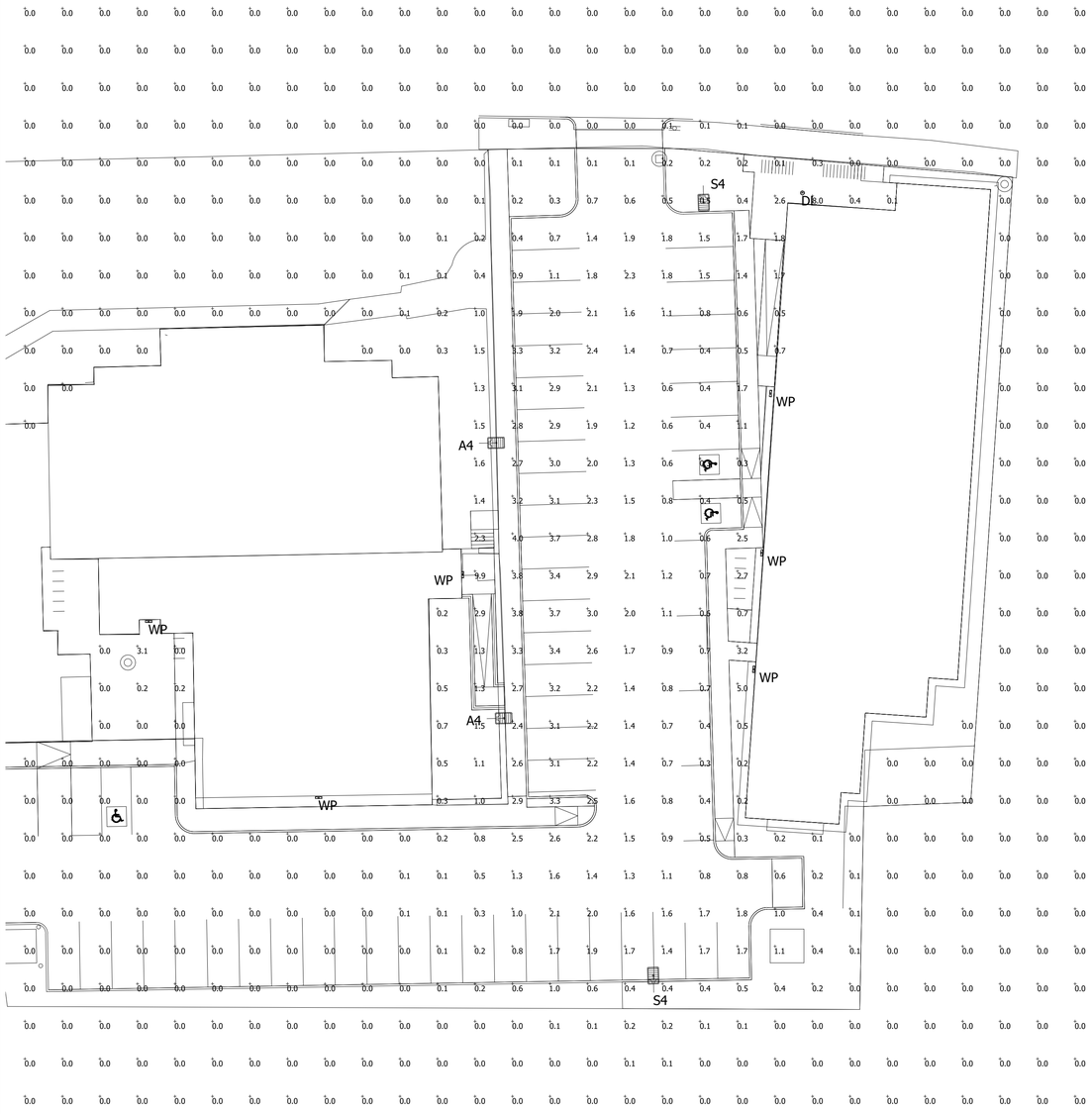
THESE PLANS SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION OF ACORN ENGINEERING, INC. ANY MODIFICATIONS MADE WITHOUT WRITTEN PERMISSION OF ACORN ENGINEERING, INC. WILL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
ONE CITY CENTER, 4TH FLOOR
PO BOX 3287 PORTLAND, MAINE 04104
(207) 775–2655

FILE:	1200_CIVL
JN:	1200
SCALE:	AS NOTED
DESIGNED BY:	PFH
DRAWN BY:	DSH
CHECKED BY:	WHS

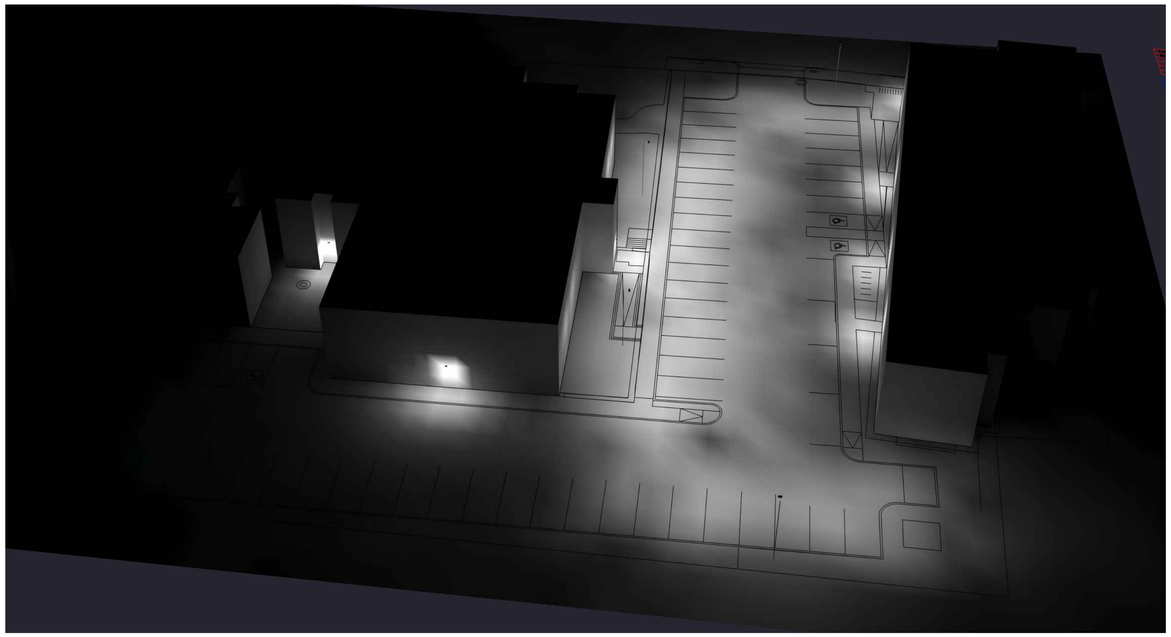
STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
PLAT



Luminaire Schedule							
Symbol	Qty	Label	Mounting Height	LLF	Lum. Lumens	Lum. Watts	Description
	6	WP	8' - 0" AFG	0.900	1547	17	CY1-15-3K7-1-1D-R
	1	DL	9' - 0" AFG	0.900	1030	12	LTR-4RD-H-SL10L-DM1_LTR-4RD-T-SL35K8XWS
	2	A4	20' - 0" AFG	0.900	12364	100	VP-1-160L-100-3K7-4W
	2	S4	20' - 0" AFG	0.900	3870	50	VP-1-160L-50-5K7-4W-BC

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Overall Area	Illuminance	Fc	0.30	9.9	0.0	N.A.	N.A.
Property Line	Illuminance	Fc	0.02	0.4	0.0	N.A.	N.A.
Shared Parking Lot	Illuminance	Fc	1.60	3.7	0.3	5.33	12.33



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 - FT.

1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO CURRENT. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.
2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.
3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

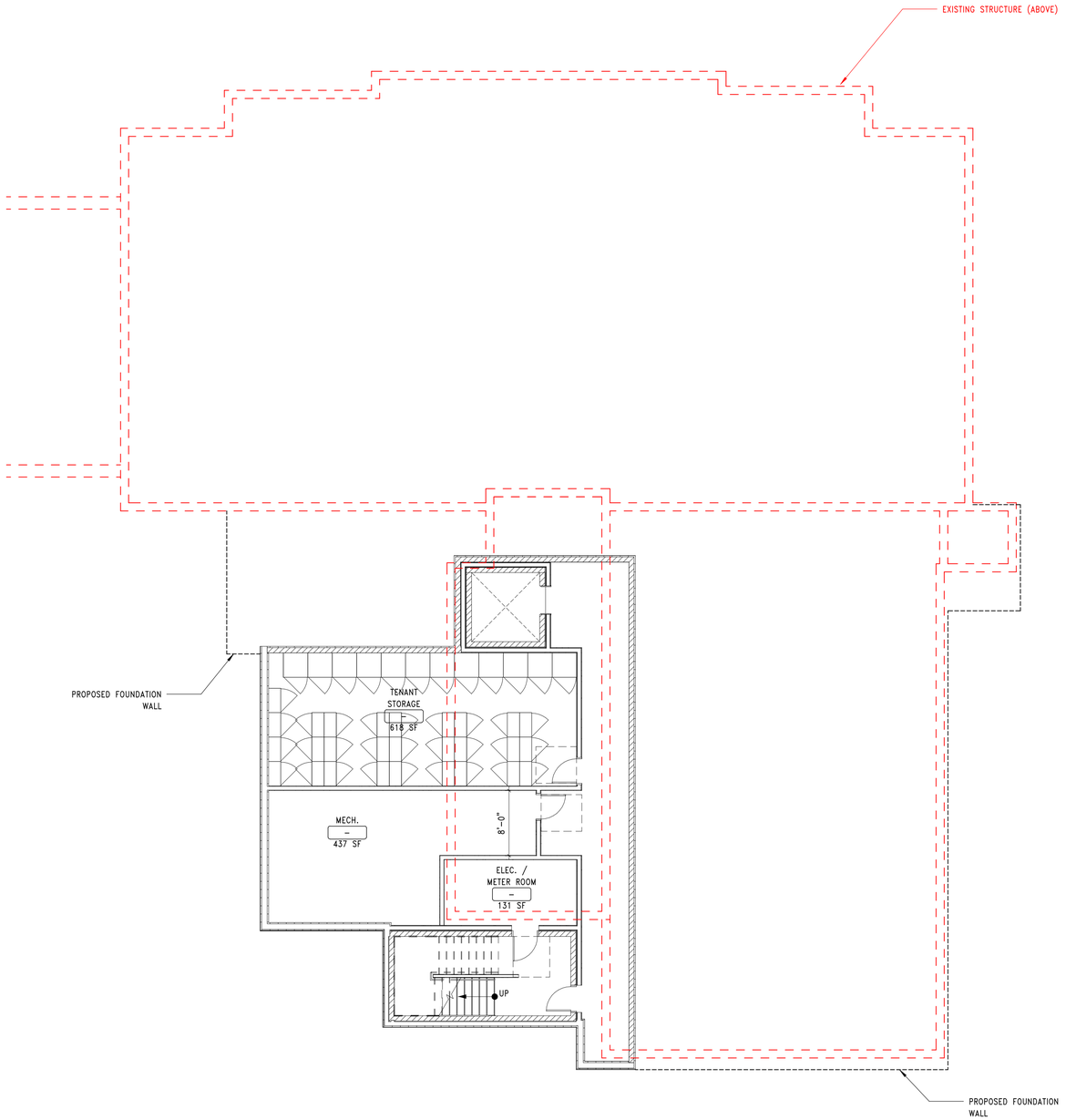
TITLE:

WOODFORD STREET AFFORDABLE HOUSING
PORTLAND, ME
SITE PHOTOMETRIC PLAN

REVISED FROM DRAWING NUMBER(S):	
R1: 12/18/23	

Current

DN BY:	DATE:	CHK BY:
DHK	12/12/23	N/A
REV. BY:	DATE:	SCALE:
DHK	12/18/23	AS NOTED
QUOTE:	DRAWING / DESIGN NO.:	
N/A	A232358R1	



A5 ADDITION BASEMENT PLAN

REFERENCED FROM A3.00 SCAL 1/8" = 1'-0"

C:\Users\kcarmichael\Documents\20058_WoodfordsParishHouse-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE
1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS
202 Woodford Street, Portland, ME 04103

DRAWING

PROPOSED BASEMENT PLAN
CWS PROJECT NUMBER: 20058

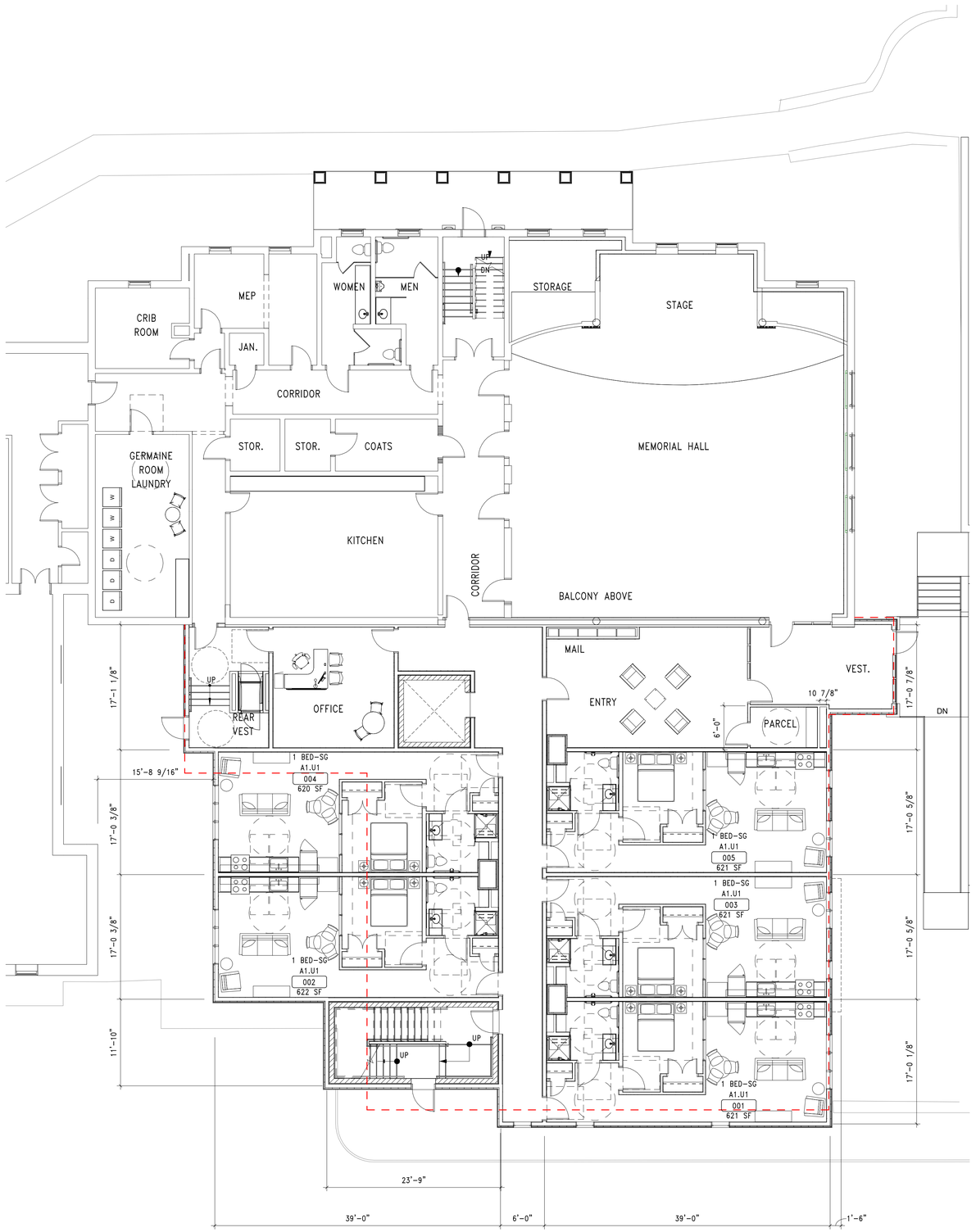
REVISIONS

DRAWING
A1.B0

SCALE: 1/8" = 1'-0"
DATE: 12/22/23

PROJECT STATUS

2/7/2024 2:45:01 PM



D5 GROUND FLOOR NEW WORK PLAN

REFERENCED FROM: A3.00 SCALE 1/8" = 1'-0"

C:\Users\KellyCarmichael\Documents\20058_WoodfordsParishHouse-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE
1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS
202 Woodford Street, Portland, ME 04103

DRAWING

GROUND FLOOR NEW WORK PLAN
CWS PROJECT NUMBER: 20058

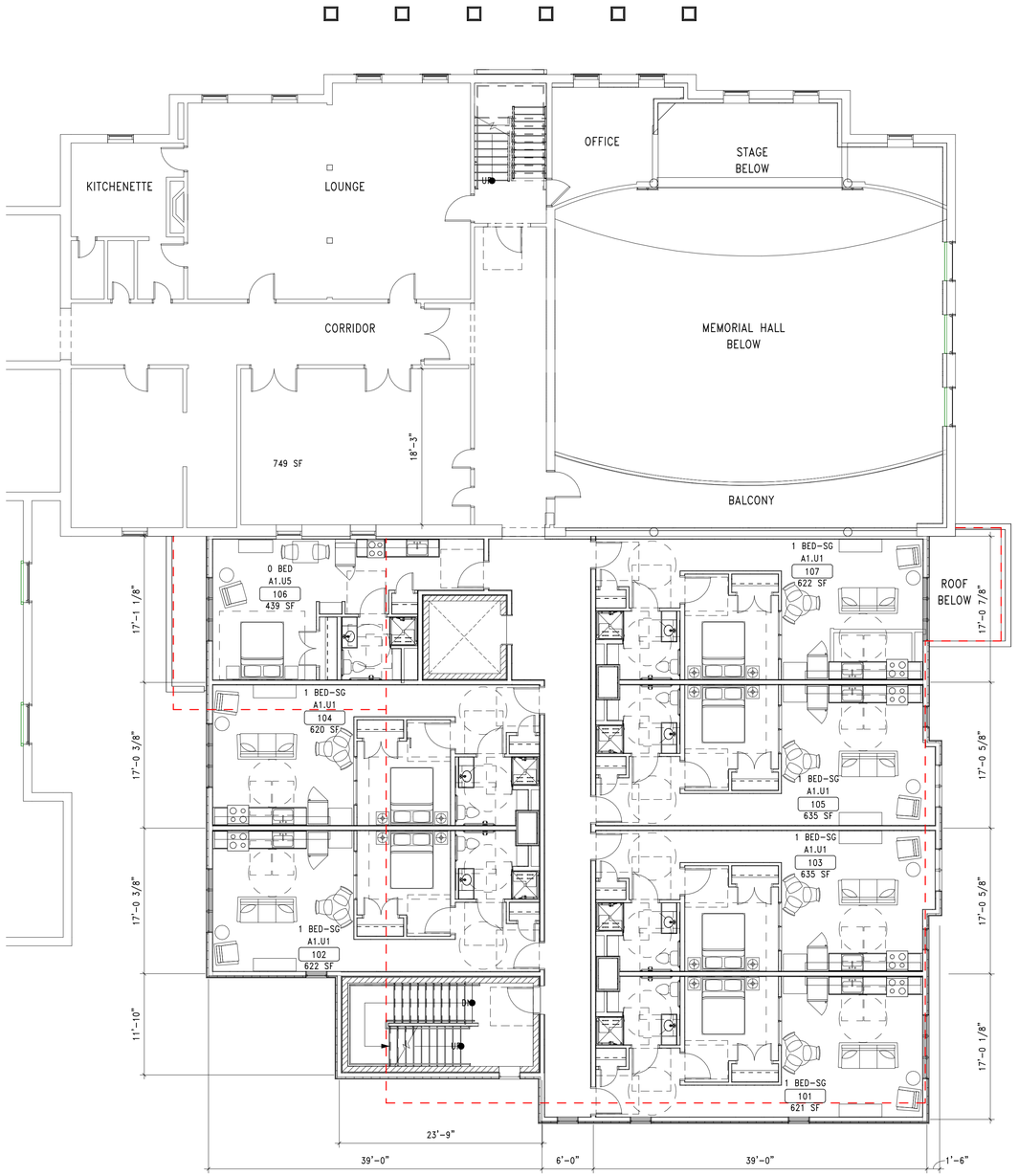
REVISIONS

DRAWING
A1.00

SCALE: 1/8" = 1'-0"
DATE: 12/22/23

PROJECT STATUS

2/7/2024 2:44:52 PM



A5 FIRST FLOOR NEW WORK PLAN

REFERENCED A3.00 SCAL 1/8" = 1'-0"

C:\Users\Keegan.Carmichael\Documents\20058_WoodfordsParishHouse-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE
1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS
202 Woodford Street, Portland, ME 04103

DRAWING

FIRST FLOOR NEW WORK PLAN
CWS PROJECT NUMBER: 20058

REVISIONS

DRAWING
A1.10

SCALE: 1/8" = 1'-0"
DATE: 12/22/23

PROJECT STATUS

2/7/2024 2:44:54 PM



A5 SECOND FLOOR NEW WORK PLAN

REFERENCED A3.00 SCAL 1/8" = 1'-0"

C:\Users\Keegan Carmichael\Documents\20058_WoodfordsParishHouse-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
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OWNER

COMMUNITY HOUSING OF MAINE
1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS
202 Woodford Street, Portland, ME 04103

DRAWING

SECOND FLOOR NEW WORK PLAN
CWS PROJECT NUMBER: 20058

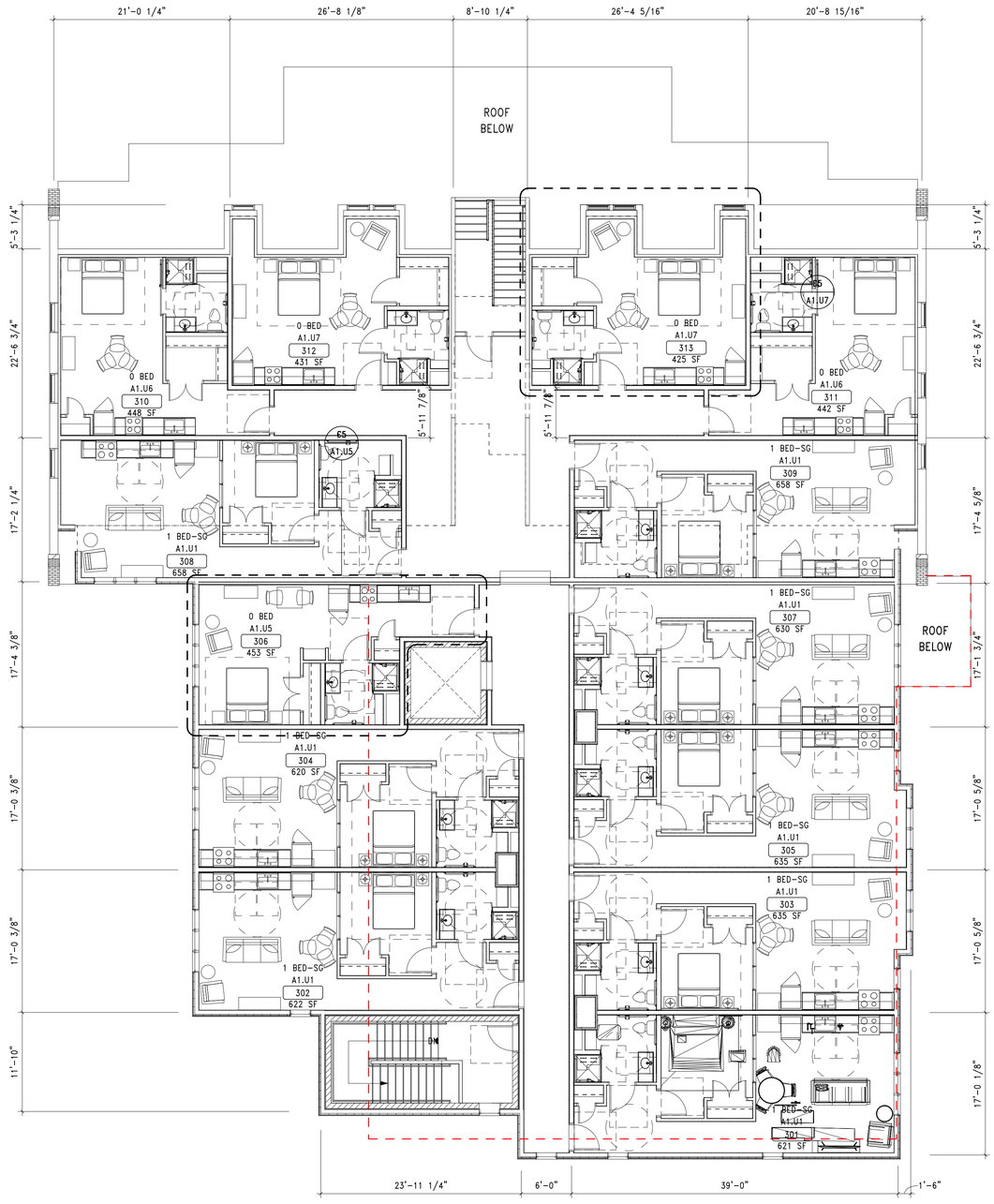
REVISIONS

DRAWING
A1.20

SCALE: 1/8" = 1'-0"
DATE: 12/22/23

2/7/2024 2:44:54 PM

PROJECT STATUS



A5 THIRD FLOOR NEW WORK PLAN

REFERENCED FROM A3.00 SCAL 1/8" = 1'-0"

C:\Users\kcarmichael\Documents\20058_WoodfordsParishHouse-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

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SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE

1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS

202 Woodford Street, Portland, ME 04103

DRAWING

THIRD FLOOR NEW WORK PLAN

CWS PROJECT NUMBER: 20058

REVISIONS

DRAWING

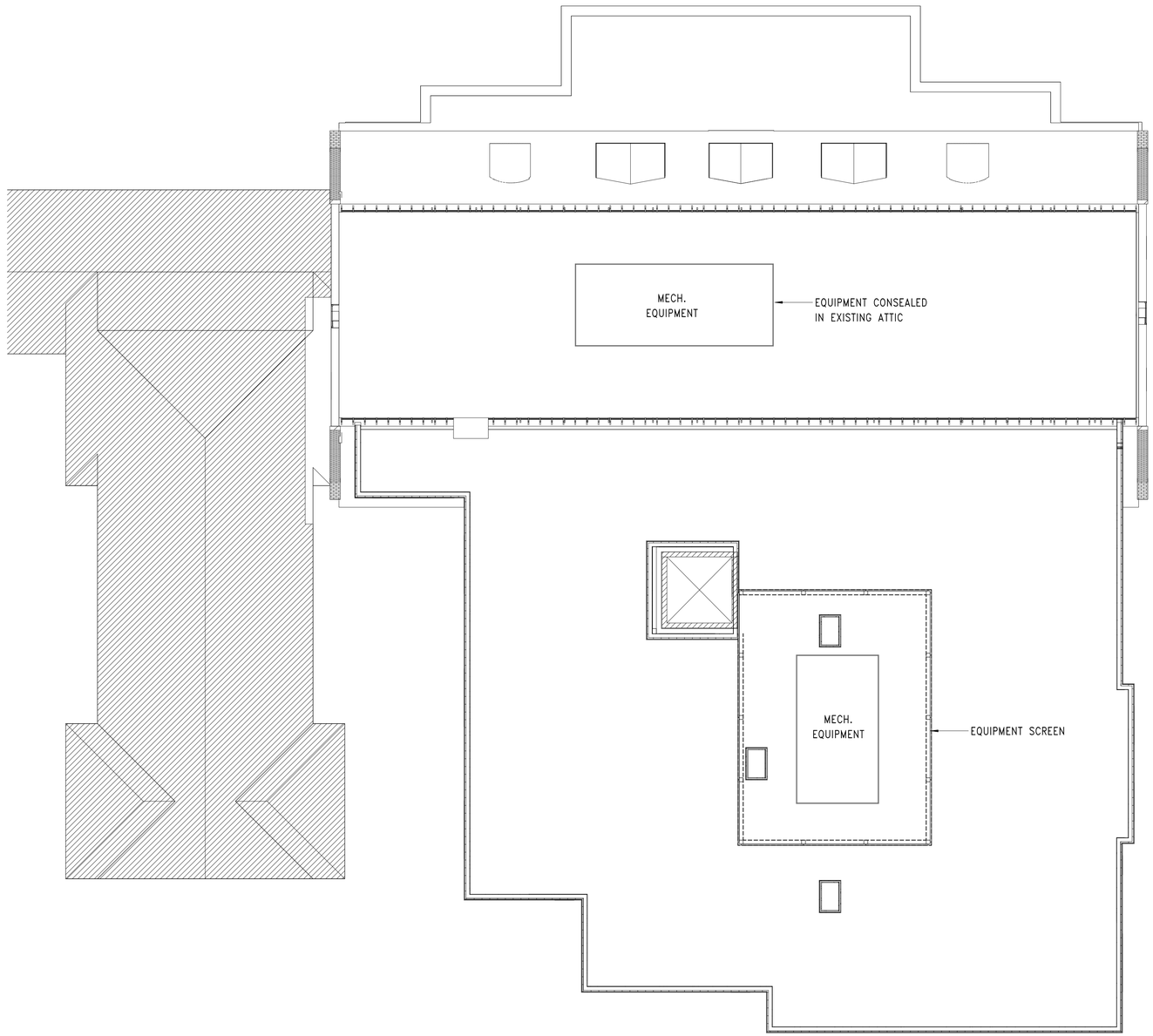
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SCALE: 1/8" = 1'-0"

DATE: 12/22/23

PROJECT STATUS

2/7/2024 2:44:58 PM



A5 04 ATTIC PLAN - NEW WORK

REFERENCED FROM: A3.00 SCALE 1/8" = 1'-0"

C:\Users\KellyCMichael\Documents\20058_WoodfordsParishHouse-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

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264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
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OWNER

COMMUNITY HOUSING OF MAINE
1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS
202 Woodford Street, Portland, ME 04103

DRAWING

ATTIC PLAN NEW WORK
CWS PROJECT NUMBER: 20058

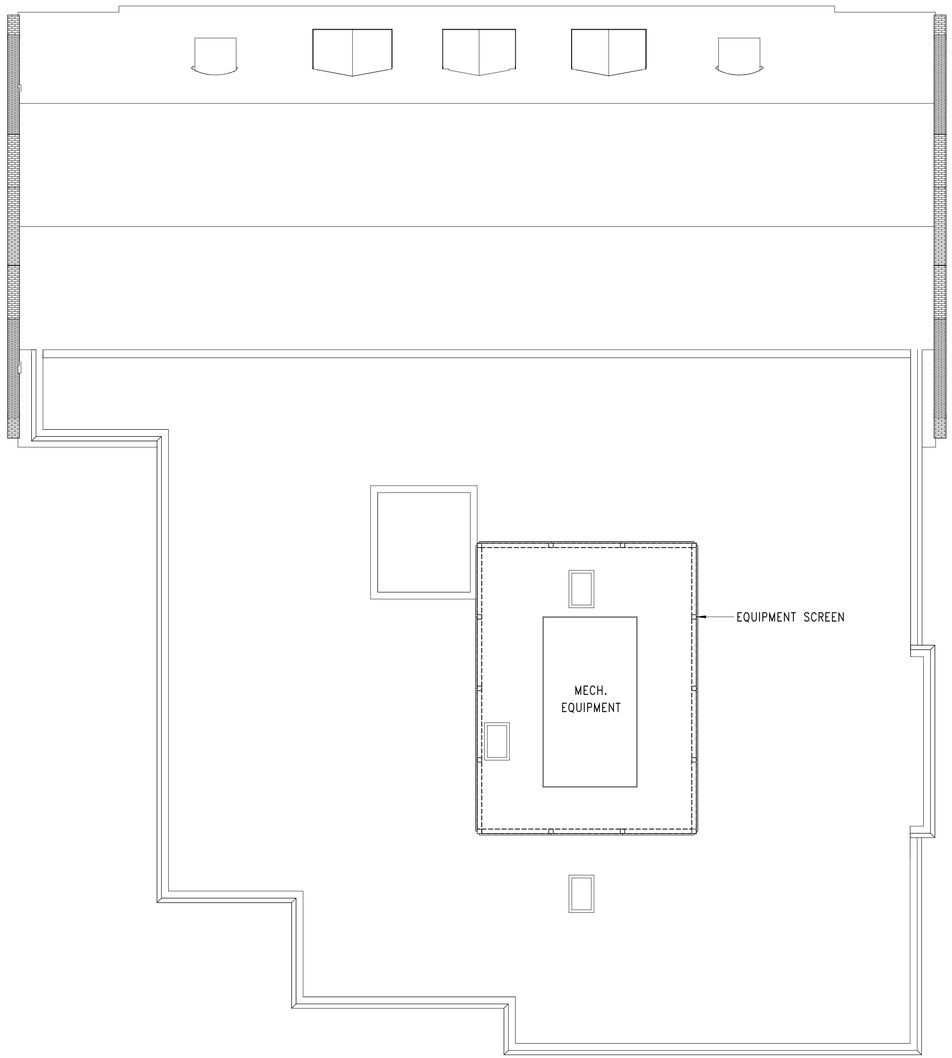
REVISIONS

DRAWING
A1.A0

SCALE: 1/8" = 1'-0"
DATE: 12/22/23

PROJECT STATUS

12/7/2024 2:45:00 PM



A5 ADDITION T.O. DECK

REFERENCED A3.00 SCAL 1/8" = 1'-0"

FROM:

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CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN
CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE
1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS
202 Woodford Street, Portland, ME 04103

DRAWING

ROOF PLAN NEW WORK

CWS PROJECT NUMBER: 20058

REVISIONS

DRAWING
A1.R0

SCALE: 1/8" = 1'-0"
DATE: 12/22/23

PROJECT STATUS

12/7/2024 2:45:01 PM



1 WEST ELEVATION - CHURCH SIDE

REFERENCED FROM: LS1.00 SCALE: 1/8" = 1'-0"



2 SOUTH ELEVATION - BACK PARKING LOT

REFERENCED FROM: LS1.10 SCALE: 1/8" = 1'-0"

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CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

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264 US ROUTE ONE, SUITE 100-2A
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COMMUNITY HOUSING OF MAINE

1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS

202 Woodford Street, Portland, ME 04103

DRAWING

EXTERIOR ELEVATIONS

CWS PROJECT NUMBER: 20058

REVISIONS

DRAWING

A3.01

SCALE: 1/8" = 1'-0"

DATE: 12/22/23

PROJECT STATUS

2/7/2024 2:45:56 PM



A3 EAST ELEVATION - SIDE PARKING LOT

REFERENCED FROM: LS1.10 SCALE: 1/8" = 1'-0"



A5 NORTH ELEVATION - WOODFORD STREET

REFERENCED FROM: LS1.10 SCALE: 1/8" = 1'-0"

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CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

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264 US ROUTE ONE, SUITE 100-2A
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OWNER

COMMUNITY HOUSING OF MAINE

1 City Ctr Ste 4, Portland, ME 04101

PROJECT

WOODFORDS PARISH HOUSE SENIOR APARTMENTS

202 Woodford Street, Portland, ME 04103

DRAWING

EXTERIOR ELEVATIONS

CWS PROJECT NUMBER: 20058

REVISIONS

DRAWING

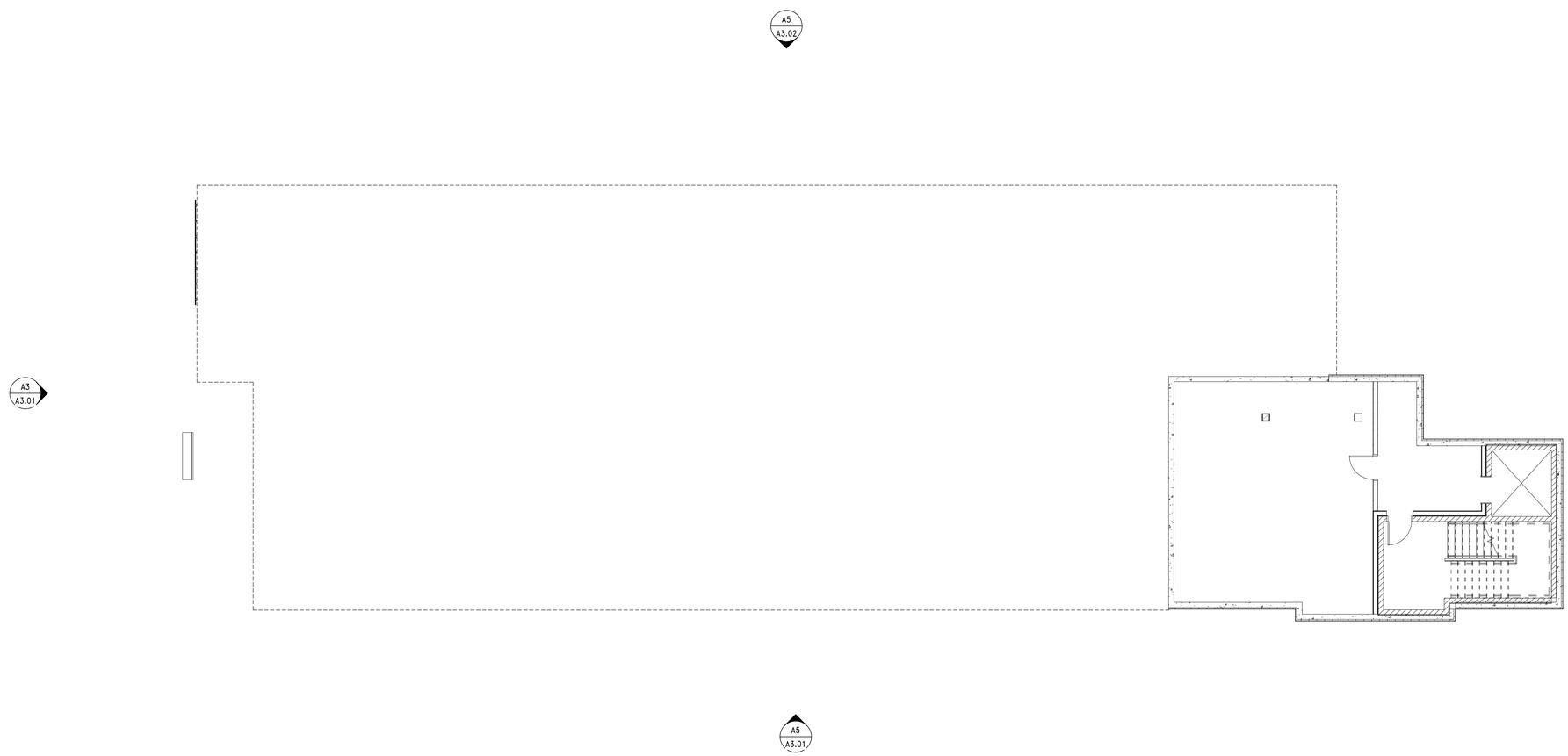
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SCALE: 1/8" = 1'-0"

DATE: 12/22/23

PROJECT STATUS

2/7/2024 2:45:29 PM



A5 MECH BASEMENT PLAN

REFERENCED FROM: A3.01 SCALE: 1/8" = 1'-0"

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CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR
PORTLAND, ME 04101

PROJECT

WOODFORDS NEW SENIOR APARTMENTS
202 WOODFORD STREET
PORTLAND, ME

DRAWING

BASEMENT PLAN
CWS PROJECT NUMBER: 23056

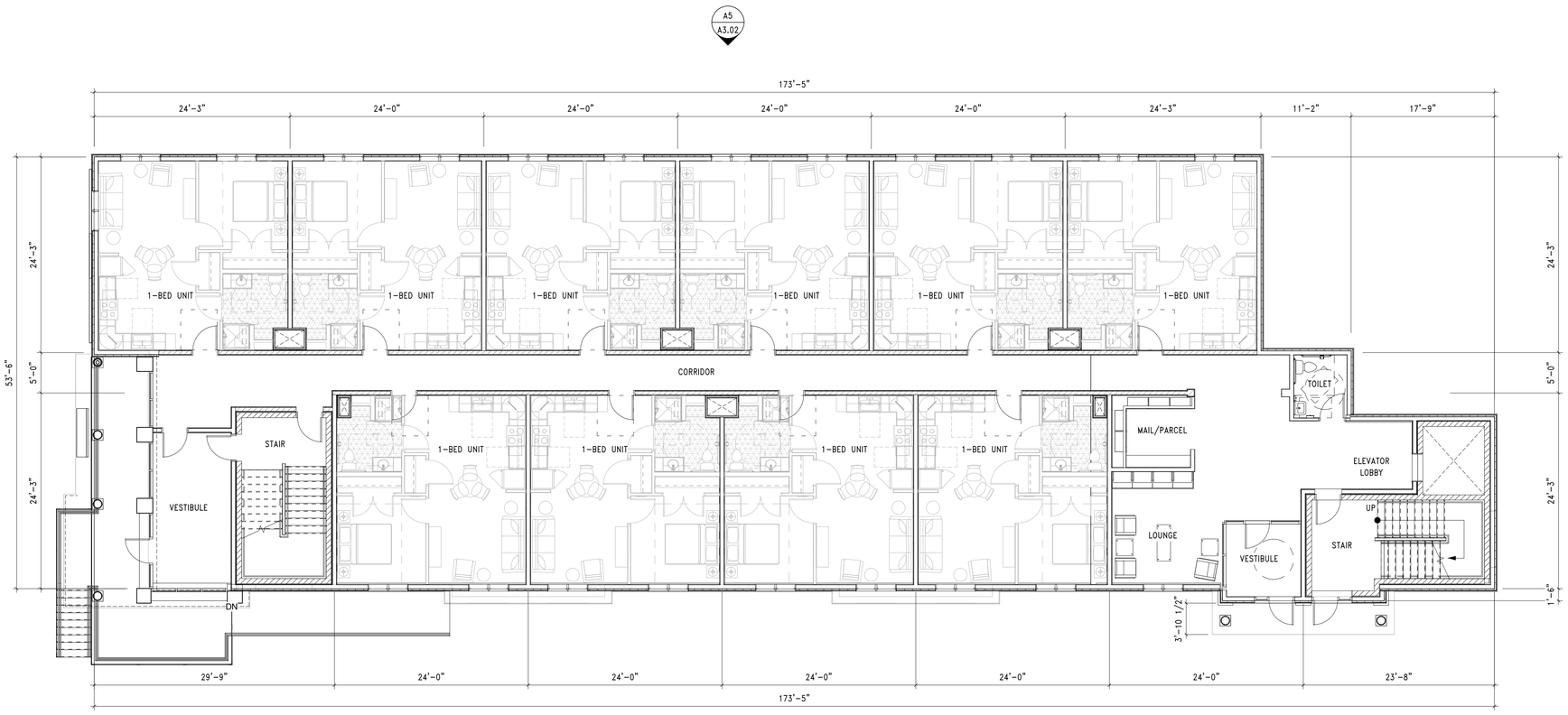
REVISIONS

DRAWING
A1.00

SCALE: 1/8" = 1'-0"
DATE: 12/22/2023

2/7/2024 2:29:18 PM

PLANNING BOARD WORKSHOP



CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

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SCARBOROUGH, ME 04074
207 774 4441
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OWNER

COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR
PORTLAND, ME 04101

PROJECT

WOODFORDS NEW SENIOR APARTMENTS
202 WOODFORD STREET
PORTLAND, ME

DRAWING

FIRST AND SECOND FLOOR PLAN
CWS PROJECT NUMBER: 23056

REVISIONS

DRAWING
A1.10

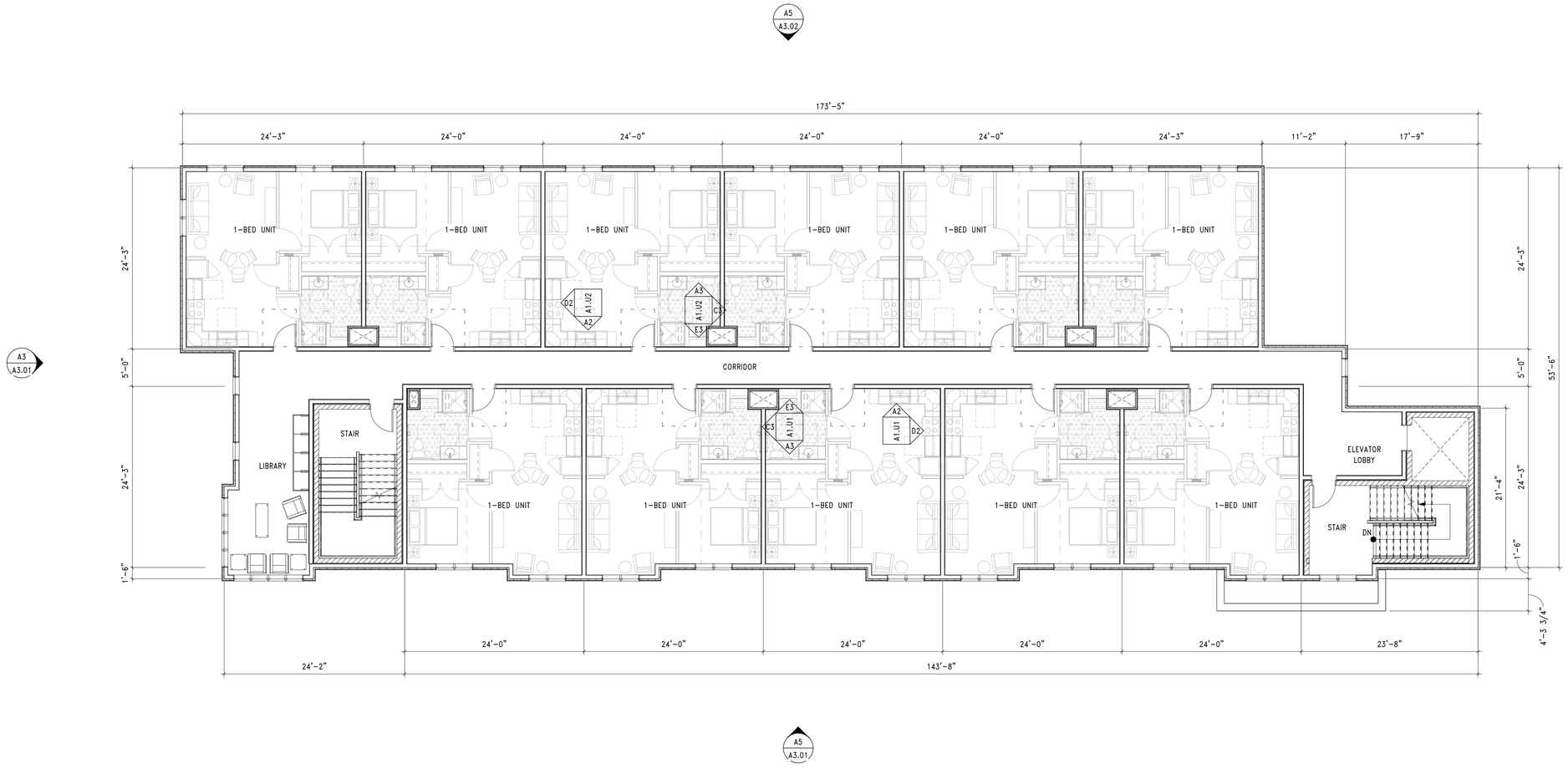
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DATE: 12/22/2023

2/7/2024 2:29:23 PM

A5 01-FIRST FLOOR
REFERENCED FROM: A3.01 SCAL 1/8" = 1'-0"

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PLANNING BOARD WORKSHOP



CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

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264 US ROUTE ONE, SUITE 100-2A
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207 774 4441
CWSARCH.COM

OWNER

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ONE CITY CENTER, 4TH FLOOR
PORTLAND, ME 04101

PROJECT

WOODFORDS NEW SENIOR APARTMENTS
202 WOODFORD STREET
PORTLAND, ME

DRAWING

SECOND FLOOR PLAN
CWS PROJECT NUMBER: 23056

REVISIONS

DRAWING
A1.20

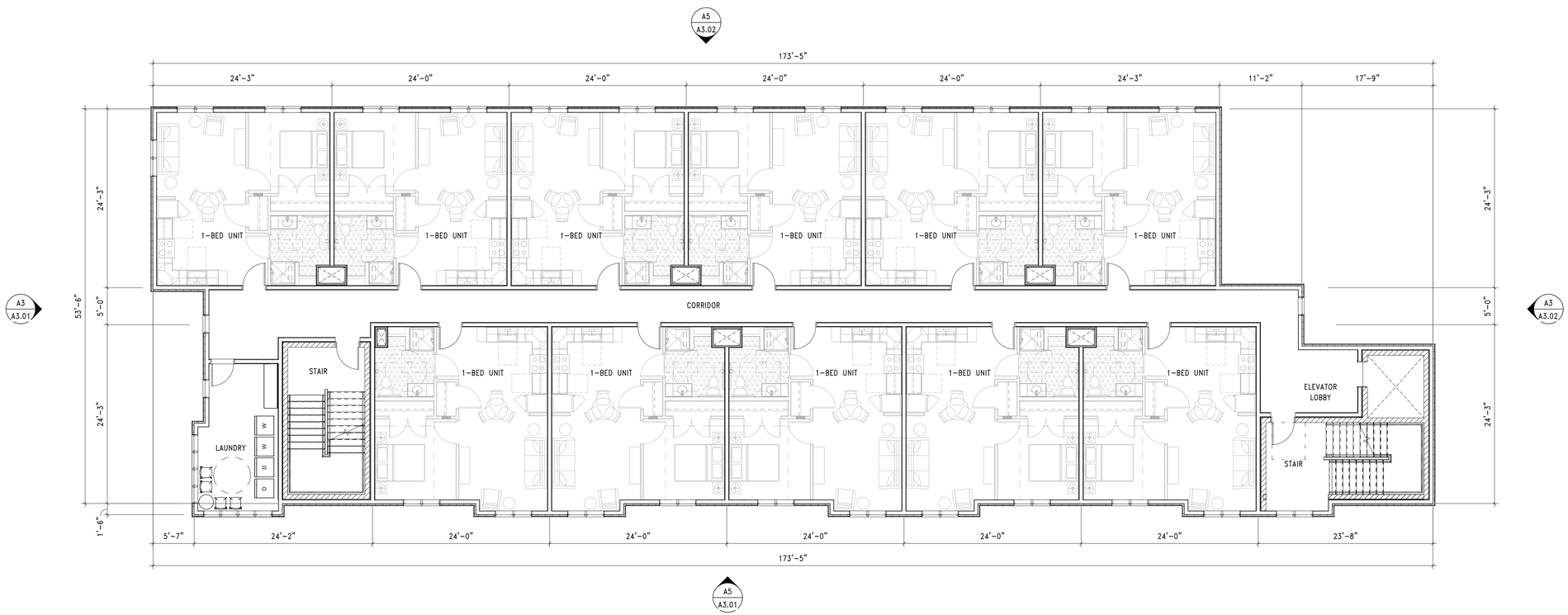
A5 02-SECOND FLOOR
REFERENCED A3.01 SCAL 1/8" = 1'-0"

SCALE: 1/8" = 1'-0"
DATE: 12/22/2023

2/7/2024 2:29:22 PM

C:\Users\keegan.Carmichael\Documents\23056_WoodfordsNewSeniorApartments-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

PLANNING BOARD WORKSHOP



A5 03-THIRD FLOOR

REFERENCED FROM: A3.01 SCAL 1/8" = 1'-0"

C:\Users\KellyCarmichael\Documents\23056_WoodfordsNewSeniorApartments-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN
CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR
PORTLAND, ME 04101

PROJECT

WOODFORDS NEW SENIOR APARTMENTS
202 WOODFORD STREET
PORTLAND, ME

DRAWING

THIRD FLOOR PLAN
CWS PROJECT NUMBER: 23056

REVISIONS

DRAWING
A1.30

SCALE: 1/8" = 1'-0"
DATE: 12/22/2023

2/7/2024 2:29:23 PM

PLANNING BOARD WORKSHOP



CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE

ONE CITY CENTER, 4TH FLOOR
PORTLAND, ME 04101

PROJECT

WOODFORDS NEW SENIOR APARTMENTS

202 WOODFORD STREET
PORTLAND, ME

DRAWING

FOURTH FLOOR PLAN

CWS PROJECT NUMBER: 23056

REVISIONS

DRAWING

A1.40

SCALE: 1/8" = 1'-0"

DATE: 12/22/2023

2/7/2024 2:29:23 PM

A5 04-FOURTH FLOOR

REFERENCED A3.01 SCALE 1/8" = 1'-0"

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PLANNING BOARD WORKSHOP



A3 SOUTH ELEVATION - WOODFORD STREET

REFERENCED FROM: A1.00 SCALE: 1/8" = 1'-0"



A5 WEST ELEVATION - PARKING LOT

REFERENCED FROM: A1.00 SCALE: 1/8" = 1'-0"

C:\Users\KCarmichael\Documents\23056_WoodfordsNewSeniorApartments-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN
PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER
CWS ARCHITECTURE + INTERIOR DESIGN
264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER
COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR
PORTLAND, ME 04101

PROJECT
WOODFORDS NEW SENIOR APARTMENTS
202 WOODFORD STREET
PORTLAND, ME

DRAWING
EXTERIOR ELEVATIONS
CWS PROJECT NUMBER: 23056

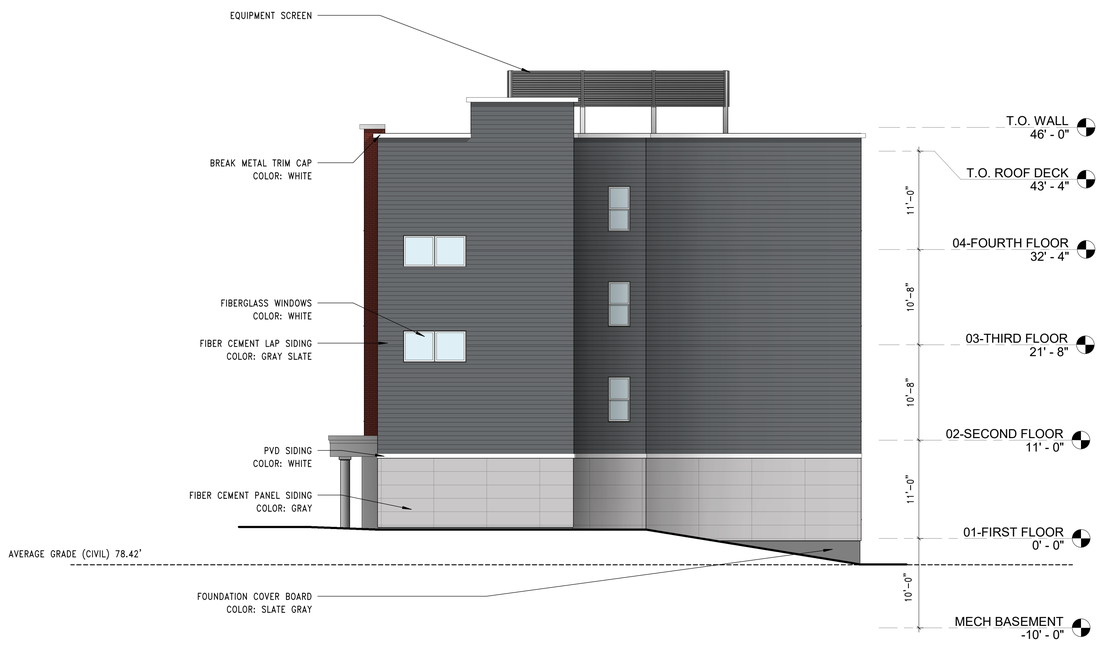
REVISIONS

DRAWING
A3.01

SCALE: 1/8" = 1'-0"
DATE: 12/22/2023

2/7/2024 2:29:41 PM

PLANNING BOARD WORKSHOP



A3 NORTH ELEVATION - BACK PROPERTY LINE

REFERENCED FROM: A1.00 SCALE: 1/8" = 1'-0"



A5 EAST ELEVATION - SIDE PROPERTY LINE

REFERENCED FROM: A1.00 SCALE: 1/8" = 1'-0"

C:\Users\KCarmichael\Documents\23056_WoodfordsNewSeniorApartments-CHOM_R23_CENTRAL_KCarmichaelSPEY2.rvt

CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

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SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

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ONE CITY CENTER, 4TH FLOOR
PORTLAND, ME 04101

PROJECT

WOODFORDS NEW SENIOR APARTMENTS
202 WOODFORD STREET
PORTLAND, ME

DRAWING

EXTERIOR ELEVATIONS
CWS PROJECT NUMBER: 23056

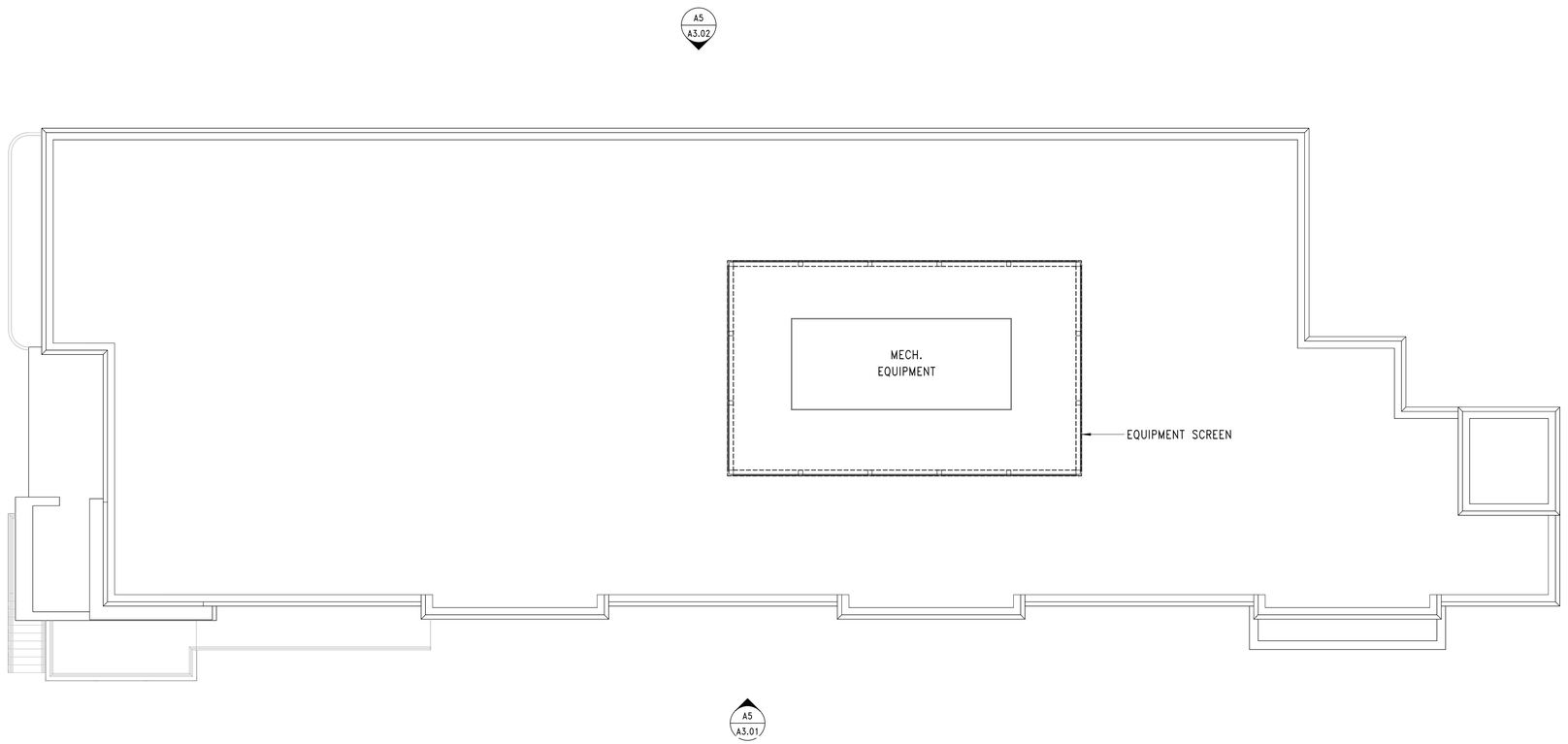
REVISIONS

DRAWING
A3.02

SCALE: 1/8" = 1'-0"
DATE: 12/22/2023

2/7/2024 2:29:49 PM

PLANNING BOARD WORKSHOP



A5 ROOF PLAN

REFERENCED A3.01 SCAL 1/8" = 1'-0"

FROM:

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CWS ARCHITECTURE + INTERIOR DESIGN

PLANNING + DESIGN CONSTRUCTION SERVICES

DESIGNER

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264 US ROUTE ONE, SUITE 100-2A
SCARBOROUGH, ME 04074
207 774 4441
CWSARCH.COM

OWNER

COMMUNITY HOUSING OF MAINE
ONE CITY CENTER, 4TH FLOOR
PORTLAND, ME 04101

PROJECT

WOODFORDS NEW SENIOR APARTMENTS
202 WOODFORD STREET
PORTLAND, ME

DRAWING

ROOF PLAN
CWS PROJECT NUMBER: 23056

REVISIONS

DRAWING
A1.50

SCALE: 1/8" = 1'-0"
DATE: 12/22/2023

2/7/2024 2:29:28 PM

PLANNING BOARD WORKSHOP

Brandon Mazer, Chair
Justin Barker, Vice Chair
Maggie Stanley
Marpheen Chann
Sean Murphy
David Silk
Austin Smith

February 13, 2024

Josh Trombley
Developers Collaborative
631 Stevens Avenue, Suite 203
Portland, ME 04103

Steve Bushey
Gorrill Palmer
300 Southborough Drive, Suite 200
South Portland, ME 04106

Project Name: Major Site Plan + Inclusionary Zoning Conditional Use
Project ID: PL-002673-2023 + CU-002791-2024
Address: 509 Forest Avenue
CBL: 127 A002001
Applicant: DC 509 Forest LLC
Planner: Natasha Kypfer

Dear Josh Trombley and Steve Bushey:

On January 23, 2024, the Planning Board approved a major site plan and conditional use application for inclusionary zoning to facilitate the conversion of a commercial office space located at 509 Forest Avenue, to a commercial/retail and residential use, with 38 residential unit apartments. The property is located in the B-2b Community Business zone. Based on the information provided to the Board in the application, plans, reports, through testimony and other information submitted by the applicant, the Planning Board adopted the findings, conclusions and recommendations contained in the Planning Board Report for the public hearing on January 23, 2024 which is attached hereto and incorporated herein by reference. Based upon those findings, conclusions and recommendations, the Planning Board found that the application met all relevant standards and voted [4-0 Chann and Stanley absent, Silk recused] to approve the application with the following conditions as presented below.

A. WAIVERS

On the basis of the application, plans, reports, and other information submitted by the applicant, findings, and recommendations contained in the Planning Board Report for the public hearing on January 23, 2024 for application PL-002662-2023 at 509 Forest Avenue relevant to the Site Plan Standards of the Land Use Code and Portland's Technical and Design Standards, and other regulations, and testimony presented at the Planning Board public hearing:

1. Waiver 1: Minimum Driveway Spacing Reduction
   The Planning Board [finds] based upon the third-party traffic engineer's Review and updated materials from the applicant, that extraordinary conditions exist or undue hardship may result from strict compliance with the Technical Manual Standard 1.5.1.C which requires 100 feet of spacing between driveways, along arterial and collector streets with posted speeds of 35 mph or less, and therefore, substantial justice and the public interest are secured with the proposed variation in this standard, and that variation is consistent with the intent of the ordinance. The Planning Board [waives] the Technical Manual standard Section 1.5.1.C to allow for the current separation of 75 feet.

2. Waiver 2: Drive Aisle Width Reduction

The Planning Board [finds] based upon the third-party traffic engineer's Review, that extraordinary conditions exist or undue hardship may result from strict compliance with the Technical Manual Standard 1.10.3 which requires a minimum two-way drive aisle width of 24 feet for standard, right-angle parking., the substantial justice and the public interest are secured with the proposed variation in this standard, and that variation is consistent with the intent of the ordinance. The Planning Board [waives] the Technical Manual standard Section 1.10.3 to allow for the reduction of the drive aisle from 24' to 23'.

B. SITE PLAN REVIEW

Based upon the information provided to the Board in the application, plans, reports, through testimony and other information submitted by the applicant, the Planning Board adopted the findings, conclusions and recommendations contained in Section IX of the Planning Board Report for the public hearing on January 23, 2024, which is attached hereto and incorporated herein by reference. The Planning Board voted [4-0 Chann and Stanley absent, Silk recused] to find that the plan is in conformance with the site plan standards of the Land Use Code, subject to the following conditions of approval:

PRIOR TO ISSUANCE OF A BUILDING PERMIT

1. The applicant shall submit updates to the Planning Authority relative to the configuration of the esplanade(s) along the Forest Avenue frontage, as requested by Staff.
2. The applicant shall provide ability to serve conformation letters to the Planning Authority from CMP, the Portland Water District, and a Wastewater Capacity Authorization.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY

3. The applicant shall contribute to the tree fund in the amount of $400 per tree for 35 trees, for a total of $14,000.

C. INCLUSIONARY ZONING CONDITIONAL USE

Based upon the information provided to the Board in the application, plans, reports, through testimony and other information submitted by the applicant, the Planning Board adopted the findings, conclusions and recommendations contained in Section VIII. B. of the Planning Board Report for the public hearing on January 23, 2024, which is attached hereto and incorporated herein by reference. The Planning Board voted [4-0 Chann and Stanley absent, Silk recused] to find that the plan is in conformance with the conditional use standards of the Land Use Code, subject to the following conditions of approval:

PRIOR TO ISSUANCE OF A BUILDING PERMIT

1. The Applicant and the City shall enter into an Affordable Housing Agreement (AHA) for all on-site workforce housing units, or the project may pay a fee-in-lieu for some or all of the required units prior to issuance of certificate of occupancy.

PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY

2. The Affordable Housing Agreement (AHA) be filed as covenant to the 509 Forest Avenue property's deed with the Cumberland County Registry of Deeds.
3. Or the applicant may choose to provide a fee in-lieu of the required units, which is calculated at $172,485 per residential unit in 2023.

D. PLANNING BOARD DECISION

On the basis of the findings, conclusions and recommendations contained in the Planning Board report for the public hearing on January 23, 2024 related to application PL-002662-2023 and application CU-002791-2024for 509 Forest Avenue, which is attached to the draft approval letter and incorporated therein, the Planning Board adopts the approval letter as drafted as the Planning Board's decision for application PL-002662-2023 and application CU-002791-2024, and authorizes the Planning Board Chair to sign the approval letter as drafted.

The approval is based on the submitted plans and findings related to site plan review as contained in the Planning Board report dated January 23, 2024 for application PL-002662-2023 which is attached.

Standard Procedures

Note: The following standard procedures and requirements apply to all approved site plans:

1. Site Plan Expiration The site plan approval will be deemed to have expired unless work has commenced within one (1) year of the approval or within a time period up to three (3) years from the approval date as agreed upon in writing by the City and the applicant. Requests to extend approvals must be received before the one (1) year expiration date.

2. Separate Building Permits Are Required This approval does not constitute approval of building plans, which must be reviewed and approved by the City of Portland's Permitting and Inspections Department.

3. Performance Guarantee and Inspection Fees A performance guarantee covering the site improvements and an inspection fee payment of 2.0% of the guarantee amount and three (3) final sets of plans must be submitted to and approved by the Planning and Urban Development Department and Public Works Department prior to the release of a building permit, street opening permit or certificate of occupancy for site plans.

4. Construction Management Plans The applicant, contractor and subcontractors are required to conform to the approved Construction Management Plan, and all conditions contained within the project's approval, for the entire duration of the project. Any amendments to the approved Construction Management Plan shall be reviewed and approved by the Department of Public Works prior to the execution. The Planning Authority and the Department of Public Works have the right to seek revisions to an approved Construction Management Plan. The applicant shall coordinate the project's construction schedule with the timing of nearby construction activities to avoid cumulative impacts on a neighborhood and prevent unsafe vehicle and pedestrian movements. Accordingly, nearby construction activities could involve a delay in the commencement of construction.

5. Preconstruction Meeting Prior to the release of a building permit and scheduling of a preconstruction meeting, a hard copy set of approved plans shall be submitted to the Development Review Coordinator. A pre-construction meeting shall be held at the project site with the contractor, Development Review Coordinator, Public Works representative, and owner to review the construction schedule and critical aspects of the site work. At that time, the Development Review Coordinator will confirm that the contractor is working from the approved site plan and the approved Construction Management Plan. The site/building contractor shall provide one (1) copy of a detailed construction schedule to the attending City representative. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.

6. Department of Public Works Permits If work or obstructions will occur within the public right-of-way, such as utilities, curb, sidewalk, driveway construction, site deliveries and equipment siting, a Street Opening and/or Occupancy Permits are required for your site. Please contact the Department of Public Works Permit Clerk at (207) 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

7. Develop Site According to Plan The site shall be developed and maintained as depicted on the site plan and in the written submission of the applicant. Any modifications of an approved site plan or alteration of a parcel, or of any approved exterior elevations, which were the subject of site plan approval after May 20, 1974, shall require the prior approval of an amended site plan by the Planning Board or Planning Authority pursuant to the terms of Chapter 14, Land Use, of the Portland City Code.

8. Third Party Inspections For all sites with one acre or greater of disturbance, the applicant shall retain the services of a third-party inspector for the duration of construction until final site stabilization is in place. The inspection is required in order to ensure that all construction and stabilization activities comply with the approved drawings and specifications; that field decisions regarding erosion control implementation,

stormwater system installation, and natural resource protection are based on sound engineering and environmental considerations; and that any changes to the development's erosion control plan, stormwater management plan, or final stabilization plan is communicated to the City of Portland for additional review and approval.

9. The inspector will submit weekly written reports to the Stormwater Coordinator(s) in the Water Resources Division of Public Works. Reports must include: project ID, project address, the date(s) and time(s) of inspection(s), site photographs of areas under construction, and the date(s) and approximate duration(s) of any rainfall events. The report will identify and describe any erosion problems or discharge of pollutants and what actions will be taken to address these issues and repair any damage to other properties or natural resources, actions to eliminate the erosion source, and actions to prevent future sediment discharges from the area.

10. Defect Guarantee A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.

11. As-Built Final Plans Final sets of as-built plans shall be submitted digitally to the Planning and Urban Development Department, on a CD or DVD, in AutoCAD format (.dwg), release AutoCAD 2005 or greater. Please provide one hard copy of the mylar.

12. Mylar Copies Mylar copies of the as-built drawings for the public streets and other public infrastructure in the subdivision must be submitted to Public Works prior to the issuance of a certificate of occupancy.

13. Impact Fees New development or changes of use that result in net new residential dwelling units, non-residential building square footage, or water meters, are subject to the City of Portland's impact fee ordinance (Chapter 14, Article XVII). Impact fees are calculated at the time of building permit and must be paid prior to the certificate of occupancy. For more information, visit https://www.portlandmaine.gov/2409/Impact-Fees

The Development Review Coordinator must be notified five (5) working days prior to the date required for final site inspection. The Development Review Coordinator can be reached at the Planning and Urban Development Department at drc@portlandmaine.gov or (207) 874-8901. All site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions, please contact Natasha Kypfer at (207) 874-8725 or via email at nkypfer@portlandmaine.gov.

Sincerely,

Brandon Mazer, Planning Board Chair

Attachments:
1. Planning Board Report
2. Performance Guarantee Packet

Proposed Historic District Amendment – Reclassification of 142 Free Street
142 Free Street | CBL: 039 B003001
Minimum Criteria for Designation & Integrity of Landmarks & Historic Districts
Portland Museum of Art, Applicant

Submitted to:	Portland Planning Board	**Prepared By:**	Kevin Kraft, AICP
Public Hearing Date:	February 13, 2024	**Date:**	February 12, 2024

I. INTRODUCTION

The Portland Museum of Art (PMA) has submitted a request to have their property at 142 Free Street reclassified from a contributing to a noncontributing building within the Congress Street Historic District (Figure 1 and Figure 2). The proposed amendment would mean that building alterations would be reviewed under different standards within the Historic Preservation Ordinance, and would allow by-right demolition of the existing building. The applicant is not proposing to change the boundaries of the Congress Street Historic District, meaning that any future alterations, or new construction on the site would still be subject to the applicable review standards of the Historic Preservation Ordinance.

The Planning & Urban Development Department mailed 209 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the February 2 and February 3, 2024 editions of the *Portland Press Herald*.

On November 1, 2023, the Historic Preservation Board voted unanimously 5-0 (Paquin-Gould recused) to recommend that the Planning Board and City Council vote to retain the contributing classification for the former Chamber of Commerce Building at 142 Free Street within the Congress Street Historic District. The Board based its decision on the submitted documentation provided by the applicant (Attachment 7), staff report and findings by the Board pursuant to Section 17.4.1(A) and Section 17.4.2 (Attachment 6).

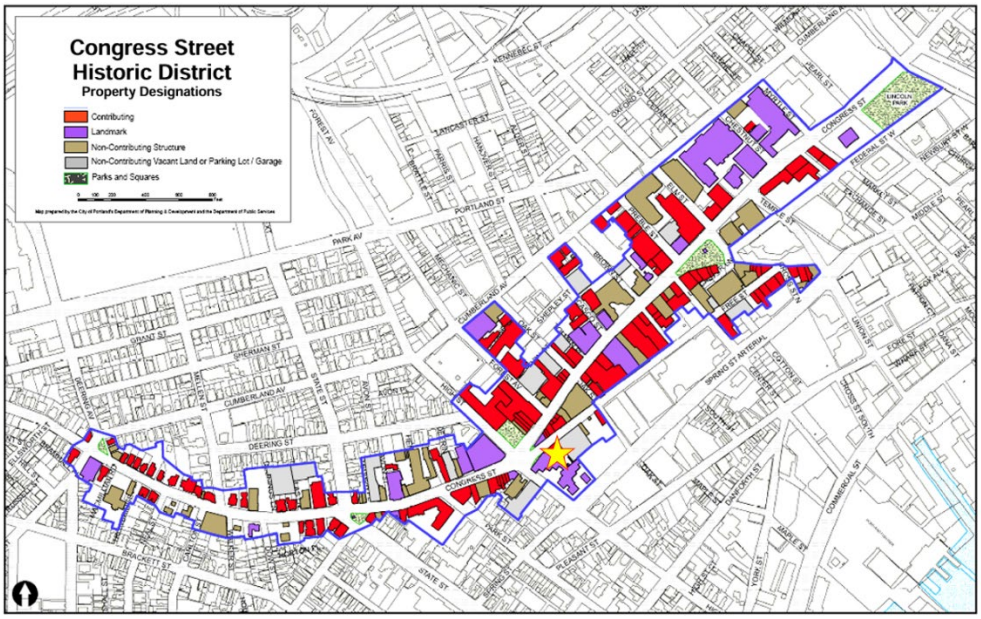


Figure 1: Map of Congress Street Historic District showing location of 142 Free Street (Contributing Structure) with star.



Figure 2: 142 Free Street (Former Children's Museum/Chamber of Commerce Building)

II. ROLE OF THE PLANNING BOARD

Under the provisions of Section 17.5.9 of the historic preservation ordinance, amendments or recessions of designations follow a three-step review process, with first the Historic Preservation Board, then the Planning Board making a recommendation to the City Council. Upon receipt of the Historic Preservation Board's recommendation, the Planning Board's role is to determine whether the materials and findings provided sufficiently address how the building does not meet the standards for designation. The criteria for amendment are limited to those provided in Section 17.4.1(A) and (B), Minimum Criteria for Designation, and Subsection 17.4.2, Integrity of Landmarks and Historic Districts. Following deliberations, the Planning Board forwards its recommendation and report, together with the recommendation of the Historic Preservation Board, to the City Council for final consideration and a formal decision.



III. PREVIOUS PLANNING BOARD WORKSHOP

During the November 28, 2023 Planning Board workshop, the applicant presented background information on the proposed expansion of the Portland Museum of Art campus, provided a brief overview of the PMA campus unification + expansion international design competition, preliminary information on their planned future development, shared an overview of their existing campus and historic structures, and also presented why they believed the building should be reclassified to noncontributing. Board members asked the applicant about whether consideration had been given to reusing the building or incorporating elements of it. The applicant stated that they had, but felt that the challenges were too great and that they had not received a positive reception by the public for designs that considered adaptively reusing the building. As part of their design competition, PMA did note that one of four shortlisted teams incorporated

the existing building's façade in their conceptual design. Board member Barker asked if the PMA studied the economic impact of adaptively reusing the building as part of their December 2022 study "*The Economic Contribution and Impact of the Portland Museum of Art in Maine*." Board member Stanley asked if the reclassification would impact other properties within the Congress Street Historic District from being eligible to utilize state and federal historic tax credits and expressed concern about making a recommendation on the reclassification request without understanding the potential effects district-wide. City Staff informed the Board that the City's Historic Preservation Program Manager contacted the State Historic Preservation Office and the National Park Service regarding this matter and were still awaiting an official response. Also, Board members requested clarification from staff regarding the Board's purview and relevant review standards.

Several public comments were provided expressing opposition to the application. It was stated by many commenters that the existing building at 142 Free Street retains its historic integrity, meets the criteria for contributing status under the historic preservation ordinance, exemplifies a significant architectural style and was designed by prominent architect, John Calvin Stevens. Several individuals expressed their belief that the PMA's proposed expansion should incorporate the existing building rather than tear it down. Other members of the public expressed concern that the reclassification of 142 Free Street to non-contributing would compromise the integrity and purpose of the historic preservation ordinance.

Several other members of the public also expressed support for the reclassification request. One resident shared that the building at 142 Free Street is of very minor significance and does not contribute to the current or future conditions of Congress Square and that Portland is in need of a high-quality, high-profile building in a high-visibility location. Another member of the public expressed their support for the project due to an overabundance of preserved John Calvin Stevens structures in Portland and that the past should not suffocate the energy and creativity of our community's future.

The information below provides additional information related to specific questions asked.

Questions:

1. **Is the effect of historic designation on aspects of the City's Comprehensive Plan a discrete criterion for the Planning Board and City Council to consider when reviewing an amendment or rescission of any historic designation?** Unlike designation of an area or landmark, according to *Section 17.5.9 Amendment or rescission of designation,* when the Planning Board and City Council are reviewing amendments or rescissions of any historic district, they are not to consider the effect of an amendment on aspects of the Comprehensive Plan. Similar to the Historic Preservation Board, the Planning Board and City Council are required to limit their consideration to the criteria specified in Sections 17.4.1(A) and (B) and 17.4.2. Therefore, the Planning Board and City Council will not be reviewing the request for comprehensive plan consistency. The relevant review standards for the Planning Board's consideration are described in Section VI below.

2. **Does changing the classification of the building at 142 Free Street from contributing to non-contributing impact the certification of the Congress Street Historic District and thus impact the ability of other property owners within the District to obtain historic tax credits?** City staff provided the National Parks Service (NPS) with requested information related to this question. On Sunday, February 11th, 2024, NPS informed City Staff that changing 142 Free Street's classification from contributing to non-contributing would be considered an amendment to the district and would need to be submitted for NPS review following a final determination by the City

Council (Attachment 11). The Applicant also had a conversation with the NPS on this issue. A summary of the applicant's discussion with NPS can be found in Attachment 1A.

IV. BACKGROUND

The building at 142 Free Street was originally constructed in 1830 as a theater building. No images of the structure exist from this period; however, descriptions suggest a late federal or Greek revival style. Shortly thereafter in 1836, the structure was renovated into a temple-fronted Greek revival church for the Free Street Baptist Church. Then, again in 1856, the church was renovated into an asymmetrical double-spired Italianate/Romanesque revival church. In 1876, after the taller of the church's spires was damaged in a storm, the steeple was redesigned. Throughout the Free Street Baptist Church's ownership of the structure, they made a series of other modest interior renovations in addition to the major redesigns.



Figure 3: 142 Free Street building over time (1856 – 1958)

In 1926, after a merger with another Baptist Church, the structure was sold to the Portland Chamber of Commerce. The Chamber retained architect John Calvin Stevens to complete renovations to the structure. It was at this time that the building was redesigned to its current Greek or colonial revival temple-fronted form. The Chamber retained the building until 1991 when, after financial difficulties, it was sold to the Children's Museum of Maine. Under the ownership of the Children's Museum, the structure underwent further alterations including programs of window and door replacement, dormer additions, and the addition of the prominent octagonal cupola.

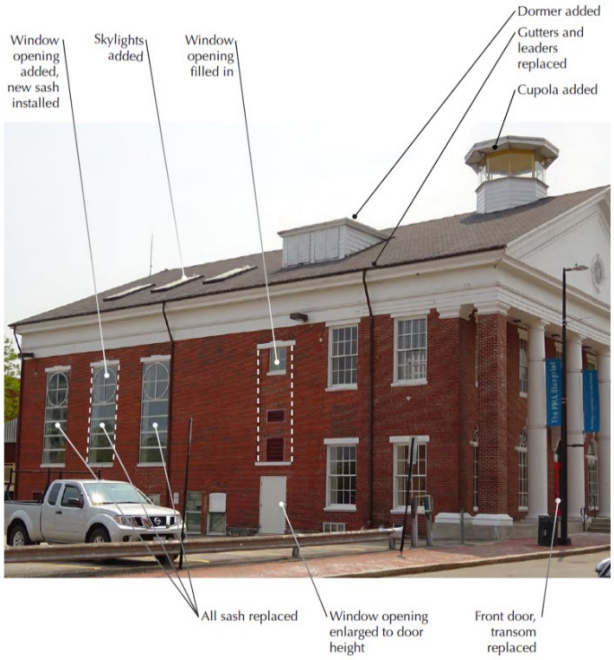


Figure 4: Exterior Alterations to 142 Free Street made for the Children's Museum in the early 1990s

In 1976, the Spring Street Historic District was added to the National Register of Historic Places. In 2020 the National Register listing was updated with an expanded period of significance (1800-1943), at which point the Chamber of Commerce building was listed as a contributing resource within the National Register District.

Local Congress Street Historic Designation

In 2009, the building located at 142 Free Street was also listed as a contributing structure within the local Congress Street Historic District. While the updated National Register nomination did include a period of significance for the Spring Street Historic District from 1800 to 1943, the local Congress Street Historic District did not include a specific period of significance. However, the period of significance can be presumed as extending from 1785 (the original date of construction for the Wadsworth-Longfellow House, the oldest contributing structure within the district) to 1959 (fifty years prior to the establishment of the local district). This would mean that the period of significance ended during the tenure of the Chamber of Commerce. While it also includes the eras of the theatre and the Free Street Baptist Church, those assorted renovations and redesigns would have attained historical significance in their own right, speaking to the history of the evolution of Congress Street over the nearly two-hundred years of history the district represents.

The description of 142 Free Street in the Congress Street Historic District (Attachment 3) is as follows:

> Architectural Description/Historic Significance:
>
> Free Street Baptist Church (1830-1926)
> Portland Chamber of Commerce Building (1926 – 1993)
>
> 1830 (theater), 1836 (renovated as church), 1926 (renovated to present form)

> Originally built as a theater in 1830 and remodeled into a Romanesque style church in 1836, the Free Street Baptist Church was substantially renovated in 1926 by John Calvin Stevens and John Howard Stevens for the Chamber of Commerce and became an essentially Colonial Revival style building. The building is a dignified two-story structure with four monumental concrete columns of the Doric order and 2 brick piers and 2 pilasters. There is a symmetrical façade under the fullwidth two-story porch. The upper windows have 8/8 sash capped by flush stone lintels. The ground floor has a doorway surmounted by a balcony on brackets with a replaced doorway of glass and aluminum. It is flanked by 10/10 sash topped by semi-circular windows in elliptical keystone arches. In the flush board pediment is a bull's eye window. The frieze and cornice are boldly delineated. The roofline was free of any dormers, thus maintaining its temple shape, until renovated for the Children's Museum of Maine in the 1990s. The octagonal cupola and dormers were added at that time.

For a more thorough documentation of the history of the building at 142 Free Street, including extensive images and documentation of alterations, please see the PMA commissioned report by Margaret Gaertner included in the applicant's materials (Attachment 1). Additional information on the Congress Street Historic District can be found in the attachments (Attachments 2 and 3) and on the city website: https://www.portlandmaine.gov/665/Historic-Districts

Present

In 2019, the PMA purchased the building at 142 Free Street from the Children's Museum & Theater of Maine, who relocated to a new state-of-the-art museum at Thompson's Point. In 2022, the PMA launched the Portland Museum of Art Campus Unification + Expansion International Design Competition and Request for Qualifications, inviting designers to develop a concept design for campus expansion and unification as part of the PMA Blueprint. PMA received 104 entries, submitted by architectural teams from 20 different countries. Four finalists were chosen, Adjaye Associates, LEVER Architecture, MVRDV, and Toshikio Mori Architect. LEVER Architecture was selected as the winning firm of the International Design Competition for their conceptual design (Figure 5).



Figure 5: Rendering of the proposed concept for expansion at 142 Free Street by LEVER Architecture (Source: PMA)

V. FINDINGS AND RECOMMENDATIONS OF THE HISTORIC PRESERVATION BOARD

At the September 6, 2023, Historic Preservation Board meeting, the Board received the request by the PMA to reclassify 142 Free Street as noncontributing within the Congress Street Historic District. In order for the amendment to progress through review, two members of the Historic Preservation Board needed to sponsor the request. Chair O'Brien and Vice Chair Miller voiced their sponsorship initiating review of the amendment.

On October 4, 2023, the Historic Preservation Board held an initial workshop on the reclassification request. During the workshop, the applicant presented background information on the proposed expansion of the PMA campus and preliminary information on their planned future development. Board members asked the applicant about whether consideration had been given to reusing the existing building or incorporating elements of it. The applicant stated that they had, but felt that the challenges were too great and that they had not received a positive reception by the public for those versions of their planned project. Board members also requested confirmation that the current application for reclassification was being limited to a question of the integrity of the existing structure. The applicant provided no other areas of consideration for the Board within the scope of the ordinance's minimum criteria for designation.

On November 1, 2023, the Historic Preservation Board held a Public Hearing and voted unanimously 5-0 (Paquin-Gould recused) to recommend that the Planning Board and City Council vote to retain the contributing classification for the former Chamber of Commerce Building at 142 Free Street within the Congress Street Historic District (Attachment 6).

Based on the materials supplied by the applicant (including the extensive report on the history of 142 Free Street) (Attachment 7) and the materials from the designation of the Congress Street Historic District in 2009, Board members agreed that the existing structure had been correctly deemed contributing when the District was established. Board members noted that while the building had a long history of alterations from its original construction in 1830, it still retained a high degree of integrity relative to the 1926 redesign by John Calvin Stevens. Alterations noted by the applicant in their materials were acknowledged by the Board, but members noted that window replacements and additions are regularly approved alterations to contributing structures. Several Board members praised the intentions behind the proposed expansion with several noting that they personally appreciated the conceptual design of the new building. One member of the Board expressed a desire to see the ordinance revised to allow the Historic Preservation Board to consider the effect of designations on Comprehensive Plan goals but noted that the review purview was focused solely on the integrity of the building standards; however, there was general agreement that the applicant had not provided a basis by which the Board could recommend that the structure be reclassified as noncontributing.

VI. PLANNING BOARD CONSIDERATIONS

ANALYSIS OF APPLICABLE REVIEW STANDARDS

The argument rests primarily on the questions of whether the building at 142 Free Street meets the Minimum Criteria for Designation outlined in Section 17.4.1(A) and whether the building meets the Integrity of Landmarks and Historic Districts outlined in Section 17.4.2.

The applicant submitted materials to the Planning Board in a letter dated November 8, 2023 (Attachment 1). Following the Planning Board workshop, the applicant submitted updated materials on January 31, 2024 (Attachment 1A). The revised materials (Attachment 1A) attempt to address questions and comments that

arose during the first Planning Board workshop and provide additional information regarding why the applicant believes the building at 142 Free Street does not meet the Minimum Criteria for Designation (Section 17.4.1(A)) and the Integrity of Landmarks and Historic Districts (Section 17.4.2).

Section 17.4.1.A Minimum Criteria for Designation

During the Historic Preservation Board review process, the Board requested that the applicant confirm that the basis for their application for reclassification was being limited to a question of the integrity of the structure pursuant to Section 17.4.2 and that the applicant was not questioning whether the building met the Minimum Criteria for Designation in Section 17.4.1.A. At that time, the applicant confirmed that the argument presented rested on the question of the building's Integrity (Section 17.4.2), and that no information addressing the minimum criteria outlined in Section 17.4.1.A was presented. Therefore, the Historic Preservation Board did not interrogate the building against the minimum criteria for designation standards and found that the building located at 142 Free Street met the minimum criteria for designation as outlined in Section 17.4.1.A.

The applicant has since submitted materials arguing that 142 Free Street does not contribute to the Congress Street Historic District, as the building does not contribute to the Minimum Criteria for Designation which the District is significant, and that it lacks integrity (Attachment 1A). A summary of the standards and analysis is provided below:

The Historic Preservation Board (Planning Board) shall limit its consideration to the following criteria in making a determination on a proposed nomination of an area, site, structure, or object for designation by ordinance as a landmark or district:
Its value as a significant example of the cultural, historic, architectural, archaeological, or related aspect of the heritage of the City of Portland, State of Maine, New England region, or the United States.
Staff Comments
The applicant has stated that they believe the building is not a significant example of cultural, historic, architectural, archeological, or related aspect of the heritage of the City, the State, New England region, or the United States. The Congress Street Historic District description provides a history of the development of Congress Street, its evolution from a residential corridor at the edge of town to a commercial one, speaking to the district's importance as the city's eventual "Main Street." The 142 Free Street description notes the building's evolution from a theater, to a church, and then its civic/commercial use by the Chamber of Commerce. The Board should determine whether the information provided by the applicant and the information provided in the Congress Street Historic description and 142 Free Street descriptions demonstrate that 142 Free Street contributes to the district under this criterion, or whether the information provided is erroneous.
Its location as a site of a significant historic or prehistoric event or activity which may have taken place within or which involved the use of any existing structure on the property.
Staff Comments
The applicant has stated that they believe that the building's location is not a site of a significant historic or prehistoric event or activity which may have taken place within the building at 142 Free Street, or which involved the use of any existing structure on the property.

Neither the Congress Street Historic District nor the 142 Free Street descriptions identify any significant events associated with this structure, so this criterion is not applicable.

Its identification with a person or persons who significantly contributed to the cultural, historic, architectural, archaeological, or related aspect of the development of the City of Portland, State of Maine, New England region, or the United States.

Staff Comments

The applicant has stated that they believe that the building does not identify with a person or persons who significantly contributed to the cultural, historic, architectural, archaeological, or related aspect of the development of the City of Portland, State of Maine, New England region, or the United States.

Neither the Congress Street Historic District nor the 142 Free Street descriptions identify any significant identification with a person associated with this structure, so this criterion is not applicable. It should be noted that any association with John Calvin Stevens has been identified under Criterion 5: *Identification as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Portland*.

Its exemplification of a significant architectural type, style, or design distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.

Staff Comments

The applicant has stated that they believe that the building is not an exemplification of a significant architectural type, style, or design distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.

The Congress Street Historic District description states that the visual character of the district is rich and varied, with structures exhibiting architectural styles and types from across three centuries as well as differing scales and uses including small-scale residential, medium-scale civic and institutional buildings, and large-scale commercial and mixed-use structures. The 142 Free Street description notes that the building's current form is temple-fronted in the Colonial Revival Style as constructed for use by the Chamber of Commerce.

The Board should determine whether the information provided by the applicant and the information provided in the Congress Street Historic Descript and 142 Free Street descriptions demonstrate that 142 Free Street contributes to the district under this criterion or whether the information provided is erroneous.

Its identification as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States.

Staff Comments

The applicant has stated that they believe that the building does not identify as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States.

The Congress Street Historic District description states that the district includes works of many prominent 19th- and 20th-century architects, with John Calvin Stevens among them. The description of 142 Free Street notes that John Calvin Stevens was documented as the architect of the 1926 renovation commissioned by the Chamber of Commerce.

The Board should determine whether the information provided by the applicant and the information provided in the Congress Street Historic Descript and 142 Free Street descriptions demonstrate that 142 Free Street contributes to the district under this criterion or whether the information provided is erroneous.
Its representation of a significant cultural, historic, architectural, archaeological, or related theme expressed through distinctive areas, sites, structures, or objects that may or may not be contiguous.
Staff Comments
The applicant has stated that they believe that the building does not represent a significant cultural, historic, architectural, archaeological, or related theme expressed through distinctive areas, sites, structures, or objects that may or may not be contiguous. The Congress Street Historic District description speaks to the theme of the evolution and change of Congress Street over the centuries from a residential to a commercial corridor. The 142 Free Street description notes the building's evolution from a theater, to a church, and then its civic/commercial use by the Chamber of Commerce. The Board should determine whether the information provided by the applicant and the information provided in the Congress Street Historic Descript and 142 Free Street descriptions demonstrate that 142 Free Street contributes to the district under this criterion or whether the information provided is erroneous.

Section 17.4.2. Integrity of Landmarks and Historic District

An analysis performed by Historic Preservation Staff and adopted by the Historic Preservation Board can be found in the Historic Preservation Board report dated October 27, 2023 (Attachment 6). The applicable review standards associated with Section 17.4.2 Integrity of Landmarks and Historic Standards is provided below:

Any area, structure, or object that meets the criteria in Section 17.4.1 must also have sufficient integrity of location, design, condition, materials, and workmanship to make it worthy of preservation or restoration.
Location
Staff Comments
The building remains in its historic location and therefore retains integrity of location; however, the applicant argues that the building lacks any historic integrity and is surrounded by parking lots and a circa 1983 building (the Payson Wing).
Design
Staff Comments
The applicant has pointed to a number of alterations made to the design of the structure (see Figure 4 above), which include the addition of a highly visible octagonal cupola located toward the front of the building, skylights, replacement windows along the east elevation, alteration of the eastern façade to add one new window opening and fill in another window opening on the second story, and alterations to basement openings, with one being added and another filled in. Additionally, the applicant points out that the existing entry doors are incompatible replacements from a design and materiality standpoint, and that the entrance walkway and stairs have been altered to create a poured-in-place concrete stair and handicap ramp, which the applicant argues is not in character with any of the entrances on the previous iterations of the building.

The Board should determine whether these alterations have irretrievably destroyed the character of the Chamber of Commerce building at 142 Free Street.
Condition
Staff Comments
The applicant had noted that the building is generally in good structural condition as a result of renovations completed by the Children's Museum, that included an all new steel structural frame, including the roof. The applicant previously noted to staff that the building would require extensive interior upgrades and improvements in order to be usable and accessible.
Materials
Staff Comments
The applicant noted that historic materials have been lost through the replacement of windows at the east elevation and basement, as neither are wood and one window was replaced by a door at the west elevation. According to the applicant, the primary entry door and transom over the door were replaced, and are metal. The Board should determine whether these alterations have irretrievably destroyed the character of the Chamber of Commerce building at 142 Free Street.
Workmanship
Staff Comments
The applicant has noted that through the replacement of windows and doors, the structure has lost a sense of workmanship; in particular with respect to the windows on the east elevation, which do not match the historic appearance of those windows, and the primary entry door. The applicant instead states that the building more prominently reflects the renovations completed by the Children's Museum. The applicant has also pointed out that the added dormer alters the roofline and that the cupola changes the formal feel of the building. The Board should determine whether these alterations have irretrievably destroyed the character of the Chamber of Commerce building at 142 Free Street.

VII. PUBLIC COMMENT

Throughout the course of the review there have been numerous submitted written public comments and public testimony provided both in favor of and in opposition of the request to reclassify the building at 142 Free Street from contributing to noncontributing. Written public comments submitted to the Historic Preservation Board are provided in Attachment 8. Written public comment submitted to the Planning Board for the November 28, 2023 workshop can be found in Attachment 9. All written public comments submitted after the November 28th Planning Board workshop can be found in Attachment 10.

VIII. MOTIONS

On the basis of the November 1, 2023 recommendation of the Historic Preservation Board, materials and documentation submitted by the applicant, public comment and the information provided at the public hearing on February 13, 2024, and/or other findings, the Planning Board finds that the building at 142 Free Street **[meets/fails to meet]** the Minimum Criteria for Designation in Section 17.4.1(A) and pursuant to Section 17.4.2 Integrity of Landmarks and Historic Districts the building at 142 Free Street **[demonstrates/does not demonstrate]** sufficient integrity. Therefore, the Planning Board **[recommends/does not recommend]** to the City Council that the building at 142 Free Street be reclassified from a contributing to a noncontributing structure within the Congress Street Historic District.

IX. ATTACHMENTS

Att. 1 – PMA Application to PB 11.8.23
Att. 1A – PMA Updated Application to PB 1.31.24
Att. 2 – Congress Street Historic District Description
Att. 3 – 142 Free Street – Property Description
Att. 4 – Chapter 14, Article 17 Excerpts
Att. 5 – NR Bulletin-How to Apply NR Criteria
Att. 6 – 11-1-2023 142 Free HPB PH Report
Att. 7 – PMA Application to HPB
Att. 8 – Public Comment submitted to Historic Preservation Board
Att. 9 – Public Comment PB Workshop 11.28.23
Att. 10 – Public Comment PB Public Hearing 2.13.24
Att. 11 – NPS Certified Local District

November 8, 2023

City of Portland Planning Division
c/o Christine Grimando, Director
c/o Kevin Kraft, City Planner
389 Congress Street, 4th Floor
Portland, ME 04101

Dear Planning Board,

We are honored to present *The PMA Blueprint* to you and ask for your partnership and support in bringing this transformational project to our city. *The PMA Blueprint* is a once-in-a-lifetime opportunity that ensures a vibrant future for Congress Square, anchors our communities in the arts, sparks dynamic economic benefits for our neighbors and downtown businesses, and engages the city's comprehensive plan in a transformative way. It has been shaped by the community at every step, and it is exactly the caliber and quality of urban revitalization the City of Portland needs.

Please accept this letter as an application from the Portland Museum of Art, Portland, Maine, to request that the Planning Board of the City of Portland re-classify the 142 Free Street property, currently a "contributing structure," to be "non-contributing." While the Historic Preservation Board, under the criteria for designation, voted to uphold the contributing status, we urge the Planning Board to vote to enable the museum to help spark the urban renewal necessary for our community and for our city.

The PMA stands ready to build a Portland landmark for the future, a building that will create a space where all can belong. We urge the Planning Board to vote that 142 Free Street be a "non-contributing structure."

The City of Portland is driven by a vision of "six interconnected themes," set forth in *Portland's Plan 2030,* of equity, connection, sustainability, dynamism, authenticity, security, and connectivity. The PMA is driven by the values of courage, equity, service, trust and sustainability, activating our *Art for All* mission. Together with our communities, we can create a landmark building that exemplifies these shared values and goals, communicating to anyone who visits that all are welcome in Portland. To do this, we must have the flexibility to develop our campus responsibly, with courage and care. *The PMA Blueprint* is in lockstep with the city's comprehensive plan for 2030. Released in 2017, the city's plan serves as a policy guide for the entire city and was the result of extensive public engagement. The Plan's Vision Statement acknowledges that a "vibrant arts and cultural life will be central to our city's identity." It calls for embracing innovation and welcoming new residents because they enhance and enrich our region. It champions equity and sustainability.

The PMA Blueprint embodies goal after goal of the city's vision, and its potential impacts are far reaching and incredibly significant. Last year, an impact study conducted by our colleagues at the Maine Center for Business and Economic Research at the University of Maine found that the

PORTLAND MUSEUM *of* ART Seven Congress Square, Portland, Maine 04101 PH: 207 / 775-6418 FAX: 207 / 773-7324 portlandmuseum.org

addition of our new wing will transform Portland's economy. The study projected that post-expansion, the PMA's annual economic contribution will include doubling the number of jobs supported (to 600) and generating more than $28 million in labor income, $65 million in sales, $4 million in state and local taxes, and a 120-percent increase in tourism spending, reaching nearly $30 million.

The new wing also will be sustainably constructed, primarily utilizing mass timber, making it one of the first sustainable public buildings in Portland as well as one of the first green museum buildings in the country. The sustainable construction will reference Maine's lumber industry while the building's curved roofline will frame the sun as it rises and sets, in honor of Maine's Wabanaki communities.

We have been here before. The Portland Museum of Art was founded 140 years ago by artists living here in Maine. It grew quickly, as community members donated their time, energy, and passion for the arts, enabling the PMA to establish a downtown Portland campus. For the next 100 years, that campus grew to include the McLellan House, L.D.M. Sweat Memorial Galleries, and the Charles Q. Clapp House. As art from donors throughout our communities began filling up the walls and spaces within the museum, our communities came together again in the late 1970s for what was, at the time, the largest major expansion in PMA history.

That expansion, a courageous and iconic design of the Charles Shipman Payson building by Harry Cobb of the I. M. Pei & Partners firm, was a result of collection growth, campus limitations, and community support. In the more than 40 years since construction began, the Payson building has anchored the dynamic and world-renowned arts district of Portland, Maine, and enabled millions of people to discover and connect with the transformative power of art.

But a lot has changed in 40 years.

Our collection has grown exponentially, and in the last decade alone has diversified deliberately and more quickly than at any point previously. Judy Glickman Lauder, Barbara Goodbody, Richard Estes, Bruce Brown, David and Eva Bradford, the Berger Collection Educational Trust, and Alex Katz Foundation have all made significant and transformative gifts to the PMA collection in recent years, expanding the narratives we can tell and connections we can make.

Our campus has changed, and we've restored the McLellan House, purchased, restored, and opened the Winslow Homer Studio, and reinstalled our collection multiple times to maximize our existing footprint. And yet our campus has reached its limit, with attendance already twice the planned capacity of the Payson building. In just five years, we will more than triple the planned capacity of our campus. We need to expand, as we are being forced to make tough choices around reducing exhibition size and restricting capacity due to the physical limitations of our campus.

Critically, we, as a community, have changed as well. Our needs and expectations from our institutions have changed, and nowhere is that clearer than for museums. We must do more to create opportunity—on our walls, in our galleries, through our programs, on our board, and within our staff—to ensure the PMA experience reflects your experience, lifestyle, and values. We must elevate individuals and communities that have been excluded from museums and "the art world," embodying our values through artwork, exhibitions, programs, and didactics by and in partnership with our BIPOC communities, immigrants and new Mainers, LGBTQIA2S+ neighbors, our elders, youth, and other communities across Maine. We must be at the center of our communities, which requires dialogue, trust, and transparency. And we must ensure we are championing a more diverse, inclusive, and sustainable region. We must become a community institution that is rooted in belonging.

142 Free Street is our catalyst for a brighter future, ensuring Congress Square is a sustainable center for arts and culture. In 2022 we launched our vision with *The Blueprint Project: Building a Landmark for the Future*. This case for development was supported by years of open-ended community building and research, including campus planning, listening sessions, focus groups, strategic plan development, equity strategic action plan development, a feasibility study, and an economic impact study. Through this work, we came to understand what our communities want from museums and their arts institutions. These needs, desires, and expectations are embedded in the project, our Strategic Plan, and our mission, *Art for All*. We are the first museum in the country to have a mission led by our values in this way.

The PMA sits in the heart of the arts district in Portland and the truth is, Congress Square is failing. Longtime community anchors have determined Congress Square no longer supports or sustains them and have left—such as Harmon's Floral Company, a Congress Square fixture since 1887. The Schwartz Building, once a vibrant mix of artist studios, has remained vacant for over 15 years. In the last month, Starbucks announced it is leaving the Hay Building, and just this week, Portland's original and pioneering coffee shop, Coffee By Design, announced the permanent closure of its Congress Square location as well. Workers are not coming back to commercial office space and pedestrian traffic is at an all-time low. The city's Congress Square redevelopment project is in disarray—years away and in perpetual limbo.

In the face of this, we come to you ready to act with our transformative project, eager to revitalize this critical region of our city, just as we did in 1982 with the Payson wing. As outlined in our historic report to this Board, in the years after WWII, the city razed much of Free Street to make way for development that never came. Eight decades later, we are prepared to deliver on the potential of this neighborhood, ushering in a future we can count on by bringing community, energy, and meaning back to Congress Square.

Our concept, developed with LEVER Architecture, is the result of years-long planning and partnering with our communities. It began nearly five years ago—with a process similar to the development of the city's comprehensive plan—as we hosted focus groups, held listening sessions, and sent surveys throughout our communities to learn about what they needed and wanted from their museum. That feedback informed an innovative, juried international design competition challenging architects from around the world to propose a vision for the museum grounded in our values, our *Art for All* mission, and belonging.

A total of 104 teams representing 20 countries submitted proposals for *The PMA Blueprint*, with 46 percent of all lead firm submissions owned or founded by people of color or women. Once we announced the finalists, we opened a gallery onsite and online where everyone could explore and interact with 3D models of the proposals and submit feedback. We received more than 2,000 responses about the designs, and LEVER was the clear standout among our communities, with 47 percent preferring LEVER's concept over the three other finalists. That concept has been overwhelmingly supported by our communities, with an astounding 93-percent positive feedback rate.

The competition and vision of LEVER's design is very much based on key principles of the Portland's Urban Planning Strategic Plan and, at the same time, this project is about so much more than the Portland Museum of Art. It is about Congress Square, the City of Portland, and the businesses that depend on our destination status.

This is a shared future, as evidenced by the thousands of public comments we have solicited informing the project and the unsolicited letters of support we've received in recent months. Lucas St. Clair shares, "While I support the understanding to protect our city's history, we should not let it define our future or prevent evolution. The expanded PMA campus will be a Greater

Portland Landmark of the future, one that takes into account 21st century needs and helps the city in advance in its vision." And architect Susan Faxon shares, "This is a decision that is hard to make, but as with all preservation decisions, the greater good needs to be given weight . . . I submit that the sacrifice of a rather stolid and unimaginative structure is a fair and necessary measure to allow a project that will enervate and enliven an important streetscape."

LEVER's concept has garnered support from Congress Square institutions such as Springers, Portland Flea-for-All, The State Theatre, and VIA. It is supported by arts organizations such as Indigo Arts Alliance and The Children's Museum and Theater of Maine—the former owner of 142 Free Street. It is worth noting that The Children's Museum sold the building and relocated away from downtown Portland because the site could not grow with them. The project is also supported across industries throughout Maine and the country, including the New England Forest Foundation, USDA, and Wood Products Council. We believe that this unified approval for a new, landmark arts building is a result of the collaborative and empathetic approach the PMA has taken to ensure our growth is sustainable and responsible.

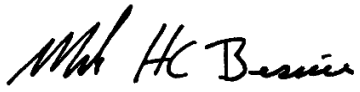
***The PMA Blueprint* embodies goal after goal of the city's vision.** And our plan for 142 Free Street is the only way to grow while maintaining a primary relationship with Congress Square, a place we've anchored since our Payson wing replaced the Libby building in 1983. The alternative is not an idyllic repurposing of 142 Free Street as some critics may suggest. The reality is the property can never adequately support the museum's collection, gallery, and public needs. In actuality, our only alternative would be a painful shift for our city—joining our neighbors in turning away from Congress Square—and reorienting the museum toward Spring Street. Simply put, there has never been a more important time to make the right choice for Congress Square's future.

Maine and Portland have changed. The ways we plan have become transparent, collaborative, and inclusive. Values and vision lead. That's why we are here now, backed by thousands of our citizens who have contributed to this vision—just as they did with *Portland's Plan*. *The PMA Blueprint* has been heralded nationally and internationally as one of the most innovative and game-changing urban projects possible. Why? Because projects like this don't happen in communities like ours. They happen in London, New York, Paris, and other leading cities that understand how to balance preservation with opportunity. We stand with a singular chance to cement Portland's identity to the world as a beacon of inclusion and diversity, and we need your support.

Through leadership and consensus, the PMA has proved its commitment to preserving the past, recognizes the opportunities of the present, and strives to provide a gathering space for future generations to grow. As deeply invested and thoughtful members of our community, I urge you to lean into the true issue at hand. This is about the very nature of the city of Portland, our values, and our future.

Please support the vibrant arts and cultural life envisioned by the city's comprehensive plan and empowered by equity and sustainability. Please help us save Congress Square and reestablish our neighborhood as the heart of the city. And please enable this generational opportunity for our communities and our future.

Thank you,



Mark H.C. Bessire
Judy and Leonard Lauder Director

August 31, 2023

City of Portland
Historic Preservation Board
c/o Evan Schueckler
Historic Preservation Program Manager
389 Congress Street
Portland, ME 04101

Dear Historic Preservation Board,

Please accept this letter as an application for the Portland Museum of Art, Portland, Maine, to request that the Historic Preservation Board of the City of Portland re-classify the 142 Free Street property, currently a "contributing structure," to be "non-contributing" on the basis that the building never should have been classified as contributing in 2009 and 2020. Please review the History of 142 Free Street report prepared by Margaret Gaertner, Historic Building Consultant, for the details on the history of this property as well as the memo attached analyzing the existing designation position.

Throughout its lifetime, 142 Free Street has been significantly altered, and is now virtually unrecognizable when compared to previous iterations of the building. As a result, and after much diligence and research, we have come to believe it does not contribute to the district historically, nor does it support our city's innovative vision for the future. When considered for its role in the Congress Street Historic District, and as part of the PMA's historic campus, 142 Free Street does not carry the same historical stature, architectural consistency, or community significance that the District's or the museum's other properties do.

In the case of a nominated historic district, the Historic Preservation Board shall also determine whether there is an interrelationship of resources within it that creates an identifiable entity, even if composed of a wide variety of resources. A district must convey a visual sense of the overall historic environment or be a grouping of historically or functionally related properties. To be clear, we believe:

- 142 Free Street should not be designated a contributing structure and doing so diminishes the credibility of the designation.
- Our values and interests are absolutely aligned with the city's and are in the best interests of its citizens, visitors, and future.
- The PMA has a long history of stewardship and preservation of historic buildings, understands their significance, and has a legacy of architecturally significant contributions to our community.

After World War II, Portland's leaders looked to urban renewal to draw businesses and development into the city. A series of "slum-clearing" and redevelopment projects demolished entire blocks to make room for widened streets and new buildings that would accommodate an automobile-focused culture. To this day, many of these blocks, including much of Free Street,

remain vacant and await redevelopment. Implementation is *long* overdue. We have completed a thorough search to identify a design team with a bold vision that is appropriate for Portland, Maine, and the 142 Free Street site. With your support, we stand ready to create a new landmark for Portland.

The City of Portland is driven by a vision of "six interconnected themes," set forth in *Portland's Plan 2030*, of equity, connection, sustainability, dynamism, authenticity, security, and connectivity. The PMA is driven by the values of courage, equity, service, trust and sustainability, activating our *Art for All* mission. Together, with our communities we can create a landmark building that exemplifies these shared values and goals, communicating to anyone who visits that all are welcome in Portland, Maine. To do this, we must have the flexibility to develop our campus responsibly, with courage and care.

The Portland Museum of Art was founded 140 years ago by artists living here in Maine. It grew quickly, as community members donated their time, energy, and passion for the arts, enabling the PMA to establish a downtown Portland campus. For the next 100 years, that campus grew to include the McLellan House, LDM Sweat galleries, and the Clapp House. As art from donors throughout our communities began filling up the walls and spaces within the museum, our communities came together again in the late 1970s for what was, at the time, the largest major expansion in PMA history.

That expansion, a courageous and iconic design of the Charles Shipman Payson building by Harry Cobb of the I. M. Pei & Partners firm, was a result of collection growth, campus limitations, and community support. In the more than 40 years since construction began, the Payson building has anchored the dynamic and world-renowned arts district of Portland, Maine, and enabled millions of people to discover and connect with the transformative power of art.

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Our campus has changed, and we've restored the McLellan House, purchased, restored, and opened the Winslow Homer Studio, and reinstalled our collection multiple times to maximize our existing footprint. And yet our campus has reached its limit, with attendance already at twice the planned capacity of the Payson building. In just five years, we will more than triple the planned capacity of our campus. We need to expand, as we are being forced to make tough choices around reducing exhibition size and restricting capacity due to the physical limitations of our campus.

Critically, we, as a community, have changed as well. Our needs and expectations from our institutions have changed, and nowhere is that clearer than for museums. We must do more to create opportunity—on our walls, in our galleries, through our programs, on our board, and within our staff—to ensure the PMA experience reflects *your* experience, lifestyle, and values. We must elevate individuals and communities that have been excluded from museums and "the art world," embodying our values through artwork, exhibitions, programs, and didactics by and in partnership with our BIPOC communities, immigrants and new Mainers, LGBTQIA2S+ neighbors, our elders, youth, and other communities across Maine. We must be at the center of our communities, which

requires dialogue, trust, and transparency. And we must ensure we are championing a more diverse, inclusive, and sustainable region. We must become a community institution that is rooted in *belonging*.

142 Free Street is our catalyst for a brighter future, ensuring Congress Square is a sustainable center for arts and culture.

In 2022 we launched our vision with *The Blueprint Project: Building a Landmark for the Future*. This case for development was supported by years of open-ended community building and research, including campus planning, listening sessions, focus groups, strategic plan development, equity strategic action plan development, a feasibility study, and an economic impact study. Through this work, we came to understand what our communities want from museums and their arts institutions. These needs, desires, and expectations are embedded in the project, our Strategic Plan, and our mission, *Art for All*. We are the first museum in the country to have a mission led by our values in this way.

The shared values of the PMA and city of Portland were centerstage as we put out a global open call for architects to assemble diverse teams of experts to imagine the future of 142 Free Street. Our International Design Competition attracted submissions from 104 teams representing 20 countries, including Australia, Belgium, China, Denmark, Finland, Japan, Mexico, Spain, South Korea, United Arab Emirates, the United Kingdom, and more. In total, more than 250 firms participated as part of the 104 submitting teams, with 46 percent of all lead architecture firms founded or owned by people of color or women.

After a rigorous selection process, Portland, Oregon's LEVER Architecture won the commission. LEVER stood out for numerous reasons, chief among them their commitment to sustainable design and building practices, and deeply rooted understanding of DEAI.

Their initial concept has been overwhelmingly supported by our communities, with an astounding 93% positive feedback rate for LEVER's concept.

Here are a few of the impacts we're looking forward to:

1. **Align with our *Art for All* mission**. The new PMA wing will be a lasting example of our communities' values and the PMA's commitment to diversity, equity, accessibility, and inclusion. In the words of the late artist David Driskell, "What we leave as proof of our being here will not necessarily be in the sciences, in politics in economics, but will manifest itself through the arts". ***This once-in-a-lifetime museum expansion and unification that will forever change Maine and New England.*** Through *The PMA Blueprint*, we will redefine our region, unite our communities, and sustain our economy for generations to come.

2. **Contribute significantly to Portland and Maine's economy**. A 2022 economic analysis commissioned by the PMA through the Center for Business and Economic Research at the University of Southern Maine concludes that post-expansion, ***the PMA's annual economic contribution will more than double to include more than 600 jobs, $28.1 million in labor income, $65.3 million in sales, and $4.2 million in local and state taxes.*** The expansion also will solidify the PMA's status as quintessential destination and defining experience in Maine.

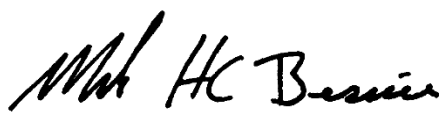
3. **Promote sustainability and spark revitalization across our state.** True to the spirit of the City of Portland's comprehensive plan and dedication to sustainability, our new building will showcase innovative construction materials and techniques that are on the forefront of sustainability. The building will be constructed primarily of mass timber, a remarkably strong, durable, and sustainable material with an ability to sequester carbon. When wood that is used for mass timber construction is obtained from sustainably managed forests, the resulting materials have a much lower life-cycle carbon footprint than steel and concrete, delivering a 26.5% reduction in global warming potential, according to University of Washington researchers. ***We're working to operationalize the shared desire for a mass timber plant in Maine and get it to the finish line with our policymakers at all levels, the University of Maine, Indigenous leaders, landowners, forestry advocates, businesses, and more.*** Why? Because mass timber in Maine just makes sense. We're the most forested state in the country—with nearly 90% of the land covered in forests, the potential to revitalize and reimagine our state through this innovative industry is real. This is a rare and unique opportunity to bring rural and urban communities, companies, and governments together through clean industries that make the world better and support Maine jobs.

4. **Expand inclusivity and belonging.** It is important to acknowledge and understand the potential interpretations of architectural styles, and when they are applied in different time periods, when considering what to champion for our city. Maine's marquee cultural institution must be a landmark designed with everyone in mind. 142 Free Street's current façade, however, was erected during the Jim Crow era. Our region is one that is striving to become more inclusive, dynamic, and diverse—a city where everyone belongs—and some architecture styles can carry unfortunate legacies of the past into the future that undermine these values and goals.

Without the removal of 2009's misclassified designation, we will not be able to realize this collective vision for our future and our city will be less dynamic, inclusive, equitable, and sustainable as a result.

We are aligned with the City of Portland's values and vision, and our drive to do right by our communities has been at the center of this project from day one. We believe that this project will spark our economies, spur urban development locally, and change the way our city and state are seen by visitors from around the world. We request that the City of Portland take the brave step forward to support our request to re-designate the 142 Free Street property to "non-Contributing" to enable our communities' vision for the City of Portland, our beautiful state, and the PMA.

Thank you for your consideration,



Mark H.C. Bessire
Judy and Leonard Lauder Director

Aspects of Integrity Evaluation for 142 Free Street

National Register and City of Portland

Please find the seven Aspects of Integrity and an assessment summarizing each aspect of 142 Free Street and the resulting impact on National Register (NR) eligibility for Individual Listing or as a contributing structure to a NR Historic District. Interior features and alterations are mentioned only in the context of NR eligibility for individual listing.

Per the 2020 district nomination update, the Period of Significance for the Spring Street National Register Historic District is 1800 through 1943, which includes the tenancy of the Chamber of Commerce. Other entities associated with the site—the Baptist Church, the Children's Museum—are not relevant to this evaluation as no physical fabric remains to represent the Church's ownership, and the Children's Museum's ownership post-dates the Period of Significance.

All historic interior elements are gone from 142 Free Street. This is more of an issue for individual eligibility—only the exterior is considered when evaluating if a building contributes or does not contribute to a National Register Historic District. The National Register Guidelines define the Aspects of Integrity as follows:

Location is the place where the historic property was constructed or the place where the historic event occurred.

Design is the combination of elements that create the form, plan, space, structure, and style of a property.

Setting is the physical environment of a historic property.

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.

Association is the direct link between an important historic event or person and a historic property.[1]

	Contributes to a District?	Eligibility for Individual Listing?	
Location	---	---	Building remains in original location. Integrity of location is uncompromised.
Design	The form of the building is compromised by the addition of the dormer and cupola.	Building would not be eligible for individual listing on the National Register due to the	Integrity of Design is compromised.

		alteration of the interior. The interior of the building has no integrity – plan is altered, all finishes removed, roof structure replaced.	
Setting	• The setting lacks any historic integrity – building is surrounded by parking lots and a ca. 1983 building (the Payson wing)	• The setting lacks any historic integrity. Historically, Free Street was a residential street (19th c.) and in the early 20th c. some commercial structures – the YMCA – replaced residences. 142 Free is now surrounded by surface parking lots and a ca. 1983 building (the Payson wing)	No Integrity of Setting remains.
Materials	• Large windows on the highly visible east facade are not wood. • Basement windows, east facade are not wood. • Front (main entry) doors, transom over same replaced with modern, metal doors.	• Large windows on the highly visible east facade are not wood. • Basement windows, east facade are not wood. • Front (main entry) doors, transom over same replaced with modern, metal doors	Integrity of Materials is compromised.
Workmanship		All elements of the 1927-43 interior are gone – no workmanship remains at interior.	For the interior, the Integrity of Workmanship is compromised.
Feeling	• Cupola changes the formal *feel* of the building. • The added dormer alters the roofline, a critical feature on this formal design.	• Cupola changes the formal *feel* of the building. • The added dormer alters the roofline, a critical feature on this formal design.	Integrity of Feeling is compromised.

		• The interior retains no feeling of its 1927-43 era.	
Association	Changes to the exterior – fenestration changes, replacement windows, dormers, cupola – have resulted in a stronger visual association with the Children's Museum's ownership.	• Interior retains no spaces or finishes to represent its association with the Chamber ca. 1927-43. • Changes to the exterior create a stronger association with the Children's Museum.	Integrity of Association is compromised.

City's Aspects of Integrity

The Designation Report does not assign/mention a Period of Significance.

The City's "Land Use Code" does not define Design, Condition, Materials, etc. (see "Definitions" on pages 17-1 through 17-3).

The City does not consider or review interiors, so the interior of the building is not discussed in the following list.

Location	---	Intact - building remains in original location.
Design	• Fenestration (window locations) altered – east facade. One opening added, one filled in at upper floor. Basement openings heavily altered – filled in, added, one opening enlarged to door. • Highly visible cupola added • Highly visible dormer added. • Highly visible skylights added.	Compromised.
Condition	---	Intact - building is generally in good condition.
Materials	• Large windows, east facade are not wood.	Compromised.

	• Basement windows, east facade are not wood. • Front (main entry) doors, transom over same replaced with modern, metal doors.	
Workmanship	• Windows replaced, the modern windows do not replicate the original design • Primary entry door, transom over same door replaced – door, transom are metal and do not replicate original design	Compromised.

[1] *National Register Bulletin How to Apply the National Register Criteria for Evaluation,* page 45. Available at https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf

July 10, 2023

I am happy to submit this letter of support for the potential new museum wing of the Portland Museum of Art.

As the General Manager of Crobo LLC, owner and operator of the State Theatre and Summer Concert Series at Thompson's Point, I can speak first-hand how incredible it has been to be a neighbor of the Portland Museum of Art. The PMA and the State Theatre are two of the oldest arts-institutions in Portland as we have welcomed both locals and tourists into our venues for a century. I am thrilled for the museum's expansion and the economic growth and impact that this expansion would have not only in our neighborhood, but city and state wide. The potential for more programming, event space and community events is certainly an exciting and big part of it all, but so is the commitment the PMA has made to sustainable building practices with this project, which is crucial as we navigate climate change in a coastal city.

From the PMA, to Congress Square free events, to the lines going into the State Theatre for a concert, to the bustling restaurants around us and the amazing, local retail stores that have opened - watching this neighborhood and city grow and thrive both economically and culturally has been a thrill to watch over the years, and I firmly believe that the PMA expansion would further this excitement and the tangible energy you can actually feel on the street. We have been grateful to be one part of it all, and we wholeheartedly both support and are excited for the Portland Museum of Art's expansion project.

Thank you,



Lauren Wayne
GM – Crobo LLC
State Theatre

SPRINGER'S
TRUSTED JEWELERS 1870

To the Historic Preservation Board,

I am writing in support of the redesign of 142 Free Street. I am currently the President of Springer's Jewelers located at 580 Congress Street. Although we technically reside on Congress Street, our most commonly used entrance is Free St.
We have been honored to be neighbors of the Portland Museum of Art for over 50 years.
As a fourth-generation family-owned business Springer's Jewelers understands the delicate balance between upholding tradition and welcoming change to meet the needs and expectations of our clients and community. It is no secret that the residents of upper Congress and Free Street have struggled with the balance needed for the community and businesses to thrive. The introduction of the "Arts District" has been well accepted by businesses in our area. The Portland Museum of Art is the anchor of this area and community.
We are in full support the redesign of the 142 Free Street location as an opportunity to let the Art District shine and create new history, while the Museum continues to pay homage to the already existing and maintained historical buildings that are part of its campus. We hope this letter helps to encourage a dialogue with the goal of supporting the evolution of Portland in a way we can all be proud of and call ours.

Sincerely,

Lilly Mullen
President & Fourth-Generation Owner, Springer's Jewelers

July 8, 2023

Chair Schueckler and Members of the Historic Preservation Board
Portland City Hall
389 Congress Street, 3rd Floor
Portland, Maine 04101

Re: PMA Blueprint Project and Redesignating 142 Free Street as a "Non-Contributing" Property in Portland's Historic District

Dear Chair Schueckler and Members of Historic Preservation

This letter serves as an expression of our support for the Portland Museum of Art's Blueprint Project, and its petition to redesignate 142 Free Street as a non-contributing building in Portland's Historic District. As neighbors, community members, business owners and historic preservationists in our own right, we believe the Blueprint Project and redesignation are vital to the future of the Museum campus and our neighborhood.

PMA has been a touchstone of Portland's economic and cultural vitality since the Museum's inception. Lying squarely at the heart of Portland's geographic and artistic cores, PMA must be allowed to adapt to the growing demands of the city and its audiences. The community has watched the campus grow over the last 190 years, sometimes with great purpose, other times more organically. The current structure at 142 Free Street is more a pastiche than a relic. Historic preservation is best utilized when it preserves the quality and character of a place and time. 142 Free Street no longer reflects a single character or quality requiring protection. Its value rests in its use, not its facade.

The Museum leadership has invested tremendous thought, time and resources into making sure this development is executed with integrity. Over the last two years, we've been thrilled to see the care they've taken paying homage to Maine's local and regional histories in their process. Every step of the way they've asked how best to look forward without forgetting the past. PMA has a vision for a more inclusive, welcoming Museum - a Museum whose vibrancy ripples out into the community. They can only fulfill this vision with freedom and latitude to execute this world class design in a manner that feels cohesive to the rest of the campus. Tying that process to the Greco-Roman facade at 142 Free Street would place an undue stylistic and structural burden on the project. More importantly, it would be imposing a fight to preserve something that doesn't speak to Portland's best past or future.

Thank you for your time and consideration. We look forward to the impact of the completed project, and working alongside PMA and City leadership to enhance the cultural and economic vitality of Portland.

Most sincerely,

Erin Kiley
Co-Owner, Portland Flea-for-All
Co-Owner, Hammond Heirs Block at 585-593 Congress Street
Portland Downtown Board of Directors

August 18, 2023

As an architect and lifelong Portland resident I am writing to support the Portland Museum of Art's proposal to expand their historic complex on Congress Square. The museum is the anchor for our Arts District and an important cultural asset for Portland and the wider Maine community.

I am pleased with the selection of LEVER Architecture's team for the design. I am confident that their design solution will respect the PMA's historic complex and be an important contribution to Congress Square and Portland's architectural fabric. Their sustainability goals for the project featuring engineered wood construction are exciting and forward thinking. It will be a bonus if the construction helps jumpstart the wood products industry in Maine.

It is obvious to me as a longtime PMA member that the museum has outgrown its current space and requires this expansion to provide flexible, non-traditional museum space to further their mission to serve a wider and more diverse arts community.

Sincerely,
Paul S Stevens Architect
37 Fessenden Avenue
Portland, Maine 04109



A History of 142 Free Street and Free Street at Congress Square

for the Portland Museum of Art Portland, Maine

July 5, 2023

Prepared by
Margaret Gaertner
M. Gaertner, Historic Building Consultant

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The Free Street Theater (1830-1835)

Free Street and 142 Free Street are slightly off axis. For the purposes of the following report the Free Street-facing facade of 142 Free Street is the north facade and Free Street runs east-west.

Sometime in 1830, a building was constructed at 142 Free Street in Portland, Maine.[1] Originally built as a theater, it may have been the first theater constructed in Maine.[2] Some accounts called it the Portland Theater while others referred to it as the Free Street Theater.[3] One newspaper noted the cost of the theater building was $10,000.[4] Surviving deeds indicate there were many investors involved in the theater enterprise – a January, 1831 mortgage on the property listed twenty-seven grantors, or titleholders, with ownership rights in the theater building and lot.[5]

No drawings or other images of the building have been located, and the written descriptions of the original theater building vary.[6] The theater was a hipped-roof building set several feet back from the street line. A broad flight of steps ran up to a portico, where three doors led to the vestibule. There were also doors to the basement on either side of the steps. The facade had a recess, and two, large Ionic columns that supported a "heavy" entablature. Above the entablature, there

> ***Free Street Theatre.***—The Boston Galaxy has been altogether too obliging to us 'down Easters.' Our theatre is not opened; no Poem has been recited, and we are wonder-struck at the marvellous events which, the editor says, have happened in our town. We don't know here, who is the successful competitor for the Prize Poem, much less that a Poem has been delivered. We learn, however, that the Theatre will be opened to-morrow evening. The *Corps Dramatique* have been here over a week waiting for the finishing of the building which "is being" erected in Free-street. We are told, and we are happy to give such information to our readers, that the reputation, habits, and morality of this company are such as entitle it to the confidence of the public. Such information will be doubly agreeable to the lovers of the Drama with us, for they have so often been visited by Thespian gipsies. The Manager promises in his advertisement to use his best exertions to give satisfaction to the public. We have no doubt he will be successful.

This notice ran in the Portland Advertiser *on September 9, 1830. It suggests construction of the Free Street Theater was nearing completion on that date.*

1. *Free Street Baptist Church Semi-Centennial 1836-1886*, 74. "Free Street Theater," *Portland Advertiser* (September 28, 1830) np.
2. Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10.
3. Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10.
4. "Edwin Forrest Played Here 83 Years Ago," *Portland Sunday Telegram* (6 February, 1914) 1, "The Saunterer," *Portland Sunday Telegram* (25 November 1917) 6, and Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10.
5. Cumberland County Registry of Deeds, Book 123, page 515.
6. For descriptions of the theater building, see: Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10 and "The Saunterer," *Portland Sunday Telegram* (25 November, 1917) 6.

was a balustrade, also described as "heavy". There were four chimneys, one at each corner. The side walls had two rows of windows, likely one row for the basement, and the second at the main floor. Each row had six windows.

The Free Street Theater operated for approximately five years. Portland's proximity to Boston provided access to quality performers. In July 1831, a young Edwin Forrest, who would later become one of the most noted stage actors of the early-nineteenth century, appeared in a series of plays at the Free Street Theater.[7] Junius Booth, patriarch of the noted family of stage actors, is also believed to have performed there.[8]

As a business enterprise, the Theater appears to have struggled. Various newspapers in the early 1830s noted the re-opening of the theater and the appointment of new managers.[9] By 1835, the ownership of the theater was divided among three investors: Solomon Mudge, Enoch Mudge, and Nathaniel Jewett.[10]

By 1835, the Theater was closed for good. In December, 1835 the theater building was sold to eight Portland residents who were members of the First Baptist Society for $5,000.[11] The men intended to use the theater building as a church.

7. "Edwin Forrest Played Here 83 Years Ago," *Portland Sunday Telegram* (6 February, 1914) 1.
8. Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10.
9. "Re-opening of the Portland Theatre," *Eastern Argus* (17 June, 1831) 2, *Daily Eastern Argus* (12 June, 1833) 2, and *Daily Eastern Argus* (8 July, 1833) 2.
10. Cumberland County Registry of Deeds, Book 142, Page 412.
11. Cumberland County Registry of Deeds, Book 146, page 14.

The Free Street Baptist Church (1836-1926)

The Free Street Baptist Society was incorporated in January 1836. A building committee was formed, and the building formerly known as the Portland Theater was purchased. The eight men who had bought the Theater in December, 1835 sold the property to the Free Street Baptist Society on January 18, 1836. The deed for the sale of the building to the Society specifically mentioned "…being the lot of land on which the Brick Building called the Theatre now stands..."[12]

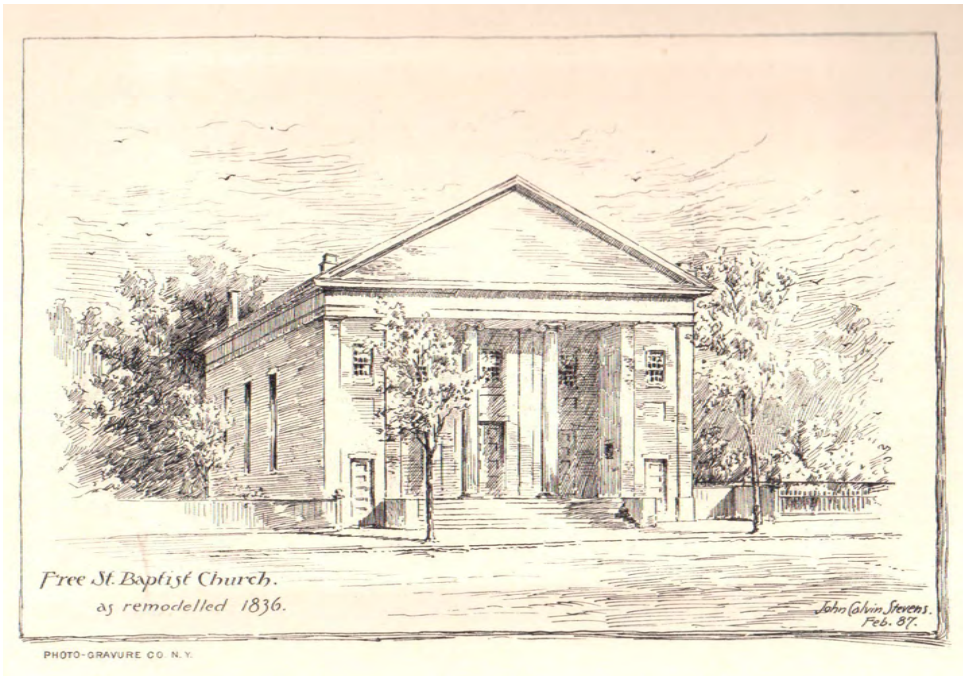
The Church made major alteration campaigns to its building every twenty years – in 1836, 1856, and 1876 – that resulted in significant changes to the appearance of the building. A final remodeling in 1926 by the subsequent owner erased all remnants of the earlier church building from the front facade and interior.

In 1836, the building was converted from a theater to the Free Street Baptist Church. Per non-contemporary written accounts, the former theater was altered as follows: the hipped roof was replaced with a gable roof, and the entablature was extended. The earlier windows in the side walls were replaced with taller windows, three openings in each wall. By August 11, 1836 the renovations were completed and the building was dedicated. A small line drawing on John Cullum's 1836 *Map of the City of Portland…* records the earliest appearance of the Church. John Calvin Stevens' conjectural sketch of the Free Street Baptist Church (following page), published in 1886, appears to be based on that small drawing.

In 1856 the church building was remodeled per the designs of architect Richard Bond (1798-1861). Bond was a Boston-based architect who had designed the Portland Merchant's Exchange (1835-9) prior to receiving the commission for the redesign of the Free Street Baptist Church.[13]

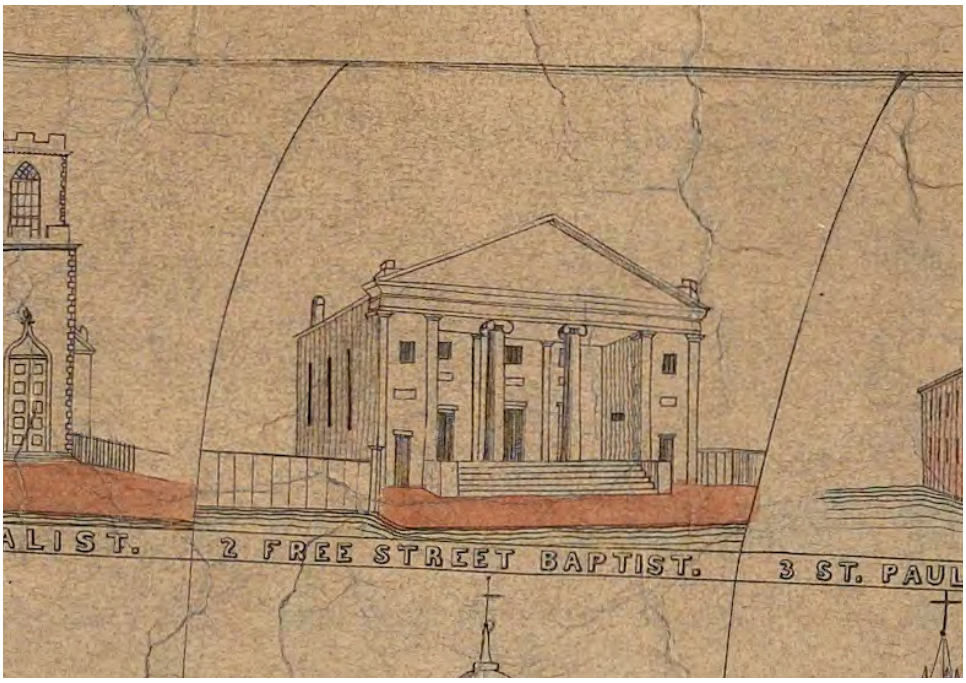
The alterations cost $15,000[14] and included adding a new "front" to the building which brought the primary facade out to the street line. This new facade was Italianate in style, and included two asymmetrical towers. The taller of the two towers was 185 feet tall and dominated the neighborhood around it. Surviving photographs show a light-colored building, lighter than the brick buildings adjacent to it, indicating the brick structure was painted, or more likely, stuccoed and scored, to imitate stone. Remnants of a stone-colored finish are still visible on the west facade of the building.

12. Cumberland County Registry of Deeds, Book 143, page 446.
13. Stephen Jerome, "Richard Bond," *Biographical Dictionary of Architects in Maine* (Volume V, No. 2) 1988.
14. William Willis, *The History of Portland* (Somersworth, NH: New Hampshire Publishing Company, 1972) 691.



In 1887, architect John Calvin Stevens made this sketch of the Free Street Baptist Church as he believed it would have appeared in 1836.

Source: *Free Street Baptist Church Semi-Centennial 1836-1886.*



This drawing of the Free Street Baptist Church was included on John Cullum's 1836 map of Portland. It likely was the source for John Calvin Stevens' 1887 sketch of the Church (above).

Source: John Cullum, *A Map of the City of Portland with its Latest Improvements...,* 1836.



These finish remnants found on the west facade record the stone color that was once found on the exterior of the Free Street Baptist Church.

In March, 1876 a fierce gale damaged the original spire.[15] The spire and its base were removed and replaced with a shorter, eight-sided, curved dome roof on a new base (see photographs, next page).

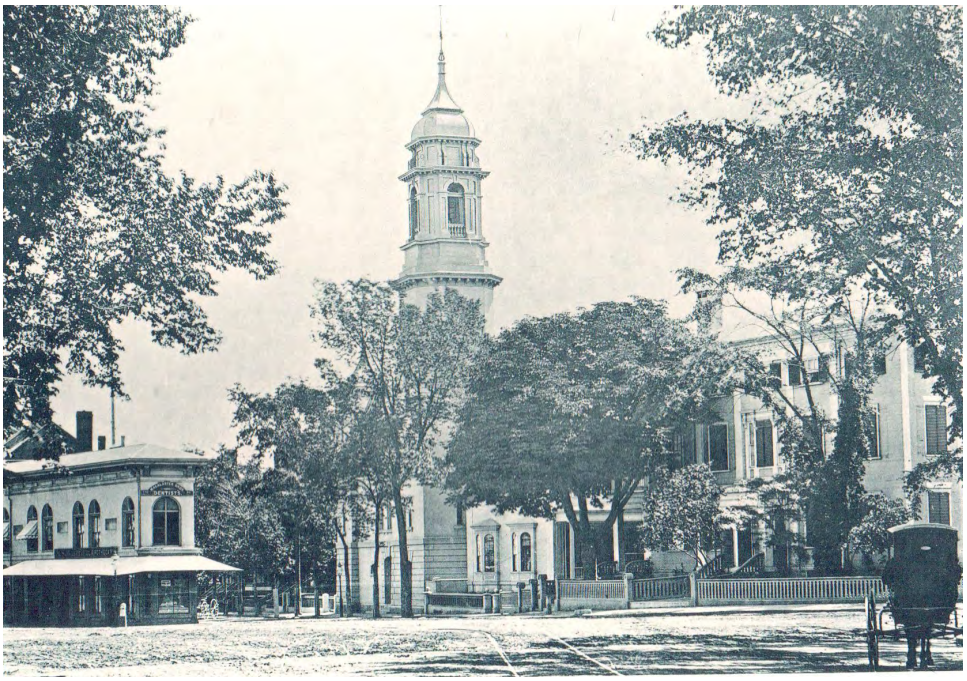
In 1887, the Free Street Baptist Church spent $6,500 on a "thorough improving" of the Church and a few years after that, stained glass windows were installed in the building.[16] In 1894, five-sixths of the lath-and-plaster ceiling fell down, including the furring, landing on and damaging some of the pews.[17]

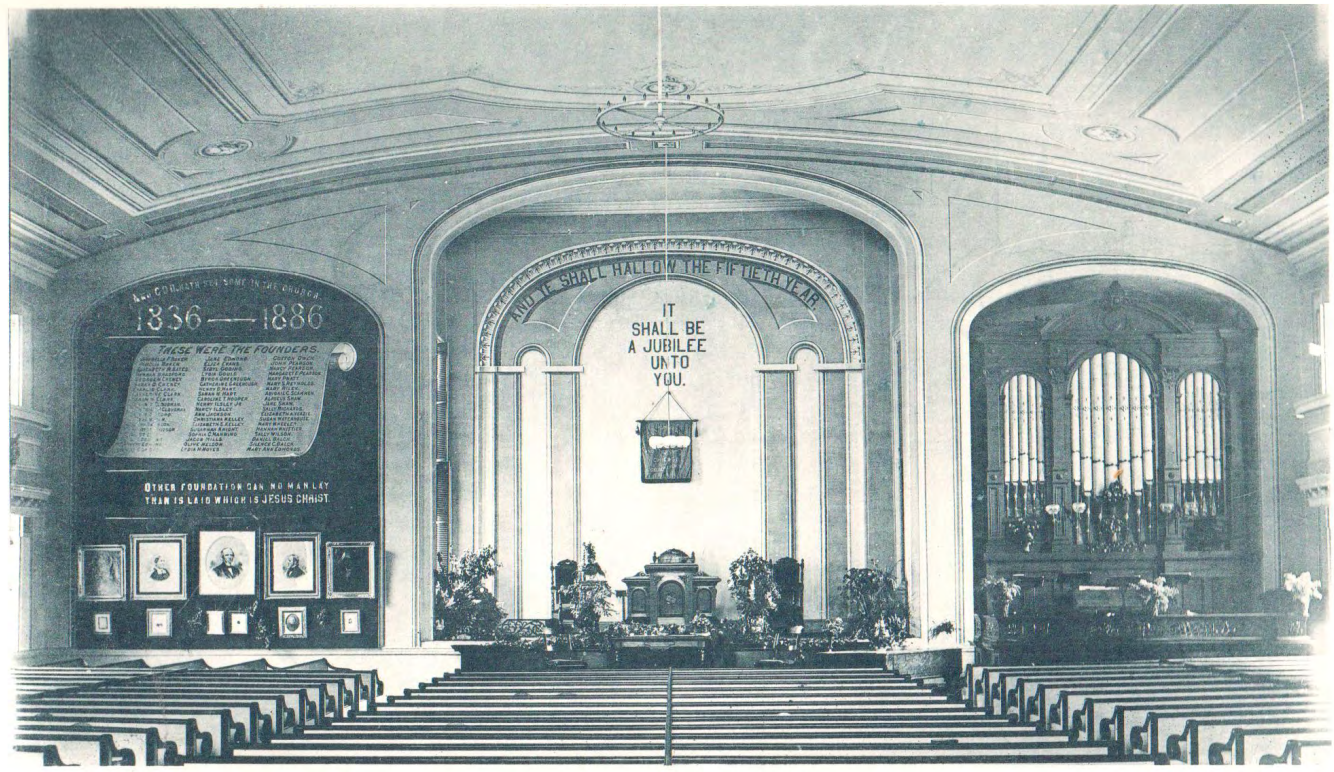
In 1922, the Free Street Baptist Church and the First Free Baptist Church merged and formed the Immanuel Baptist Church. The newly formed congregation decided to build a new, shared church at the corner of Deering and High Streets. On October 15, 1926, the Immanuel Baptist Church sold its building at 142 Free Street to the Portland Chamber of Commerce ("the Chamber").[18] As part of the sale agreement, the Church retained ownership of the stained glass windows, organ, and pews that were then in the building.[19]

15. *Free Street Baptist Church Semi-Centennial 1836-1886*, 79.
16. "A Fall in Plaster," *The Portland Daily Press* (25 October, 1894) 8.
17. "A Fall in Plaster," *The Portland Daily Press* (25 October, 1894) 8.
18. The Chamber of Commerce has had several names over its existence including the Chamber of Commerce of Portland and the Chamber of Commerce of the Greater Portland Region. For the purposes of this report, "Chamber of Commerce" will be used.
19. Cumberland County Registry of Deeds, Deed dated October 31, 1991, Book 1246, page 482.



Right: The Free Street Baptist Church as it appeared after architect Richard Bond's 1856 redesign was complete. Below: The Free Street Baptist Church as it appeared after the spire was removed in 1876. In both images, the only building shown that still stands today is the Hay Building, the two-story "flat iron" building to the left of the Church.





This interior view of the Free Street Baptist Church was published in 1887.

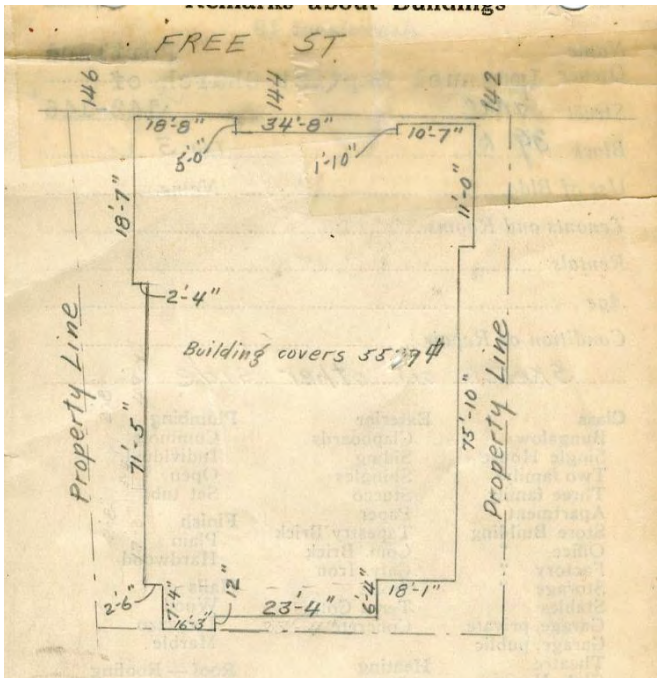
Source: *Free Street Baptist Church Semi-Centennial 1836-1886.*

Chamber of Commerce (1926-1991)

In 1926, the Chamber of Commerce bought 142 Free Street[20] and announced plans to renovate it for their new home. The Chamber retained architects John Calvin Stevens and John Howard Stevens to convert the former church into the Chamber's new headquarters.[21] The contractors for the work were W. W. Cunningham & Sons.

As noted by the press, the remodeled building retained little of its appearance from its days as a church. The two projecting towers on the Free Street facade were removed, and northernmost fifteen feet of the building (at Free Street) were rebuilt. The front facade of the building, likely stuccoed to resemble stone in its Church days, was completely removed and replaced with a new facade of exposed brick. The new facade had a portico supported on four concrete columns between two brick piers.

The extant building bears so little resemblance to the earlier Free Street Baptist Church that it is difficult to see how the Church was remodeled rather than completely replaced. Comparison of the building footprints as recorded in the 1924 assessor's sketch of the building footprint and the footprint in the current assessor's database show the basic dimensions are roughly the same. Photographs of the east facade from 1925 and 1958 (see photographs on following page) show the window openings on that wall were retained (new lintels were added in 1926) as was part of the cornice. Remnants of a stone-colored finish remain on the exterior face of the west wall (see photograph, page 7) but very little else of the building's past as a Church building appears to have survived.



This sketch floor plan was included in the City of Portland's 1924 assessment card for 142 Free Street.

Source: City of Portland - Planning & Development Department.

20. Cumberland County Registry of Deeds, Book 9779, page 254.
21. Drawings for the Stevens' alterations are not known to have survived. They are not in the collections of the Maine Historical Society. Requests to the Avery Library at Columbia University were not returned.



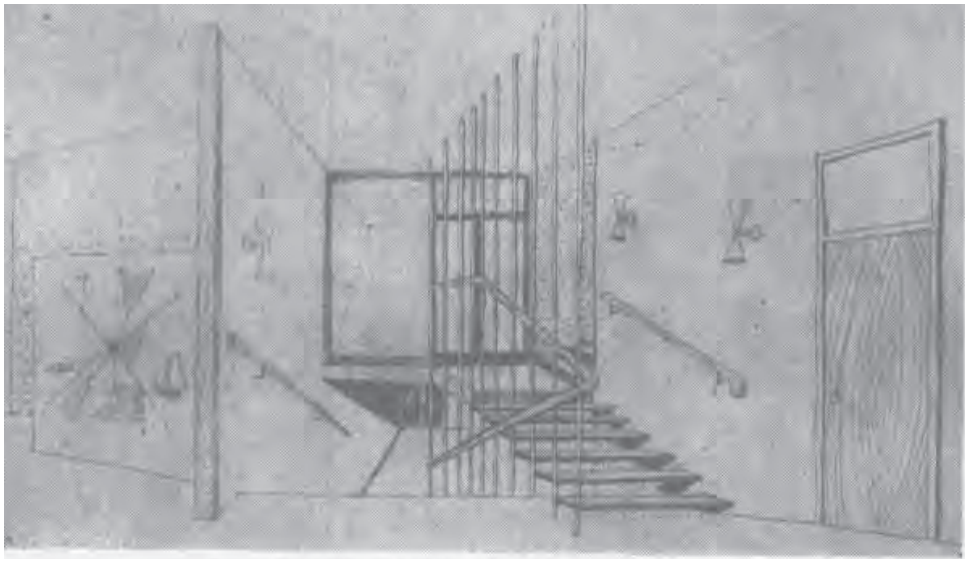


The Free Street Baptist Church in 1925 (above) and the Chamber of Commerce in 1958 (below). Without these two views to compare, it is difficult to see how the Church building was remodeled into the Chamber. The Free Street end of the building (at the right in these images) was completely replaced, and the brick walls are a different color.

Source: *Portland Evening Express,* May 31, 1958.

In addition to the exterior changes, the interior was remodeled. Although no architectural drawings have been located, the fenestration of the side walls suggests the north end of the building was divided into two floors, likely office space, while the south end was a double-height space. A "hard fuel" (coal) steam heating system was installed. During the sixty-five years the Chamber owned 142 Free Street, it continued to make small improvements and upgrades to the building. In 1941, an internal stair at the rear of the building that connected the first floor and basement was "floored over."[22]

In 1959, the Chamber remodeled the interior of the building.[23] In June of that year, the Chamber applied for a building permit to make $54,700 in alterations "as per plans." The contractor was Samuel Aceto & Co. Inc.[24] As part of the alterations, the coal-fired steam heating system was converted to oil.[25] In 1966, the Chamber completed a "brightening" of the exterior of 142 Free Street. The work included painting and repointing and cost $15,000.[26] In January, 1972 the Chamber applied for a building permit to complete $85,000 worth of renovation and alteration work "as per plan." The referenced plan has not survived.[27] The inspector noted steel beams were installed in the basement. As part of that project, the Chamber installed air-conditioning in the building.[28]



This rendering shows the interior design proposed for the Chamber of Commerce building in 1959. It is not known if the design was executed.

Source: *Portland Evening Express*, April 17, 1959.

22. Permitting and Inspections, Permit number 1919, dated December 9, 1941.
23. "Older than it Looks," *Evening Express* (14 January 1966) 7.
24. The referenced plans were not included with the building permit. Permitting and Inspections, Permit number 749, dated June 17, 1959.
25. Permitting and Inspections, Permit number 848, dated July 7, 1959.
26. "Older than it Looks," *Evening Express* (14 January 1966) 7.
27. Permitting and Inspections, Permit number 0112, dated January 21, 1972.
28. Permitting and Inspections, Permit number 0168, dated February 8, 1972.



142 Free Street (left) and the former WCTU building at 150 Free Street (right) on January 30, 1980. The WCTU building was torn down later that year.

Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.

Throughout the 1980s, the Chamber reported financial difficulties. In October 1981, the Chamber of Commerce announced a "cash flow" problem of $100,000. Most of the shortfall was due to cuts in federal programs that had covered salaries for clerical staff.[29]

In June, 1982 the Chamber announced a deficit of $65,000. The shortage was to be covered by bank loans, with refinancing of the mortgage on 142 Free Street listed as a possible longer-term solution.[30] By 1990, the Chamber had decided to sell their building. Chamber President Bill Nugent said the building was too big for their needs, and had deteriorated over the years. He also noted that while the building had lowered ceilings, the original ceilings were about thirty feet high and "nicely decorated."[31] On October 31, 1991 the Chamber sold 142 Free Street to the Children's Museum of Maine.[32]

29. Frank Sleeper, "Chamber problem: $100,000," *Evening Express* (26 October, 1981) 1.
30. Frank Sleeper, "Chamber shows $65,000 Deficit," *Evening Express* 7 (May, 1982) 1
31. "Chamber Puts Building up for Sale," *Evening Express* (9 January, 1990) 16.
32. Cumberland County Registry of Deeds, Book 9770, page 254.

The Children's Museum of Maine (1991- 2019)

The next owner of 142 Free Street was The Children's Museum of Maine. As did prior owners, the Children's Museum made alterations to the building to accommodate their activities. The renovations were extensive and included complete demolition of the interior and alterations to the exterior.

The Children's Museum worked with architect Stephen Blatt, structural engineers Pinkham & Greer, and Wright-Ryan Construction to renovate the building. On his website, Stephen Blatt notes the Chamber of Commerce building was "…severely dilapidated…." prior to the renovations. The construction cost was 1.1 million.[33]

The primary, Free Street-facing facade saw few changes. The primary entry door and the transom over it were removed and replaced with a modern frame, transom, and door of metal. On the east facade, the fenestration was altered. During the Chamber of Commerce's ownership, the south end of the facade had three, double height window openings with wood sash. The northernmost window was removed, the opening was infilled with brick, and two, smaller windows



Left: Only one of the ca. 1926 double-height wood windows survives in the building. Below: the extant entry door and transom are late-twentieth century replacement.



33. City of Portland, Permitting and Inspections, Permit No. 923937, issued July 21, 1992.

installed in the infilled portion. A new, double-height window was installed between the surviving two windows at the south end.

An eight-sided cupola was placed on the ridge of the roof and a large, shed-roofed dormer and three skylights were installed on the east roof slope. The cornice south of the downspout was removed and replaced with a new cornice that was to match the existing (see diagram, following page).[34] Other changes to the exterior of the building included a new addition to the south facade for an egress stair.

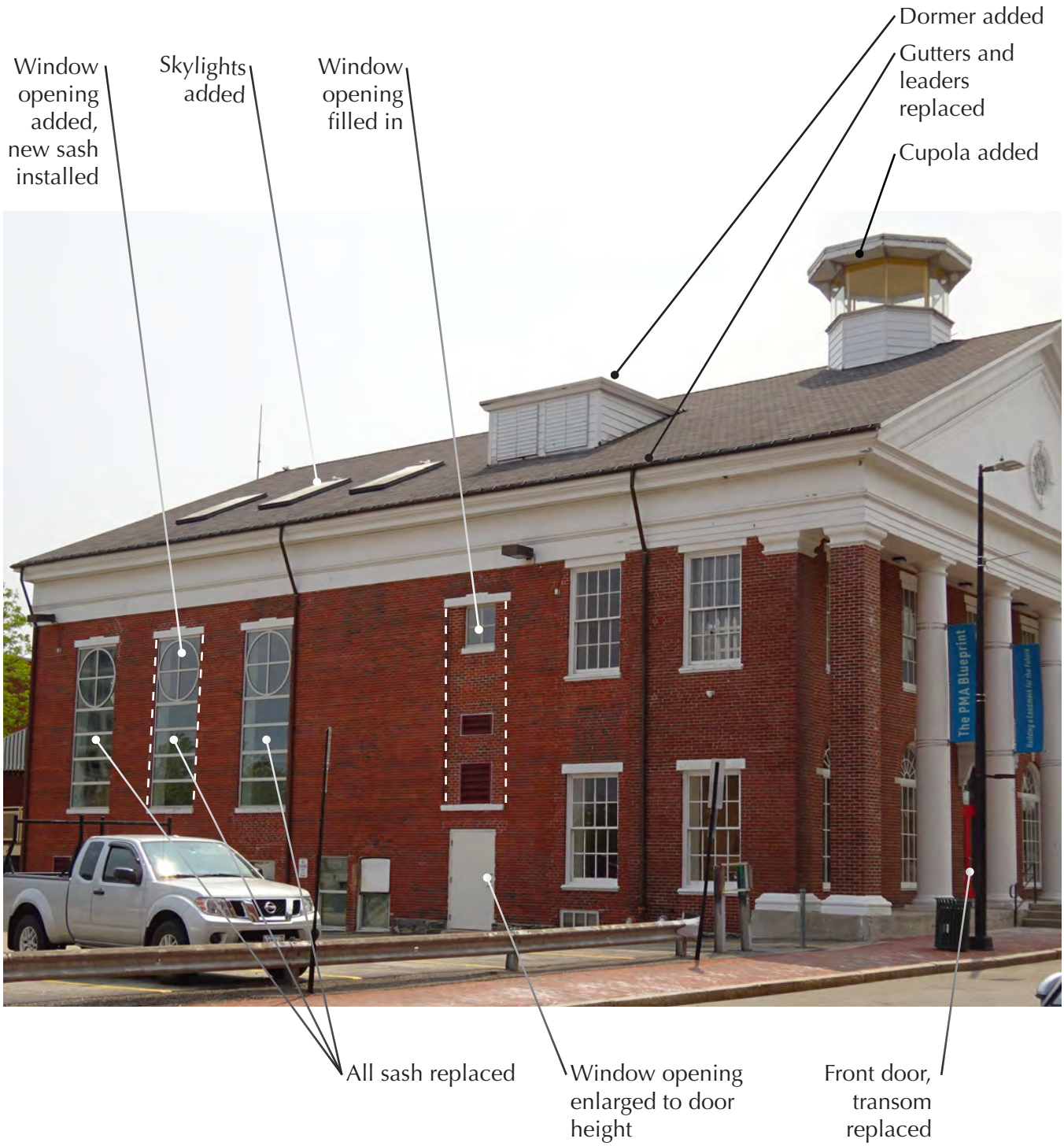
The renovations for the future Children's Museum occurred in 1992, two years after Portland enacted its historic preservation ordinance. A 1997 building permit noted the building was "Not in District or Landmark" and "Does not Require Review."[35] Had the alterations been reviewed for compliance with historic preservation standards, it is likely that most of the exterior alterations, including the addition of a large cupola and a large dormer in locations so highly visible from a public way (Free Street); alteration of the fenestration on the east facade; and replacement of the ca. 1926 windows would have been denied.

The interior of the building was completely gutted in 1992. The demolition work included removing the existing wood roof trusses and replacing them with a steel roof frame. A steel "superstructure" was also added to the building. A new, interior stair enclosed in modern masonry walls was constructed in the northwest corner of the building. An elevator was added as well.

No historic floor, wall, or ceiling finishes survive today. It is likely that any that had survived were removed as part of the 1990s work. Records in the City of Portland's building permit files indicate concrete slabs were poured for the basement, first, and second floors.[36] As seen from the interior of the building, the existing floors are poured in modern, corrugated pans, confirming that all of the floor framing and flooring was replaced as well. A sprinkler system was installed throughout the building.[37]

In 2017, the Children's Museum and Theater of Maine announced its plans to relocate to a new, larger building at Thompson's Point in Portland. The new building was to include 30,000 square feet of space, while the building at 142 Free Street had only 18,000. On October 15, 2019, the Children's Museum sold the building at 142 Free Street to its neighbor, the Portland Museum of Art.

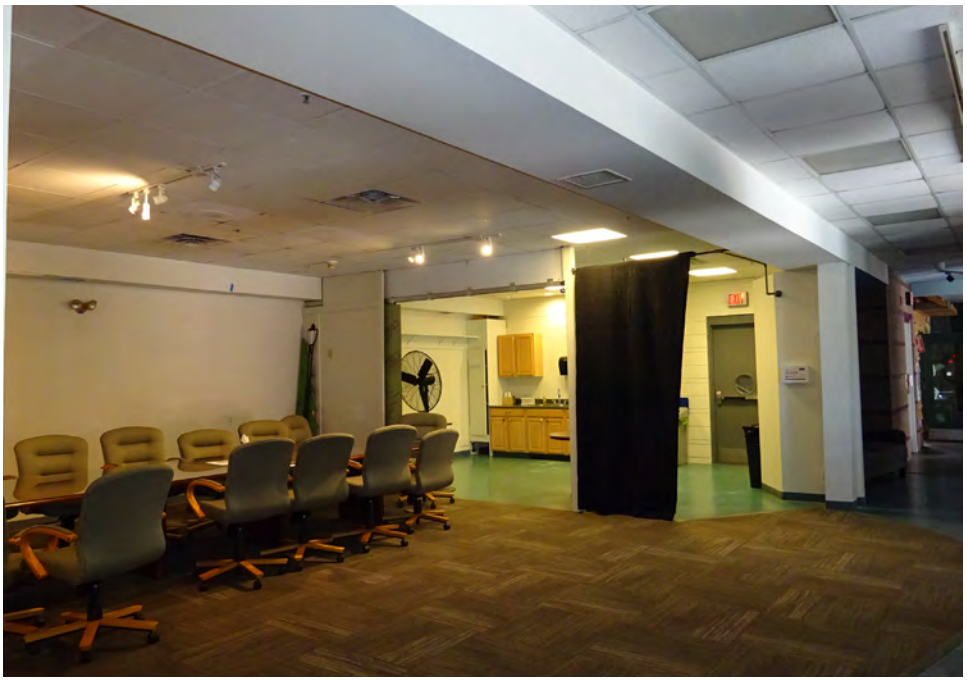
34. City of Portland, Permitting and Inspections, 142 Free Street file, undated elevation drawing.
35. City of Portland, Permitting and Inspections, Permit No. 971138, issued October 20, 1997.
36. City of Portland, Permitting and Inspections, 142 Free Street file, Con Test Lab, Inc. "Report of Compressive Strength…"
37. City of Portland, Permitting and Inspections, Permit 924219, Issued October 8, 1992. Letter, P. Samuel Hoffses to Sprinkler Systems Inc., October 8, 1992. Inspections Department.



Exterior alterations to 142 Free Street made for the Children's Museum in the early 1990s.



Renovations made by the Children's Museum in the early 1990s included gutting the interior of the building. Today, no historic interior finishes remain. Note the modern steel framing and skylights in the image at right.



Free Street

The earliest section of Free Street, originally called Love Lane, was laid out in 1772. Initially, it extended only from Center Street to Middle Street – Free Street once ended where it now intersects Cross Street. In 1783, Free Street was extended westward to meet the intersection of Congress and High Streets, which became its western terminus. The newly built section, wider than the original part, was called Windmill Lane, after the windmill that once stood at the top of the hill. In 1788 the original portion of the road was widened to align with the newer section, and the entire street was renamed Free Street.[1] The intersection of Congress, High, and Free Streets is known as Congress Square.

By the early-nineteenth century, Congress Square was a wealthy residential neighborhood lined with some of Portland's finest homes. Noted residences here included the Cobb Mansion, a ca. 1801 Federal-style home designed by Alexander Parris at present-day 7 Congress Square. Further down High Street and on Spring Street were the twin mansions of Stephen McLellan (116 High Street, 1800) and Major Hugh McLellan (107 Spring Street, ca. 1801). The latter was designed by John Kimball, Sr. At the corner of High and Congress Streets was the ca. 1837 Nathaniel Warren mansion, a brick Greek Revival building with an angled facade and two-story porch on columns. As one moved eastward along Free Street, the houses were somewhat smaller, and typically built in a simpler versions of the Federal and Greek Revival styles. These residences were a mix of brick and frame construction, and some were freestanding, while others were duplexes or rowhouses. Both the north and south sides of Free Street were still largely residential as late as 1886 (see maps and images, following pages).



The south side of Free Street was once lined with brick homes such as this one that stood at 134 Free.

Source: Maine Historical Society. For study purposes only / not for publication.

1. "Free Street Dates Back to Before Revolution," *Portland Sunday Telegram* (16 December, 1917) 5.



As seen in the Sanborn map of 1886, the north side of Free Street east of Congress Square was still largely residential as late as 1886. On the north side of the street (above) all of the structures east of the "Union Hall" were "dwellings" (labeled "D" on the map).

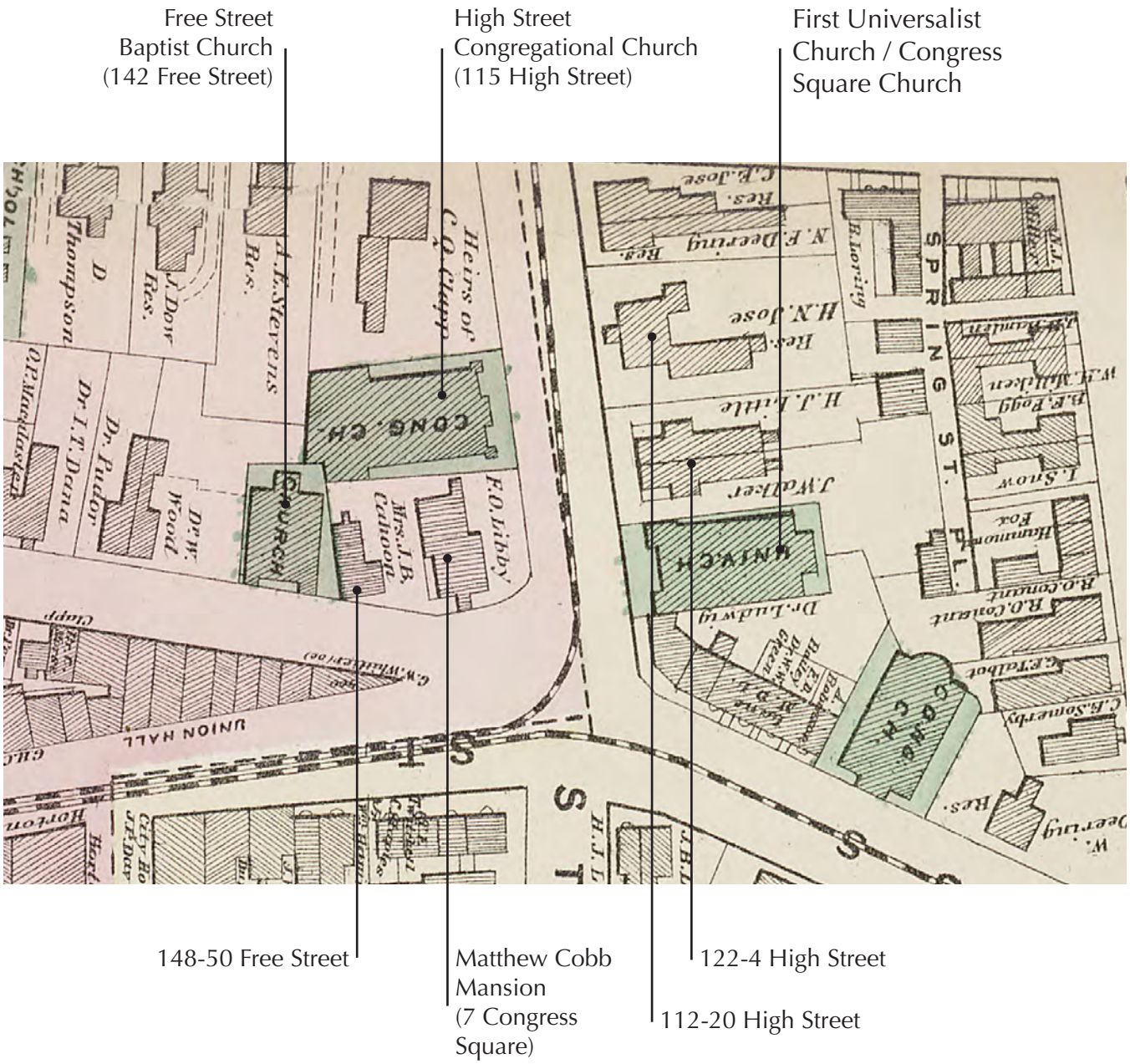
Source: *Sanborn Fire Insurance Map from Portland, Cumberland County, Maine,* Plate 12 (above) and Plate 24 (below). 1886.





Photograph of the area around Congress Square ca. 1885.

Source: Maine Historical Society. For study purposes only / not for publication.



Map showing the area around Congress Square in 1871. Please note the map has been flipped to align with photograph on the previous page.

Source: Beer's Atlas of Cumberland County.



The former First Universalist Church / Congress Square Church on High Street and the Nathaniel Warren mansion to its right. The Hay Building is visible in the foreground.

Source: Stereoview Photograph Collection, Maine State Archives.

Large churches were built between the residences, including the High Street Congregational Church at 115 High Street (ca. 1831) and the Free Street Baptist Church, which took over and remodeled a former theater at 142 Free Street in 1836. The streets were lined with trees, and the overall feeling was one of prosperity and elegance. Commercial activities were found on nearby Congress Street, in small-scale buildings. The Hay Building (ca. 1922, third story added 1922) at 594 Congress Street is typical of the retail buildings that lined Congress Street during the early- to mid-nineteenth century.



An early view of Congress Street, immediately east of Congress Square. The street is lined with small-scale, two- and three-story commercial buildings.

Source: Stereoview Photograph Collection, Maine State Archives.



The Libby Mansion in 1924.

Source: City of Portland - Planning & Development Department.

As the nineteenth century progressed, the area remained fashionable and more large residences were built, in the Italianate, Second Empire, and Queen Anne styles. The Libby Mansion, at the northwest corner of Congress and High, was among the grandest. Designed in 1853 by architect Charles Alexander, it was actually a double house. 126 High Street was another double residence, this one in the Greek Revival Style. The brick house had a hipped roof that extended over engaged side porches, and was supported on two-story tall columns.

Existing churches were remodeled, and new ones constructed. The Baptists remodeled their Free Street church in 1859, adding a tall spire and Italianate facade over their existing building. The Universalists constructed a large church, known as the Congress Square Church, in 1865 at 1 Congress Square. The Congregational Church on High Street was updated to a Gothic Revival style in 1869.

Most of Free Street was spared by Portland's Great Fire of 1866. Only the eastern-most end, the commercial area at Middle Street, was lost. This block was quickly rebuilt after the fire, and today remains a well-preserved block of commercial buildings built in a range of architectural styles popular in the 1870s.

The late-nineteenth and early-twentieth century saw extensive changes to the formerly genteel and largely residential neighborhood around Congress Square. As the neighborhood became less fashionable, many of the mansions that lined Congress and High Streets were divided into apartments or converted for civic and charitable uses. Some of the homes were demolished and replaced by larger, commercial structures.



Congress Square after 1897. The Cobb Mansion that stood at the corner has been demolished and the YMCA/Libby Building constructed in its place. The brick Nathaniel Warren Mansion still stands at the right.

Source: Collection of the author.



Congress Square after 1920. The Nathaniel Warren mansion that stood at the corner has been demolished and the Shwartz Building constructed in its place. The postmark on the rear of the card is May 6, 1926.

Source: Collection of the author.



As the neighborhood around Congress Square became less fashionable, the once-grand homes were re-purposed. By 1924, this large duplex home at 126 High Street had an addition for retail spaces at street level and was divided into apartments at the upper floors.

Source: City of Portland - Planning & Development Department.

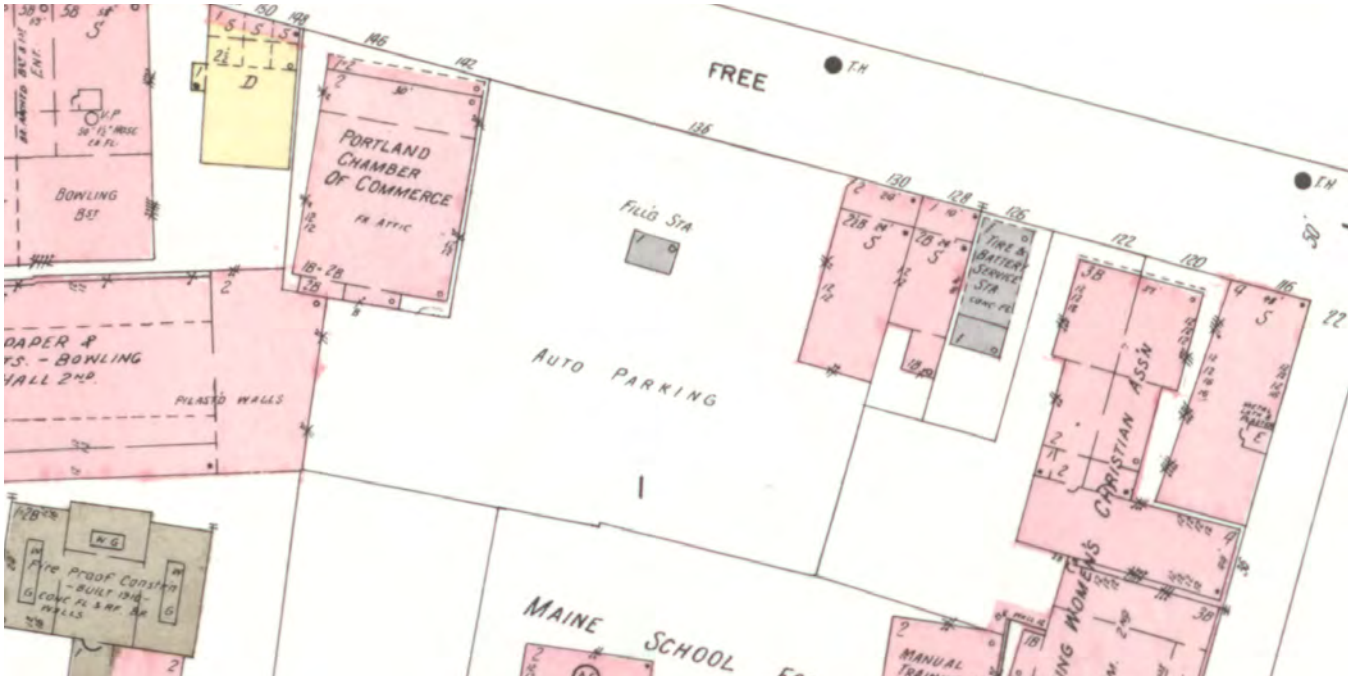
The 1886 Sanborn map recorded that the Cobb Mansion (7 Congress Square) was then home to the Cumberland Club. By 1890, the Cumberland Club had moved to the Stephen McLellan Mansion (116 High Street). The Cobb Mansion was demolished and replaced in 1897 by a five-story tall brick building for the Young Men's Christian Association (YMCA). In 1908, Margaret Mussey Sweat donated the Hugh McLellan Mansion (107 Spring Street) to the Portland Society of Art and it was converted into a museum. The Nathaniel Warren Mansion at 1 Congress Square was replaced by the Shwartz Building, a four-story brick commercial building with a round tower, in 1920. Across Congress Street, the Libby Mansion was demolished and replaced by the State Theater building.

While these changes marked a shift towards larger, commercial structures, the new buildings where typically executed in brick and granite with traditional styles and details. The area around Congress Square was no longer a wealthy residential neighborhood, and instead was transitioning into a vibrant, commercial area of hotels, theaters, restaurants, and shopping. This trend continued until the Great Depression halted nearly all development in Portland.

Congress Square Declines

After World War II, Portland, like many older cities, struggled to redefine itself and compete with suburban, automobile-based development. Civic leaders took on a number of efforts, including slum-clearing and redevelopment studies, plans, and projects intended to improve living conditions, modernize the city, and attract investment and redevelopment.

Among the most far reaching was "Patterns for Progress," an urban renewal plan written in 1967 that sought to create a ring of high-speed roads to move cars around the central core of the Portland peninsula. This resulted in the widening of Franklin and Spring Streets to create "arterials." Spring Street, which had previously ended at Center Street, was also extended to Middle Street. High and State Streets became one-way streets, increasing traffic speeds and affecting the character of these historic neighborhoods. Large areas on Cumberland Avenue and near Monument Square were razed to create open space for development. Some of these projects, such as One City Center, took decades to materialize. Others, such as the "Downtown Project No. 1," a proposed fifteen-story residential tower on Cumberland Avenue, never happened and that land is largely still a surface parking lot.



The south side of Free Street in 1954. Automobiles have arrived, and the residences at 126, 134, and 136 Free Street have been torn down for parking lots and auto-repair buildings. One-story additions for commercial uses have been added to the fronts of 128 and 130 Free Street and the former WCTU building at 150 Free Street.

Source: *Sanborn Fire Insurance Map from Portland, Cumberland County, Maine,* Plate 29. 1954.



Looking west on Free Street, 1924. The Jefferson Theater is in the foreground and the tower on the Free Street Baptist Church is visible in the background.

Source: City of Portland - Planning & Development Department.

Even before the official urban renewal efforts began, Free Street's streetscape near Congress Square was already being lost to modern development and the increased demand for parking. Portland's 1924 tax photographs record an intact streetscape along the south side of Free Street, from Oak Street to High Street. At the southeast corner of Free and Oak was the Jefferson Theater, a ca. 1897 five-story brick theater, while an early-twentieth century commercial building occupied the southwest corner (116 Free Street, extant). Between the commercial building and the Free Street Baptist Church was a row of seven two- and three-story tall brick residences dating to the mid-nineteenth century. An eighth house, a wood-framed building at 150 Free Street later owned by the Women' Christian Temperance Union (WCTU), stood between the Church and the YMCA.

The north side of Free Street, while more commercial, was also intact. This side was dominated by the elaborate brick and terracotta facade of the Baxter Memorial Building. Although this was actually the back of the building – the building's address was 562 Congress Street – the Free Street facade was nonetheless detailed with arches over the windows, belt courses, and swags, all of terracotta.

Shortly after 1924, Free Street began to change rapidly. In 1926, the Free Street Baptist Church was altered to its present, portico-front form. In 1933, the Jefferson Theater at the southeast corner of Free and Oak was torn down. In 1947, a modern, nearly windowless block of blonde brick – a Sears Roebuck store – was built on its site. Across the street, in 1954-5, all of the historic details were stripped off of the Congress Street and Free Street facades of the Baxter Memorial, and modern windows were installed.



The Jefferson Theater stood on the southeast corner of Free and Oak Streets. It was demolished in 1933.

Source: Collection of the author.

The south side of Free Street was also severely altered. The 1954 Sanborn map and an aerial photograph taken in 1960 (see photograph, page 30) records that only five of eight houses (120, 124, 128, 130, and 150 Free) remained on the south side of Free Street by that time. 126 Free Street had already been torn down and replaced with a concrete building used for "Tire and Battery" service. 130 Free and 150 Free were both heavily altered, with commercial additions on their primary facades. The rest of the block was an open parking lot with a filling station. Thus, much of this loss occurred prior to the implementation of official urban renewal projects in the area. Today, only a single, heavily altered former residence remains (128 Free Street).

Removal of historic buildings on Congress Square continued through the 1970s and 1980s. The former Universalist Church (128-32 High Street / 1 Congress Square) and the Greek Revival duplex next to it (126 High Street) were demolished to build a new studio building and parking lot for WCSH in 1977. In 1980, the former YMCA building at 7 Congress Square and the small, wood-framed building immediately east of the YMCA were torn down. In 1983, the Payson Wing of the Portland Museum of Art was built on those lots. On High Street, the former High Street Congregational Church appears to have been altered into a commercial building by 1924 before it was eventually demolished sometime before 1972. Today, none of the churches that once lined Congress Square remain.



This Sears Roebuck store was built on the site of the Jefferson Theater. This photograph was taken in 1947.

Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.



The former Sears Roebuck store in 2023.



An aerial view of Congress Square taken in 1960. Much of the south side of Free Street is already a parking lot.

Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.



An aerial view of Spring Street taken in 1972. Spring Street has been widened, and the Holiday Inn is visible. The rear walls of 142 Free Street and the Libby Building are visible at the left edge of the photograph. The building south of the Libby Building - originally a Congregational Church, later a recreation building - has been demolished. Much of the south side of Free Street remains an open parking lot.

Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.

116 **128** **142**



Comparison of ca. 2022 aerial photograph of Free Street (middle image) with the 1914 Richards Standard Atlas of the City of Portland *reveals how few buildings remain on the south side (top image) of Free Street.*

South Side of Free Street in 1924

116 Free Street



120-24 Free Street
Demolished after 1960



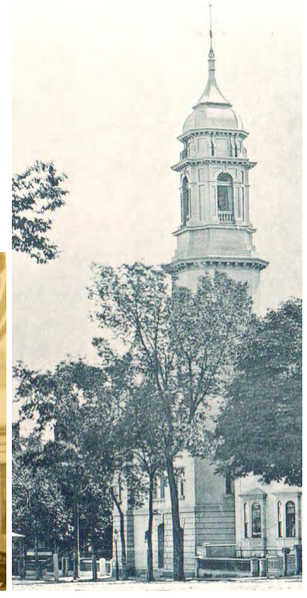
126 Free Street
Demolished before 1954
128 Free Street
Extant; altered and non-contributing
130 Free Street
Demolished after 1975



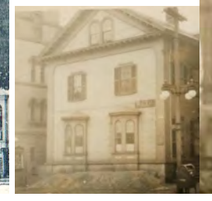
134-6 Free Street
Demolished before 1960



142 Free Street



150 Free Street



7 Congress Square





116 Free Street



120-24 Free Street
(parking lot)



126 Free Street
(parking lot)



128 Free Street
(extant; non-contributing)



134-6 Free Street
(parking lot)



142 Free Street



150 Free Street / 7 Congress Square

South Side of Free Street in 2023

This demolition did not occur without objection. The widening of Spring Street in 1970 and the loss of the historic houses on its south side were one of several events that led to the nomination of the Spring Street Historic District to the National Register in 1970 and passage of a Historic Preservation Ordinance by the City of Portland in 1990. Unfortunately, the damage to the portion of Free Street adjacent to Congress Square was already done. The Spring Street National Register District nomination acknowledged the loss in the Description section and noted "This is an active section of modern day Portland, yet this district retains the flavor and appearance of an older time. There are only a few modern structures and these front on streets such as Congress and Free which are commercial...an urban renewal project has leveled a section giving rise to the location of a new Sears-Roebuck store and parking area, on the eastern part of Spring Street. Some cleared land lies vacant. With the exceptions of the above the remaining district contains a great many old, but proud, structurally sound residences..."



142 Free Street, the former WCTU building at 150 Free Street, and the YMCA / Libby Building in 1978. The Libby Building and WCTU building were torn down in 1980.

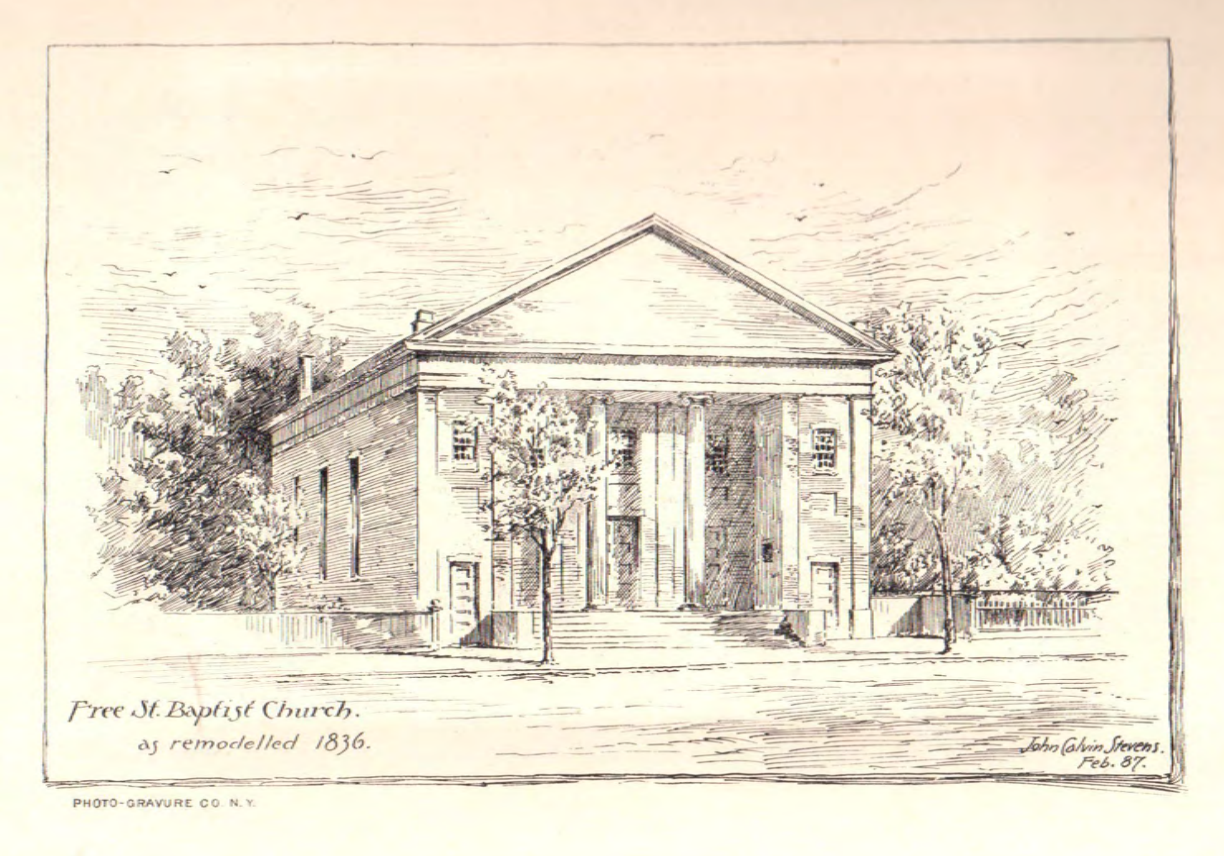
Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.

Illustrations



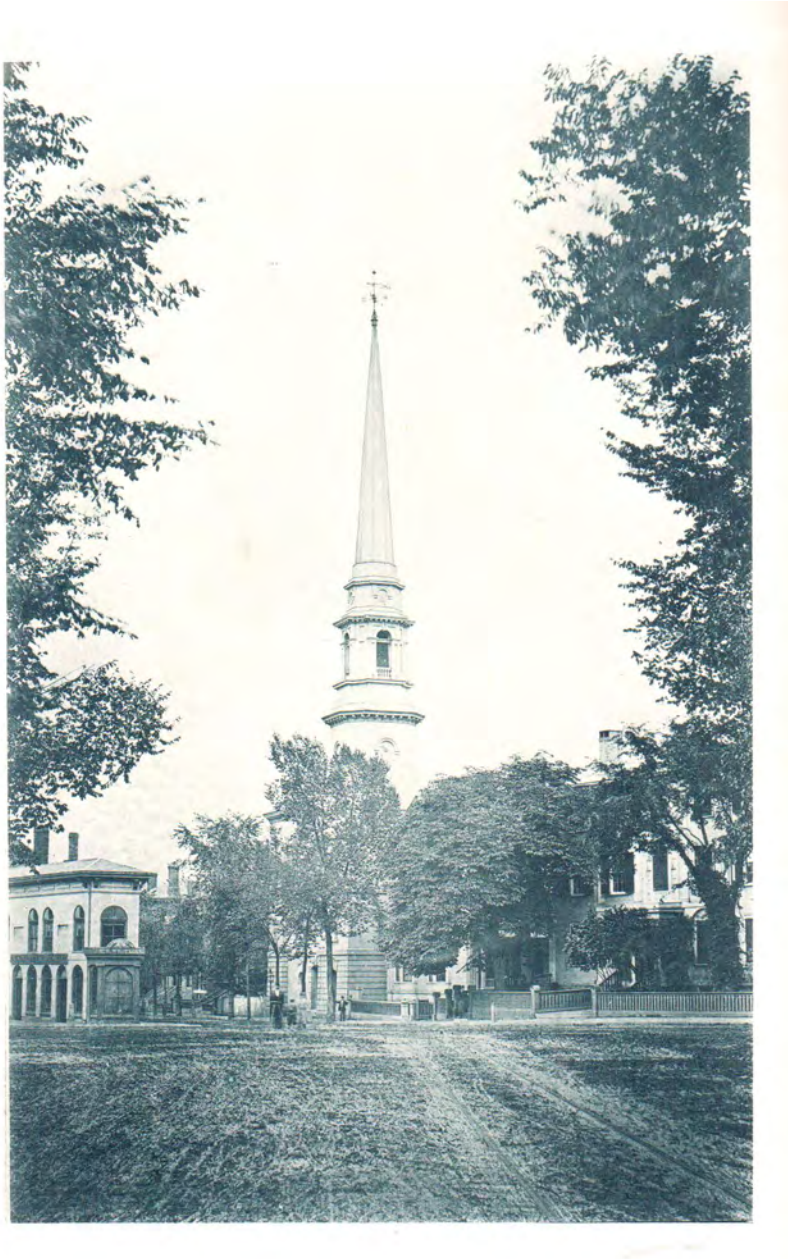
This 1836 map includes a line drawing showing the Free Street Baptist Church in 1836.

Source: "A Map of the City of Portland with its Latest Improvements including a view of the principal buildings engraved and published by John Cullum, Portland." Osher Map Library.



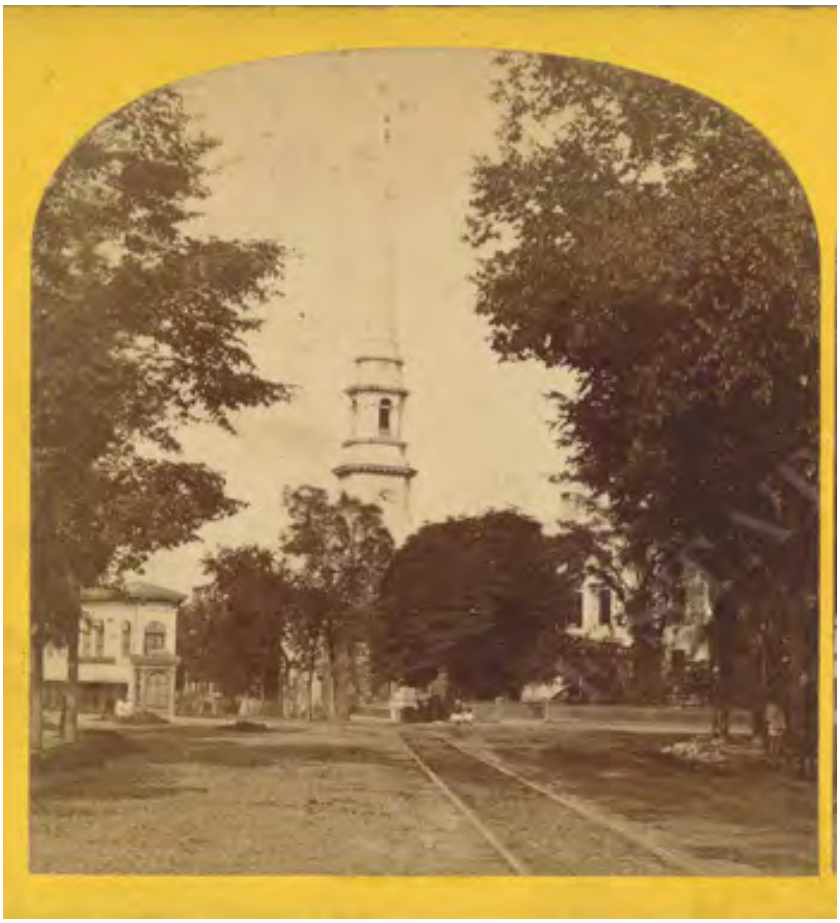
John Calvin Steven's sketch of the possible appearance of the Free Street Baptist Church prior to the 1856 remodeling campaign.

Source: *Free Street Baptist Church Semi-Centennial 1836-1886.* Collection of the author.



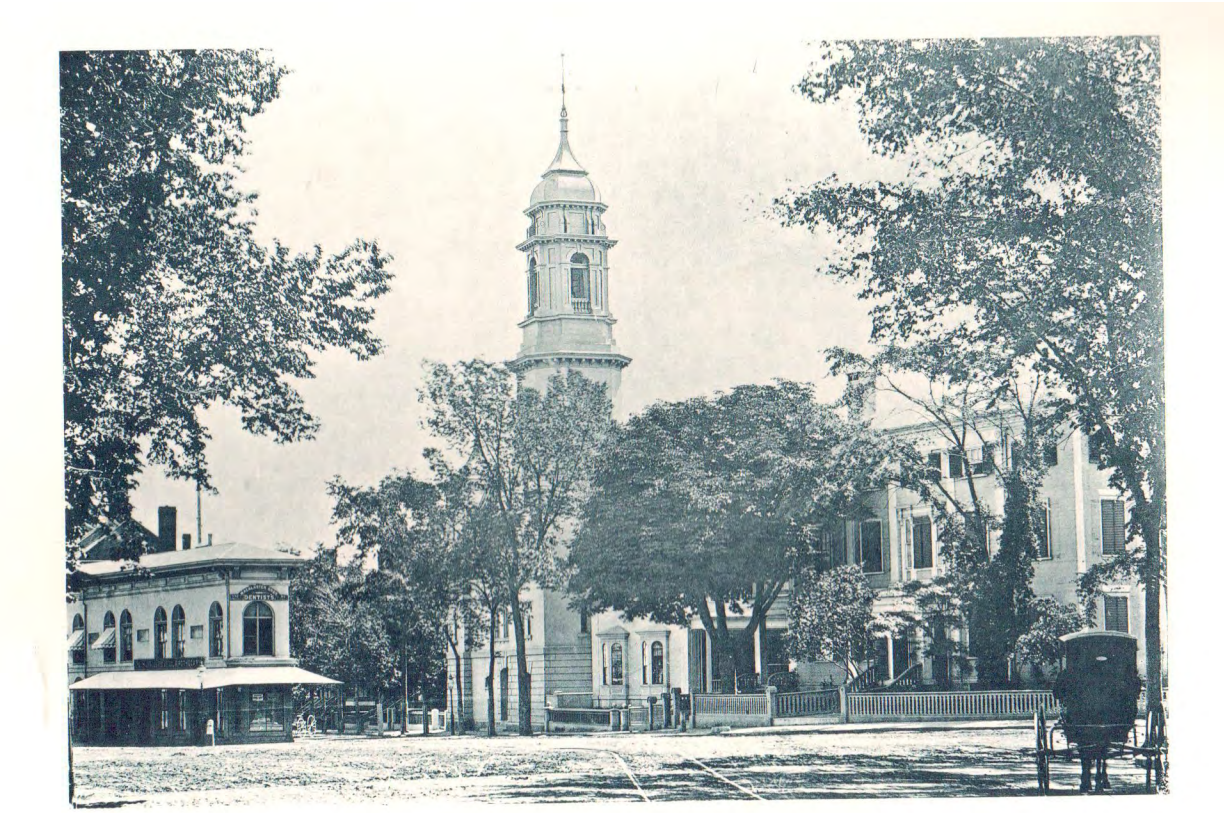
An early photograph of the Free Street Baptist Church - note the original, ca. 1856 steeple is still in place. The Hay Building is only two stories high.

Source: *Free Street Baptist Church Semi-Centennial 1836-1886.* Collection of the author.



An early stereoview photograph of the Free Street Baptist Church. The original, ca. 1856 steeple is still in place.

Source: Stereoview Photograph Collection, Maine State Archives.



The Free Street Baptist Church, sometime after 1876.

Source: *Free Street Baptist Church Semi-Centennial 1836-1886*. Collection of the author.



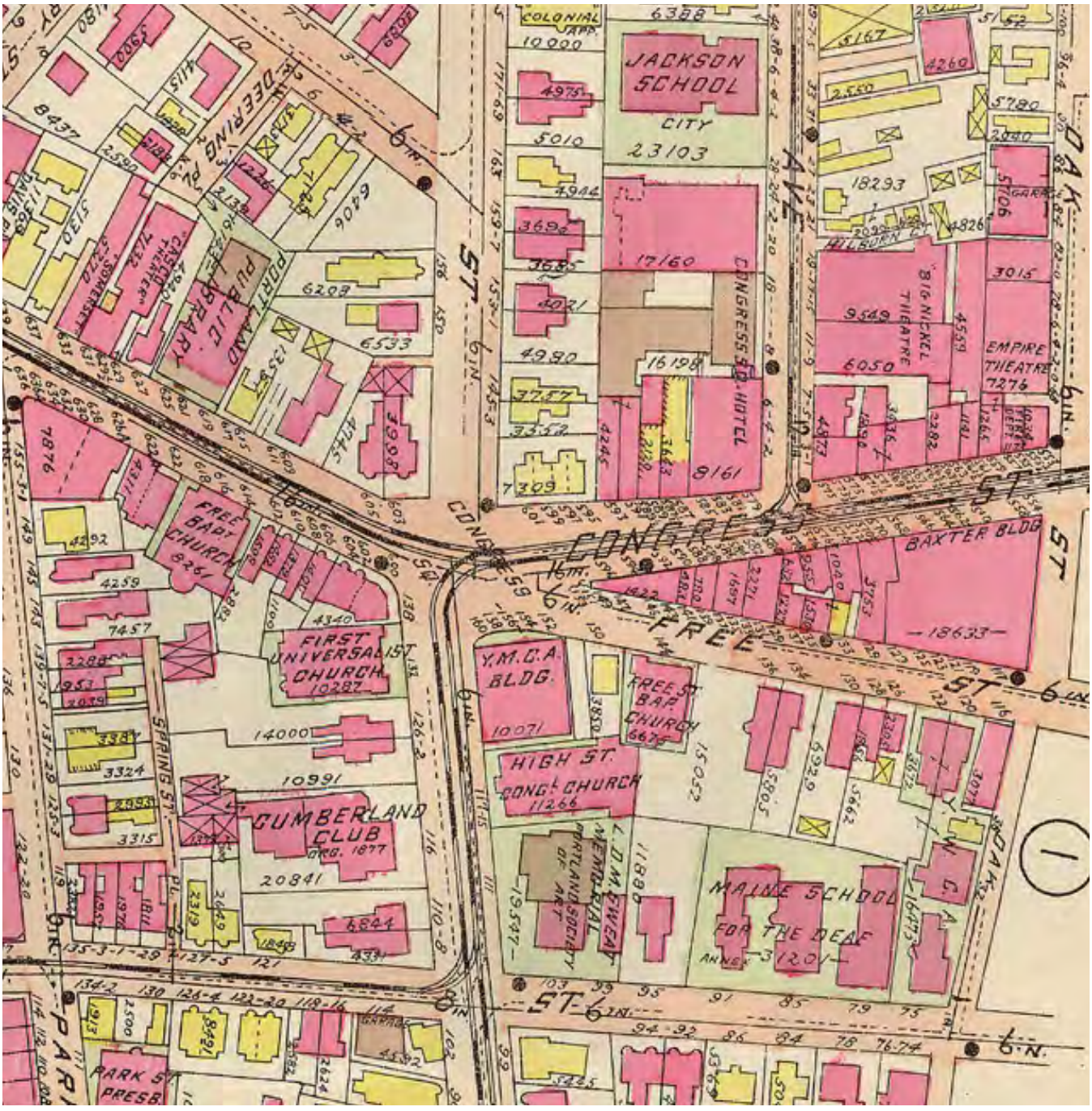
An 1882 map of Congress Square.

Source: *Revaluation Plans City of Portland, 1882*. Plate 39. Portland Public Library.



Congress Square in the early-twentieth century, showing the ca. 1897 YMCA/Libby Building at the center, and the Free Street Baptist Church at the left. The spire of the High Street Congregational Church is visible at the right, behind the Libby Building. This image was published in 1908.

Source: *In and About Portland,* 1908. Library of Congress.



Congress Square in 1914. The wood-framed Matthew Cobb Mansion has been replaced by the YMCA / Libby Building. The Free Street Baptist Church at 142 Free Street retains its towers.

Source: *Richards Standard Atlas of the City of Portland…,* 1914. Portland Public Library.

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The Economic Contribution and Impact of the Portland Museum of Art in Maine

A snapshot from a typical year before the PMA Blueprint facilities expansion and estimates post-expansion



Photo from the PMA website

Prepared for the Portland Museum Of Art

By the Maine Center for Business and Economic Research, University of Southern Maine

December 2022

PORTLAND MUSEUM of ART

MAINE CENTER FOR BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF SOUTHERN MAINE

UNIVERSITY OF SOUTHERN MAINE

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Executive Summary

With a renewed commitment to diversity, equity, accessibility, and inclusion the Portland Museum of Art's (PMA) vision to become a central community gathering place and serve as a regional economic catalyst is being realized through its $100M multi-year redevelopment and construction project funded in part by an ongoing capital fundraising campaign. The following economic analysis – commissioned by the PMA and completed by the Center for Business and Economic Research (CBER) at the University of Southern Maine (USM) – quantifies the Museums ongoing contributions and impacts on the Maine economy in a typical year before the PMA Blueprint project (i.e., construction/expansion) and estimates the PMAs impact in a typical year after the expansion. Indirect and induced multiplier effects and some of the direct impacts are estimated by a Maine input-output model (IMPLAN, 2019 Data).

Pre-Expansion Snapshot, the PMA's annual economic contribution in 2019

The two major components of the PMA's economic contribution stem from museum spending and visitor spending. In 2019, the PMA welcomed over 170,000 patrons, an estimated 13% of which were from out of state and their trip to Maine was motivated by visiting the museum. These tourists spent an estimated $12.6 million directly on lodging, meals, shopping, transportation, etc. from outside of the museum. At the same time, the PMA paid $8M to maintain its ongoing operations, 69% of the direct operating costs were spent in Maine. Direct spending by out-of-state tourists supported an additional $8.1M in output (sales) – including both indirect and induced spending – and an additional 52 jobs. *For every $100 of tourists spending (sales), an additional $79 is generated elsewhere in the local economy.*

Including indirect and induced spending, the Museums direct operating activities supported an additional $5.7M in output (sales), and 37 jobs. *For every $100 of the PMA spending (sales), an additional $99 is generated elsewhere in the local economy.* Combine, in a typical year before the expansion the PMA supported:

- **Over 300 jobs.** Museum & visitor spending supported 309 jobs of which 220 were direct impacts and another 89 were supported through indirect and induced spending.
- **$12.9M labor income.** $8.7 million in direct labor income which supported an additional $4.2 million in indirect and induced impacts.
- **$29.8M output (sales).** Generated a total of $29.8 million in total output of which $16M were from the initial direct spending which supported another $13.8M in indirect and induced impacts.
- **$1.9 million in local and state taxes.** In 2019, $786,599 in local and $1.1 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of tourists.

Post-Expansion Snapshot, the PMA's annual economic contribution in 2027

The PMA Blueprint project is expected to be complete in 2027 and the new facilities open to the public. The PMA will have more space to host events, display more and higher quality exhibits, and in turn attract more visitors to the state. The increased capacity and diversity could allow the museum to welcome up to 300,000 annual visitors. An estimated 16% of visitors from out of state may take a trip to Maine motivated by visiting the PMA and could spend an estimated $28M on direct tourism-related expenditures.

To support the additional capacity, the PMA's annual operating budget will nearly double from the pre-expansion snapshot and a greater portion will be spent in Maine (81%) to purchase goods and services from local businesses and pay museum employees. In total, the estimated contribution for 2027, the year *after* the expansion, includes:

Executive Summary

Post-Expansion Snapshot, the PMA's annual economic contribution in 2027

- **Over 600 jobs.** Museum & visitor spending supported 621 jobs of which 426 were direct and another 195 were supported through indirect and induced spending.
- **$28.1M labor income.** $18.8 million in direct labor income which supported an additional $9.3 million in indirect and induced impacts.
- **$65.3M output (sales).** Generated a total of $65.3 million in total output of which $35M were from the initial direct spending which supported another $30.2M in indirect and induced impacts.
- **$4.2 million in local and state taxes in 2027.** In 2027, $1.7 million in local and $2.5 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

Five-Year Construction Impacts in the Maine Economy

This analysis also estimated the economic impact from the capital expenditures on the proposed PMA Blueprint construction project under two local spending scenarios. In 2023 through 2027, the PMA estimates that it will cumulatively spend $52.1 million to construct the new 60,000 sq ft. building.

Under the first scenario, 50% of spending (i.e., $26.1M) is assumed to go to local construction companies. Including direct, indirect, and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 66 construction-related jobs per year (55 FTE)
- $17.4 million in associated labor income, and
- $49.5 million in total output (sales)

Under the second scenario, 60% of spending (i.e., $31.3M) is assumed to go to local construction companies. Including direct, indirect, and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 79 construction-related jobs per year (65 FTE)
- $20.8 million in associated labor income, and
- $59.4 million in total output (sales)

Importance of cultural amenities, community, and museum membership

Housing inventory – via the conversion of property from non-residential use to housing – is expanding in Southern Maine and downtown Portland, increasing residents and the pool of potential museum members.

The PMA's presence in downtown Portland in addition to the Blueprint project and other redevelopment and revitalization efforts underway improve the areas desirability and contribute to increased economic activity and population growth within the Portland and Greater Portland area.

Introduction & Methods

Introduction

Introduction & Methods

Situated near Congress Square in Portland Maine, the Portland Museum of Art (PMA) is part of the city's unique downtown Arts District that includes a mix of condos, apartment rentals, hotels, and local businesses. Not only does the PMA contribute to the local economy by generating sales and creating jobs, but it also contributes to the quality of life that Portland is known for as it serves the needs of residents, workers, and visitors, and invests money in redeveloping the area.

The PMA Blueprint is a $100M multi-year redevelopment and construction project funded in part under an ongoing capital fundraising campaign. Some of these investments will improve the existing structure and surrounding property and approximately $52M will be put towards the construction of a new 60,000 square foot building. By 2027, the PMA Blueprint project is expected to be complete, and the new facilities open to the public.

To quantify the Museums ongoing contributions and impacts resulting from its capital investments on new construction, the PMA commissioned the Center for Business and Economic Research (CBER) at the University of Southern Maine (USM) to conduct the following economic analysis.

The remaining section provides an overview of the economic trends shaping the region then describes estimation methods and data sources. The remaining report is structured into the following sections:

1) Pre-Expansion Snapshot (2019)
2) Post-Expansion Snapshot (2027)
3) Five-Year Construction Impacts in the Maine Economy
4) Technical Appendices

Map 1: The Portland Museum of Art located at 7 Congress Sq, Portland, ME



Image source: https://www.portlandmaine.com/explore-downtown/downtown-map/

Overview – *Economic and Demographic Trends*

Introduction & Methods

A general understanding of the underlying economic conditions and trends in a region provide important context when considering current and estimated impacts to the economy. Trends that impact consumer spending or influence a person's choice to visit or relocate to a city will have an impact on museum visitation and membership opportunities.

During the peak of the COVID-19 pandemic, stay at home orders and social distancing restrictions caused tourism-related spending to significantly drop. In 2020 and 2021, spending shifted from services to goods as travel, dining, and other indoor service activities halted. As of October 2022, expenditures on services have since increased to pre-pandemic levels. While this is good news, economic conditions in the short- and medium-term are highly uncertain, and there is an increased possibility of an economic slowdown in 2023.

Portland was listed as one of the 100 Best Places to Live in the US in 2022, based on a range of factors such as community amenities, education, sustainability, transportation, housing, and the economy. However, demographics and housing were among Portland's lowest ranking. Maine's aging demographic and resulting labor market conditions is a longstanding challenge, and the lack of housing stock and the high cost of existing housing is an ongoing concern.

Maine has the oldest population in the US by median age (44.7 years) and by percent of the population age 65+ (21.7%).[1] Over the next 10 years, the entire baby boomer cohort will surpass age 65 and reach retirement. It was typical for baby boomers to work beyond retirement age, but more have retired during the pandemic. At the same time there is a smaller population of youth and young adults in the state to replace them in the labor force and without higher rates of in-migration economic growth will be constrained. An older demographic will not negatively impact the number of people that visit the PMA, but labor force issues can impact both the museum and its local vender and supplier business operations. These issues can also impact the supply of local construction workers available to build the PMA's the new structure.

Recent population growth in Maine is ranked among the fastest in the nation. From 2020 to 2021 Maine's population increased by nearly 10,000 or 0.7%, for comparison, the US as a whole added around 400,000 people, an increase of 0.1%. Much of this growth was driven by in-migration that was strong enough to offset a natural decrease in population (i.e., when deaths outnumber births). In other words, more people moved to Maine during the pandemic. This was driven in part by an increase in remote work and people seeking locations that allow for work-life balance and access to outdoor recreation. The influx of people relocating to Maine is not a new trend but has increased since the pandemic. These trends are encouraging especially since the state needs more working-age people to sustain economic activity, but it is uncertain whether they will continue at the same rate in the future. There is opportunity for Maine to see continued increased in-migration in the coming years due to the latter trends, however housing – in addition to childcare and school availability for those with children – are possibly limiting factors.[2]

Housing costs have sharply increased over the past several years as demand far outpaced supply. Affordability is a particular concern as interest rates have spiked causing more potential buyers to be priced out of the market and make home mortgages more expensive. Higher home prices have contributed to higher rental prices; increases in the Portland and Greater Portland area have started to create a new 'high end' market especially in cities such as Westbrook, Biddeford, Gorham, Windham, Brunswick, and Lewiston. This trend was underway prior to the pandemic but demand has increased, and many higher end options are being purchased.

The need for more housing in general and more affordable options is a well-known issue in Portland and the Greater Portland area. From 2011 to 2020 the total number of housing units in Cumberland County increased by 5.7% (7,861) and in the Art District neighborhood where the PMA is located the number of housing units increased by 7% (142), but it is still not enough to keep up with demand.[3] The influx of people relocating to the state further constrains the housing supply and limits availability for ongoing migration.

[1] 2021 Population Estimates Program
[2] Maine State Economist
[3] Housing data from 2011-2015 American Community Survey (ACS) 5-Year and 2016-2020 ACS 5-Year Estimates

Overview – *Downtown Redevelopment and Revitalization*

Introduction & Methods

Thriving and successful neighborhoods and downtowns provide a sense of place, a community. Cultivating community, as the PMA has done for over 140 years, impacts the economy as more people in the area results in improved business activity, increased property values, and expanded local tax base.

Think of quality of life as everything that makes a place worth calling home.

Within economic development, "quality of life" is measured with a complex balance of indicators such as infrastructure, jobs, education, healthcare, housing, and cultural amenities. A place, or a region with a high quality of life can provide its residents with everything they need and want to live and thrive. That is why improving quality of life increases desirability for a destination. It attracts and retains people, adds revenue, and boosts recognition and reputation.

Investments that contribute and improve quality of life and place can be more effective than traditional economic development tools such as business tax incentives to attract or retain employers or create a more "business-friendly" environment with lower taxes and labor costs. While traditional tools have value, community amenities such as recreational opportunities, cultural activities, and quality services may be larger contributors to a healthy local economy than traditional "business-friendly" measures.[4] Other quality of life factors such as good restaurants, access to open spaces and public spaces, good jobs, safety, and connection and mobility also attract (and retain) more people to an area to live, work, and play.

Housing & real estate development trends in Portland and the Greater Portland area

There are several housing developments and redevelopments currently under construction in Portland downtown, Bayside, and East Bayside neighborhoods in addition to revitalization projects. These projects will increase housing capacity and contribute to the quality of life the city has become known for, as well as have a positive impact on museum's membership opportunities.

Office building conversions in downtown Portland are bringing more housing inventory online as apartments, condos, and hotels. In 2021, at least two known buildings were sold in downtown Portland with plans to convert to residential, with two additional known for 2022, and more potential projects are under discussion.[5]

Housing-related redevelopment is underway in Portland to increase housing capacity, such as the updates to 50 Monument Square and the conversion of city's iconic Time & Temperature building to an 86-bed luxury hotel with a restaurant and rooftop bar, and meeting and retail spaces.

These are just a few examples of redevelopment projects in addition to the PMA Blueprint project and other revitalization efforts underway contributing to the areas increased desirability thus improving economic activity and population growth within the Portland and Greater Portland area.

[4] Ohio River Valley Institute. (2022) An Aggregate Approach to Estimating Quality of Life in Micropolitan Areas

[5] MEREDA 2022 Forecast Conference. Southern Maine Office Forecast, Nate Stevens, The Boulos Company

Estimation Methods & Data Sources

Introduction & Methods

The Portland Museum of Art (PMA) provided actual and projected annual operational data including payroll information and vendor/supplier spending, detailed visitation counts as well as portion of out-of-state visitors, and estimated construction spending for 2019 through to 2027. These data represent PMA's direct spending in the Maine economy and serve as inputs to estimate indirect and induced impacts statewide.

Data from the Maine Office of Tourism's (MOT) 2021 Economic Impact and Visitor Tracking Report and "Maine Museums: An Economic Impact Study, 2010" is used to develop trip assumptions, visitor segments, spending patterns, and estimate the portion of visitors that took a trip to Maine motivated by visiting the PMA. These data along with visitor counts provided by the PMA are used to estimate the total direct tourism-related expenditures (i.e., visitor purchases of goods and services including meals, hotels, transportation, etc. outside of the museum). Trip assumptions, visitor segments, and spending patterns for 2019 are used to estimate direct tourism-related expenditures for 2027. An estimated 25% of out-of-state museum visitors in 2019 took a trip to Maine motivated by visiting the PMA. In 2027, an estimated 35% of out-of-state museum visitors will take a trip to Maine motivated by visiting the PMA. These data reflect direct visitor spending and serve as inputs to estimate indirect, induced, and sometimes direct impacts (i.e., jobs and labor income) to the state.

The term "economic impact" and "economic contribution" are often used interchangeably but there are distinctions important for the reader to understand. The term "economic impact" of the PMA represents new spending in the economy, that is "but if not for" the PMA, the spending is assumed would not have occurred. On the other hand, "economic contribution" can be thought of as the entire footprint of the PMA to the Maine economy, it measures the support of the PMAs ongoing operations - that is money that is already circulating. The spending of tourists whose trip to Maine was motivated by visiting the PMA to browse its galleries, patronize a specific exhibition, or attend an event, and capital investments on new construction represent spending that would not have occurred but for the PMA.

Indirect and induced multiplier effects and some of the direct impacts are estimated by a Maine input-output model (IMPLAN, 2019 Data). IMPLAN is a regional economic analysis software application that is designed to estimate the impact or "ripple" effect of a given economic activity within a specific geographic area. For more information on the IMPLAN modeling process, visit IMPLAN.com. The impacts and contributions presented in this report are quantified and presented using common economic metrics including full-time equivalent employment (FTEs), workers, wages, total output (sales), and tax revenues. Only spending that takes place within Maine is included as stimulating the changes in economic activity. All economic impact and contribution figures are reported in current 2022 dollars.

A note on employment. Jobs or workers in IMPLAN represent average annual employment. To switch between FTE and IMPLAN jobs we use the 2020 546 FTE & Employee Compensation Conversion table. The factors used to switch between FTE to IMPLAN jobs and from IMPLAN jobs to FTE are as follows: 1 FTE is equal to 1.159 IMPLAN employees and 1 IMPLAN employee is equal to 0.831 FTE. Refer to the technical appendices for modeling output definitions and other key terminology used throughout the report.

Ongoing Museum Operations

Introduction & Methods

Since the onset of the COVID-19 pandemic in 2020, the PMA closed for several months due to emergency restrictions – involving state and local stay-at-home mandates coupled with physical distancing measures – enacted to limit the spread of the virus. In April and May of 2020 and January and February of 2021, the PMA was closed to visitors. During this time, the pandemic caused consumer spending to significantly contract as most people opted to stay home instead of going out and spending money on leisure activities. In particular, services that involved any kind face-to-face human interaction were affected the most. In 2019, over 170,000 individuals visited the PMA. When compared to visitation in 2019, levels were 67% lower in 2020 and 46% lower in 2021. The impacts of COVID-19 have lingered into 2022 but visitation has increased. As of September 2022, the PMA has welcomed over 97,000 visitors exceeding totals from 2020 and 2021. The number of museum visitors is expected to increase as more people continue to resume pre-pandemic activities. By 2027, the PMA estimates the number of museum visitors will nearly double from 2019 levels because of the increased capacity and attraction anticipated from its new facilities (Figure 1).

The COVID-related closures did not lead to a drop in the PMA operating expenses, in fact these costs slightly increased in 2020 and 2021 over 2019 levels. During this time, the Museum still needed to maintain its facilities and art collections and pay its employees. Many businesses had to layoff employees, but the PMA was able to retain and support its staff during these challenging times. Actual and projected operating costs, shown in Figure 2, include total personnel budget (with tax and benefits) and vendor/supplier spending. In 2019, approximately 69% of the operating budget was spent in Maine on local vender and supplier businesses and to pay workers' salaries, wages, and benefits. As the operating budget increases to support anticipated capacity so too will the PMA's share of local investments. By 2027, approximately 81% of the operating budget will be spent in Maine to purchase goods and services from local vendors/suppliers and pay employees.

Figure 1. Annual number of visitors (with future projections)

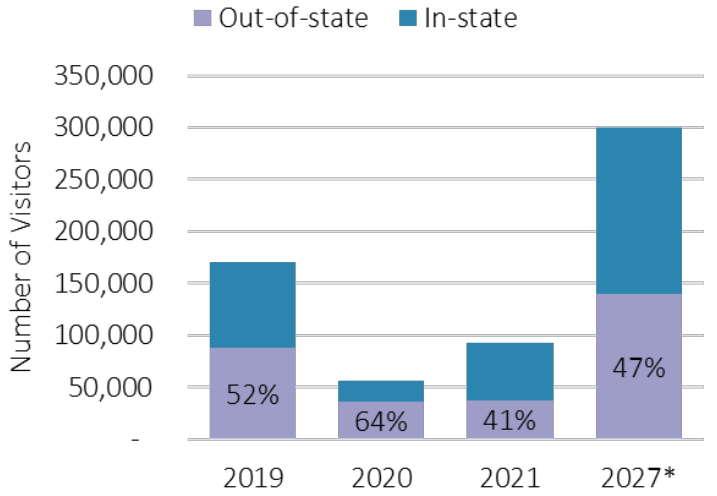
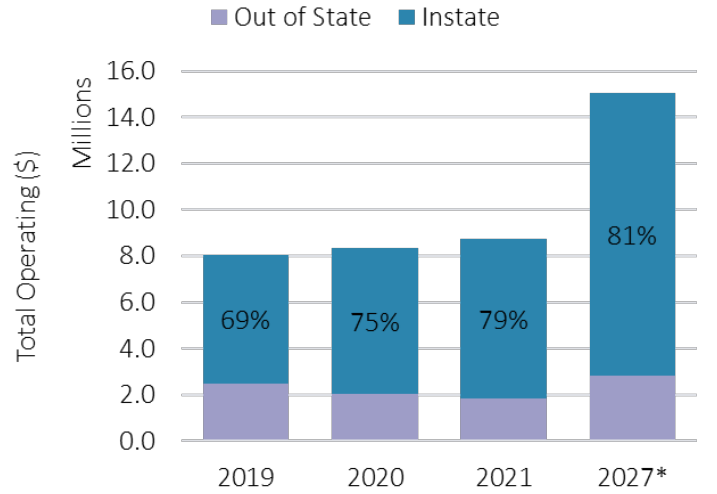


Figure 2. Annual operating costs (with future projections)



Note: Total operating cost includes personnel budget (with tax and benefits) and vendor/supplier spending.*Projections.

Visitor Estimates and Assumptions

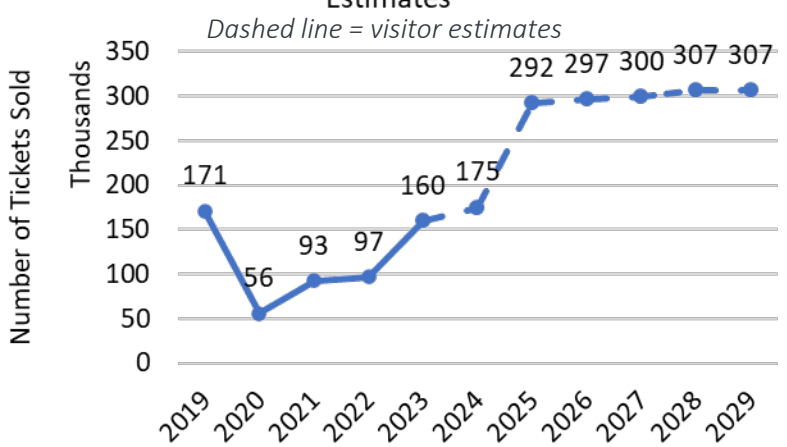
Introduction & Methods

Number of Visitors. In 2019, the PMA welcomed over 170,000 visitors, 88,000 or 52% came from outside of Maine. Not all visitors came to Maine to specifically visit the PMA. An estimated 25% or 22,020 out-of-state visitors are estimated as museum-specific tourists whose trip to Maine was motivated by visiting the PMA to browse its galleries, patronize a specific exhibition, or attend an event (Table 1). By 2027, the PMA expects the facilities expansion to be complete and anticipates up to 300,000 annual visitors, 47% or 140,153 would come from out-of-state. Because the new facilities are expected to increase the museums physical capacity and draw new art attractions that in turn attract more visitors to the state, an estimated 35% of out-of-state visitors (i.e., 49,053) are estimated to be museum-specific tourists in 2027.

Table 1. Museum Visitors

	2019	2027
Total museum visitors	170,831	300,000
Tourists - trip to Maine motivated by visiting the PMA	22,020	49,053

Figure 3. Annual Museum Visitor Totals & Estimates



Visitor segments and trip assumptions. Not all visitors have the same spending patterns, some come for the day while others, for example, stay with friends and family or at a hotel. To account for these differences, out-of-state museum visitors – or museum tourists – are segmented into three groups. Two are based on the type of overnight accommodations, that is paid lodging (45%) and unpaid lodging (27%), and the third is day-trippers (28%) (Table 2). The average trip length for paid lodging visitors is 4 nights and non-paid overnight visitors is 5.7 nights. Visitor segments and trip assumptions are applied to both 2019 and 2027 museum tourist counts.

Table 2. Visitor Segments & Trip Assumptions

	Visitor Segments		
	Paid Overnight	Unpaid Overnight	Day
Average length of stay (nights)	4	5.7	0
Visitor segment (% of total)	45%	27%	28%

Visitor Spending and Assumptions

Introduction & Methods

Spending Patterns. Daily per person spending by visitor segment, shown in Table 3, is estimated from daily travel party spending figures reported by the MOT, and adjusted by findings from the Maine Museums report and the authors assumptions. Spending patterns in 2019 are comparable to those in 2021. Average travel party size, reported as 2.7, is used to convert daily travel party spending to daily per person spending. The average cost to purchase a ticket to the museum is assumed to be captured in the spending patterns shown in Table 3.

Direct tourism-related expenditures reflect visitor purchases of goods and services on meals, hotels, shopping, transportation, etc. from outside of the museum. To estimate the direct tourism-related spending of museum tourists, the average spending patterns by visitor segment, illustrated in Table 4, are multiplied by the number of visitors in each respective segment. Annual ticket sales estimated from these visitors of $178,512 in 2019 and $397,368 in 2027 are removed from total direct spending because this spending is technically captured within the museum effects. Since the number of out-of-state visitors is expected to increase from 88,078 in 2019 to 140,153 in 2027, a 59% increase, the assumption is that ticket sales will increase by approximately the same percentage.

Table 3. Daily Per Person Spending Patterns

	Visitor Segments		
Category	Paid Overnight	Unpaid Overnight	Day
Accommodations	$106	$0	$0
Food & beverage	$52	$56	$31
Recreation	$11	$13	$7
Retail shopping	$21	$36	$20
Transportation	$31	$17	$9
Total	**$221**	**$121**	**$67**

Table 4. Direct Tourism Spending

Category	2019	2027
Accommodations	$4,188,202	$9,330,144
Food & beverage	$4,171,069	$9,291,949
Recreation	$551,314	$1,228,475
Retail shopping	$1,832,872	$4,083,112
Transportation	$1,838,789	$4,096,300
Total	**$12,582,246**	**$28,029,981**

The Portland Museum of Art's Economic Contribution & Impact in Maine

Pre-Expansion Snapshot, 2019

This section reports the PMA's statewide economic contribution in 2019, a typical year before construction. The two major components of the economic contribution and impact stem from museum spending and visitor spending. The PMA pays its employees and spends money at local vendor/supplier businesses to maintain its ongoing operations while people from out-of-state who come to Maine to visit the Museum spend money on retail goods, meals, hotels, and other items outside of the museum. This constitutes the initial or direct spending. The local businesses use a portion of their revenues to purchase supplies, equipment, and employ workers. Employees of the PMA and its vendors, in turn, spend their earnings in the local economy on household consumption goods including food, entertainment, housing and other goods and services adding value along the way. This results in recurring rounds of local economic spending, this is referred to as the indirect and induced economic impacts, which are estimated by a Maine economic model (IMPLAN) and presented in the following section.

Museum Spending Effects in the Maine Economy

Pre-Expansion Snapshot, 2019

The PMA contributes to the Maine economy through three types of impacts: direct (initial sale or spending) and indirect and induced, which account for the ripple effects of multiple rounds of spending in the economy. These contributions are quantified and presented, in Table 5, using common economic metrics including workers/FTE, labor earnings, and total output.

In 2019, approximately 69% of the PMA's direct operating costs were spent in Maine on local vender and supplier businesses ($1,156,000) and to pay museum employees ($4,379,035). These operating activities are estimated to support an additional 8 indirect workers, $335,983 (in 2022 dollars) in indirect labor income, and $1.4 million in indirect output.

Including direct, indirect, and induced spending, the total impacts of the PMA's ongoing operational spending, include an estimated 129 jobs (i.e., 107 FTE), $6.3 million in associated labor income, and $11.5 million in total output (sales).

Table 5. Contribution of the Operation of PMA to the Maine Economy, 2019

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	76	$ 4,559,603	$ 5,763,270	92
Indirect	7	$ 335,983	$ 1,408,376	8
Induced	24	$ 1,369,320	$ 4,291,359	29
Total Impact	**107**	**$ 6,264,905**	**$ 11,463,004**	**129**

Note: The Portland Museum of Art (PMA) provided actual and projected operational spending data, including employee compensation and local business vendor/supplier spending. Full-time equivalent (FTE) values provided by PMA are converted to IMPLAN employment prior to using it as an input to the model. Results do not include impacts of construction or visitor spending. Figures are reported in current 2022 dollars. The multiplier is 1.99.

Assumptions: In 2019, 32% of total local venders/suppliers spending (i.e., $1,156,000) went to Maine businesses. This figure along with total employee compensation ($4,379,035) and number of employees (92) are used to estimate indirect and induced spending.

Visitor Spending Effects

Pre-Expansion Snapshot, 2019

In 2019, an estimated 22,020 tourists took a trip to Maine motivated by visiting the PMA, these tourists spent an estimated $12.6 million on lodging, meals, shopping, transportation, etc. from outside of the museum. This direct spending supports indirect and induced effects generated by sales to tourism-related businesses in the hospitality sectors that in turn purchase goods and services from other Maine businesses and pay their employees who then spend their wages on household goods and services in Maine. Indirect and induced activity support an additional 52 jobs, $2.5 million (in 2022 dollars) in labor income, and $8.1 million in output.

Including direct, indirect and induced spending, the total impacts of visitor spending, include an estimated 180 jobs (i.e., 150 FTE), $6.3 million in associated labor income, and $18.3 million in total output (Table 6).

Table 6. Economic Impact of Visitor Spending to the Maine Economy, 2019

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	106	$ 4,095,696	$ 10,192,076	128
Indirect	18	$ 1,084,347	$ 3,536,575	22
Induced	25	$ 1,453,745	$ 4,553,370	30
Total Impact	**150**	**$ 6,633,789**	**$ 18,282,021**	**180**

Note: Results do not include impacts of construction or museum spending. Figures are reported in current 2022 dollars. Estimated direct spending in narrative does not equal direct spending reported in table due to leakages resulting from the difference in the prices paid by the consumer and the actual price of the product purchased. For more information refer to the technical appendices. The multiplier is 1.79.

The Economic Contribution & Impact of the PMA in Maine

Pre-Expansion Snapshot, 2019

The total economic contribution of the PMA in 2019 is the sum of the business activity directly associated with operations of the PMA and the spending of tourists whose trip to Maine was motivated by visiting the PMA.

In 2019, museum and tourism spending supported:

- Over 300 jobs of which 220 were direct impacts and another 89 were supported through indirect and induced spending.
- $8.7 million in direct labor income which supported an additional $4.2 million in indirect and induced impacts.
- Generated a total of $29.8 million in total output of which $16M were from the initial direct spending which supported another $13.8M in indirect and induced impacts.

Table 7. Contribution of Museum & Visitor Spending, 2019

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	183	$ 8,655,299	$ 15,955,346	220
Indirect	25	$ 1,420,330	$ 4,944,950	30
Induced	49	$ 2,823,065	$ 8,844,728	59
Total Impact	**257**	**12,898,693**	**29,745,025**	**309**

Notes: Results include the impacts and contribution of visitor or museum spending.

Tax Impacts

Pre-Expansion Snapshot, 2019

The economic activity generated by the PMA's ongoing museum operations and by spending of visitors on retail goods, meals, hotels, and other taxable items support fiscal impacts in the form of tax revenues from income, sales, and other tax collections. These result from taxes on wages and salaries paid by the PMA and by tourism-related businesses, in addition to taxes on wages and salaries from the indirect and induced jobs. In 2019, these economic activities generated an estimated $1.9 million in local and state tax revenue in the Maine economy (Table 8).

Table 8. Fiscal Contribution of Museum & Visitor Spending, 2019

in 2022 dollars

Impact	Local	State	Total
Direct	$ 422,580	$ 626,876	$ 1,049,456
Indirect	$ 98,310	$ 136,414	$ 234,724
Induced	$ 265,709	$ 322,930	$ 588,639
Total Impact	**$ 786,599**	**$ 1,086,219**	**$ 1,872,819**

Notes:
Assumptions:

$1.9 million in local and state taxes in 2019

In 2019, $786,599 in local and $1.1 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

Five-Year Construction Impacts in the Maine Economy

The PMA Blueprint Project, 2023-2027

In 2023 through 2027, the PMA estimates that it will cumulatively spend $52.1 million on its new facilities expansion. This section reports the one-time economic impact from the PMA's capital expenditures on the proposed PMA Blueprint project in Maine under two local spending scenarios.

Five-Year Construction Impacts in the Maine Economy – 50/50

The PMA's Blueprint project, 2023-2027

In 2023 through 2027, the PMA estimates that it will cumulatively spend $52.1 million for (new) construction. Under the first scenario, 50% of spending (i.e., $26.1M) is assumed to go to local construction companies, construction activities for this period are estimated to support 37 total direct construction-related jobs per year (i.e., 31 FTEs) and $10 million (in 2022 dollars) in direct labor income.

Including direct, indirect and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 66 construction-related jobs per year (55 FTE)
- $17.4 million in associated labor income
- $49.5 million in total output (sales)

For every $100 of the PMA spends on new construction, an additional $90 is generated elsewhere in the local economy.

Labor income and output reported in Table 9 is the combination of the impacts across the five years, reported in 2022 dollars. The number of workers and FTEs is reported in terms of average annual jobs and FTEs (i.e., jobs/year and FTE/year) for the project. This is because the jobs on the construction site are not cumulative, in the same way that an employee working a job for 5 years is not viewed as 5 jobs.

Table 9. Economic Impact from New Construction Spending, 5-year period (50/50 Scenario)

in 2022 dollars

Impact	Average Annual FTE	Labor Income	Output / Sales	Average Annual Workers
Direct	**31**	**$ 9,998,223**	**$ 26,059,000**	**37**
Indirect & Induced	24	$ 7,351,350	$ 23,477,917	29
Total Impact	**55**	**$ 17,349,573**	**$ 49,536,917**	**66**

Notes: The Portland Museum of Art (PMA) provided construction cost estimates. Capital expenditures are analyzed independently from the PMA's business operations as these are one-time purchases. Results reflect total economic impact from spending on the one-time construction project that is expected to take place over a five-year period from 2023 to 2027. Figures reported in current 2022 dollars. The multiplier is 1.9.

Five-Year Construction Impacts in the Maine Economy – 60/40

The PMA's Blueprint project, 2023-2027

Under the second scenario, 60% of spending (i.e., $31.3M) is assumed to go to local construction companies, construction activities for this period are estimated to support 45 total direct construction-related jobs per year (i.e., 37 FTEs) and $12 million (in 2022 dollars) in direct labor income. Including direct, indirect and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 79 construction-related jobs per year (65 FTE)
- $20.8 million in associated labor income, and
- $59.4 million in total output (sales)

Labor income and output reported in Table 10 is the combination of the impacts across the five years, reported in 2022 dollars.

Table 10. Economic Impact from New Construction Spending, 5-year period (60/40 Scenario)

in 2022 dollars

Impact	Average Annual FTE	Labor Income	Output / Sales	Average Annual Workers
Direct	37	$ 11,997,868	$ 31,270,800	45
Indirect & Induced	28	$ 8,821,620	$ 28,173,500	34
Total Impact	**65**	**$ 20,819,487**	**$ 59,444,300**	**79**

Notes: The Portland Museum of Art (PMA) provided construction cost estimates and share of local spending estimates. Capital expenditures are analyzed independently from the PMA's business operations as these are one-time purchases. Results reflect total economic impact from spending on the one-time construction project that is expected to take place over a five-year period from 2023 to 2027. Figures reported in current 2022 dollars. The multiplier is 1.9

The Portland Museum of Art's Economic Contribution & Impact in Maine

Post Expansion Snapshot, 2027

By 2027, the multi-year redevelopment and construction project is expected to be complete, and the new facilities open to the public. The new facilities are anticipated to increase the PMAs physical capacity, it will have more space to host events, display more and higher quality exhibits and in turn attract more visitors. This section provides a snapshot of the PMA's economic contribution in 2027 as a result of the estimated increase in operational spending and increased visitor attraction and spending.

Museum Spending Effects in the Maine Economy

Post Expansion Snapshot, 2027

Approximately 81% of the PMA's direct operating costs will be spent in Maine on local vender and supplier businesses ($2,600,000) and to pay museum employees ($9,640,000), in 2027. These operating activities are estimated to support an additional 17 indirect jobs, $713,871 (in 2022 dollars) in indirect labor income, and $3.1 million (in 2022 dollars) in indirect output.

Including direct, indirect, and induced spending, the total impacts of the PMA's anticipated increase in operational spending, include an estimated 216 jobs (i.e., 180 FTE), $13.3 million in associated labor income, and $24.4 million in total output (sales).

Table 11. Contribution of the Operation of PMA to the Maine Economy, 2027

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	115	$ 9,640,000	$ 12,240,000	138
Indirect	14	$ 713,871	$ 3,051,006	17
Induced	51	$ 2,903,075	$ 9,098,032	61
Total Impact	**180**	**$ 13,256,946**	**$ 24,389,038**	**216**

Note: The Portland Museum of Art (PMA) provided actual and projected operational spending data, including employee compensation and local business vendor/supplier spending. Full-time equivalent (FTE) values provided by PMA are converted to IMPLAN employment prior to using it as an input to the model. Results do not include impacts of construction or visitor spending. Figures are reported in current 2022 dollars.

Assumptions: By 2027, the PMA estimates that 48% of total venders/suppliers spending (i.e., $2,600,000) will go to Maine businesses. This figure along with projected employee compensation ($9,640,000) and number of employees (138) are used as model indirect and induced spending.

Visitor Spending Effects

Post Expansion Snapshot, 2027

In 2027, an estimated 49,053 tourists will take a trip to Maine motivated by visiting the PMA. These visitors will spend an estimated $28 million for lodging, meals, shopping, transportation, etc. from outside of the museum. Indirect and induced impacts are estimated to support an additional 117 jobs, $5.7 million (in 2022 dollars) in labor income, and $18.1 million in output.

Including direct, indirect, and induced spending, the total impacts of visitor spending, include an estimated 405 jobs (i.e., 336 FTE), $14.9 million in associated labor income, and $40.9 million in total output (sales).

Table 12. Economic Impact of Visitor Spending to the Maine Economy, 2027

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	239	$ 9,174,087	$ 22,805,766	288
Indirect	40	$ 2,421,710	$ 7,898,630	48
Induced	57	$ 3,254,228	$ 10,192,750	68
Total Impact	**336**	**$ 14,850,025**	**$ 40,897,146**	**405**

Note: Estimated direct spending in narrative does not equal direct spending reported in table due to leakages resulting from the difference in the prices paid by the consumer and the actual price of the product purchased. For more information refer to the technical appendices. Results do not include impacts of construction or museum spending. Figures are reported in current 2022 dollars.

The Economic Contribution & Impact of the PMA in Maine

Post Expansion Snapshot, 2027

The total economic contribution is the sum of the museum spending effects and visitor spending effects previously reported. In 2027, the estimated museum and tourism spending will support:

- Over 600 jobs of which 426 were direct impacts and another 195 were supported through indirect and induced spending.
- $18.8 million in direct labor income which supported an additional $9.3 million in indirect and induced impacts.
- Generated a total of $65.3 million in total output of which $35M were from the initial direct spending which supported another $30.2M in indirect and induced impacts.

Table 13. Estimated Contribution of Museum & Visitor Spending, 2027

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	354	$ 18,814,087	$ 35,045,766	426
Indirect	55	$ 3,135,581	$ 10,949,636	66
Induced	107	$ 6,157,303	$ 19,290,782	129
Total Impact	**516**	**28,106,971**	**65,286,184**	**621**

Notes: Results include the impacts and contribution of visitor or museum spending.

Tax Impacts

Pre and post expansion

By 2027, the economic activity supported by the PMA's ongoing museum operations and by spending of museum tourists is estimated to generate $4.2 million in local and state tax revenues (Table 14).

Table 14. Fiscal Contribution of Museum & Visitor Spending, 2027

in 2022 dollars

Impact	Local	State	Total
Direct	$ 948,844	$ 1,423,457	$ 2,372,301
Indirect	$ 218,499	$ 325,349	$ 543,848
Induced	$ 579,512	$ 747,096	$ 1,326,607
Total Impact	**$ 1,746,855**	**$ 2,495,901**	**$ 4,242,757**

Notes:
Assumptions:

$4.2 million in local and state taxes in 2027

In 2027, $1.7 million in local and $2.5 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

Technical Appendices

Definitions of Modeling Outputs & Other Key Terms

Technical Appendices

Key word	Definition
Direct effects	The expenditures or initial production changes associated with an industry or sector in the study area which are entered into the Input-Output analysis.
Economic contribution	Economic 'contribution' measures the support of an existing business, event or policy that is money that is already circulating, it is the gross change in economic activity associated with a business, event, or policy in an existing regional economy.
Economic impacts	Economic 'impacts' are to the local economy by exits or entry-related events, "but if not for", is the net changes in new economic activity associated with an industry, event, or policy in an existing regional economy.
Employee compensation	Total payroll cost of an employee, inclusive of wages, salaries, payroll taxes, and benefits such as health insurance and retirement.
Employment	The number of full-time, part-time, and seasonal jobs associated with a specific industry.
Full-time equivalent employment (FTEs)	Full-time equivalent employment (FTEs) is the number of full-time equivalent jobs, defined as total hours worked divided by average annual hours worked in full-time jobs.
Indirect effects	The economic impact of local industries purchasing goods and services from other industries along supply chains.
Induced effects	The economic impact of household spending of labor income following deductions from taxes, savings, and income for commuting.
Labor income	The sum of employee compensation and proprietor income.
Multipiliers	The measure of an industry's connection to the economy of Maine in terms of purchases, payments of wages and taxes, and other transactions.
Output	The value in dollars of production within Maine. It equates to the total of sales and net inventory change.
Total effects	The sum of direct, indirect, and induced effects.
Workers	Employment or workers is the total number of full-time, part-time, and seasonal jobs

END

The PMA Blueprint

Building a Landmark for the Future

A once-in-a-lifetime museum expansion and unification that will forever change Maine and New England. Through The PMA Blueprint, we will redefine our region, unite our communities, and sustain our economy for generations to come.

In a region traditionally renowned for its natural beauty and cuisine, the PMA has a new vision defined by arts, culture, belonging, and sustainability. To get there will require innovative thinking that goes "beyond the brick," and into the very nature of what a museum can be.

We believe the museum can transcend convention and redefine the quintessential Maine experience. **We understand** that the PMA, through investment in art and the facilities that bring that art to the public, can initiate a transformative new chapter for our region, one defined by growth and prosperity. **And we know** the time is now to embark on this profound and permanent shift forward.







THE CHALLENGE

For the last half decade, we've sustained double-digit increases in attendance, reaching a record high in 2019 with nearly 177,000 visitors. Our campus is at its limit, with attendance already at 2x the planned capacity of the Payson building. **In just 5 years, we will exceed 3x the planned capacity of our campus.** We need to build up, as we are being forced to make tough choices around reducing exhibition size, relocating programs, and restricting capacity due to the physical limitations of our campus.

Our collection has also grown exponentially, and **in the last decade alone has diversified deliberately and more quickly than at any point in our 140-year history**. Significant gifts from Judy Glickman Lauder, the Alex Katz Foundation, Barbara Goodbody, Richard Estes, Bruce Brown, David and Eva Bradford, the Berger Collection Educational Trust, and many more are transforming the PMA collection and expanding the narratives we can tell. Recently acquired works by Laura Aguilar, Rackstraw Downes, Nan Goldin, Philip Guston, Reggie Burrows Hodges, Carrie Mae Weems, Kara Walker, and others deserve space to store, care for, and present them–yet our existing facilities are insufficient and inadequate by modern standards.

And our communities have changed as well. We must do more to create opportunity–on our walls, in our galleries, through our programs, on our board, and within our staff–to ensure the PMA experience reflects the experiences, lifestyles, and values of the myriad people who call our region home and visit from around the world. We must platform individuals and communities that have been excluded from museums and "the art world". We must ensure our artwork, exhibitions, programs, and didactics are created by and in partnership with our BIPOC communities, immigrants and new Mainers, LGBTQIA2S+ neighbors, our elders, youth, and other communities across Maine. We must be at the center of our communities, which requires dialogue, trust, and transparency. And we must ensure we are championing a more diverse, inclusive, and sustainable region. **We must become a community institution that is rooted in *belonging*.**



A LEADER IN OUR REGION, KEYSTONE IN OUR COMMUNITIES, AND CATALYST FOR OUR ECONOMY

From the museum's founding in 1882 by artists and community leaders, to Charles Shipman Payson's gift of 17 works by Winslow Homer and the opening of our Payson building 40 years ago, to our present-day status as a cultural leader, the PMA's impact is greatest when we open doors for audience engagement, identify opportunities to grow our collection and unify our campus, and create space to come together.

Nearly a decade ago, the PMA prioritized diversity, equity, accessibility, and inclusion throughout our exhibitions, programs, events, and culture of philanthropy. In the years since, we have cultivated a broader, more detailed, and nuanced understanding of what these ideas mean, dedicating ourselves to the concepts of belonging, sustainability, our mission–*Art for All*–and values of courage, equity, service, sustainability, and trust.

In October 2019, the PMA took a big step toward a bold future, purchasing 142 Free Street, a building directly adjacent to the museum's Charles Shipman Payson Building. In a rapidly evolving city, this purchase provides the museum with a footprint for future opportunities and enables the PMA to define Portland as a national center for arts and culture.

With the opportunities of 142 Free Street, the development of Congress Square (a major, underdeveloped urban park at the main entrance of the museum) and the domino effects of renewal across our campus at sites like the Payson Building, Spring Street lot, and more, now is the time to unify the campus and thoughtfully plan the museum's future. We envision our campus as an environmentally sustainable gathering place where a strong artistic vision drives conversation, creativity, and cultural vibrancy.

This investment will embody our *Art for All* and sustainability values, with 142 Free Street being the first sustainable and green public building in Portland and just the fourth green public museum building in the country. The mass timber structure will include flexible and open-ended spaces, including classrooms to learn and get messy, workshops, artist residencies, performance spaces, and many more versatile areas for collaborations, partnerships, and connection. This is all in addition to innovative galleries and ways to present art that are at the heart of a museum.

This new, iconic, and architecturally significant center will be the hallmark of a unified and renewed campus–enhancing the PMA's mission, welcoming visitors from around the corner and across the world, and encouraging meaningful connections with artworks, programs, and events.

LEVER ARCHITECTURE & THE CONCEPT

In January, the Portland Museum of Art announced LEVER Architecture (Portland, OR and Los Angeles, CA) to lead the design team for ***The PMA Blueprint***. LEVER Architecture's winning concept imagines the PMA campus unified through a stunning and sustainable building that connects directly to the PMA's Postmodern-style Charles Shipman Payson Building (1983), Beaux-arts style Lorenzo De Medici Sweat Memorial Galleries (1911), Federalist-style McLellan House (1801), and Greek revival Clapp House (1832.) The design–proposed primarily from sustainable mass timber, one of LEVER's defining characteristics–reflects LEVER's understanding of the PMA's values and goals, as well as the history and future of Portland, of Maine, and of the region.

LEVER envisions a new building at the site of 142 Free Street made from mass timber, terracotta, and glass, and includes nods to Maine communities, history, and culture. The curved roofline is designed to frame the sun as it rises and sets, in honor of Maine's Wabanaki communities (Abenaki, Maliseet, Micmac, Passamaquoddy, and Penobscot Nations) and the land they call Wabanaki, or Dawnland. The timber used in LEVER's design speaks to the state's lumber industry heritage while reimagining its future as a hallmark of environmental stewardship, much in the same way the PMA's other buildings embody their time and place and reflect other aspects of Maine's history. Other sustainable building materials and practices, such as geothermal energy, will be explored as the project moves into future phases.

LEVER Architecture and their team of Simons Architects and Unknown Studio, Chris Newell-Akomawt Educational Initiative, Openbox, Once-Future Office, Atelier Ten, and Studio Pacifica were selected through a juried international design competition that attracted submissions from 104 teams representing 20 countries, including Australia, Belgium, China, Denmark, Finland, Japan, Mexico, Spain, South Korea, United Arab Emirates, the United Kingdom, and more. In total, more than 250 firms participated as part of the 104 submitting teams, with 46% of all lead firm submissions owned or founded by people of color or women.

Additionally, the Jury considered feedback from the public, who submitted more than 2,000 ideas, questions, and comments to the PMA during the concept gallery display November 18–December 31. Opportunities for community feedback have been critical to the PMA throughout its campus planning and ***The PMA Blueprint*** process, and in addition to the public comment period this winter have included focus groups, listening sessions, and surveys to ensure the future development of the museum's campus is defined by and rooted within the communities it serves.

In the months since the announcement, the LEVER team has frequently been to Maine to meet with, interview, and learn from our communities. These pre-planning moments with visitors, staff, and stakeholders are the initial steps to refine the concepts that will ultimately become the final design for the new PMA.

DOUBLING OUR ECONOMIC IMPACT

The Portland Museum of Art's contributions to Maine's economy are already significant, with $29.8 million in total output, $8.7 million in direct labor income supporting an additional $4.2 million in indirect and induced impacts, and $12 million in direct tourism-related expenditures. In 2022, The Maine Center for Business and Economic Research at The University of Southern Maine (USM) found that ***The PMA Blueprint*** could effectively double its impact at the completion of the project.

This is because investments that contribute to and improve quality of life can be more effective economic development tools than traditional strategies such as business tax incentives. Community amenities including recreational opportunities and cultural activities may be larger contributors to a healthy local economy than more narrowly focused "business-friendly" measures. A range of easily accessible open spaces and public gathering spots that promote community connections, restaurants, jobs, and safety have proven to attract–and retain–newcomers to an area to live, work, and play.

USM's analysis also estimated the economic impact from the capital expenditures on the proposed PMA Blueprint construction project. Between 2023 through 2027, the PMA estimates that it will cumulatively spend more than $60 million to construct the new building. Including direct, indirect, and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated: 66 - 79 construction-related jobs per year, $17.4 - $20.8 million in associated labor income, and $49.5 - $59.4 million in total output (sales).

MASS TIMBER'S POTENTIAL FOR MAINE

The Portland Museum of Art sees even more potential for economic development beyond Portland, extending throughout Maine's rural and urban communities, invigorating local economies, revitalizing communities, and sparking new industries and revenue streams.

This spring, the Portland Museum of Art was the sole arts institution at the International Mass Timber Conference in Portland, Oregon, among 3,000 attendees from 20 countries. Yet, we were welcomed with open arms and told time and again that ***The PMA Blueprint*** is the bellwether this emerging industry has been waiting for. That's because our project can demonstrate the benefits of mass timber beyond raw materials and processes.

One of the key benefits of mass timber construction is its ability to sequester carbon, retaining it in the building rather than being released back into the atmosphere through decomposition or burning. When wood that is used for mass timber construction is obtained from sustainably managed forests, the resulting materials have a much lower life-cycle carbon footprint than steel and concrete, delivering a 26.5% reduction in global warming potential, according to University of Washington researchers. That is incredibly significant, as the building sector produces an extraordinary 40% of global carbon emissions annually. The most common forms of mass timber include cross-laminated timber (CLT), Glue Laminated beams, Structural Round Timber (SRT), and laminated veneer lumber (LVL). No matter the type, all mass timber is incredibly strong, climate safe, and sustainable.

Maine almost had a CLT plant in 2018 but lost the bid to a site in the south that is now a profitable economic driver in Alabama. In our preplanning for our building, we're discovering a shared desire and drive for a CLT plant in Maine by our policymakers at all levels, the University of Maine, Indigenous leaders, landowners, forestry advocates, businesses, and more. Why? Because mass timber in Maine just makes sense. We're the most forested state in the country–with nearly 90% of the land covered in forests, the potential to revitalize and reimagine our state is real. This is a rare and unique opportunity to bring rural and urban communities, companies, and governments together through clean industries that make the world better and support Maine jobs.

The time is now to incentivize mass timber as a go-to building material to maximize long-lasting and positive outcomes for our economies and environment. We are excited to partner with LEVER Architecture and lead by example through our new, landmark building, but we need others to embrace regenerative, climate-safe wood products and processes as well. Together, we can support a better future, one that leads sustainably while fostering the people, communities, and industries that could revitalize and reimagine our state and New England as a whole.

JOIN US

Beginning today, we can renew, revitalize, and redefine a museum's role within our society.

With your partnership and support, we can manifest a model for all museums: one defined by leadership, courage, sustainability, and belonging.

The PMA you help to establish will strengthen our societal fabric and affirm that museums are critical to the health of our communities in all ways.

Together, we can realize the true potential of museums for all people.

MUSEUMS NEED A PARADIGM SHIFT THAT DELIVERS ON THE PROMISE OF *ART FOR ALL.*

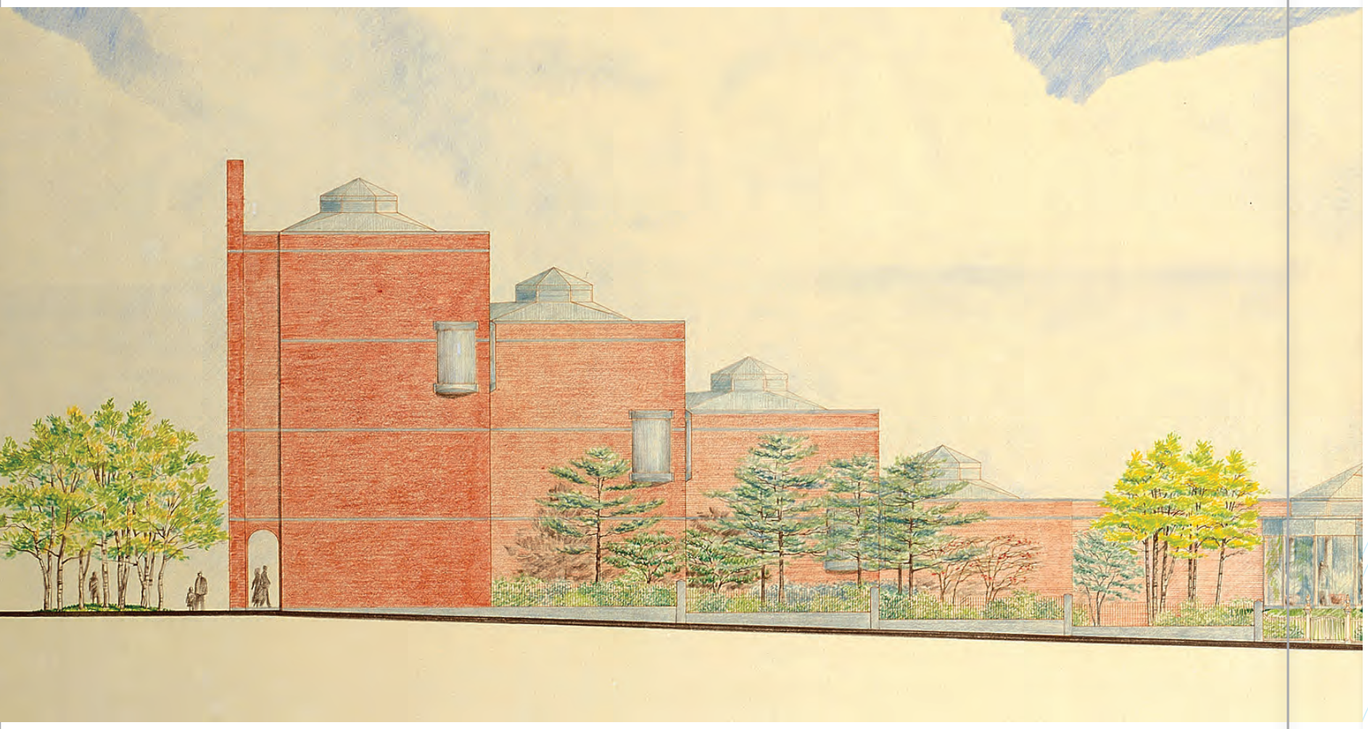
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This paradigm shift enables the PMA to be a leader of our region, a keystone for our communities, and a catalyst for our economy.



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BEYOND THE BRICK



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The PMA's impact is greatest when we open doors for audience engagement and identify opportunities to grow our collection and unify our campus.

The Portland Museum of Art is defined by three pillars: community, collection, and campus. Working in tandem, these pillars have been the foundation of every milestone of the museum's incredible history. From the museum's founding in 1882 by artists and community leaders, to Charles Shipman Payson's gift of 17 works by Winslow Homer, to the opening of its Payson building one hundred years later, and to its present-day status as a cultural leader, the PMA's success has been grounded by one of these three pillars.

Now, sparked by the current growth and diversification of the collection, record attendance and community feedback, and new opportunities to expand and unify its campus, the Portland Museum of Art stands ready to embark on what will be its most ambitious and pioneering era yet. ***This era will be defined by the additions of new, renowned collections, the development of iconic buildings in which to present them, and an innovative relationship with the communities we serve.***

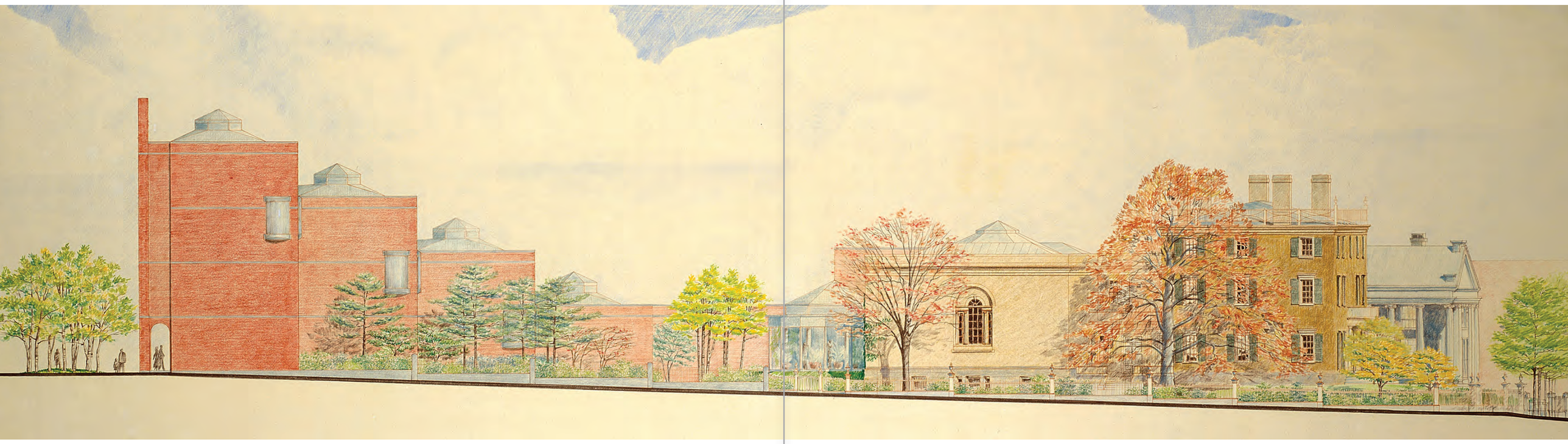
Mark H.C. Bessire
Judy and Leonard Lauder Director

COMMUNITY, COLLECTION, CAMPUS; UNIFIED

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and prosperity. ***And we know*** the time is now to embark on this profound and permanent shift forward.

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The Portland Museum of Art is about to fundamentally change Maine. In a region traditionally renowned for its natural beauty and cuisine, the PMA has a new vision defined by arts, culture, equity, and sustainability. To get there will require innovative thinking that goes "beyond the brick," and into the very nature of what a museum can be.

We believe the museum can transcend convention and redefine the quintessential Maine experience. ***We understand*** that the PMA, through investment in art and the facilities that bring that art to the public, can initiate a transformative new chapter for our region, one defined by growth and prosperity. ***And we know*** the time is now to embark on this profound and permanent shift forward.



It's time to envision the next great era in PMA history, one sparked through new, world-famous collections and an architecturally innovative and unified campus that serves as an epicenter for conversation, connection, and community.

– MARK H.C. BESSIRE,
JUDY AND LEONARD
LAUDER DIRECTOR


OUR HISTORY

AT 140 YEARS OLD, THE PMA IS AMONG THE OLDEST ART MUSEUMS IN THE COUNTRY, AND PREDATES X-RAYS, THE EIFFEL TOWER, AND THE BOSTON RED SOX.

THE FIRST 100

Although the museum was founded in 1882, the PMA story really begins with the legacy of its first benefactor, Margaret Jane Mussey Sweat. In 1908, Sweat bequeathed the McLellan House and necessary funds to build the L. D. M. Sweat Memorial Galleries in memory of her late husband. Margaret Jane Mussey Sweat's belief in the museum would set the precedent for future generations of philanthropy and provide the visionary foundation of what the Portland Museum of Art could be.

1882
The Portland Society of Art is founded by artists.

1888
COLLECTION
Benjamin Paul Akers' *The Dead Pearl Diver* becomes the museum's very first acquisition, marked by a group donation model.



1908
CAMPUS
Sweat bequeaths the McLellan House, an 1801 federal-style three-story mansion designed by John Kimball, Sr., to found the museum. Sweat foresees the need for future growth, and includes the necessary funds to build the L. D. M. Sweat Memorial Galleries.



1911
CAMPUS
L.D.M. Sweat Memorial Galleries open in a Beaux-arts style building designed by John Calvin Stevens: 7,500 sq. ft., with 4,000 sq. ft. of exhibition space.

CREATING THE PMA, 1976–2006

When Charles Shipman Payson gave the museum 17 artworks by Winslow Homer in 1976, it served as a catalyst for a group of visionary leaders to expand the campus, attract the museum's first significant collections and long-term loans, and establish the downtown footprint that remains to this day.

1976
COLLECTION
Maine native Charles Shipman Payson promises the museum his collection of 17 paintings by Winslow Homer.

CAMPUS
Critically, Payson identifies the museum's physical limitations and generously gives $8 million toward the construction of a new building.

1979
COLLECTION
In direct response to the Payson gift, the Hamilton Easter Field Art Foundation Collection adds more than 50 paintings, sculptures, and works on paper by American modernists to the PMA collection.

1980
COLLECTION
Edward Hopper's *Pemaquid Light*, which continues to be the PMA's most requested artwork by visitors, joins the collection.

1981
CAMPUS
The museum breaks ground on the Charles Shipman Payson Building.



1983
CAMPUS
Designed by Henry Nichols Cobb of Pei Cobb Freed & Partners, the new heart of the PMA opens with 20,000 sq. ft. of exhibition space.

1983
COLLECTION
The Friends of the Collection is founded by a group of enterprising women to bring greater diversity and equity to the PMA through the acquisition, conservation, and care for the collection and related programming.

FUN FACT | Artworks by Ahmed Alsoudani, David C. Driskell, Edward Hopper, Louise Nevelson, Isamu Noguchi, Marguerite Zorach, and many more have been acquired by the Friends of the Collection.

1988
COLLECTION
Winslow Homer's masterpiece, *Weatherbeaten*, sparks a new era of major growth of the collection.

1991
COLLECTION
The Joan Whitney Payson Collection of 20 impressionist and post-impressionist works of art is given to the museum on permanent loan. Pierre-Auguste Renoir's *Confidences (Secrets)* is among the highlights of the collection.

1996
COLLECTION
Elizabeth B. Noyce bequeaths 66 works of American art, which at the time stands as the most extensive and diverse gift of American art ever given to the museum.

2002
CAMPUS
After a successful $12.3 million capital campaign, the PMA meticulously renovates the McLellan House, restoring it to its original condition and reopening it to the public in 2002.

For more than 40 years, there have been no increases in galleries, visitor amenities, or capacity.

ENSURING FLEXIBILITY, 2006 – 2016

The first 10 years of the 21st century proved to be a pivotal decade in Portland, and as its cultural renaissance took hold, the PMA moved to secure the museum's future flexibility by securing three strategic properties: 87 Spring Street, the Charles Quincy Clapp House, and the Winslow Homer Studio.



2006
CAMPUS
The PMA purchases the Winslow Homer Studio and begins restoration project.



2007
CAMPUS
The Charles Quincy Clapp House, one of Maine's important early examples of high style Greek Revival architecture built in 1832, is purchased.

FUN FACT | Acquired by the Portland Society of Art in 1914, with ownership transferring in 1982 to Maine College of Art when the Portland Society of Art separated into the PMA and MECA.

Board votes to purchase 87 Spring Street in 2007 for $2.35 million.

2012
COMMUNITY
The exhibition *Weatherbeaten* breaks attendance records and sets a new precedent as to what the museum could do if it unified exhibition strategy, audience development, and brand equity in the years to come.

CAMPUS
The Winslow Homer Studio opens to the public.

2013
COLLECTION
CAMPUS
COMMUNITY
The PMA begins planning a four year, cross-departmental accessibility initiative, *Your Museum, Reimagined,* to reinstall the collection, digitize the collection, improve physical accessibility, and create more ways to remove financial means as a barrier to the museum.

FUN FACT | Director Mark Bessire often said, "the PMA built a building without a building."

2014
CAMPUS
The museum purchases the land surrounding the Winslow Homer Studio to be preserved in perpetuity through an $11.8 million capital campaign for restorations, land, and building the endowment.

COLLECTION
Robert Indiana's *SEVEN* is installed in Congress Square, simultaneously adding an iconic public work of art in Portland while underscoring the PMA's physical address at 7 Congress Square.

2015
COLLECTION
Andrew Wyeth's *River Cove*, which the New York Times said, "may be Wyeth's best painting" and is regularly identified by art historians as among his most important and impressive artworks, joins the collection.

THE *ART FOR ALL* GENERATION, 2016 - PRESENT

The path the PMA is about to take was made possible through several successful projects and initiatives that ensured artworks and audiences came together to move the museum forward.

In 2015 the PMA announced its commitment to a multiyear, cross-departmental collections and accessibility initiative, *Your Museum, Reimagined*. By its completion in 2017, the PMA had reinstalled the collection, digitized the collection, improved physical accessibility, and created more ways to remove financial barriers to the museum.

2016
COMMUNITY
A sustained multiyear increase in attendance begins, growing beyond the previous five-year average of 130,000, jumping 7%.

2017
COMMUNITY
The PMA launches *Your Museum, Reimagined*, immediately attracting 20,000 more visitors than the year before while establishing a new baseline for annual attendance.

The David E. Shaw Family Sculpture Park opens as a free space to the public for the first time in nearly 35 years.

Recent additions by John Bisbee, Jonathan Borofsky, Isamu Noguchi, and William Zorach have joined works by Anthony Caro and Celeste Roberge.

20,000 more visitors come to the museum.

COLLECTION
A substantial collection of photographs by Nan Goldin joins the collection.

2018
COMMUNITY
11% increase in attendance over 2016.

Through the generosity of Susie Konkel, the PMA introduces free admission for everyone ages 21 and under.

The museum launches multivocal didactic materials in exhibitions, which–alongside community advisory committees–improve the range of perspectives and educational opportunities available in the galleries.

Since that time, the PMA has aimed to build on the new wave of energy and support at the museum. This has been marked by a deep commitment to Diversity, Equity, Accessibility, and Inclusivity [DEAI] through exhibitions and programs that reflect the region's diverse communities and experiences with art that brings people together. We call it *Art for All*.

2019
COMMUNITY
Record Attendance: 176,464 visitors to the museum with a 10% increase over 2018 plus a 16% over previous half decade.

COLLECTION
Kara Walker's *Occupation of Alexandria*, David C. Driskell's *Ghetto Wall #2*, and Jeffrey Gibson's *PEOPLE LIKE US* immediately become collection highlights.

FUN FACT | 290 artworks added to the collection since 2016.

CAMPUS
The museum purchases 142 Free Street building, directly adjacent to the museum's Charles Shipman Payson Building. The purchase provides the museum with flexibility for future opportunities and enables the PMA to secure the area around Congress Square as a center for arts and culture.

2020
COMMUNITY
Attendance goal is set for 220,000.

As the pandemic takes hold, the PMA pivots to a digital-first museum, creating hundreds of types of content across all departments, and sets new record with 3.53 million people engaging with the museum online.

369% increase in web traffic from previous year.

Throughout the PMA's history, there have been flash points where circumstance, positioning, and support have come together to move the museum forward. Reflecting on these cycles is critical to understanding the unique and promising moment the PMA is embracing.



IT'S TIME

to envision the next great era in PMA history, one sparked through new, world-famous collections and an architecturally innovative and unified campus that serves as an epicenter for conversation, connection, and community.

ATTRACTING COLLECTIONS

Our dedication to the collection has never been stronger. We're committed to highlighting the strengths of our existing collection and the long-term loans that have attracted local and global audiences for decades. Simultaneously, we're expanding the collection dramatically through additions by artists such as Jeffrey Gibson, Daniel Minter, Tim Rollins & K.O.S., Clifford Ross, Theresa Secord, and Kara Walker. Lastly, we're reinforcing holdings of landmark works by Maine artists, including Lois Dodd, David Driskell, Winslow Homer, John Marin, and Andrew Wyeth.

The museum is now about to move light-years forward, with the addition of several major, internationally renowned and incredibly valuable collections that will transform everything. This expansion of the collection is the most extensive and diverse in the institution's history, and immediately centers the PMA as one of the most important museums in the Northeast.

But the opportunity and challenge ahead is clear: to present these collections at all, let alone meaningfully and in line with our values, we need to increase capacity to provide welcoming spaces for all through the growth and unification of our campus.



GROWING OUR COLLECTION



ALEX KATZ FOUNDATION GIFTS

Over the last decade, the Alex Katz Foundation has generously provided the PMA with a collection of nationally and internationally renowned artworks by Katherine Bradford, Emily Brown, Lois Dodd, Misaki Kawai, Chris Martin, Julian Opie, and more. The foundation has contributed more than 45 artworks to the PMA collection since 2011.



JUDY GLICKMAN LAUDER PHOTOGRAPHY COLLECTION

Anchored by works from some of the most beloved and influential photographers of the 20th century, including Berenice Abbott, Diane Arbus, Richard Avedon, Margaret Bourke-White, Danny Lyon, Sally Mann, Gordon Parks, and James Van Der Zee, the collection will become the center of a photographic collection at the Portland Museum of Art that will thrill audiences from around the world. The collection also includes photographs by critical contributors to the medium's history, such as Irving Bennett Ellis, Lotte Jacobi, Alma Lavenson, Ben Shahn, Graciela Iturbide, and Glickman Lauder, the collector herself.



BARBARA GOODBODY COLLECTION

Over the last half decade, the PMA has worked to prioritize artworks and perspectives from our Wabanaki communities, presenting contemporary artworks in our Biennial series, featuring leaders in our marquee public programs, and partnering with artists and community members on inclusive, direct, and honest didactic materials in order to dismantle systemic racism and art historical blind spots. Wabanaki baskets, given generously by Barbara Goodbody in 2021, include stunning works by David Moses Bridges, Martin Dana, Jeremy Frey, Theresa Secord, Sarah Sockbeson, Geo Soctomah Neptune, and more.

Beginning with our first acquisition in 1888 of Benjamin Paul Akers' *The Dead Pearl Diver*, the PMA has amassed a permanent collection of morethan 18,000 objects, with roughly 75 percent arriving as gifts from more than 10,000 donors.



WALTER B. AND MARCIA F. GOLDFARB COLLECTION

Assembled by PMA Trustee and patron Dr. Walter Goldfarb and his wife, Marcia, the Goldfarb collection focuses on three primary categories of painting: ship portraits, landscapes in the tradition of the Hudson River School, and trompe l'oeil still life. Featured artists include Sanford R. Gifford, John Haberle, William Michael Harnett, and John Frederick Peto. The Goldfarb Collection offers strong resonance with existing PMA works by Charles Codman, Fitz Henry Lane, Eastman Johnson, and others, providing visitors a coherent narrative of 19th-century American art.



RICHARD ESTES COLLECTION

The Richard Estes Collection and Archive has been promised to the Portland Museum of Art. This transformational collection contains paintings and extensive archival material, forming a significant body of work that will provide breadth to the museum's collection of American art. The Richard Estes Collection will help chart the reinvigoration of realist and figurative American painting in the decades after World War II, when numerous artists of Estes' generation were seeking a fresh approach to painting. Many of these artists eventually found Maine, or places like Maine–rural environments where their interest in the natural world became intertwined with their artistic visions.



BERGER COLLECTION EDUCATIONAL TRUST

A major gift of works by American icon Winslow Homer strengthens the Portland Museum of Art's position as one of the leading institutions in the world to experience the art and legacy of Winslow Homer. Highlights of the gift from the Berger Collection Educational Trust include paintings *Returning from the Spring,* 1874, and *Young Farmers (Study for Weaning the Calf),* 1873-1874, as well as nearly a dozen other works made by Homer during his career.



DAVID AND EVA BRADFORD COLLECTION

German expressionist works that powerfully blend issues of history, politics, art, and national identity, provoking questions about who we are and what we value in ways that are as pertinent today as they were a century ago. The works, gifts to the PMA from David and Eva Bradford, add context to the social and artistic expression of the era and are equally probing in their evaluation of German society and national identity. Highlights include works by Max Beckmann, Otto Dix, and Käthe Kollwitz.

THE PMA'S SUCCESS IS NOW OUR BIGGEST CHALLENGE

In the last two years, our audiences have made it clear that they have big expectations, and we do too. **We've sustained double-digit increases in attendance for the last half decade, reaching a record high in 2019 with more than 175,494 visitors.** As we look to the future, it's easy to see how the constraints of our campus will soon hinder our goals and our communities' needs.



We already welcome nearly

2x

the planned capacity of the Payson building.

In just five years of our current pace of growth, we will exceed

3x

the planned capacity of our campus.

4x

as many visitors than peer museums with similar exhibition square footage.



WE NEED TO BUILD UP

We are being forced to reduce exhibition size, relocate marquee programs and events, and restrict capacity due to limits of our campus.



OUR NEEDS IN CONTEXT

Compared to peer institutions*, the PMA...

has

170-515%

MORE VISITORS

than similar sized campuses.

has

130-370%

MORE VISITORS

than equivalent member households.

has

140-585%

MORE VISITORS

than comparable collection sizes.

is

one of only 13

MUSEUMS IN THE UNITED STATES

with 100% of its collection online and accessible digitally.

has the

4th most open hours

IN THE ENTIRE COUNTRY.

leads

every other museum but one

IN FREE ADMISSION

by age.

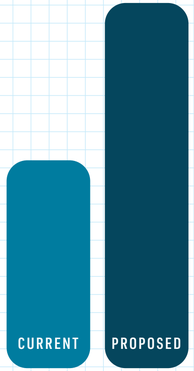
serves

more school districts

THAN BROOKLYN MUSEUM AND NATIONAL GALLERY OF ART.

* According to the American Association of Museum Directors (AAMD) 2019 report, which represents the most recent data. AAMD did not conduct reports for 2020. Data rounded to nearest fifth.

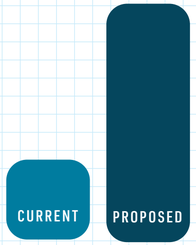
OUR PARADIGM SHIFT IS DEFINED BY EQUITY, SUSTAINABILITY, AND FLEXIBILITY.



21,556 SF 38,070 SF

+ 77%

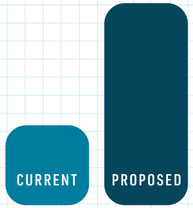
Space for Art



8,276 SF 25,214 SF

+ 205%

Space for Community



8,478 SF 21,163 SF

+ 150%

Space for Operations

By adding

60,000 SF

we can easily welcome

300,000-500,000

visitors per year.

In October 2019, the PMA took a big step toward a bold future, purchasing 142 Free Street building directly adjacent to the museum's Charles Shipman Payson Building. In a rapidly evolving city, this purchase provides the museum with a footprint for future opportunities and enables the PMA to define Portland as a national center for arts and culture.

With the opportunities of 142 Free Street, the development of Congress Square (a major, underdeveloped urban park at the main entrance of the museum) and the domino effects of renewal across our campus at sites like the Payson Building, Spring Street lot, and more, **now is the time to unify the campus and thoughtfully plan the museum's future.** We envision our campus as an environmentally sustainable gathering place where a strong artistic vision drives conversation, creativity, and cultural vibrancy.

This investment will embody our *Art for All* and Sustainability values, with 142 Free Street being the first sustainable and green public building in Portland and just the fourth green public museum building in the country. Planned across a six- or seven-story building, the ground floor is a **community gathering space** with a gallery, classrooms, and versatile areas for collaborations, partnerships, and communal food sharing. The lower level is a large **flexible auditorium**, and one floor would be **dedicated to housing local nonprofit organizations,** which would operate in the building and become crucial to the **education and outreach** programs of the PMA. One floor would include an all ages Makers Space, classrooms, and a Photography Center. One floor would be dedicated to **traveling exhibitions** as our current space of 4,500 square feet is too small for us to collaborate with our peer museums; another floor would hold offices. The rooftop would provide a **meeting area, restaurant, and a sculpture park as well as an opportunity for earned revenue.**

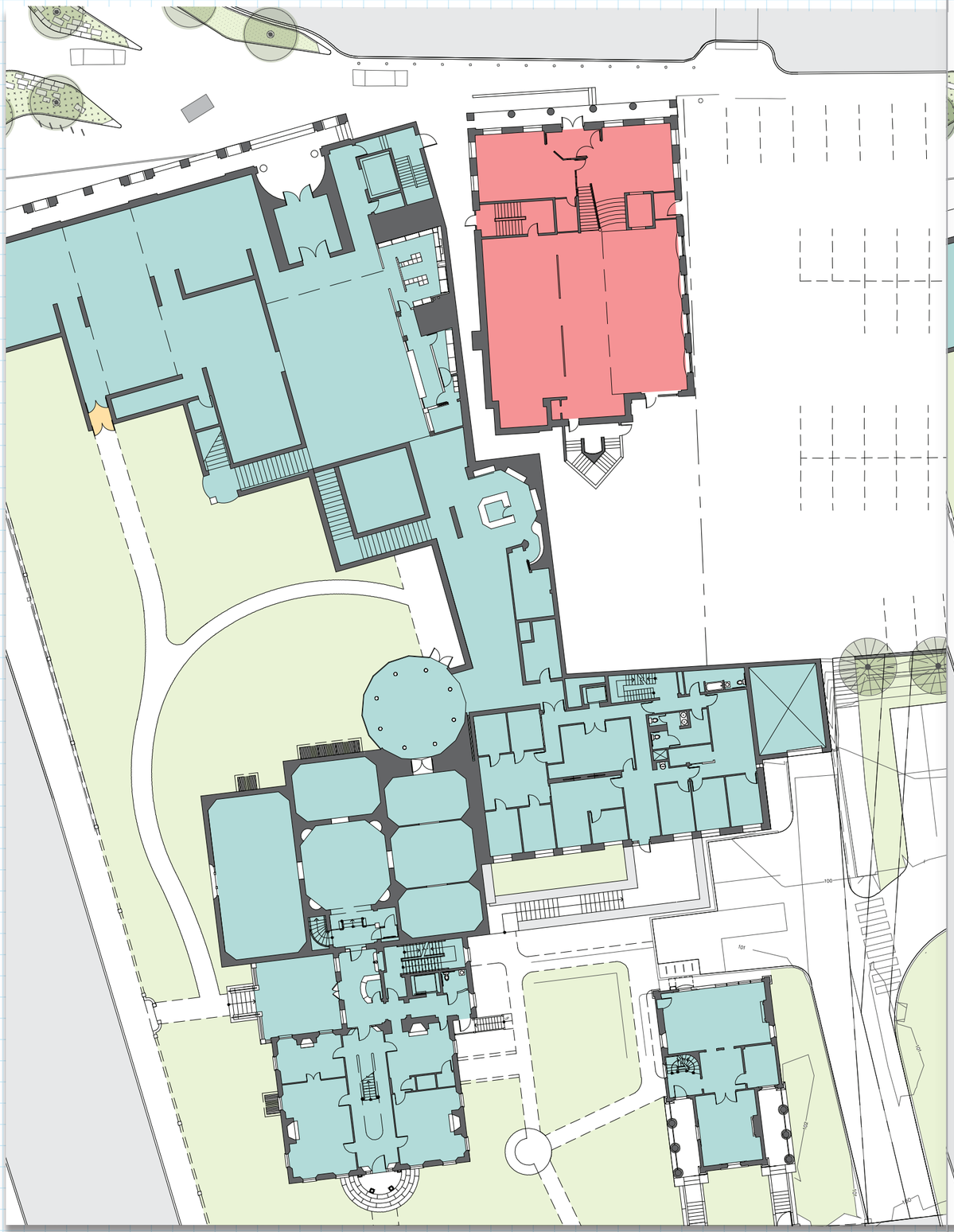
A key component of the new PMA building at 142 Free Street will be **home to a photography study center** that teaches and inspires our youth, partners with seasoned photographers, and analyzes the historical and contemporary fields of photography. This dedicated space could fully support the field of photography for all generations by creating a new model that is so needed today, as museums struggle with their past. It could be housed on a floor that provides full-service photography, from darkrooms, classrooms, and galleries, to a study center in partnership with other cultural organizations, making it an active and accessible space for all. It could also include a dedicated permanent gallery, with exhibitions changing annually so that visitors to the PMA can build over time their knowledge of the art of photography.

It's time to create the next great PMA experience, adding a new, iconic, and architecturally significant center to our historic campus. A unified and renewed campus will enhance the mission, welcome visitors from around the corner and across the world, and encourage meaningful connections with artworks, programs, and events.

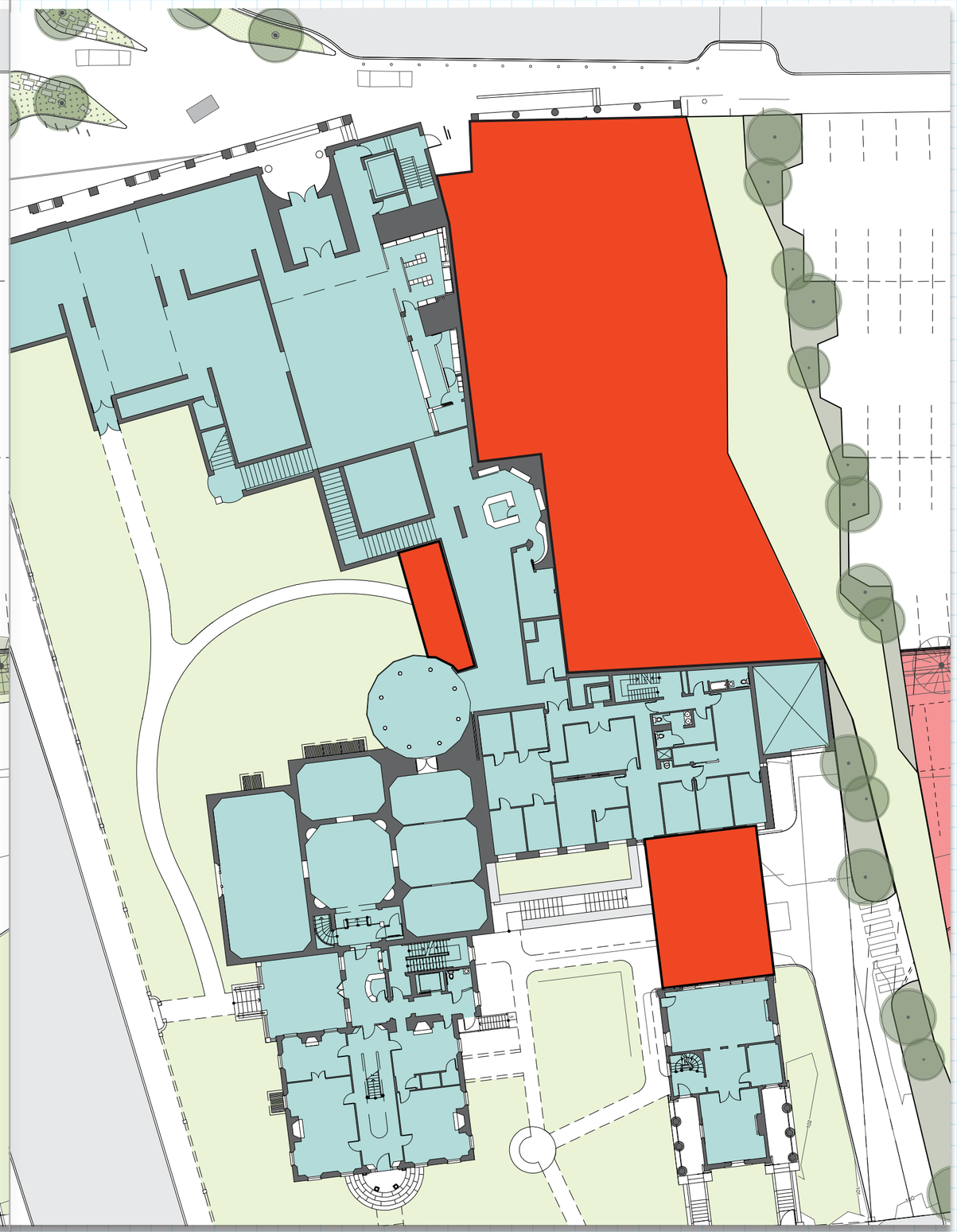


IT'S TIME.

EXISTING SITE PLAN



POTENTIAL DEVELOPABLE SPACE PLAN



ART IS THE HEART

At every step along our 140-year history, we have been supported, guided, and sustained by our visionary partners who understand art's unique capacity to connect, inspire, and transform.

Beginning today, we can renew, revitalize, and redefine a museum's role within our society–but we can't do it alone.

With your partnership and support, we can manifest a model for all museums: one defined by leadership, courage, sustainability, and inclusivity. The PMA that you will help establish will strengthen our societal fabric and affirm that museums are critical to the health of our communities.

Together, we can realize the true potential of museums for all people.







What we leave as proof of our being here will not necessarily be in the sciences, in politics, in economics, but will manifest itself through the arts.

– DAVID C. DRISKELL

We're committed to connecting the art and ideas inside our walls with the world and people outside of them, and our vision for the museum will demonstrate that **the PMA is a different kind of arts institution:** one that platforms its communities, promotes its region, and elevates our shared future.

...Museums have an opportunity to not become community centers, but to ***be at the center of their community...***

– LONNIE G. BUNCH III, 14TH SECRETARY
OF THE SMITHSONIAN AND PMA'S 2018
NELSON SOCIAL JUSTICE KEYNOTE SPEAKER

Page 3: Jeffrey Gibson (United States, born 1972), *PEOPLE LIKE US*, 2018, glass and plastic beads, tin, copper and gold-finished jingles, artificial sinew, quartz crystal, silver-coated copper wire, druzy crystal, nylon thread, nylon fringe, acrylic felt, acrylic paint, repurposed wool blanket, recycled jersey stuffing, rawhide, 60 1/2 x 24 1/2 x 14 inches. Gift of Crewe Foundation and Family, 2019.13. © Courtesy of the artist and Robert Projects, Los Angeles, California; Photo Peter Mauney

Page 4: Architectural rendering of the Payson Building by I. M. Pei & Partners.

Page 12: Winslow Homer (United States, 1836–1910), *Weatherbeaten*, 1894, oil on canvas, 28 1/2 x 48 3/8 inches. Bequest of Charles Shipman Payson, 1988.55.1. Image courtesy of Luc Demers

Page 13: Katherine Bradford (United States, born 1942), *Woman Flying*, 1999, oil on canvas dropcloth, 84 x 72 inches. Museum purchase with support from the Friends of the Collection, 2012.14. Image courtesy of Pillar Digital Imaging. © Katherine Bradford

Page 17: Pierre-Auguste Renoir (France, 1841–1919), *Confidences (Secrets)*, circa 1874, oil on canvas, 32 x 23 3/4 inches. The Joan Whitney Payson Collection at the Portland Museum of Art, Maine. Gift of John Whitney Payson, 1991.62. Image courtesy of Pillar Digital Imaging

Pages 18 / 19, left to right: Elizabeth Hazan (United States, born 1965), *The Forest at 2:00am*, 2019, oil on linen, 50 x 47 inches. Gift of the Alex Katz Foundation, 2019.26.2. Image courtesy of Cary Whittier. © Elizabeth Hazan. Gordon Parks (United States, 1912–2006), *American Gothic, Washington, DC*, 1942, gelatin silver print, 13 x 10 1/4 inches. Promised Gift from the Judy Glickman Lauder Collection. Image courtesy of Luc Demers. Courtesy of and copyright The Gordon Parks Foundation. Theresa Secord (Penobscot, born 1958), *Trinket basket*, 2014, birch bark, spruce rooblack ash, sweetgrass, cedar bark, dye, 5 1/2 x 4 1/2 x 4 1/2 inches. Gift of Barbara M. Goodbody, 2021.19.12a,b. Image courtesy of Luc Demers. © Theresa Secord. John Frederick Peto (United States, 1854-1907), *Office Board for Christian Faser*, 1881, oil on canvas, 20 x 16 inches. Collection of Walter B. and Marcia F. Goldfarb. Richard Estes (United States, born 1932), *Kentucky Fried Chicken*, 2007, screenprint, 24 x 16 inches. Private collection. Image courtesy of Luc Demers. © Richard Estes. Winslow Homer (United States, 1836–1910), *Returning from the Spring*, 1874,oil on panel, 7 7/8 x 5 3/4 inches, Gift from the Berger Collection Educational Trust in honor of the preservation of the Winslow Homer Studio, 2018.9.1. Image courtesy of Luc Demers. Ernst Ludwig Kirchner (Germany, 1880-1938), *Striding Bathers in the Woods (In der Walde Schreitende Badens)*, 1910, etching on wove paper, 9 3/4 x 7 3/4 inches. Gift of David and Eva Bradford, 2003.34.2. Image courtesy of Luc Demers

Page 28: David C. Driskell (United States, 1931–2020), *Ghetto Wall #2*, 1970, oil, acrylic, and collage on linen, 60 x 50 inches. Museum purchase with support from the Friends of the Collection, including Anonymous (2), Charlton and Eleanor Ames, Eileen Gillespie and Timothy Fahey, Cyrus Hagge, Patricia Hille Dodd Hagge, Alison and Horace Hildreth, Douglas and Sharyn Howell, Harry W. Konkel, Judy and Leonard Lauder, Marian Hoyt Morgan and Christopher Hawley Corbett, Anne and Vince Oliviero, D. Suzi Osher, Christina F. Petra, Karen and Stuart Watson, Michael and Nina Zilkha, and with support from the Freddie and Regina Homburger Endowment for Acquisitions, and the Emily Eaton Moore and Family Fund for the Collection, 2019.16. © Estate of David C. Driskell. Courtesy DC Moore Gallery, New York

HOW WE GOT HERE:

Diversity, Equity, Accessibility, and Inclusion (DEAI) Roadmap

Equity Strategic Action Plan (ESAP)

Listening Sessions

Staff Workshops

Community Focus Group

Feasability Study

Strategic Plan

WHAT'S NEXT:

PHASE 1 | 142 Free Street Development
Begins with an *Architect Selection Process* and culminates with breaking ground on a new building.

Phase 2 | Further Campus Unification
Optimize and integrate existing facilities.

Phase 3 | Land Investment
Spring Street property transformation to serve the future of the PMA and our communities.

JOIN US

Mark H.C. Bessire
Judy and Leonard Lauder Director
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mbessire@portlandmuseum.org

Elizabeth Jones
Senior Deputy Director
Advancement and Sustainability
Direct: (207) 699-4543
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Director of Philanthropy
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PH: (207) 775-6148, ext. 3212
ahill@portlandmuseum.org

Lane Brenner
Director of Major Gifts
Cell: (315) 243-3379
lbrenner@portlandmuseum.org

Alicia Coll
Philanthropy and Campaign Administrator
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acoll@portlandmuseum.org

...Museums have an opportunity to not become community centers, but to ***be at the center of their community...***

– LONNIE G. BUNCH III, 14TH SECRETARY OF THE SMITHSONIAN AND PMA'S 2018 NELSON SOCIAL JUSTICE KEYNOTE SPEAKER



The PMA Blueprint

Building a Landmark for the Future

Art reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects **art. The Portland Museum of Art is defined by three pillars: community, collection, and campus.**

...Museums have an opportunity to not become community centers, but to ***be at the center of their community...***

– LONNIE G. BUNCH III, 14TH SECRETARY OF THE SMITHSONIAN AND PMA'S 2018 NELSON SOCIAL JUSTICE KEYNOTE SPEAKER



ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision **inspires** giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects **culture** defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects **art. The Portland Museum of Art is defined by three pillars: community, collection, and campus.**





City of Portland
Historic Preservation Board
c/o Evan Schueckler
Historic Preservation Manager
389 Congress Street
Portland, ME 04101

September 28, 2023

Dear Historic Preservation Board,

I am writing today in support of the Portland Museum of Art to have the City remove the unfortunate misclassification of 142 Free Street as a historically significant or "contributing" building.

I moved to Portland in 1989, and lived at 612 Congress Street, within one block of the PMA and what was at that time the Chamber of Commerce. From my living room I could see the Henry Cobb facade of the museum and the Hay Building. So for me, these structures are embedded in my psyche as home. That said, as an artist and former board member of Architalx, I have never felt the building at 142 Free Street has provided any significant contributing value to Portland's varied (and at times struggling) cityscape. If anything, it is part of the residue of multiple failures and fires which have left enduring scars on the peninsula.

Without reiterating what has been clearly outlined in the supporting document *A History of 142 Free Street* prepared by Historic Building Consultant Margaret Gaertner, I would simply like to add a few additional comments.

In my opinion, Free Street has been a significant lost opportunity for the fabric of Portland city life for the past three decades. This one-way street has prioritized cars and sporadic events at the Civic Center, with little consideration given to the day-to-day life of the people that live and work on the peninsula. I feel this contributes to a down-trodden and at times barren feeling of this part of the city.

For eight years (1996-2004), my studio was in the State Theatre Building (aka The Congress Building), and my home was on Park Street. Before the *Arts District* was even established, I had a small gallery in the The Congress Building. At that time, visitors from out of state would comment on the abundance of *For Rent* signs, signifying a struggling Congress Street economy.

| 95 jeanne street portland, me 04102 | 207.450.3628 |

jepaterak@gmail.com

While we continue to live with the events at the Civic Center creating occasional traffic, we also continue to endure the loss of true livable urban space due to the poor planning of the 1970s. This should have been remedied long ago. The Spring Street urban renewal project is one of those enduring scars which tore through the fabric of city-life, removing beautiful homes and quality pedestrian and business friendly street life. Free Street connects the cultural hub that the PMA is central to, with the Old Port, home to the touristed and working waterfront. This street has been waiting to be designated a pedestrian powerhouse and cultural hub which could provide a vibrant consumer audience, day and night, for the businesses that might choose to locate there. I believe the architecturally significant planned addition, newly designed by LEVER, will largely strengthen a robust economic future for downtown and a renewed life for Free Street.

It is unfortunate that the singular "architecturally significant" feature of 142 Free St is its *Greek Revival* facade. While there are examples of historically significant buildings in Maine with *Greek Revival* architecture worth saving, this is definitely not one. Stylistically, *Greek Revival* may have served the purpose of upholding certain ideals, architecturally and otherwise, in the 19th Century when the term was first used. However, it now only serves as a harmful reminder of exclusion and elitism, which is not in alignment with either the city's or the musuem's identified ideals for the present and future of our city life.

This facade was added to an existing building in 1958, for the simplistic fantasy reasoning of what "good architecture" is. As built, it was hardly given more consideration than a temporary theatre set. When this addition to the structure was built, the considerations of a handicap access (not legally required until 1990) and adequate pedestrian space were clearly not considered. If anything, to correct these wrongs, the footprint of the facade of the building should be brought back the 30 or so feet or so it was moved forward in 1856, which would allow for more comfortable street facing life at the museum entrance.

In closing, I am reminded that in 1983, when I was a 19 year old art student at the Worcester Art Museum & Clark University, I wrote an impassioned letter to save Union Station in Worcester, MA. I am not accustomed to wanting to remove a structurally sound building, as I think many structures are worth saving and/or re-purposing, especially in light of a fast-paced developing and resource-hungry world. In this case, however, the compromising changes made to the structure, the lack of any real historic or design significance of the building warrant its removal. In short, the building is not well designed, well placed, or of any use to the museum as it stands. I support the PMA's goals in a better future, a better museum and indeed I wholeheatedly support the ideals of *Art for All*. Art is what makes us better understand our humanity and citizenship, and that is precisely what the world needs more of and what I want for Portland's future.

Sincerely,



Jeanne Paterak

jepaterak@gmail.com

PC6

To Whom it May Concern:

It is my great pleasure to write a letter in support of the Portland Museum of Art's application to request that the Historic Preservation Board of the City of Portland re-classify the 142 Free Street property, currently a "contributing structure," to be "non-contributing" on the basis that the building never should have been classified as contributing in 2009 and 2020.

The inclusion of 142 Free Street is critical to the PMA's expansion project, as the space will enable the incredible work the museum does for our community to expand, while engaging the many communities that PMA works alongside.

Research is showing us that 142 Free Street does not contribute to the city historically in any way that should present as a barrier to the PMA's innovative vision for the future. Importantly, the PMA has a long history of stewardship and preservation of historic buildings and respects their significance. Architectural leadership was a key aspect in the selected design concept for the expanded PMA. The PMA's actions in engaging the citizens of Maine in the process of selection demonstrates their values and commitment to our community.

The Indigo Arts Alliance (IAA) has been fortunate to be in deep partnership with the Portland Museum of Art for many years and in many forms. We look forward to our continued collaborations in the future inside and outside of the walls of the new museum they have imagined.

We sincerely hope you will support this important museum expansion project.

In Solidarity,
Márçia Minter, PhD hc | She, Her
Chief Officer of Strategic Growth and Innovation
Indigo Arts Alliance
60 Cove St. Portland, ME 04101
(207) 272-3113

Unceded Wabanaki Territory.

142 Free St. 0 views

Edgar Beem <beem@gwi.net>
to hp@portlandmaine.gov

10:10 AM (12 minutes ago)

Dear Portland Historic Preservation Board,

I am writing in support of the Portland Museum of Art's application to have 142 Free St. exempted from the historic district in order that the museum be able expand its facility by adding a landmark new structure to the existing campus. While I appreciate that some in Portland are very sensitive to any changes to the built environment, I do not believe 142 Free St. is a building of any great architectural merit. It is altogether fitting and proper that it should be razed to make way for a great new future.

As a Portland native and a writer who has written about the cultural life of Portland and Maine since 1978, I recall the howls of protest that went up in 1983 when the old Libby Building was razed to make way for the Charles Shipman Payson Building. When the new museum opened, I remember some boo birds complaining about the distinctive arches and suggesting that the building designed by Henry Cobb of the I.E. Pei firm looked like a shopping mall. Many people experience the shock of the new when familiar landmarks are changed to accommodate growth.

I keep hearing that the fact that architect John Calvin Stevens did some renovation work on the old theater-church-chamber building gives it special historical significance. I do not believe this is so. 142 Free St. is a utilitarian structure that has served many purposes is many different forms. It is time for it to go. I very much hope that the commission, planning board and council will not stand in the way of the Portland Museum of Art's $100 million improvement to the City of Portland.

I am sorry I could not attend the10/4 meeting to speak in favor of the museum's request, but as a trustee of the $20 million Dorothea and Leo Rabkin Foundation, another cultural treasure in the new Portland, I was busy with board business.

Thank you for your time and consideration.

Sincerely,

Edgar Allen Beem

83 McKeen St.

Brunswick, Maine 04011

HP Public Comment - 142 Free Street: Haven't we venerated John Calvin Stevens ENOUGH?

0 views

Assigned to me

George Rheault <george.rheault@gmail.com>
to HIstoric Preservation

11:07 AM (24 minutes ago)

See attachment.

I am pretty sure that the legacy of John Calvin Stevens and his contributions to Portland's physical development (as well as his much more checkered involvement in its social and political evolution) will not rise or fall based on the continuing existence of 142 Free Street.

How many totems from this one man does the City of Portland need to tell his story?

Why should the dead hand of the past once again serve to suffocate the energy and creativity of our community's present and future?

PMA new design 0 views



Rob Neal <rtneal@gmail.com> 11:35 AM (3 minutes ago)
to hp@portlandmaine.gov

The issue is really very simple. Does Portland want to be a city that focuses on the past or on what's best for the future and coming generations?

Historic preservation is certainly important, but not in all cases of potential preservation.

It comes down to this choice: What is more important, being able to say "see how we once looked.... in the past", or "this is how we want the city to look now and in the future".....

Portland is a unique and vibrant small city. We have lots of historic preservation and most of that is good for us. The potential for the new PMA, however, is enormous and would be even more of a cornerstone / foundation of what Portland is about both literally (the physical structure), and symbolically in what statement as a city we are making about our city with the PMA.

I live in Yarmouth, but have lived and worked in the greater Portland area since 1988 when I moved here with my family from Atlanta. The greater Portland region and community is a wonderful place to live, work, and raise children. We are world class in many areas and still evolving in others.

Let's not make a backwards statement about Portland by preserving an antiquated structure that is actually not visually appealing anyway, but more importantly represents a more narrow minded past than the more open and progressive minded direction Portland and the surrounding region has been headed for many years.

Let's move forward!!

--
Best Regards,

Rob Neal
www.robnealconsulting.com
207-838-4645

October 4, 2023

To Whom it May Concern:

I'm writing to express my confidence in the leadership at the Portland Museum of Art (PMA) as they work to significantly expand the organization's reach and offerings in the form of an expanded home on Free Street.

In late 2019, the PMA purchased 142 Free Street from the Children's Museum & Theatre of Maine (CMTM), our home for nearly three decades. The sale of the building enabled us to break ground on our new state-of-the-art facility at Thompson's Point. It was also the culmination of years of work by the board and staff at CMTM at the time to identify a larger location for our organization, as we grew rapidly.

In early research, CMTM strongly considered remaining at 142 Free Street and adding to the existing structure. However, studies and financial models showed that it was not a viable option given the significant updates needed to the building in both operating systems and physical accessibility, as well as a lack of opportunity to greatly expand our footprint. I should note that when CMTM moved locations, we donated, sold or took with us the majority of the beloved exhibits that were housed inside. The few relics that remain in the building were not salvageable. As a result of our move, we now attract over 200,000 visitors a year to our new space - double the visitation we were ever able to host at Free Street.

The PMA has played a significant role in creating the vibrant arts and culture community that exists in Portland today. They are the anchor of the Arts District, and their expansion will undoubtedly bring significantly more visitors from near and far to enjoy all the amenities our city has to offer. I am fully in support of the PMA's decision making and look forward to spending time in their new facility when it is complete.

Sincerely,

Julie Butcher Pezzino
Executive Director
207.828.1234 x223
julie@kitetails.org

RE: Reclassification of 142 Free Street

0 views

Assigned to me

Susan Faxon <sfaxon1122@gmail.com>
to hp@portlandmaine.gov, officeofthedirector@portlandmuseum.org

Oct 28, 2023, 6:22:43 PM (yesterday)

Dear Historic Preservation Board,

I write to enthusiastically support the Portland Museum of Art's petition to your board to reclassify 142 Free Street in order to allow the museum to move forward with their innovative and necessary expansion program.

Let me explain what I bring to this conclusion.

I retired to Portland in 2017 after nearly 50 years of experience with issues of historic preservation, including a graduate degree in the topic from Columbia, and over twenty years serving as a founding member of the Design Review Committee, reviewing restorations, adaptive reuse, expansion, and removal of buildings on the 500 acre campus of Phillips Academy, Andover MA. Concurrently I have extensive experience in the museum field, having served as both an administrator and as senior curator of American Art before 1950 at the Addison Gallery of American Art at Phillips. I know first hand the difficult compromises and challenges of deciding the fate of historic structures as well as the caretaking obligations and educational opportunities demanded of the modern museum.

In my opinion the Portland Museum's visionary architectural expansion plan gives tangible evidence of the institution's commitment to serving a wider Portland community and will allow the museum to more easily and creatively share our common artistic heritage with both present and future audiences. Additionally the expansion offers significant improvements to the streetscapes of Free Street and Spring Street. The open character of the museum's new addition on Free Street will provide a counterpoint to the uninviting and off-putting blank brick wall of the Payson Building. It will offer visual access to art both while open and when closed through its pedestrian passage between Free and Spring Street. It unifies and clarifies the museum campus at the same time that it mitigates against the dreary and hodge-podge streetscape that presently exists along Free Street.

Of course the difficulty with the expansion plan is the necessity of either relocating (a proposal worth considering, by the way) or demolishing the Chamber of Commerce building. This is a decision that is hard to make, but as with all preservation decisions, the greater good needs to be given weight (and I believe that in this case the expansion of the museum is the greater good in the ways I have articulated above). I submit that the sacrifice of a rather stolid and unimaginative structure is a fair and necessary measure to allow a project that will enervate and enliven an important streetscape. Finally, I come to this decision with the knowledge that the museum's plans will allow the far more important Greek Revival building on Spring Street, the Charles Quincy Clapp House, to shine. This is a fair trade to my mind.

Sincerely,

Susan Faxon
20 West Street,Apt 21
Portland Maine 04102

PMA development Plans

0 views

Assigned to me



Lucas St.Clair <lucasstclair12@gmail.com> 11:59 AM (1 hour ago)

to hp@portlandmaine.gov

Dear HP Board,

Thank you for allowing written comments to voice opinion on the plans that the Portland Museum of Art is working on.

I recently have received two emails from the Greater Portland Landmarks about supporting the blockage of the reclassification of the structure of the former Chamber of Commerce building. I do not support that Greater Portland Landmarks in this case. While the building may meet the criteria to be a contributing building to the Congress St. historic district, it is my belief that a more comprehensive way of approaching this decision should be taken.

While the building that is being considered meets the criteria of the historic district, what the PMA plans to do is far superior for the whole of our city, community, and state. Adding a building that takes into account a 21st vision for construction, energy use, and inclusivity is what our city needs. While I support the understanding and protect our city's history, we should not let it define our future or prevent evolution. The expanded PMA campus will be a Greater Portland Landmark of the future, one that takes into account 21st century needs and helps the city in advance in its vision.

I also must add that the editorializing in their advocacy emails, the Great Portland Landmarks, stands in the face of uniting our great community. The choice of language that they use, including "setting a dangerous precedent" and "jeopardizing the integrity of the historic districts" is hyperbolic at best and at worst undermines their ability to be a partner to a growing city. While I support the historic districts and own a historic building in Portland, I find their perspective on this issue not unifying or helpful.

Thank you so much for your reading this email and considering my point of view when making your decision.

All my best,

Lucas

142 Free Street 0 views

Assigned to me

Jack Griswold <JackGriswold@outlook.com>
to hp@portlandmaine.gov

Oct 30, 2023, 5:35:58 PM (17 hours ago)

Chair O'Brien and Members of the Historic Preservation Board:

I am writing to support the PMA's request to reclassify the Childrens Museum as a non-contributing structure.

1. 1. To my layman's eye, this Greek Temple-ish building has always seemed an odd duck. It just doesn't fit in. Further, it appears cheaply built from the poured concrete columns with the seams showing, to the square brick end-columns and the window treatments. It is not a particularly appealing or pretty building.

2. 2. Why would we want to preserve this building and prevent something truly transformative and inspiring to be built in its place? That would be a massive loss for Portland and a real abuse of common sense and the intent of historical preservation.

3. 3. I saw that one of the architectural models for the new museum addition proposed to build around the Childrens Museum and encase it in glass. Frankly, that would be ridiculous, and I hope that Greater Portland Landmarks, or other supporters of the current structure, are not pushing to go back to something like that.

4. 4. Why is this just coming up now? Shouldn't this have been dealt with much earlier in the process?

Thank you –

Jack Griswold

38 Deering St.

Portland, ME 04101

Portland Planning Board
389 Congress Street
Portland, ME 04101

RE: Proposed Reclassification of 142 Free Street

January 31, 2024

Dear Board Members:

The purpose of this submission is to address questions and comments that arose during the workshop and to provide additional information regarding why the building at 142 Free Street does not meet the definition of "contributing structure" under the Land Use Code.

At the November workshop, members of the Board asked for clarification, context, and information about The PMA Blueprint's background, city's ordinances and processes, and questions about the district.

The requests, as we understood them, included:

1. Clarify why the museum believes that 142 Free Street should not be considered a contributing structure to the Congress Street Historic District.
2. Address questions pertaining to tax credits for owners within the district, should 142 Free Street be reclassified.
3. Demonstrate the work that went into assessing the Spring Street lot as a possible location for Phase 1 expansion and explain our findings.

Please find the included memos from Mary Costigan of Bernstein Shur and Scott Simons of Simons Architects that address these requests. We hope that these materials lay the foundation for more discussion at the public hearing and assist in the Board's decision.

We believe the Planning Board can recommend the removal of 142 Free Street's "contributing" classification to the City Council, because the building does not qualify as a contributing building under the Land Use Code and the project:

- Will not set a precedent and will be contingent on approval of the PMA's building permit for a museum expansion.
- Does not qualify as an amendment to the district and therefore does not alter the NPS's tax credit program.
- Cannot be accomplished through Phase 1 development of Spring Street lot nor the renovation of 142 Free Street.
- Creates a new landmark economic and cultural anchor for our communities by replacing a non-landmark building.

We appreciate your time and consideration, and look forward to a discussion on February 13.

Sincerely,

Mark H.C. Bessire

BERN
STEIN
SHUR

Bernstein, Shur,
Sawyer & Nelson, P.A.
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Portland, ME 04104-5029

T (207) 774 - 1200
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Mary E. Costigan
Shareholder
207-228-7147 direct
mcostigan@bernsteinshur.com

January 31, 2024

Portland Planning Board
389 Congress Street
Portland, ME 04101

Re: Proposed Reclassification of 142 Free Street

Dear Board Members:

I am writing on behalf of the Portland Museum of Art to support their request to reclassify the building at 142 Free Street from contributing to noncontributing. Their initial submission focused primarily on the Comprehensive Plan and economic benefits of the planned museum expansion. The purpose of this submission is to provide additional information regarding why the building at 142 Free Street does not meet the definition of "contributing structure" under the Land Use Code and to provide additional information on two issues that were raised at the workshop. We are requesting that the Planning Board recommend to the Council that the building at 142 Free Street be reclassified from contributing to noncontributing for the following reasons which are supported by the Land Use Code.

PMA's Request

As noted above, PMA is requesting that the Planning Board recommend to the City Council that the building at 142 Free Street be reclassified from contributing to noncontributing. To that end, it is instructive to begin with the definitions of those terms as set forth in Section 17.2 of the Land Use Code:

Contributing: a classification applied to a site, structure, or object within a historic district signifying that it contributes generally to the qualities that give the historic district cultural, historic, architectural, or archaeological significance as embodied in the criteria for designating a historic district.

Noncontributing: a classification applied to a site, structure, object, or portion thereof, within a historic district signifying that: 1) it does not contribute generally to the qualities that give the historic district cultural, historic, architectural, or archaeological significance as embodied in the criteria for designating a historic district; 2) was built within 50 years of the date of district designation unless otherwise designated in the historic resources inventory; or 3) where the

location, design, setting, materials, workmanship, and association have been so altered or have so deteriorated that the overall integrity of the site, structure, or object has been irretrievably lost. A portion of an otherwise contributing or landmark structure may be determined by the Historic Preservation Board to be non-contributing if it meets one or more of the above conditions.
As we will explain in more detail below, the building at 142 Free Street is noncontributing because 1) it does not contribute generally to the qualities that give the Congress Street Historic District cultural, historic, architectural, or archeological significance as embodied in the criteria for designation as historic district; and 2) the design, setting, materials, workmanship, and association have been so altered that the overall integrity of the structure has been irretrievably lost.

Congress Street Historic District

The Congress Street Historic District was established in 2009. The description of Congress Street Historic District describes the history of Congress Street as follows:

> If there is one word that characterizes the history and development of Congress Street, it is *change*. From the street's beginnings as an access road for farmers bringing their goods to market, to its development first into a prestigious residential neighborhood and then into Portland's commercial and cultural center, the character and role of Congress Street have changed repeatedly.

One questions why, if Congress Street can be best described with the word "change," the City decided to halt change on many of the properties in the District, including 142 Free Street, without a clear rationale as to why progress on those particular lots should be stopped. The building on 142 Free Street is a great example of the kind of change that has occurred in that area over time (until 2009). Beginning as a theater in 1830, the building was significantly remodeled to a church in 1936; then significantly remodeled again in 1926 for the Chamber of Commerce; and finally remodeled again for the Children's Museum in 1991. The museum's current plans to utilize the site for a modern expansion of the museum to further its mission of *Art for All* is more in line with the history of Congress Street than freezing a building in its 2009 form.

It is difficult to discern from the description and documentation from the nomination process what the precise qualities of Congress Street are that "give the historic district cultural, historic, architectural, or archaeological significance as embodied in the criteria for designating a historic district." Several reasons were given for the District, including access to tax credits and greater control over renovations. The architecture is described as "rich and varied" because the period of significance stretches over 173 years, and John Calvin Stevens is included among a list of fifteen different notable architects and firms.

Based upon the description and documentation of the Congress Street Historic District, we believe that a brand-new use of 142 Free Street is more in line with the history of that site than preserving the significantly altered building that is currently on the site.

142 Free Street

Originally built as a theater in 1830, the building at 142 Free Street has undergone the following renovations (many, but not all occurring within the 173-year period of significance for the Congress Street Historic District):

- 1836 - the hipped roof was replaced with a gable roof, and the entablature was extended. The earlier windows in the side walls were replaced with taller windows, three openings in each wall.
- 1856 - a new front was added to the building which brought the primary facade out to the street line. This new facade was Italianate in style and included two asymmetrical towers. The taller of the two towers was 185 feet tall and dominated the neighborhood around it.
- 1876 - the spire and its base were removed and replaced with a shorter, eight-sided, curved dome roof on a new base.
- 1887 - stained glass windows were installed in the building
- 1926 - the two projecting towers on the Free Street facade were removed, and the northernmost fifteen feet of the building (at Free Street) were rebuilt. The front facade of the building, likely stuccoed to resemble stone in its Church days, was completely removed and replaced with a new facade of exposed brick. The new facade had a portico supported on four concrete columns between two brick piers.
- Photographs of the east facade from 1925 and 1958 show the window openings on that wall were retained (new lintels were added in 1926) as was part of the cornice. Remnants of a stone-colored finish remain on the exterior face of the west wall but very little else of the building's past as a Church building appears to have survived.
- 1992 (after the end of the period of significance date of 1958) - the primary entry door and the transom over it were removed and replaced with a modern frame, transom, and door of metal. On the east facade, the fenestration was altered. The northernmost window was removed, the opening was infilled with brick, and two, smaller windows installed in the infilled portion. A new, double-height window was installed between the surviving two windows at the south end. An eight-sided cupola was placed on the ridge of the roof and a large, shed-roofed dormer and three skylights were installed on the east roof slope. The cornice south of the downspout was removed and replaced with a new cornice that was to match the existing. Other changes to the exterior of the building included a new addition to the south facade for an egress stair.

The description of 142 Free Street in the Congress Street District listing is as follows:

> Originally built as a theater in 1830 and remodeled into a Romanesque style church in 1836, the Free Street Baptist Church was substantially renovated in 1926 by John Calvin Stevens and John Howard Stevens for the Chamber of Commerce and became an essentially Colonial Revival style building. The building is a dignified two-story structure with four monumental concrete columns of the Doric order and 2 brick piers and 2 pilasters. There is a symmetrical façade under the fullwidth two-story porch. The upper windows have 8/8 sash capped by flush stone lintels. The ground floor has a doorway surmounted by a balcony on brackets with a replaced doorway of glass and aluminum. It is flanked by 10/10 sash topped by semi-circular

windows in elliptical keystone arches. In the flush board pediment is a bull's eye window. The frieze and cornice are boldly delineated. The roofline was free of any dormers, thus maintaining its temple shape, until renovated for the Children's Museum of Maine in the 1990s. The octagonal cupola and dormers were added at that time.

Noncontributing Building

A building is considered noncontributing when 1) it does not contribute generally to the qualities that give the historic district cultural, historic, architectural, or archaeological significance as embodied in the criteria for designating a historic district; 2) was built within 50 years of the date of district designation unless otherwise designated in the historic resources inventory; or 3) where the location, design, setting, materials, workmanship, and association have been so altered or have so deteriorated that the overall integrity of the site, structure, or object has been irretrievably lost. The building at 142 Free Street does not contribute generally to the qualities that give the Congress Street Historic District significance as embodied in the designation criteria. In addition, the design, materials, and workmanship have been so altered that the overall integrity of the structure has been irretrievably lost. While we believe the building at 142 Free Street meets two of the above categories, the Planning Board need only find that the building meets one of the above to be considered noncontributing.

In addition, Section 17.5.9 of the Code directs the Board to review proposed amendments to the District in accordance with the standards provided in Subsections 17.4.1(A) and (B) and Subsection 17.4.2. As reviewed against those standards, the building at 142 Free Street should be reclassified to noncontributing.

Section 17.4.1(A)

In reviewing the criteria for designation in Section 17.4.1(A), the building at 142 Free Street does not generally contribute to any of the criteria that would have given the Congress Street District its significance for listing. (1) The building is not a significant example of cultural, historic, architectural, archeological, or related aspect of the City, the State, New England region, or the United States. (2) The building's location is not a site of a significant historic or prehistoric event or activity which may have taken place within or which involved the use of any existing structure on the property. (3) The building does not identify with a person or persons who significantly contributed to the cultural, historic, architectural, archaeological, or related aspect of the development of the City of Portland, State of Maine, New England region, or the United States. (4) The building is not an exemplification of a significant architectural type, style, or design distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship. (5) The building does not identify as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States. Although the significant renovation of the building in 1926 for the Chamber of Commerce was the work of John Calvin Stevens and his son John Howard Stevens, the drawings for the renovations were not retained and the project is a renovation, not an original design by John Calvin Stevens, of which there are many examples of his work that are located in Portland. (6) Finally, the building does not

represent a significant cultural, historic, architectural, archaeological, or related theme expressed through distinctive areas, sites, structures, or objects that may or may not be contiguous.

Section 17.4.1(B)

In reviewing the criteria for designation in Section 17.4.1(B), there is no interrelationship between the building at 142 Free Street and other resources in the District. Therefore, the building at 142 Free Street does not meet this standard for designation.

Section 17.4.2

Due to the vast extent of renovations to the building both during and after the period of significance, the building lacks integrity of design, setting, materials, workmanship, and association to make it worthy of preservation or restoration, in accordance with Section 17.4.2 of the Code. Focusing only on the changes to the building since the 1926 Chamber of Commerce iteration, the following alterations to that version of the building by the Children's Museum are significant:

The integrity of the design has been significantly altered by the following:

- The form of the building is compromised by the addition of a highly visible dormer and cupola.
- Highly visible skylights were added.
- Fenestration (window locations) altered – east facade. One opening added, one filled in at upper floor. Basement openings heavily altered – filled in, added, one opening enlarged to door.
- Several of the original large wood windows have been removed and replaced with incompatible windows (fixed metal sash, flat muntins, different configuration).
- The extent entry doors are incompatible (design, material) replacements.
- The entrance walkway and stairs have been altered to create a poured-in-place concrete stair and handicap ramp which are not in character with any of the entrances on the previous iterations of the building.

The building setting lacks any historic integrity:

- The building is surrounded by parking lots and a ca. 1983 building (the Payson wing) that post-dates the District's Period of Significance.

The integrity of the materials has been significantly altered by the following:

- Large windows on the highly visible east facade are no longer wood.
- Basement windows, east facade are not wood.
- Front (main entry) doors, transom over same replaced with modern, metal doors.

- The building interior was gutted and an entirely new structural frame was installed when the Children's Museum renovation was undertaken. This included all new steel frame including the roof.

The integrity of the workmanship has been significantly altered by the following:

- Windows replaced, the modern windows do not replicate the original design.
- Primary entry door, transom over same door replaced – door, transom are metal and do not replicate original design.

The integrity of association has been significantly altered by the following:

- The cupola changes the formal *feel* of the building.
- The added dormer alters the roofline, a critical feature on this formal design.
- Incompatible replacement entry doors and windows on east facade are too modern for the building.

Based on the above analysis, we believe that a determination that the building at 142 Free Street is noncontributing to the Congress Street Historic District is supported by the provisions of the Land Use Code.

Precedent & Tax Credits

In addition to questions regarding the above analysis, two other issues were raised at the workshop that we would like to address. First, some Board members expressed concern with the Museum selling the property and thus allowing anyone to demolish the building and replace it with any approved building. In order to ensure the Board and the public that it is not the Museum's intention to ever sell the property or utilize it for any purpose other than the expansion, we propose the following condition:

> "Notwithstanding the building's classification as noncontributing, no demolition permit may be issued prior to the issuance of a building permit for an approved expansion of the Portland Museum of Art that includes demolition of the building at 142 Free Street. The demolition permit may be issued concurrently with the building permit for the expansion project."

We believe this condition is sufficient to allay any concerns.

Finally, there was concern expressed regarding whether changing the classification of the building from contributing to noncontributing would impact the certification of the Congress Street Historic District and thus impact the ability for owners of buildings within the District to obtain tax credits. We understand that City staff have been in contact with the National Park Service ("NPS") regarding this issue. As of the date of this letter, the staff has not received a response to their inquiry. However, we were able to have a conversation with NPS on this issue, which was enlightening and has led us to the conclusion that certification is not threatened by reclassifying a single building in the Congress Street Historic District.

According to NPS, the following regulation applies to amendments to certified historic districts:

> 36 CFR §67.9(i) State or local governments, as appropriate, shall notify the Secretary if a certified district designation is amended (including boundary changes) or repealed. If a certified district designation is amended, the duly authorized representative shall submit documentation describing the change(s) and, if the district has been increased in size, information on the new areas as outlined in § 67.9. A revised statement of significance for the district as a whole shall also be included to reflect any changes in overall significance as a result of the addition or deletion of areas. Review procedures shall follow those outlined in § 67.9 (d) and (e). The Secretary will withdraw certification of repealed or inappropriately amended certified district designations, thereby disqualifying them as registered historic districts.

NPS noted that "amend" is not defined in the regulation, but it could be that something is considered an amendment at the local level but would not be an amendment under the federal regulation. In the experience of the individual we spoke with at NPS, changing the classification of one building in a district has not previously been reviewed as an amendment to a district. Amendments that are reviewed by NPS are typically revisions to the period of significance or modifications to the boundaries of a district. It is questionable whether the City would even have to notify NPS of the change in classification of one building. In addition, an amendment does not automatically impact the certification. Rather, NPS will review the district as amended (if they determine it is in fact an amendment) to determine whether it still meets the standards for certification. We were unable to find any instance of a district being de-certified by NPS for reclassification of a single building to noncontributing.

We appreciate your time and consideration.

Sincerely,



Mary E. Costigan

simons architects
designed for human potential

PORTLAND MUSEUM OF ART

Planning Board Presentation: February 2024

INTRODUCTION

My name is Scott Simons. I am the founding principal of Simons Architects, a company that has practiced architecture in Portland for almost 30 years and designed some noteworthy buildings and renovations for our City, including the Portland Public Library, the Casco Bay Ferry Terminal, and the Waynflete School Theater and Lower School Buildings, among many others. We are working with the LEVER Architects team as Architects of Record and have been asked to present our thoughts about the Portland Museum of Art expansion project.

CONTEXT & HISTORY

Simons Architects has been working closely with the Museum for the past ten years on a number of projects. We developed the 2015 Campus Master Plan, completed several significant interior renovations projects, and prepared the 2022 Campus Framework Plan which set the stage for the Museum's "Art for All" Design Competition. We are intimately familiar with the programmatic and spatial requirements of the Museum as well as its plans and goals for their community gathering and art gallery spaces in the future.

During the 2015 Campus Master Plan process, Simons Architects and the Museum met with the City's planning staff and members of the historic preservation community to discuss the idea of removing the 142 Free Street building. At the time, there was discussion that there was a possibility the building could be removed. The federal tax credit program had not been put in place, and the conversation centered around the comprehensive plan and how the Museum expansion would be a benefit to the community that would outweigh the relative historic value of the existing 142 Free Street building. During our conversations, the only portion of the building that was considered to have significant historic value was the 1926 front facade, which was designed by John Calvin Stevens' office. In conversations with the City's planning staff regarding plans for the competition, the Museum was encouraged not to prescribe removal of the building one way or the other, to allow applicants full creative license and considerations for the context in their proposals.

PROGRAMMATIC CONSIDERATIONS

During the course of the 2022 Campus Plan and the Design Competition, the Museum articulated the specific requirements that would enable them to meet the goals of their Strategic Plan. Many of the existing spaces do not meet those needs, for example: for traveling shows, the Museum's largest gallery space is currently 4,500 SF with 10' high ceilings. To attract larger and more important exhibitions, a flexible gallery space of 8,000 SF is required, with ceilings at least 16' high. For lectures and presentations, the Museum's current auditorium can only seat 176 people. To accommodate the programs necessary to meet the needs of the community, an auditorium with over 250 seats is required. To meet the goals of their
"Art for All" initiative, community studios and gathering spaces are required. There are currently no spaces for these programs. The proposed expansion provides more than 2,000 SF of space at the very front of the building, right off Congress Square, to support these programs and encourage much wider community participation in the museum's programs.

QUESTIONS RAISED IN WORKSHOPS WITH THE HISTORIC PRESERVATION COMMITTEE

Since the Museum's front door and facade form the southern edge of Congress Square, the development of the PMA's community and art programs has alway had a direct relationship to the development of Congress Square and the Arts District. It is the Museum's goal to have the proposed expansion strengthen and enhance that relationship by bringing more inclusive and community programming, excitement, and business activity to Congress Square.

scott simons architects 75 york street portland, maine 04101 207.772.4656 simonsarchitects.com

simons architects
designed for human potential

One question has been asked repeatedly is why the 142 Free Street building cannot be renovated to accommodate the Museum's program requirements. In order to make this building work for the museum, all that would remain of the 1926 renovation would be the facade of the building. In 1992 when the building was renovated to house the Children's Museum, the entire interior structure and the roof of the building were removed. Over 50 tons of new steel structure were brought in to the support the Children's Museum program spaces. Almost nothing of the original 19th century building remained after that renovation, and what is there now is not in any way suitable for the Museum's requirements. It's floors are misaligned with the Payson wing's floors and are structurally inadequate (the Museum structure will require much greater lives loads to support their exhibitions and audiences). The Museum's program will not fit withinthe existing building as it exists, necessitationg extensive expansion both outward and upward, and it would require a significant amount of demolition of the site at the Free Street elevation, including the plinth, steps, and ramp at the front of the building to make the entrance and interior floor levels accessible.

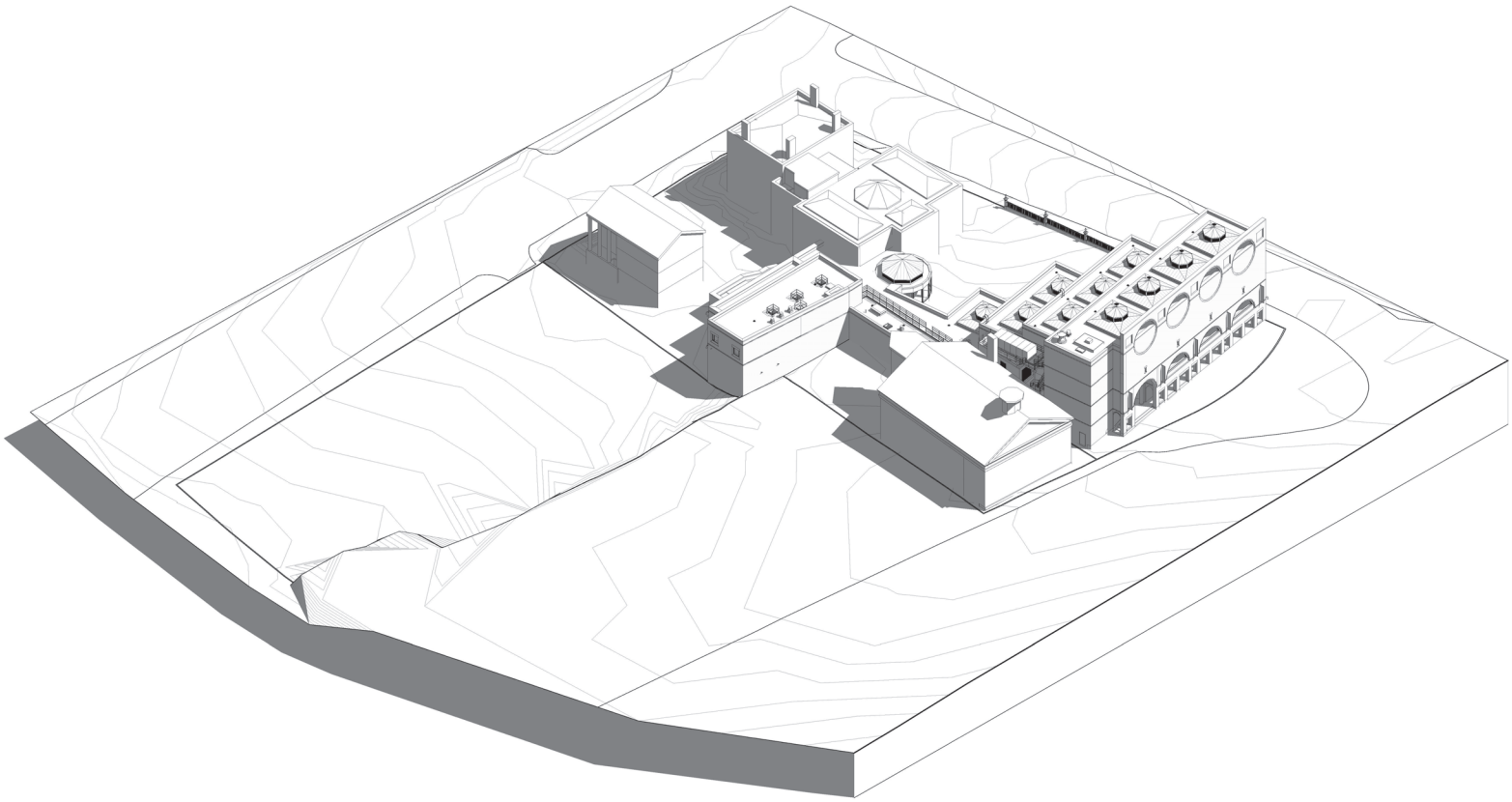
Another question raised was the suitability of the Museum's Spring Street property to accommodate their program requirements. Of primary importance to any museum is that the galleries and museum spaces be connected for both functional and environmental reasons. A museum expansion on Spring Street would not make any sense because it would not be connected to the primary galleries of the Payson Wing and would not contribute to the life Congress Square and the Arts District.

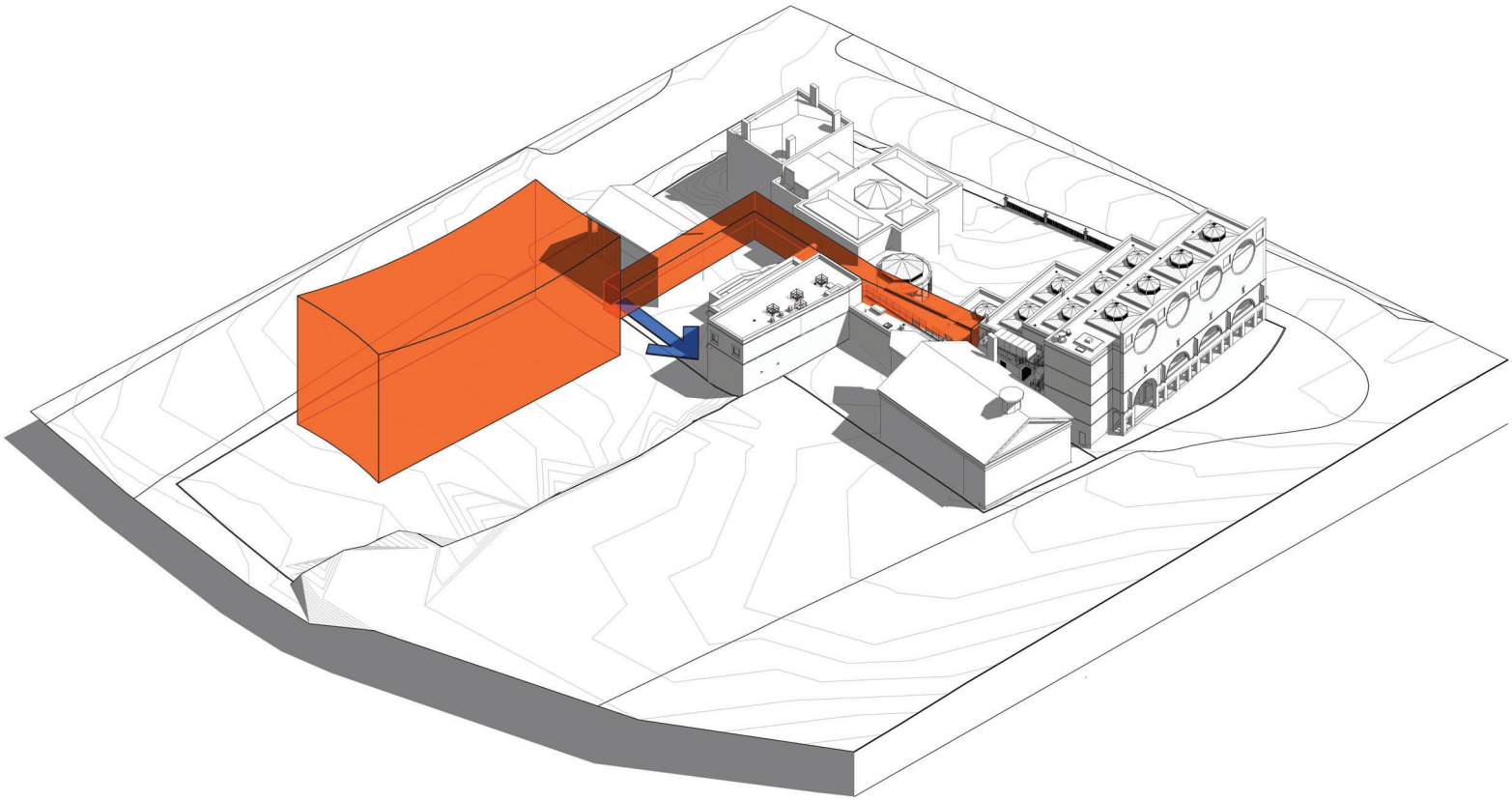
FOR YOUR CONSIDERATION
We feel a more meaningful approach would be to allow the Museum to remove the building and build their proposed expansion, but to honor the legacy and convey the history of the site with a Memorial timeline. This timeline would not start with the building of the Theater Building in 1830, but with the history of the site starting from before it was settled and developed in the 1600's.

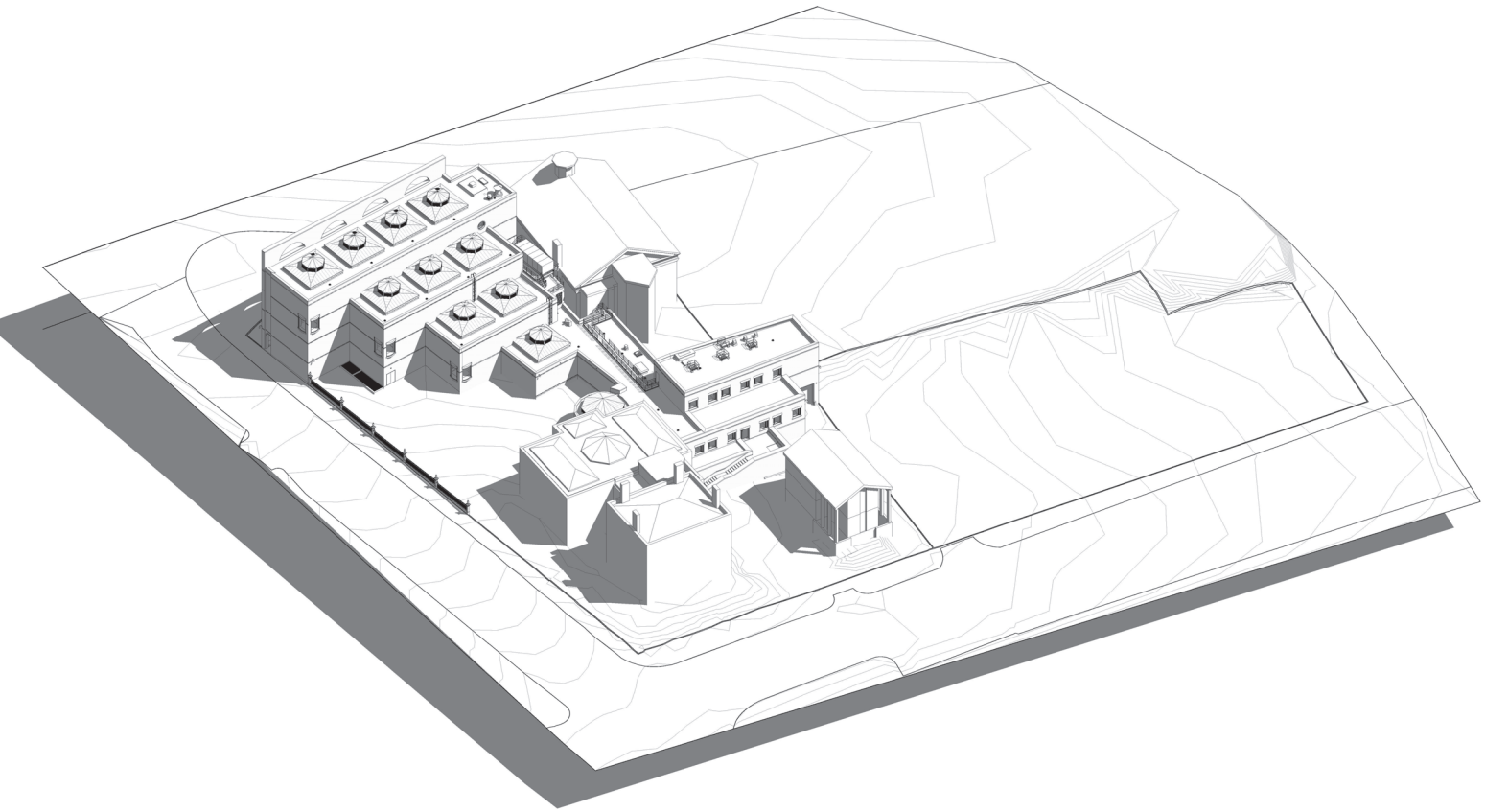
The Museum would design an exhibition that could be read and discovered as people entered the building, telling the story of the Wabanaki people and how they used the land, the early settlers of what is now Portland, the Great Fire of 1866, the history of the building that was originally built on this site, and how it has changed over its 100 year history, all of this inlaid into the polished concrete floor with bronze or stainless steel letters and drawings. We propose that the Footprint of the 142 Street building be made visible in all four of its iterations, making an even more compelling story and memory of the history of the site than the saving of the facade from one of the many changes to a building that does not speak to the time, place, and opportunity that is before us at this moment in history.

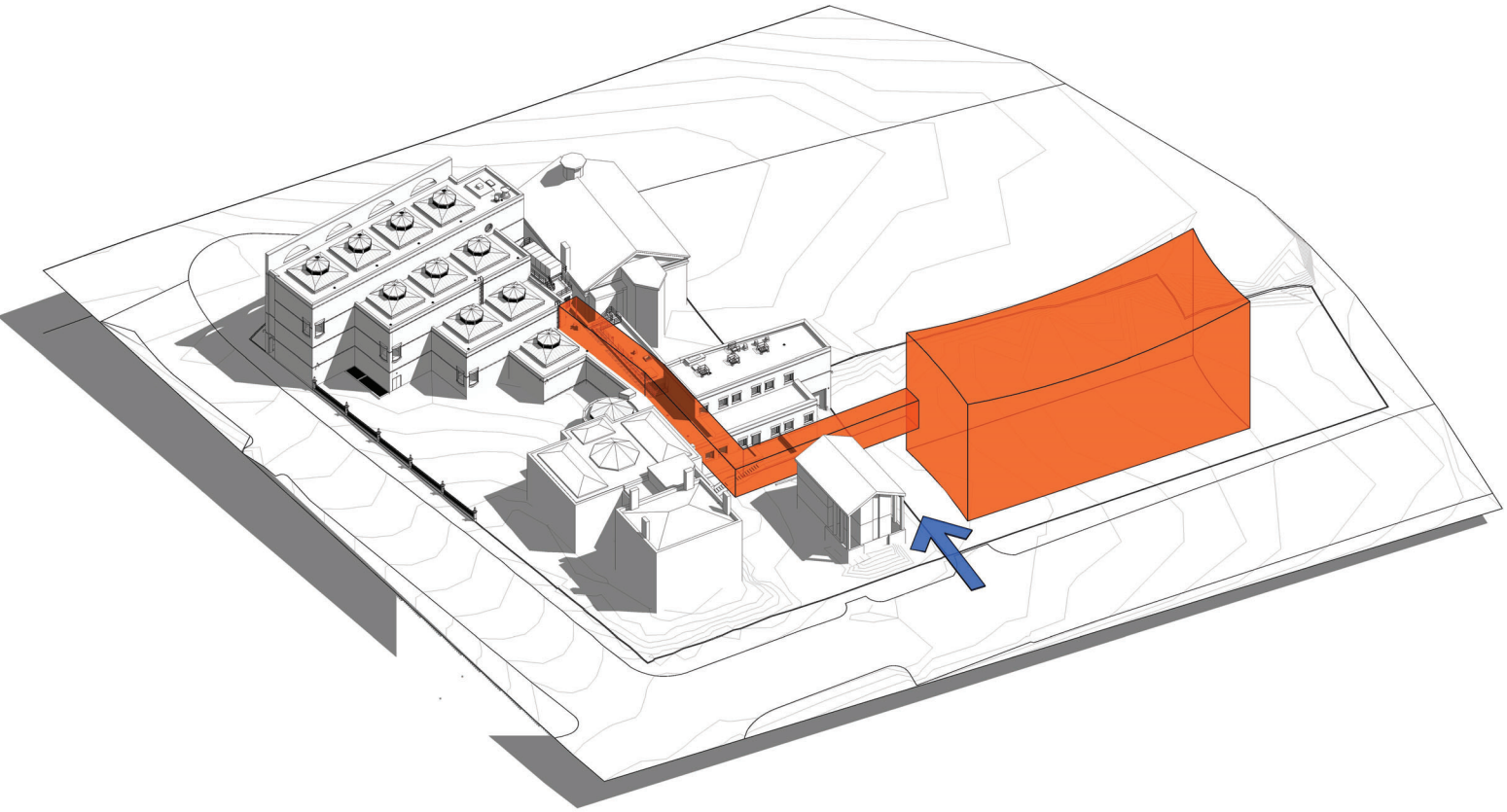
Cities and buildings are not static, they change with the times. This particular site has housed multiple functions over time and has adapted as the community's needs changed. The PMA's proposed expansion represents the next stage in next stage in the site's growth and development, one that will provide extraordinary benefits to the City and the history of Congress Square.

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CONGRESS STREET HISTORIC DISTRICT

Historic and Architectural Significance

Congress Street is Portland's "Main Street", the peninsula's primary east-west commercial and transportation axis. The richness and diversity of its architecture and public spaces, particularly along the section extending from Franklin Arterial to Bramhall Square, constitutes a unique record of Portland's residential and commercial development history.

Over the years Congress Street has been the location of choice for many of the city's most important business, religious, residential, civic and cultural buildings. For most of the past two centuries it has been seen as Maine's most sophisticated urban area, where one could witness what was new and most exciting. Although Congress Street has always welcomed change, it has also retained key reminders of earlier chapters in its history. For example, the Wadsworth-Longfellow House, one of the nation's oldest historic house museums, continues to stand alongside the newer department stores and office towers of subsequent eras. This eclecticism and layering of historical periods is the essence of the district's character and what makes it unique among Portland's historic districts, which generally have a more limited "period of significance." In the Congress Street district it is possible to read the long history of the Portland's development in the buildings that line the street.

Boundaries

The Congress Street Historic District is focused on Congress Street itself, between Bramhall Square and Franklin Street, but also includes abutting streets that collectively make up Portland's traditional "downtown." At its western end, beyond High Street, the district is bordered on the north and south by the Deering Street Historic District and the West Ed Historic District. East of High Street the northerly boundary of the district is the south side of Cumberland Avenue. The southern boundary runs from High Street along Spring Street to Temple Street. It turns northerly along Temple, and then easterly along Federal Street to Franklin.

History

If there is one word that characterizes the history and development of Congress Street, it is *change*. From the street's beginnings as an access road for farmers bringing their goods to market, to its development first into a prestigious residential neighborhood and then into Portland's commercial and cultural center, the character and role of Congress Street have changed repeatedly.

Colonial Falmouth Neck ("Portland" after 1786) began as a series of wharves connected by muddy lanes. Most travel and transport to and from the town was by sea and the principal street, India Street (originally called Broad Street, then King Street), stretching back from the waterfront, was lined with clusters of homes and businesses. Eventually an access road

intersecting the top of India Street was extended to reach the mainland at the west end of the peninsula, and the agricultural towns developing inland. Originally called Back Street or Queen Street, it was known as congress Street by 1823. Most people probably knew it simply as "the road that leads out of town." Its most prominent early structures were the First Parish Meeting House (1740, replaced by the current structure in 1825-26) and the hay scales at Market Square (renamed Monument Square in 1892). Up through the Revolutionary War period, Back Street was considered the edge of town.

In the reconstruction of the town following Independence (it had been burned by British naval forces in 1775), Congress Street began to be more actively developed. Market Square was a commercial hub where farm products destined for residents of the booming port were bought and sold. Residential fashion, however, triggered Congress Street's development to the west, a movement that continued until the 20th century. One of the first private homes to rise after the Revolution was the elegant Wadsworth-Longfellow House (1785-85), now the only remaining example of a single-family residence on this downtown section of Congress Street. By 1800, leading merchants, ship's captains and other business leaders had begun to commission Federal style homes in the area of Congress Square, High and State Streets. This area continued as the city's fashionable residential neighborhood up to the time of statehood (1820) and beyond.

After the War of 1812, as Portland began to recover commercial vitality, it sought political power as well. From 1820 to 1832 Portland served as the capital of the new State of Maine. The State House and County Court House were located on the site of the current City Hall, lending new importance to Congress Street. In 1825 a Town Hall with Market House on the lower level was built in Market Square. It was renovated in the Greek Revival style, with columned portico, in 1833, after Portland was incorporated as a city. It served as City Hall until 1858 and continued as a public market until being removed for the Civil War memorial statue in the late 19the century. Its neighbors included a museum of curiosities, a tavern, a hotel and numerous stores.

Stores moved westward more slowly than did fashionable homes. The Charles Q. Clapp Block (H.H. Hay Building) appeared on Congress Square in 1826, but stores and shops were still outnumbered by churches in the vicinity of the Square. Historian Edward H. Elwell, in the 19th century, called the Square a "sort of Zion's Hill," being surrounded by nearly a half-dozen churches built between 1831 and the Civil War.

Up through the 1860s "mixed-use" characterized most of the area, except around Monument Square with its large commercial properties. The Great Fire of 1866 did not touch Congress Street west of Temple Street, although City Hall and the eastern reaches of the street to the base of Munjoy Hill were destroyed. In 1866 a hotel was built near the head of Forest Avenue, the first of many built in the area over the following century, moving away from the location of earlier hotels near Market Square. During the next three decades, the area between Market (Monument) Square and Congress Square began to fill in with notable buildings, such as the

lavish Queen Anne style J.B. Brown Memorial Block, the Baxter Building, and the congress Square Hotel. After the Great Fire the lower blocks of Free Street were rebuilt in Victorian styles consistent with the new buildings in the adjoining Exchange Street area. At the intersection of Free and Middle Streets the Lower H.H. Hay Building was built as a "flatiron" building like the Upper H.H. Hay Building at congress Square, creating unique "bookends" for the blocks between.

Street cars ran throughout the city, extending the size and capabilities of the downtown (which still very much included the Exchange Street and waterfront areas.) The intersection of Middle, Federal, and Congress Streets at Market Square made the square a pivotal location where traffic flowed to and from the Exchange Street area and the waterfront (this dynamic connection was lost when the 1970's Maine Way project redesigned Monument Square as a pedestrian only space and eliminated the upper section of Middle Street). East of Market Square, the Victorian style City hall occupied a block of Congress Street and was rebuilt on the same site after the 1866 fire. At the same time, the burned-over block b9und by Congress, Franklin, Pearl and Federal Streets became Portland's first downtown public green space, Lincoln Park. Over time, it came to be faced with imposing public buildings and churches.

From the 1880s, the section west of Congress Square began to change with the construction of ambitious new civic and commercial structures, often replacing earlier residences. A number of residences which had been built back from the street had new commercial storefronts added up to the sidewalk, the upper floors typically converted to apartments. The elegant Romanesque Revival Portland Public Library was built in 1888, followed by the 1895 Columbia Hotel and the Lafayette Hotel of 1903. Continuing the trend begun in the early 19th century, residential development continued west as it was replaced with commercial development in the expanding downtown. West of Longfellow Square, blocks of substantial single-family residences were constructed along Congress Street, many designed by the city's leading architects.

At the turn of the century, Portland was a prosperous commercial city with a growing tourist trade. Congress Street reflected what was new in the world and, after yet another fire, in 1909, the City hired one of the nation's leading architectural firms to design a new City Hall in the fashionable Beaux Arts style. The stretch of Congress Street between Monument and Congress Squares became noted for its fashionable shops and large department stores. In 1910, a new era arrived when the Fidelity Trust Company erected the city's first skyscraper at Monument Square. The 1920s roared up Congress Street as electric trolleys and increasing number of automobiles brought visitors to the compact downtown that included restaurants, theaters, department stores, movie houses, an historical society and an art museum. Art Deco style arrived in downtown with the construction of the second AT & T Building on Forest Avenue and several smaller structures in the style. Large multi-story apartment buildings were constructed on many of the side streets off Congress Street, reflecting a new style of urban living. By then the Exchange Street area was eclipsed by Congress Street as the business center of the city and what is now known as the Old Port began to decline. By 1930, new downtown structures like the

Schwartz, congress (State Theater) and Chapman (Time and Temperature) Buildings – as well as the new Eastland Hotel – had established the shape of the street for the next forty years.

The Great Depression largely halted new construction and the following economic boom of World War II concentrated resources on the construction of ships and war materials rather than buildings. After the war, two new five-and-dime stores appeared, on in Colonial Revival style and the other Art Deco, but, in the face of developing suburban shopping centers, the downtown began to languish. When attempts were made to retain or attract business, money was spent on renovating and revamping storefronts to appear "modern" with new materials, many of which did not match the quality of the original construction and have not aged well. Most businesses renovated only the first floor, the area most readily seen by the passing pedestrian or motorist. Reflecting the post-war embrace of "the latest thing" a delayed reaction to the economic constraints of the Depression, and clearly feeling the competition from the new suburban shopping centers, businesses attempted to replace the "dowdy" image of the traditional "Main Street" with the image of the suburban shopping center itself. It ws during this period that the upper story space along much of Congress Street became vacant or underutilized. A number of the large homes between Longfellow Square and Bramhall Square were raised and replaced with gas stations, others were converted to commercial uses or divided into apartments.

It was not until the 1970's that Portland's economic stagnation began a long slow path to recovery. With the availability of Federal "Urban Renewal" money, the ambitious Maine Way public infrastructure program signaled a new interest in and concern about downtown by city leaders. In 1969, Casco Bank constructed a new skyscraper for its headquarters at Monument Square, soon to be a newly redesigned public space. This ushered in a phase of dramatic large scale new construction, not seen since the 1920s. It came to include such structures as Maine Savings Plaza (1974), the Cumberland County Civic Center (1977), the international style Portland Public Library (1979), and the new Post Modern style wing of the Portland Museum of Art (1982-83). At the same time historic commercial buildings such as the Congress Square Hotel and the Upper H.H. Hay Building were rehabilitated for new uses. A "notorious" donut shop at congress Square was cleared to make way for a new public plaza.
A primary focus of "Urban Renewal" projects nationwide was to increase the accessibility of older city centers to automobiles. Unfortunately, this often involved the wholesale clearance of built up historic areas for new arterials and surface parking areas. Portland did not escape these negative effects of this infusion of federal money. While Congress Street itself was largely spared, many of the surrounding blocks were cleared. Oak Street, Shepley Street, Preble Street, Cumberland Avenue, Brown Street and Free Street all saw large blocks of buildings cleared for parking, often leaving large paved open spaces surrounded by significant Landmark structures.

Through the 1980s the growth of the Maine Mall area in South Portland and the revival of the Old Port district contributed to the continued decline of Congress Street as a shopping destination. By the early 1990s the last downtown department store, Porteous, Mitchell &

Braun, closed and much of the storefront space along Congress Street was vacant. The development of suburban office space had also had a negative effect on downtown by this point, with increasing vacancy rates in office buildings on Congress Street. This was probably the lowest point for downtown Congress Street in terms of economic viability.

As the national economy improved in the 1990s, downtown Portland turned a corner and began to recover. Previous economic recovery of the Old Port district, based largely on its historic character, and the "rediscovery" of Portland's wealth of wonderful historic homes had stabilized the population and created an atmosphere encouraging investment in Portland. As property prices reached record level in the Old Port investors began to look toward downtown. The J.B. Brown Memorial Block and the Lafayette Hotel, two large and highly visible historic structures, were rehabilitated under the federal historic tax credit program. The State Theater, the last of what was once a long list of downtown "Movie palaces," was reclaimed from its use as a pornographic theater and restored. The Maine College of Art purchased the Porteous department store building and began rehabilitation of it as a new main building for the school, continuing a move to congress Street they had begun with the purchase of the former Portland Public Library in 1979. The Children's Museum of Maine moved next to the new wing of the Portland Museum of Art at Congress Square, into a building that had once been one of Elwell's "Zion's Hill" churches.

A significant contributor to the recovery was philanthropist Elizabeth Noyce, who purchased and renovated a number of large downtown properties. Her investments lead to increased office building occupancy, the opening of a new L.L. Bean store as a retail anchor on Congress Street, and the creation of the Portland Public Market. The City of Portland addressed issues of damaged and dated street lighting and street furniture with the phased installation of attractive new fixtures and worked proactively to attract businesses to Congress Street.

In the early years of the 21st century, congress Street and downtown Portland entered into a new period of prosperity, with the first significant new development pressures since the 1970s. For the first time since World War II, the upper floors of Congress Street buildings began to be renovated, particularly for residential use. West of Longfellow Square, a large new multi-story residential building, Walker Terrace, replaced one of the gas stations, restoring the street wall and residential usage to that block. The "Bernie's Fashion" building at the heart of downtown with an undistinguished and deteriorated post-war façade was replaced with a striking contemporary structure. Using the federal tax credit program for rehabilitation of historic structures, the Maine College of Art converted the former Everett Hotel on Oak Street into student housing.

Today the Congress Street area is still evolving, with many underutilized sites available for it to continue its historic role as a showplace for new and exciting architecture. The lessons of the past 40 years – the negative consequences of "Urban Renewal" as well as the positive

consequences of historic preservation efforts in other sections of the city – strongly suggest that the district's important historic resources, something the competing suburban shopping and office developments can never offer, be protected with review of exterior alterations to historic buildings and review of new construction for compatibility with its surrounding context. This is the only way to ensure that future generations will experience the many layers and periods of development in Maine's most urban area.

Visual Character

The visual character of the district is rich and varied. Unlike several other historic districts in Portland, which were largely constructed within a limited "period of significance," the character of the Congress Street District is one of layered historical development over time. This results in an area with a delightful mix of historical architectural styles from 18th century Colonial and 19th century Federal to 20th century international and 21st century Post Modern styles, with examples of nearly every significant style of residential, commercial and civic architecture in between. This diversity of styles has been part of the area's visual character since early in its history and (with a number of large underutilized lots within its boundaries) its continuation into the future is likely.

Represented in the district are the works of many prominent architects from the early 19th through the 20th centuries. Maine architects and architectural firms that have contributed to the street include Charles Quincy Clapp, Francis H. Fassett, Frederick A. Thompson, John Calvin Stevens, George Burnham, John P. Thomas, Miller & Mayo and Orcutt Associates. Noteworthy regional and national firms whose work is represented on the street include Densmore, LeClear & Robbins and Shepley, Bulfinch, Richardson & Abbott of Boston and Richard Morris Hunt, Carrere & Hastings and I.M. Pei & Partners of New York.

In addition to the wide variety of styles found within the district, the scale of development varies significantly as well, from the three-story Wadsworth Longfellow House to the ten story Fidelity Building only a few yards away. Generally, however, the Congress Street Historic District exhibits a greater concentration of tall buildings than the Portland Waterfront Historic District, creating an urban environment reminiscent of much larger cities and almost unique in the State of Maine.

Within the variety of styles and periods of architecture represented with the district, there are several common urban design characteristics that serve to unify the area. First, with few exceptions, the structures that line Congress are built up to the street, creating a strong street wall and sense of enclosure. Second, the best buildings on the street – those identified as landmarks and contributing structures – all exhibit high quality materials and a high level of craftsmanship. Third, the majority of the commercial structures, particularly those built during the 19th and early 20th century, share a basic visual organization with an identifiable base (storefront level), middle (upper façade) and top (terminating cornice.) Within the storefront zone itself, there is also a typical design formula with low bulkheads, large display windows,

transom windows, and recessed entries. The beauty of this design formula is that it is flexible enough to accommodate a wide variety of architectural styles, materials and details while at the same time providing a level of consistency that unifies the streetscape.

Today, a number of the commercial structures within the district exhibit a rather schizophrenic appearance. Although the upper facades on these buildings remain in remarkably original condition, the storefronts are the produce of numerous layers of "modernization." All too often the storefront remodeling did not take into account the materials, architectural proportions or basic organization of the upper floors and, as a result, any architectural relationship that once existed between the two zones has become severed. Because the ground floor is what attracts most attention from the casual observer, it is often difficult to see beyond the unfortunate remuddling and appreciate the beauty or value of the building. Through the historic preservation review process, there is an opportunity to restore lost stylistic relationships and character by returning to the original design formula and vocabulary of these compromised structure.

While most of the commercial buildings within the district boundaries are architecturally notable, and therefore worthy of preservation, a few structures could be candidates for future remodeling or replacement. These are ranked as "Non-Contributing" buildings in the Historic Resources Inventory. "Non-Contributing" buildings generally fall into three categories: a) structures that clearly have no architectural merit; or b) once-notable historic structures that have been so fundamentally altered to make restoration infeasible (The Baxter Memorial Building at 562 Congress is one example), or buildings less than fifty years old (with a few notable exceptions whose architectural and cultural importance is widely recognized.)

Civic and institutional buildings also contribute to the character of the district. Although only one of the nearly dozen church buildings which have existed in the districts is still in use as a church, two others remain in altered form and one is intact, awaiting a new use. Numerous nearby church steeples are visible from within the district, as reminders of a time when steeples were the highest structures in the city. Municipal buildings include the Beaux Arts style City Hall and Merrill Auditorium, Portland High School, Portland Public Library and fire stations from several periods. Across Lincoln Park from Congress Street, the Cumberland County and Federal Courthouses contribute to the character of the Congress Street Historic District although they are just outside it, in the Portland Waterfront Historic District. Institutional structures include the several buildings at the Portland Museum of Art, the Wadsworth-Longfellow House and Maine Historical Society, the Neal Dow House Museum, the Masonic Temple, Hold Hall/Maine Eye and Ear Infirmary, and the original Mercy Hospital at Longfellow Square (the last two converted to residential use).

Also contributing greatly to the visual character of the district are the public squares and parks that are spaced along the length of Congress Street. These include Lincoln Park, Monument

Square, Congress Square and Bramhall Square. These parks and plazas are intentional breaks in the prevailing streetwall and provide welcome breathing room within the otherwise densely developed downtown area. Important pieces of public art within the district include the Firemen Statue (Central Fire Station). The Soldier and Sailors Monument/Or Lady of Victories statue (Monument Square), The Little Water Girl statue (Portland Public Library), Henry Wadsworth Longfellow statue (Longfellow Square), "Michael" sculpture (City Center), the Stanley Pullen Memorial Fountain (Federal Street) and the Lincoln Park fountain.

Less apparent to the casual viewer, but crucial to understanding the development of the downtown district, is the residential character along sections of Congress Street within the district. A wide range of residential p5roperties are located within the district. The single-family Wadsworth-Longfellow House, just west of Monument Square, represents a once common form of residential development now otherwise completely replaced with later development in the heart of downtown. In several locations, on Free Street and Congress Street, early 19th century Federal and Greek Revival row houses are still visible, with later commercial storefront additions or alterations at the street level. Between Congress Square and Longfellow Square the same pattern is seen with Italianate houses from the middle of the 19th century. Closer to, and beyond, Longfellow Square residences in Second Empire, Queen Anne, Romanesque Revival and other styles of the late 19th' century are apparent with later alterations to convert them to commercial or institutional use. Another development in the evolution of the district and urban residential living is represented by the large early 20th century apartment buildings on Congress Street and on side streets between Congress and Cumberland Avenue. Several large late-Victorian era hotels have also been converted to residential apartments.

The Congress Street Historic District was locally designated in 2009 and received National Park Service certification of 2019.

Portland Historic Resources Inventory

Property Address: 142 Free Street – Children's Museum of Maine

CSHD Map Key #119

District: Congress Street

Local Rating: Contributing

National Register: Contributing – Spring Street Historic District

Date of Placement: Local 4/15/09 National 04/03/70

Architectural Description/Historic Significance:

Free Street Baptist Church (1830-1926)
Portland Chamber of Commerce Building (1926 – 1993)

1830 (theater), 1836 (renovated as church), 1926 (renovated to present form)

Originally built as a theater in 1830 and remodeled into a Romanesque style church in 1836, the Free Street Baptist Church was substantially renovated in 1926 by John Calvin Stevens and John Howard Stevens for the Chamber of Commerce and became an essentially Colonial Revival style building. The building is a dignified two-story structure with four monumental concrete columns of the Doric order and 2 brick piers and 2 pilasters. There is a symmetrical façade under the full-width two-story porch. The upper windows have 8/8 sash capped by flush stone lintels. The ground floor has a doorway surmounted by a balcony on brackets with a replaced doorway of glass and aluminum. It is flanked by 10/10 sash topped by semi-circular windows in elliptical keystone arches. In the flush board pediment is a bull's eye window. The frieze and cornice are boldly delineated. The roofline was free of any dormers, thus maintaining its temple shape, until renovated for the Children's Museum of Maine in the 1990s. The octagonal cupola and dormers were added at that time.


CHILDREN'S MUSEUM OF MAINE

17 HISTORIC PRESERVATION

17.1 PURPOSE

The purpose of this article is to promote the educational, cultural, economic, and general welfare of the City of Portland by:

A. Creating a mechanism to identify, preserve and enhance distinctive areas, sites, structures, and objects that have historic, cultural, architectural, and archaeological significance.

B. Providing a resource of information and expertise to help those interested in rehabilitation or new construction in a district or restoring a landmark.

C. Applying review standards in a reasonable and flexible manner to prevent the unnecessary loss of the community's historical features and to ensure compatible new construction and rehabilitation in historic districts while not stifling change and development or forcing modern recreations of historic styles.

D. Fostering civic pride in the city's history and development patterns as represented in such distinctive areas, sites, structures, and objects.

E. Protecting and enhancing neighborhood character.

F. Stabilizing and improving the values of designated properties and areas.

G. Protecting and enhancing the attractiveness of the city to its home buyers, home owners, residents, tourists, visitors, businesses and shoppers.

H. Fostering and encouraging preservation, restoration, and rehabilitation that respects the historic, cultural, architectural, and archaeological significance of distinctive areas, sites, structures, and objects.

17.2 DEFINITIONS

Alteration. Any act or process requiring a building permit and any other act or process not requiring a building permit but specifically listed in this article as a reviewable action, including without limitation the repair, reconstruction, demolition, or relocation of any structure or object, or any part of a structure or object.

Certificate of Appropriateness. A certificate issued by the Planning Authority evidencing approval of specific plans for alteration of a structure, site, or designated historic landscape or new construction on a site in accordance with this article.

Certificate of Economic Hardship. A certificate issued by the Planning Authority evidencing a hardship variance approved by the Zoning Board of Appeals in accordance with Article 2.

Certificate of Non-Applicability. A certificate issued by the Planning Authority evidencing a determination that specific plans for alteration of a structure, site, or designated historic landscape or new construction on a site do not require approval under this Article.

Contributing. A classification applied to a site, structure, or object within a historic district signifying that it contributes generally to the qualities that give the historic district cultural, historic, architectural, or archaeological significance as embodied in the criteria for designating a historic district.

Demolition. Any act or process that partially or totally destroys a structure or object.

District. A historic district or historic landscape district.

Historic district. A geographically definable area possessing a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or by past events or aesthetically by plan or physical development. A district may also comprise individual elements separated geographically but linked by association or history.

Historic landscape district. A geographically definable area possessing a significant concentration, linkage, or continuity of landscape components which are united by human use and past events or aesthetically by design, plan or physical development.

Historic Resources Design Manual. A manual including guidelines for meeting historic preservation ordinance review standards and other information.

Landmark. Any property, site, structure, or object of particular historic, architectural, or archaeological significance to Portland, the State of Maine and/or the United States relating to its cultural, social, economic, political, or architectural heritage, or which is associated with historic persons, important events or themes in local, state, or national history.

New construction. The adding to a structure by an addition, the erection or placement of any new structure on a lot or property, or the comprehensive redesign/renovation of an existing structure.

Noncontributing. A classification applied to a site, structure, object, or portion thereof, within a historic district signifying that: 1) it does not contribute generally to the qualities that give the historic district cultural, historic, architectural, or archaeological significance as embodied in the criteria for designating a historic district; 2) was built within 50 years of the date of district designation unless otherwise designated in the historic resources inventory; or 3) where the location, design, setting, materials, workmanship, and association have been so altered or have so deteriorated that the overall integrity of the site, structure, or object has been irretrievably lost. A portion of an otherwise contributing or landmark structure may be determined by the Historic Preservation Board to be non-contributing if it meets one or more of the above conditions.

Object. Anything constructed, fabricated, or created, the use of which does not require permanent or semi-permanent location on or in the ground.

Ordinary maintenance. Acts of maintenance or repair which do not include a change in the design, material, or outer appearance of a structure, including without limitation repainting, replacement of materials or windows of the same scale, texture and color, and landscaping other than within an historic landscape district.

Preservation. The act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property. Work, including preliminary measures to protect and stabilize the property, generally focuses upon the ongoing maintenance and repair of historic

materials and features rather than the extensive replacement and new construction.

Rehabilitation. The act or process of returning a property to a state of utility through repair or alteration which makes possible an efficient contemporary use while preserving those portions or features of the property which are significant to its historical, architectural, and cultural value.

Relocation. Any removal or relocation of a structure on its site or to another site.

Restoration. The act or process of accurately depicting the form, features, and character of the property as it appeared at a particular period of time by means of the removal of features from other period in its history and reconstruction of missing features from the restoration period.

Site. The location of a significant event, an archaeological site, a landscape or traditional cultural property, or a building or structure, whether standing, ruined or vanished, where the location itself maintains historical or archaeological value regardless of the value of any existing structure.

17.3 ADMINISTRATIVE PROCEDURES

17.3.1 Costs

A. Any project may be subject to fees as established by the City Council to cover administrative costs and the costs of Historic Preservation Board review. Applicants shall also pay a fee to cover the professional and administrative costs for analysis associated with project review, including but not limited to planning, legal, or other services. The fee shall be based on the hours of review and processing time and prevailing hourly rate for reimbursement of City costs. The City shall periodically invoice the applicant for such costs incurred by the City, which invoice shall be paid promptly by the applicant.

B. Every applicant shall bear the entire expense of giving notice by mail and publication in accordance with this article.

C. No Certificate of Appropriateness, building, demolition, or other permit shall issue until all current charges due under this article have been paid. The balance of any remaining review and administrative costs invoiced or incurred after a permit has been issued shall be paid in full by the developer prior the issuance of any temporary or permanent certificate of occupancy.

17.3.2 Notice of public meeting

A. For all Certificate of Appropriateness applications that are subject to Historic Preservation Board review, the applicant shall be responsible for posting a notice of public meeting sign on the property where the development is to occur. The dimensions, construction, and content of the sign shall be in accordance with standards established by the Planning Authority.

B. The sign shall be posted at least 10 days prior to the public workshop or hearing date, and shall be removed from the site no more than three days following the date of the meeting.

C. Once the required notice of public meeting signage is posted, the applicant shall submit a completed certification of posting form to the Planning Authority.

D. In the event that a required notice of public meeting sign is knocked over or made illegible, it shall be the responsibility of the applicant to promptly reset or replace the sign, though failure to do so shall not invalidate the review.

17.3.3 Notices and public comment

A. Except as provided in Subsection 17.7.5, notice of proceedings upon any application for a Certificate of Appropriateness shall be given only when the proposed activity otherwise constitutes major site plan. Notice of such proceedings also shall be furnished to any persons interested in historic preservation who have registered with the Planning Authority, and to the Historic Preservation Board and/or the Planning Board when the proceeding is pending before a different body. The failure to give any notice required by this article shall not affect the validity of any action taken.

B. The Historic Preservation Board, the Planning Board, the Board of Appeals, and the City Council shall each invite public comment at a public meeting in accordance with their respective rules, prior to any final action being taken under this article.

C. The Planning Authority shall advise the Historic Preservation Board and the Planning Board of any demolition permit application received by the Planning Authority as to structures or objects that have been classified as noncontributing within nominated or designated districts, but there shall be no Historic Preservation Board review of such permit applications.

17.4 CATEGORIES AND CRITERIA FOR DESIGNATION

17.4.1 Minimum criteria for designation

A. The Historic Preservation Board shall limit its consideration to the following criteria in making a determination on a proposed nomination of an area, site, structure, or object for designation by ordinance as a landmark or district:

1. Its value as a significant example of the cultural, historic, architectural, archaeological, or related aspect of the heritage of the City of Portland, State of Maine, New England region, or the United States.
2. Its location as a site of a significant historic or prehistoric event or activity which may have taken place within or which involved the use of any existing structure on the property.
3. Its identification with a person or persons who significantly contributed to the cultural, historic, architectural, archaeological, or related aspect of the development of the City of Portland, State of Maine, New England region, or the United States.
4. Its exemplification of a significant architectural type, style, or design distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.
5. Its identification as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States.

6. Its representation of a significant cultural, historic, architectural, archaeological, or related theme expressed through distinctive areas, sites, structures, or objects that may or may not be contiguous.

B. In the case of a nominated historic district, the Historic Preservation Board shall also determine whether there is an interrelationship of resources within it which creates an identifiable entity, even if composed of a wide variety of resources. A district must convey a visual sense of the overall historic environment or be a grouping of historically or functionally related properties. A historic district can comprise both individually distinctive historic resources and historic resources that may lack individual distinction but which contribute to the significance and visual character of the district as a whole.

C. In the case of a nominated historic landscape district, the Historic Preservation Board shall also consider its significance as a geological, natural, or designed landscape associated with the development, heritage, or culture of the City of Portland, State of Maine, New England region, or the United States.

D. The Planning Board and City Council shall apply the criteria of (A), (B), and (C) above as well as historic preservation goals included in the Comprehensive Plan, but shall also consider the effect of such designation on other aspects of the Comprehensive Plan of the City.

17.4.2 Integrity of landmarks and historic districts

Any area, structure, or object that meets the criteria in Section 17.4.1 must also have sufficient integrity of location, design, condition, materials, and workmanship to make it worthy of preservation or restoration.

17.4.3 Designation of historic landscape districts

An historic landscape district may be nominated and considered for designation only if the entire area of the district is owned by a unit of federal, state, or local government, or any combination of such ownership.

17.5 NOMINATION, CONSIDERATION AND DESIGNATION

17.5.1 Procedure

The provisions of this section shall govern the nomination, consideration, and designation of landmarks and districts.

17.5.2 Initiation of nomination

A. Nomination of an area, site, structure, or object for consideration of designation as a landmark, historic district, or historic landscape district shall be submitted to the Planning Authority by the following:

1. Any two members of the Historic Preservation Board on their own initiative, by written notice to the Planning Authority, or
2. By written petition of any owner, in the case of a landmark, or
3. By written petition of one or more owners of affected property in the case of a district, provided two members of the Historic Preservation Board must sponsor the petition.

B. A nomination shall be completed and filed with the Planning Authority with all required signatures for the nomination to be pending.

C. Upon nomination, the Planning Authority shall notify the owner or owners of the nomination and shall transmit the nomination to the Historic Preservation Board for its preliminary consideration at a scheduled meeting, which in no event shall be held later than 60 days following nomination.

D. If documentation and analysis that is necessary for the consideration of a given designation has not been provided at the time of nomination, such documentation shall be completed prior to further consideration by the Historic Preservation Board of the nominated landmark, district, or historic landscape.

E. At any time after a complete nomination is filed for an historic district, the owner of a structure who seeks a permit for demolition may apply to the Historic Preservation Board for a determination that the structure to be demolished is noncontributing and eligible for a demolition permit. The determination of the Historic Preservation Board that the structure is eligible for a permit shall be conclusive.

17.5.3 Notification of nomination and public hearing

A. A public hearing on the nomination shall be held by the Historic Preservation Board following one or more preliminary workshops of the Historic Preservation Board.

B. The hearing shall be conducted in accordance with procedures adopted by the Historic Preservation Board. The Historic Preservation Board shall consider all testimony or evidence relating to the designation criteria in Section 17.4 from any person who makes written submissions or appears at the public hearing. The owner of a nominated landmark or of property within a nominated district shall be allowed reasonable opportunity to present testimony or evidence concerning the applicability of the designation criteria in Section 17.4.

17.5.4 Recommendation by Historic Preservation Board

A. Within 45 days following the close of the public hearing, the Historic Preservation Board shall make recommendation to the City Council in the case of a landmark, or to the Planning Board in the case of a district, upon the evidence as to whether the nominated landmark or district meets the criteria for designation in Section 17.4. Such recommendation shall be approved by at least four members of the Historic Preservation Board and shall be accompanied by a report to the City Council and/or Planning Board containing the following information:

1. Explanation of the significance or lack of significance of the nominated landmark or district as it relates to the criteria for designation.
2. Explanation of the integrity or lack of integrity of a nominated landmark or historic district.
3. Proposed design guidelines for review of alteration or construction may be recommended. The specific design guidelines may provide explanation by text and/or schematic examples of visual compatibility for purposes of complying with Section 17.8.
4. Relationship of the nominated landmark or district to the ongoing effort by the Historic Preservation Board to identify and

nominate areas, sites, structures, and objects that meet the criteria for designation.

5. A map showing the location of the nominated landmark and/or the boundaries of the nominated district.
6. A list, including the address, of every site, structure, and object in each nominated historic district indicating their degree of cultural, historic, architectural, or archaeological significance by classification as a landmark, contributing, or noncontributing,

B. Where a motion either in favor of a recommendation or in opposition to a recommendation results in a vote of fewer than four members, the item shall automatically be tabled to the next regularly scheduled meeting.

17.5.5 Notification of Historic Preservation Board recommendation

A. The recommendation of the Historic Preservation Board, including a copy of the report, shall be transmitted to the City Council in the case of a landmark and to the Planning Board in the case of a district. Notice of the recommendation shall be sent by mail to the owner of a nominated landmark and to all owners within a nominated district within 14 days following adoption of the recommendation and report.

B. If the recommendation of the Historic Preservation Board is that the property or district not be designated, the nomination process shall terminate and no new nomination shall be submitted for the identical property or area for a period of one year from the date of termination, except upon a showing of substantial and material newly discovered information.

17.5.6 Determination by Planning Board

A. The Planning Board, upon receipt of a recommendation and a report from the Historic Preservation Board concerning nomination of a district, may hold one or more workshops pursuant to the provisions of Article 2. After review of the Historic Preservation Board recommendation and report, the Planning Board shall hold a public hearing.

B. All meetings, hearings, and deliberations of the Planning Board to consider the recommendation and report of the Historic Preservation Board shall be held in conformity with Article 2.

C. The Planning Board may request the chair of the Historic Preservation Board, or a member designated by the chair, to appear at any meeting, hearing or deliberation to explain any recommendation or report.

D. A public hearing shall be scheduled within 30 days of the Planning Board's final workshop. At the conclusion of the public hearing, the Planning Board shall make its final determination including written findings as to whether the nominated district meets the criteria for designation in Section 17.4. A copy of the determination of the Planning Board shall be sent by regular mail to all owners within a nominated district within 14 days following the determination.

17.5.7 Planning Board recommendation to City Council

The recommendation of the Planning Board regarding a nominated district shall be filed with the

City Clerk within 14 days. It shall be accompanied by a copy of the report and recommendation of the Historic Preservation Board, including any specific proposed design guidelines applicable to the nominated landmark or district. The recommendation of the Planning Board may include proposed changes in other City ordinances, policies, infrastructure, or recommendations with respect to the Comprehensive Plan of the City relating to the proposed designation.

17.5.8 Action by City Council

A. Within 60 days after the filing of a Planning Board recommendation, or Historic Preservation Board recommendation in the case of a landmark, on the nomination with the City Clerk pursuant to Section 17.5.6, the City Council shall designate the landmark or district or reject designation. Any designation may include specific design guidelines for the designated landmark or district.

B. Designation of a district shall be accompanied by a list, including the address, of every site, structure and object in the district. Every site, structure, or object shall be assigned a classification of landmark, contributing, or noncontributing, indicating their degree of cultural, historic, architectural, or archaeological significance. This list may be amended thereafter by the City Council upon recommendation from the Historic Preservation Board and Planning Board under the same procedures as set forth above. Where there are no express findings by the City Council in the designation ordinance, there shall be a presumption that the City Council found that all requirements of Section 17.4 were met.

C. Notice of the proposed action of the City Council shall be provided by mail to the nominator and the owner of the nominated landmark and/or of all properties adjacent thereto prior to City Council action.

D. Notice of City Council action to the same persons shall be sent within 14 days following the City Council action. A copy of each designation and any design guidelines shall be sent to the Planning Board, the Historic Preservation Board, and the Planning Authority.

E. A complete schedule of all landmarks and districts, including design guidelines and a listing of landmark and contributing structures, shall be maintained by the Planning Authority and shall be available online or for public inspection and copying during ordinary business hours.

17.5.9 Amendment or rescission of designation

Amendment or rescission of any designation shall be upon the request of a person or persons authorized to nominate the property or properties affected, or upon request of the City Council, and shall follow the procedure set forth in Section 17.5 for designation. The City Council may rescind or amend a designation only after all of these procedures have been followed. The standards for rescission or amendment applied by the Historic Preservation Board, Planning Board, and City Council shall be limited to those provided in Subsections 17.4.1(A) and (B) and Subsection 17.4.2. Amendments may include reclassification of a portion of a contributing property to noncontributing status, refinement or correction of design guidelines, maps, and other parts of any designation.

NATIONAL REGISTER BULLETIN

Technical information on the the National Register of Historic Places:
survey, evaluation, registration, and preservation of cultural resources

U.S. Department of the Interior
National Park Service
Cultural Resources
National Register, History and Education

How to Apply the National Register Criteria for Evaluation









The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to tribes.

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

This material is partially based upon work conducted under a cooperative agreement with the National Conference of State Historic Preservation Officers and the U.S. Department of the Interior.

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Cover

(Top Left) ***Criterion B - Frederick Douglass Home,*** *Washington, D.C. From 1877-1899, this was the home of Frederick Douglass, the former slave who rose to become a prominent author, abolitionist, editor, orator, and diplomat. (Walter Smalling, Jr.)*

(Top Right) ***Criterion D - Francis Canyon Ruin,*** *Blanco vicinity, Rio Arriba County, New Mexico. A fortified village site composed of 40 masonry-walled rooms arranged in a cluster of four house blocks. Constructed ca. 1716-1742 for protection against raiding Utes and Comanches, the site has information potential related to Navajo, Pueblo, and Spanish cultures. (Jon Samuelson)*

(Bottom Left) ***Criterion C - Bridge in Cherrytree Township,*** *Venago County, Pennsylvania. Built in 1882, this Pratt through truss bridge is significant for engineering as a well preserved example of a type of bridge frequently used in northwestern Pennsylvania in the late 19th century. (Pennsylvania Department of Transportation)*

(Bottom Right) ***Criterion A - Main Street/Market Square Historic District,*** *Houston, Harris County, Texas. Until well into the 20th century this district marked the bounds of public and business life in Houston. Constructed between the 1870s and 1920s, the district includes Houston's municipal and county buildings, and served as the city's wholesale, retail, and financial center. (Paul Hester)*

PREFACE

Preserving historic properties as important reflections of our American heritage became a national policy through passage of the Antiquities Act of 1906, the Historic Sites Act of 1935, and the National Historic Preservation Act of 1966, as amended. The Historic Sites Act authorized the Secretary of the Interior to identify and recognize properties of national significance (National Historic Landmarks) in United States history and archeology. The National Historic Preservation Act of 1966 authorized the Secretary to expand this recognition to properties of local and State significance in American history, architecture, archeology, engineering, and culture, and worthy of preservation. The National Register of Historic Places is the official list of these recognized properties, and is maintained and expanded by the National Park Service on behalf of the Secretary of the Interior.[1]

The National Register of Historic Places documents the appearance and importance of districts, sites, buildings, structures, and objects significant in our prehistory and history. These properties represent the major patterns of our shared local, State, and national experience. To guide the selection of properties included in the National Register, the National Park Service has developed the National Register Criteria for Evaluation. These criteria are standards by which every property that is nominated to the National Register is judged. In addition, the National Park Service has developed criteria for the recognition of nationally significant properties, which are designated National Historic Landmarks and prehistoric and historic units of the National Park System. Both these sets of criteria were developed to be consistent with the Secretary of the Interior's *Standards and Guidelines for Archeology and Historic Preservation*, which are uniform, national standards for preservation activities.[2]

This publication explains how the National Park Service applies these criteria in evaluating the wide range of properties that may be significant in local, State, and national history.

It should be used by anyone who must decide if a particular property qualifies for the National Register of Historic Places.

Listing properties in the National Register is an important step in a nationwide preservation process. The responsibility for the identification, initial evaluation, nomination, and treatment of historic resources lies with private individuals, State historic preservation offices, and Federal preservation offices, local governments, and Indian tribes. The final evaluation and listing of properties in the National Register is the responsibility of the Keeper of the National Register.

This bulletin was prepared by staff of the National Register Branch, Interagency Resources Division, National Park Service, with the assistance of the History Division. It was originally issued in draft form in 1982. The draft was revised into final form by Patrick W. Andrus, Historian, National Register, and edited by Rebecca H. Shrimpton, Consulting Historian.

Beth L. Savage, National Register and Sarah Dillard Pope, National Register, NCSHPO coordinated the latest revision of this bulletin. Antionette J. Lee, Tanya Gossett, and Kira Badamo coordinated earlier revisions.

[1]Properties listed in the National Register receive limited Federal protection and certain benefits. For more information concerning the effects of listing, and how the National Register may be used by the general public and Certified Local Governments, as well as by local, State, and Federal agencies, and for copies of National Register Bulletins, contact the National Park Service, National Register, 1849 C Street, NW, NC400, Washington, D.C., 20240. Information may also be obtained by visiting the National Register Web site at **www.cr.nps.gov/nr** or by contacting any of the historic preservation offices in the States and territories.

[2]The *Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation* are found in the *Federal Register*, Vol. 48, No. 190 (Thursday, September 29, 1983). A copy can be obtained by writing the National Park Service, Heritage Preservation Services (at the address above).

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I. INTRODUCTION

The National Register is the nation's inventory of historic places and the national repository of documentation on the variety of historic property types, significance, abundance, condition, ownership, needs, and other information. It is the beginning of a national census of historic properties. The National Register Criteria for Evaluation define the scope of the National Register of Historic Places; they identify the range of resources and kinds of significance that will qualify properties for listing in the National Register. The Criteria are written broadly to recognize the wide variety of historic properties associated with our prehistory and history.

Decisions concerning the significance, historic integrity, documentation, and treatment of properties can be made reliably only when the resource is evaluated within its historic context. The historic context serves as the framework within which the National Register Criteria are applied to specific properties or property types. (See *Part V* for a brief discussion of historic contexts. Detailed guidance for developing and applying historic contexts is contained in *National Register Bulletin: How to Complete the National Register Registration Form* and *National Register Bulletin: How to Complete the National Register Multiple Property Documentation Form*)

The guidelines provided here are intended to help you understand the National Park Service's use of the Criteria for Evaluation, historic contexts, integrity, and Criteria Considerations, and how they apply to properties under consideration for listing in the National Register. Examples are provided throughout, illustrating specific circumstances in which properties are and are not eligible for the National Register. This bulletin should be used by anyone who is:

- Preparing to nominate a property to the National Register,
- Seeking a determination of a property's eligibility,
- Evaluating the comparable significance of a property to those listed in the National Register, or
- Expecting to nominate a property as a National Historic Landmark in addition to nominating it to the National Register.

This bulletin also contains a summary of the National Historic Landmarks Criteria for Evaluation (see *Part IX*). National Historic Landmarks are those districts, sites, buildings, structures, and objects designated by the Secretary of the Interior as possessing national significance in American history, architecture, archeology, engineering, and culture. Although National Register documentation includes a recommendation about whether a property is significant at the local, State, or national level, the only official designation of national significance is as a result of National Historic Landmark designation by the Secretary of the Interior, National Monument designation by the President of the United States, or establishment as a unit of the National Park System by Congress. These properties are automatically listed in the National Register.

II. THE NATIONAL REGISTER CRITERIA FOR EVALUATION

CRITERIA FOR EVALUATION:[3]

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

A. That are associated with events that have made a significant contribution to the broad patterns of our history; or

B. That are associated with the lives of persons significant in our past; or

C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. That have yielded, or may be likely to yield, information important in prehistory or history.

CRITERIA CONSIDERATIONS:

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However, such properties *will qualify* if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

a. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or

b. A building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

c. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life; or

d. A cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or

e. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

f. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or

g. A property achieving significance within the past 50 years if it is of exceptional importance.

[3]The Criteria for Evaluation are found in the *Code of Federal Regulations, Title 36, Part 60,* and are reprinted here in full.

III. HOW TO USE THIS BULLETIN TO EVALUATE A PROPERTY

For a property to qualify for the National Register it must meet one of the National Register Criteria for Evaluation by:

- **Being associated with an important historic context** *and*
- **Retaining historic integrity of those features necessary to convey its significance.**

Information about the property based on physical examination and documentary research is necessary to evaluate a property's eligibility for the National Register. Evaluation of a property is most efficiently made when following this sequence:

1. Categorize the property (Part IV). A property must be classified as a district, site, building, structure, or object for inclusion in the National Register.
2. **Determine which prehistoric or historic context(s) the property represents** (Part V). A property must possess significance in American history, architecture, archeology, engineering, or culture when evaluated within the historic context of a relevant geographic area.
3. Determine whether the property is significant under the National Register Criteria (Part VI). This is done by identifying the links to important events or persons, design or construction features, or information potential that make the property important.
4. Determine if the property represents a type usually excluded from the National Register (Part VII). If so, determine if it meets any of the Criteria Considerations.
5. Determine whether the property retains integrity (Part VIII). Evaluate the aspects of location, design, setting, workmanship, materials, feeling, and association that the property must retain to convey its historic significance.

If, after completing these steps, the property appears to qualify for the National Register, the next step is to prepare a written nomination. (Refer to *National Register Bulletin: How to Complete the National Register Registration Form.*)

IV. HOW TO DEFINE CATEGORIES OF HISTORIC PROPERTIES

The National Register of Historic Places includes significant properties, classified as buildings, sites, districts, structures, or objects. It is not used to list intangible values, except in so far as they are associated with or reflected by historic properties. The National Register does not list cultural events, or skilled or talented individuals, as is done in some countries. Rather, the National Register is oriented to recognizing physically concrete properties that are relatively fixed in location.

For purposes of National Register nominations, small groups of properties are listed under a single category, using the primary resource. For example, a city hall and fountain would be categorized by the city hall (building), a farmhouse with two outbuildings would be categorized by the farmhouse (building), and a city park with a gazebo would be categorized by the park (site). Properties with large acreage or a number of resources are usually considered districts. Common sense and reason should dictate the selection of categories.

BUILDING

A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and jail or a house and barn.

Buildings eligible for the National Register must include all of their basic structural elements. Parts of buildings, such as interiors, facades, or wings, are not eligible independent of the rest of the existing building. The whole building must be considered, and its significant features must be identified.

If a building has lost any of its basic structural elements, it is usually considered a "ruin" and is categorized as a site.

Examples of buildings include:

administration building
carriage house
church
city or town hall
courthouse
detached kitchen, barn, and privy
dormitory
fort
garage
hotel
house
library
mill building
office building
post office
school
social hall
shed
stable
store
theater
train station

STRUCTURE

The term "structure" is used to distinguish from buildings those functional constructions made usually for purposes other than creating human shelter.

Structures nominated to the National Register must include all of the extant basic structural elements. Parts of structures can not be considered eligible if the whole structure remains. For example, a truss bridge is composed of the metal or wooden truss, the abutments, and supporting piers, all of which, if extant, must be included when considering the property for eligibility.

If a structure has lost its historic configuration or pattern of organization through deterioration or demolition, it is usually considered a "ruin" and is categorized as a site.

Examples of structures include:

aircraft
apiary
automobile
bandstand
boats and ships
bridge
cairn
canal
carousel
corncrib
dam
earthwork
fence
gazebo
grain elevator
highway
irrigation system
kiln
lighthouse
railroad grade
silo
trolley car
tunnel
windmill

OBJECT

The term "object" is used to distinguish from buildings and structures those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment.

Small objects not designed for a specific location are normally not eligible. Such works include transportable sculpture, furniture, and other decorative arts that, unlike a fixed outdoor sculpture, do not possess association with a specific place.

Objects should be in a setting appropriate to their significant historic use, roles, or character. Objects relocated to a museum are inappropriate for listing in the National Register.

Examples of objects include:

boundary marker
fountain
milepost
monument
scupture
statuary

SITE

A site is the location of a significant event, a prehistoric or historic occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure.

A site can possess associative significance or information potential or both, and can be significant under any or all of the four criteria. A site need not be marked by physical remains if it is the location of a prehistoric or historic event or pattern of events and if no buildings, structures, or objects marked it at the time of the events. However, when the location of a prehistoric or historic event cannot be conclusively determined because no other cultural materials were present or survive, documentation must be carefully evaluated to determine whether the traditionally recognized or identified site is accurate.

A site may be a natural landmark strongly associated with significant prehistoric or historic events or patterns of events, if the significance of the natural feature is well documented through scholarly research. Generally, though, the National Register excludes from the definition of "site" natural waterways or bodies of water that served as determinants in the location of communities or were significant in the locality's subsequent economic development. While they may have been "avenues of exploration," the features most appropriate to document this significance are the properties built in association with the waterways.

Examples of sites include:

battlefield
campsite
cemeteries significant for information potential or historic association
ceremonial site
designed landscape
habitation site
natural feature (such as a rock formation) having cultural significance
petroglyph
rock carving
rock shelter
ruins of a building or structure
shipwreck
trail
village site

DISTRICT

A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development.

CONCENTRATION, LINKAGE, & CONTINUITY OF FEATURES

A district derives its importance from being a unified entity, even though it is often composed of a wide variety of resources. The identity of a district results from the interrelationship of its resources, which can convey a visual sense of the overall historic environment or be an arrangement of historically or functionally related properties. For example, a district can reflect one principal activity, such as a mill or a ranch, or it can encompass several interrelated activities, such as an area that includes industrial, residential, or commercial buildings, sites, structures, or objects. A district can also be a grouping of archeological sites related primarily by their common components; these types of districts often will not visually represent a specific historic environment.

SIGNIFICANCE

A district must be significant, as well as being an identifiable entity. It must be important for historical, architectural, archeological, engineering, or cultural values. Therefore, districts that are significant will usually meet the last portion of Criterion C plus Criterion A, Criterion B, other portions of Criterion C, or Criterion D.

TYPES OF FEATURES

A district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. It may even be considered eligible if all of the components lack individual distinction, provided that the grouping achieves significance as a whole within its historic context. In either case, the majority of the components that add to the district's historic character, even if they are individually undistinguished, must possess integrity, as must the district as a whole.

A district can contain buildings, structures, sites, objects, or open spaces that do not contribute to the significance of the district. The number of noncontributing properties a district can contain yet still convey its sense of time and place and historical development depends on how these properties affect the district's integrity. In archeological districts, the primary factor to be considered is the effect of any disturbances on the information potential of the district as a whole.

GEOGRAPHICAL BOUNDARIES

A district must be a definable geographic area that can be distinguished from surrounding properties by changes such as density, scale, type, age, style of sites, buildings, structures, and objects, or by documented differences in patterns of historic development or associations. It is seldom defined, however, by the limits of current parcels of ownership, management, or planning boundaries. The boundaries must be based upon a shared relationship among the properties constituting the district.

DISCONTIGUOUS DISTRICTS

A district is usually a single geographic area of contiguous historic properties; however, a district can also be composed of two or more definable significant areas separated by nonsignificant areas. A discontiguous district is most appropriate where:

- Elements are spatially discrete;
- Space between the elements is not related to the significance of the district; and
- Visual continuity is not a factor in the significance.

In addition, a canal can be treated as a discontiguous district when the system consists of man-made sections of canal interspersed with sections of river navigation. For scattered archeological properties, a discontiguous district is appropriate when the deposits are related to each other through cultural affiliation, period of use, or site type.

It is not appropriate to use the discontiguous district format to include an isolated resource or small group of resources which were once connected to the district, but have since been separated either through demolition or new construction. For example, do not use the discontiguous district format to nominate individual buildings of a downtown commerical district that have become isolated through demolition.

Examples of districts iE,[;lude:

business districts
canal systems
groups of habitation sites
college campuses
estates and farms with large acreage/ numerous properties
industrial complexes
irrigation systems
residential areas
rural villages
transportation networks
rural historic districts



Ordeman-Shaw Historic District, *Montgomery, Montgomery County, Alabama. Historic districts derive their identity from the interrationship of their resources. Part of the defining characteristics of this 19th century residential district in Montgomery, Alabama, is found in the rhythmic pattern of the rows of decorative porches. (Frank L. Thiermonge, III)*

V. HOWTOEVALUATEA PROPERTY WITHIN ITS HISTORIC CONTEXT

UNDERSTANDING HISTORIC CONTEXTS

To qualify for the National Register, a property must be significant; that is, it must represent a significant part of the history, architecture, archeology, engineering, or culture of an area, and it must have the characteristics that make it a good representative of properties associated with that aspect of the past. This section explains how to evaluate a property within its historic context.

The significance of a historic property can be judged and explained only when it is evaluated within its historic context. Historic contexts are those patterns or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within history or prehistory is made clear. Historians, architectural historians, folklorists, archeologists, and anthropologists use different words to describe this phenomena such as trend, pattern, theme, or cultural affiliation, but ultimately the concept is the same.

The concept of historic context is not a new one; it has been fundamental to the study of history since the 18th century and, arguably, earlier than that. Its core premise is that resources, properties, or happenings in history do not occur in a vacuum but rather are part of larger trends or patterns.

In order to decide whether a property is significant within its historic context, the following five things must be determined:

- The facet of prehistory or history of the local area, State, or the nation that the property represents;
- Whether that facet of prehistory or history is significant;
- Whether it is a type of property that has relevance and importance in illustrating the historic context;
- How the property illustrates that history; and finally
- Whether the property possesses the physical features necessary to convey the aspect of prehistory or history with which it is associated.

These five steps are discussed in detail below. If the property being evaluated does represent an important aspect of the area's history or prehistory *and* possesses the requisite quality of integrity, then it qualifies for the National Register.

HOW TO EVALUATE APROPERTY WITHIN ITS HISTORIC CONTEXT

Identify what the property represents: the theme(s), geographical limits, and chronological period that provide a perspective from which to evaluate the property's significance.

Historic contexts are historical patterns that can be identified through consideration of the history of the property and the history of the surrounding area. Historic contexts may have already been defined in your area by the State historic preservation office, Federal agencies, or local governments. In accordance with the National Register Criteria, the historic context may relate to one of the following:

- An event, a series of events or activities, or patterns of an area's development (Criterion A);
- Association with the life of an important person (Criterion B);
- A building form, architectural style, engineering technique, or artistic values, based on a stage of physical development, or the use of a material or method of construction that shaped the historic identity of an area (Criterion C); or
- A research topic (Criterion D).

[4] For a complete discussion of historic contexts, see *National Register Bulletin: Guidelines for Completing National Register of Historic Places Registration Forms.*

Determine how the theme of the context is significant in the history of the local area, the State, or the nation.

A theme is a means of organizing properties into coherent patterns based on elements such as environment, social/ethnic groups, transportation networks, technology, or political developments that have influenced the development of an area during one or more periods of prehistory or history. A theme is considered significant if it can be demonstrated, through scholarly research, to be important in American history. Many significant themes can be found in the following list of Areas of Significance used by the National Register.

AREAS OF SIGNIFICANCE

Agriculture
Architecture
Archeology
  Prehistoric
  Historic—Aboriginal
  Historic—Non-Aboriginal
Art
Commerce
Communications
Community Planning and Development
Conservation
Economics
Education
Engineering
Entertainment/Recreation
Ethnic Heritage
  Asian
  Black
  European
  Hispanic
  Native American
  Pacific Islander
  Other
Exploration/Settlement
Health/Medicine
Industry
Invention
Landscape Architecture
Law
Literature
Maritime History
Military
Performing Arts
Philosophy
Politics/Government
Religion
Science
Social History
Transportation
Other

Determine what the property type is and whether it is important in illustrating the historic context.

A context may be represented by a variety of important property types. For example, the context of "Civil War Military Activity in Northern Virginia" might be represented by such properties as: a group of mid-19th century fortification structures; an open field where a battle occurred; a knoll from which a general directed troop movements; a sunken transport ship; the residences or public buildings that served as company headquarters; a railroad bridge that served as a focal point for a battle; and earthworks exhibiting particular construction techniques.

Because a historic context for a community can be based on a distinct period of development, it might include numerous property types. For example, the context "Era of Industrialization in Grand Bay, Michigan, 1875 - 1900" could be represented by important property types as diverse as sawmills, paper mill sites, salt refining plants, flour mills, grain elevators, furniture factories, workers housing, commercial buildings, social halls, schools, churches, and transportation facilities.

A historic context can also be based on a single important type of property. The context "Development of County Government in Georgia, 1777 - 1861" might be represented solely by courthouses. Similarly, "Bridge Construction in Pittsburgh, 1870 - 1920" would probably only have one property type.

Determine how the property represents the context through specific historic associations, architectural or engineering values, or information potential (the Criteria for Evaluation).

For example, the context of county government expansion is represented under Criterion A by historic districts or buildings that reflect population growth, development patterns, the role of government in that society, and political events in the history of the State, as well as the impact of county government on the physical development of county seats. Under Criterion C, the context is represented by properties whose architectural treatments reflect their governmental functions, both practically and symbolically. (See *Part VI: How to Identify the Type of Significance of a Property.*)

Determine what physical features the property must possess in order for it to reflect the significance of the historic context.

These physical features can be determined after identifying the following:

- Which types of properties are associated with the historic context,
- The ways in which properties can represent the theme, and
- The applicable aspects of integrity.

Properties that have the defined characteristics are eligible for listing. (See *Part VIII: How to Evaluate the Integrity of a Property.*)

PROPERTIES SIGNIFICANT WITHIN MORE THAN ONE HISTORIC CONTEXT

A specific property can be significant within one or more historic contexts, and, if possible, all of these should be identified. For example, a public building constructed in the 1830s that is related to the historic context of Civil War campaigns in the area might also be related to the theme of political developments in the community during the 1880s. A property is only required, however, to be documented as significant in one context.

COMPARING RELATED PROPERTIES

Properties listed in the National Register must possess significance when evaluated in the perspective of their historic context. Once the historic context is established and the property type is determined, it is not necessary to evaluate the property in question against other properties *if*:

- It is the sole example of a property type that is important in illustrating the historic context or
- It clearly possesses the defined characteristics required to strongly represent the context.

If these two conditions do not apply, then the property will have to be evaluated against other examples of the property type to determine its eligibility. The geographic level (local, State, or national) at which this evaluation is made is the same as the level of the historic context. (See *Part V: How to Evaluate a Property Within Its Historic Context.*)

LOCAL, STATE, AND NATIONAL HISTORIC CONTEXTS

Historic contexts are found at a variety of geographical levels or scales. The geographic scale selected may relate to a pattern of historical development, a political division, or a cultural area. Regardless of the scale, the historic context establishes the framework from which decisions about the significance of related properties can be made.

LOCAL HISTORIC CONTEXTS

A local historic context represents an aspect of the history of a town, city, county, cultural area, or region, or any portions thereof. It is defined by the importance of the property, not necessarily the physical location of the property. For instance, if a property is of a type found throughout a State, or its boundaries extend over two States, but its importance relates only to a particular county, the property would be considered of local significance.

The level of context of archeological sites significant for their information potential depends on the scope of the applicable research design. For example, a Late Mississippian village site may yield information in a research design concerning one settlement system on a regional scale, while in another research design it may reveal information of local importance concerning a single group's stone tool manufacturing techniques or house forms. It is a question of how the available information potential is likely to be used.

STATE HISTORIC CONTEXTS

Properties are evaluated in a State context when they represent an aspect of the history of the State as a whole (or American Samoa, the District of Columbia, the Commonwealth of the Northern Mariana Islands, Guam, Puerto Rico, or the Virgin Islands). These properties do not necessarily have to belong to property types found throughout the entire State: they can be located in only a portion of the State's present political boundary. It is the property's historic context that must be important statewide. For example, the "cotton belt" extends through only a portion of Georgia, yet its historical development in the antebellum period affected the entire State. These State historic contexts may have associated properties that are statewide or locally significant representations. A cotton gin in a small town might be a locally significant representation of this context, while one of the largest cotton producing plantations might be of State significance.

A property whose historic associations or information potential appears to extend beyond a single local area might be significant at the State level. A property can be significant to more than one community or local area, however, without having achieved State significance.

A property that overlaps several State boundaries can possibly be significant to the State or local history of each of the States. Such a property is not necessarily of national significance, however, nor is it necessarily significant to all of the States in which it is located.

Prehistoric sites are not often considered to have "State" significance, per se, largely because States are relatively recent political entities and usually do not correspond closely to Native American political territories or cultural areas. Numerous sites, however, may be of significance to a large region that might geographically encompass parts of one, or usually several, States. Prehistoric resources that might be of State significance include regional sites that provide a diagnostic assemblage of artifacts for a particular cultural group or time period or that provide chronological control (specific dates or relative order in time) for a series of cultural groups.

NATIONAL HISTORIC CONTEXTS

Properties are evaluated in a national context when they represent an aspect of the history of the United States and its territories as a whole. These national historic contexts may have associated properties that are locally or statewide significant representations, as well as those of national significance.

Properties designated as nationally significant and listed in the National Register are the prehistoric and historic units of the National Park System and those properties that have been designated National Historic Landmarks. The National Historic Landmark criteria are the standards for nationally significant properties; they are found in the *Code of Federal Regulations, Title 36, Part 65* and are summarized in this bulletin in *Part IX: Summary of National Historic Landmarks Criteria for Evaluation.*

A property with national significance helps us understand the history of the nation by illustrating the nationwide impact of events or persons associated with the property, its architectural type or style, or information potential. It must be of exceptional value in representing or illustrating an important theme in the history of the nation.

Nationally significant properties do not necessarily have to belong to a property type found throughout the entire country: they can be located in only a portion of the present political boundaries. It is their historic context that must be important nationwide. For example, the American Civil War was fought in only a portion of the United States, yet its impact was nationwide. The site of a small military skirmish might be a locally significant representation of this national context, while the capture of the State's largest city might be a statewide significant representation of the national context.

When evaluating properties at the national level for designation as a National Historic Landmark, please refer to the National Historic Landmarks outline, *History and Prehistory in the National Park System and the National Historic Landmarks Program 1987.* (For more information about the National Historic Landmarks program, please write to the Department of the Interior, National Park Service, National Historic Landmarks, 1849 C Street, NW, NC400, Washington, DC 20240.)

VI. HOW TO IDENTIFY THE TYPE OF SIGNIFICANCE OF A PROPERTY

INTRODUCTION

When evaluated within its historic context, a property must be shown to be significant for *one or more of the four Criteria for Evaluation - A, B, C, or D* (listed earlier in *Part II*). The Criteria describe how properties are significant for their association with important events or persons, for their importance in design or construction, or for their information potential.

The basis for judging a property's significance and, ultimately, its eligibility under the Criteria is *historic context*. The use of historic context allows a property to be properly evaluated in a nearly infinite number of capacities. For instance, Criterion C: Design/Construction can accommodate properties representing construction types that are unusual or widely practiced, that are innovative or traditional, that are "high style" or vernacular, that are the work of a famous architect or an unknown master craftsman. *The key to determining whether the characteristics or associations of a particular property are significant is to consider the property within its historic context.*

After identifying the relevant historic context(s) with which the property is associated, the four Criteria are applied to the property. Within the scope of the historic context, the National Register Criteria define the kind of significance that the properties represent.

For example, within the context of "19th Century Gunpowder Production in the Brandywine Valley," Criterion A would apply to those properties associated with important events in the founding and development of the industry. Criterion B would apply to those properties associated with persons who are significant in the founding of the industry or associated with important inventions related to gunpowder manufacturing. Criterion C would apply to those buildings, structures, or objects whose architectural form or style reflect important design qualities integral to the industry. And Criterion D would apply to properties that can convey information important in our understanding of this industrial process. If a property qualifies under more than one of the Criteria, its significance under each should be considered, if possible, in order to identify all aspects of its historical value.

NATIONAL REGISTER CRITERIA FOR EVALUATION*

The National Register Criteria recognize different types of values embodied in districts, sites, buildings, structures, and objects. These values fall into the following categories:

Associative value (Criteria A and B): Properties significant for their association or linkage to events (Criterion A) or persons (Criterion B) important in the past.

Design or Construction value (Criterion C): Properties significant as representatives of the manmade expression of culture or technology.

Information value (Criterion D): Properties significant for their ability to yield important information about prehistory or history.

*For a complete listing of the Criteria for Evaluation, refer to Part II of this bulletin.

CRITERION A: EVENT

Properties can be eligible for the National Register if they are associated with events that have made a significant contribution to the broad patterns of our history.

UNDERSTANDING CRITERION A: EVENT

To be considered for listing under Criterion A, a property must be associated with one or more events important in the defined historic context. Criterion A recognizes properties associated with single events, such as the founding of a town, or with a pattern of events, repeated activities, or historic trends, such as the gradual rise of a port city's prominence in trade and commerce. The event or trends, however, must clearly be important within the associated context: settlement, in the case of the town, or development of a maritime economy, in the case of the port city. Moreover, the property must have an important association with the event or historic trends, and it must retain historic integrity. (See *Part V: How to Evaluate a Property Within its Historic Context.)*

Several steps are involved in determining whether a property is significant for its associative values:

- Determine the nature and origin of the property,
- Identify the historic context with which it is associated, and
- Evaluate the property's history to determine whether it is associated with the historic context in any important way.

APPLYING CRITERION A: EVENT

TYPES OF EVENTS

A property can be associated with either (or both) of two types of events:

- A specific event marking an important moment in American prehistory or history and
- A pattern of events or a historic trend that made a significant contribution to the development of a community, a State, or the nation.

Refer to the sidebar on the right for a list of specific examples.

ASSOCIATION OF THE PROPERTY WITH THE EVENTS

The property you are evaluating must be documented, through accepted means of historical or archeological research (including oral history), to have existed at the time of the event or pattern of events *and* to have been associated with those events. A property is *not* eligible if its associations are speculative. For archeological sites, well reasoned inferences drawn from data recovered at the site can be used to establish the association between the site and the events.

SIGNIFICANCE OF THE ASSOCIATION

Mere association with historic events or trends is not enough, in and of itself, to qualify under Criterion A: the property's specific association must be considered important as well. For example, a building historically in commercial use must be shown to have been significant in commercial history.

EXAMPLES OF PROPERTIES ASSOCIATED WITH EVENTS

Properties associated with specific events:

- *The site of a battle.*
- *The building in which an important invention was developed.*
- *A factory district where a significant strike occurred.*
- *An archeological site at which a major new aspect of prehistory was discovered, such as the first evidence of man and extinct Pleistocene animals being contemporaneous.*
- *A site where an important facet of European exploration occurred.*

Properties associated with a pattern of events:

- *A trail associated with western migration.*
- *A railroad station that served as the focus of a community's transportation system and commerce.*
- *A mill district reflecting the importance of textile manufacturing during a given period.*
- *A building used by an important local social organization.*
- *A site where prehistoric Native Americans annually gathered for seasonally available resources and for social interaction.*
- *A downtown district representing a town's growth as the commercial focus of the surrounding agricultural area.*

TRADITIONAL CULTURAL VALUES

Traditional cultural significance is derived from the role a property plays in a community's historically rooted beliefs, customs, and practices. Properties may have significance under Criterion A if they are associated with events, or series of events, significant to the cultural traditions of a community.[5]

Eligible

- A hilltop associated in oral historical accounts with the founding of an Indian tribe or society is eligible.
- A rural community can be eligible whose organization, buildings, or patterns of land use reflect the cultural traditions valued by its long-term residents.
- An urban neighborhood can be eligible as the traditional home of a particular cultural group and as a reflection of its beliefs and practices.

Not Eligible

- A site viewed as sacred by a recently established utopian or religious community does not have traditional cultural value and is not eligible.



Criterion A - The Old Brulay Plantation, *Brownsville vicinity, Cameron county, Texas. Historically significant for its association with the development of agriculture in southeast Texas, this complex of 10 brick buildings was constructed by George N. Brulay, a French immigrant who introduced commercial sugar production and irrigation to the Rio Grande Valley. (Photo by Texas Historical Commission).*

[5] For more information, refer to *National Register Bulletin: Guidelines for Evaluating and Documenting Traditional Cultural Properties.*

CRITERION B: PERSON

Properties may be eligible for the National Register if they are associated with the lives of persons significant in our past.

UNDERSTANDING CRITERION B: PERSON[6]

Criterion B applies to properties associated with individuals whose specific contributions to history can be identified and documented. Persons "significant in our past" refers to individuals whose activities are demonstrably important within a local, State, or national historic context. The criterion is generally restricted to those properties that illustrate (rather than commemorate) a person's important achievements. (The policy regarding commemorative properties, birthplaces, and graves is explained further in *Part VIII: How to Apply the Criteria Considerations.)*

Several steps are involved in determining whether a property is significant for its associative values under Criterion B. First, determine the importance of the individual. Second, ascertain the length and nature of his/her association with the property under study and identify the other properties associated with the individual. Third, consider the property under Criterion B, as outlined below.

EXAMPLES OF PROPERTIES ASSOCIATED WITH PERSONS

Properties associated with a Significant Person:

- *The home of an important merchant or labor leader.*
- *The studio of a significant artist.*
- *The business headquarters of an important industrialist.*



Criterion B - The William Whitney House, *Hinsdale, DuPage County, Illinois. This building is locally significant for its historical association with William Whitney, the founder of the town of Hinsdale, Illinois. Whitney, a citizen of New York State, moved to Illinois, established the town, and while living here between 1870 and 1879 was a prominent local businessman and politician. (Photo by Frederick C. Cue).*

[6] For further information on properties eligible under Criterion B, refer to *National Register Bulletin: Guidelines for Evaluating and Documenting Properties Associated with Significant Persons.*

APPLYING CRITERION B: PERSON

SIGNIFICANCE OF THE INDIVIDUAL

The persons associated with the property must be *individually* significant within a historic context. A property is not eligible if its only justification for significance is that it was owned or used by a person who is a member of an identifiable profession, class, or social or ethnic group. It must be shown that the person gained importance within his or her profession or group.

Eligible

- The residence of a doctor, a mayor, or a merchant is eligible under Criterion B if the person was significant in the field of medicine, politics, or commerce, respectively.

Not Eligible

- A property is not eligible under Criterion B if it is associated with an individual about whom no scholarly judgement can be made because either research has not revealed specific information about the person's activities and their impact, or there is insufficient perspective to determine whether those activities or contributions were historically important.

ASSOCIATION WITH THE PROPERTY

Properties eligible under Criterion B are usually those associated with a person's *productive* life, reflecting the time period when he or she achieved significance. In some instances this may be the person's home; in other cases, a person's business, office, laboratory, or studio may best represent his or her contribution. Properties that pre- or post-date an individual's significant accomplishments are usually not eligible. (See *Comparison to Related Properties*, below, for exceptions to this rule.)

The individual's association with the property must be documented by accepted methods of historical or archeological research, including written or oral history. Speculative associations are not acceptable. For archeological sites, well reasoned inferences drawn from data recovered at the site are acceptable.

COMPARISON TO RELATED PROPERTIES

Each property associated with an important individual should be compared to other associated properties to identify those that best represent the person's historic contributions. The best representatives usually are properties associated with the person's adult or *productive* life. Properties associated with an individual's formative or later years may also qualify if it can be demonstrated that the person's activities during this period were historically significant *or* if no properties from the person's productive years survives. Length of association is an important factor when assessing several properties with similar associations.

A community or State may contain several properties eligible for associations with the same important person, if each represents a different aspect of the person's productive life. A property can also be eligible if it has brief but consequential associations with an important individual. (Such associations are often related to specific events that occurred at the property and, therefore, it may also be eligible under Criterion A.)

ASSOCIATION WITH GROUPS

For properties associated with several community leaders or with a prominent family, it is necessary to identify specific individuals and to explain their significant accomplishments.

Eligible

- A residential district in which a large number of prominent or influential merchants, professionals, civic leaders, politicians, etc., lived will be eligible under Criterion B if the significance of one or more specific individual residents is explicitly justified.
- A building that served as the seat of an important family is eligible under Criterion B if the significant accomplishments of one or more individual family members is explicitly justified.

Not Eligible

- A residential district in which a large number of influential persons lived is not eligible under Criterion B if the accomplishments of a specific individual(s) cannot be documented. If the significance of the district rests in the cumulative importance of prominent residents, however, then the district might still be eligible under Criterion A. Eligibility, in this case, would be based on the broad pattern of community development, through which the neighborhood evolved into the primary residential area for this class of citizens.
- A building that served as the seat of an important family will not be eligible under Criterion B if the significant accomplishments of individual family members cannot be documented. In cases where a succession of family members have lived in a house and collectively have had a demonstrably significant impact on the community, as a family, the house is more likely to be significant under Criterion A for association with a pattern of events.

ASSOCIATION WITH LIVING PERSONS

Properties associated with living persons are usually not eligible for inclusion in the National Register. Sufficient time must have elapsed to assess both the person's field of endeavor and his/her contribution to that field. Generally, the person's active participation in the endeavor must be finished for this historic perspective to emerge. (See Criteria Considerations C and G in *Part VII: How to Apply the Criteria Considerations.)*

ASSOCIATION WITH ARCHITECTS/ARTISANS

Architects, artisans, artists, and engineers are often represented by their works, which are eligible under Criterion C. Their homes and studios, however, can be eligible for consideration under Criterion B, because these usually are the properties with which they are most personally associated.

NATIVE AMERICAN SITES

The known major villages of individual Native Americans who were important during the contact period or later can qualify under Criterion B. As with all Criterion B properties, the individual associated with the property must have made some specific important contribution to history. Examples include sites significantly associated with Chief Joseph and Geronimo.[7]

[7] For more information, refer to *National Register Bulletin: Guidelines for Evaluating and Documenting Traditional Cultural Properties.*

CRITERION C: DESIGN/CONSTRUCTION

Properties may be eligible for the National Register if they embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction.



Richland Plantation, *East Feliciana Parish, Louisiana. Properties can qualify under Criterion C as examples of high style architecture. Built in the 1830s, Richland is a fine example of a Federal style residence with a Greek Revival style portico. (Photo by Dave Gleason).*

UNDERSTANDING CRITERION C: DESIGN/ CONSTRUCTION

This criterion applies to properties significant for their physical design or construction, including such elements as architecture, landscape architecture, engineering, and artwork. To be eligible under Criterion C, a property must meet *at least one* of the following requirements:

- Embody distinctive characteristics of a type, period, or method of construction.
- Represent the work of a master.
- Possess high artistic value.
- Represent a significant and distinguishable entity whose components may lack individual distinction.

The first requirement, that properties "embody the distinctive characteristics of a type, period, or method of construction," refers to the way in which a property was conceived, designed, or fabricated by a people or culture in past periods of history. "The work of a master" refers to the technical or aesthetic achievements of an architect or craftsman. "High artistic values" concerns the expression of aesthetic ideals or preferences and applies to aesthetic achievement.

Resources "that represent a significant and distinguishable entity whose components may lack individual distinction" are called "districts." In the Criteria for Evaluation (as published in the *Code of Federal Regulations* and reprinted here in Part II), districts are defined within the context of Criterion C. *Districts, however, can be considered for eligibility under all the Criteria,* individually or in any combination, as is appropriate. For this reason, the full discussion of districts is contained in *Part IV: How to Define Categories of Historic Properties.* Throughout the bulletin, however, districts are mentioned within the context of a specific subject, such as an individual Criterion.



Grant Family House*, Saco vicinity, York County, Maine. Properties possessing high artistic value meet Criterion C through the expression of aesthetic ideals or preferences. The Grant Family House, a modest Federal style residence, is significant for its remarkably well-preserved stenciled wall decorative treatment in the entry hall and parlor. Painted by an unknown artist ca. 1825, this is a fine example of 19th century New England regional artistic expression. (Photo by Kirk F. Mohney).*

EXAMPLES OF PROPERTIES ASSOCIATED WITH DESIGN/ CONSTRUCTION

Properties associated with design and construction:

- *A house or commercial building representing a significant style of architecture.*
- *A designed park or garden associated with a particular landscape design philosophy.*
- *A movie theater embodying high artistic value in its decorative features.*
- *A bridge or dam representing technological advances.*

APPLYING CRITERION C: DESIGN/ CONSTRUCTION

DISTINCTIVE CHARACTERISTICS OF TYPE, PERIOD, AND METHOD OF CONSTRUCTION

This is the portion of Criterion C under which most properties are eligible, for it encompasses all architectural styles and construction practices. To be eligible under this portion of the Criterion, a property must clearly illustrate, through "distinctive characteristics," the following:

- The pattern of features common to a particular class of resources,
- The individuality or variation of features that occurs within the class,
- The evolution of that class, or
- The transition between classes of resources.

Distinctive Characteristics: "Distinctive characteristics" are the physical features or traits that commonly recur in individual types, periods, or methods of construction. To be eligible, a property must clearly contain enough of those characteristics to be considered a true representative of a particular type, period, or method of construction.

Characteristics can be expressed in terms such as form, proportion, structure, plan, style, or materials. They can be general, referring to ideas of design and construction such as basic plan or form, or they can be specific, referring to precise ways of combining particular kinds of materials.

Eligible

- A building eligible under the theme of Gothic Revival architecture must have the distinctive characteristics that make up the vertical and picturesque qualities of the style, such as pointed gables, steep roof pitch, board and batten siding, and ornamental bargeboard and veranda trim.
- A late Mississippian village that illustrates the important concepts in prehistoric community design and planning will qualify.
- A designed historic landscape will qualify if it reflects a historic trend or school of theory and practice, such as the City Beautiful Movement, evidencingdistinguished design, layout, and the work of skilled craftsmanship.

Not Eligible

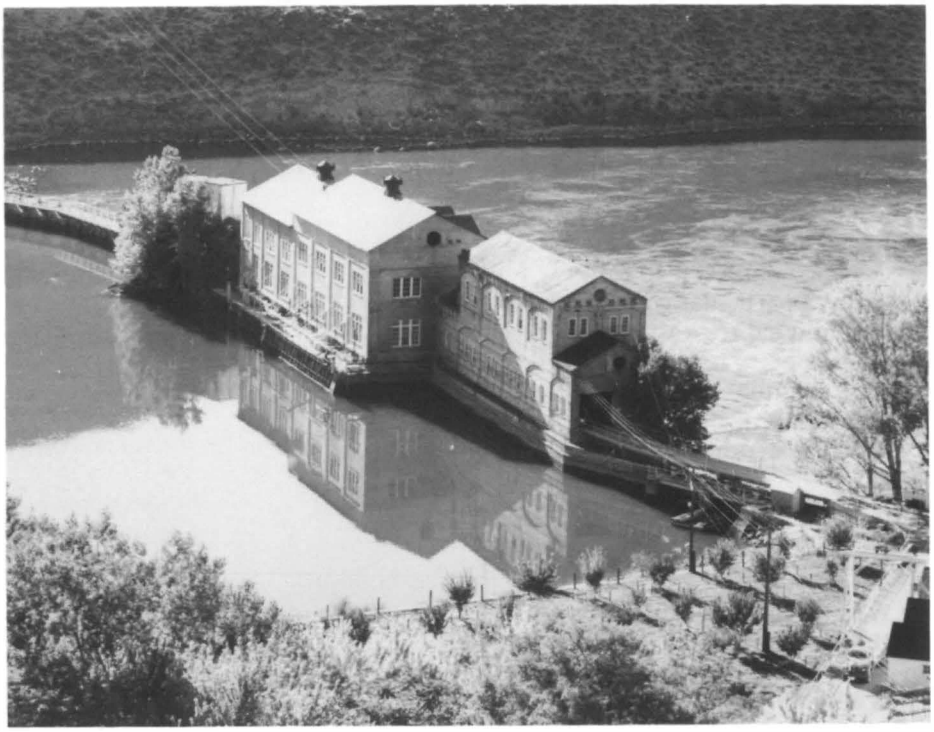
- A commercial building with some Art Deco detailing is not eligible under Criterion C if the detailing was added merely as an afterthought, rather than fully integrated with overall lines and massing typical of the Art Deco style or the transition between that and another style.
- A designed landscape that has had major changes to its historic design, vegetation, original boundary, topography/ grading, architectural features, and circulation system will not qualify.

Type, Period, and Method of Construction: "Type, period, or method of construction" refers to the way certain properties are related to one another by cultural tradition or function, by dates of construction or style, or by choice or availability of materials and technology.

A structure is eligible as a specimen of its type or period of construction if it is an important example (within its context) of building practices of a particular time in history. For properties that represent the variation, evolution, or transition of construction types, it must be demonstrated that the variation, etc., was an important phase of the architectural development of the area or community in that it had an impact as evidenced by later buildings. A property is not eligible, however, simply because it has been identified as the only such property ever fabricated; it must be demonstrated to be significant as well.

Eligible

- A building that has some characteristics of the Romanesque Revival style and some characteristics of the Commercial style can qualify if it illustrates the transition of architectural design and the transition itself is considered an important architectural development.
- A Hopewellian mound, if it is an important example of mound building construction techniques, would qualify as a method or type of construction.
- A building which illustrates the early or the developing technology of particular structural systems, such as skeletal steel framing, is eligible as an example of a particular method of construction.



Swan Falls Dam and Power Plant, *Murphy vicinity, Ada County, Idaho. Significant works of engineering can qualify under Criterion C. Built between 1900-1907 the Swan Falls Dam and Power Plant across the Snake River is one of the early hydroelectric plants in the State of Idaho. (Photo by H.L. Hough).*



Looney House, *Asheville vicinity, St. Clair County, Alabama. Examples of vernacular styles of architecture can qualify under Criterion C. Built ca. 1818, the Looney House is significant as possibly the State's oldest extant two-story dogtrot type of dwelling. The defining open center passage of the dogtrot was a regional building response to the southern climate. (Photo by Carolyn Scott).*

HISTORIC ADAPTATION OF THE ORIGINAL PROPERTY

A property can be significant not only for the way it was originally constructed or crafted, but also for the way it was adapted at a later period, or for the way it illustrates changing tastes, attitudes, and uses over a period of time.

A district is eligible under this guideline if it illustrates the evolution of historic character of a place over a particular span of time.

Eligible

- A Native American irrigation system modified for use by Europeans could be eligible if it illustrates the technology of either or both periods of construction.
- An early 19th century farmhouse modified in the 1880s with Queen Anne style ornamentation could be significant for the modification itself, if it represented a local variation or significant trend in building construction or remodelling, was the work of a local master (see *Works of a Master* on page 20), or reflected the tastes of an important person associated with the property at the time of its alteration.
- A district encompassing the commercial development of a town between 1820 and 1910, characterized by buildings of various styles and eras, can be eligible.

WORKS OF A MASTER

A master is a figure of generally recognized greatness in a field, a known craftsman of consummate skill, or an anonymous craftsman whose work is distinguishable from others by its characteristic style and quality. The property must express a particular phase in the development of the master's career, an aspect of his or her work, or a particular idea or theme in his or her craft.

A property is not eligible as the work of a master, however, simply because it was designed by a prominent architect. For example, not every building designed by Frank Lloyd Wright is eligible under this portion of Criterion C, although it might meet other portions of the Criterion, for instance as a representative of the Prairie style.

The work of an unidentified craftsman is eligible if it rises above the level of workmanship of the other properties encompassed by the historic context.

PROPERTIES POSSESSING HIGH ARTISTIC VALUES

High artistic values may be expressed in many ways, including areas as diverse as community design or planning, engineering, and sculpture. A property is eligible for its high artistic values if it so fully articulates a particular concept of design that it expresses an aesthetic ideal. A property is not eligible, however, if it does not express aesthetic ideals or design concepts more fully than other properties of its type.

Eligible

- A sculpture in a town square that epitomizes the design principles of the Art Deco style is eligible.
- A building that is a classic expression of the design theories of the Craftsman Style, such as carefully detailed handwork, is eligible.
- A landscaped park that synthesizes early 20th century principles of landscape architecture and expresses an aesthetic ideal of environment can be eligible.
- Properties that are important representatives of the aesthetic values of a cultural group, such as petroglyphs and ground drawings by Native Americans, are eligible.

Not Eligible

- A sculpture in a town square that is a typical example of sculpture design during its period would not qualify for high artistic value, although it might be eligible if it were significant for other reasons.
- A building that is a modest example (within its historic context) of the Craftsman Style of architecture, or a landscaped park that is characteristic of turn of the century landscape design would not qualify for high artistic value.

A Significant and Distinguishable Entity Whose Components May Lack Individual Distinction. This portion of Criterion C refers to districts. For detailed information on districts, refer to *Part IV* of this bulletin.

CRITERION D: INFORMATION POTENTIAL

Properties may be eligible for the National Register if they have yielded, or may be likely to yield, information important in prehistory or history.

UNDERSTANDING CRITERION D: INFORMATION POTENTIAL

Certain important research questions about human history can only be answered by the actual physical material of cultural resources. Criterion D encompasses the properties that have the potential to answer, in whole or in part, those types of research questions. The most common type of property nominated under this Criterion is the archeological site (or a district comprised of archeological sites). Buildings, objects, and structures (or districts comprised of these property types), however, can also be eligible for their information potential.

Criterion D has two requirements, which must *both* be met for a property to qualify:

- The property must have, or have had, information to contribute to our understanding of human history or prehistory, and
- The information must be considered important.

Under the first of these requirements, a property is eligible if it has been used as a source of data and contains more, as yet unretrieved data. A property is also eligible if it has not yet yielded information but, through testing or research, is determined a likely source of data.

Under the second requirement, the information must be carefully evaluated within an appropriate context to determine its importance. Information is considered "important" when it is shown to have a significant bearing on a research design that addresses such areas as: 1) current data gaps or alternative theories that challenge existing ones or 2) priority areas identified under a State or Federal agency management plan.

APPLYING CRITERION D: INFORMATION POTENTIAL

ARCHEOLOGICAL SITES

Criterion D most commonly applies to properties that contain or are likely to contain information bearing on an important archeological research question. The property must have characteristics suggesting the likelihood that it possesses configurations of artifacts, soil strata, structural remains, or other natural or cultural features that make it possible to do the following:

- Test a hypothesis or hypotheses about events, groups, or processes in the past that bear on important research questions in the social or natural sciences or the humanities; or
- Corroborate or amplify currently available information suggesting that a hypothesis is either true or false; or
- Reconstruct the sequence of archeological cultures for the purpose of identifying and explaining continuities and discontinuities in the archeological record for a particular area.

BUILDINGS, STRUCTURES, AND OBJECTS

While most often applied to archeological districts and sites, Criterion D can also apply to buildings, structures, and objects that contain important information. In order for these types of properties to be eligible under Criterion D, they themselves must be, or must have been, the principal source of the important information.

Eligible

- A building exhibiting a local variation on a standard design or construction technique can be eligible if study could yield important information, such as how local availability of materials or construction expertise affected the evolution of local building development.

Not Eligible

- The ruins of a hacienda once contained murals that have since been destroyed. Historical documentation, however, indicates that the murals were significant for their highly unusual design. The ruins can not be eligible under Criterion D for the importance of the destroyed murals if the information is contained only in the documentation.



Criterion D - Champe-Fremont 1 Archeological Site, *Omaha vicinity, Douglas County, Nebraska. This archeological site, dating from ca. 1100-1450 A.D., consists of pit houses and storage pits which have the potential to yield important information concerning the subsistence patterns, religious and mortuary practices, and social organization of the prehistoric residents of eastern Nebraska. (Nebraska State Historical Society)*

ASSOCIATION WITH HUMAN ACTIVITY

A property must be associated with *human activity* and be critical for understanding a site's historic environment in order to be eligible under Criterion D. A property can be linked to human activity through events, processes, institutions, design, construction, settlement, migration, ideals, beliefs, lifeways, and other facets of the development or maintenance of cultural systems.

The natural environment associated with the properties was often very different from that of the present and strongly influenced cultural development. Aspects of the environment that are pertinent to human activities should be considered when evaluating properties under Criterion D.

Natural features and paleontological (floral and faunal) sites are not usually eligible under Criterion D in and of themselves. They can be eligible, however, if they are either directly related to human activity or critical to understanding a site's historic environment. In a few cases, a natural feature or site unmarked by cultural materials, that is primarily eligible under Criterion A, may also be eligible under Criterion D, *if* study of the feature, or its location, setting, etc. (usually in the context of data gained from other sources), will yield important information about the event or period with which it is associated.

ESTABLISHING A HISTORIC CONTEXT

The information that a property yields, or will yield, must be evaluated within an appropriate historic context. This will entail consulting the body of information already collected from similar properties or other pertinent sources, including modern and historic written records. The researcher must be able to anticipate if and how the potential information will affect the definition of the context. The information likely to be obtained from a particular property must confirm, refute, or supplement in an important way existing information.

A property is *not* eligible if it cannot be related to a particular time period or cultural group and, as a result, lacks any historic context within which to evaluate the importance of the information to be gained.

DEVELOPING RESEARCH QUESTIONS

Having established the importance of the information that may be recovered, it is necessary to be explicit in demonstrating the connection between the important information and a specific property. One approach is to determine if specific important research questions can be answered by the data contained in the property. Research questions can be related to property-specific issues, to broader questions about a large geographic area, or to theoretical issues independent of any particular geographic location. These questions may be derived from the academic community or from preservation programs at the local, regional, State, or national level. Research questions are usually developed as part of a "research design," which specifies not only the questions to be asked, but also the types of data needed to supply the answers, and often the techniques needed to recover the data.

Eligible

- When a site consisting of a village occupation with midden deposits, hearths, ceramics, and stratified evidence of several occupations is being evaluated, three possible research topics could be: 1) the question of whether the site occupants were indigenous to the area prior to the time of occupation or recent arrivals, 2) the investigation of the settlement-subsistence pattern of the occupants, 3) the question of whether the region was a center for the domestication of plants. Specific questions could include: A) Do the deposits show a sequential development or sudden introduction of Ceramic Type X? B) Do the dates of the occupations fit our expectations based on the current model for the reoccupation behavior of slash-and-burn agriculturalists? C) Can any genetic changes in the food plant remains be detected?

Not Eligible

- A property is not eligible if so little can be understood about it that it is not possible to determine if specific important research questions can be answered by data contained in the property.

ESTABLISHING THE PRESENCE OF ADEQUATE DATA

To support the assertion that a property has the data necessary to provide the important information, the property should be investigated with techniques sufficient to establish the presence of relevant data categories. What constitutes appropriate investigation techniques would depend upon specific circumstances including the property's location, condition, and the research questions being addressed, and could range from surface survey (or photographic survey for buildings), to the application of remote sensing techniques or intensive subsurface testing. Justification of the research potential of a property may be based on analogy to another better known property if sufficient similarities exist to establish the appropriateness of the analogy.

Eligible

- Data requirements depend on the specific research topics and questions to be addressed. To continue the example in "Developing Research Questions" above, we might want to ascertain the following with reference to questions A, B, and C: A) The site contains Ceramic Type X in one or more occupation levels and we expect to be able to document the local evaluation of the type or its intrusive nature. B) The hearths contain datable carbon deposits and are associated with more than one occupation. C) The midden deposits show good floral/faunal preservation, and we know enough about the physical evolution of food plants to interpret signs that suggest domestication.

Not Eligible

- Generally, if the applicable research design requires clearly stratified deposits, then subsurface investigation techniques must be applied. A site composed only of surface materials can not be eligible for its potential to yield information that could only be found in stratified deposits.

INTEGRITY

The assessment of integrity for properties considered for information potential depends on the data requirements of the applicable research design. A property possessing information potential does not need to recall *visually* an event, person, process, or construction technique. It is important that the significant data contained in the property remain sufficiently intact to yield the expected important information, if the appropriate study techniques are employed.

Eligible

- An irrigation system significant for the information it will yield on early engineering practices can still be eligible even though it is now filled in and no longer retains the appearance of an open canal.

Not Eligible

- A plowed archeological site contains several superimposed components that have been mixed to the extent that artifact assemblages cannot be reconstructed. The site cannot be eligible if the data requirements of the research design call for the study of artifacts specific to one component.

PARTLY EXCAVATED OR DISTURBED PROPERTIES

The current existence of appropriate physical remains must be ascertained in considering a property's ability to yield important information. Properties that have been partly excavated or otherwise disturbed and that are being considered for their potential to yield additional important information must be shown to retain that potential in their remaining portions.

Eligible

- A site that has been partially excavated but still retains substantial intact deposits (or a site in which the remaining deposits are small but contain critical information on a topic that is not well known) is eligible.

Not Eligible

- A totally collected surface site or a completely excavated buried site is not eligible since the physical remains capable of yielding important information no longer exist at the site. (See *Completely Excavated Sites*, on page 24, for exception.) Likewise, a site that has been looted or otherwise disturbed to the extent that the remaining cultural materials have lost their important depositional context (horizontal or vertical location of deposits) is not eligible.
- A reconstructed mound or other reconstructed site will generally not be considered eligible, because original cultural materials or context or both have been lost.

COMPLETELY EXCAVATED SITES

Properties that have yielded important information in the past and that no longer retain additional research potential (such as completely excavated archeological sites) must be assessed essentially as historic sites under Criterion A. Such sites must be significant for associative values related to: 1) the importance of the data gained or 2) the impact of the property's role in the history of the development of anthropology/archeology or other relevant disciplines. Like other historic properties, the site must retain the ability to convey its association as the former repository of important information, the location of historic events, or the representative of important trends.

Eligible

- A property that has been excavated is eligible if the data recovered was of such importance that it influenced the direction of research in the discipline, as in a site that clearly established the antiquity of the human occupation of the New World. (See Criterion A in *Part VI: How to Identify the Type of Significance of a Property* and Criteria Consideration G in *Part VII: How to Apply the Criteria Considerations.*)

Not Eligible

- A totally excavated site that at one time yielded important information but that no longer can convey either its historic/prehistoric utilization or significant modern investigation is not eligible.

VII. HOW TO APPLY THE CRITERIA CONSIDERATIONS

INTRODUCTION

Certain kinds of properties are not usually considered for listing in the National Register: religious properties, moved properties, birthplaces and graves, cemeteries, reconstructed properties, commemorative properties, and properties achieving significance within the past fifty years. These properties *can* be eligible for listing, however, if they meet special requirements, called Criteria Considerations, in addition to meeting the regular requirements (that is, being eligible under one or more of the four Criteria and possessing integrity). *Part VII* provides guidelines for determining which properties must meet these special requirements and for applying each Criteria Consideration.

The Criteria Considerations need to be applied only to *individual* properties. Components of eligible districts do not have to meet the special requirements unless they make up the majority of the district or are the focal point of the district. These are the general steps to follow when applying the Criteria Considerations to your property:

- Before looking at the Criteria Considerations, make sure your property meets one or more of the four Criteria for Evaluation and possesses integrity.
- If it does, check the Criteria Considerations (next column) to see if the property is of a type that is usually excluded from the National Register. The sections that follow also list specific examples of properties of each type. If your property clearly *does not* fit one of these types, then it does not need to meet any special requirements.
- If your property *does* fit one of these types, then it must meet the special requirements stipulated for that type in the Criteria Considerations.

CRITERIA CONSIDERATIONS*

Ordinarily cemeteries, birthplaces, or graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past fifty years shall not be considered eligible for the National Register. However, such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

a. a religious property deriving primary significance from architectural or artistic distinction or historical importance; or

b. a building or structure removed from its original location but which is significant primarily for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or

c. a birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building directly associated with his or her productive life; or

d. a cemetery which derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, from association with historic events; or

e. a reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or

f. a property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or,

g. a property achieving significance within the past 50 years if it is of exceptional importance.

*The Criteria Considerations are taken from the Criteria for Evaluation, found in the *Code of Federal Regulations, Title 36, Part 60.*

CRITERIA CONSIDERATION A: RELIGIOUS PROPERTIES

A religious property is eligible if it derives its primary significance from architectural or artistic distinction or historical importance.

UNDERSTANDING CRITERIA CONSIDERATION A: RELIGIOUS PROPERTIES

A religious property requires justification on architectural, artistic, or historic grounds to avoid any appearance of judgment by government about the validity of any religion or belief. Historic significance for a religious property cannot be established on the merits of a religious doctrine, but rather, for architectural or artistic values or for important historic or cultural forces that the property represents. A religious property's significance under Criterion A, B, C, or D must be judged in purely secular terms. A religious group may, in some cases, be considered a cultural group whose activities are significant in areas broader than religious history.

Criteria Consideration for Religious Properties applies:

- If the resource was constructed by a religious institution.
- If the resource is presently owned by a religious institution or is used for religious purposes.
- If the resource was owned by a religious institution or used for religious purposes during its Period of Significance.
- If Religion is selected as an Area of Significance.

Examples of Properties that MUST Meet Criteria Consideration A: Religious Properties

- *A historic church where an important non-religious event occurred, such as a speech by Patrick Henry.*
- *A historic synagogue that is significant for architecture.*
- *A private residence is the site of a meeting important to religious history.*
- *A commercial block that is currently owned as an investment property by a religious institution.*
- *A historic district in which religion was either a predominant or significant function during the period of significance.*

Example of Properties that DO NOT Need to Meet Criteria Consideration A: Religious Properties

- *A residential or commercial district that currently contains a small number of churches that are not a predominant feature of the district.*
- *A town meeting hall that serves as the center of community activity and houses a wide variety of public and private meetings, including religious service. The resource is significant for architecture and politics, and the religious function is incidental.*
- *A town hall, significant for politics from 1875 to 1925, that housed religious services during the 1950s. Since the religious function occurred after the Period of Significance, the Criteria Consideration does not apply.*

APPLYING CRITERIA CONSIDERATION A: RELIGIOUS PROPERTIES

ELIGIBILITY FOR HISTORIC EVENTS

A religious property can be eligible under Criterion A for any of three reasons:

- It is significant under a theme in the history of religion having secular scholarly recognition; or
- It is significant under another historical theme, such as exploration, settlement, social philanthropy, or education; or
- It is significantly associated with traditional cultural values.

RELIGIOUS HISTORY

A religious property can be eligible if it is directly associated with either a specific event or a broad pattern in the history of religion.

Eligible

- The site of a convention at which a significant denominational split occurred meets the requirements of Criteria Consideration A. Also eligible is a property that illustrates the broad impact of a religious institution on the history of a local area.

Not Eligible

- A religious property cannot be eligible simply because was the place of religious services for a community, or was the oldest structure used by a religious group in a local area.

OTHER HISTORICAL THEMES

A religious property can be eligible if it is directly associated with either a specific event or a broad pattern that is significant in another historic context. A religious property would also qualify if it were significant for its associations that illustrate the importance of a particular religious group in the social, cultural, economic, or political history of the area. Eligibility depends on the importance of the event or broad pattern and the role of the specific property.

Eligible

- A religious property can qualify for its important role as a temporary hospital during the Revolutionary War, or if its school was significant in the history of education in the community.

Not Eligible

- A religious property is not significant in the history of education in a community simply because it had occasionally served as a school.

TRADITIONAL CULTURAL VALUES

When evaluating properties associated with traditional cultures, it is important to recognize that often these cultures do not make clear distinctions between what is secular and what is sacred. Criteria Consideration A is not intended to exclude traditional cultural resources merely because they have religious uses or are considered sacred. A property or natural feature important to a traditional culture's religion and mythology is eligible if its importance has been ethnohistorically documented and if the site can be clearly defined. It is critical, however, that the activities be documented and that the associations not be so diffuse that the physical resource cannot be adequately defined.[8]

Eligible

- A specific location or natural feature that an Indian tribe believes to be its place of origin and that is adequately documented qualifies under Criteria Consideration A.

ELIGIBILITY FOR HISTORIC PERSONS

A religious property can be eligible for association with a person important in religious history, if that significance has scholarly, secular recognition or is important in other historic contexts. Individuals who would likely be considered significant are those who formed or significantly influenced an important religious institution or movement, or who were important in the social, economic, or political history of the area. Properties associated with individuals important only within the context of a single congregation and lacking importance in any other historic context would not be eligible under Criterion B.

Eligible

- A religious property strongly associated with a religious leader, such as George Whitefield or Joseph Smith, is eligible.

[8] For more information on applying Criteria Consideration A to traditional cultural properties, refer to *National Register Bulletin: Guidelines for Evaluating and Documenting Traditional Cultural Properties.*

ELIGIBILITY FOR ARCHITECTURAL OR ARTISTIC DISTINCTION

A religious property significant for its architectural design or construction should be evaluated as are other properties under Criterion C; that is, it should be evaluated within an established architectural context and, if necessary, compared to other properties of its type, period, or method of construction. (See "Comparing Related Properties" in *Part V: How to Evaluate a Property Within Its Historic Context.)*

Eligible

- A historic camp meeting district that meets the requirements of Criterion C for its significance as a type of construction is eligible.

ELIGIBILITY FOR INFORMATION POTENTIAL

A religious property, whether a district, site, building, structure, or object, is eligible if it can yield important information about the religious practices of a cultural group or other historic themes. This kind of property should be evaluated as are other properties under Criterion D, in relation to similar properties, other information sources, and existing data gaps.

Eligible

- A 19th century camp meeting site that could provide information about the length and intensity of site use during revivals of the Second Great Awakening is eligible.
- Rock cairns or medicine wheels that had a historic religious mythological function and can provide information about specific cultural beliefs are eligible.

ABILITY TO REFLECT HISTORIC ASSOCIATIONS

As with all eligible properties, religious properties must physically represent the period of time for which they are significance. For instance, a recent building that houses an older congregation cannot qualify based on the historic activities of the group because the current building does not convey the earlier history. Likewise, an older building that housed the historic activities of the congregation is eligible if it still physically represents the period of the congregation's significance. However, if an older building has been remodeled to the extent that its appearance dates from the time of the remodeling, it can only be eligible if the period of significance corresponds with the period of the alterations.

Eligible

- A church built in the 18th century and altered beyond recognition in the 19th century is eligible only if the additions are important in themselves as an example of late 19th century architecture or as a reflection of an important period of the congregation's growth.

Not Eligible

- A synagogue built in the 1920s cannot be eligible for the important activities of its congregation in the 18th and 19th centuries. It can only be eligible for significance obtained after its construction date.
- A rural 19th century frame church recently sheathed in brick is not eligible because it has lost its characteristic appearance and therefore can no longer convey its 19th century significance, either for architectural value or historic association.



Criteria Consideration A - Religious Properties. *A religious property can qualify as an exception to the Criteria if it is architecturally significant.* ***The Church of the Navity*** *in Rosedale, Iberville Parish, Louisiana, qualified as a rare example in the State of a 19th century small frame Gothic Revival style chapel. (Robert Obier)*

CRITERIA CONSIDERATION B: MOVED PROPERTIES

A property removed from its original or historically significant location can be eligible if it is significant primarily for architectural value or it is the surviving property most importantly associated with a historic person or event.

UNDERSTANDING CRITERIA CONSIDERATION B: MOVED PROPERTIES

The National Register criteria limit the consideration of moved properties because significance is embodied in locations and settings as well as in the properties themselves. Moving a property destroys the relationships between the property and its surroundings and destroys associations with historic events and persons. A move may also cause the loss of historic features such as landscaping, foundations, and chimneys, as well as loss of the potential for associated archeological deposits. Properties that were moved *before* their period of significance do not need to meet the special requirements of Criteria Consideration B.

One of the basic purposes of the National Register is to encourage the preservation of historic properties as living parts of their communities. In keeping with this purpose, it is not usual to list artificial groupings of buildings that have been created for purposes of interpretation, protection, or maintenance. Moving buildings to such a grouping destroys the integrity of location and setting, and can create a false sense of historic development.

APPLYING CRITERIA CONSIDERATION B: MOVED PROPERTIES

ELIGIBILITY FOR ARCHITECTURAL VALUE

A moved property significant under Criterion C must retain enough historic features to convey its architectural values and retain integrity of design, materials, workmanship, feeling, and association.

Examples of Properties that MUST Meet Criteria Consideration B: Moved Properties

- *A resource moved from one location on its original site to another location on the property, during or after its Period of Significance.*
- *A district in which a significant number of resources have been moved from their original location.*
- *A district which has one moved building that makes an especially significant contribution to the district.*
- *A portable resource, such as a ship or railroad car, that is relocated to a place incompatible with its original function.*
- *A portable resource, such as a ship or railroad car, whose importance is critically linked to its historic location or route and that is moved.*

Examples of Properties that DO NOT Need to Meet Criteria Consideration B: Moved Properties

- *A property that is moved prior to its Period of Significance.*
- *A district in which only a small percentage of typical buildings in a district are moved.*
- *A moved building that is part of a complex but is of less significance than the remaining (unmoved) buildings.*
- *A portable resource, such as a ship or railroad car, that is eligible under Criterion C and is moved within its natural setting (water, rails, etc.).*
- *A property that is raised or lowered on its foundations.*

ELIGIBILITY FOR HISTORIC ASSOCIATIONS

A moved property significant under Criteria A or B must be demonstrated to be the surviving property most importantly associated with a particular historic event or an important aspect of a historic person's life. The phrase "most importantly associated" means that it must be the single surviving property that is most closely associated with the event or with the part of the person's life for which he or she is significant.

Eligible

- A moved building occupied by an business woman during the majority of her productive career would be eligible if the other extant properties are a house she briefly inhabited prior to her period of significance and a commercial building she owned after her retirement.

Not Eligible

- A moved building associated with the beginning of rail transportation in a community is not eligible if the original railroad station and warehouse remained intact on their original sites.

SETTING AND ENVIRONMENT

In addition to the requirements above, moved properties must still have an orientation, setting, and general environment that are comparable to those of the historic location and that are compatible with the property's significance.

Eligible

- A property significant as an example of mid-19th century rural house type can be eligible after a move, provided that it is placed on a lot that is sufficient in size and character to recall the basic qualities of the historic environment and setting, and provided that the building is sited appropriately in relation to natural and manmade surroundings.

Not Eligible

- A rural house that is moved into an urban area and a bridge that is no longer situated over a waterway are not eligible.

ASSOCIATION DEPENDENT ON THE SITE

For a property whose design values or historical associations are directly dependent on its location, any move will cause the property to lose its integrity and prevent it from conveying its significance.

Eligible

- A farm structure significant only as an example of a method of construction peculiar to the local area is still eligible if it is moved within that local area and the new setting is similar to that of the original location.

Not Eligible

- A 19th century rural residence that was designed around particular topographic features, reflecting that time period's ideals of environment, is not eligible if moved.

PROPERTIES DESIGNED TO BE MOVED

A property designed to move or a property frequently moved during its historic use must be located in a historically appropriate setting in order to qualify, retaining its integrity of setting, design, feeling, and association. Such properties include automobiles, railroad cars and engines, and ships.

Eligible

- A ship docked in a harbor, a locomotive on tracks or in a railyard, and a bridge relocated from one body of water to another are eligible.

Not Eligible

- A ship on land in a park, a bridge placed in a pasture, or a locomotive displayed in an indoor museum are not eligible.

ARTIFICIALLY CREATED GROUPINGS

An artificially created grouping of buildings, structures, or objects is not eligible unless it has achieved significance since the time of its assemblage. It cannot be considered as a reflection of the time period when the individual buildings were constructed.

Eligible

- A grouping of moved historic buildings whose creation marked the beginning of a major concern with past lifestyles can qualify as an early attempt at historic preservation and as an illustration of that generation's values.

Not Eligible

- A rural district composed of a farmhouse on its original site and a grouping of historic barns recently moved onto the property is not eligible.

PORTIONS OF PROPERTIES

A moved *portion* of a building, structure, or object is not eligible because, as a fragment of a larger resource, it has lost integrity of design, setting, materials, workmanship, and location.

CRITERIA CONSIDERATION C: BIRTHPLACES OR GRAVES

A birthplace or grave of a historical figure is eligible if the person is of outstanding importance and if there is no other appropriate site or building directly associated with his or her productive life.

UNDERSTANDING CRITERIA CONSIDERATION C: BIRTHPLACES AND GRAVES

Birthplaces and graves often attain importance as reflections of the origins of important persons or as lasting memorials to them. The lives of persons significant in our past normally are recognized by the National Register through listing of properties illustrative of or associated with that person's productive life's work. Birthplaces and graves, as properties that represent the beginning and the end of the life of distinguished individuals, may be temporally and geographically far removed from the person's significant activities, and therefore are not usually considered eligible.

Examples of Properties that MUST Meet Criteria Consideration C: Birthplaces and Graves

- *The birthplace of a significant person who lived elsewhere during his or her Period of Significance.*
- *A grave that is nominated for its association with the significant person buried in it.*
- *A grave that is nominated for information potential.*

Examples of Properties that DO NOT Need to Meet Criteria Consideration C: Birthplaces and Graves

- *A house that was inhabited by a significant person for his or her entire lifetime.*
- *A grave located on the grounds of the house where a significant person spent his or her productive years.*

APPLYING CRITERIA CONSIDERATION C: BIRTHPLACES AND GRAVES

PERSONS OF OUTSTANDING IMPORTANCE

The phrase "a historical figure of outstanding importance" means that in order for a birthplace or grave to qualify, it cannot be simply the birthplace or grave of a person significant in our past (Criterion B). It must be the birthplace or grave of an individual who was of outstanding importance in the history of the local area, State, or nation. The birthplace or grave of an individual who was one of several people active in some aspect of the history of a community, a state, or the Nation would not be eligible.

LAST SURVIVING PROPERTY ASSOCIATED WITH A PERSON

When an geographical area strongly associated with a person of outstanding importance has lost all other properties directly associated with his or her formative years or productive life, a birthplace or grave may be eligible.

ELIGIBILITY FOR OTHER ASSOCIATIONS

A birthplace or grave can also be eligible if it is significant for reasons other than association with the productive life of the person in question. It can be eligible for significance under Criterion A for association with important events, under Criterion B for association with the productive lives of *other* important persons, or under Criterion C for architectural significance. A birthplace or grave can also be eligible in rare cases if, after the passage of time, it is significant for its commemorative value. (See Criteria Consideration F for a discussion of commemorative properties.) A birthplace or grave can also be eligible under Criterion D if it contains important information on research, *e.g.,* demography, pathology, mortuary practices, socioeconomic status differentiation.



***Criteria Consideration** C - **Birthplaces.** A birthplace of a historical figure is eligible if the person is of outstanding importance and there is no other appropriate site or building associated with his or her productive life. The **Walter Reed Birthplace,** Gloucester vicinity, Gloucester County, Virginia is the most appropriate remaining building associated with the life of the man who, in* 1900, *discovered the cause and mode of transmission of the great scourge of the tropics, yellow fever. (Virginia Historic Landmarks Commission)*

CRITERIA CONSIDERATION D: CEMETERIES

A cemetery is eligible if it derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.

UNDERSTANDING CRITERIA CONSIDERATION D: CEMETERIES

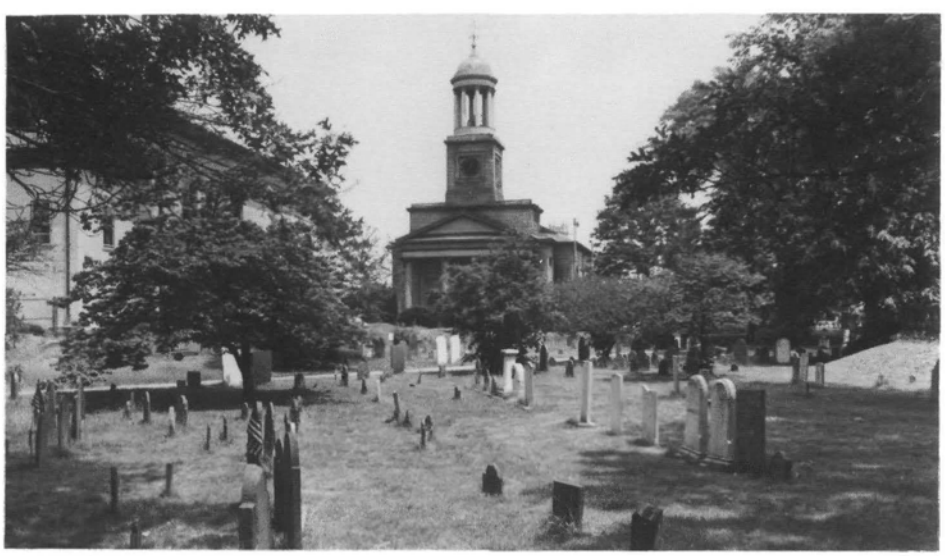
A cemetery is a collection of graves that is marked by stones or other artifacts or that is unmarked but recognizable by features such as fencing or depressions, or through maps, or by means of testing. Cemeteries serve as a primary means of an individual's recognition of family history and as expressions of collective religious and/or ethnic identity. Because cemeteries may embody values beyond personal or family-specific emotions, the National Register criteria allow for listing of cemeteries under certain conditions.

Examples of Properties that MUST Meet Criteria Consideration D: Cemeteries

- *A cemetery that is nominated individually for Criterion A, B, or C.*

Examples of Properties that DO NOT Need to Meet Criteria Consideration D: Cemeteries

- *A cemetery that is nominated along with its associated church, but the church is the main resource nominated.*
- *A cemetery that is nominated under Criterion D for information potential.*
- *A cemetery that is nominated as part of a district but is not the focal point of the district.*



Criteria Consideration D - Cemeteries. *The* ***Hancock Cemetery,*** *Quincy, Norfolk County, Massachusetts meets the exception to the Criteria because it derives its primary significance from its great age (the earliest burials date from 1640) and from the distinctive design features found in its rich collection of late 17th and early 18th century funerary art. (N. Hobart Holly)*

APPLYING CRITERIA CONSIDERATION D: CEMETERIES

PERSONS OF TRANSCENDENT IMPORTANCE

A cemetery containing the graves of persons of transcendent importance may be eligible. To be of transcendent importance the persons must have been of great eminence in their fields of endeavor or had a great impact upon the history of their community, State, or nation. (A single grave that is the burial place of an important person and is located in a larger cemetery that does not qualify under this Criteria Consideration should be treated under Criteria Consideration C: Birthplaces and Graves.)

Eligible

- A historic cemetery containing the graves of a number of persons who were exceptionally significant in determining the course of a State's political or economic history during a particular period is eligible.

Not Eligible

- A cemetery containing graves of State legislators is not eligible if they simply performed the daily business of State government and did not have an outstanding impact upon the nature and direction of the State's history.

ELIGIBILITY ON THE BASIS OF AGE

Cemeteries can be eligible if they have achieved historic significance for their relative great age in a particular geographic or cultural context.

Eligible

- A cemetery dating from a community's original 1830s settlement can attain significance from its association with that very early period.

ELIGIBILITY FOR DESIGN

Cemeteries can qualify on the basis of distinctive design values. These values refer to the same design values addressed in Criterion C and can include aesthetic or technological achievement in the fields of city planning, architecture, landscape architecture, engineering, mortuary art, and sculpture. As for all other nominated properties, a cemetery must clearly express its design values and be able to convey its historic appearance.

Eligible

- A Victorian cemetery is eligible if it clearly expresses the aesthetic principles related to funerary design for that period, through such features as the overall plan, landscaping, statuary, sculpture, fencing, buildings, and grave markers.

Not Eligible

- A cemetery cannot be eligible for design values if it no longer conveys its historic appearance because of the introduction of new grave markers.

ELIGIBILITY FOR ASSOCIATION WITH EVENTS

Cemeteries may be associated with historic events including specific important events or general events that illustrate broad patterns.

Eligible

- A cemetery associated with an important Civil War battle is eligible.
- A cemetery associated with the settlement of an area by an ethnic or cultural group is eligible if the movement of the group into the area had an important impact, if other properties associated with that group are rare, and if few documentary sources have survived to provide information about the group's history.

Not Eligible

- A cemetery associated with a battle in the Civil War does not qualify if the battle was not important in the history of the war.
- A cemetery associated with an area's settlement by an ethnic or cultural group is not eligible if the impact of the group on the area cannot be established, if other extant historic properties better convey association with the group, or if the information that the cemetery can impart is available in documentary sources.

ELIGIBILITY FOR INFORMATION POTENTIAL

Cemeteries, both historic and prehistoric, can be eligible if they have the potential to yield important information. The information must be important within a specific context and the potential to yield information must be demonstrated.

A cemetery can qualify if it has potential to yield important information provided that the information it contains is not available in extant documentary evidence.

Eligible

- A cemetery associated with the settlement of a particular cultural group will qualify if it has the potential to yield important information about subjects such as demography, variations in mortuary practices, or the study of the cause of death correlated with nutrition or other variables.

INTEGRITY

Assessing the integrity of a historic cemetery entails evaluating principal design features such as plan, grave markers, and any related elements (such as fencing). Only that portion of a historic cemetery that retains its historic integrity can be eligible. If the overall integrity has been lost because of the number and size of recent grave markers, some features such as buildings, structures, or objects that retain integrity may be considered as individual properties if they are of such historic or artistic importance that they individually meet one or more of the requirements listed above.

NATIONAL CEMETERIES

National Cemeteries administered by the Veterans Administration are eligible because they have been designated by Congress as primary memorials to the military history of the United States. Those areas within a designated national cemetery that have been used or prepared for the reception of the remains of veterans and their dependents, as well as any landscaped areas that immediately surround the graves may qualify. Because these cemeteries draw their significance from the presence of the remains of military personnel who have served the country throughout its history, the age of the cemetery is not a factor in judging eligibility, although integrity must be present.

A national cemetery or a portion of a national cemetery that has only been set aside for use in the future is not eligible.

CRITERIA CONSIDERATION E: RECONTRUCTED PROPERTIES

A reconstructed property is eligible when it is accurately executed in a suitable environment *and* presented in a dignified manner as part of a restoration master plan *and* when no other building or structure with the same associations has survived. All three of these requirements must be met.

UNDERSTANDING CRITERIA CONSIDERATION E: RECONSTRUCTED PROPERTIES

"Reconstruction" is defined as the reproduction of the exact form and detail of a vanished building, structure, object, or a part thereof, as it appeared at a specific period of time. Reconstructed buildings fall into two categories: buildings wholly constructed of new materials and buildings reassembled from some historic and some new materials. Both categories of properties present problems in meeting the integrity requirements of the National Register criteria.

Examples of Properties that MUST Meet Criteria Consideration E: Reconstructed Properties

- *A property in which most or all of the fabric is not original.*
- *A district in which an important resource or a significant number of resources are reconstructions.*

Examples of Properties that DO NOT Need to Meet Criteria Consideration E: Reconstructed Properties

- *A property that is remodeled or renovated and still has the majority of its original fabric.*

APPLYING CRITERIA CONSIDERATION E: RECONSTRUCTED PROPERTIES

ACCURACY OF THE RECONSTRUCTION

The phrase "accurately executed" means that the reconstruction must be based upon sound archeological, architectural, and historic data concerning the historic construction and appearance of the resource. That documentation should include both analysis of any above or below ground material and research in written and other records.

SUITABLE ENVIRONMENT

The phrase "suitable environment" refers to: 1) the physical context provided by the historic district and 2) any interpretive scheme, if the historic district is used for interpretive purposes. This means that the reconstructed property must be located at the same site as the original. It must also be situated in its original grouping of buildings, structures, and objects (as many as are extant), and that grouping must retain integrity. In addition, the reconstruction must not be misrepresented as an authentic historic property.

Eligible

- A reconstructed plantation manager's office building is considered eligible because it is located at its historic site, grouped with the remaining historic plantation buildings and structures, and the plantation as a whole retains integrity. Interpretation of the plantation district includes an explanation that the manager's office is not the original building, but a reconstruction.

Not Eligible

- The same reconstructed plantation manager's office building would not qualify if it were rebuilt at a location different from that of the original building, or if the district as a whole no longer reflected the period for which it is significant, or if a misleading interpretive scheme were used for the district or for the reconstruction itself.

RESTORATION MASTER PLANS

Being presented "as part of a restoration master plan" means that: 1) a reconstructed property is an essential component in a historic district and 2) the reconstruction is part of an overall restoration plan for an entire district. "Restoration" is defined as accurately recovering the form and details of a property and its setting as it appeared at a particular period by removing later work or by replacing missing earlier work (as opposed to completely rebuilding the property). The master plan for the entire property must emphasize restoration, not reconstruction. In other words, the master plan for the entire resource would not be acceptable under this consideration if it called for reconstruction of a majority of the resource.

Eligible

- A reconstructed plantation manager's office is eligible if the office were an important component of the plantation *and* if the reconstruction is one element in an overall plan for restoring the plantation *and* if no other building or structure with the same associations has survived.
- The reconstruction of the plantation manager's office building can be eligible only if the majority of buildings, structures, and objects that comprised the plantation are extant and are being restored. For guidance regarding restoration see the *Secretary of the Interior's Standards for Historic Preservation Projects.*

LAST SURVIVING PROPERTY OF A TYPE

This consideration also stipulates that a reconstruction can qualify if, in addition to the other requirements, no other building, object, or structure with the same association has survived. A reconstruction that is part of a restoration master plan is appropriate only if: 1) the property is the only one in the district with which a particular important activity or event has been historically associated or 2) no other property with the same associative values has survived.

RECONSTRUCTIONS OLDER THAN FIFTY YEARS

After the passage of fifty years, a reconstruction may attain its own significance for what it reveals about the period in which it was built, rather than the historic period it was intended to depict. On that basis, a reconstruction can possibly qualify under any of the Criteria.

CRITERIA CONSIDERATION F: COMMEMORATIVE PROPERTIES

A property primarily commemorative in intent can be eligible if design, age, tradition, or symbolic value has invested it with its own historical significance.

UNDERSTANDING CRITERIA CONSIDERATION F: COMMEMORATIVE PROPERTIES

Commemorative properties are designed or constructed after the occurrence of an important historic event or after the life of an important person. They are not directly associated with the event or with the person's productive life, but serve as evidence of a later generation's assessment of the past. Their significance comes from their value as cultural expressions at the date of their creation. Therefore, a commemorative property generally must be over fifty years old and must possess significance based on its own value, not on the value of the event or person being memorialized.

Examples of Properties that MUST Meet Criteria Consideration F: Commemorative Properties

- *A property whose sole or primary function is commemorative or in which the commemorative function is of primary significance.*

Examples of Properties that DO NOT Need to Meet Criteria Consideration F: Commemorative Properties

- *A resource that has a non-commemorative primary function or significance.*
- *A single marker that is a component of a district (whether contributing or non-contributing).*

APPLYING CRITERIA CONSIDERATION F: COMMEMORATIVE PROPERTIES

ELIGIBILITY FOR DESIGN

A commemorative property derives its design from the aesthetic values of the period of its creation. A commemorative property, therefore, may be significant for the architectural, artistic, or other design qualities of its own period in prehistory or history.

Eligible

- A commemorative statue situated in a park or square is eligible if it expresses the aesthetics or craftsmanship of the period when it was made, meeting Criterion C.
- A late 19th century statue erected on a courthouse square to commemorate Civil War veterans would qualify if it reflects that era's shared perception of the noble character and valor of the veterans and their cause. This was commonly conveyed by portraying idealized soldiers or allegorical figures of battle, victory, or sacrifice.

ELIGIBILITY FOR AGE, TRADITION, OR SYMBOLIC VALUE

A commemorative property cannot qualify for association with the event or person it memorializes. A commemorative property may, however, acquire significance after the time of its creation through *age, tradition,* or *symbolic* value. This significance must be documented by accepted methods of historical research, including written or oral history, and must meet one or more of the Criteria.

Eligible

- A commemorative marker erected by a cultural group that believed the place was the site of its origins is eligible if, for subsequent generations of the group, the marker itself became the focus of traditional association with the group's historic identity.
- A building erected as a monument to an important historical figure will qualify if through the passage of time the property itself has come to symbolize the value placed upon the individual and is widely recognized as a reminder of enduring principles or contributions valued by the generation that erected the monument.
- A commemorative marker erected early in the settlement or development of an area will qualify if it is demonstrated that, because of its relative great age, the property has long been a part of the historic identity of the area.

Not Eligible

- A commemorative marker erected in the past by a cultural group at the site of an event in its history would not be eligible if the marker were significant only for association with the event, and it had not become significant itself through tradition.
- A building erected as a monument to an important historical figure would not be eligible if its only value lay in its association with the individual, and it has not come to symbolize values, ideas, or contributions valued by the generation that erected the monument.
- A commemorative marker erected to memorialize an event in the community's history would not qualify simply for its association with the event it memorialized.

INELIGIBILITY AS THE LAST REPRESENTATIVE OF AN EVENT OR PERSON

The loss of properties directly associated with a significant event or person does not strengthen the case for consideration of a commemorative property. Unlike birthplaces and graves, a commemorative property usually has no direct historic association. The commemorative property can qualify for historic association only if it is clearly significant in its own right, as stipulated above.

CRITERIA CONSIDERATION G: PROPERTIES THAT HAVE ACHIEVED SIGNIFICANCE WITHIN THE LAST FIFTY YEARS[9]

A property achieving significance within the last fifty years is eligible if it is of exceptional importance.

UNDERSTANDING CRITERIA CONSIDERATION G: PROPERTIES THAT HAVE ACHIEVED SIGNIFICANCE WITHIN THE LAST FIFTY YEARS

The National Register Criteria for Evaluation exclude properties that achieved significance within the last fifty years unless they are of exceptional importance. Fifty years is a general estimate of the time needed to develop historical perspective and to evaluate significance. This consideration guards against the listing of properties of passing contemporary interest and ensures that the National Register is a list of truly historic places.

Examples of Properties that MUST Meet Criteria Consideration G: Properties that Have Achieved Significance Within the Last Fifty Years

- *A property that is less than fifty years old.*
- *A property that continues to achieve significance into a period less than fifty years before the nomination.*
- *A property that has non-contiguous Periods of Significance, one of which is less than fifty years before the nomination.*
- *A property that is more than fifty years old and had no significance until a period less than fifty years before the nomination.*

Examples of Properties that DO NOT Need to Meet Criteria Consideration G: Properties that Have Achieved Significance Within the Last Fifty Years

- *A resource whose construction began over fifty years ago, but the completion overlaps the fifty year period by a few years or less.*
- *A resource that is significant for its plan or design, which is over fifty years old, but the actual completion of the project overlaps the fifty year period by a few years.*
- *A historic district in which a few properties are newer than fifty years old, but the majority of properties and the most important Period of Significance are greater than fifty years old.*

[9] For more information on Criteria Consideration G, refer to *National Register Bulletin: Guidelines for Evaluating and Nominating Properties that Have Achieved Significance Within the Last Fifty Years.*

APPLYING CRITERIA CONSIDERATION G: PROPERTIES THAT HAVE ACHIEVED SIGNIFICANCE WITHIN THE PAST FIFTY YEARS

ELIGIBILITY FOR EXCEPTIONAL IMPORTANCE

The phrase "exceptional importance" may be applied to the extraordinary importance of an event or to an entire category of resources so fragile that survivors of any age are unusual. Properties listed that had attained significance in less than fifty years include: the launch pad at Cape Canaveral from which men first traveled to the moon, the home of nationally prominent playwright Eugene O'Neill, and the Chrysler Building (New York) significant as the epitome of the "Style Moderne" architecture.

Properties less than fifty years old that qualify as exceptional because the entire category of resources is fragile include a recent example of a traditional sailing canoe in the Trust Territory of the Pacific Islands, where because of rapid deterioration of materials, no working Micronesian canoes exist that are more than twenty years old. Properties that by their nature can last more than fifty years cannot be considered exceptionally important because of the fragility of the class of resources.

The phrase "exceptional importance" does not require that the property be of national significance. It is a measure of a property's importance within the appropriate historic context, whether the scale of that context is local, State, or national.

Eligible

- The General Laundry Building in New Orleans, one of the few remaining Art Deco Style buildings in that city, was listed in the National Register when it was forty years old because of its exceptional importance as an example of that architectural style.

HISTORICAL PERSPECTIVE

A property that has achieved significance within the past fifty years can be evaluated only when sufficient historical perspective exists to determine that the property is exceptionally important. The necessary perspective can be provided by scholarly research and evaluation, and must consider both the historic context and the specific property's role in that context.

In many communities, properties such as apartment buildings built in the 1950s cannot be evaluated because there is no scholarly research available to provide an overview of the nature, role, and impact of that building type within the context of historical and architectural developments of the 1950s.

NATIONAL PARK SERVICE RUSTIC ARCHITECTURE

Properties such as structures built in a rustic style by the National Park Service during the 1930s and 1940s can be evaluated because a broad study, *National Park Service Rustic Architecture* (1977), provides the context for evaluating properties of this type and style. Specific examples were listed in the National Register prior to reaching fifty years of age when documentation concerning the individual properties established their significance within the historical and architectural context of the type and style.

VETERANS ADMINISTRATION HOSPITALS

Hospitals less than fifty years old that were constructed by the Veterans Bureau and Veterans Administration can be evaluated because the collection of forty-eight facilities built between 1920 and 1946 has been analyzed in a study prepared by the agency. The study provided a historic and architectural context for development of veteran's care within which hospitals could be evaluated. The exceptional importance of specific individual facilities constructed within the past fifty years could therefore be determined based on their role and their present integrity.

COMPARISON WITH RELATED PROPERTIES

In justifying exceptional importance, it is necessary to identify other properties within the geographical area that reflect the same significance or historic associations and to determine which properties *best* represent the historic context in question. Several properties in the area could become eligible with the passage of time, but few will qualify now as exceptionally important.

POST-WORLD WAR II PROPERTIES

Properties associated with the post-World War II era must be identified and evaluated to determine which ones in an area could be judged exceptionally important. For example, a public housing complex may be eligible as an outstanding expression of the nation's post-war urban policy. A military installation could be judged exceptionally important because of its contribution to the Cold War arms race. A church building in a Southern city may have served as the pivotal rallying point for the city's most famous civil rights protest. A post-war suburban subdivision may be the best reflection of contemporary siting and design tenets in a metropolitan area. In each case, the nomination preparer must justify the *exceptional* importance of the property relative to similar properties in the community, State, or nation.

ELIGIBILITY FOR INFORMATION POTENTIAL

A property that has achieved significance within the past fifty years can qualify under Criterion D only if it can be demonstrated that the information is of exceptional importance within the appropriate context and that the property contains data superior to or different from those obtainable from other sources, including other culturally related sites. An archeological site less than fifty years old may be eligible if the former inhabitants are so poorly documented that information about their lifeways is best obtained from examination of the material remains.

Eligible

- Data such as the rate of adoption of modern technological innovations by rural tenant farmers in the 1950s may not be obtainable through interviews with living persons but could be gained by examination of homesites.

Not Eligible

- A recent archeological site such as the remains of a Navajo sheep corral used in the 1950s would not be considered exceptionally significant for its information potential on animal husbandry if better information on the same topic is available through ethnographic studies or living informants.

HISTORIC DISTRICTS

Properties which have achieved significance within the past fifty years can be eligible for the National Register if they are an integral part of a district which qualifies for National Register listing. This is demonstrated by documenting that the property dates from within the district's defined Period of Significance and that it is associated with one or more of the district's defined Areas of Significance.

Properties less than fifty years old may be an integral part of a district when there is sufficient perspective to consider the properties as historic. This is accomplished by demonstrating that: 1) the district's Period of Significance is justified as a discrete period with a defined beginning and end, 2) the character of the district's historic resources is clearly defined and assessed, 3) specific resources in the district are demonstrated to date from that discrete era, and 4) the majority of district properties are over fifty years old. In these instances, it is not necessary to prove exceptional importance of either the district itself or the less-than-fifty-year-old properties. Exceptional importance still must be demonstrated for district where the majority of properties or the major Period of Significance is less than fifty years old, and for less-than-fifty-year-old properties which are nominated individually.

PROPERTIES MORE THAN FIFTY YEARS IN AGE, LESS THAN FIFTY YEARS IN SIGNIFICANCE

Properties that are more than fifty years old, but whose significant associations or qualities are less than fifty years old, must be treated under the fifty year consideration.

Eligible

- A building constructed early in the twentieth century (and having no architectural importance), but that was associated with an important person during the 1950s, must be evaluated under Criteria Consideration G because the Period of Significance is within the past fifty years. Such a property would qualify if the person was of exceptional importance.

REQUIREMENT TO MEET THE CRITERIA, REGARDLESS OF AGE

Properties that are less than fifty years old and are not exceptionally important will *not* automatically qualify for the National Register once they are fifty years old. In order to be listed in the National Register, all properties, regardless of age, must be demonstrated to meet the Criteria for Evaluation.

VIII. HOW TO EVALUATE THE INTEGRITY OF A PROPERTY

INTRODUCTION

Integrity is the ability of a property to convey its significance. To be listed in the National Register of Historic Places, a property must not only be shown to be significant under the National Register criteria, but it also must have integrity. The evaluation of integrity is sometimes a subjective judgment, but it must always be grounded in an understanding of a property's physical features and how they relate to its significance.

Historic properties either retain integrity (this is, convey their significance) or they do not. Within the concept of integrity, the National Register criteria recognizes seven aspects or qualities that, in various combinations, define integrity.

To retain historic integrity a property will always possess several, and usually most, of the aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance. Determining *which* of these aspects are most important to a particular property requires knowing why, where, and when the property is significant. The following sections define the seven aspects and explain how they combine to produce integrity.

SEVEN ASPECTS OF INTEGRITY

- Location
- Design
- Setting
- Materials
- Workmanship
- Feeling
- Association

UNDERSTANDING THE ASPECTS OF INTEGRITY

LOCATION

Location is the place where the historic property was constructed or the place where the historic event occurred. The relationship between the property and its location is often important to understanding why the property was created or why something happened. The actual location of a historic property, complemented by its setting, is particularly important in recapturing the sense of historic events and persons. Except in rare cases, the relationship between a property and its historic associations is destroyed if the property is moved. (See Criteria Consideration B in *Part VII: How to Apply the Criteria Considerations*, for the conditions under which a moved property can be eligible.)

DESIGN

Design is the combination of elements that create the form, plan, space, structure, and style of a property. It results from conscious decisions made during the original conception and planning of a property (or its significant alteration) and applies to activities as diverse as community planning, engineering, architecture, and landscape architecture. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials.

A property's design reflects historic functions and technologies as well as aesthetics. It includes such considerations as the structural system; massing; arrangement of spaces; pattern of fenestration; textures and colors of surface materials; type, amount, and style of ornamental detailing; and arrangement and type of plantings in a designed landscape.

Design can also apply to districts, whether they are important primarily for historic association, architectural value, information potential, or a combination thereof. For districts significant primarily for historic association or architectural value, design concerns more than just the individual buildings or structures located within the boundaries. It also applies to the way in which buildings, sites, or structures are related: for example, spatial relationships between major features; visual rhythms in a streetscape or landscape plantings; the layout and materials of walkways and roads; and the relationship of other features, such as statues, water fountains, and archeological sites.

SETTING

Setting is the physical environment of a historic property. Whereas location refers to the specific place where a property was built or an event occurred, setting refers to the *character* of the place in which the property played its historical role. It involves *how*, not just where, the property is situated and its relationship to surrounding features and open space.

Setting often reflects the basic physical conditions under which a property was built and the functions it was intended to serve. In addition, the way in which a property is positioned in its environment can reflect the designer's concept of nature and aesthetic preferences.

The physical features that constitute the setting of a historic property can be either natural or manmade, including such elements as:

- Topographic features (a gorge or the crest of a hill);
- Vegetation;
- Simple manmade features (paths or fences); and
- Relationships between buildings and other features or open space.

These features and their relationships should be examined not only within the exact boundaries of the property, but also between the property and its *surroundings*. This is particularly important for districts.

MATERIALS

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property. The choice and combination of materials reveal the preferences of those who created the property and indicate the availability of particular types of materials and technologies. Indigenous materials are often the focus of regional building traditions and thereby help define an area's sense of time and place.

A property must retain the key exterior materials dating from the period of its historic significance. If the property has been rehabilitated, the historic materials and significant features must have been preserved. The property must also be an actual historic resource, not a recreation; a recent structure fabricated to look historic is not eligible. Likewise, a property whose historic features and materials have been lost and then reconstructed is usually not eligible. (See Criteria Consideration E in *Part VII: How to Apply the Criteria Considerations* for the conditions under which a reconstructed property can be eligible.)

WORKMANSHIP

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. It is the evidence of artisans' labor and skill in constructing or altering a building, structure, object, or site. Workmanship can apply to the property as a whole or to its individual components. It can be expressed in vernacular methods of construction and plain finishes or in highly sophisticated configurations and ornamental detailing. It can be based on common traditions or innovative period techniques.

Workmanship is important because it can furnish evidence of the technology of a craft, illustrate the aesthetic principles of a historic or prehistoric period, and reveal individual, local, regional, or national applications of both technological practices and aesthetic principles. Examples of workmanship in historic buildings include tooling, carving, painting, graining, turning, and joinery. Examples of workmanship in prehistoric contexts include Paleo-Indian clovis projectile points; Archaic period beveled adzes; Hopewellian birdstone pipes; copper earspools and worked bone pendants; and Iroquoian effigy pipes.

FEELING

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time. It results from the presence of physical features that, taken together, convey the property's historic character. For example, a rural historic district retaining original design, materials, workmanship, and setting will relate the feeling of agricultural life in the 19th century. A grouping of prehistoric petroglyphs, unmarred by graffiti and intrusions and located on its original isolated bluff, can evoke a sense of tribal spiritual life.

ASSOCIATION

Association is the direct link between an important historic event or person and a historic property. A property retains association if it *is* the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer. Like feeling, association requires the presence of physical features that convey a property's historic character. For example, a Revolutionary War battlefield whose natural and manmade elements have remained intact since the 18th century will retain its quality of association with the battle.

Because feeling and association depend on individual perceptions, their retention *alone* is never sufficient to support eligibility of a property for the National Register.

ASSESSING INTEGRITY IN PROPERTIES

Integrity is based on significance: why, where, and when a property is important. Only after significance is fully established can you proceed to the issue of integrity.

The steps in assessing integrity are:

- Define the **essential physical features** that must be present for a property to represent its significance.
- Determine whether the **essential physical features are visible** enough to convey their significance.
- Determine whether the property needs to be **compared with similar properties.** And,
- Determine, based on the significance and essential physical features, **which aspects of integrity** are particularly vital to the property being nominated and if they are present.

Ultimately, the question of integrity is answered by whether or not the property retains the **identity** for which it is significant.

DEFINING THE ESSENTIAL PHYSICAL FEATURES

All properties change over time. It is not necessary for a property to retain all its historic physical features or characteristics. The property must retain, however, the essential physical features that enable it to convey its historic identity. The essential physical features are those features that define both *why* a property is significant (Applicable Criteria and Areas of Significance) and *when* it was significant (Periods of Significance). They are the features without which a property can no longer be identified as, for instance, a late 19th century dairy barn or an early 20th century commercial district.

CRITERIA A AND B

A property that is significant for its historic association is eligible if it retains the essential physical features that made up its character or appearance during the period of its association with the important event, historical pattern, or person(s). If the property is a site (such as a treaty site) where there are no material cultural remains, the setting must be intact.

Archeological sites eligible under Criteria A and B must be in overall good condition with excellent preservation of features, artifacts, and spatial relationships to the extent that these remains are able to convey important associations with events or persons.

CRITERION C

A property important for illustrating a particular architectural style or construction technique must retain most of the physical features that constitute that style or technique. A property that has lost some historic materials or details can be eligible *if* it retains the majority of the features that illustrate its style in terms of the massing, spatial relationships, proportion, pattern of windows and doors, texture of materials, and ornamentation. The property is not eligible, however, if it retains some basic features conveying massing but has lost the majority of the features that once characterized its style.

Archeological sites eligible under Criterion C must be in overall good condition with excellent preservation of features, artifacts, and spatial relationships to the extent that these remains are able to illustrate a site type, time period, method of construction, or work of a master.

CRITERION D

For properties eligible under Criterion D, including archeological sites and standing structures studied for their information potential, less attention is given to their overall condition, than it they were being considered under Criteria A, B, or C. Archeological sites, in particular, do not exist today exactly as they were formed. There are always cultural and natural processes that alter the deposited materials and their spatial relationships.

For properties eligible under Criterion D, integrity is based upon the property's potential to yield specific data that addresses important research questions, such as those identified in the historic context documentation in the Statewide Comprehensive Preservation Plan or in the research design for projects meeting the *Secretary of the Interior's Standards for Archeological Documentation.*

INTERIORS

Some historic buildings are virtually defined by their exteriors, and their contribution to the built environment can be appreciated even if their interiors are not accessible. Examples of this would include early examples of steel-framed skyscraper construction. The great advance in American technology and engineering made by these buildings can be read from the outside. The change in American popular taste during the 19th century, from the symmetry and simplicity of architectural styles based on classical precedents, to the expressions of High Victorian styles, with their combination of textures, colors, and asymmetrical forms, is readily apparent from the exteriors of these buildings.

Other buildings "are" interiors. The Cleveland Arcade, that soaring 19th century glass-covered shopping area, can only be appreciated from the inside. Other buildings in this category would be the great covered train sheds of the 19th century.

In some cases the loss of an interior will disqualify properties from listing in the National Register—a historic concert hall noted for the beauty of its auditorium and its fine acoustic qualities would be the type of property that if it were to lose its interior, it would lose its value as a historic resource. In other cases, the overarching significance of a property's exterior can overcome the adverse effect of the loss of an interior.

In borderline cases particular attention is paid to the significance of the property and the remaining historic features.

HISTORIC DISTRICTS

For a district to retain integrity as a whole, the majority of the components that make up the district's historic character must possess integrity even if they are individually undistinguished. In addition, the relationships among the district's components must be substantially unchanged since the period of significance.

When evaluating the impact of intrusions upon the district's integrity, take into consideration the relative number, size, scale, design, and location of the components that do not contribute to the significance. A district is not eligible if it contains so many alterations or new intrusions that it no longer conveys the sense of a historic environment.

A component of a district cannot contribute to the significance if:

- it has been substantially altered since the period of the district's significance *or*
- it does not share the historic associations of the district.

VISIBILITY OF PHYSICAL FEATURES

Properties eligible under Criteria A, B, and C must not only retain their essential physical features, but the features must be visible enough to convey their significance. This means that even if a property is physically intact, its integrity is questionable if its significant features are concealed under modern construction. Archeological properties are often the exception to this; by nature they usually do not require visible features to convey their significance.

NON-HISTORIC EXTERIORS

If the historic *exterior* building material is covered by non-historic material (such as modern siding), the property can still be eligible *if* the significant form, features, and detailing are not obscured. If a property's exterior is covered by a non-historic false-front or curtain wall, the property will not qualify under Criteria A, B, or C, because it does not retain the visual quality necessary to convey historic or architectural significance. Such a property also cannot be considered a contributing element in a historic district, because it does not add to the district's sense of time and place. If the false front, curtain wall, or non-historic siding is removed and the original building materials are intact, then the property's integrity can be re-evaluated.

PROPERTY CONTAINED WITHIN ANOTHER PROPERTY

Some properties contain an earlier structure that formed the nucleus for later construction. The exterior property, if not eligible in its own right, can qualify on the basis of the interior property *only if* the interior property can yield significant information about a specific construction technique or material, such as rammed earth or tabby. The interior property *cannot* be used as the basis for eligibility if it has been so altered that it no longer contains the features that could provide important information, or if the presence of important information cannot be demonstrated.

SUNKEN VESSELS

A sunken vessel can be eligible under Criterion C as embodying the distinctive characteristics of a method of construction if it is structurally intact. A *deteriorated* sunken vessel, no longer structurally intact, can be eligible under Criterion D if the remains of either the vessel or its contents is capable of yielding significant information. For further information, refer to *National Register Bulletin: Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places.*

Natural Features

A natural feature that is associated with a historic event or trend, such as a rock formation that served as a trail marker during westward expansion, must retain its historic appearance, unobscured by modern construction or landfill. Otherwise it is not eligible, even though it remains intact.

COMPARING SIMILAR PROPERTIES

For some properties, comparison with similar properties should be considered during the evaluation of integrity. Such comparison may be important in deciding what physical features are essential to properties of that type. In instances where it has not been determined what physical features a property must possess in order for it to reflect the significance of a historic context, comparison with similar properties should be undertaken during the evaluation of integrity. This situation arises when scholarly work has not been done on a particular property type or when surviving examples of a property type are extremely rare. (See **Comparing Related Properties** in *Part V: How to Evaluate a Property within its Historic Context.)*

RARE EXAMPLES OF A PROPERTY TYPE

Comparative information is particularly important to consider when evaluating the integrity of a property that is a rare surviving example of its type. The property must have the essential physical features that enable it to convey its historic character or information. The rarity and poor condition, however, of other extant examples of the type may justify accepting a greater degree of alteration or fewer features, provided that enough of the property survives for it to be a significant resource.

Eligible

- A one-room schoolhouse that has had all original exterior siding replaced and a replacement roof that does not exactly replicate the original roof profile can be eligible if the other extant rare examples have received an even greater degree of alteration, such as the subdivision of the original one-room plan.

Not Eligible

- A mill site contains information on how site patterning reflects historic functional requirements, but parts of the site have been destroyed. The site is not eligible for its information potential if a comparison of other mill sites reveals more intact properties with complete information.

DETERMINING THE RELEVANT ASPECTS OF INTEGRITY

Each type of property depends on certain aspects of integrity, more than others, to express its historic significance. Determining which of the aspects is most important to a particular property requires an understanding of the property's significance and its essential physical features.

CRITERIA A AND B

A property important for association with an event, historical pattern, or person(s) ideally might retain *some* features of all seven aspects of integrity: location, design, setting, materials, workmanship, feeling, and association. Integrity of design and workmanship, however, might not be as important to the significance, and would not be relevant if the property were a site. A basic integrity test for a property associated with an important event or person is whether a historical contemporary would recognize the property as it exists today.

For archeological sites that are eligible under Criteria A and B, the seven aspects of integrity can be applied in much the same way as they are to buildings, structures, or objects. It is important to note, however, that the site must have *demonstrated* its ability to convey its significance, as opposed to sites eligible under Criterion D where only the potential to yield information is required.

Eligible

A mid-19th century waterpowered mill important for its association with an area's industrial development is eligible if:

- it is still on its original site (**Location**), and
- the important features of its setting are intact (**Setting**), and
- it retains most of its historic materials (**Materials**), and
- it has the basic features expressive of its design and function, such as configuration, proportions, and window pattern (**Design**).

Not Eligible

A mid-19th century waterpowered mill important for its association with an area's industrial development is not eligible if:

- it has been moved (**Location, Setting, Feeling**, and **Association**), or
- substantial amounts of new materials have been incorporated (**Materials, Workmanship,** and **Feeling**), or
- it no longer retains basic design features that convey its historic appearance or function (**Design, Workmanship,** and **Feeling**).

CRITERION C

A property significant under Criterion C must retain those physical features that characterize the type, period, or method of construction that the property represents. Retention of design, workmanship, and materials will usually be more important than location, setting, feeling, and association. Location and setting will be important, however, for those properties whose design is a reflection of their immediate environment (such as designed landscapes and bridges).

For archeological sites that are eligible under Criterion C, the seven aspects of integrity can be applied in much the same way as they are to buildings, structures, or objects. It is important to note, however, that the site must have *demonstrated* its ability to convey its significance, as opposed to sites eligible under Criterion D where only the *potential* to yield information is required.

Eligible

A 19th century wooden covered bridge, important for illustrating a construction type, is eligible if:

- the essential features of its design are intact, such as abutments, piers, roof configuration, and trusses (**Design, Workmanship,** and **Feeling**), and
- most of the historic materials are present (**Materials, Workmanship**, and **Feeling**), and
- evidence of the craft of wooden bridge technology remains, such as the form and assembly technique of the trusses (**Workmanship**).
- Since the design of a bridge relates directly to its function as a transportation crossing, it is also important that the bridge still be situated over a waterway (**Setting, Location, Feeling,** and **Association**).

Not Eligible

For a 19th century wooden covered bridge, important for its construction type, replacement of some materials of the flooring, siding, and roofing would not necessarily damage its integrity. Integrity would be lost, however, if:

- the abutments, piers, or trusses were substantially altered (**Design, Workmanship,** and **Feeling**) or
- considerable amounts of new materials were incorporated (**Materials, Workmanship,** and **Feeling**).
- Because environment is a strong factor in the design of this property type, the bridge would also be ineligible if it no longer stood in a place that conveyed its function as a crossing (**Setting, Location, Feeling,** and **Association**).

CRITERION D

For properties eligible under Criterion D, setting and feeling may not have direct bearing on the property's ability to yield important information. Evaluation of integrity probably will focus primarily on the location, design, materials, and perhaps workmanship.

Eligible

A multicomponent prehistoric site important for yielding data on changing subsistence patterns can be eligible if:

- floral or faunal remains are found in clear association with cultural material (**Materials** and **Association**) and
- the site exhibits stratigraphic separation of cultural components (**Location**).

Not Eligible

A multicomponent prehistoric site important for yielding data on changing subsistence patterns would not be eligible if:

- floral or faunal remains were so badly decomposed as to make identification impossible (**Materials**), or
- floral or faunal remains were disturbed in such a manner as to make their association with cultural remains ambiguous (**Association**), or
- the site has lost its stratigraphic context due to subsequent land alterations (**Location**).

Eligible

A lithic scatter site important for yielding data on lithic technology during the Late Archaic period can be eligible if:

- the site contains lithic debitage, finished stone tools, hammerstones, or antler flakers (**Material** and **Design**), and
- the site contains datable material (**Association**).

Not Eligible

A lithic scatter site important for yielding data on lithic technology during the Late Archaic period would not be eligible if:

- the site contains natural deposits of lithic materials that are impossible to distinguish from culturally modified lithic material (**Design**) or
- the site does not contain any temporal diagnostic evidence that could link the site to the Late Archaic period (**Association**).

IX. SUMMARY OF THE NATIONAL HISTORIC LANDMARKS CRITERIA FOR EVALUATION

A property being nominated to the National Register may also merit consideration for potential designation as a National Historic Landmark. Such consideration is dependent upon the stringent application of the following distinct set of criteria (found in the *Code of Federal Regulations, Title 36, Part 65*).

NATIONAL HISTORIC LANDMARKS CRITERIA

The quality of national significance is ascribed to districts, sites, buildings, structures, and objects that possess exceptional value or quality in illustrating or interpreting the heritage of the United States in history, architecture, archeology, engineering, and culture and that possess a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association, and:

1. That are associated with events that have made a significant contribution to, and are identified with, or that outstandingly represent, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained; or
2. That are associated importantly with the lives of persons nationally significant in the history of the United States; or
3. That represent some great idea or ideal of the American people; or
4. That embody the distinguishing characteristics of an architectural type specimen exceptionally valuable for a study of a period, style or method of construction, or that represent a significant, distinctive and exceptional entity whose components may lack individual distinction; or
5. That are composed of integral parts of the environment not sufficiently significant by reason of historical association or artistic merit to warrant individual recognition but collectively compose an entity of exceptional historical or artistic significance, or outstandingly commemorate or illustrate a way of life or culture; or
6. That have yielded or may be likely to yield information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts and ideas to a major degree.

NATIONAL HISTORIC LANDMARK EXCLUSIONS

Ordinarily, cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings and properties that have achieved significance within the past fifty years are not eligible for designation. If such properties fall within the following categories they may, nevertheless, be found to qualify:

1. A religious property deriving its primary national significance from architectural or artistic distinction or historical importance; or
2. A building or structure removed from its original location but which is nationally significant primarily for its architectural merit, or for association with persons or events of transcendent importance in the nation's history and the association consequential; or
3. A site of a building or structure no longer standing but the person or event associated with it is of transcendent importance in the nations's history and the association consequential; or

4. A birthplace, grave or burial if it is of a historical figure of transcendent national significance and no other appropriate site, building, or structure directly associated with the productive life of that person exists; or
5. A cemetery that derives its primary national significance from graves of persons of transcendent importance, or from an exceptionally distinctive design or an exceptionally significant event; or
6. A reconstructed building or ensemble of buildings of extraordinary national significance when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other buildings or structures with the same association have survived; or
7. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own national historical significance; or
8. A property achieving national significance within the past 50 years if it is of extraordinary national importance.

COMPARING THE NATIONAL HISTORIC LANDMARKS CRITERIA AND THE NATIONAL REGISTER CRITERIA

In general, the instructions for preparing a National Register nomination and the guidelines stated in this bulletin for applying the National Register Criteria also apply to Landmark nominations and the use of the Landmark criteria. While there are specific distinctions discussed below, *Parts IV and V* of this bulletin apply equally to National Register listings and Landmark nominations. That is, the categories of historic properties are defined the same way; historic contexts are identified similarly; and comparative evaluation is carried out on the same principles enumerated in *Part V*.

There are some differences between National Register and National Historic Landmarks Criteria. The following is an explanation of how each Landmark Criterion compares with its National Register Criteria counterpart:

CRITERION 1

This Criterion relates to National Register Criterion A. Both cover properties associated with events. The Landmark Criterion, however, requires that the events associated with the property be *outstandingly* represented by that property and that the property be related to the broad national patterns of U.S. history. Thus, the quality of the property to convey and interpret its meaning must be of a higher order and must relate to national themes rather than the narrower context of State or local themes.

CRITERION 2

This Criterion relates to National Register Criterion B. Both cover properties associated with significant people. The Landmark Criterion differs in that it specifies that the association of a person to the property in question be an important one and that the person associated with the property be of *national* significance.

CRITERION 3

This Criterion has no counterpart among the National Register Criteria. It is rarely, if ever, used alone. While not a landmark at present, the Liberty Bell is an object that might be considered under this Criterion. The application of this Criterion obviously requires the most careful scrutiny and would apply only in rare instances involving ideas and ideals of the highest order.

CRITERION 4

This Criterion relates to National Register Criterion C. Its intent is to qualify exceptionally important works of architecture or collective elements of architecture extraordinarily significant as an ensemble, such as a historic district. Note that the language is more restrictive than that of the National Register Criterion in requiring that a candidate in architecture be "a specimen exceptionally valuable for the study of a period, style, or method of construction" rather than simply embodying distinctive characteristics of a type, period, or method of construction. With regard to historic districts, the Landmarks Criterion requires an entity that is distinctive and exceptional. Unlike National Register Criterion C, this Criterion will not qualify the works of a master, per se, but only such works which are exceptional or extraordinary. Artistic value is considered only in the context of history's judgement in order to avoid current conflicts of taste.

CRITERION 5

This Criterion does not have a strict counterpart among the National Register Criteria. It may seem redundant of the latter part of Landmark Criterion 4. It is meant to cover collective entities such as Greenfield Village and historic districts like New Bedford, Massachusetts, which qualify for their collective association with a nationally significant event, movement, or broad pattern of national development.

CRITERION 6

The National Register counterpart of this is Criterion D. Criterion 6 was developed specifically to recognize archeological sites. All such sites must address this Criterion. The following are the qualifications that distinguish this Criterion from its National Register counterpart: the information yielded or likely to be yielded must be of *major* scientific importance by revealing new cultures, or by shedding light upon periods of occupation *over large areas* of the United States. Such sites should be expected to yield data affecting *theories, concepts, and ideas* to a *major degree.*

The data recovered or expected to be recovered must make a major contribution to the existing corpus of information. Potentially recoverable data must be likely to revolutionize or substantially modify a major theme in history or prehistory, resolve a substantial historical or anthropological debate, or close a serious gap in a major theme of U. S. history or prehistory.

EXCLUSIONS AND EXCEPTIONS TO THE EXCLUSIONS

This section of the National Historic Landmarks Criteria has its counterpart in the National Register's "Criteria Considerations." The most abundant difference between them is the addition of the qualifiers "national," "exceptional," or "extraordinary" before the word significance. Other than this, the following are the most notable distinctions:

EXCLUSION 2

Buildings moved from their original location, qualify only if one of two conditions are met: 1) the building is nationally significant for architecture, *or* 2) the persons or events with which they are associated are of *transcendent* national significance and the association is consequential.

Transcendent significance means an order of importance higher than that which would ordinarily qualify a person or event to be nationally significant. A consequential association is a relationship to a building that had an evident impact on events, rather than a connection that was incidental and passing.

EXCLUSION 3

This pertains to the site of a structure no longer standing. There is no counterpart to this exclusion in the National Register Criteria. In order for such a property to qualify for Landmark designation it must meet the second condition cited for Exclusion 2.

EXCLUSION 4

This exclusion relates to Criteria Consideration C of the National Register Criteria. The only difference is that a burial place qualifies for Landmark designation only if, in addition to other factors, the person buried is of *transcendent* national importance.

When evaluating properties at the national level for designation as a National Historic Landmark, please refer to the National Historic Landmarks outline, *History and Prehistory in the National Park System and the National Historic Landmarks Program, 1987*. (For more information about the National Historic Landmarks program, please write to Department of the Interior, National Park Service, National Historic Landmarks, 1849 C Street, NW, NC400, Washington, DC 20240.)

X. GLOSSARY

Associative Qualities - An aspect of a property's history that links it with historic events, activities, or persons.

Code of Federal Regulations - Commonly referred to as "CFR." The part containing the National Register Criteria is usually referred to as 36 CFR 60, and is available from the National Park Service.

CLG - Certified Local Government.

Culture - A group of people linked together by shared values, beliefs, and historical associations, together with the group's social institutions and physical objects necessary to the operation of the institution.

Cultural Resource - See Historic Resource.

Evaluation - Process by which the significance and integrity of a historic property are judged and eligibility for National Register listing is determined.

Historic Context - An organizing structure for interpreting history that groups information about historic properties that share a common theme, common geographical area, and a common time period. The development of historic contexts is a foundation for decisions about the planning, identification, evaluation, registration, and treatment of historic properties, based upon comparative historic significance.

Historic Integrity - The unimpaired ability of a property to convey its historical significance.

Historic Property - See Historic Resource.

Historic Resource - Building, site, district, object, or structure evaluated as historically significant.

Identification - Process through which information is gathered about historic properties.

Listing - The formal entry of a property in the National Register of Historic Places. See also, Registration.

Nomination - Official recommendation for listing a property in the National Register of Historic Places.

Property Type - A grouping of properties defined by common physical and associative attributes.

Registration - Process by which a historic property is documented and nominated or determined eligible for listing in the National Register.

Research Design - A statement of proposed identification, documentation, investigation, or other treatment of a historic property that identifies the project's goals, methods and techniques, expected results, and the relationship of the expected results to other proposed activities or treatments.

XI. LIST OF NATIONAL REGISTER BULLETINS

The Basics
How to Apply National Register Criteria for Evaluation *

Guidelines for Completing National Register of Historic Places Form
Part A: How to Complete the National Register Form *
Part B: How to Complete the National Register Multiple Property Documentation Form *

Researching a Historic Property *

Property Types
Guidelines for Evaluating and Documenting Historic **Aids to Navigation** *

Guidelines for Identifying, Evaluating and Registering **America's Historic Battlefields**

Guidelines for Evaluating and Registering Historical **Archeological Sites**

Guidelines for Evaluating and Documenting Historic **Aviation Properties**

Guidelines for Evaluating and Registering **Cemeteries and Burial Places**

How to Evaluate and Nominate **Designed Historic Landscapes** *

Guidelines for Identifying, Evaluating and Registering Historic **Mining Sites**

How to Apply National Register Criteria to **Post Offices** *

Guidelines for Evaluating and Documenting **Properties Associated with Significant Persons**

Guidelines for Evaluating and Documenting **Properties That Have Achieved Significance Within the Last Fifty Years** *

Guidelines for Evaluating and Documenting **Rural Historic Landscapes** *

Guidelines for Evaluating and Documenting **Traditional Cultural Properties** *

Nominating Historic **Vessels and Shipwrecks** to the National Register of Historic Places

Technical Assistance
Defining Boundaries for National Register Properties*

Guidelines for Local Surveys: A Basis for Preservation Planning *

How to Improve the Quality of Photographs for National Register Nominations

National Register Casebook: Examples of Documentation *

Using the UTM Grid System to Record Historic Sites

To order these publications, write to: National Register of Historic Places, National Park Service, 1849 C St., NC 400, NW, Washington, D.C. 20240, or e-mail at: nr_reference@nps.gov. Publications marked with an asterisk (*) are also available in electronic form at **www.cr.nps.gov/nr**.

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STAFF MEMORANDUM
HISTORIC PRESERVATION PROGRAM
PLANNING AND URBAN DEVELOPMENT

TO: Chair O'Brien and Members of the Historic Preservation Board
FROM: Evan R. Schueckler, Historic Preservation Program Manager
DATE: October 27, 2023
RE: Proposed Historic District Amendment – PUBLIC HEARING - CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING
PROJECT ID: Not Applicable
MEETING: November 1, 2023

Owner: Portland Museum of Art

A legal ad announcing the Historic Preservation Board's meeting on November 1, 2023 was published in the Portland Press Herald on October 20, 2023 and October 21, 2023, and 169 notices were sent to property owners within the Congress Street Historic District.

PROJECT SCOPE

The applicant is proposing that the Congress Street Historic District be amended to reclassify 142 Free Street as non-contributing to the district. The proposed amendment would mean that alterations would be reviewed under different standards within the Historic Preservation Ordinance, and would allow by-right demolition of the structure. The applicant is not proposing to change the boundaries of the Congress Street Historic District, meaning that any future alterations, additions, or new construction on the site would still be subject to the applicable review standards of the Historic Preservation Ordinance.

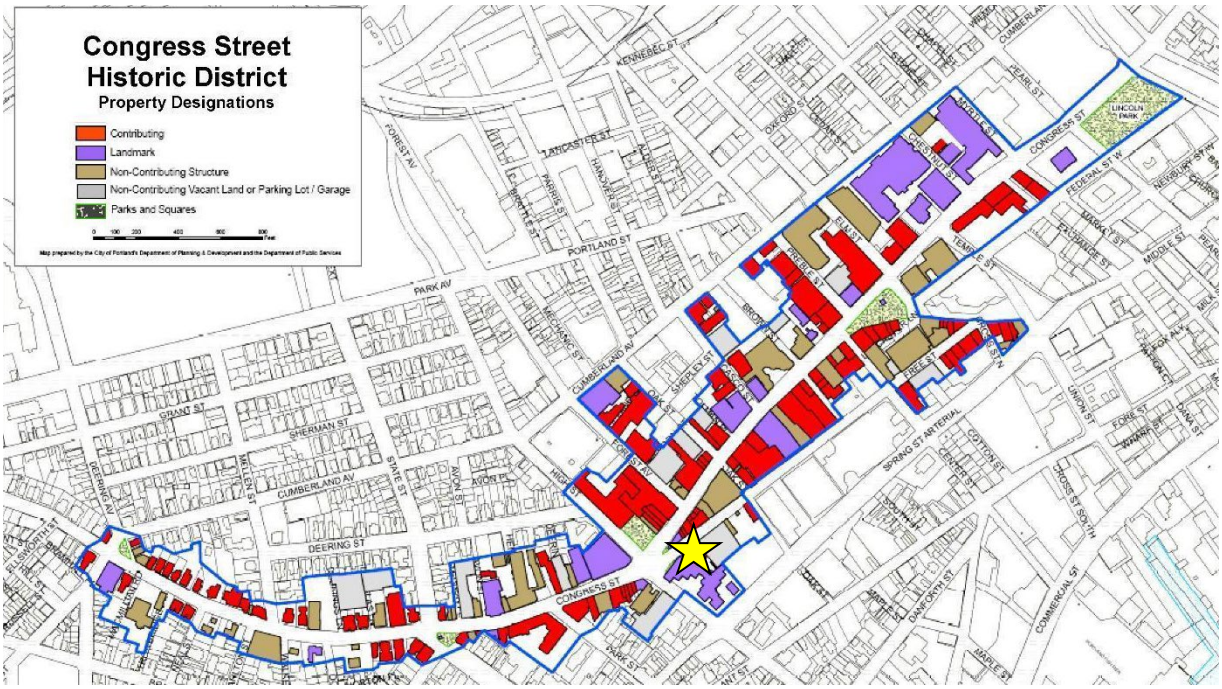


Figure 1: Map of Congress Street Historic District showing location of 142 Free Street with a star.

SUMMARY OF HISTORIC CONTEXT

142 Free Street was originally constructed in 1830 as a theater building. No images of the structure exist from this period; however, descriptions suggest a late federal or Greek revival style. Shortly thereafter in 1836, the structure was renovated into a temple-fronted Greek revival church for the Free Street Baptist Church. Then, again in 1856, the church was renovated into an asymmetrical double-spired Italianate/Romanesque revival church. In 1876, after the taller of the church's spires was damaged in a storm, the steeple was redesigned. Throughout the Free Street Baptist Church's ownership of the structure, they made a series of other modest and interior renovations in addition to the major redesigns.

In 1926, after a merger with another Baptist Church, the structure was sold to the Portland Chamber of Commerce. The Chamber retained architect John Calvin Stevens to complete renovations to the structure. It was at this time that the building was redesigned to its current Greek or colonial revival temple-fronted form. The Chamber retained the building until 1991 when, after financial difficulties, it was sold to the Children's Museum of Maine. Under the ownership of the Children's Museum, the structure underwent further alterations including programs of window and door replacement, dormer additions, and addition of the prominent octagonal cupola.

The Spring Street Historic District was added to the National Register of Historic Places in 1976. In 2020 the National Register listing was updated with an expanded period of significance (1800-1943), at which point the Chamber of Commerce building was listed as a contributing resource

within the National Register District. It was also listed as contributing to the local Congress Street Historic District in 2009. While the updated National Register nomination did include a period of significance for the Spring Street Historic District from 1800 to 1943, the local Congress Street Historic District did not include a specific period of significance. However, the period of significance can be presumed as extending from 1785 (the original date of construction for the Wadsworth-Longfellow House, the oldest contributing structure within the district) to 1959 (fifty years prior to the establishment of the local district). This would mean that the period of significance ended during the tenure of the Chamber of Commerce. While it also includes the eras of the theatre and the Free Street Baptist Church, those assorted renovations and redesigns would have attained historical significance in their own right, speaking to the history of the evolution of Congress Street over the nearly two-hundred years of history the district represents.

For a more thorough documentation of the history of 142 Free Street, including extensive images and documentation of alterations, please see the report by Margaret Gaertner included in the applicant's materials (Attachment 1). Additional information on the Congress Street Historic District can be found in the attachments (Attachments 2 & 3) and on the city website: https://www.portlandmaine.gov/665/Historic-Districts

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PREVIOUS REVIEW BY HISTORIC PRESERVATION BOARD

October 4, 2023, Workshop:

During the October 4 workshop, the applicant presented background information on the proposed expansion of the Portland Museum of Art campus and preliminary information on their planned future development. Board members asked the applicant about whether consideration had been given to reusing the existing building or incorporating elements of it. The applicant stated that they had, but felt that the challenges were too great and that they had not received a positive reception by the public of those versions of their planned project. Board members also requested confirmation on the basis for the current application for reclassification being limited to a question of the integrity of the existing structure. The applicant provided no other areas of consideration for the Board within the scope of the ordinance's minimum criteria for designation.

Based on the materials supplied by the applicant (including the extensive report on the history of 142 Free Street) and the materials from the designation of the Congress Street Historic District in 2009, Board members agreed that the existing structure had been correctly deemed contributing when the District was established. Board members noted that while the building had a long history of alterations from its original construction in 1830, it still retained a high degree of integrity relative to the 1926 redesign by John Calvin Stevens. Alterations noted by the applicant in their materials were acknowledged by the Board, but members noted that window replacements and additions are regularly approved alterations to contributing structures. Several Board members praised the intentions behind the proposed expansion with several noting that they personally

appreciated the design of the proposed new structure; however, there was general agreement that the applicant had not provided a basis by which the Board could recommend that the structure be reclassified as noncontributing.

STAFF COMMENTS

The application is being brought forward for a public hearing. For the Board's consideration, the applicant has provided the same materials as were reviewed at the October 4 workshop. The Board will vote on a recommendation to the Planning Board and City Council. Staff have revised the analysis of the applicable review standards and provided a motion for consideration based on the Board's discussion at the October 4 workshop. The below assessment is informed by Board deliberations at the workshop.

ANALYSIS OF APPLICABLE REVIEW STANDARDS

Integrity of Landmarks and Historic Districts, 17.4.2:

Any area, structure, or object that meets the criteria in Section 17.4.1 must also have sufficient integrity of location, design, condition, materials, and workmanship to make it worthy of preservation or restoration.
Location
Staff Comments
The building remains in its historic location and therefore retains integrity of location.
Design
Staff Comments
At the Oct. 4th workshop, Board members concurred that while the structure has experienced alterations prior to the designation of the Congress Street Historic District, including replacement windows and doors, and additions, the essential character of the Chamber of Commerce building as designed by John Calvin Stevens (in particular at the Free Street elevation) has not been irretrievably destroyed, and the structure therefore retains integrity of design.
Condition
Staff Comments
The applicant had noted that the building is generally in good structural condition, though they had previously noted to staff that the building would require extensive interior upgrades and improvements in order to be usable and accessible. Based on the information presented, the Board agreed that the structure retains integrity of condition.

Materials
Staff Comments
Board members concurred that while some historic materials have been lost through the replacement of windows and doors, the structure still retains significant amounts of historic materials including the masonry walls and extensive decorative trim and details at the Free Street elevation, and therefore retains integrity of materials.
Workmanship
Staff Comments
Board members concurred that while some evidence of historic workmanship has been lost through the replacement of windows and doors, the structure still retains significant evidence of historic workmanship, in particular at the decorative trim and details at the Free Street elevation, and therefore retains integrity of workmanship.

MOTION FOR CONSIDERATION

I move to recommend that the Planning Board and City Council vote to retain the contributing classification for the former Chamber of Commerce Building at 142 Free Street within the Congress Street Historic District on the basis of submitted documentation; information provided in the staff memo; and findings by the Historic Preservation Board pursuant to 17.4.2 that 142 Free Street retains sufficient integrity of location, design, condition, materials, and workmanship to make it worthy of preservation or restoration. Pursuant to 17.5.4-A, the staff memorandum from this hearing and the attachments shall serve as the report of these findings to the Planning Board and City Council.

ATTACHMENTS

1. Portland Museum of Art Application
2. Congress Street Historic District Description
3. 142 Free Street – Property Description from Congress Street Historic District Designation Materials
4. Chapter 14, Article 17 Excerpts
5. National Register Bulletin - How to Apply the National Register Criteria

August 31, 2023

City of Portland
Historic Preservation Board
c/o Evan Schueckler
Historic Preservation Program Manager
389 Congress Street
Portland, ME 04101

Dear Historic Preservation Board,

Please accept this letter as an application for the Portland Museum of Art, Portland, Maine, to request that the Historic Preservation Board of the City of Portland re-classify the 142 Free Street property, currently a "contributing structure," to be "non-contributing" on the basis that the building never should have been classified as contributing in 2009 and 2020. Please review the History of 142 Free Street report prepared by Margaret Gaertner, Historic Building Consultant, for the details on the history of this property as well as the memo attached analyzing the existing designation position.

Throughout its lifetime, 142 Free Street has been significantly altered, and is now virtually unrecognizable when compared to previous iterations of the building. As a result, and after much diligence and research, we have come to believe it does not contribute to the district historically, nor does it support our city's innovative vision for the future. When considered for its role in the Congress Street Historic District, and as part of the PMA's historic campus, 142 Free Street does not carry the same historical stature, architectural consistency, or community significance that the District's or the museum's other properties do.

In the case of a nominated historic district, the Historic Preservation Board shall also determine whether there is an interrelationship of resources within it that creates an identifiable entity, even if composed of a wide variety of resources. A district must convey a visual sense of the overall historic environment or be a grouping of historically or functionally related properties. To be clear, we believe:

- 142 Free Street should not be designated a contributing structure and doing so diminishes the credibility of the designation.
- Our values and interests are absolutely aligned with the city's and are in the best interests of its citizens, visitors, and future.
- The PMA has a long history of stewardship and preservation of historic buildings, understands their significance, and has a legacy of architecturally significant contributions to our community.

After World War II, Portland's leaders looked to urban renewal to draw businesses and development into the city. A series of "slum-clearing" and redevelopment projects demolished entire blocks to make room for widened streets and new buildings that would accommodate an automobile-focused culture. To this day, many of these blocks, including much of Free Street,

remain vacant and await redevelopment. Implementation is *long* overdue. We have completed a thorough search to identify a design team with a bold vision that is appropriate for Portland, Maine, and the 142 Free Street site. With your support, we stand ready to create a new landmark for Portland.

The City of Portland is driven by a vision of "six interconnected themes," set forth in *Portland's Plan 2030*, of equity, connection, sustainability, dynamism, authenticity, security, and connectivity. The PMA is driven by the values of courage, equity, service, trust and sustainability, activating our *Art for All* mission. Together, with our communities we can create a landmark building that exemplifies these shared values and goals, communicating to anyone who visits that all are welcome in Portland, Maine. To do this, we must have the flexibility to develop our campus responsibly, with courage and care.

The Portland Museum of Art was founded 140 years ago by artists living here in Maine. It grew quickly, as community members donated their time, energy, and passion for the arts, enabling the PMA to establish a downtown Portland campus. For the next 100 years, that campus grew to include the McLellan House, LDM Sweat galleries, and the Clapp House. As art from donors throughout our communities began filling up the walls and spaces within the museum, our communities came together again in the late 1970s for what was, at the time, the largest major expansion in PMA history.

That expansion, a courageous and iconic design of the Charles Shipman Payson building by Harry Cobb of the I. M. Pei & Partners firm, was a result of collection growth, campus limitations, and community support. In the more than 40 years since construction began, the Payson building has anchored the dynamic and world-renowned arts district of Portland, Maine, and enabled millions of people to discover and connect with the transformative power of art.

But a lot has changed in 40 years.

Our collection has grown exponentially, and in the last decade alone has diversified deliberately and more quickly than at any point previously. Judy Glickman Lauder, Barbara Goodbody, Richard Estes, Bruce Brown, David and Eva Bradford, the Berger Collection Educational Trust, and Alex Katz Foundation have all made significant and transformative gifts to the PMA collection in recent years, expanding the narratives we can tell and connections we can make.

Our campus has changed, and we've restored the McLellan House, purchased, restored, and opened the Winslow Homer Studio, and reinstalled our collection multiple times to maximize our existing footprint. And yet our campus has reached its limit, with attendance already at twice the planned capacity of the Payson building. In just five years, we will more than triple the planned capacity of our campus. We need to expand, as we are being forced to make tough choices around reducing exhibition size and restricting capacity due to the physical limitations of our campus.

Critically, we, as a community, have changed as well. Our needs and expectations from our institutions have changed, and nowhere is that clearer than for museums. We must do more to create opportunity—on our walls, in our galleries, through our programs, on our board, and within our staff—to ensure the PMA experience reflects *your* experience, lifestyle, and values. We must elevate individuals and communities that have been excluded from museums and "the art world," embodying our values through artwork, exhibitions, programs, and didactics by and in partnership with our BIPOC communities, immigrants and new Mainers, LGBTQIA2S+ neighbors, our elders, youth, and other communities across Maine. We must be at the center of our communities, which

requires dialogue, trust, and transparency. And we must ensure we are championing a more diverse, inclusive, and sustainable region. We must become a community institution that is rooted in *belonging*.

142 Free Street is our catalyst for a brighter future, ensuring Congress Square is a sustainable center for arts and culture.

In 2022 we launched our vision with *The Blueprint Project: Building a Landmark for the Future*. This case for development was supported by years of open-ended community building and research, including campus planning, listening sessions, focus groups, strategic plan development, equity strategic action plan development, a feasibility study, and an economic impact study. Through this work, we came to understand what our communities want from museums and their arts institutions. These needs, desires, and expectations are embedded in the project, our Strategic Plan, and our mission, *Art for All*. We are the first museum in the country to have a mission led by our values in this way.

The shared values of the PMA and city of Portland were centerstage as we put out a global open call for architects to assemble diverse teams of experts to imagine the future of 142 Free Street. Our International Design Competition attracted submissions from 104 teams representing 20 countries, including Australia, Belgium, China, Denmark, Finland, Japan, Mexico, Spain, South Korea, United Arab Emirates, the United Kingdom, and more. In total, more than 250 firms participated as part of the 104 submitting teams, with 46 percent of all lead architecture firms founded or owned by people of color or women.

After a rigorous selection process, Portland, Oregon's LEVER Architecture won the commission. LEVER stood out for numerous reasons, chief among them their commitment to sustainable design and building practices, and deeply rooted understanding of DEAI.

Their initial concept has been overwhelmingly supported by our communities, with an astounding 93% positive feedback rate for LEVER's concept.

Here are a few of the impacts we're looking forward to:

1. **Align with our *Art for All* mission**. The new PMA wing will be a lasting example of our communities' values and the PMA's commitment to diversity, equity, accessibility, and inclusion. In the words of the late artist David Driskell, "What we leave as proof of our being here will not necessarily be in the sciences, in politics in economics, but will manifest itself through the arts". ***This once-in-a-lifetime museum expansion and unification that will forever change Maine and New England.*** Through *The PMA Blueprint*, we will redefine our region, unite our communities, and sustain our economy for generations to come.

2. **Contribute significantly to Portland and Maine's economy**. A 2022 economic analysis commissioned by the PMA through the Center for Business and Economic Research at the University of Southern Maine concludes that post-expansion, ***the PMA's annual economic contribution will more than double to include more than 600 jobs, $28.1 million in labor income, $65.3 million in sales, and $4.2 million in local and state taxes.*** The expansion also will solidify the PMA's status as quintessential destination and defining experience in Maine.

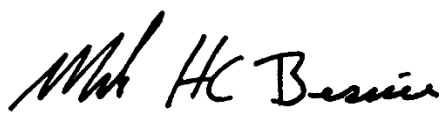
3. **Promote sustainability and spark revitalization across our state.** True to the spirit of the City of Portland's comprehensive plan and dedication to sustainability, our new building will showcase innovative construction materials and techniques that are on the forefront of sustainability. The building will be constructed primarily of mass timber, a remarkably strong, durable, and sustainable material with an ability to sequester carbon. When wood that is used for mass timber construction is obtained from sustainably managed forests, the resulting materials have a much lower life-cycle carbon footprint than steel and concrete, delivering a 26.5% reduction in global warming potential, according to University of Washington researchers. ***We're working to operationalize the shared desire for a mass timber plant in Maine and get it to the finish line with our policymakers at all levels, the University of Maine, Indigenous leaders, landowners, forestry advocates, businesses, and more.*** Why? Because mass timber in Maine just makes sense. We're the most forested state in the country—with nearly 90% of the land covered in forests, the potential to revitalize and reimagine our state through this innovative industry is real. This is a rare and unique opportunity to bring rural and urban communities, companies, and governments together through clean industries that make the world better and support Maine jobs.

4. **Expand inclusivity and belonging.** It is important to acknowledge and understand the potential interpretations of architectural styles, and when they are applied in different time periods, when considering what to champion for our city. Maine's marquee cultural institution must be a landmark designed with everyone in mind. 142 Free Street's current façade, however, was erected during the Jim Crow era. Our region is one that is striving to become more inclusive, dynamic, and diverse—a city where everyone belongs—and some architecture styles can carry unfortunate legacies of the past into the future that undermine these values and goals.

Without the removal of 2009's misclassified designation, we will not be able to realize this collective vision for our future and our city will be less dynamic, inclusive, equitable, and sustainable as a result.

We are aligned with the City of Portland's values and vision, and our drive to do right by our communities has been at the center of this project from day one. We believe that this project will spark our economies, spur urban development locally, and change the way our city and state are seen by visitors from around the world. We request that the City of Portland take the brave step forward to support our request to re-designate the 142 Free Street property to "non-Contributing" to enable our communities' vision for the City of Portland, our beautiful state, and the PMA.

Thank you for your consideration,



Mark H.C. Bessire
Judy and Leonard Lauder Director

Aspects of Integrity Evaluation for 142 Free Street

National Register and City of Portland

Please find the seven Aspects of Integrity and an assessment summarizing each aspect of 142 Free Street and the resulting impact on National Register (NR) eligibility for Individual Listing or as a contributing structure to a NR Historic District. Interior features and alterations are mentioned only in the context of NR eligibility for individual listing.

Per the 2020 district nomination update, the Period of Significance for the Spring Street National Register Historic District is 1800 through 1943, which includes the tenancy of the Chamber of Commerce. Other entities associated with the site—the Baptist Church, the Children's Museum—are not relevant to this evaluation as no physical fabric remains to represent the Church's ownership, and the Children's Museum's ownership post-dates the Period of Significance.

All historic interior elements are gone from 142 Free Street. This is more of an issue for individual eligibility—only the exterior is considered when evaluating if a building contributes or does not contribute to a National Register Historic District. The National Register Guidelines define the Aspects of Integrity as follows:

Location is the place where the historic property was constructed or the place where the historic event occurred.

Design is the combination of elements that create the form, plan, space, structure, and style of a property.

Setting is the physical environment of a historic property.

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.

Association is the direct link between an important historic event or person and a historic property.[1]

	Contributes to a District?	Eligibility for Individual Listing?	
Location	---	---	Building remains in original location. Integrity of location is uncompromised.
Design	The form of the building is compromised by the addition of the dormer and cupola.	Building would not be eligible for individual listing on the National Register due to the	Integrity of Design is compromised.

		alteration of the interior. The interior of the building has no integrity – plan is altered, all finishes removed, roof structure replaced.	
Setting	• The setting lacks any historic integrity – building is surrounded by parking lots and a ca. 1983 building (the Payson wing)	• The setting lacks any historic integrity. Historically, Free Street was a residential street (19th c.) and in the early 20th c. some commercial structures – the YMCA – replaced residences. 142 Free is now surrounded by surface parking lots and a ca. 1983 building (the Payson wing)	No Integrity of Setting remains.
Materials	• Large windows on the highly visible east facade are not wood. • Basement windows, east facade are not wood. • Front (main entry) doors, transom over same replaced with modern, metal doors.	• Large windows on the highly visible east facade are not wood. • Basement windows, east facade are not wood. • Front (main entry) doors, transom over same replaced with modern, metal doors	Integrity of Materials is compromised.
Workmanship		All elements of the 1927-43 interior are gone – no workmanship remains at interior.	For the interior, the Integrity of Workmanship is compromised.
Feeling	• Cupola changes the formal *feel* of the building. • The added dormer alters the roofline, a critical feature on this formal design.	• Cupola changes the formal *feel* of the building. • The added dormer alters the roofline, a critical feature on this formal design.	Integrity of Feeling is compromised.

		• The interior retains no feeling of its 1927-43 era.	
Association	Changes to the exterior – fenestration changes, replacement windows, dormers, cupola – have resulted in a stronger visual association with the Children's Museum's ownership.	• Interior retains no spaces or finishes to represent its association with the Chamber ca. 1927-43. • Changes to the exterior create a stronger association with the Children's Museum.	Integrity of Association is compromised.

City's Aspects of Integrity

The Designation Report does not assign/mention a Period of Significance.

The City's "Land Use Code" does not define Design, Condition, Materials, etc. (see "Definitions" on pages 17-1 through 17-3).

The City does not consider or review interiors, so the interior of the building is not discussed in the following list.

Location	---	Intact - building remains in original location.
Design	• Fenestration (window locations) altered – east facade. One opening added, one filled in at upper floor. Basement openings heavily altered – filled in, added, one opening enlarged to door. • Highly visible cupola added • Highly visible dormer added. • Highly visible skylights added.	Compromised.
Condition	---	Intact - building is generally in good condition.
Materials	• Large windows, east facade are not wood.	Compromised.

	• Basement windows, east facade are not wood. • Front (main entry) doors, transom over same replaced with modern, metal doors.	
Workmanship	• Windows replaced, the modern windows do not replicate the original design • Primary entry door, transom over same door replaced – door, transom are metal and do not replicate original design	Compromised.

[1] *National Register Bulletin How to Apply the National Register Criteria for Evaluation,* page 45. Available at https://www.nps.gov/subjects/nationalregister/upload/NRB-15_web508.pdf

July 10, 2023

I am happy to submit this letter of support for the potential new museum wing of the Portland Museum of Art.

As the General Manager of Crobo LLC, owner and operator of the State Theatre and Summer Concert Series at Thompson's Point, I can speak first-hand how incredible it has been to be a neighbor of the Portland Museum of Art. The PMA and the State Theatre are two of the oldest arts-institutions in Portland as we have welcomed both locals and tourists into our venues for a century. I am thrilled for the museum's expansion and the economic growth and impact that this expansion would have not only in our neighborhood, but city and state wide. The potential for more programming, event space and community events is certainly an exciting and big part of it all, but so is the commitment the PMA has made to sustainable building practices with this project, which is crucial as we navigate climate change in a coastal city.

From the PMA, to Congress Square free events, to the lines going into the State Theatre for a concert, to the bustling restaurants around us and the amazing, local retail stores that have opened - watching this neighborhood and city grow and thrive both economically and culturally has been a thrill to watch over the years, and I firmly believe that the PMA expansion would further this excitement and the tangible energy you can actually feel on the street. We have been grateful to be one part of it all, and we wholeheartedly both support and are excited for the Portland Museum of Art's expansion project.

Thank you,



Lauren Wayne
GM – Crobo LLC
State Theatre

SPRINGER'S
TRUSTED JEWELERS 1870

To the Historic Preservation Board,

I am writing in support of the redesign of 142 Free Street. I am currently the President of Springer's Jewelers located at 580 Congress Street. Although we technically reside on Congress Street, our most commonly used entrance is Free St.
We have been honored to be neighbors of the Portland Museum of Art for over 50 years.
As a fourth-generation family-owned business Springer's Jewelers understands the delicate balance between upholding tradition and welcoming change to meet the needs and expectations of our clients and community. It is no secret that the residents of upper Congress and Free Street have struggled with the balance needed for the community and businesses to thrive. The introduction of the "Arts District" has been well accepted by businesses in our area. The Portland Museum of Art is the anchor of this area and community.
We are in full support the redesign of the 142 Free Street location as an opportunity to let the Art District shine and create new history, while the Museum continues to pay homage to the already existing and maintained historical buildings that are part of its campus. We hope this letter helps to encourage a dialogue with the goal of supporting the evolution of Portland in a way we can all be proud of and call ours.

Sincerely,

Lilly Mullen
President & Fourth-Generation Owner, Springer's Jewelers

July 8, 2023

Chair Schueckler and Members of the Historic Preservation Board
Portland City Hall
389 Congress Street, 3rd Floor
Portland, Maine 04101

Re: PMA Blueprint Project and Redesignating 142 Free Street as a "Non-Contributing" Property in Portland's Historic District

Dear Chair Schueckler and Members of Historic Preservation

This letter serves as an expression of our support for the Portland Museum of Art's Blueprint Project, and its petition to redesignate 142 Free Street as a non-contributing building in Portland's Historic District. As neighbors, community members, business owners and historic preservationists in our own right, we believe the Blueprint Project and redesignation are vital to the future of the Museum campus and our neighborhood.

PMA has been a touchstone of Portland's economic and cultural vitality since the Museum's inception. Lying squarely at the heart of Portland's geographic and artistic cores, PMA must be allowed to adapt to the growing demands of the city and its audiences. The community has watched the campus grow over the last 190 years, sometimes with great purpose, other times more organically. The current structure at 142 Free Street is more a pastiche than a relic. Historic preservation is best utilized when it preserves the quality and character of a place and time. 142 Free Street no longer reflects a single character or quality requiring protection. Its value rests in its use, not its facade.

The Museum leadership has invested tremendous thought, time and resources into making sure this development is executed with integrity. Over the last two years, we've been thrilled to see the care they've taken paying homage to Maine's local and regional histories in their process. Every step of the way they've asked how best to look forward without forgetting the past. PMA has a vision for a more inclusive, welcoming Museum - a Museum whose vibrancy ripples out into the community. They can only fulfill this vision with freedom and latitude to execute this world class design in a manner that feels cohesive to the rest of the campus. Tying that process to the Greco-Roman facade at 142 Free Street would place an undue stylistic and structural burden on the project. More importantly, it would be imposing a fight to preserve something that doesn't speak to Portland's best past or future.

Thank you for your time and consideration. We look forward to the impact of the completed project, and working alongside PMA and City leadership to enhance the cultural and economic vitality of Portland.

Most sincerely,

Erin Kiley
Co-Owner, Portland Flea-for-All
Co-Owner, Hammond Heirs Block at 585-593 Congress Street
Portland Downtown Board of Directors

August 18, 2023

As an architect and lifelong Portland resident I am writing to support the Portland Museum of Art's proposal to expand their historic complex on Congress Square. The museum is the anchor for our Arts District and an important cultural asset for Portland and the wider Maine community.

I am pleased with the selection of LEVER Architecture's team for the design. I am confident that their design solution will respect the PMA's historic complex and be an important contribution to Congress Square and Portland's architectural fabric. Their sustainability goals for the project featuring engineered wood construction are exciting and forward thinking. It will be a bonus if the construction helps jumpstart the wood products industry in Maine.

It is obvious to me as a longtime PMA member that the museum has outgrown its current space and requires this expansion to provide flexible, non-traditional museum space to further their mission to serve a wider and more diverse arts community.

Sincerely,
Paul S Stevens Architect
37 Fessenden Avenue
Portland, Maine 04109



A History of 142 Free Street and Free Street at Congress Square

for the Portland Museum of Art Portland, Maine

July 5, 2023

Prepared by
Margaret Gaertner
M. Gaertner, Historic Building Consultant

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The Free Street Theater (1830-1835)

Free Street and 142 Free Street are slightly off axis. For the purposes of the following report the Free Street-facing facade of 142 Free Street is the north facade and Free Street runs east-west.

Sometime in 1830, a building was constructed at 142 Free Street in Portland, Maine.[1] Originally built as a theater, it may have been the first theater constructed in Maine.[2] Some accounts called it the Portland Theater while others referred to it as the Free Street Theater.[3] One newspaper noted the cost of the theater building was $10,000.[4] Surviving deeds indicate there were many investors involved in the theater enterprise – a January, 1831 mortgage on the property listed twenty-seven grantors, or titleholders, with ownership rights in the theater building and lot.[5]

No drawings or other images of the building have been located, and the written descriptions of the original theater building vary.[6] The theater was a hipped-roof building set several feet back from the street line. A broad flight of steps ran up to a portico, where three doors led to the vestibule. There were also doors to the basement on either side of the steps. The facade had a recess, and two, large Ionic columns that supported a "heavy" entablature. Above the entablature, there

> ***Free Street Theatre.***—The Boston Galaxy has been altogether too obliging to us 'down Easters.' Our theatre is not opened; no Poem has been recited, and we are wonder-struck at the marvellous events which, the editor says, have happened in our town. We don't know here, who is the successful competitor for the Prize Poem, much less that a Poem has been delivered. We learn, however, that the Theatre will be opened to-morrow evening. The *Corps Dramatique* have been here over a week waiting for the finishing of the building which "is being" erected in Free-street. We are told, and we are happy to give such information to our readers, that the reputation, habits, and morality of this company are such as entitle it to the confidence of the public. Such information will be doubly agreeable to the lovers of the Drama with us, for they have so often been visited by Thespian gipsies. The Manager promises in his advertisement to use his best exertions to give satisfaction to the public. We have no doubt he will be successful.

This notice ran in the Portland Advertiser *on September 9, 1830. It suggests construction of the Free Street Theater was nearing completion on that date.*

1. *Free Street Baptist Church Semi-Centennial 1836-1886*, 74. "Free Street Theater," *Portland Advertiser* (September 28, 1830) np.
2. Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10.
3. Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10.
4. "Edwin Forrest Played Here 83 Years Ago," *Portland Sunday Telegram* (6 February, 1914) 1, "The Saunterer," *Portland Sunday Telegram* (25 November 1917) 6, and Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10.
5. Cumberland County Registry of Deeds, Book 123, page 515.
6. For descriptions of the theater building, see: Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10 and "The Saunterer," *Portland Sunday Telegram* (25 November, 1917) 6.

was a balustrade, also described as "heavy". There were four chimneys, one at each corner. The side walls had two rows of windows, likely one row for the basement, and the second at the main floor. Each row had six windows.

The Free Street Theater operated for approximately five years. Portland's proximity to Boston provided access to quality performers. In July 1831, a young Edwin Forrest, who would later become one of the most noted stage actors of the early-nineteenth century, appeared in a series of plays at the Free Street Theater.[7] Junius Booth, patriarch of the noted family of stage actors, is also believed to have performed there.[8]

As a business enterprise, the Theater appears to have struggled. Various newspapers in the early 1830s noted the re-opening of the theater and the appointment of new managers.[9] By 1835, the ownership of the theater was divided among three investors: Solomon Mudge, Enoch Mudge, and Nathaniel Jewett.[10]

By 1835, the Theater was closed for good. In December, 1835 the theater building was sold to eight Portland residents who were members of the First Baptist Society for $5,000.[11] The men intended to use the theater building as a church.

7. "Edwin Forrest Played Here 83 Years Ago," *Portland Sunday Telegram* (6 February, 1914) 1.
8. Herbert G. Jones, "Nothing Remains on Free Street…" *Portland Press Herald* (26 November, 1939) Section C, 10.
9. "Re-opening of the Portland Theatre," *Eastern Argus* (17 June, 1831) 2, *Daily Eastern Argus* (12 June, 1833) 2, and *Daily Eastern Argus* (8 July, 1833) 2.
10. Cumberland County Registry of Deeds, Book 142, Page 412.
11. Cumberland County Registry of Deeds, Book 146, page 14.

The Free Street Baptist Church (1836-1926)

The Free Street Baptist Society was incorporated in January 1836. A building committee was formed, and the building formerly known as the Portland Theater was purchased. The eight men who had bought the Theater in December, 1835 sold the property to the Free Street Baptist Society on January 18, 1836. The deed for the sale of the building to the Society specifically mentioned "…being the lot of land on which the Brick Building called the Theatre now stands..."[12]

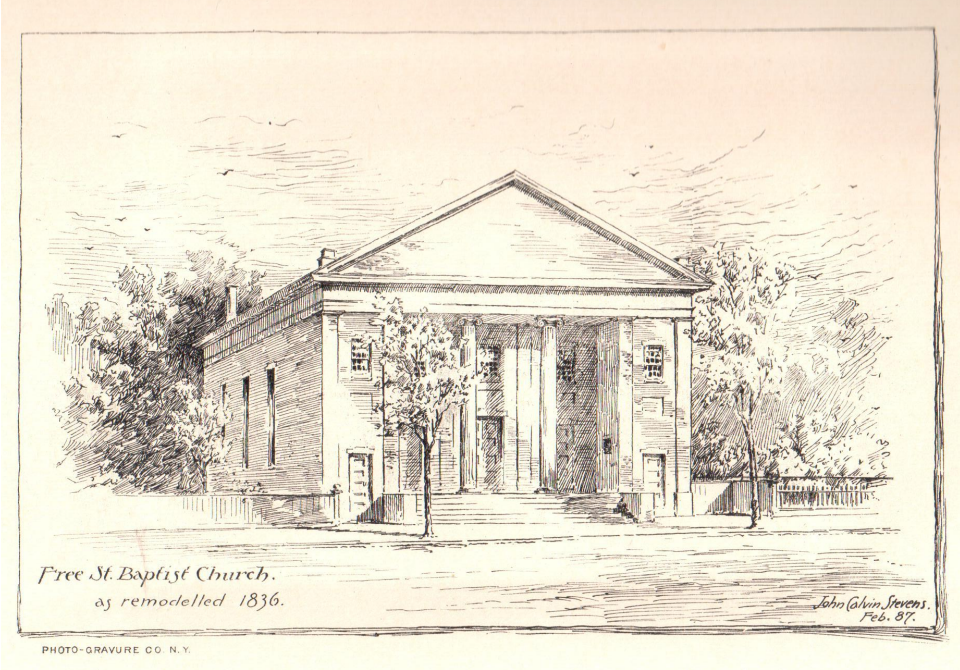
The Church made major alteration campaigns to its building every twenty years – in 1836, 1856, and 1876 – that resulted in significant changes to the appearance of the building. A final remodeling in 1926 by the subsequent owner erased all remnants of the earlier church building from the front facade and interior.

In 1836, the building was converted from a theater to the Free Street Baptist Church. Per non-contemporary written accounts, the former theater was altered as follows: the hipped roof was replaced with a gable roof, and the entablature was extended. The earlier windows in the side walls were replaced with taller windows, three openings in each wall. By August 11, 1836 the renovations were completed and the building was dedicated. A small line drawing on John Cullum's 1836 *Map of the City of Portland…* records the earliest appearance of the Church. John Calvin Stevens' conjectural sketch of the Free Street Baptist Church (following page), published in 1886, appears to be based on that small drawing.

In 1856 the church building was remodeled per the designs of architect Richard Bond (1798-1861). Bond was a Boston-based architect who had designed the Portland Merchant's Exchange (1835-9) prior to receiving the commission for the redesign of the Free Street Baptist Church.[13]

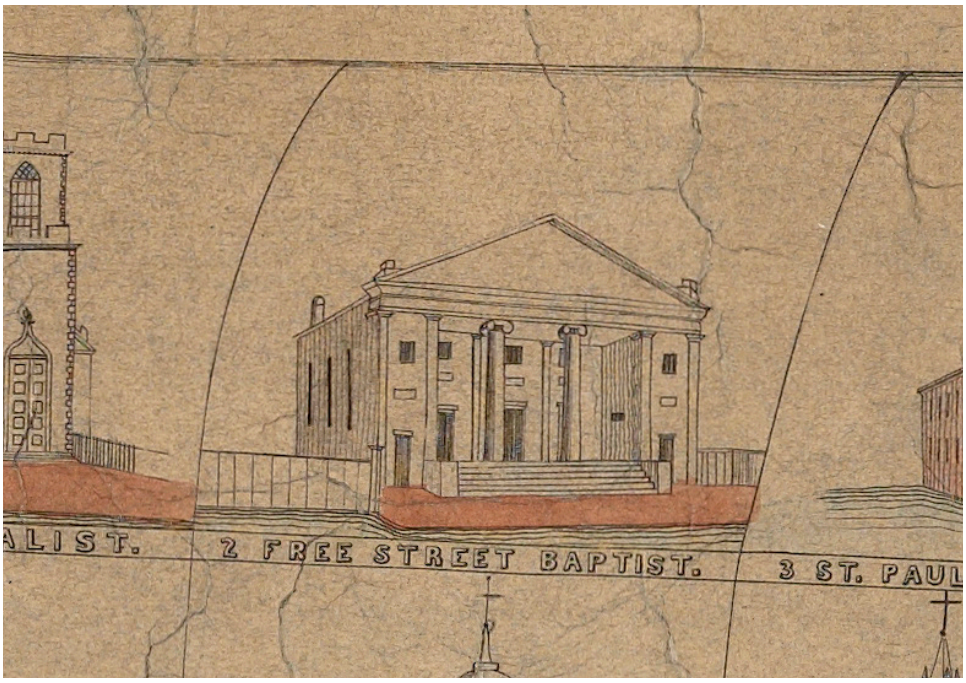
The alterations cost $15,000[14] and included adding a new "front" to the building which brought the primary facade out to the street line. This new facade was Italianate in style, and included two asymmetrical towers. The taller of the two towers was 185 feet tall and dominated the neighborhood around it. Surviving photographs show a light-colored building, lighter than the brick buildings adjacent to it, indicating the brick structure was painted, or more likely, stuccoed and scored, to imitate stone. Remnants of a stone-colored finish are still visible on the west facade of the building.

12. Cumberland County Registry of Deeds, Book 143, page 446.
13. Stephen Jerome, "Richard Bond," *Biographical Dictionary of Architects in Maine* (Volume V, No. 2) 1988.
14. William Willis, *The History of Portland* (Somersworth, NH: New Hampshire Publishing Company, 1972) 691.



In 1887, architect John Calvin Stevens made this sketch of the Free Street Baptist Church as he believed it would have appeared in 1836.

Source: *Free Street Baptist Church Semi-Centennial 1836-1886.*



This drawing of the Free Street Baptist Church was included on John Cullum's 1836 map of Portland. It likely was the source for John Calvin Stevens' 1887 sketch of the Church (above).

Source: John Cullum, *A Map of the City of Portland with its Latest Improvements...,* 1836.



These finish remnants found on the west facade record the stone color that was once found on the exterior of the Free Street Baptist Church.

In March, 1876 a fierce gale damaged the original spire.[15] The spire and its base were removed and replaced with a shorter, eight-sided, curved dome roof on a new base (see photographs, next page).

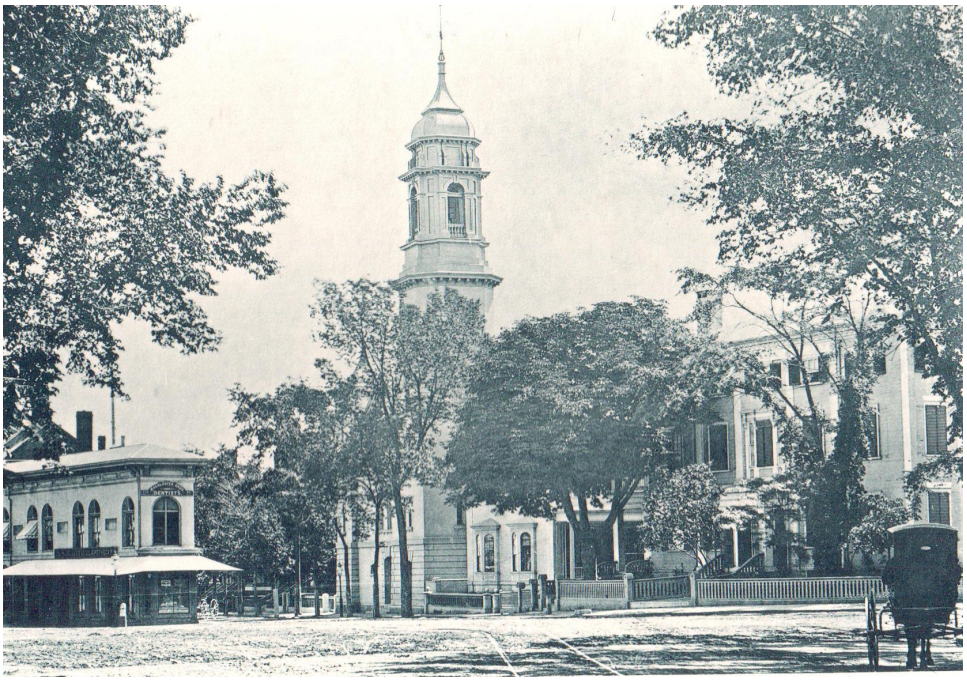
In 1887, the Free Street Baptist Church spent $6,500 on a "thorough improving" of the Church and a few years after that, stained glass windows were installed in the building.[16] In 1894, five-sixths of the lath-and-plaster ceiling fell down, including the furring, landing on and damaging some of the pews.[17]

In 1922, the Free Street Baptist Church and the First Free Baptist Church merged and formed the Immanuel Baptist Church. The newly formed congregation decided to build a new, shared church at the corner of Deering and High Streets. On October 15, 1926, the Immanuel Baptist Church sold its building at 142 Free Street to the Portland Chamber of Commerce ("the Chamber").[18] As part of the sale agreement, the Church retained ownership of the stained glass windows, organ, and pews that were then in the building.[19]

15. *Free Street Baptist Church Semi-Centennial 1836-1886*, 79.
16. "A Fall in Plaster," *The Portland Daily Press* (25 October, 1894) 8.
17. "A Fall in Plaster," *The Portland Daily Press* (25 October, 1894) 8.
18. The Chamber of Commerce has had several names over its existence including the Chamber of Commerce of Portland and the Chamber of Commerce of the Greater Portland Region. For the purposes of this report, "Chamber of Commerce" will be used.
19. Cumberland County Registry of Deeds, Deed dated October 31, 1991, Book 1246, page 482.

Right: The Free Street Baptist Church as it appeared after architect Richard Bond's 1856 redesign was complete. Below: The Free Street Baptist Church as it appeared after the spire was removed in 1876. In both images, the only building shown that still stands today is the Hay Building, the two-story "flat iron" building to the left of the Church.







This interior view of the Free Street Baptist Church was published in 1887.

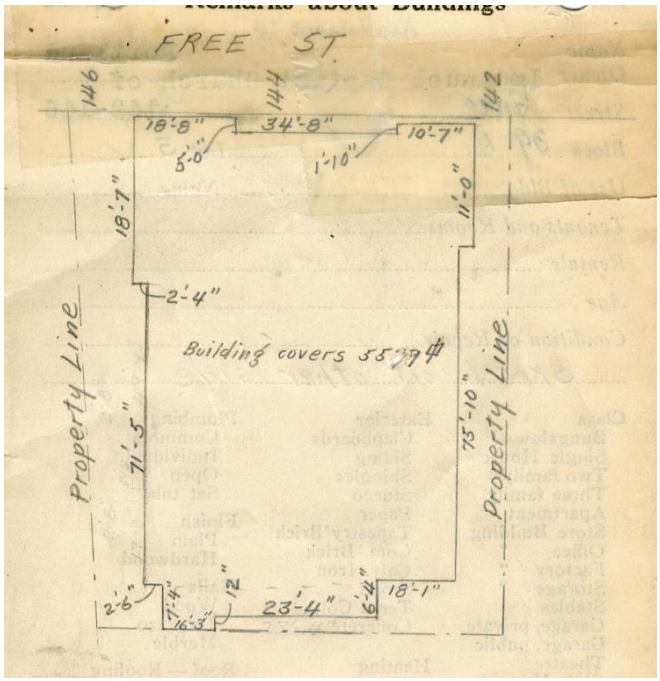
Source: *Free Street Baptist Church Semi-Centennial 1836-1886.*

Chamber of Commerce (1926-1991)

In 1926, the Chamber of Commerce bought 142 Free Street[20] and announced plans to renovate it for their new home. The Chamber retained architects John Calvin Stevens and John Howard Stevens to convert the former church into the Chamber's new headquarters.[21] The contractors for the work were W. W. Cunningham & Sons.

As noted by the press, the remodeled building retained little of its appearance from its days as a church. The two projecting towers on the Free Street facade were removed, and northernmost fifteen feet of the building (at Free Street) were rebuilt. The front facade of the building, likely stuccoed to resemble stone in its Church days, was completely removed and replaced with a new facade of exposed brick. The new facade had a portico supported on four concrete columns between two brick piers.

The extant building bears so little resemblance to the earlier Free Street Baptist Church that it is difficult to see how the Church was remodeled rather than completely replaced. Comparison of the building footprints as recorded in the 1924 assessor's sketch of the building footprint and the footprint in the current assessor's database show the basic dimensions are roughly the same. Photographs of the east facade from 1925 and 1958 (see photographs on following page) show the window openings on that wall were retained (new lintels were added in 1926) as was part of the cornice. Remnants of a stone-colored finish remain on the exterior face of the west wall (see photograph, page 7) but very little else of the building's past as a Church building appears to have survived.



This sketch floor plan was included in the City of Portland's 1924 assessment card for 142 Free Street.

Source: City of Portland - Planning & Development Department.

20. Cumberland County Registry of Deeds, Book 9779, page 254.
21. Drawings for the Stevens' alterations are not known to have survived. They are not in the collections of the Maine Historical Society. Requests to the Avery Library at Columbia University were not returned.



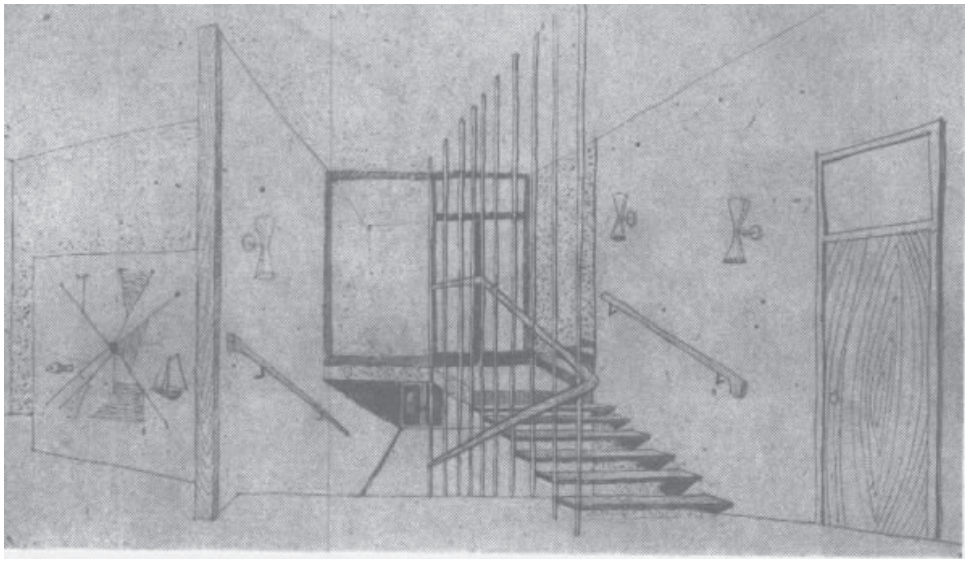
The Free Street Baptist Church in 1925 (above) and the Chamber of Commerce in 1958 (below). Without these two views to compare, it is difficult to see how the Church building was remodeled into the Chamber. The Free Street end of the building (at the right in these images) was completely replaced, and the brick walls are a different color.

Source: *Portland Evening Express,* May 31, 1958.



In addition to the exterior changes, the interior was remodeled. Although no architectural drawings have been located, the fenestration of the side walls suggests the north end of the building was divided into two floors, likely office space, while the south end was a double-height space. A "hard fuel" (coal) steam heating system was installed. During the sixty-five years the Chamber owned 142 Free Street, it continued to make small improvements and upgrades to the building. In 1941, an internal stair at the rear of the building that connected the first floor and basement was "floored over."[22]

In 1959, the Chamber remodeled the interior of the building.[23] In June of that year, the Chamber applied for a building permit to make $54,700 in alterations "as per plans." The contractor was Samuel Aceto & Co. Inc.[24] As part of the alterations, the coal-fired steam heating system was converted to oil.[25] In 1966, the Chamber completed a "brightening" of the exterior of 142 Free Street. The work included painting and repointing and cost $15,000.[26] In January, 1972 the Chamber applied for a building permit to complete $85,000 worth of renovation and alteration work "as per plan." The referenced plan has not survived.[27] The inspector noted steel beams were installed in the basement. As part of that project, the Chamber installed air-conditioning in the building.[28]



This rendering shows the interior design proposed for the Chamber of Commerce building in 1959. It is not known if the design was executed.

Source: *Portland Evening Express*, April 17, 1959.

22. Permitting and Inspections, Permit number 1919, dated December 9, 1941.
23. "Older than it Looks," *Evening Express* (14 January 1966) 7.
24. The referenced plans were not included with the building permit. Permitting and Inspections, Permit number 749, dated June 17, 1959.
25. Permitting and Inspections, Permit number 848, dated July 7, 1959.
26. "Older than it Looks," *Evening Express* (14 January 1966) 7.
27. Permitting and Inspections, Permit number 0112, dated January 21, 1972.
28. Permitting and Inspections, Permit number 0168, dated February 8, 1972.



142 Free Street (left) and the former WCTU building at 150 Free Street (right) on January 30, 1980. The WCTU building was torn down later that year.

Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.

Throughout the 1980s, the Chamber reported financial difficulties. In October 1981, the Chamber of Commerce announced a "cash flow" problem of $100,000. Most of the shortfall was due to cuts in federal programs that had covered salaries for clerical staff.[29]

In June, 1982 the Chamber announced a deficit of $65,000. The shortage was to be covered by bank loans, with refinancing of the mortgage on 142 Free Street listed as a possible longer-term solution.[30] By 1990, the Chamber had decided to sell their building. Chamber President Bill Nugent said the building was too big for their needs, and had deteriorated over the years. He also noted that while the building had lowered ceilings, the original ceilings were about thirty feet high and "nicely decorated."[31] On October 31, 1991 the Chamber sold 142 Free Street to the Children's Museum of Maine.[32]

29. Frank Sleeper, "Chamber problem: $100,000," *Evening Express* (26 October, 1981) 1.
30. Frank Sleeper, "Chamber shows $65,000 Deficit," *Evening Express* 7 (May, 1982) 1
31. "Chamber Puts Building up for Sale," *Evening Express* (9 January, 1990) 16.
32. Cumberland County Registry of Deeds, Book 9770, page 254.

The Children's Museum of Maine (1991- 2019)

The next owner of 142 Free Street was The Children's Museum of Maine. As did prior owners, the Children's Museum made alterations to the building to accommodate their activities. The renovations were extensive and included complete demolition of the interior and alterations to the exterior.

The Children's Museum worked with architect Stephen Blatt, structural engineers Pinkham & Greer, and Wright-Ryan Construction to renovate the building. On his website, Stephen Blatt notes the Chamber of Commerce building was "…severely dilapidated…." prior to the renovations. The construction cost was 1.1 million.[33]

The primary, Free Street-facing facade saw few changes. The primary entry door and the transom over it were removed and replaced with a modern frame, transom, and door of metal. On the east facade, the fenestration was altered. During the Chamber of Commerce's ownership, the south end of the facade had three, double height window openings with wood sash. The northernmost window was removed, the opening was infilled with brick, and two, smaller windows



Left: Only one of the ca. 1926 double-height wood windows survives in the building. Below: the extant entry door and transom are late-twentieth century replacement.



33. City of Portland, Permitting and Inspections, Permit No. 923937, issued July 21, 1992.

installed in the infilled portion. A new, double-height window was installed between the surviving two windows at the south end.

An eight-sided cupola was placed on the ridge of the roof and a large, shed-roofed dormer and three skylights were installed on the east roof slope. The cornice south of the downspout was removed and replaced with a new cornice that was to match the existing (see diagram, following page).[34] Other changes to the exterior of the building included a new addition to the south facade for an egress stair.

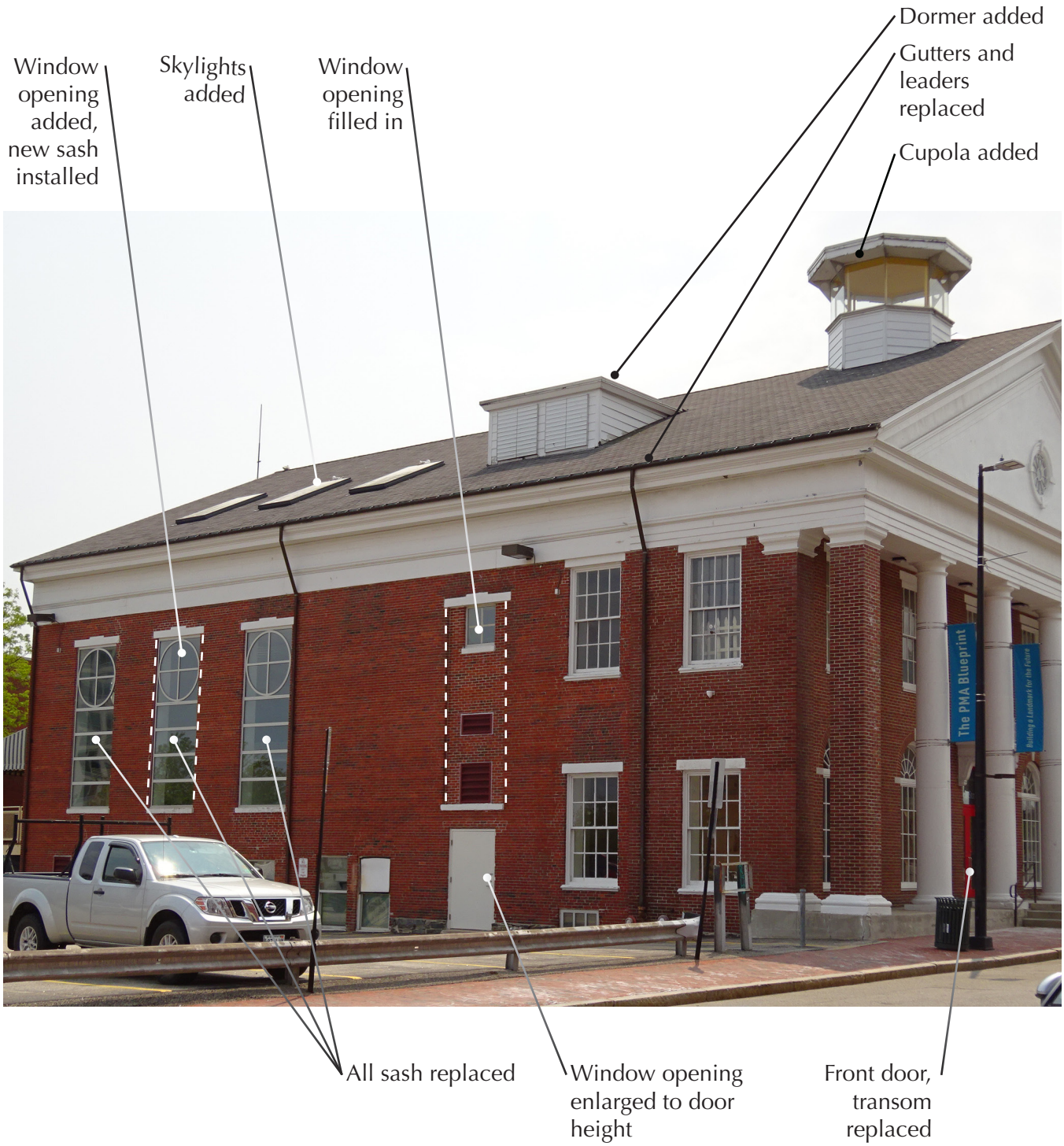
The renovations for the future Children's Museum occurred in 1992, two years after Portland enacted its historic preservation ordinance. A 1997 building permit noted the building was "Not in District or Landmark" and "Does not Require Review."[35] Had the alterations been reviewed for compliance with historic preservation standards, it is likely that most of the exterior alterations, including the addition of a large cupola and a large dormer in locations so highly visible from a public way (Free Street); alteration of the fenestration on the east facade; and replacement of the ca. 1926 windows would have been denied.

The interior of the building was completely gutted in 1992. The demolition work included removing the existing wood roof trusses and replacing them with a steel roof frame. A steel "superstructure" was also added to the building. A new, interior stair enclosed in modern masonry walls was constructed in the northwest corner of the building. An elevator was added as well.

No historic floor, wall, or ceiling finishes survive today. It is likely that any that had survived were removed as part of the 1990s work. Records in the City of Portland's building permit files indicate concrete slabs were poured for the basement, first, and second floors.[36] As seen from the interior of the building, the existing floors are poured in modern, corrugated pans, confirming that all of the floor framing and flooring was replaced as well. A sprinkler system was installed throughout the building.[37]

In 2017, the Children's Museum and Theater of Maine announced its plans to relocate to a new, larger building at Thompson's Point in Portland. The new building was to include 30,000 square feet of space, while the building at 142 Free Street had only 18,000. On October 15, 2019, the Children's Museum sold the building at 142 Free Street to its neighbor, the Portland Museum of Art.

34. City of Portland, Permitting and Inspections, 142 Free Street file, undated elevation drawing.
35. City of Portland, Permitting and Inspections, Permit No. 971138, issued October 20, 1997.
36. City of Portland, Permitting and Inspections, 142 Free Street file, Con Test Lab, Inc. "Report of Compressive Strength…"
37. City of Portland, Permitting and Inspections, Permit 924219, Issued October 8, 1992. Letter, P. Samuel Hoffses to Sprinkler Systems Inc., October 8, 1992. Inspections Department.



Exterior alterations to 142 Free Street made for the Children's Museum in the early 1990s.



Renovations made by the Children's Museum in the early 1990s included gutting the interior of the building. Today, no historic interior finishes remain. Note the modern steel framing and skylights in the image at right.



Free Street

The earliest section of Free Street, originally called Love Lane, was laid out in 1772. Initially, it extended only from Center Street to Middle Street – Free Street once ended where it now intersects Cross Street. In 1783, Free Street was extended westward to meet the intersection of Congress and High Streets, which became its western terminus. The newly built section, wider than the original part, was called Windmill Lane, after the windmill that once stood at the top of the hill. In 1788 the original portion of the road was widened to align with the newer section, and the entire street was renamed Free Street.[1] The intersection of Congress, High, and Free Streets is known as Congress Square.

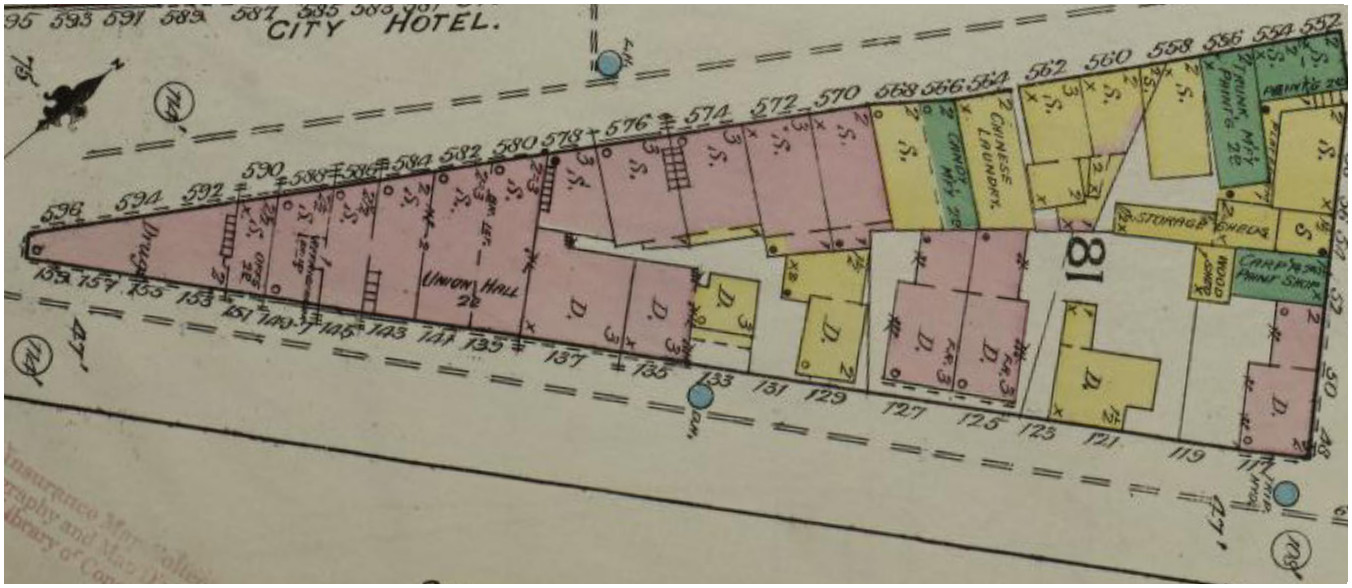
By the early-nineteenth century, Congress Square was a wealthy residential neighborhood lined with some of Portland's finest homes. Noted residences here included the Cobb Mansion, a ca. 1801 Federal-style home designed by Alexander Parris at present-day 7 Congress Square. Further down High Street and on Spring Street were the twin mansions of Stephen McLellan (116 High Street, 1800) and Major Hugh McLellan (107 Spring Street, ca. 1801). The latter was designed by John Kimball, Sr. At the corner of High and Congress Streets was the ca. 1837 Nathaniel Warren mansion, a brick Greek Revival building with an angled facade and two-story porch on columns. As one moved eastward along Free Street, the houses were somewhat smaller, and typically built in a simpler versions of the Federal and Greek Revival styles. These residences were a mix of brick and frame construction, and some were freestanding, while others were duplexes or rowhouses. Both the north and south sides of Free Street were still largely residential as late as 1886 (see maps and images, following pages).



The south side of Free Street was once lined with brick homes such as this one that stood at 134 Free.

Source: Maine Historical Society. For study purposes only / not for publication.

1. "Free Street Dates Back to Before Revolution," *Portland Sunday Telegram* (16 December, 1917) 5.



As seen in the Sanborn map of 1886, the north side of Free Street east of Congress Square was still largely residential as late as 1886. On the north side of the street (above) all of the structures east of the "Union Hall" were "dwellings" (labeled "D" on the map).

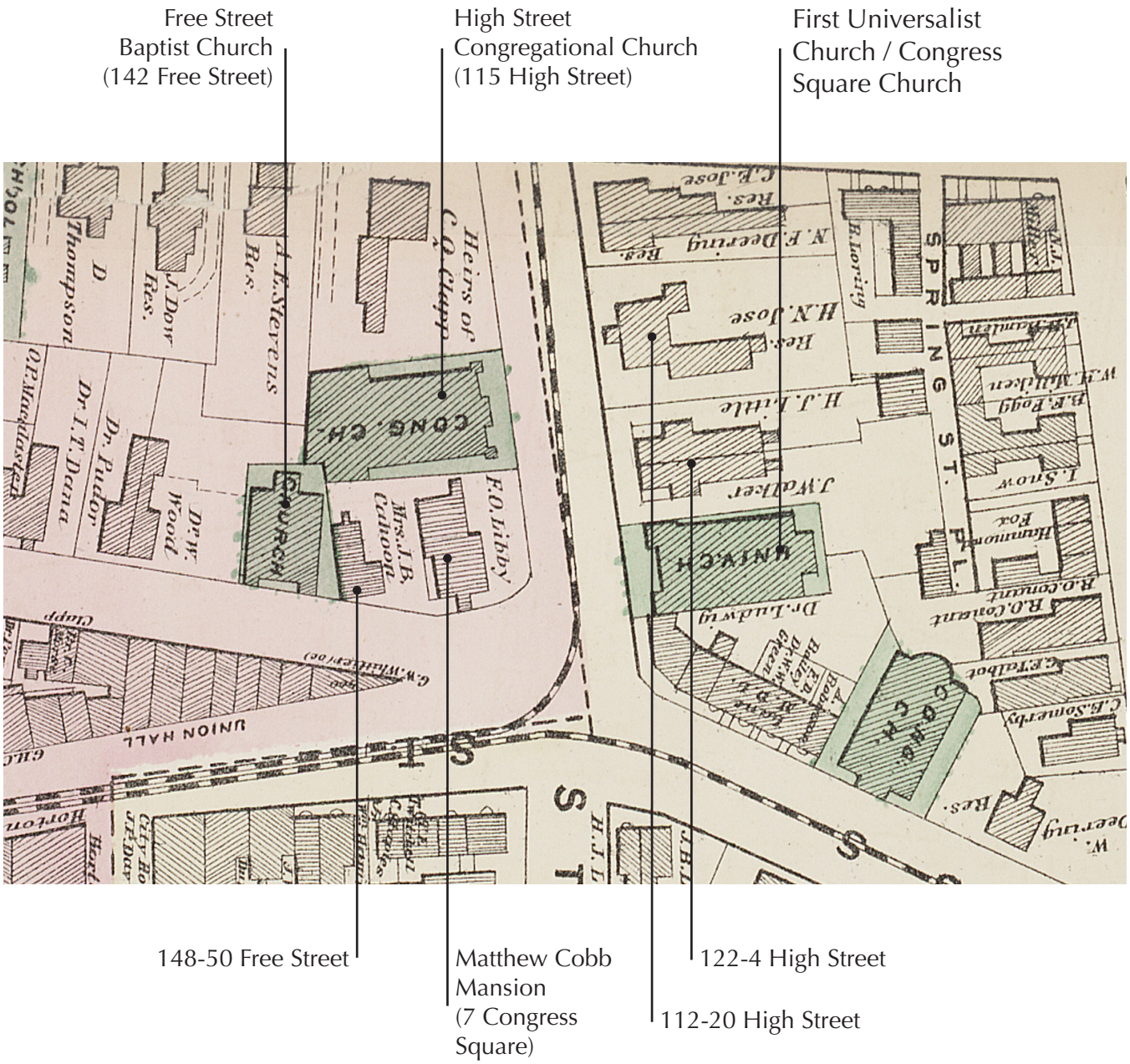
Source: *Sanborn Fire Insurance Map from Portland, Cumberland County, Maine,* Plate 12 (above) and Plate 24 (below). 1886.





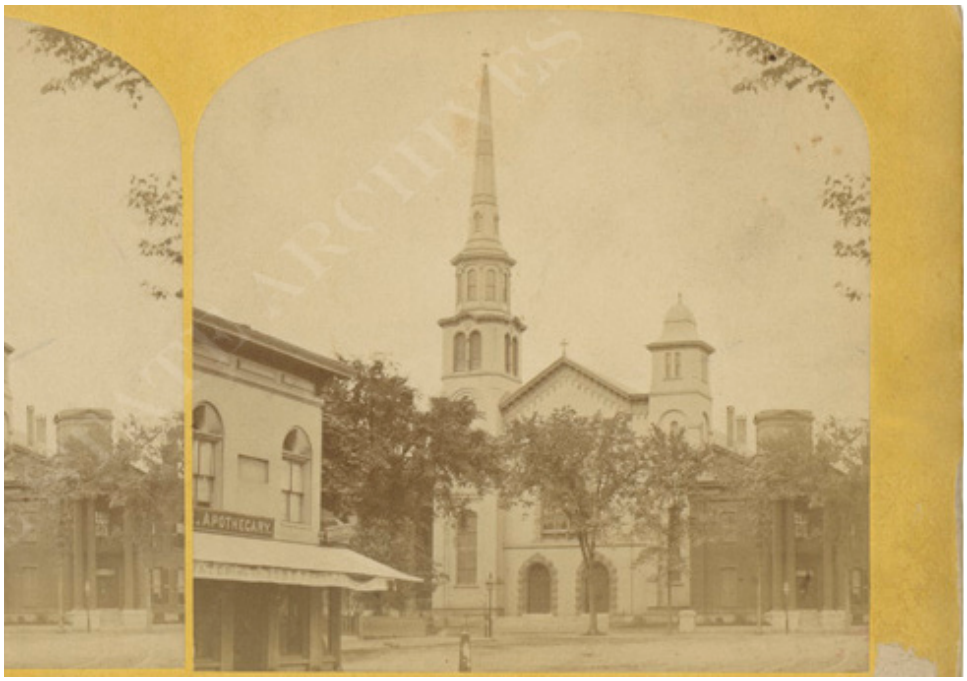
Photograph of the area around Congress Square ca. 1885.

Source: Maine Historical Society. For study purposes only / not for publication.



Map showing the area around Congress Square in 1871. Please note the map has been flipped to align with photograph on the previous page.

Source: Beer's Atlas of Cumberland County.



The former First Universalist Church / Congress Square Church on High Street and the Nathaniel Warren mansion to its right. The Hay Building is visible in the foreground.

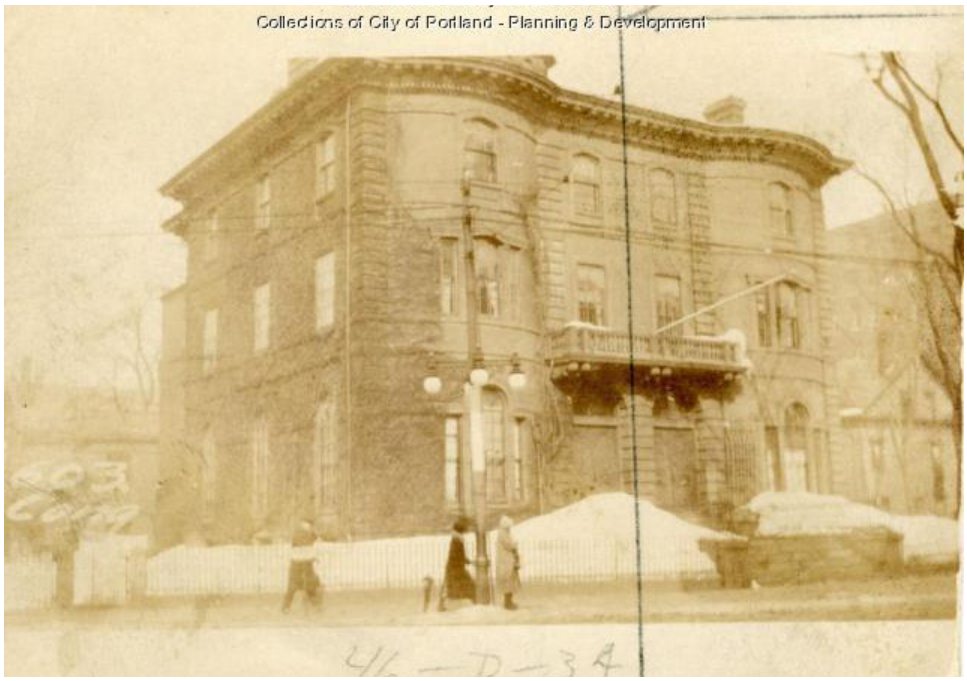
Source: Stereoview Photograph Collection, Maine State Archives.

Large churches were built between the residences, including the High Street Congregational Church at 115 High Street (ca. 1831) and the Free Street Baptist Church, which took over and remodeled a former theater at 142 Free Street in 1836. The streets were lined with trees, and the overall feeling was one of prosperity and elegance. Commercial activities were found on nearby Congress Street, in small-scale buildings. The Hay Building (ca. 1922, third story added 1922) at 594 Congress Street is typical of the retail buildings that lined Congress Street during the early- to mid-nineteenth century.



An early view of Congress Street, immediately east of Congress Square. The street is lined with small-scale, two- and three-story commercial buildings.

Source: Stereoview Photograph Collection, Maine State Archives.



The Libby Mansion in 1924.

Source: City of Portland - Planning & Development Department.

As the nineteenth century progressed, the area remained fashionable and more large residences were built, in the Italianate, Second Empire, and Queen Anne styles. The Libby Mansion, at the northwest corner of Congress and High, was among the grandest. Designed in 1853 by architect Charles Alexander, it was actually a double house. 126 High Street was another double residence, this one in the Greek Revival Style. The brick house had a hipped roof that extended over engaged side porches, and was supported on two-story tall columns.

Existing churches were remodeled, and new ones constructed. The Baptists remodeled their Free Street church in 1859, adding a tall spire and Italianate facade over their existing building. The Universalists constructed a large church, known as the Congress Square Church, in 1865 at 1 Congress Square. The Congregational Church on High Street was updated to a Gothic Revival style in 1869.

Most of Free Street was spared by Portland's Great Fire of 1866. Only the eastern-most end, the commercial area at Middle Street, was lost. This block was quickly rebuilt after the fire, and today remains a well-preserved block of commercial buildings built in a range of architectural styles popular in the 1870s.

The late-nineteenth and early-twentieth century saw extensive changes to the formerly genteel and largely residential neighborhood around Congress Square. As the neighborhood became less fashionable, many of the mansions that lined Congress and High Streets were divided into apartments or converted for civic and charitable uses. Some of the homes were demolished and replaced by larger, commercial structures.



Congress Square after 1897. The Cobb Mansion that stood at the corner has been demolished and the YMCA/Libby Building constructed in its place. The brick Nathaniel Warren Mansion still stands at the right.

Source: Collection of the author.



Congress Square after 1920. The Nathaniel Warren mansion that stood at the corner has been demolished and the Shwartz Building constructed in its place. The postmark on the rear of the card is May 6, 1926.

Source: Collection of the author.



As the neighborhood around Congress Square became less fashionable, the once-grand homes were re-purposed. By 1924, this large duplex home at 126 High Street had an addition for retail spaces at street level and was divided into apartments at the upper floors.

Source: City of Portland - Planning & Development Department.

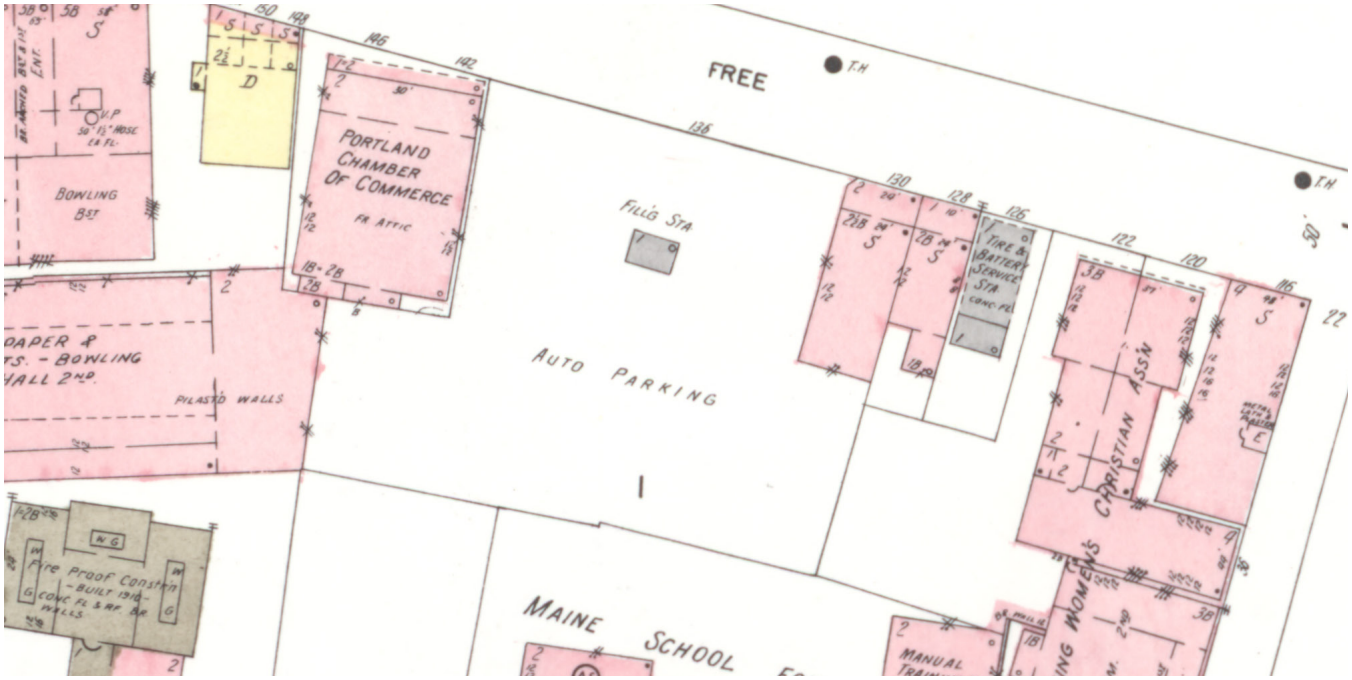
The 1886 Sanborn map recorded that the Cobb Mansion (7 Congress Square) was then home to the Cumberland Club. By 1890, the Cumberland Club had moved to the Stephen McLellan Mansion (116 High Street). The Cobb Mansion was demolished and replaced in 1897 by a five-story tall brick building for the Young Men's Christian Association (YMCA). In 1908, Margaret Mussey Sweat donated the Hugh McLellan Mansion (107 Spring Street) to the Portland Society of Art and it was converted into a museum. The Nathaniel Warren Mansion at 1 Congress Square was replaced by the Shwartz Building, a four-story brick commercial building with a round tower, in 1920. Across Congress Street, the Libby Mansion was demolished and replaced by the State Theater building.

While these changes marked a shift towards larger, commercial structures, the new buildings where typically executed in brick and granite with traditional styles and details. The area around Congress Square was no longer a wealthy residential neighborhood, and instead was transitioning into a vibrant, commercial area of hotels, theaters, restaurants, and shopping. This trend continued until the Great Depression halted nearly all development in Portland.

Congress Square Declines

After World War II, Portland, like many older cities, struggled to redefine itself and compete with suburban, automobile-based development. Civic leaders took on a number of efforts, including slum-clearing and redevelopment studies, plans, and projects intended to improve living conditions, modernize the city, and attract investment and redevelopment.

Among the most far reaching was "Patterns for Progress," an urban renewal plan written in 1967 that sought to create a ring of high-speed roads to move cars around the central core of the Portland peninsula. This resulted in the widening of Franklin and Spring Streets to create "arterials." Spring Street, which had previously ended at Center Street, was also extended to Middle Street. High and State Streets became one-way streets, increasing traffic speeds and affecting the character of these historic neighborhoods. Large areas on Cumberland Avenue and near Monument Square were razed to create open space for development. Some of these projects, such as One City Center, took decades to materialize. Others, such as the "Downtown Project No. 1," a proposed fifteen-story residential tower on Cumberland Avenue, never happened and that land is largely still a surface parking lot.



The south side of Free Street in 1954. Automobiles have arrived, and the residences at 126, 134, and 136 Free Street have been torn down for parking lots and auto-repair buildings. One-story additions for commercial uses have been added to the fronts of 128 and 130 Free Street and the former WCTU building at 150 Free Street.

Source: *Sanborn Fire Insurance Map from Portland, Cumberland County, Maine,* Plate 29. 1954.



Looking west on Free Street, 1924. The Jefferson Theater is in the foreground and the tower on the Free Street Baptist Church is visible in the background.

Source: City of Portland - Planning & Development Department.

Even before the official urban renewal efforts began, Free Street's streetscape near Congress Square was already being lost to modern development and the increased demand for parking. Portland's 1924 tax photographs record an intact streetscape along the south side of Free Street, from Oak Street to High Street. At the southeast corner of Free and Oak was the Jefferson Theater, a ca. 1897 five-story brick theater, while an early-twentieth century commercial building occupied the southwest corner (116 Free Street, extant). Between the commercial building and the Free Street Baptist Church was a row of seven two- and three-story tall brick residences dating to the mid-nineteenth century. An eighth house, a wood-framed building at 150 Free Street later owned by the Women' Christian Temperance Union (WCTU), stood between the Church and the YMCA.

The north side of Free Street, while more commercial, was also intact. This side was dominated by the elaborate brick and terracotta facade of the Baxter Memorial Building. Although this was actually the back of the building – the building's address was 562 Congress Street – the Free Street facade was nonetheless detailed with arches over the windows, belt courses, and swags, all of terracotta.

Shortly after 1924, Free Street began to change rapidly. In 1926, the Free Street Baptist Church was altered to its present, portico-front form. In 1933, the Jefferson Theater at the southeast corner of Free and Oak was torn down. In 1947, a modern, nearly windowless block of blonde brick – a Sears Roebuck store – was built on its site. Across the street, in 1954-5, all of the historic details were stripped off of the Congress Street and Free Street facades of the Baxter Memorial, and modern windows were installed.



The Jefferson Theater stood on the southeast corner of Free and Oak Streets. It was demolished in 1933.

Source: Collection of the author.

The south side of Free Street was also severely altered. The 1954 Sanborn map and an aerial photograph taken in 1960 (see photograph, page 30) records that only five of eight houses (120, 124, 128, 130, and 150 Free) remained on the south side of Free Street by that time. 126 Free Street had already been torn down and replaced with a concrete building used for "Tire and Battery" service. 130 Free and 150 Free were both heavily altered, with commercial additions on their primary facades. The rest of the block was an open parking lot with a filling station. Thus, much of this loss occurred prior to the implementation of official urban renewal projects in the area. Today, only a single, heavily altered former residence remains (128 Free Street).

Removal of historic buildings on Congress Square continued through the 1970s and 1980s. The former Universalist Church (128-32 High Street / 1 Congress Square) and the Greek Revival duplex next to it (126 High Street) were demolished to build a new studio building and parking lot for WCSH in 1977. In 1980, the former YMCA building at 7 Congress Square and the small, wood-framed building immediately east of the YMCA were torn down. In 1983, the Payson Wing of the Portland Museum of Art was built on those lots. On High Street, the former High Street Congregational Church appears to have been altered into a commercial building by 1924 before it was eventually demolished sometime before 1972. Today, none of the churches that once lined Congress Square remain.



This Sears Roebuck store was built on the site of the Jefferson Theater. This photograph was taken in 1947.

Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.



The former Sears Roebuck store in 2023.



An aerial view of Congress Square taken in 1960. Much of the south side of Free Street is already a parking lot.

Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.



An aerial view of Spring Street taken in 1972. Spring Street has been widened, and the Holiday Inn is visible. The rear walls of 142 Free Street and the Libby Building are visible at the left edge of the photograph. The building south of the Libby Building - originally a Congregational Church, later a recreation building - has been demolished. Much of the south side of Free Street remains an open parking lot.

Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.

116 **128** **142**



Comparison of ca. 2022 aerial photograph of Free Street (middle image) with the 1914 Richards Standard Atlas of the City of Portland *reveals how few buildings remain on the south side (top image) of Free Street.*

South Side of Free Street in 1924

116 Free Street



120-24 Free Street
Demolished after 1960



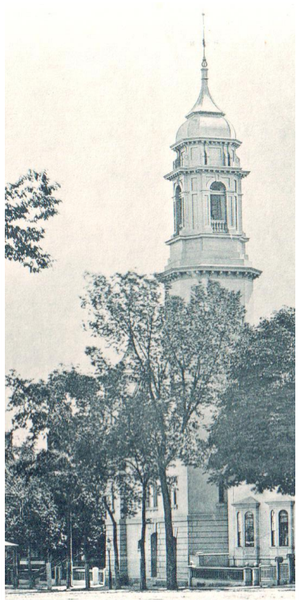
126 Free Street
Demolished before 1954
128 Free Street
Extant; altered and non-contributing
130 Free Street
Demolished after 1975



134-6 Free Street
Demolished before 1960



142 Free Street



150 Free Street



7 Congress Square





116 Free Street



120-24 Free Street
(parking lot)



126 Free Street
(parking lot)



128 Free Street
(extant; non-contributing)



134-6 Free Street
(parking lot)



142 Free Street



150 Free Street / 7 Congress Square

South Side of Free Street in 2023

This demolition did not occur without objection. The widening of Spring Street in 1970 and the loss of the historic houses on its south side were one of several events that led to the nomination of the Spring Street Historic District to the National Register in 1970 and passage of a Historic Preservation Ordinance by the City of Portland in 1990. Unfortunately, the damage to the portion of Free Street adjacent to Congress Square was already done. The Spring Street National Register District nomination acknowledged the loss in the Description section and noted "This is an active section of modern day Portland, yet this district retains the flavor and appearance of an older time. There are only a few modern structures and these front on streets such as Congress and Free which are commercial...an urban renewal project has leveled a section giving rise to the location of a new Sears-Roebuck store and parking area, on the eastern part of Spring Street. Some cleared land lies vacant. With the exceptions of the above the remaining district contains a great many old, but proud, structurally sound residences..."



142 Free Street, the former WCTU building at 150 Free Street, and the YMCA / Libby Building in 1978. The Libby Building and WCTU building were torn down in 1980.

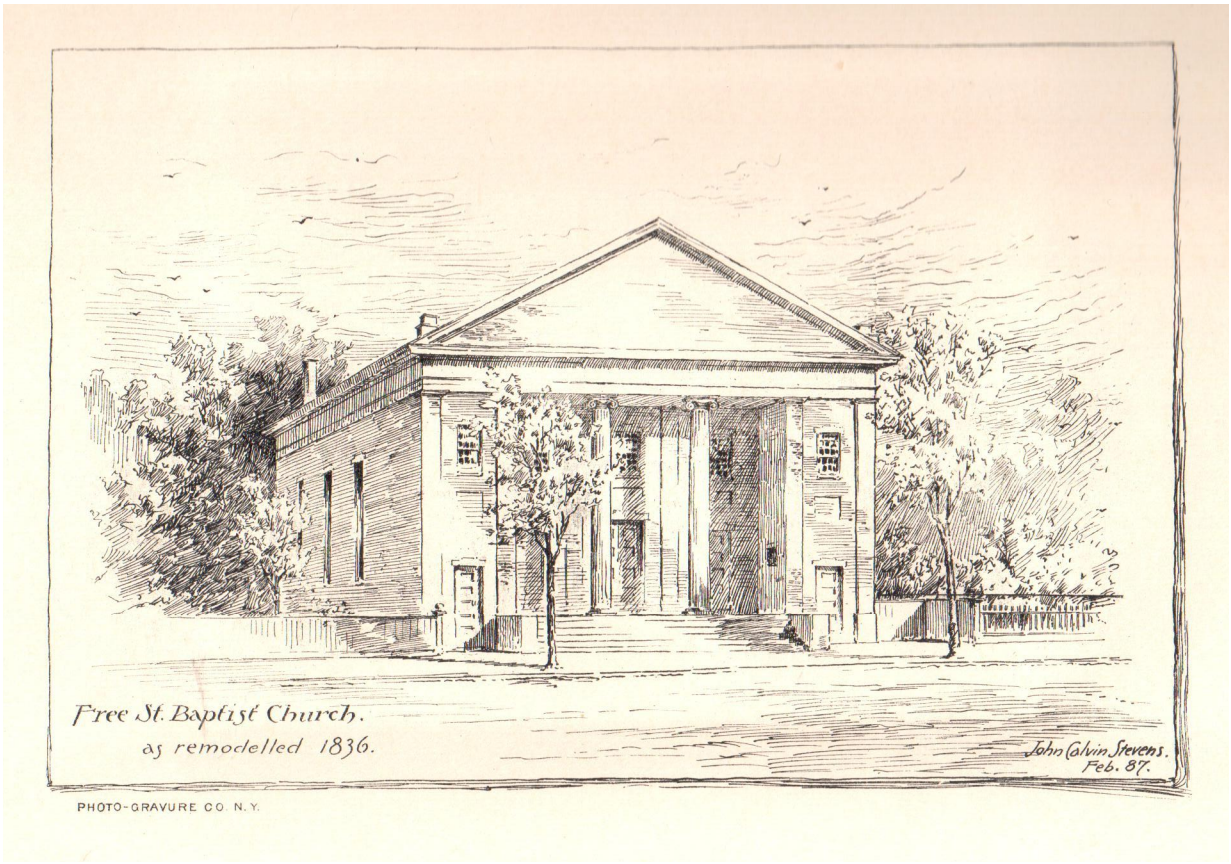
Source: Portland Press Herald Still-Film Negatives Collection, Portland Public Library.

Illustrations



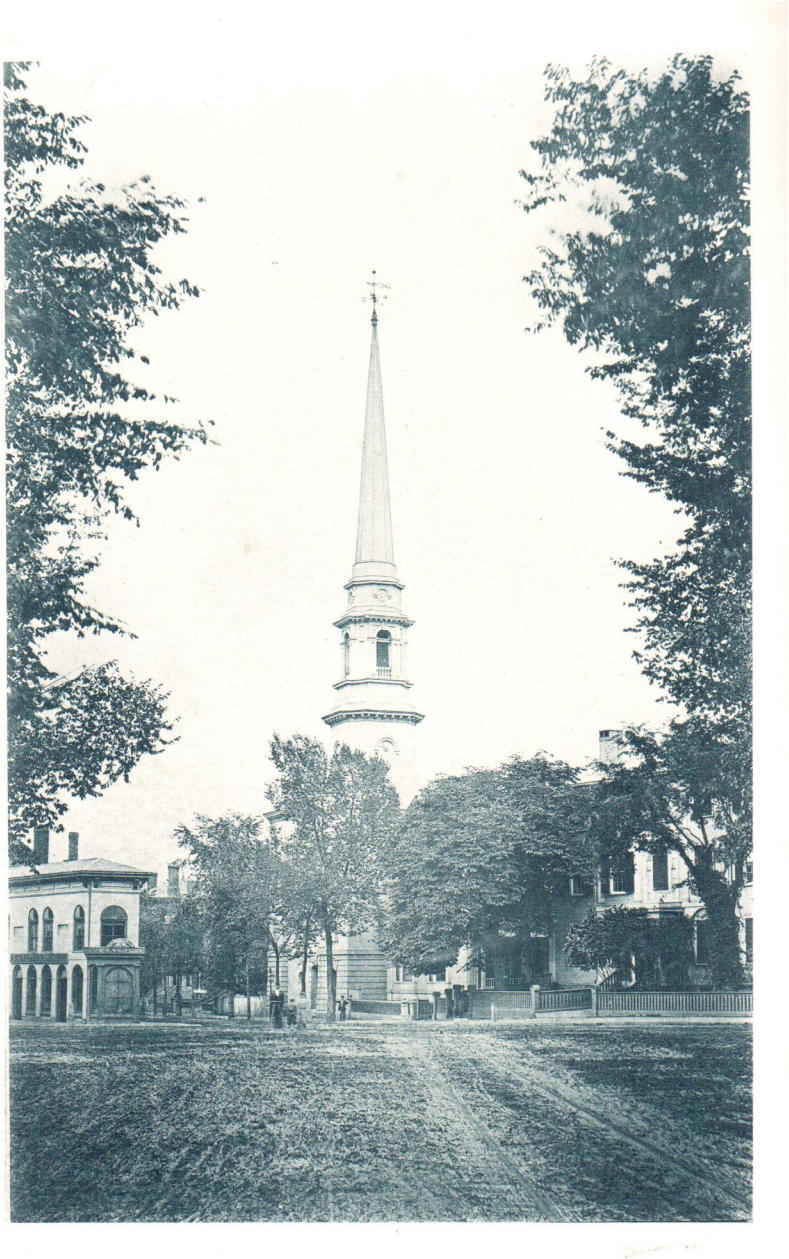
This 1836 map includes a line drawing showing the Free Street Baptist Church in 1836.

Source: "A Map of the City of Portland with its Latest Improvements including a view of the principal buildings engraved and published by John Cullum, Portland." Osher Map Library.



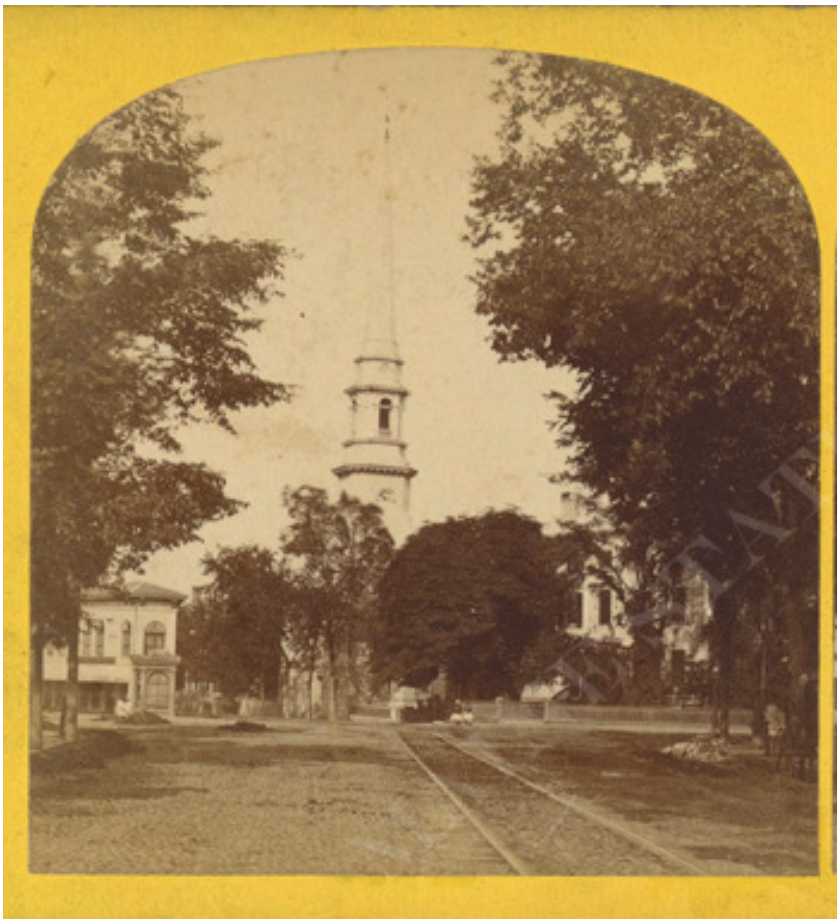
John Calvin Steven's sketch of the possible appearance of the Free Street Baptist Church prior to the 1856 remodeling campaign.

Source: *Free Street Baptist Church Semi-Centennial 1836-1886.* Collection of the author.



An early photograph of the Free Street Baptist Church - note the original, ca. 1856 steeple is still in place. The Hay Building is only two stories high.

Source: *Free Street Baptist Church Semi-Centennial 1836-1886.* Collection of the author.



An early stereoview photograph of the Free Street Baptist Church. The original, ca. 1856 steeple is still in place.

Source: Stereoview Photograph Collection, Maine State Archives.



The Free Street Baptist Church, sometime after 1876.

Source: *Free Street Baptist Church Semi-Centennial 1836-1886*. Collection of the author.



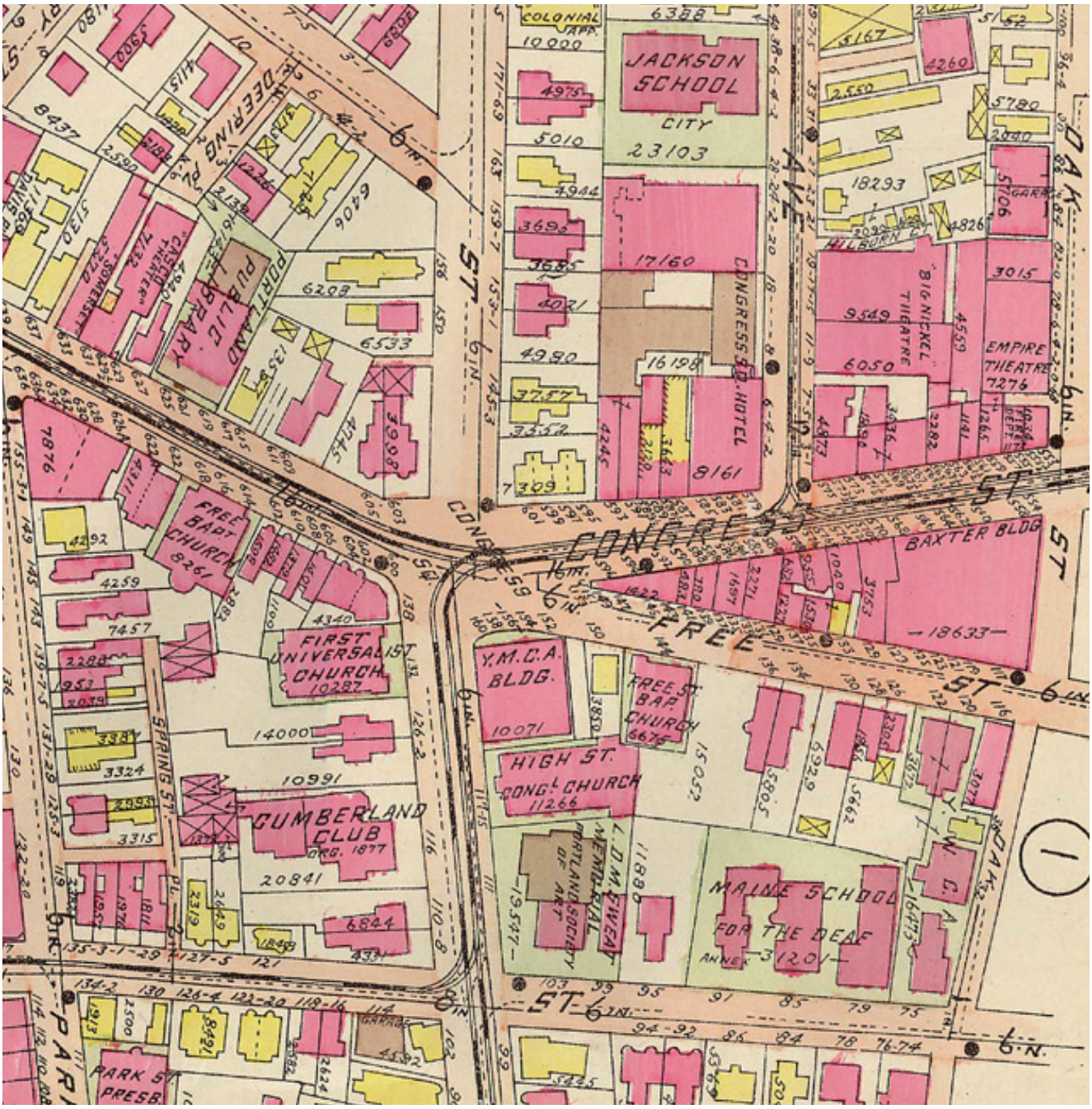
An 1882 map of Congress Square.

Source: *Revaluation Plans City of Portland, 1882*. Plate 39. Portland Public Library.



Congress Square in the early-twentieth century, showing the ca. 1897 YMCA/Libby Building at the center, and the Free Street Baptist Church at the left. The spire of the High Street Congregational Church is visible at the right, behind the Libby Building. This image was published in 1908.

Source: *In and About Portland,* 1908. Library of Congress.



Congress Square in 1914. The wood-framed Matthew Cobb Mansion has been replaced by the YMCA / Libby Building. The Free Street Baptist Church at 142 Free Street retains its towers.

Source: *Richards Standard Atlas of the City of Portland…,* 1914. Portland Public Library.

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The Economic Contribution and Impact of the Portland Museum of Art in Maine

A snapshot from a typical year before the PMA Blueprint facilities expansion and estimates post-expansion



Photo from the PMA website

PORTLAND MUSEUM of ART

MAINE CENTER FOR BUSINESS AND ECONOMIC RESEARCH
UNIVERSITY OF SOUTHERN MAINE

UNIVERSITY OF SOUTHERN MAINE

Prepared for the Portland Museum Of Art

By the Maine Center for Business and Economic Research, University of Southern Maine

December 2022

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Executive Summary

With a renewed commitment to diversity, equity, accessibility, and inclusion the Portland Museum of Art's (PMA) vision to become a central community gathering place and serve as a regional economic catalyst is being realized through its $100M multi-year redevelopment and construction project funded in part by an ongoing capital fundraising campaign. The following economic analysis – commissioned by the PMA and completed by the Center for Business and Economic Research (CBER) at the University of Southern Maine (USM) – quantifies the Museums ongoing contributions and impacts on the Maine economy in a typical year before the PMA Blueprint project (i.e., construction/expansion) and estimates the PMAs impact in a typical year after the expansion. Indirect and induced multiplier effects and some of the direct impacts are estimated by a Maine input-output model (IMPLAN, 2019 Data).

Pre-Expansion Snapshot, the PMA's annual economic contribution in 2019

The two major components of the PMA's economic contribution stem from museum spending and visitor spending. In 2019, the PMA welcomed over 170,000 patrons, an estimated 13% of which were from out of state and their trip to Maine was motivated by visiting the museum. These tourists spent an estimated $12.6 million directly on lodging, meals, shopping, transportation, etc. from outside of the museum. At the same time, the PMA paid $8M to maintain its ongoing operations, 69% of the direct operating costs were spent in Maine. Direct spending by out-of-state tourists supported an additional $8.1M in output (sales) – including both indirect and induced spending – and an additional 52 jobs. *For every $100 of tourists spending (sales), an additional $79 is generated elsewhere in the local economy.*

Including indirect and induced spending, the Museums direct operating activities supported an additional $5.7M in output (sales), and 37 jobs. *For every $100 of the PMA spending (sales), an additional $99 is generated elsewhere in the local economy.* Combine, in a typical year before the expansion the PMA supported:

- **Over 300 jobs.** Museum & visitor spending supported 309 jobs of which 220 were direct impacts and another 89 were supported through indirect and induced spending.
- **$12.9M labor income.** $8.7 million in direct labor income which supported an additional $4.2 million in indirect and induced impacts.
- **$29.8M output (sales).** Generated a total of $29.8 million in total output of which $16M were from the initial direct spending which supported another $13.8M in indirect and induced impacts.
- **$1.9 million in local and state taxes.** In 2019, $786,599 in local and $1.1 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of tourists.

Post-Expansion Snapshot, the PMA's annual economic contribution in 2027

The PMA Blueprint project is expected to be complete in 2027 and the new facilities open to the public. The PMA will have more space to host events, display more and higher quality exhibits, and in turn attract more visitors to the state. The increased capacity and diversity could allow the museum to welcome up to 300,000 annual visitors. An estimated 16% of visitors from out of state may take a trip to Maine motivated by visiting the PMA and could spend an estimated $28M on direct tourism-related expenditures.

To support the additional capacity, the PMA's annual operating budget will nearly double from the pre-expansion snapshot and a greater portion will be spent in Maine (81%) to purchase goods and services from local businesses and pay museum employees. In total, the estimated contribution for 2027, the year *after* the expansion, includes:

Executive Summary

Post-Expansion Snapshot, the PMA's annual economic contribution in 2027

- **Over 600 jobs.** Museum & visitor spending supported 621 jobs of which 426 were direct and another 195 were supported through indirect and induced spending.
- **$28.1M labor income.** $18.8 million in direct labor income which supported an additional $9.3 million in indirect and induced impacts.
- **$65.3M output (sales).** Generated a total of $65.3 million in total output of which $35M were from the initial direct spending which supported another $30.2M in indirect and induced impacts.
- **$4.2 million in local and state taxes in 2027.** In 2027, $1.7 million in local and $2.5 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

Five-Year Construction Impacts in the Maine Economy

This analysis also estimated the economic impact from the capital expenditures on the proposed PMA Blueprint construction project under two local spending scenarios. In 2023 through 2027, the PMA estimates that it will cumulatively spend $52.1 million to construct the new 60,000 sq ft. building.

Under the first scenario, 50% of spending (i.e., $26.1M) is assumed to go to local construction companies. Including direct, indirect, and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 66 construction-related jobs per year (55 FTE)
- $17.4 million in associated labor income, and
- $49.5 million in total output (sales)

Under the second scenario, 60% of spending (i.e., $31.3M) is assumed to go to local construction companies. Including direct, indirect, and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 79 construction-related jobs per year (65 FTE)
- $20.8 million in associated labor income, and
- $59.4 million in total output (sales)

Importance of cultural amenities, community, and museum membership

Housing inventory – via the conversion of property from non-residential use to housing – is expanding in Southern Maine and downtown Portland, increasing residents and the pool of potential museum members.

The PMA's presence in downtown Portland in addition to the Blueprint project and other redevelopment and revitalization efforts underway improve the areas desirability and contribute to increased economic activity and population growth within the Portland and Greater Portland area.

Introduction & Methods

Introduction

Introduction & Methods

Situated near Congress Square in Portland Maine, the Portland Museum of Art (PMA) is part of the city's unique downtown Arts District that includes a mix of condos, apartment rentals, hotels, and local businesses. Not only does the PMA contribute to the local economy by generating sales and creating jobs, but it also contributes to the quality of life that Portland is known for as it serves the needs of residents, workers, and visitors, and invests money in redeveloping the area.

The PMA Blueprint is a $100M multi-year redevelopment and construction project funded in part under an ongoing capital fundraising campaign. Some of these investments will improve the existing structure and surrounding property and approximately $52M will be put towards the construction of a new 60,000 square foot building. By 2027, the PMA Blueprint project is expected to be complete, and the new facilities open to the public.

To quantify the Museums ongoing contributions and impacts resulting from its capital investments on new construction, the PMA commissioned the Center for Business and Economic Research (CBER) at the University of Southern Maine (USM) to conduct the following economic analysis.

The remaining section provides an overview of the economic trends shaping the region then describes estimation methods and data sources. The remaining report is structured into the following sections:

1) Pre-Expansion Snapshot (2019)
2) Post-Expansion Snapshot (2027)
3) Five-Year Construction Impacts in the Maine Economy
4) Technical Appendices

Map 1: The Portland Museum of Art located at 7 Congress Sq, Portland, ME



Image source: https://www.portlandmaine.com/explore-downtown/downtown-map/

Overview – *Economic and Demographic Trends*

Introduction & Methods

A general understanding of the underlying economic conditions and trends in a region provide important context when considering current and estimated impacts to the economy. Trends that impact consumer spending or influence a person's choice to visit or relocate to a city will have an impact on museum visitation and membership opportunities.

During the peak of the COVID-19 pandemic, stay at home orders and social distancing restrictions caused tourism-related spending to significantly drop. In 2020 and 2021, spending shifted from services to goods as travel, dining, and other indoor service activities halted. As of October 2022, expenditures on services have since increased to pre-pandemic levels. While this is good news, economic conditions in the short- and medium-term are highly uncertain, and there is an increased possibility of an economic slowdown in 2023.

Portland was listed as one of the 100 Best Places to Live in the US in 2022, based on a range of factors such as community amenities, education, sustainability, transportation, housing, and the economy. However, demographics and housing were among Portland's lowest ranking. Maine's aging demographic and resulting labor market conditions is a longstanding challenge, and the lack of housing stock and the high cost of existing housing is an ongoing concern.

Maine has the oldest population in the US by median age (44.7 years) and by percent of the population age 65+ (21.7%).[1] Over the next 10 years, the entire baby boomer cohort will surpass age 65 and reach retirement. It was typical for baby boomers to work beyond retirement age, but more have retired during the pandemic. At the same time there is a smaller population of youth and young adults in the state to replace them in the labor force and without higher rates of in-migration economic growth will be constrained. An older demographic will not negatively impact the number of people that visit the PMA, but labor force issues can impact both the museum and its local vender and supplier business operations. These issues can also impact the supply of local construction workers available to build the PMA's the new structure.

Recent population growth in Maine is ranked among the fastest in the nation. From 2020 to 2021 Maine's population increased by nearly 10,000 or 0.7%, for comparison, the US as a whole added around 400,000 people, an increase of 0.1%. Much of this growth was driven by in-migration that was strong enough to offset a natural decrease in population (i.e., when deaths outnumber births). In other words, more people moved to Maine during the pandemic. This was driven in part by an increase in remote work and people seeking locations that allow for work-life balance and access to outdoor recreation. The influx of people relocating to Maine is not a new trend but has increased since the pandemic. These trends are encouraging especially since the state needs more working-age people to sustain economic activity, but it is uncertain whether they will continue at the same rate in the future. There is opportunity for Maine to see continued increased in-migration in the coming years due to the latter trends, however housing – in addition to childcare and school availability for those with children – are possibly limiting factors.[2]

Housing costs have sharply increased over the past several years as demand far outpaced supply. Affordability is a particular concern as interest rates have spiked causing more potential buyers to be priced out of the market and make home mortgages more expensive. Higher home prices have contributed to higher rental prices; increases in the Portland and Greater Portland area have started to create a new 'high end' market especially in cities such as Westbrook, Biddeford, Gorham, Windham, Brunswick, and Lewiston. This trend was underway prior to the pandemic but demand has increased, and many higher end options are being purchased.

The need for more housing in general and more affordable options is a well-known issue in Portland and the Greater Portland area. From 2011 to 2020 the total number of housing units in Cumberland County increased by 5.7% (7,861) and in the Art District neighborhood where the PMA is located the number of housing units increased by 7% (142), but it is still not enough to keep up with demand.[3] The influx of people relocating to the state further constrains the housing supply and limits availability for ongoing migration.

[1] 2021 Population Estimates Program
[2] Maine State Economist
[3] Housing data from 2011-2015 American Community Survey (ACS) 5-Year and 2016-2020 ACS 5-Year Estimates.

Overview – *Downtown Redevelopment and Revitalization*

Introduction & Methods

Thriving and successful neighborhoods and downtowns provide a sense of place, a community. Cultivating community, as the PMA has done for over 140 years, impacts the economy as more people in the area results in improved business activity, increased property values, and expanded local tax base.

Think of quality of life as everything that makes a place worth calling home.

Within economic development, "quality of life" is measured with a complex balance of indicators such as infrastructure, jobs, education, healthcare, housing, and cultural amenities. A place, or a region with a high quality of life can provide its residents with everything they need and want to live and thrive. That is why improving quality of life increases desirability for a destination. It attracts and retains people, adds revenue, and boosts recognition and reputation.

Investments that contribute and improve quality of life and place can be more effective than traditional economic development tools such as business tax incentives to attract or retain employers or create a more "business-friendly" environment with lower taxes and labor costs. While traditional tools have value, community amenities such as recreational opportunities, cultural activities, and quality services may be larger contributors to a healthy local economy than traditional "business-friendly" measures.[4] Other quality of life factors such as good restaurants, access to open spaces and public spaces, good jobs, safety, and connection and mobility also attract (and retain) more people to an area to live, work, and play.

Housing & real estate development trends in Portland and the Greater Portland area

There are several housing developments and redevelopments currently under construction in Portland downtown, Bayside, and East Bayside neighborhoods in addition to revitalization projects. These projects will increase housing capacity and contribute to the quality of life the city has become known for, as well as have a positive impact on museum's membership opportunities.

Office building conversions in downtown Portland are bringing more housing inventory online as apartments, condos, and hotels. In 2021, at least two known buildings were sold in downtown Portland with plans to convert to residential, with two additional known for 2022, and more potential projects are under discussion.[5]

Housing-related redevelopment is underway in Portland to increase housing capacity, such as the updates to 50 Monument Square and the conversion of city's iconic Time & Temperature building to an 86-bed luxury hotel with a restaurant and rooftop bar, and meeting and retail spaces.

These are just a few examples of redevelopment projects in addition to the PMA Blueprint project and other revitalization efforts underway contributing to the areas increased desirability thus improving economic activity and population growth within the Portland and Greater Portland area.

[4] Ohio River Valley Institute. (2022) An Aggregate Approach to Estimating Quality of Life in Micropolitan Areas

[5] MEREDA 2022 Forecast Conference. Southern Maine Office Forecast, Nate Stevens, The Boulos Company

Estimation Methods & Data Sources

Introduction & Methods

The Portland Museum of Art (PMA) provided actual and projected annual operational data including payroll information and vendor/supplier spending, detailed visitation counts as well as portion of out-of-state visitors, and estimated construction spending for 2019 through to 2027. These data represent PMA's direct spending in the Maine economy and serve as inputs to estimate indirect and induced impacts statewide.

Data from the Maine Office of Tourism's (MOT) 2021 Economic Impact and Visitor Tracking Report and "Maine Museums: An Economic Impact Study, 2010" is used to develop trip assumptions, visitor segments, spending patterns, and estimate the portion of visitors that took a trip to Maine motivated by visiting the PMA. These data along with visitor counts provided by the PMA are used to estimate the total direct tourism-related expenditures (i.e., visitor purchases of goods and services including meals, hotels, transportation, etc. outside of the museum). Trip assumptions, visitor segments, and spending patterns for 2019 are used to estimate direct tourism-related expenditures for 2027. An estimated 25% of out-of-state museum visitors in 2019 took a trip to Maine motivated by visiting the PMA. In 2027, an estimated 35% of out-of-state museum visitors will take a trip to Maine motivated by visiting the PMA. These data reflect direct visitor spending and serve as inputs to estimate indirect, induced, and sometimes direct impacts (i.e., jobs and labor income) to the state.

The term "economic impact" and "economic contribution" are often used interchangeably but there are distinctions important for the reader to understand. The term "economic impact" of the PMA represents new spending in the economy, that is "but if not for" the PMA, the spending is assumed would not have occurred. On the other hand, "economic contribution" can be thought of as the entire footprint of the PMA to the Maine economy, it measures the support of the PMAs ongoing operations - that is money that is already circulating. The spending of tourists whose trip to Maine was motivated by visiting the PMA to browse its galleries, patronize a specific exhibition, or attend an event, and capital investments on new construction represent spending that would not have occurred but for the PMA.

Indirect and induced multiplier effects and some of the direct impacts are estimated by a Maine input-output model (IMPLAN, 2019 Data). IMPLAN is a regional economic analysis software application that is designed to estimate the impact or "ripple" effect of a given economic activity within a specific geographic area. For more information on the IMPLAN modeling process, visit IMPLAN.com. The impacts and contributions presented in this report are quantified and presented using common economic metrics including full-time equivalent employment (FTEs), workers, wages, total output (sales), and tax revenues. Only spending that takes place within Maine is included as stimulating the changes in economic activity. All economic impact and contribution figures are reported in current 2022 dollars.

A note on employment. Jobs or workers in IMPLAN represent average annual employment. To switch between FTE and IMPLAN jobs we use the 2020 546 FTE & Employee Compensation Conversion table. The factors used to switch between FTE to IMPLAN jobs and from IMPLAN jobs to FTE are as follows: 1 FTE is equal to 1.159 IMPLAN employees and 1 IMPLAN employee is equal to 0.831 FTE. Refer to the technical appendices for modeling output definitions and other key terminology used throughout the report.

Ongoing Museum Operations

Introduction & Methods

Since the onset of the COVID-19 pandemic in 2020, the PMA closed for several months due to emergency restrictions – involving state and local stay-at-home mandates coupled with physical distancing measures – enacted to limit the spread of the virus. In April and May of 2020 and January and February of 2021, the PMA was closed to visitors. During this time, the pandemic caused consumer spending to significantly contract as most people opted to stay home instead of going out and spending money on leisure activities. In particular, services that involved any kind face-to-face human interaction were affected the most. In 2019, over 170,000 individuals visited the PMA. When compared to visitation in 2019, levels were 67% lower in 2020 and 46% lower in 2021. The impacts of COVID-19 have lingered into 2022 but visitation has increased. As of September 2022, the PMA has welcomed over 97,000 visitors exceeding totals from 2020 and 2021. The number of museum visitors is expected to increase as more people continue to resume pre-pandemic activities. By 2027, the PMA estimates the number of museum visitors will nearly double from 2019 levels because of the increased capacity and attraction anticipated from its new facilities (Figure 1).

The COVID-related closures did not lead to a drop in the PMA operating expenses, in fact these costs slightly increased in 2020 and 2021 over 2019 levels. During this time, the Museum still needed to maintain its facilities and art collections and pay its employees. Many businesses had to layoff employees, but the PMA was able to retain and support its staff during these challenging times. Actual and projected operating costs, shown in Figure 2, include total personnel budget (with tax and benefits) and vendor/supplier spending. In 2019, approximately 69% of the operating budget was spent in Maine on local vender and supplier businesses and to pay workers' salaries, wages, and benefits. As the operating budget increases to support anticipated capacity so too will the PMA's share of local investments. By 2027, approximately 81% of the operating budget will be spent in Maine to purchase goods and services from local vendors/suppliers and pay employees.

Figure 1. Annual number of visitors (with future projections)

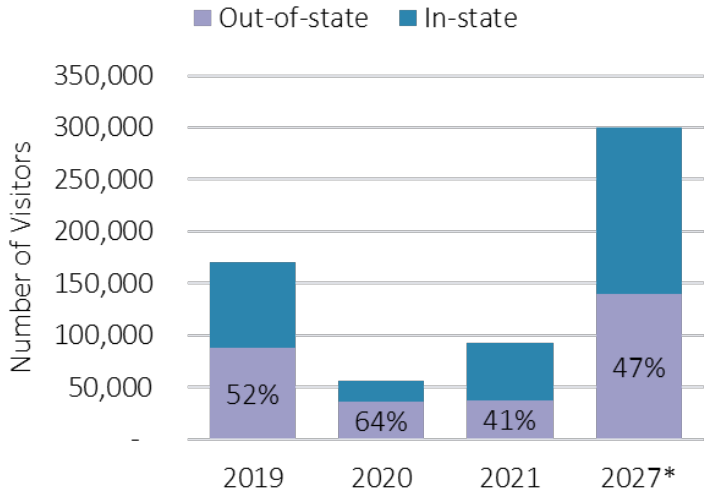
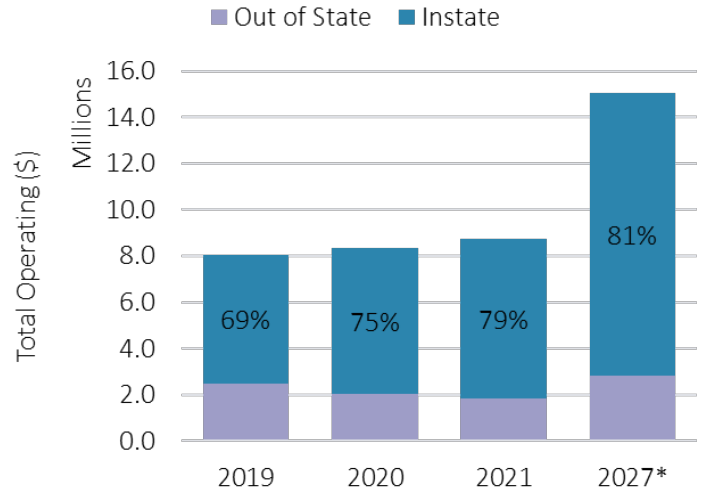


Figure 2. Annual operating costs (with future projections)



Note: Total operating cost includes personnel budget (with tax and benefits) and vendor/supplier spending.*Projections.

Visitor Estimates and Assumptions

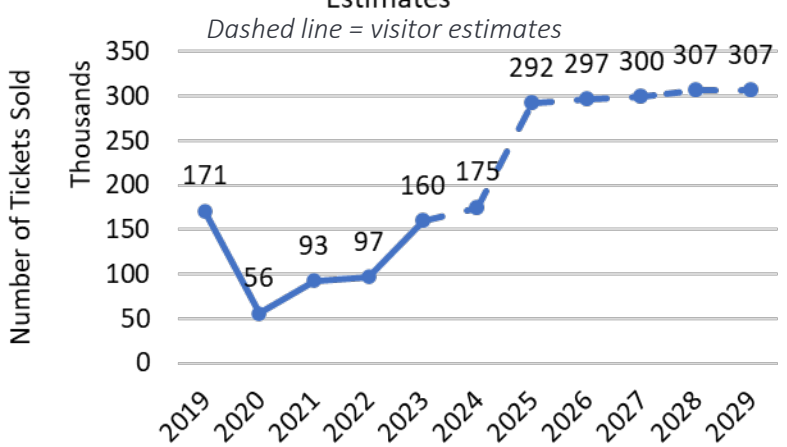
Introduction & Methods

Number of Visitors. In 2019, the PMA welcomed over 170,000 visitors, 88,000 or 52% came from outside of Maine. Not all visitors came to Maine to specifically visit the PMA. An estimated 25% or 22,020 out-of-state visitors are estimated as museum-specific tourists whose trip to Maine was motivated by visiting the PMA to browse its galleries, patronize a specific exhibition, or attend an event (Table 1). By 2027, the PMA expects the facilities expansion to be complete and anticipates up to 300,000 annual visitors, 47% or 140,153 would come from out-of-state. Because the new facilities are expected to increase the museums physical capacity and draw new art attractions that in turn attract more visitors to the state, an estimated 35% of out-of-state visitors (i.e., 49,053) are estimated to be museum-specific tourists in 2027.

Table 1. Museum Visitors

	2019	2027
Total museum visitors	170,831	300,000
Tourists - trip to Maine motivated by visiting the PMA	22,020	49,053

Figure 3. Annual Museum Visitor Totals & Estimates



Visitor segments and trip assumptions. Not all visitors have the same spending patterns, some come for the day while others, for example, stay with friends and family or at a hotel. To account for these differences, out-of-state museum visitors – or museum tourists – are segmented into three groups. Two are based on the type of overnight accommodations, that is paid lodging (45%) and unpaid lodging (27%), and the third is day-trippers (28%) (Table 2). The average trip length for paid lodging visitors is 4 nights and non-paid overnight visitors is 5.7 nights. Visitor segments and trip assumptions are applied to both 2019 and 2027 museum tourist counts.

Table 2. Visitor Segments & Trip Assumptions

	Visitor Segments		
	Paid Overnight	Unpaid Overnight	Day
Average length of stay (nights)	4	5.7	0
Visitor segment (% of total)	45%	27%	28%

Visitor Spending and Assumptions

Introduction & Methods

Spending Patterns. Daily per person spending by visitor segment, shown in Table 3, is estimated from daily travel party spending figures reported by the MOT, and adjusted by findings from the Maine Museums report and the authors assumptions. Spending patterns in 2019 are comparable to those in 2021. Average travel party size, reported as 2.7, is used to convert daily travel party spending to daily per person spending. The average cost to purchase a ticket to the museum is assumed to be captured in the spending patterns shown in Table 3.

Direct tourism-related expenditures reflect visitor purchases of goods and services on meals, hotels, shopping, transportation, etc. from outside of the museum. To estimate the direct tourism-related spending of museum tourists, the average spending patterns by visitor segment, illustrated in Table 4, are multiplied by the number of visitors in each respective segment. Annual ticket sales estimated from these visitors of $178,512 in 2019 and $397,368 in 2027 are removed from total direct spending because this spending is technically captured within the museum effects. Since the number of out-of-state visitors is expected to increase from 88,078 in 2019 to 140,153 in 2027, a 59% increase, the assumption is that ticket sales will increase by approximately the same percentage.

Table 3. Daily Per Person Spending Patterns

	Visitor Segments		
Category	Paid Overnight	Unpaid Overnight	Day
Accommodations	$106	$0	$0
Food & beverage	$52	$56	$31
Recreation	$11	$13	$7
Retail shopping	$21	$36	$20
Transportation	$31	$17	$9
Total	**$221**	**$121**	**$67**

Table 4. Direct Tourism Spending

Category	2019	2027
Accommodations	$4,188,202	$9,330,144
Food & beverage	$4,171,069	$9,291,949
Recreation	$551,314	$1,228,475
Retail shopping	$1,832,872	$4,083,112
Transportation	$1,838,789	$4,096,300
Total	**$12,582,246**	**$28,029,981**

The Portland Museum of Art's Economic Contribution & Impact in Maine

Pre-Expansion Snapshot, 2019

This section reports the PMA's statewide economic contribution in 2019, a typical year before construction. The two major components of the economic contribution and impact stem from museum spending and visitor spending. The PMA pays its employees and spends money at local vendor/supplier businesses to maintain its ongoing operations while people from out-of-state who come to Maine to visit the Museum spend money on retail goods, meals, hotels, and other items outside of the museum. This constitutes the initial or direct spending. The local businesses use a portion of their revenues to purchase supplies, equipment, and employ workers. Employees of the PMA and its vendors, in turn, spend their earnings in the local economy on household consumption goods including food, entertainment, housing and other goods and services adding value along the way. This results in recurring rounds of local economic spending, this is referred to as the indirect and induced economic impacts, which are estimated by a Maine economic model (IMPLAN) and presented in the following section.

Museum Spending Effects in the Maine Economy

Pre-Expansion Snapshot, 2019

The PMA contributes to the Maine economy through three types of impacts: direct (initial sale or spending) and indirect and induced, which account for the ripple effects of multiple rounds of spending in the economy. These contributions are quantified and presented, in Table 5, using common economic metrics including workers/FTE, labor earnings, and total output.

In 2019, approximately 69% of the PMA's direct operating costs were spent in Maine on local vender and supplier businesses ($1,156,000) and to pay museum employees ($4,379,035). These operating activities are estimated to support an additional 8 indirect workers, $335,983 (in 2022 dollars) in indirect labor income, and $1.4 million in indirect output.

Including direct, indirect, and induced spending, the total impacts of the PMA's ongoing operational spending, include an estimated 129 jobs (i.e., 107 FTE), $6.3 million in associated labor income, and $11.5 million in total output (sales).

Table 5. Contribution of the Operation of PMA to the Maine Economy, 2019

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	76	$ 4,559,603	$ 5,763,270	92
Indirect	7	$ 335,983	$ 1,408,376	8
Induced	24	$ 1,369,320	$ 4,291,359	29
Total Impact	**107**	**$ 6,264,905**	**$ 11,463,004**	**129**

Note: The Portland Museum of Art (PMA) provided actual and projected operational spending data, including employee compensation and local business vendor/supplier spending. Full-time equivalent (FTE) values provided by PMA are converted to IMPLAN employment prior to using it as an input to the model. Results do not include impacts of construction or visitor spending. Figures are reported in current 2022 dollars. The multiplier is 1.99.

Assumptions: In 2019, 32% of total local venders/suppliers spending (i.e., $1,156,000) went to Maine businesses. This figure along with total employee compensation ($4,379,035) and number of employees (92) are used to estimate indirect and induced spending.

Visitor Spending Effects

Pre-Expansion Snapshot, 2019

In 2019, an estimated 22,020 tourists took a trip to Maine motivated by visiting the PMA, these tourists spent an estimated $12.6 million on lodging, meals, shopping, transportation, etc. from outside of the museum. This direct spending supports indirect and induced effects generated by sales to tourism-related businesses in the hospitality sectors that in turn purchase goods and services from other Maine businesses and pay their employees who then spend their wages on household goods and services in Maine. Indirect and induced activity support an additional 52 jobs, $2.5 million (in 2022 dollars) in labor income, and $8.1 million in output.

Including direct, indirect and induced spending, the total impacts of visitor spending, include an estimated 180 jobs (i.e., 150 FTE), $6.3 million in associated labor income, and $18.3 million in total output (Table 6).

Table 6. Economic Impact of Visitor Spending to the Maine Economy, 2019

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	106	$ 4,095,696	$ 10,192,076	128
Indirect	18	$ 1,084,347	$ 3,536,575	22
Induced	25	$ 1,453,745	$ 4,553,370	30
Total Impact	**150**	**$ 6,633,789**	**$ 18,282,021**	**180**

Note: Results do not include impacts of construction or museum spending. Figures are reported in current 2022 dollars. Estimated direct spending in narrative does not equal direct spending reported in table due to leakages resulting from the difference in the prices paid by the consumer and the actual price of the product purchased. For more information refer to the technical appendices. The multiplier is 1.79.

The Economic Contribution & Impact of the PMA in Maine

Pre-Expansion Snapshot, 2019

The total economic contribution of the PMA in 2019 is the sum of the business activity directly associated with operations of the PMA and the spending of tourists whose trip to Maine was motivated by visiting the PMA.

In 2019, museum and tourism spending supported:

- Over 300 jobs of which 220 were direct impacts and another 89 were supported through indirect and induced spending.
- $8.7 million in direct labor income which supported an additional $4.2 million in indirect and induced impacts.
- Generated a total of $29.8 million in total output of which $16M were from the initial direct spending which supported another $13.8M in indirect and induced impacts.

Table 7. Contribution of Museum & Visitor Spending, 2019

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	183	$ 8,655,299	$ 15,955,346	220
Indirect	25	$ 1,420,330	$ 4,944,950	30
Induced	49	$ 2,823,065	$ 8,844,728	59
Total Impact	**257**	**12,898,693**	**29,745,025**	**309**

Notes: Results include the impacts and contribution of visitor or museum spending.

Tax Impacts

Pre-Expansion Snapshot, 2019

The economic activity generated by the PMA's ongoing museum operations and by spending of visitors on retail goods, meals, hotels, and other taxable items support fiscal impacts in the form of tax revenues from income, sales, and other tax collections. These result from taxes on wages and salaries paid by the PMA and by tourism-related businesses, in addition to taxes on wages and salaries from the indirect and induced jobs. In 2019, these economic activities generated an estimated $1.9 million in local and state tax revenue in the Maine economy (Table 8).

Table 8. Fiscal Contribution of Museum & Visitor Spending, 2019

in 2022 dollars

Impact	Local	State	Total
Direct	$ 422,580	$ 626,876	$ 1,049,456
Indirect	$ 98,310	$ 136,414	$ 234,724
Induced	$ 265,709	$ 322,930	$ 588,639
Total Impact	**$ 786,599**	**$ 1,086,219**	**$ 1,872,819**

Notes:
Assumptions:

$1.9 million in local and state taxes in 2019

In 2019, $786,599 in local and $1.1 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

Five-Year Construction Impacts in the Maine Economy

The PMA Blueprint Project, 2023-2027

In 2023 through 2027, the PMA estimates that it will cumulatively spend $52.1 million on its new facilities expansion. This section reports the one-time economic impact from the PMA's capital expenditures on the proposed PMA Blueprint project in Maine under two local spending scenarios.

Five-Year Construction Impacts in the Maine Economy – 50/50

The PMA's Blueprint project, 2023-2027

In 2023 through 2027, the PMA estimates that it will cumulatively spend $52.1 million for (new) construction. Under the first scenario, 50% of spending (i.e., $26.1M) is assumed to go to local construction companies, construction activities for this period are estimated to support 37 total direct construction-related jobs per year (i.e., 31 FTEs) and $10 million (in 2022 dollars) in direct labor income.

Including direct, indirect and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 66 construction-related jobs per year (55 FTE)
- $17.4 million in associated labor income
- $49.5 million in total output (sales)

For every $100 of the PMA spends on new construction, an additional $90 is generated elsewhere in the local economy.

Labor income and output reported in Table 9 is the combination of the impacts across the five years, reported in 2022 dollars. The number of workers and FTEs is reported in terms of average annual jobs and FTEs (i.e., jobs/year and FTE/year) for the project. This is because the jobs on the construction site are not cumulative, in the same way that an employee working a job for 5 years is not viewed as 5 jobs.

Table 9. Economic Impact from New Construction Spending, 5-year period (50/50 Scenario)

in 2022 dollars

Impact	Average Annual FTE	Labor Income	Output / Sales	Average Annual Workers
Direct	**31**	**$ 9,998,223**	**$ 26,059,000**	**37**
Indirect & Induced	24	$ 7,351,350	$ 23,477,917	29
Total Impact	**55**	**$ 17,349,573**	**$ 49,536,917**	**66**

Notes: The Portland Museum of Art (PMA) provided construction cost estimates. Capital expenditures are analyzed independently from the PMA's business operations as these are one-time purchases. Results reflect total economic impact from spending on the one-time construction project that is expected to take place over a five-year period from 2023 to 2027. Figures reported in current 2022 dollars. The multiplier is 1.9.

Five-Year Construction Impacts in the Maine Economy – 60/40

The PMA's Blueprint project, 2023-2027

Under the second scenario, 60% of spending (i.e., $31.3M) is assumed to go to local construction companies, construction activities for this period are estimated to support 45 total direct construction-related jobs per year (i.e., 37 FTEs) and $12 million (in 2022 dollars) in direct labor income. Including direct, indirect and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated:

- 79 construction-related jobs per year (65 FTE)
- $20.8 million in associated labor income, and
- $59.4 million in total output (sales)

Labor income and output reported in Table 10 is the combination of the impacts across the five years, reported in 2022 dollars.

Table 10. Economic Impact from New Construction Spending, 5-year period (60/40 Scenario)

in 2022 dollars

Impact	Average Annual FTE	Labor Income	Output / Sales	Average Annual Workers
Direct	37	$ 11,997,868	$ 31,270,800	45
Indirect & Induced	28	$ 8,821,620	$ 28,173,500	34
Total Impact	**65**	**$ 20,819,487**	**$ 59,444,300**	**79**

Notes: The Portland Museum of Art (PMA) provided construction cost estimates and share of local spending estimates. Capital expenditures are analyzed independently from the PMA's business operations as these are one-time purchases. Results reflect total economic impact from spending on the one-time construction project that is expected to take place over a five-year period from 2023 to 2027. Figures reported in current 2022 dollars. The multiplier is 1.9

The Portland Museum of Art's Economic Contribution & Impact in Maine

Post Expansion Snapshot, 2027

By 2027, the multi-year redevelopment and construction project is expected to be complete, and the new facilities open to the public. The new facilities are anticipated to increase the PMAs physical capacity, it will have more space to host events, display more and higher quality exhibits and in turn attract more visitors. This section provides a snapshot of the PMA's economic contribution in 2027 as a result of the estimated increase in operational spending and increased visitor attraction and spending.

Museum Spending Effects in the Maine Economy

Post Expansion Snapshot, 2027

Approximately 81% of the PMA's direct operating costs will be spent in Maine on local vender and supplier businesses ($2,600,000) and to pay museum employees ($9,640,000), in 2027. These operating activities are estimated to support an additional 17 indirect jobs, $713,871 (in 2022 dollars) in indirect labor income, and $3.1 million (in 2022 dollars) in indirect output.

Including direct, indirect, and induced spending, the total impacts of the PMA's anticipated increase in operational spending, include an estimated 216 jobs (i.e., 180 FTE), $13.3 million in associated labor income, and $24.4 million in total output (sales).

Table 11. Contribution of the Operation of PMA to the Maine Economy, 2027

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	115	$ 9,640,000	$ 12,240,000	138
Indirect	14	$ 713,871	$ 3,051,006	17
Induced	51	$ 2,903,075	$ 9,098,032	61
Total Impact	**180**	**$ 13,256,946**	**$ 24,389,038**	**216**

Note: The Portland Museum of Art (PMA) provided actual and projected operational spending data, including employee compensation and local business vendor/supplier spending. Full-time equivalent (FTE) values provided by PMA are converted to IMPLAN employment prior to using it as an input to the model. Results do not include impacts of construction or visitor spending. Figures are reported in current 2022 dollars.

Assumptions: By 2027, the PMA estimates that 48% of total venders/suppliers spending (i.e., $2,600,000) will go to Maine businesses. This figure along with projected employee compensation ($9,640,000) and number of employees (138) are used as model indirect and induced spending.

Visitor Spending Effects

Post Expansion Snapshot, 2027

In 2027, an estimated 49,053 tourists will take a trip to Maine motivated by visiting the PMA. These visitors will spend an estimated $28 million for lodging, meals, shopping, transportation, etc. from outside of the museum. Indirect and induced impacts are estimated to support an additional 117 jobs, $5.7 million (in 2022 dollars) in labor income, and $18.1 million in output.

Including direct, indirect, and induced spending, the total impacts of visitor spending, include an estimated 405 jobs (i.e., 336 FTE), $14.9 million in associated labor income, and $40.9 million in total output (sales).

Table 12. Economic Impact of Visitor Spending to the Maine Economy, 2027

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	239	$ 9,174,087	$ 22,805,766	288
Indirect	40	$ 2,421,710	$ 7,898,630	48
Induced	57	$ 3,254,228	$ 10,192,750	68
Total Impact	**336**	**$ 14,850,025**	**$ 40,897,146**	**405**

Note: Estimated direct spending in narrative does not equal direct spending reported in table due to leakages resulting from the difference in the prices paid by the consumer and the actual price of the product purchased. For more information refer to the technical appendices. Results do not include impacts of construction or museum spending. Figures are reported in current 2022 dollars.

The Economic Contribution & Impact of the PMA in Maine

Post Expansion Snapshot, 2027

The total economic contribution is the sum of the museum spending effects and visitor spending effects previously reported. In 2027, the estimated museum and tourism spending will support:

- Over 600 jobs of which 426 were direct impacts and another 195 were supported through indirect and induced spending.
- $18.8 million in direct labor income which supported an additional $9.3 million in indirect and induced impacts.
- Generated a total of $65.3 million in total output of which $35M were from the initial direct spending which supported another $30.2M in indirect and induced impacts.

Table 13. Estimated Contribution of Museum & Visitor Spending, 2027

in 2022 dollars

Impact	FTE	Labor Income	Output / Sales	Workers
Direct	354	$ 18,814,087	$ 35,045,766	426
Indirect	55	$ 3,135,581	$ 10,949,636	66
Induced	107	$ 6,157,303	$ 19,290,782	129
Total Impact	**516**	**28,106,971**	**65,286,184**	**621**

Notes: Results include the impacts and contribution of visitor or museum spending.

Tax Impacts

Pre and post expansion

By 2027, the economic activity supported by the PMA's ongoing museum operations and by spending of museum tourists is estimated to generate $4.2 million in local and state tax revenues (Table 14).

Table 14. Fiscal Contribution of Museum & Visitor Spending, 2027

in 2022 dollars

Impact	Local	State	Total
Direct	$ 948,844	$ 1,423,457	$ 2,372,301
Indirect	$ 218,499	$ 325,349	$ 543,848
Induced	$ 579,512	$ 747,096	$ 1,326,607
Total Impact	**$ 1,746,855**	**$ 2,495,901**	**$ 4,242,757**

Notes:
Assumptions:

$4.2 million in local and state taxes in 2027

In 2027, $1.7 million in local and $2.5 million in state taxes are estimated to result from the PMA's ongoing museum operations and by spending of visitors.

Technical Appendices

Definitions of Modeling Outputs & Other Key Terms

Technical Appendices

Key word	Definition
Direct effects	The expenditures or initial production changes associated with an industry or sector in the study area which are entered into the Input-Output analysis.
Economic contribution	Economic 'contribution' measures the support of an existing business, event or policy that is money that is already circulating, it is the gross change in economic activity associated with a business, event, or policy in an existing regional economy.
Economic impacts	Economic 'impacts' are to the local economy by exits or entry-related events, "but if not for", is the net changes in new economic activity associated with an industry, event, or policy in an existing regional economy.
Employee compensation	Total payroll cost of an employee, inclusive of wages, salaries, payroll taxes, and benefits such as health insurance and retirement.
Employment	The number of full-time, part-time, and seasonal jobs associated with a specific industry.
Full-time equivalent employment (FTEs)	Full-time equivalent employment (FTEs) is the number of full-time equivalent jobs, defined as total hours worked divided by average annual hours worked in full-time jobs.
Indirect effects	The economic impact of local industries purchasing goods and services from other industries along supply chains.
Induced effects	The economic impact of household spending of labor income following deductions from taxes, savings, and income for commuting.
Labor income	The sum of employee compensation and proprietor income.
Multipiliers	The measure of an industry's connection to the economy of Maine in terms of purchases, payments of wages and taxes, and other transactions.
Output	The value in dollars of production within Maine. It equates to the total of sales and net inventory change.
Total effects	The sum of direct, indirect, and induced effects.
Workers	Employment or workers is the total number of full-time, part-time, and seasonal jobs

END

The PMA Blueprint

Building a Landmark for the Future

A once-in-a-lifetime museum expansion and unification that will forever change Maine and New England. Through The PMA Blueprint, we will redefine our region, unite our communities, and sustain our economy for generations to come.

In a region traditionally renowned for its natural beauty and cuisine, the PMA has a new vision defined by arts, culture, belonging, and sustainability. To get there will require innovative thinking that goes "beyond the brick," and into the very nature of what a museum can be.

We believe the museum can transcend convention and redefine the quintessential Maine experience. **We understand** that the PMA, through investment in art and the facilities that bring that art to the public, can initiate a transformative new chapter for our region, one defined by growth and prosperity. **And we know** the time is now to embark on this profound and permanent shift forward.







THE CHALLENGE

For the last half decade, we've sustained double-digit increases in attendance, reaching a record high in 2019 with nearly 177,000 visitors. Our campus is at its limit, with attendance already at 2x the planned capacity of the Payson building. **In just 5 years, we will exceed 3x the planned capacity of our campus.** We need to build up, as we are being forced to make tough choices around reducing exhibition size, relocating programs, and restricting capacity due to the physical limitations of our campus.

Our collection has also grown exponentially, and **in the last decade alone has diversified deliberately and more quickly than at any point in our 140-year history**. Significant gifts from Judy Glickman Lauder, the Alex Katz Foundation, Barbara Goodbody, Richard Estes, Bruce Brown, David and Eva Bradford, the Berger Collection Educational Trust, and many more are transforming the PMA collection and expanding the narratives we can tell. Recently acquired works by Laura Aguilar, Rackstraw Downes, Nan Goldin, Philip Guston, Reggie Burrows Hodges, Carrie Mae Weems, Kara Walker, and others deserve space to store, care for, and present them–yet our existing facilities are insufficient and inadequate by modern standards.

And our communities have changed as well. We must do more to create opportunity–on our walls, in our galleries, through our programs, on our board, and within our staff–to ensure the PMA experience reflects the experiences, lifestyles, and values of the myriad people who call our region home and visit from around the world. We must platform individuals and communities that have been excluded from museums and "the art world". We must ensure our artwork, exhibitions, programs, and didactics are created by and in partnership with our BIPOC communities, immigrants and new Mainers, LGBTQIA2S+ neighbors, our elders, youth, and other communities across Maine. We must be at the center of our communities, which requires dialogue, trust, and transparency. And we must ensure we are championing a more diverse, inclusive, and sustainable region. **We must become a community institution that is rooted in *belonging*.**



A LEADER IN OUR REGION, KEYSTONE IN OUR COMMUNITIES, AND CATALYST FOR OUR ECONOMY

From the museum's founding in 1882 by artists and community leaders, to Charles Shipman Payson's gift of 17 works by Winslow Homer and the opening of our Payson building 40 years ago, to our present-day status as a cultural leader, the PMA's impact is greatest when we open doors for audience engagement, identify opportunities to grow our collection and unify our campus, and create space to come together.

Nearly a decade ago, the PMA prioritized diversity, equity, accessibility, and inclusion throughout our exhibitions, programs, events, and culture of philanthropy. In the years since, we have cultivated a broader, more detailed, and nuanced understanding of what these ideas mean, dedicating ourselves to the concepts of belonging, sustainability, our mission–*Art for All*–and values of courage, equity, service, sustainability, and trust.

In October 2019, the PMA took a big step toward a bold future, purchasing 142 Free Street, a building directly adjacent to the museum's Charles Shipman Payson Building. In a rapidly evolving city, this purchase provides the museum with a footprint for future opportunities and enables the PMA to define Portland as a national center for arts and culture.

With the opportunities of 142 Free Street, the development of Congress Square (a major, underdeveloped urban park at the main entrance of the museum) and the domino effects of renewal across our campus at sites like the Payson Building, Spring Street lot, and more, now is the time to unify the campus and thoughtfully plan the museum's future. We envision our campus as an environmentally sustainable gathering place where a strong artistic vision drives conversation, creativity, and cultural vibrancy.

This investment will embody our *Art for All* and sustainability values, with 142 Free Street being the first sustainable and green public building in Portland and just the fourth green public museum building in the country. The mass timber structure will include flexible and open-ended spaces, including classrooms to learn and get messy, workshops, artist residencies, performance spaces, and many more versatile areas for collaborations, partnerships, and connection. This is all in addition to innovative galleries and ways to present art that are at the heart of a museum.

This new, iconic, and architecturally significant center will be the hallmark of a unified and renewed campus–enhancing the PMA's mission, welcoming visitors from around the corner and across the world, and encouraging meaningful connections with artworks, programs, and events.

LEVER ARCHITECTURE & THE CONCEPT

In January, the Portland Museum of Art announced LEVER Architecture (Portland, OR and Los Angeles, CA) to lead the design team for ***The PMA Blueprint***. LEVER Architecture's winning concept imagines the PMA campus unified through a stunning and sustainable building that connects directly to the PMA's Postmodern-style Charles Shipman Payson Building (1983), Beaux-arts style Lorenzo De Medici Sweat Memorial Galleries (1911), Federalist-style McLellan House (1801), and Greek revival Clapp House (1832.) The design–proposed primarily from sustainable mass timber, one of LEVER's defining characteristics–reflects LEVER's understanding of the PMA's values and goals, as well as the history and future of Portland, of Maine, and of the region.

LEVER envisions a new building at the site of 142 Free Street made from mass timber, terracotta, and glass, and includes nods to Maine communities, history, and culture. The curved roofline is designed to frame the sun as it rises and sets, in honor of Maine's Wabanaki communities (Abenaki, Maliseet, Micmac, Passamaquoddy, and Penobscot Nations) and the land they call Wabanaki, or Dawnland. The timber used in LEVER's design speaks to the state's lumber industry heritage while reimagining its future as a hallmark of environmental stewardship, much in the same way the PMA's other buildings embody their time and place and reflect other aspects of Maine's history. Other sustainable building materials and practices, such as geothermal energy, will be explored as the project moves into future phases.

LEVER Architecture and their team of Simons Architects and Unknown Studio, Chris Newell-Akomawt Educational Initiative, Openbox, Once-Future Office, Atelier Ten, and Studio Pacifica were selected through a juried international design competition that attracted submissions from 104 teams representing 20 countries, including Australia, Belgium, China, Denmark, Finland, Japan, Mexico, Spain, South Korea, United Arab Emirates, the United Kingdom, and more. In total, more than 250 firms participated as part of the 104 submitting teams, with 46% of all lead firm submissions owned or founded by people of color or women.

Additionally, the Jury considered feedback from the public, who submitted more than 2,000 ideas, questions, and comments to the PMA during the concept gallery display November 18–December 31. Opportunities for community feedback have been critical to the PMA throughout its campus planning and ***The PMA Blueprint*** process, and in addition to the public comment period this winter have included focus groups, listening sessions, and surveys to ensure the future development of the museum's campus is defined by and rooted within the communities it serves.

In the months since the announcement, the LEVER team has frequently been to Maine to meet with, interview, and learn from our communities. These pre-planning moments with visitors, staff, and stakeholders are the initial steps to refine the concepts that will ultimately become the final design for the new PMA.

DOUBLING OUR ECONOMIC IMPACT

The Portland Museum of Art's contributions to Maine's economy are already significant, with $29.8 million in total output, $8.7 million in direct labor income supporting an additional $4.2 million in indirect and induced impacts, and $12 million in direct tourism-related expenditures. In 2022, The Maine Center for Business and Economic Research at The University of Southern Maine (USM) found that ***The PMA Blueprint*** could effectively double its impact at the completion of the project.

This is because investments that contribute to and improve quality of life can be more effective economic development tools than traditional strategies such as business tax incentives. Community amenities including recreational opportunities and cultural activities may be larger contributors to a healthy local economy than more narrowly focused "business-friendly" measures. A range of easily accessible open spaces and public gathering spots that promote community connections, restaurants, jobs, and safety have proven to attract–and retain–newcomers to an area to live, work, and play.

USM's analysis also estimated the economic impact from the capital expenditures on the proposed PMA Blueprint construction project. Between 2023 through 2027, the PMA estimates that it will cumulatively spend more than $60 million to construct the new building. Including direct, indirect, and induced spending, the total impacts of the PMA's capital investment on new construction, include an estimated: 66 - 79 construction-related jobs per year, $17.4 - $20.8 million in associated labor income, and $49.5 - $59.4 million in total output (sales).

MASS TIMBER'S POTENTIAL FOR MAINE

The Portland Museum of Art sees even more potential for economic development beyond Portland, extending throughout Maine's rural and urban communities, invigorating local economies, revitalizing communities, and sparking new industries and revenue streams.

This spring, the Portland Museum of Art was the sole arts institution at the International Mass Timber Conference in Portland, Oregon, among 3,000 attendees from 20 countries. Yet, we were welcomed with open arms and told time and again that ***The PMA Blueprint*** is the bellwether this emerging industry has been waiting for. That's because our project can demonstrate the benefits of mass timber beyond raw materials and processes.

One of the key benefits of mass timber construction is its ability to sequester carbon, retaining it in the building rather than being released back into the atmosphere through decomposition or burning. When wood that is used for mass timber construction is obtained from sustainably managed forests, the resulting materials have a much lower life-cycle carbon footprint than steel and concrete, delivering a 26.5% reduction in global warming potential, according to University of Washington researchers. That is incredibly significant, as the building sector produces an extraordinary 40% of global carbon emissions annually. The most common forms of mass timber include cross-laminated timber (CLT), Glue Laminated beams, Structural Round Timber (SRT), and laminated veneer lumber (LVL). No matter the type, all mass timber is incredibly strong, climate safe, and sustainable.

Maine almost had a CLT plant in 2018 but lost the bid to a site in the south that is now a profitable economic driver in Alabama. In our preplanning for our building, we're discovering a shared desire and drive for a CLT plant in Maine by our policymakers at all levels, the University of Maine, Indigenous leaders, landowners, forestry advocates, businesses, and more. Why? Because mass timber in Maine just makes sense. We're the most forested state in the country–with nearly 90% of the land covered in forests, the potential to revitalize and reimagine our state is real. This is a rare and unique opportunity to bring rural and urban communities, companies, and governments together through clean industries that make the world better and support Maine jobs.

The time is now to incentivize mass timber as a go-to building material to maximize long-lasting and positive outcomes for our economies and environment. We are excited to partner with LEVER Architecture and lead by example through our new, landmark building, but we need others to embrace regenerative, climate-safe wood products and processes as well. Together, we can support a better future, one that leads sustainably while fostering the people, communities, and industries that could revitalize and reimagine our state and New England as a whole.

JOIN US

Beginning today, we can renew, revitalize, and redefine a museum's role within our society.

With your partnership and support, we can manifest a model for all museums: one defined by leadership, courage, sustainability, and belonging.

The PMA you help to establish will strengthen our societal fabric and affirm that museums are critical to the health of our communities in all ways.

Together, we can realize the true potential of museums for all people.

MUSEUMS NEED A PARADIGM SHIFT THAT DELIVERS ON THE PROMISE OF *ART FOR ALL.*

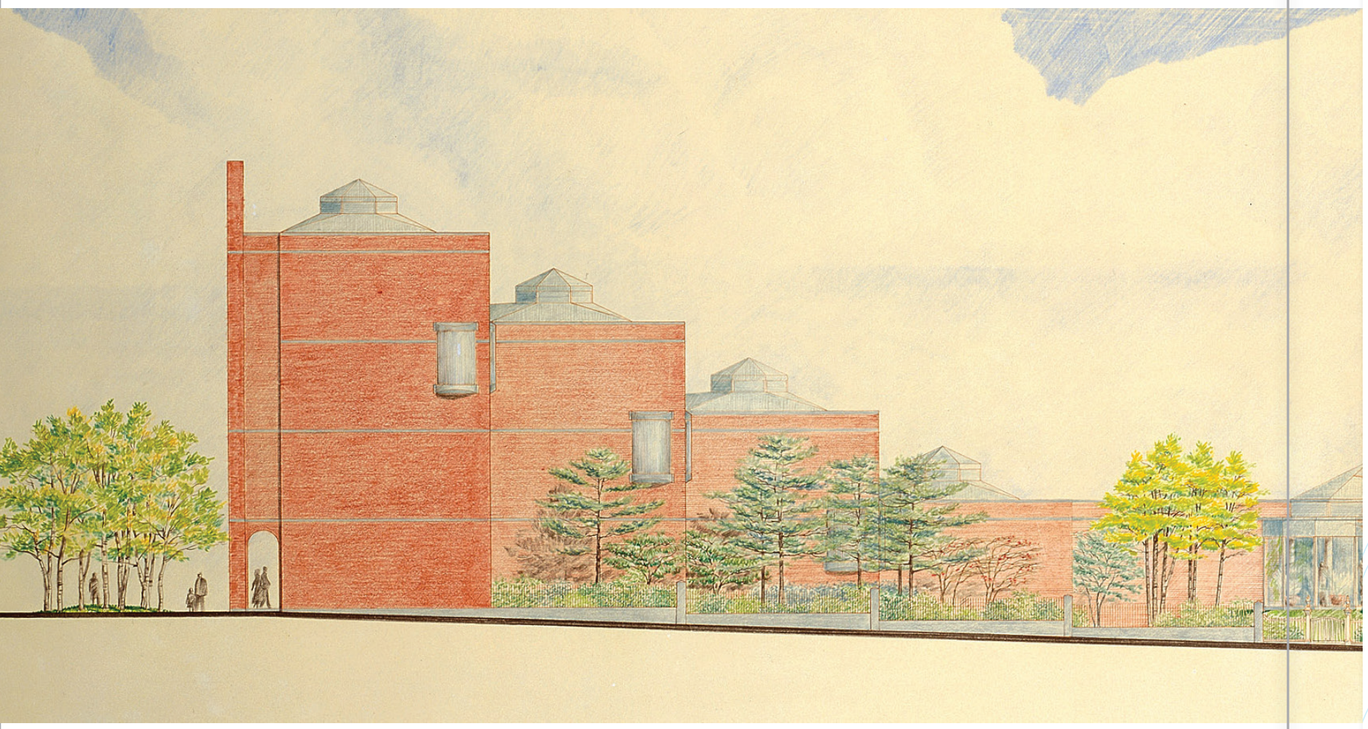
Art reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks **imagination** spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks **imagination** spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects **culture** defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses

This paradigm shift enables the PMA to be a leader of our region, a keystone for our communities, and a catalyst for our economy.



Art reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks **imagination** spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks **imagination** spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination

BEYOND THE BRICK



CONTENTS:

History	8
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The PMA's impact is greatest when we open doors for audience engagement and identify opportunities to grow our collection and unify our campus.

The Portland Museum of Art is defined by three pillars: community, collection, and campus. Working in tandem, these pillars have been the foundation of every milestone of the museum's incredible history. From the museum's founding in 1882 by artists and community leaders, to Charles Shipman Payson's gift of 17 works by Winslow Homer, to the opening of its Payson building one hundred years later, and to its present-day status as a cultural leader, the PMA's success has been grounded by one of these three pillars.

Now, sparked by the current growth and diversification of the collection, record attendance and community feedback, and new opportunities to expand and unify its campus, the Portland Museum of Art stands ready to embark on what will be its most ambitious and pioneering era yet. ***This era will be defined by the additions of new, renowned collections, the development of iconic buildings in which to present them, and an innovative relationship with the communities we serve.***

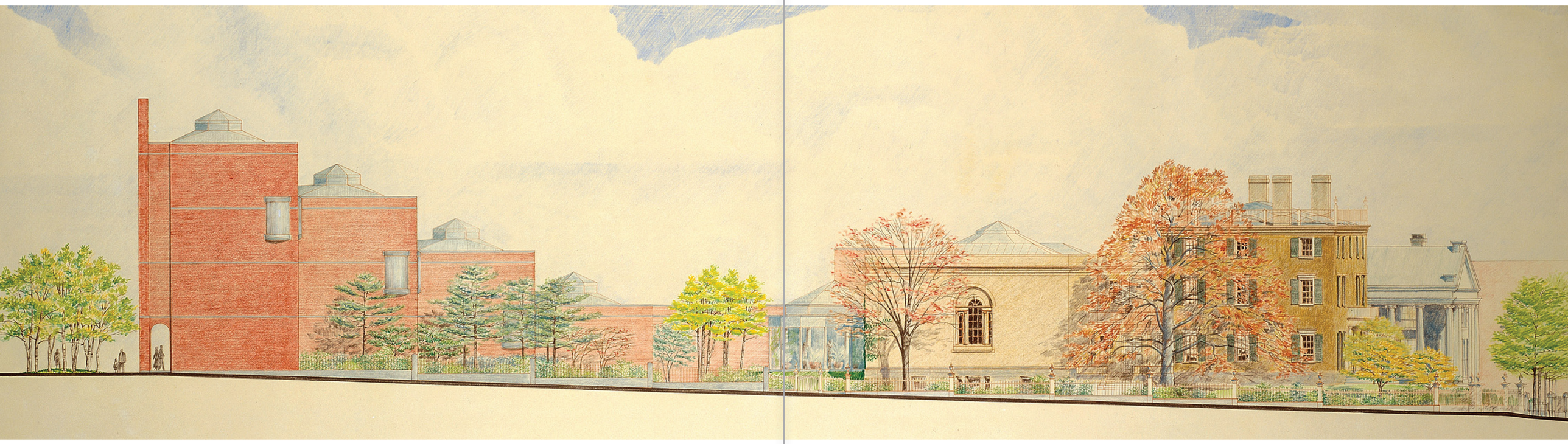
Mark H.C. Bessire
Judy and Leonard Lauder Director

COMMUNITY, COLLECTION, CAMPUS; UNIFIED

PORTLAND MUSEUM *of* ART Seven Congress Square, Portland, Maine 04101 PH: 207 / 775-6418 FAX: 207 / 773-7324 portlandmuseum.org

and prosperity. ***And we know*** the time is now to embark on this profound and permanent shift forward.

BEYOND THE BRICK



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The Portland Museum of Art is about to fundamentally change Maine. In a region traditionally renowned for its natural beauty and cuisine, the PMA has a new vision defined by arts, culture, equity, and sustainability. To get there will require innovative thinking that goes "beyond the brick," and into the very nature of what a museum can be.

We believe the museum can transcend convention and redefine the quintessential Maine experience. ***We understand*** that the PMA, through investment in art and the facilities that bring that art to the public, can initiate a transformative new chapter for our region, one defined by growth and prosperity. ***And we know*** the time is now to embark on this profound and permanent shift forward.



It's time to envision the next great era in PMA history, one sparked through new, world-famous collections and an architecturally innovative and unified campus that serves as an epicenter for conversation, connection, and community.

– MARK H.C. BESSIRE,
JUDY AND LEONARD
LAUDER DIRECTOR


OUR HISTORY

AT 140 YEARS OLD, THE PMA IS AMONG THE OLDEST ART MUSEUMS IN THE COUNTRY, AND PREDATES X-RAYS, THE EIFFEL TOWER, AND THE BOSTON RED SOX.

THE FIRST 100

Although the museum was founded in 1882, the PMA story really begins with the legacy of its first benefactor, Margaret Jane Mussey Sweat. In 1908, Sweat bequeathed the McLellan House and necessary funds to build the L. D. M. Sweat Memorial Galleries in memory of her late husband. Margaret Jane Mussey Sweat's belief in the museum would set the precedent for future generations of philanthropy and provide the visionary foundation of what the Portland Museum of Art could be.

1882
The Portland Society of Art is founded by artists.

1888
COLLECTION
Benjamin Paul Akers' *The Dead Pearl Diver* becomes the museum's very first acquisition, marked by a group donation model.

1908
CAMPUS
Sweat bequeaths the McLellan House, an 1801 federal-style three-story mansion designed by John Kimball, Sr., to found the museum. Sweat foresees the need for future growth, and includes the necessary funds to build the L. D. M. Sweat Memorial Galleries.

1911
CAMPUS
L.D.M. Sweat Memorial Galleries open in a Beaux-arts style building designed by John Calvin Stevens: 7,500 sq. ft., with 4,000 sq. ft. of exhibition space.

CREATING THE PMA, 1976–2006

When Charles Shipman Payson gave the museum 17 artworks by Winslow Homer in 1976, it served as a catalyst for a group of visionary leaders to expand the campus, attract the museum's first significant collections and long-term loans, and establish the downtown footprint that remains to this day.

1976
COLLECTION
Maine native Charles Shipman Payson promises the museum his collection of 17 paintings by Winslow Homer.

CAMPUS
Critically, Payson identifies the museum's physical limitations and generously gives $8 million toward the construction of a new building.

1979
COLLECTION
In direct response to the Payson gift, the Hamilton Easter Field Art Foundation Collection adds more than 50 paintings, sculptures, and works on paper by American modernists to the PMA collection.

1980
COLLECTION
Edward Hopper's *Pemaquid Light*, which continues to be the PMA's most requested artwork by visitors, joins the collection.

1981
CAMPUS
The museum breaks ground on the Charles Shipman Payson Building.

1983
CAMPUS
Designed by Henry Nichols Cobb of Pei Cobb Freed & Partners, the new heart of the PMA opens with 20,000 sq. ft. of exhibition space.

1983
COLLECTION
The Friends of the Collection is founded by a group of enterprising women to bring greater diversity and equity to the PMA through the acquisition, conservation, and care for the collection and related programming.

FUN FACT | Artworks by Ahmed Alsoudani, David C. Driskell, Edward Hopper, Louise Nevelson, Isamu Noguchi, Marguerite Zorach, and many more have been acquired by the Friends of the Collection.

1988
COLLECTION
Winslow Homer's masterpiece, *Weatherbeaten*, sparks a new era of major growth of the collection.

1991
COLLECTION
The Joan Whitney Payson Collection of 20 impressionist and post-impressionist works of art is given to the museum on permanent loan. Pierre-Auguste Renoir's *Confidences (Secrets)* is among the highlights of the collection.

1996
COLLECTION
Elizabeth B. Noyce bequeaths 66 works of American art, which at the time stands as the most extensive and diverse gift of American art ever given to the museum.

2002
CAMPUS
After a successful $12.3 million capital campaign, the PMA meticulously renovates the McLellan House, restoring it to its original condition and reopening it to the public in 2002.

For more than 40 years, there have been no increases in galleries, visitor amenities, or capacity.

ENSURING FLEXIBILITY, 2006 – 2016

The first 10 years of the 21st century proved to be a pivotal decade in Portland, and as its cultural renaissance took hold, the PMA moved to secure the museum's future flexibility by securing three strategic properties: 87 Spring Street, the Charles Quincy Clapp House, and the Winslow Homer Studio.

2006
CAMPUS
The PMA purchases the Winslow Homer Studio and begins restoration project.

2007
CAMPUS
The Charles Quincy Clapp House, one of Maine's important early examples of high style Greek Revival architecture built in 1832, is purchased.

FUN FACT | Acquired by the Portland Society of Art in 1914, with ownership transferring in 1982 to Maine College of Art when the Portland Society of Art separated into the PMA and MECA.

Board votes to purchase 87 Spring Street in 2007 for $2.35 million.

2012
COMMUNITY
The exhibition *Weatherbeaten* breaks attendance records and sets a new precedent as to what the museum could do if it unified exhibition strategy, audience development, and brand equity in the years to come.

CAMPUS
The Winslow Homer Studio opens to the public.

2013
COLLECTION
CAMPUS
COMMUNITY
The PMA begins planning a four year, cross-departmental accessibility initiative, *Your Museum, Reimagined,* to reinstall the collection, digitize the collection, improve physical accessibility, and create more ways to remove financial means as a barrier to the museum.

FUN FACT | Director Mark Bessire often said, "the PMA built a building without a building."

2014
CAMPUS
The museum purchases the land surrounding the Winslow Homer Studio to be preserved in perpetuity through an $11.8 million capital campaign for restorations, land, and building the endowment.

COLLECTION
Robert Indiana's *SEVEN* is installed in Congress Square, simultaneously adding an iconic public work of art in Portland while underscoring the PMA's physical address at 7 Congress Square.

2015
COLLECTION
Andrew Wyeth's *River Cove*, which the New York Times said, "may be Wyeth's best painting" and is regularly identified by art historians as among his most important and impressive artworks, joins the collection.

THE *ART FOR ALL* GENERATION, 2016 - PRESENT

The path the PMA is about to take was made possible through several successful projects and initiatives that ensured artworks and audiences came together to move the museum forward.

In 2015 the PMA announced its commitment to a multiyear, cross-departmental collections and accessibility initiative, *Your Museum, Reimagined*. By its completion in 2017, the PMA had reinstalled the collection, digitized the collection, improved physical accessibility, and created more ways to remove financial barriers to the museum.

2016
COMMUNITY
A sustained multiyear increase in attendance begins, growing beyond the previous five-year average of 130,000, jumping 7%.

2017
COMMUNITY
The PMA launches *Your Museum, Reimagined*, immediately attracting 20,000 more visitors than the year before while establishing a new baseline for annual attendance.

The David E. Shaw Family Sculpture Park opens as a free space to the public for the first time in nearly 35 years.

Recent additions by John Bisbee, Jonathan Borofsky, Isamu Noguchi, and William Zorach have joined works by Anthony Caro and Celeste Roberge.

20,000 more visitors come to the museum.

COLLECTION
A substantial collection of photographs by Nan Goldin joins the collection.

2018
COMMUNITY
11% increase in attendance over 2016.

Through the generosity of Susie Konkel, the PMA introduces free admission for everyone ages 21 and under.

The museum launches multivocal didactic materials in exhibitions, which–alongside community advisory committees–improve the range of perspectives and educational opportunities available in the galleries.

Since that time, the PMA has aimed to build on the new wave of energy and support at the museum. This has been marked by a deep commitment to Diversity, Equity, Accessibility, and Inclusivity [DEAI] through exhibitions and programs that reflect the region's diverse communities and experiences with art that brings people together. We call it *Art for All*.

2019
COMMUNITY
Record Attendance: 176,464 visitors to the museum with a 10% increase over 2018 plus a 16% over previous half decade.

COLLECTION
Kara Walker's *Occupation of Alexandria*, David C. Driskell's *Ghetto Wall #2*, and Jeffrey Gibson's *PEOPLE LIKE US* immediately become collection highlights.

FUN FACT | 290 artworks added to the collection since 2016.

CAMPUS
The museum purchases 142 Free Street building, directly adjacent to the museum's Charles Shipman Payson Building. The purchase provides the museum with flexibility for future opportunities and enables the PMA to secure the area around Congress Square as a center for arts and culture.

2020
COMMUNITY
Attendance goal is set for 220,000.

As the pandemic takes hold, the PMA pivots to a digital-first museum, creating hundreds of types of content across all departments, and sets new record with 3.53 million people engaging with the museum online.

369% increase in web traffic from previous year.

Throughout the PMA's history, there have been flash points where circumstance, positioning, and support have come together to move the museum forward. Reflecting on these cycles is critical to understanding the unique and promising moment the PMA is embracing.



IT'S TIME

to envision the next great era in PMA history, one sparked through new, world-famous collections and an architecturally innovative and unified campus that serves as an epicenter for conversation, connection, and community.

ATTRACTING COLLECTIONS

Our dedication to the collection has never been stronger. We're committed to highlighting the strengths of our existing collection and the long-term loans that have attracted local and global audiences for decades. Simultaneously, we're expanding the collection dramatically through additions by artists such as Jeffrey Gibson, Daniel Minter, Tim Rollins & K.O.S., Clifford Ross, Theresa Secord, and Kara Walker. Lastly, we're reinforcing holdings of landmark works by Maine artists, including Lois Dodd, David Driskell, Winslow Homer, John Marin, and Andrew Wyeth.

The museum is now about to move light-years forward, with the addition of several major, internationally renowned and incredibly valuable collections that will transform everything. This expansion of the collection is the most extensive and diverse in the institution's history, and immediately centers the PMA as one of the most important museums in the Northeast.

But the opportunity and challenge ahead is clear: to present these collections at all, let alone meaningfully and in line with our values, we need to increase capacity to provide welcoming spaces for all through the growth and unification of our campus.



GROWING OUR COLLECTION



ALEX KATZ FOUNDATION GIFTS

Over the last decade, the Alex Katz Foundation has generously provided the PMA with a collection of nationally and internationally renowned artworks by Katherine Bradford, Emily Brown, Lois Dodd, Misaki Kawai, Chris Martin, Julian Opie, and more. The foundation has contributed more than 45 artworks to the PMA collection since 2011.



JUDY GLICKMAN LAUDER PHOTOGRAPHY COLLECTION

Anchored by works from some of the most beloved and influential photographers of the 20th century, including Berenice Abbott, Diane Arbus, Richard Avedon, Margaret Bourke-White, Danny Lyon, Sally Mann, Gordon Parks, and James Van Der Zee, the collection will become the center of a photographic collection at the Portland Museum of Art that will thrill audiences from around the world. The collection also includes photographs by critical contributors to the medium's history, such as Irving Bennett Ellis, Lotte Jacobi, Alma Lavenson, Ben Shahn, Graciela Iturbide, and Glickman Lauder, the collector herself.



BARBARA GOODBODY COLLECTION

Over the last half decade, the PMA has worked to prioritize artworks and perspectives from our Wabanaki communities, presenting contemporary artworks in our Biennial series, featuring leaders in our marquee public programs, and partnering with artists and community members on inclusive, direct, and honest didactic materials in order to dismantle systemic racism and art historical blind spots. Wabanaki baskets, given generously by Barbara Goodbody in 2021, include stunning works by David Moses Bridges, Martin Dana, Jeremy Frey, Theresa Secord, Sarah Sockbeson, Geo Soctomah Neptune, and more.

Beginning with our first acquisition in 1888 of Benjamin Paul Akers' *The Dead Pearl Diver*, the PMA has amassed a permanent collection of morethan 18,000 objects, with roughly 75 percent arriving as gifts from more than 10,000 donors.



WALTER B. AND MARCIA F. GOLDFARB COLLECTION

Assembled by PMA Trustee and patron Dr. Walter Goldfarb and his wife, Marcia, the Goldfarb collection focuses on three primary categories of painting: ship portraits, landscapes in the tradition of the Hudson River School, and trompe l'oeil still life. Featured artists include Sanford R. Gifford, John Haberle, William Michael Harnett, and John Frederick Peto. The Goldfarb Collection offers strong resonance with existing PMA works by Charles Codman, Fitz Henry Lane, Eastman Johnson, and others, providing visitors a coherent narrative of 19th-century American art.



RICHARD ESTES COLLECTION

The Richard Estes Collection and Archive has been promised to the Portland Museum of Art. This transformational collection contains paintings and extensive archival material, forming a significant body of work that will provide breadth to the museum's collection of American art. The Richard Estes Collection will help chart the reinvigoration of realist and figurative American painting in the decades after World War II, when numerous artists of Estes' generation were seeking a fresh approach to painting. Many of these artists eventually found Maine, or places like Maine–rural environments where their interest in the natural world became intertwined with their artistic visions.



BERGER COLLECTION EDUCATIONAL TRUST

A major gift of works by American icon Winslow Homer strengthens the Portland Museum of Art's position as one of the leading institutions in the world to experience the art and legacy of Winslow Homer. Highlights of the gift from the Berger Collection Educational Trust include paintings *Returning from the Spring,* 1874, and *Young Farmers (Study for Weaning the Calf),* 1873-1874, as well as nearly a dozen other works made by Homer during his career.



DAVID AND EVA BRADFORD COLLECTION

German expressionist works that powerfully blend issues of history, politics, art, and national identity, provoking questions about who we are and what we value in ways that are as pertinent today as they were a century ago. The works, gifts to the PMA from David and Eva Bradford, add context to the social and artistic expression of the era and are equally probing in their evaluation of German society and national identity. Highlights include works by Max Beckmann, Otto Dix, and Käthe Kollwitz.

THE PMA'S SUCCESS IS NOW OUR BIGGEST CHALLENGE

In the last two years, our audiences have made it clear that they have big expectations, and we do too. **We've sustained double-digit increases in attendance for the last half decade, reaching a record high in 2019 with more than 175,494 visitors.** As we look to the future, it's easy to see how the constraints of our campus will soon hinder our goals and our communities' needs.



We already welcome nearly

2x

the planned capacity of the Payson building.

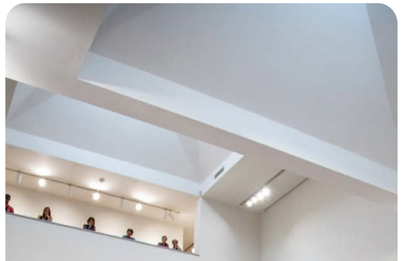
In just five years of our current pace of growth, we will exceed

3x

the planned capacity of our campus.

4x

as many visitors than peer museums with similar exhibition square footage.



WE NEED TO BUILD UP

We are being forced to reduce exhibition size, relocate marquee programs and events, and restrict capacity due to limits of our campus.





OUR NEEDS IN CONTEXT

Compared to peer institutions*, the PMA...

has **170-515%** **MORE VISITORS** than similar sized campuses.

has **130-370%** **MORE VISITORS** than equivalent member households.

has **140-585%** **MORE VISITORS** than comparable collection sizes.

is **one of only 13** **MUSEUMS IN THE UNITED STATES** with 100% of its collection online and accessible digitally.

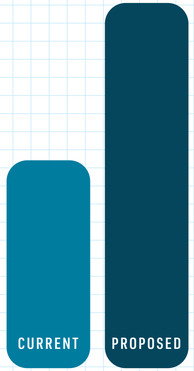
has the **4th most open hours** **IN THE ENTIRE COUNTRY.**

leads **every other museum but one** **IN FREE ADMISSION** by age.

serves **more school districts** **THAN BROOKLYN MUSEUM AND NATIONAL GALLERY OF ART.**

* According to the American Association of Museum Directors (AAMD) 2019 report, which represents the most recent data. AAMD did not conduct reports for 2020. Data rounded to nearest fifth.

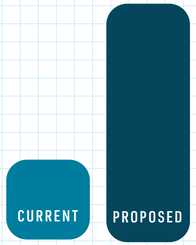
OUR PARADIGM SHIFT IS DEFINED BY EQUITY, SUSTAINABILITY, AND FLEXIBILITY.



21,556 SF 38,070 SF

+ 77%

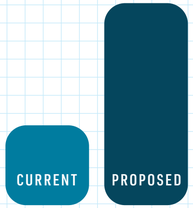
Space for Art



8,276 SF 25,214 SF

+ 205%

Space for Community



8,478 SF 21,163 SF

+ 150%

Space for Operations

By adding

60,000 SF

we can easily welcome

300,000-500,000

visitors per year.

In October 2019, the PMA took a big step toward a bold future, purchasing 142 Free Street building directly adjacent to the museum's Charles Shipman Payson Building. In a rapidly evolving city, this purchase provides the museum with a footprint for future opportunities and enables the PMA to define Portland as a national center for arts and culture.

With the opportunities of 142 Free Street, the development of Congress Square (a major, underdeveloped urban park at the main entrance of the museum) and the domino effects of renewal across our campus at sites like the Payson Building, Spring Street lot, and more, **now is the time to unify the campus and thoughtfully plan the museum's future.** We envision our campus as an environmentally sustainable gathering place where a strong artistic vision drives conversation, creativity, and cultural vibrancy.

This investment will embody our *Art for All* and Sustainability values, with 142 Free Street being the first sustainable and green public building in Portland and just the fourth green public museum building in the country. Planned across a six- or seven-story building, the ground floor is a **community gathering space** with a gallery, classrooms, and versatile areas for collaborations, partnerships, and communal food sharing. The lower level is a large **flexible auditorium**, and one floor would be **dedicated to housing local nonprofit organizations,** which would operate in the building and become crucial to the **education and outreach** programs of the PMA. One floor would include an all ages Makers Space, classrooms, and a Photography Center. One floor would be dedicated to **traveling exhibitions** as our current space of 4,500 square feet is too small for us to collaborate with our peer museums; another floor would hold offices. The rooftop would provide a **meeting area, restaurant, and a sculpture park as well as an opportunity for earned revenue.**

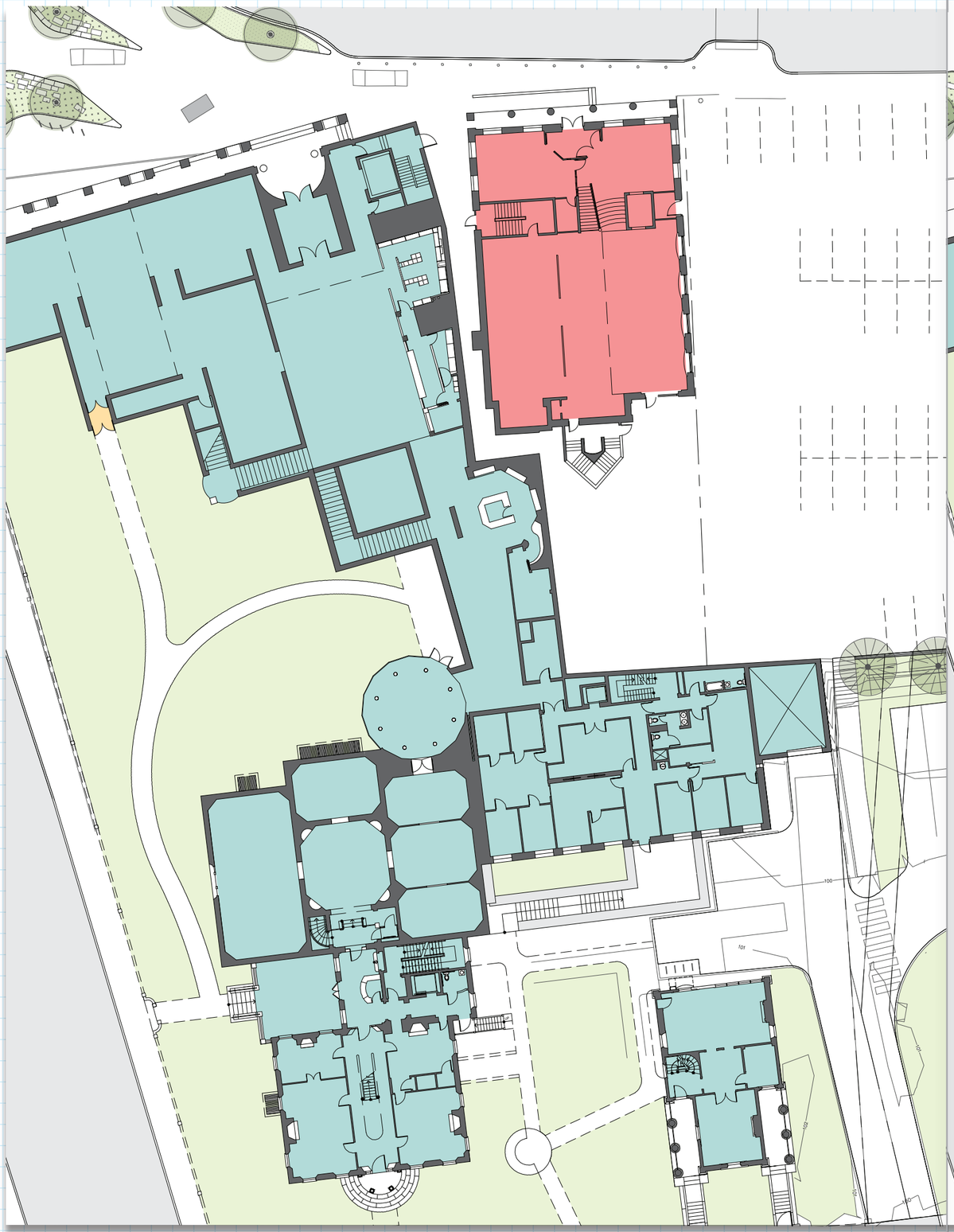
A key component of the new PMA building at 142 Free Street will be **home to a photography study center** that teaches and inspires our youth, partners with seasoned photographers, and analyzes the historical and contemporary fields of photography. This dedicated space could fully support the field of photography for all generations by creating a new model that is so needed today, as museums struggle with their past. It could be housed on a floor that provides full-service photography, from darkrooms, classrooms, and galleries, to a study center in partnership with other cultural organizations, making it an active and accessible space for all. It could also include a dedicated permanent gallery, with exhibitions changing annually so that visitors to the PMA can build over time their knowledge of the art of photography.

It's time to create the next great PMA experience, adding a new, iconic, and architecturally significant center to our historic campus. A unified and renewed campus will enhance the mission, welcome visitors from around the corner and across the world, and encourage meaningful connections with artworks, programs, and events.

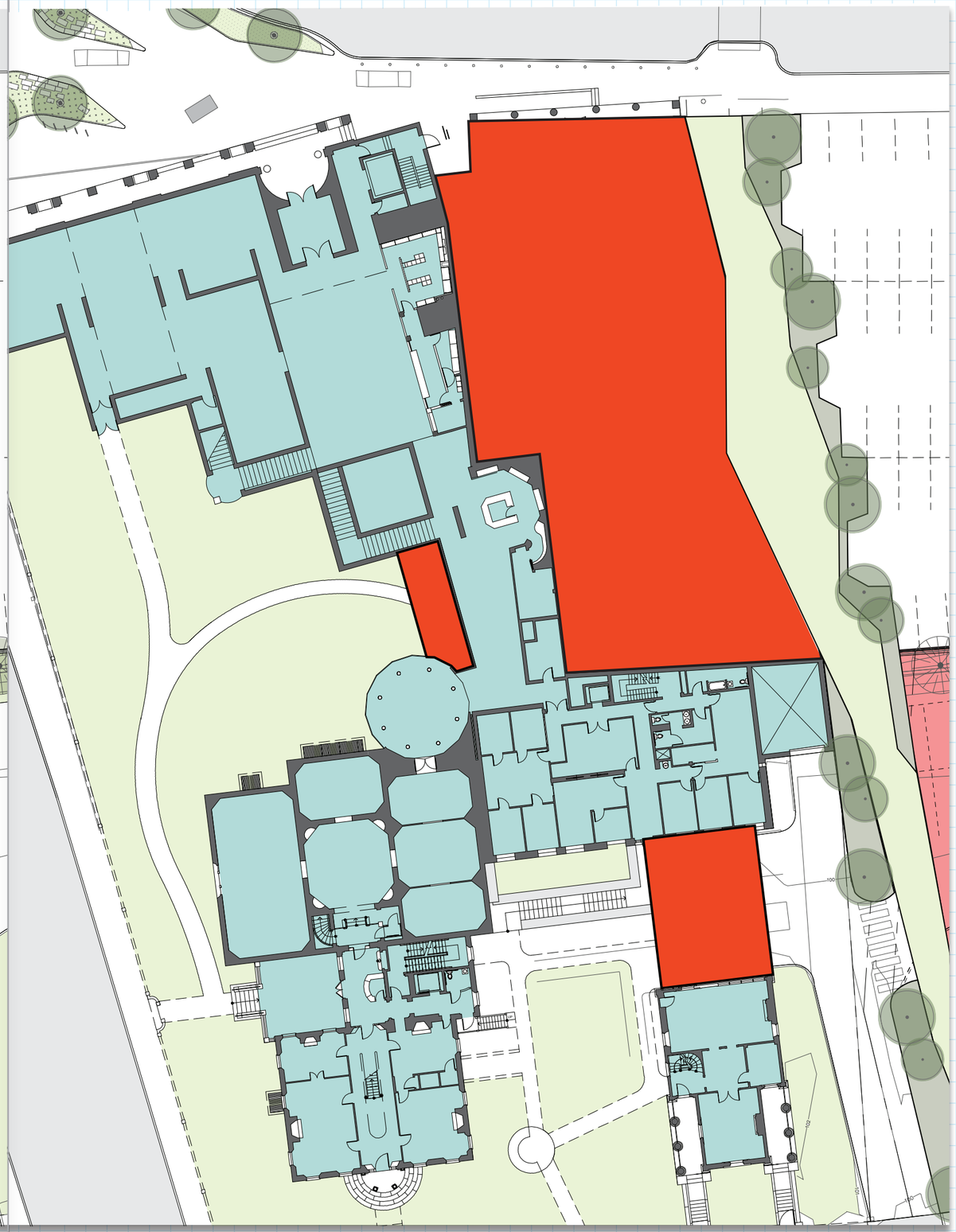


IT'S TIME.

EXISTING SITE PLAN



POTENTIAL DEVELOPABLE SPACE PLAN



ART IS THE HEART

At every step along our 140-year history, we have been supported, guided, and sustained by our visionary partners who understand art's unique capacity to connect, inspire, and transform.

Beginning today, we can renew, revitalize, and redefine a museum's role within our society–but we can't do it alone.

With your partnership and support, we can manifest a model for all museums: one defined by leadership, courage, sustainability, and inclusivity. The PMA that you will help establish will strengthen our societal fabric and affirm that museums are critical to the health of our communities.

Together, we can realize the true potential of museums for all people.





What we leave as proof of our being here will not necessarily be in the sciences, in politics, in economics, but will manifest itself through the arts.

– DAVID C. DRISKELL

We're committed to connecting the art and ideas inside our walls with the world and people outside of them, and our vision for the museum will demonstrate that **the PMA is a different kind of arts institution:** one that platforms its communities, promotes its region, and elevates our shared future.

...Museums have an opportunity to not become community centers, but to ***be at the center of their community...***

– LONNIE G. BUNCH III, 14TH SECRETARY
OF THE SMITHSONIAN AND PMA'S 2018
NELSON SOCIAL JUSTICE KEYNOTE SPEAKER

Page 3: Jeffrey Gibson (United States, born 1972), *PEOPLE LIKE US*, 2018, glass and plastic beads, tin, copper and gold-finished jingles, artificial sinew, quartz crystal, silver-coated copper wire, druzy crystal, nylon thread, nylon fringe, acrylic felt, acrylic paint, repurposed wool blanket, recycled jersey stuffing, rawhide, 60 1/2 x 24 1/2 x 14 inches. Gift of Crewe Foundation and Family, 2019.13. © Courtesy of the artist and Robert Projects, Los Angeles, California; Photo Peter Mauney

Page 4: Architectural rendering of the Payson Building by I. M. Pei & Partners.

Page 12: Winslow Homer (United States, 1836–1910), *Weatherbeaten*, 1894, oil on canvas, 28 1/2 x 48 3/8 inches. Bequest of Charles Shipman Payson, 1988.55.1. Image courtesy of Luc Demers

Page 13: Katherine Bradford (United States, born 1942), *Woman Flying*, 1999, oil on canvas dropcloth, 84 x 72 inches. Museum purchase with support from the Friends of the Collection, 2012.14. Image courtesy of Pillar Digital Imaging. © Katherine Bradford

Page 17: Pierre-Auguste Renoir (France, 1841–1919), *Confidences (Secrets)*, circa 1874, oil on canvas, 32 x 23 3/4 inches. The Joan Whitney Payson Collection at the Portland Museum of Art, Maine. Gift of John Whitney Payson, 1991.62. Image courtesy of Pillar Digital Imaging

Pages 18 / 19, left to right: Elizabeth Hazan (United States, born 1965), *The Forest at 2:00am*, 2019, oil on linen, 50 x 47 inches. Gift of the Alex Katz Foundation, 2019.26.2. Image courtesy of Cary Whittier. © Elizabeth Hazan. Gordon Parks (United States, 1912–2006), *American Gothic, Washington, DC*, 1942, gelatin silver print, 13 x 10 1/4 inches. Promised Gift from the Judy Glickman Lauder Collection. Image courtesy of Luc Demers. Courtesy of and copyright The Gordon Parks Foundation. Theresa Secord (Penobscot, born 1958), *Trinket basket*, 2014, birch bark, spruce rooblack ash, sweetgrass, cedar bark, dye, 5 1/2 x 4 1/2 x 4 1/2 inches. Gift of Barbara M. Goodbody, 2021.19.12a,b. Image courtesy of Luc Demers. © Theresa Secord. John Frederick Peto (United States, 1854-1907), *Office Board for Christian Faser*, 1881, oil on canvas, 20 x 16 inches. Collection of Walter B. and Marcia F. Goldfarb. Richard Estes (United States, born 1932), *Kentucky Fried Chicken*, 2007, screenprint, 24 x 16 inches. Private collection. Image courtesy of Luc Demers. © Richard Estes. Winslow Homer (United States, 1836–1910), *Returning from the Spring*, 1874,oil on panel, 7 7/8 x 5 3/4 inches, Gift from the Berger Collection Educational Trust in honor of the preservation of the Winslow Homer Studio, 2018.9.1. Image courtesy of Luc Demers. Ernst Ludwig Kirchner (Germany, 1880-1938), *Striding Bathers in the Woods (In der Walde Schreitende Badens)*, 1910, etching on wove paper, 9 3/4 x 7 3/4 inches. Gift of David and Eva Bradford, 2003.34.2. Image courtesy of Luc Demers

Page 28: David C. Driskell (United States, 1931–2020), *Ghetto Wall #2*, 1970, oil, acrylic, and collage on linen, 60 x 50 inches. Museum purchase with support from the Friends of the Collection, including Anonymous (2), Charlton and Eleanor Ames, Eileen Gillespie and Timothy Fahey, Cyrus Hagge, Patricia Hille Dodd Hagge, Alison and Horace Hildreth, Douglas and Sharyn Howell, Harry W. Konkel, Judy and Leonard Lauder, Marian Hoyt Morgan and Christopher Hawley Corbett, Anne and Vince Oliviero, D. Suzi Osher, Christina F. Petra, Karen and Stuart Watson, Michael and Nina Zilkha, and with support from the Freddie and Regina Homburger Endowment for Acquisitions, and the Emily Eaton Moore and Family Fund for the Collection, 2019.16. © Estate of David C. Driskell. Courtesy DC Moore Gallery, New York

HOW WE GOT HERE:

Diversity, Equity, Accessibility, and Inclusion (DEAI) Roadmap

Equity Strategic Action Plan (ESAP)

Listening Sessions

Staff Workshops

Community Focus Group

Feasibility Study

Strategic Plan

WHAT'S NEXT:

PHASE 1 | 142 Free Street Development
Begins with an *Architect Selection Process* and culminates with breaking ground on a new building.

Phase 2 | Further Campus Unification
Optimize and integrate existing facilities.

Phase 3 | Land Investment
Spring Street property transformation to serve the future of the PMA and our communities.

JOIN US

Mark H.C. Bessire
Judy and Leonard Lauder Director
Direct: (207) 699-4061
mbessire@portlandmuseum.org

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Senior Deputy Director
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...Museums have an opportunity to not become community centers, but to ***be at the center of their community...***

– LONNIE G. BUNCH III, 14TH SECRETARY OF THE SMITHSONIAN AND PMA'S 2018 NELSON SOCIAL JUSTICE KEYNOTE SPEAKER



The PMA Blueprint

Building a Landmark for the Future

The Portland Museum of Art is defined by three pillars: community, collection, and campus.

...Museums have an opportunity to not become community centers, but to ***be at the center of their community...***

– LONNIE G. BUNCH III, 14TH SECRETARY OF THE SMITHSONIAN AND PMA'S 2018 NELSON SOCIAL JUSTICE KEYNOTE SPEAKER



ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision **inspires** giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects **culture** defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display **beauty** sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects art. **Art** reflects culture defines community **centers** region attracts visitors create energy galvanizes support activates vision inspires giving diversifies collections display beauty sparks imagination spurs conversation poses ideas foster growth requires capacity unifies campus welcomes **community** defines culture reflects **art. The Portland Museum of Art is defined by three pillars: community, collection, and campus.**



Evan Schueckler <evans@portlandmaine.gov>

142 Free Street Portland

'Bruce Wood' via Historic Preservation <HP@portlandmaine.gov> Fri, Sep 15, 2023 at 4:18 PM
Reply-To: brucesar@yahoo.com
To: hp@portlandmaine.gov

The building at 142 Free Street was constructed as a theater in 1830 and later became the Free Street Baptist Church. Except for losing its steeple, the building exterior is little changed since its time as a church. It is an integral part of the Congress Street Historic District. To tear down this contributing building would be a serious loss to the Congress Square area and could encourage other owners to petition to tear down a significant building adjacent to an existing non-contributing building. It would set a dangerous precedent.

The Portland Museum of Art owns much vacant land they could expand into without tearing down an existing structure. There is a parking lot adjacent to 142 Free Street they could build on and connect a structure on that site with both the existing museum buildings and this historic building in the rear, without impacting the street view of 142 Free Street. That also could enable them to better use the Charles Quincy Clapp building on Spring Street they currently use only for storage. Incorporating those two historic buildings into the museum would be a positive move. The PMA also owns a vacant lot where a Young Women's Christian Association building once stood which could be built upon.

In short, there is no reason to tear down a perfectly functional historically contributing building in order to erect a new building that would compete with the existing main building. I think the current building would be seriously diminished in its attractiveness by adding a competing, larger building next to it. Keep what is there, reuse what we have, Take advantage of alternatives that would enhance the entire block.

I oppose allowing the contributing building at 142 Free Street to be torn down.

Bruce Wood
607 Chandler's Wharf
Portland, ME 04101

making the former Children's museum a non-contributing structure

0 views



europa1 <europa1@maine.rr.com> 12:37 PM (2 minutes ago)

to hp@portlandmaine.gov

Dear City of Portland Historic Preservation Board:

As a Portland long-term homeowner, I want to say that we want to to recommend reclassifying the former Chamber of Commerce Building (also known as the former Children's Museum) as a "**non-contributing" structure in the Congress Street Historic District.** This would allow the PMA to demolish the building as a part of its major expansion plan.

We feel that it is much more important for the Portland Museum of Art, **a treasured and much loved member of our Portland community** be allowed to build their next iteration of the museum with the large expansion using the former Children's Museum space. We (my wife and I) feel that this is a more meaningful contribution to our community that allowing the current structure to stand in the way of the new museum expansion.

Thank you for your consideration.

Lucian Burg / Marie Pollard
54 Prospect St.
Portland, ME 04103
europa1@maine.rr.com
207-775-4929

j.e.paterak

City of Portland
Historic Preservation Board
c/o Evan Schueckler
Historic Preservation Manager
389 Congress Street
Portland, ME 04101

September 28, 2023

Dear Historic Preservation Board,

I am writing today in support of the Portland Museum of Art to have the City remove the unfortunate misclassification of 142 Free Street as a historically significant or "contributing" building.

I moved to Portland in 1989, and lived at 612 Congress Street, within one block of the PMA and what was at that time the Chamber of Commerce. From my living room I could see the Henry Cobb facade of the museum and the Hay Building. So for me, these structures are embedded in my psyche as home. That said, as an artist and former board member of Architalx, I have never felt the building at 142 Free Street has provided any significant contributing value to Portland's varied (and at times struggling) cityscape. If anything, it is part of the residue of multiple failures and fires which have left enduring scars on the peninsula.

Without reiterating what has been clearly outlined in the supporting document *A History of 142 Free Street* prepared by Historic Building Consultant Margaret Gaertner, I would simply like to add a few additional comments.

In my opinion, Free Street has been a significant lost opportunity for the fabric of Portland city life for the past three decades. This one-way street has prioritized cars and sporadic events at the Civic Center, with little consideration given to the day-to-day life of the people that live and work on the peninsula. I feel this contributes to a down-trodden and at times barren feeling of this part of the city.

For eight years (1996-2004), my studio was in the State Theatre Building (aka The Congress Building), and my home was on Park Street. Before the *Arts District* was even established, I had a small gallery in the The Congress Building. At that time, visitors from out of state would comment on the abundance of *For Rent* signs, signifying a struggling Congress Street economy.

| 95 jeanne street portland, me 04102 | 207.450.3628 |

jepaterak@gmail.com

While we continue to live with the events at the Civic Center creating occasional traffic, we also continue to endure the loss of true livable urban space due to the poor planning of the 1970s. This should have been remedied long ago. The Spring Street urban renewal project is one of those enduring scars which tore through the fabric of city-life, removing beautiful homes and quality pedestrian and business friendly street life. Free Street connects the cultural hub that the PMA is central to, with the Old Port, home to the touristed and working waterfront. This street has been waiting to be designated a pedestrian powerhouse and cultural hub which could provide a vibrant consumer audience, day and night, for the businesses that might choose to locate there. I believe the architecturally significant planned addition, newly designed by LEVER, will largely strengthen a robust economic future for downtown and a renewed life for Free Street.

It is unfortunate that the singular "architecturally significant" feature of 142 Free St is its *Greek Revival* facade. While there are examples of historically significant buildings in Maine with *Greek Revival* architecture worth saving, this is definitely not one. Stylistically, *Greek Revival* may have served the purpose of upholding certain ideals, architecturally and otherwise, in the 19th Century when the term was first used. However, it now only serves as a harmful reminder of exclusion and elitism, which is not in alignment with either the city's or the musuem's identified ideals for the present and future of our city life.

This facade was added to an existing building in 1958, for the simplistic fantasy reasoning of what "good architecture" is. As built, it was hardly given more consideration than a temporary theatre set. When this addition to the structure was built, the considerations of a handicap access (not legally required until 1990) and adequate pedestrian space were clearly not considered. If anything, to correct these wrongs, the footprint of the facade of the building should be brought back the 30 or so feet or so it was moved forward in 1856, which would allow for more comfortable street facing life at the museum entrance.

In closing, I am reminded that in 1983, when I was a 19 year old art student at the Worcester Art Museum & Clark University, I wrote an impassioned letter to save Union Station in Worcester, MA. I am not accustomed to wanting to remove a structurally sound building, as I think many structures are worth saving and/or re-purposing, especially in light of a fast-paced developing and resource-hungry world. In this case, however, the compromising changes made to the structure, the lack of any real historic or design significance of the building warrant its removal. In short, the building is not well designed, well placed, or of any use to the museum as it stands. I support the PMA's goals in a better future, a better museum and indeed I wholeheatedly support the ideals of *Art for All*. Art is what makes us better understand our humanity and citizenship, and that is precisely what the world needs more of and what I want for Portland's future.

Sincerely,



Jeanne Paterak

jepaterak@gmail.com

To: Portland Historic Preservation Board
From: Earle G. Shettleworth, Jr.
37 Academy Street
Hallowell, Maine 04347
October 4, 2023

Agenda Item: Preliminary Review of Proposed Historic District Amendment; Congress Street Historic District – Reclassification of 142 Free Street as non-contributing.

As a native of Portland, I have studied the architectural history of the city for sixty years. For fifty of those years, I have researched, lectured and published on the work of John Calvin Stevens, the city's leading late nineteenth-early twentieth century architect as well as a figure of state and national reputation.

The Portland Museum of Art's report, "A History of 142 Free Street and Free at Congress Street" traces the evolution of this building and its surrounding area. However, the report fails to address the key point of the architectural significance of 142 Free Street as a work of John Calvin Stevens.

As Stevens began his career in 1884, he designed homes, summer cottages, churches, and public buildings in the Shingle Style and the Romanesque Revival. At the same time, he was influenced by the emerging Colonial Revival, a style inspired by historic New England architecture, whether Colonial, Federal, or Greek Revival. Reflecting his interest in the past, in 1887 Stevens provided the Free Street Baptists, then owners of 142 Free Street, with a pen and ink drawing of the building as it looked in 1836 to illustrate their 50th anniversary publication. Stevens based this drawing on an engraving that appears on John Cullum's 1836 map of Portland. Both drawings show a handsome Greek Revival façade of classical columns and a triangular pediment.

By the early 1900s, the Colonial Revival was Stevens' style of choice. As part of his Colonial Revival work, he specialized in the restoration of historic Portland buildings such as the Elias Thomas House of 1901-03 on Danforth Street and the Portland Club of 1922 on State Street. In both cases, he replaced a Victorian remodeling with his interpretation of Federal Period design. His restoration practice extended to other parts of Maine to include the Blaine House in Augusta and the replication of historic churches lost to fire in Wiscasset and Waterford.

When the Portland Chamber of Commerce acquired 142 Free Street for its headquarters in 1926, John Calvin Stevens chose to evoke the historic appearance of the building by replacing its Victorian church façade with the impressive Colonial Revival columned façade we see today. While the architect drew

inspiration from the 1836 Cullum drawing and his own 1887 drawing, the façade is a design that expresses his own vision of a classical building to enhance the public space of Congress Square. For Stevens was an advocate of the City Beautiful Movement, in which he sought to improve Portland with such public buildings as City Hall, the Sweat Memorial Gallery, and the Portland Water District complex. In his own words, his purpose was "to have all the city's institutions so built that they become points of interest and beauty." As such, the Stevens façade of 142 Free Street has been an integral part of the fabric of Congress Square for almost a century. It is the perfect companion for the Post-Modern classicism of Henry Cobb's Payson building of 1983.

The architectural significance of 142 Free Street that I have outlined is a primary reason for its listing as a contributing resource to Portland's Congress Street Historic District. Contrary to the Portland Museum of Art's assertion, the City of Portland was correct in including 142 Free Street as a contributing building when it created the Congress Square Historic District in 2009. The appropriateness of this designation was confirmed by the National Park Service when it certified the district for the use of Federal historic tax credits. This designation should remain in place.

Greater Portland Landmarks
Historic character enriches our lives

PO Box 17533, Portland, ME 04112

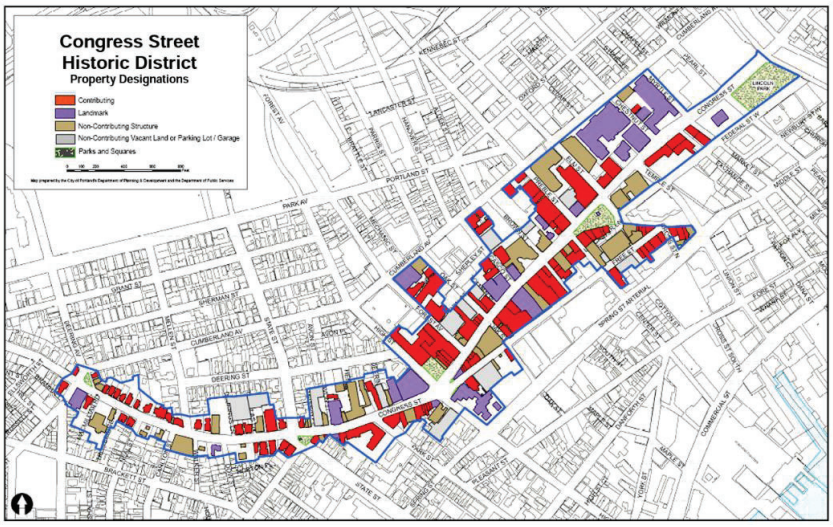
28 September 2023

RE: CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Chair O'Brien and Members of the Historic Preservation Board,

In response to the Portland Museum of Art's request to revise the classification of the former Chamber of Commerce building at 142 Free Street (more recently known as the Children's Museum building), Greater Portland Landmarks has considered the historic preservation ordinance's criteria for designation of a contributing structure within a local historic district in order to determine whether the Chamber of Commerce Building is more appropriately classified as non-contributing, as PMA suggests. Based on this analysis, Greater Portland Landmarks believes that the building clearly meets the criteria for designation as a contributing structure, both in terms of its architectural and historic significance within the Congress Street Historic District and its retention of the required level of integrity. Greater Portland Landmarks finds no basis for reclassification as a non-contributing structure.

As HP Board members are aware, the historic preservation ordinance clearly identifies criteria which must be met in order to be classified as a contributing structure within a district. During the district designation process, each structure or site is carefully evaluated in order to assign a classification of contributing, non-contributing or Landmark. This was done for the Congress Street Historic District and documentation on each building was included as part of the required designation materials.



Within the boundaries of any given district, inevitably there will be a number of structures which fail to meet the criteria for designation as a contributing structure either because they lack significance under any of the categories identified in the ordinance or because they do not exhibit sufficient integrity to be designated. For example, a building that is structurally unsound or has been altered on the exterior to such a degree it no longer retains its historic character will not meet the integrity standard and be classified a

noncontributing structure even if it is historically or architecturally significant.

The historic preservation ordinance requires that this same rigorous analysis be conducted when a request is made to change the classification of a structure or site within a district. The same criteria must guide the Board's final determination and recommendation to the Council. In order to change the classification of a building from contributing to non-contributing, the Board must find that the original classification was erroneous (perhaps based on incomplete information) or that circumstances have changed such that the building no longer meets the required criteria (if a building becomes structurally unsound, for example). Since the ordinance was adopted in 1990, about a dozen buildings have been reclassified following the process outlined in the ordinance. Greater Portland Landmarks followed these requests and, in each case, supported the reclassification based on the ordinance criteria. In this case, however, Landmarks strongly believes that the evidence that led to the building's original designation as a contributing building continues to exist and meets the minimum criteria set forth in the Ordinance.

EVALUATION BASED ON CRITERIA

We encourage the Board to consider the following in your discussion of the owner's request to reclassify the former Chamber of Commerce Building to noncontributing.

17.5.9 Amendment or Rescission of a Designation
Amendment or rescission of any designation shall … follow the procedure set forth in Section 17.5 for designation…The standards for rescission or amendment applied by the Historic Preservation Board, Planning Board, and City Council shall be limited to those provided in Subsections 17.4.1(A) and (B) and Subsection 17.4.2.

17.4.1 Minimum Criteria for Designation
17.4.1.A. The ordinance limits consideration by the HPB to the following criteria in making a determination on … an area, site, structure, or object for designation by ordinance as a landmark or district:
17.4.1.A.1. Its value as a significant example of the cultural, historic, architectural, archaeological, or related aspect of the heritage of the City of Portland, State of Maine, New England region, or the United States:

- The Chamber of Commerce Building is an example of the commercial significance of Congress Street within Portland in the first half of the 20th century. It is also an example of the significance and prominence of Portland's business community within the state and northern New England in the first half of the 20th century. At the turn of the century Congress Street from City Hall to Congress Square was noted for its fashionable shops and large department stores. Particularly between 1900 and 1930, the Congress Street business district replaced Exchange Street and the Old Port area as the business center of the city. At Congress Square this new commercial prominence is reflected in the construction of the Schwartz Building (1920), Eastland Hotel (1927), State Theater (1929), the third-story addition to the 1826 C.Q. Clapp Block/H.H. Hay Block (1922), and the alteration of the former Free Street Baptist Church for use by the Chamber of Commerce (1926).

17.4.1.A.4. Its exemplification of a significant architectural type, style, or design distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.

- Redesigned in 1926 in the Colonial Revival Style, architects John Calvin Stevens and John Howard Stevens utilized the most popular style of the period. By the turn of the 20th century the Colonial Revival Style was one of the most predominant styles of architecture on the East Coast. It had quickly

become the fashionable style in architecture following the Columbian Exposition of 1893 in Chicago. The style surged in prominence following World War I and again following World War II.

17.4.1.A.5. Its identification as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States.

- John Calvin Stevens and his son John Howard Stevens are perhaps the most well-known and documented architects working in Portland at the turn of the 20th century. John Calvin Stevens significance to Portland and Maine's architectural history is rivaled by his historic significance to Portland's Art community and to the PMA itself:

  "He designed the museum's L.D.M. Sweat Memorial Galleries. More importantly, he was a leader and president of the group that founded the museum. And it was he who secured the patronage that made the institution a reality and gave it staying power. But the Portland Society of Art not only founded the PMA, it created what is now the robust and thriving Maine College of Art, which many consider to be the most highly energized art institution in the art-oriented state of Maine."
  Portland Press Herald, July 5, 2015.

  In addition to the Chamber of Commerce Building other significant examples of the Colonial Revival style by the firm include Biddeford City Hall (1896), South Portland's Roosevelt School (1927), Fryeburg Academy's Curtis and Cutter Halls (1930) and Portland's US Post Office (1934) on Forest Avenue.

17.4.1.A.6. Its representation of a significant cultural, historic, architectural, archaeological, or related theme expressed through distinctive areas, sites, structures, or objects that may or may not be contiguous.

- The Chamber of Commerce Building is a contributing building within the Congress Street Historic District, an area locally designated in 2009 to document Portland's business district. The building's use by the Portland Chamber of Commerce for its offices from 1926-1993 expresses the commercial theme of the district. The building and its use are integral to an understanding of the Congress Street business district's development during the first half of the 20th century.

17.4.1.B. In the case of a nominated historic district, the Historic Preservation Board shall also determine whether there is an interrelationship of resources within it which creates an identifiable entity, even if composed of a wide variety of resources. A district must convey a visual sense of the overall historic environment or be a grouping of historically or functionally related properties. A historic district can comprise both individually distinctive historic resources and historic resources that may lack individual distinction, but which contribute to the significance and visual character of the district as a whole.

The "eclecticism and layering of historical periods is the essence of the district's character and what makes it unique among Portland's historic districts."
Congress Street Historic District, Local Designation Narrative.

- As stated above, the former Chamber of Commerce Building is a contributing building within the Congress Street Historic District. It expresses the commercial theme of the district and contributes to the district's visual character.

The Congress Street Historic District is a cohesive corridor of commercial and civic buildings that are significant for their role in the commercial, social, and architectural development of the city. Although flanked by a parking lot to the north, the Chamber of Commerce Building is visually related to its neighbors across Free Street, 133-135 Free Street (c1810-1820) and the Landmark-designated CQ Clapp Block/HH Hay Block at 588 Congress Street (built 1826 and altered 1922), and to the Payson Wing of the Portland Museum of Art next door. Like 133-135 Free Street and the HH Hay Block, the Chamber of Commerce Building is an early building altered to meet the changing needs of the evolving business district in the early 20th century. The former Chamber of Commerce Building is also visually related to its neighbor, the Payson Wing of the Portland Museum of Art and like the Payson Wing, its monumental facade helps to define the eastern boundary of Congress Square, a significant node within the boundary of the district.

17.4.2. Integrity of Landmarks and Historic Districts. Any area, structure, or object that meets the criteria in Section 17.4.1 must also have sufficient integrity of location, design, condition, materials, and workmanship to make it worthy of preservation or restoration.

- The former Chamber of Commerce Building retains integrity of location, design, condition, materials, and workmanship. Although the building's exterior has been altered since it was redesigned for use by the Chamber of Commerce, these alterations are reversible, have not significantly altered the character defining features of the building's style, and do not detract from the overall appearance of the building.

  In fact, the building's exterior condition is like many of its neighbors within the Congress Street Historic District. Most of the buildings within the district have undergone updates and alterations such as window or storefront replacements since their period of construction. However, the district's contributing buildings typically retain their original (mainly brick) facades, storefront use, and character-defining architectural details.

  A comparison using the 1958 Portland Press Herald photograph presented in the applicant's report and a more recent image of the buildings makes it clear that although alterations have occurred, the building retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its Colonial Revival design and reflect its appearance during the building's use by the Portland Chamber of Commerce.





CONCLUSION

For a building to be designated as a contributing structure, it needs to meet just one of the criteria laid out in ***Subsection 17.4.1.A*** of Portland's Historic Preservation Ordinance**.** The former Chamber of Commerce Building meets 4 out of the 6 criteria. It also meets the criteria laid out in ***Subsection 17.4.1.B.*** and ***Subsection 17.4.2*** of the ordinance**.**

- It is significant to the cultural, historic, architectural heritage of the city.
- It exemplifies a significant architectural style.
- It is the work of an architect whose individual work is significant in the history or development of the City of Portland and the State of Maine.
- As the former home for nearly 60 years of the city's Chamber of Commerce, it expresses and contributes to the theme of the Congress Street Historic District, a cohesive corridor of commercial and civic buildings that are significant for their role in the commercial, social, and architectural development of the city from 1780-1958.
- Although minor alterations have been made to the exterior, it retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its design and reflect its appearance during its use by the Portland Chamber of Commerce.

The former Chamber of Commerce building continues to warrant its designation as a contributing building within the historic district. We hope that through your careful deliberations, you will agree that the evidence supports its current designation.

Thank you for considering our views,



Carol De Tine
Vice President of the Board of Trustees
Greater Portland Landmarks

Hanson Historic Consulting

October 2, 2023

RE: CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Chair O'Brien and Members of the Historic Preservation Board,

From 2005 to 2010, I worked with Deb Andrews in the Portland Planning Department staffing the historic preservation program. I was the principal researcher and co-author, with Deb Andrews, for the Congress Street Historic District Designation Report, and prepared the National Park Service Local Historic District Certification Application for the district.

Since leaving the City of Portland, I have written or co-written more than 30 National Register nominations, including commercial district nominations for Augusta, Lewiston, Waterville, Rumford, and Dover-Foxcroft. I have prepared the NPS Certification applications for the Portland Waterfront, Congress Street and Munjoy Hill historic districts in Portland and the West Chelsea historic district in New York City. I have extensive experience in determining Contributing and Non-Contributing status for buildings in commercial historic districts.

When working on the designation report for the Congress Street district, every building, site, structure, and object in the district was thoroughly researched, documented, and carefully analyzed to determine whether they contributed to the historic character and significance of the district. This included the Portland Chamber of Commerce Building at 142 Free Street, which was determined to be Contributing.

The recent report prepared by Margaret Gaertner for the Portland Museum of Art makes a reasonably coherent case for why the Portland Chamber of Commerce Building does not meet the requirements to individually listed in the National Register, and perhaps not to qualify for Landmark status under the Portland Historic Preservation Ordinance. At the same time, it makes an excellent case for why the building *should* be considered Contributing to the significance of the certified local district.

Interior alterations have no relevance to qualification as a Contributing building in a district and the mention of interior alterations in the report should be ignored. Window and door replacement and minor, reversible, alterations to the roof are commonly found on Contributing buildings in historic districts and are regularly approved as alterations under the standards of the ordinance by the Historic Preservation Board. These in no way render the Chamber of Commerce Building non-contributing.

Historic changes to existing buildings are generally recognized to have significance in their own right if they date to the Period of Significance for the district or property. Additionally, these changes have more importance if also related to the district's Areas of Significance. While Portland's preservation ordinance does not require identification of the period of significance or areas of significance for a district to be designated, the Certification of the local district by the National Park Service does.

The Congress Street Historic District was certified by the National Park Service on May 25, 2010, for the purpose of allowing the owners of contributing buildings to access state and federal historic tax credits. This certification is based upon documentation that the local historic district is essentially identical to a National Register Historic District. This includes the requirement that the district meet National Register guidance for the delineation of boundaries.

Under that guidance, drawing a boundary to exclude a contiguous historic resource that falls within the areas and period of significance and retains integrity to the period of significance is not allowed. Maine Historic Preservation Commission staff were directly involved in determining the boundaries of this district to ensure it would be certifiable. Changing the boundary for the express purpose of removing a contributing resource from the district to allow its demolition could be grounds for recission of the NPS certification and the loss of access to historic tax credits by other property owners.

As part of the Certification application, a Period of Significance and Areas of Significance had to be identified for the local district, which were not required for local designation. I worked closely with the Maine Historic Preservation Commission's National Register Coordinator and with National Park Service staff in Washington, DC to make these identifications.

The Period of Significance for the Certified Congress Street Historic District is 1785 to 1958 (with two later buildings identified as Contributing due to their exceptional architectural merit). The district is significant under Criteria A in several Areas including "Commerce," and under Criteria C in the Area of Architecture with John Calvin Stevens identified as one of the most important architects whose work is represented in the district.

The NPS letter certifying the district (attached) states, "Please be aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for continued benefits under the above laws."

Currently underway historic tax credit projects in the certified Congress Street district include the Chapman Building (Time & Temp) complex, the Fidelity Trust Company Building, and the New England Telephone and Telegraph Building. Tens of millions of dollars in state and federal historic tax credits for these projects are dependent on the Certified status of the local historic district.

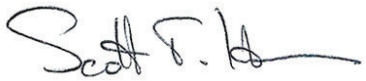
Returning to Margaret Gaertner's report. To suggest that a 1926 façade alteration for the Portland Chamber of Commerce by Maine's leading architect renders the building Non-Contributing in a district with Commerce and Architecture as Areas of Significance and a Period of Significance extending from 1785 to 1958 is irrational. If this argument were given credence, more than 20 Contributing buildings in the Congress Street Historic District would fail to qualify as Contributing, as they were altered and adapted to new uses during the district's Period of Significance.

For example, by the rationale presented in this report, the H.H. Hay Building, just across Free Street, should not be considered as Contributing to the district. It is also an early 19th century brick building

facing onto Congress Square that was substantially altered in the Colonial Revival style by John Calvin Stevens in the 1920s, with its interior completely remodeled multiple times over the years. If there is a case for removing the Contributing status of 142 Free Street, there is no argument for not removing the H.H. Hay Building if the owner requested it.

In conclusion, there is no rational case for removing the Contributing status of the Portland Chamber of Commerce Building at 142 Free Street and many reasons not to. I urge the Board to unanimously reject this request with clearly stated finding of fact to support the decision.

Sincerely,



Scott T. Hanson

Hanson Historic Consulting, LLC

8 Pleasant Street
Topsham, ME 04086
scott@hansonhistoric.com
207 620 6291

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

May 25, 2010

The Honorable Nicholas M. Mavodones, Jr.
Mayor of Portland
City Hall, 389 Congress Street, Portland, ME 04101-3509

Dear Mayor Mavodones:

The National Park Service is pleased to inform you as duly authorized representative that the Congress Street Historic District has been certified by the Secretary of the Interior for purposes of the Tax Reform Act of 1986, as substantially meeting all the requirements for listing in the National Register of Historic Places.

Individual property owners of depreciable buildings within this district can qualify for the Federal tax incentives for historic preservation by completing the Historic Preservation Certification Application -- Parts 1 and 2 and submitting them to the State Historic Preservation Office (SHPO). Application forms are available directly from the SHPO. Applications should be submitted as early as possible in the planning of a rehabilitation project.

Review boards and commissions should become familiar with the Secretary of the Interior's Standards for Rehabilitation, used by the Secretary in certifying rehabilitation work for the historic preservation tax incentives. The SHPO and the NPS are available to advise individuals and organizations about the Standards.

Please be aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for continued benefits under the above laws.

If you have any questions, please call me at (202) 354-2025.

Sincerely,

Guy M. Lapsley

Guy M. Lapsley
Technical Preservation Services

cc: National Register
ME SHPO

PC6

To Whom it May Concern:

It is my great pleasure to write a letter in support of the Portland Museum of Art's application to request that the Historic Preservation Board of the City of Portland re-classify the 142 Free Street property, currently a "contributing structure," to be "non-contributing" on the basis that the building never should have been classified as contributing in 2009 and 2020.

The inclusion of 142 Free Street is critical to the PMA's expansion project, as the space will enable the incredible work the museum does for our community to expand, while engaging the many communities that PMA works alongside.

Research is showing us that 142 Free Street does not contribute to the city historically in any way that should present as a barrier to the PMA's innovative vision for the future. Importantly, the PMA has a long history of stewardship and preservation of historic buildings and respects their significance. Architectural leadership was a key aspect in the selected design concept for the expanded PMA. The PMA's actions in engaging the citizens of Maine in the process of selection demonstrates their values and commitment to our community.

The Indigo Arts Alliance (IAA) has been fortunate to be in deep partnership with the Portland Museum of Art for many years and in many forms. We look forward to our continued collaborations in the future inside and outside of the walls of the new museum they have imagined.

We sincerely hope you will support this important museum expansion project.

In Solidarity,
Márçia Minter, PhD hc | She, Her
Chief Officer of Strategic Growth and Innovation
Indigo Arts Alliance
60 Cove St. Portland, ME 04101
(207) 272-3113

Unceded Wabanaki Territory.

2 October 2023

Robert O'Brien, Chair
Historic Preservation Board, 4 October 2023 Workshop, Agenda Item 6.i
City of Portland
389 Congress Street
Portland, ME. 04101

Dear Mr. O'Brien,

It isn't often that I have any reason to appeal to the Historic Preservation Board, because the Board has shown great stewardship of Portland's historic architecture. However, (per his 31 August 2023 letter to the Board) I fear that Mark Bessier's request to de classify 142 Free Street (the former Maine Chamber of Commerce building) from the Historic Preservation Board's historic ordinance in order to raze it, is rooted in faulty reasoning and is a potential tragedy for the people of Portland and Maine.

1. Mr. Bessier believes that 142 Free Street (currently owned by the Portland Museum of Art) does not have the "historic stature, architectural consistency, or community significance that the District's or the other [PMA] museum properties do." He is referring to the museum's Clapp House and McLellan-Sweat House—both elite homes of 19th century Portland's wealthiest citizens. 142 Free Street was built as a theater about 1830, and from the mid-1830s through the mid-1920s it was a house of worship for the Baptist Church. Within the walls of this vernacular architecture the nascent YWCA and YMCA were nurtured, and collaboration with the Abyssinian Church was encouraged, among many other social causes.[1] Vernacular architecture like 142 Free Street defines our community and sense of place over time. To accomplish "diversity, equity, accessibility, and inclusion" we must respect our historic buildings, both elite and those of the people.

2. Margaret Gaertner wrote a thorough and exacting Historic Structures Report for 142 Free Street that documents the changes in the building over time as it morphed from a theater, to a church, to the headquarters of The Chamber of Commerce, to a children"s museum. And that's the point. Each one of these changes to the building marks the cultural values and history of Portland's citizens for almost 200 years. According to Architectural Historian Stewart Brand, historic buildings are like artifacts that are constantly shaped

[1] See: YWCA, The Portland Daily Press, 28 October 1895; YMCA, Portland Press Herald 24 February 1922; Abyssinian Church, 9 November 1889.

and refined to illuminate the hopes, needs, and goals of a civilization.[2] Tearing down 142 Free Street destroys this significant artifact.

3. Mr. Bessier states that "some architecture styles carry unfortunate legacies of the past into the future that undermine" contemporary "values and goals." He insists that 142 Free Street is such a style "erected during the Jim Crow era." His history is confused. In the 1830s 142 Free Street's initial style was Greek Revival, an egalitarian architecture found in every section of Maine that celebrated America's first national style. Jim Crow laws were introduced in the American south in the late 19th and early 20th centuries that codified racial segregation. The confusion aside, his theory that buildings inhabiting the sins of a nation is reckless. I can't counter that better than a colleague did:

> "So now buildings are to be extinguished because their architectural styles have active political affiliations? Are we to tear down every building erected before, say, 2000? We might as well cut down every tree that is old enough to date from some time before our 'enlightened' present, or similarly destroy every old work of art. Shall we shatter the Sistine Chapel because, when it was painted, slavery was common and indigenous people were savagely oppressed. To personify non-sentient structures is a bizarre distortion of reality and a true perversion."

No one questions that the Portland Museum of Art "contributes significantly to Portland and Maine's economy." Or that a new PMA building "constructed primarily of mass timber" will help "reduce globing warming." But it is clear that 142 Free Street is very much a "contributing property" to Portland's history (it was remodeled by John Calvin Stevens, for goodness sake!) and it was rightly included in the Historic Preservation Ordinance. Please keep it there

Thank you, Mr. O'Brien and the Board, for your good consideration.

Andrea Constantine Hawkes, Ph.D.
1181 Westbrook Street
Portland, Maine 04102
achawkes@gmail.com
207.317.1825

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[2] *How Buildings Learn: What Happens After They're Built*. (Penguin Books, Reprint, 1995.)

PC8

Re: Oct 4th meeting of HPBoard, agenda item workshop 6.i

0 views

Assigned to me

Berry Manter <bmanter1@gmail.com>
to hp@portlandmaine.gov

9:14 AM (19 minutes ago)

Dear Historic Planning Board Members,

I am a 35 year resident of Portland. I both live in and value the preservation of intact and functional historic old buildings in our city.

The intention of Mr. Bessier to raze the 200 year old former historic Children's Museum building counters the harsh lessons learned with the razing of our irreplaceable train station. While building anew "from wood" may hold environmental value versus building anew with other materials, it does not alleviate the measurable environmental costs of failing to reuse existing structures. We on Munjoy Hill spoke to this in our support of our historic district, as do recent reports on the value of retaining and incorporating existing historic structures.

While I, personally am a huge fan of fine contemporary architecture and can point to successes within Portland, we have too many failed projects (some on-going), and I support standing strong with the Portland Landmarks, and the precedence of the Historic Planning Board decisions, in insisting the 142 Free Street building remain standing, as is consistent with the fabric of its neighboring buildings (given the exception of the lone I.M.Pei structure.)

Respectfully,

Berry Manter
46 Eastern Promenade
bmanter1@gmail.com

142 Free St. 0 views

Edgar Beem <beem@gwi.net>
to hp@portlandmaine.gov

10:10 AM (12 minutes ago)

Dear Portland Historic Preservation Board,

I am writing in support of the Portland Museum of Art's application to have 142 Free St. exempted from the historic district in order that the museum be able expand its facility by adding a landmark new structure to the existing campus. While I appreciate that some in Portland are very sensitive to any changes to the built environment, I do not believe 142 Free St. is a building of any great architectural merit. It is altogether fitting and proper that it should be razed to make way for a great new future.

As a Portland native and a writer who has written about the cultural life of Portland and Maine since 1978, I recall the howls of protest that went up in 1983 when the old Libby Building was razed to make way for the Charles Shipman Payson Building. When the new museum opened, I remember some boo birds complaining about the distinctive arches and suggesting that the building designed by Henry Cobb of the I.E. Pei firm looked like a shopping mall. Many people experience the shock of the new when familiar landmarks are changed to accommodate growth.

I keep hearing that the fact that architect John Calvin Stevens did some renovation work on the old theater-church-chamber building gives it special historical significance. I do not believe this is so. 142 Free St. is a utilitarian structure that has served many purposes is many different forms. It is time for it to go. I very much hope that the commission, planning board and council will not stand in the way of the Portland Museum of Art's $100 million improvement to the City of Portland.

I am sorry I could not attend the10/4 meeting to speak in favor of the museum's request, but as a trustee of the $20 million Dorothea and Leo Rabkin Foundation, another cultural treasure in the new Portland, I was busy with board business.

Thank you for your time and consideration.

Sincerely,

Edgar Allen Beem

83 McKeen St.

Brunswick, Maine 04011

142 Free Street 0 views

William Hall <wpeaks@earthlink.net>
to hp@portlandmaine.gov

10:47 AM (7 minutes ago)

To the members of the Historic Preservation Board:
I served on the Portland planning board 2006-2016 so I understand what an important decision you have to make regarding 142 Free Street. I am now on the board of Greater Portland Landmarks and support our organization's position on this issue.
I think it's extremely important to uphold Portland's land use code and reach a decision that is in conformance with the law. 142 Free Street certainly meets key criteria for preservation as a contributing structure. A decision contrary to that, allowing the building to be torn down, risks undermining historic preservation rules that have done so much to make Portland a unique, vibrant, and desirable place to live and visit.
Thank you for your consideration and for your service to the city of Portland.
Bill Hall
317 Pleasant Avenue
Peaks Island

HPB Public Comment - 142 Free Street - Consistent Treatment of Demolition Requests

0 views

Assigned to me

George Rheault <george.rheault@gmail.com>
to HIstoric Preservation, Grace Benninghoff

10:52 AM (4 minutes ago)

Below is a threshold issue that needs to be addressed before any discussion of the pros and cons of demolishing 142 Free Street can occur. The process seems to be flawed based on how other recent demolitions were handled by city planning staff.

HIstoric preservation staff must explain to the public why the PMA's demolition request for 142 Free Street is receiving extraordinary attention AND the extra step of needing City Council approval when other recent demolition requests in historic districts did NOT require or receive City Council approval.

For instance, two very recent demolitions involving 183 Brackett Street and 34 Spruce Street were, I believe, handled exclusively at the HPB level. See attachments for background information.

If I am mistaken, please advise by showing the public proof of the City Council action in these demolitions.

Due to the controversy here, it is important for city planning staff (including its historic preservation department) to review ALL demolition requests that have been handled by the HPB since it was brought into being circa 1990.

The PMA should not be treated any differently than other applicants.

HISTORIC PRESERVATION BOARD
CITY OF PORTLAND, MAINE

PUBLIC HEARING
34 SPRUCE STREET

TO: Chair Sheridan and Members of the Historic Preservation Board
FROM: Deb Andrews, Historic Preservation Program Manager
DATE: July 9, 2020
RE: July 15, 2020 PUBLIC HEARING

Application for: Request for Reclassification of Contributing Structure within West End Historic District

Address: 34 Spruce Street

Applicant: Tim Gebhardt, Basha LLC.

Introduction

Property owner Tim Gebhardt has requested a public hearing and formal Board decision regarding reclassification of the existing mid-19th century residential structure located at the rear of the lot at 34 Spruce Street from "contributing" to "noncontributing". Mr. Gebhardt is seeking reclassification in order to proceed with plans to construct a new single-family residence on the property. Mr. Gebhardt's proposed redevelopment plan is predicated on the removal of the existing structure. Wednesday's workshop follows two preliminary workshops during which the question of reclassification and the existing building's level of integrity have been discussed. Reclassification of a "contributing" structure needs to be evaluated as a independent question according to the ordinance provisions pertaining to such requests and separate from consideration of the relative merits of a proposed replacement structure.

At the request of the Historic Preservation Board, Mr. Gebhardt provided an engineering survey of the existing house in advance of the second workshop. No additional professional analysis has been submitted for the public hearing. To further aid the Board in making its determination regarding reclassification, Mr. Gebhardt has allowed members of the Board to walk onto his property in advance of the public hearing to view the house and its current condition at close range. Although the house was opened for Board members to enter, the interior condition of the building is not relevant to the Board's deliberations, except to the extent that structural deficiencies are evident from the interior. Staff advises the Board that their assessment is to be made primarily on the basis

of their own assessment of the building's level of integrity, which may be informed by

professional condition studies as well as other considerations.

Enclosed for the Board's review are staff photos of the subject structure, the condition assessment prepared by engineer Bruce MacLeod and excerpts from the historic preservation ordinance which govern consideration of requests for reclassification.

Subject Property, Existing Structure

The subject property at 34 Spruce Street consists of a narrow lot that was once occupied by a mid-19th century Greek Revival home near the street as well as a smaller structure of the same era at the rear of the lot (the subject structure). The primary structure on the lot was a typical side-entry Greek Revival building with its front-gabled façade close to the street. It was 2-1/2 stories with a vertical expression and proportions. (See 1924 tax photo—ATTACHMENT 3.) Staff does not know when the front house was demolished, but the existing curb cut must date from after the demolition.

At the back corner of the lot is a small, vernacular Greek Revival-era house that still exists, the William Lindsay House. The property description in the West End Historic Resources Inventory indicates that the building was erected in 1841, possibly as a carriage house or guest house. Whatever the original use, it was a residence before 1924. (See ATTACHMENT 4.) There is no 1924 tax photo of the building.

This small house has been altered significantly, and allowed to deteriorate. A brief evaluation by Engineer Bruce Macleod includes several photos, and rates the overall condition as poor. (See ATTACHMENT 2.) The footprint of the house is very close to property lines in the rear, and visibility from the street is limited. Recent staff photos (ATTACHMENT 1) illustrate some of the alterations and losses:

- Vinyl insert windows and modern brickmould casing
- (Likely) modification to the roof shape
- Front entry alterations and replacement, including door, trim, and surround
- Rear addition

Applicable Ordinance Provisions governing Reclassification Requests

The historic preservation ordinance includes a provision for consideration of reclassification requests—see Sec. 14.623 "Amendment and recission of designation", (ATTACHMENT 5). The inclusion of this provision in the ordinance recognizes that initial classifications, which are the result of an architectural survey done at the time a historic district is being proposed, are ultimately based on the assessment of the surveyor, typically confirmed by the Historic Preservation Board during the designation process, which is informed by information available at the time. Classifications do not typically take into

account structural condition unless it is an obvious factor when the building is surveyed.

Additional information about a building's structural condition may come to light at a later time that might prompt a request for reclassification. Beyond the question of structural repair, there's the issue of general level of integrity. Included within most historic districts are a handful of buildings that one would reasonably characterize as "tough calls" in terms of qualifying as contributing structures based on the degree of previous alterations/replacement. Sec. 14-623 of the ordinance provides an opportunity to revisit the question of a structure's overall contribution to the district especially in light of its level of integrity.

The same review process for designation is followed for recission of designation--in other words, the Board must determine whether the subject structure meets the minimum criteria for designation relating to significance as outlined in Sec. 14-610 (a) *and also* the integrity criterion in Sec. 14-611, which reads as follows:

> *Any area, structure or object that meets the criteria in section 14-610 must also have sufficient integrity of location, design, condition, materials and workmanship to make it worthy of preservation or restoration.*

If the Board finds that, upon reconsideration, the building fails to meet at least one of the criteria in Sec. 14-610 and/or the integrity criterion in Sec. 14-610, the Board would recommend to the Council rescission or amendment of designation—in this case reclassification to "noncontributing."

Factors for Consideration

In evaluating the applicant's request to rescind the contributing status of the existing residential structure at the rear of 34 Spruce, staff offers the following points and questions for consideration:

- It is true that the presence of a second residence behind a principal residence on a single lot is uncommon in the West End Historic District. There are other examples in the neighborhood, however. One such example is at the rear of 315 Spring Street. Another example is
- Even if this type of situation is not a common one, should that fact bear heavily on whether the building should be preserved?
- Public comment from one observer submitted in advance of the second workshop argued that the presence of the existing structure is evidence of the city's response to the need for accommodating added density in the 19th century. While this might be the case, we don't know it to be the case here.
- While there is a written description of the subject structure included in the Historic Resources Inventory, there is no historic photo available to verify its historic appearance.

- There is nothing in the structural engineer's report that suggests the building is not

salvageable from a structural standpoint.

- Based on the building's current appearance, it is clear that several original features have been replaced or altered, compromising its integrity—see list above.
- Given that the property owner has the right to construct a second residential structure on the subject lot, it is likely that the new structure will largely obscure the existing building. To what extent should this factor into the Board's consideration?

Staff Assessment

All things being equal, the existing structure would be rehabbed and reused, whether in conjunction with proposed new construction on site or not. Setting aside historic preservation goals, retention of existing housing stock to meet the City's housing needs would seem a high priority in and of itself. That consideration, however, is not before the Historic Preservation Board. The Board is charged with determining whether the building meets the criteria of a contributing structure.

As noted above, there is nothing in the engineer's report that suggests the building is not salvageable. Most historic buildings, given sufficient resources, are salvageable. The relative cost of rehabilitating the subject building, however, does become more of a valid consideration when other applicable factors are taken into account. The key question here is whether the building exhibits *sufficient integrity of location, design, condition, materials and workmanship to make it worthy of preservation or restoration.*

Given the very modest nature of the building, its current condition and the level of alteration/replacement of historic features, staff is of the opinion that the existing structure at 34 Spruce does not meet the integrity standard of Sec. 14-611. Aside from this finding, the fact that the building will likely not be seen behind any new residence constructed in front of it contributes to staff's position that reclassification is warranted in this instance.

Applicable Review Standards

The following applicable sections of the ordinance are attached—see ATTACHMENT 5

Sec. 14-623 Amendment and Rescission of Designation
Sec. 14-610 (a) Minimum Criteria for Designation
Sec. 14-611 Integrity of Landmarks and Historic Districts

Motion for Consideration

On the basis of information included in the staff report for the July 15, 2020 hearing and inspection of the subject property and structure, the Board finds that the existing

structure at 34 Spruce Street **meets (fails to meet)** the integrity standard of Sec. 14-611 of

the historic preservation ordinance. Based on this finding, the Board recommends (does not recommend) reclassifying the existing structure from "contributing" to "noncontributing".

Attachments

1. Photos of existing structure
2. Engineer's evaluation of existing structure
3. 1924 tax photo of 34 Spruce Street (no longer existing)
4. Historic Resources description of 34 Spruce Street (existing house)
5. Excerpts from historic preservation ordinance, applicable provisions


34








34



MacLeod
Structural Engineers, PA

Mr. Timothy Gephardt
Gephardt Property Management, Inc.
175 Brackett Street
Portland, Me 04102

Re: 34 Spruce Street - Portland, Maine January 24, 2020

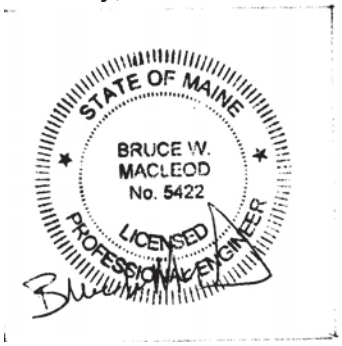
At you request, I recently visited the subject property to observe the building condition in consideration of the potential for renovating the building. The owner of the home is currently assessing the viability of renovating the home. The purpose of my inspection was to assess the structural condition of the building. My inspection did not include electrical, plumbing, or mechanical elements. This letter is a report of my findings and recommendations.

The subject property is an existing single-family home. According to the assessor's information, the date of construction is 1880. The home consists of two stories above grade, plus an attic space and a basement. The home is approximately 924 square feet in plan. The home is wood framed construction. The basement is constructed from a mix of granite rubble and brick masonry. The basement has a concrete slab floor. The roof is covered with asphalt shingles, age unknown.

The overall condition of the home is poor. The exterior wood siding is in a state of decay, with areas of splitting, missing clapboards and rotted trim. The foundation is failing, has cracks and shows signs of lateral and vertical movement. The framing of both floors exhibits significant deflection and settlement. Settlement is evident in the exterior and interior doors, and windows that are out of plumb and no longer close properly. The roof framing is drastically undersized and exhibits signs of deflection and overload.

Based on my observations, the home is in poor structural condition and is not a suitable candidate for renovation. I recommend demolition of the home structure and foundation. I recommend a replacement home be constructed from the foundation up.

Thank you for the opportunity to be of service to you in this matter. If you need additional assistance, please contact me at anytime.
Sincerely,



Bruce W. MacLeod, PE, MASCE



Photo #1 view of exterior of building



Photo #2 close up view of exterior showing foundation



Photo #3 view of interior



Photo #4 of Attic space

Att. 8



From Portland Historic Resources Inventory

WILLIAM LINDSAY HOUSE – 34 SPRUCE STREET

A small three bay, one and a half story dwelling, erected in 1841, possibly as in-fill. This building may have originally served as a carriage or guest house and converted to a permanent dwelling. While in the Greek Revival style, with cornice returns atop broad cornerboards and simple entablatures, the roof shape is almost certainly not original. The building is clad in clapboards with modern sash and window surrounds. The door also appears to be a shorter modern replacement. There is no 1924 Assessment photograph for comparison.

approval by the council.

(o) To provide comment, as appropriate, to the planning board and/or city council on matters pertaining to historic preservation in Portland.

(p) To confer recognition upon the owners of landmarks or properties, sites, structures or objects within districts by means of certificates, plaques or markers.

(q) To assist the planning board in the development of a preservation component in the comprehensive plan of the City of Portland.

(r) To periodically review this Code and to make recommendations to the planning board concerning any amendments appropriate for the protection and continued use of landmarks or properties, sites, structures or objects within districts.

(s) To annually report to the council with respect to the following matters:

1. Survey work in progress or completed;

2. The number of projects reviewed (by type);

3. How many certificates of each type were issued.

(Ord. No. 235-90, 2-26-90; Ord. No. 165-08/09, 3-16-09)

DIVISION 3. CATEGORIES AND CRITERIA FOR DESIGNATION

Sec. 14-610. Minimum criteria for designation.

(a) The historic preservation board shall limit its consideration to the following criteria in making a determination on a proposed nomination of an area, site, structure or object for designation by ordinance as a landmark or district:

1. Its value as a significant example of the cultural, historic, architectural, archeological or related aspect of the heritage of the City of Portland, State of Maine, New England region, or the United States;

2. Its location as a site of a significant historic or prehistoric event or activity which may have taken place within or which involved the use of any existing structure on the property;

3. Its identification with a person or persons who significantly contributed to the cultural, historic, architectural, archeological or related aspect of the development of the City of Portland, State of Maine, New England region, or the United States;

4. Its exemplification of a significant architectural type, style or design distinguished by innovation, rarity, uniqueness or overall quality of design, detail, materials or craftsmanship;

5. Its identification as the work of an architect, designer, engineer or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States; or

6. Its representation of a significant cultural, historic, architectural, archeological or related theme expressed through distinctive areas, sites, structures or objects that may or may not be contiguous.

(b) In the case of a nominated historic district, the historic preservation board shall also determine whether a substantial number of the properties, sites, structures or objects have a high degree of cultural, historic, architectural or archeological significance and integrity, many of which may qualify as landmarks, and which may also have within its boundaries other properties, sites, structures or objects which, while not of such cultural, historic, architectural or archeological significance to qualify as landmarks, nevertheless contribute to the overall visual characteristics of the significant properties, sites, structures or objects located within it.

(c) In the case of a nominated historic landscape district, the historic preservation board shall also consider its significance as a geologic, natural or man-made landscape feature associated with the development, heritage or culture of the City of Portland, State of Maine, New England region, or the United States.

(d) The planning board and council shall apply the criteria of subsections (a), (b) and (c) but shall also consider the effect of such designation on other aspects of the comprehensive plan of the city.
(Ord. No. 235-90, 2-26-90)

Sec. 14-611. Integrity of landmarks and historic districts.

Any area, structure or object that meets the criteria in section 14-610 must also have sufficient integrity of location, design, condition, materials and workmanship to make it worthy of preservation or restoration.
(Ord. No. 235-90, 2-26-90)

Sec. 14-612. Designation of historic landscape districts.

An historic landscape district may be nominated and considered for designation only if the entire area of the district is owned by a unit of federal, state or local government, or any combination of such ownership.
(Ord. No. 235-90, 2-26-90; Ord. No. 220-93, § 2, 5-17-93)

Sec. 14-613. Reserved.

DIVISION 4. NOMINATION, CONSIDERATION AND DESIGNATION

Sec. 14-614. Procedure.

The provisions of this division shall govern the nomination, consideration and designation of landmarks and districts.
(Ord. No. 235-90, 2-26-90)

Sec. 14-615. Initiation of nomination.

(a) Nomination of an area, site, structure or object for consideration of designation as a landmark, historic district or historic landscape district shall be submitted to the department, on a form provided by the department, by the following:

1. Any two (2) members of the historic preservation board on their own initiative, by written notice to the department; or

2. By written petition of any owner, in the case of a

landmark and/or of all properties adjacent thereto prior to council action. The notice shall include a copy of the resolution or designation ordinance and design guidelines.

(d) Notice of council action to the same persons shall be sent within ten business days following the council action. A copy of each designation ordinance and design guidelines shall be sent to the planning board, the historic preservation board and the department. A complete schedule of all landmarks and districts, including design guidelines and a listing of landmark and contributing structures, shall be maintained by the department as part of the design manual and shall be available for public inspection and copying during ordinary business hours.
(Ord. No. 235-90, 2-26-90; Ord. No. 165-08/09, 3-16-09)

Sec. 14-623. Amendment and rescission of designation.

Amendment and rescission of any designation shall be upon the request of a person or persons authorized to nominate the property or properties affected, or upon request of the council, and shall follow the procedure set forth in division 4 for designation. The council may rescind or amend a designation only after all of these procedures have been followed. The standards for rescission or amendment applied by the committee, planning board and council shall be limited to those provided in section 14-610(a) and section 14-611. Amendments may include refinement or correction of design guidelines, maps, and other parts of any designation ordinance.
(Ord. No. 235-90, 2-26-90)

Sec. 14-624.- Sec. 14-627. Reserved.

***Editor's note** – Order No. 197-03/04 adopted 9/8/04, repealed §14-625 Projects of Special Merit in its entirety.

Sec. 14-628. Time limits.

(a) Any time limit specified for any step in the process for nomination or designation of a landmark may be extended with the consent of the property owner.

(b) Any time limit specified for any step in the process for nomination or designation of a district may be extended where at least ten (10) percent of the owners of property within the

WEST END DEVELOPMENT PLANNED

The proposed four-story building would include apartments and shops at Pine and Brackett streets.

By RANDY BILLINGS
Staff Writer

PORTLAND — A developer wants to build a mixed-use project on two vacant properties in the West End that would include 39 market-rate apartments.

Redfern Properties of Portland is proposing the four-story building, totaling 45,844 square feet, at the corner of Pine and Brackett streets. The first floor would host retail stores and a 31-space parking garage, while the upper three floors would be apartments.

Before the development – projected to cost $5 million to $10 million – can move forward for site plan approval, Redfern Properties will need permission from the city's Historic Preservation Board to remove two vacant buildings that are in disrepair.

The board will meet Wednesday to consider the developer's request to demolish the 1850s Cape at 183 Brackett St. and the single-story commercial building from 1900 in front of it.

"The buildings are dilapidated and the parking lot is an eyesore," said Jonathan Culley, owner of Redfern Properties. "Our (project) design is innovative and progressive. It will be an interesting discussion with the Historic Preservation Board on how progressive they're willing to let us go."

Culley said he and his partner, Paul Peck, have two parcels, totaling 17,000 square feet, under contract to buy. The purchase is contingent on the necessary approvals for the project, which is in a neighborhood business zone where such development is encouraged.

The site is in Portland's West End Historic District so the planned demolition is subject to approval from the Historic Preservation Board, which also must ensure that the project's design fits into the fabric of the neighborhood.

The property, two blocks west of Longfellow Square, represents a "significant gateway" to the West End and Western Promenade neighborhoods, said Deb Andrews, the city's Historic Preservation Program manager.

The Cape at 183 Brackett St. is considered a contributing piece of architecture in the historic West End, so its demolition requires special approval. The commercial building is considered noncontributing.

Andrews said in a memo that those designations "are somewhat puzzling." She said the board has the authority to remove the Cape from the contributing list, which would clear the way for demolition, or add

Please see **WEST END,** Page B4



Derek Davis/Staff Photographer

A crosswalk leads to the site at the corner of Pine and Brackett streets where a developer would put 39 market-rate apartments. Two old buildings would have to come down.

WEST END

Continued from **Page B1**

the commercial building to the contributing list, which would protect it.

"Staff is not necessarily advocating for this, but the board's authority should be noted," Andrews said.

Culley said he is just starting to seek residents' feedback about the development proposal.

While several residents didn't know about the proposal Monday, they were encouraged to hear about a plan to develop the corner. The corner has been vacant for all of the 20 years that Jo Coyne has lived in the neighborhood.

"It seems like a good space to have development," said Coyne, who is reserving judgment on the proposal until she learns more. "I'd (like) to see something that is going to be on the tax rolls and contributing to the city."

Also cautiously optimistic is Ethan Strimling, executive director of LearningWorks, whose office overlooks the lots.

He said the corner in its current condition does not contribute to the area.

"The two houses next to us are only housing feral cats," Strimling said. "It would be great to have someone utilize that area."

The proposed development's retail space would run along Pine Street and wrap around Brackett Street.

Culley said he is optimistic about his company's chances of building and renting out what he believes will be Portland's first fully market-rate housing project in decades – one that would be certified for energy efficiency.

The proximity to one of Portland's largest employers – Maine Medical Center – and the arts- and restaurant-packed downtown make it a prime location for new housing, he said.

"It's a challenging deal," Culley said, "but we think the rental market in Portland is good and interest rates are low, so we hope it is a good time to be undertaking this project."



Courtesy of Ryan Senatore Architecture

An architect's rendering shows a four-story, mixed-use building Redfern Properties of Portland is proposing in the West End. Approvals are being sought, notably from the city's Historic Preservation Board for demolition of a 1850s Cape Cod at 183 Brackett St.

Staff Writer Randy Billings can be contacted at 791-6346 or at:
rbillings@mainetoday.com
Twitter: @randybillings

HP Public Comment - 142 Free Street: Haven't we venerated John Calvin Stevens ENOUGH?

0 views

Assigned to me

George Rheault <george.rheault@gmail.com>
to HIstoric Preservation

11:07 AM (24 minutes ago)

See attachment.

I am pretty sure that the legacy of John Calvin Stevens and his contributions to Portland's physical development (as well as his much more checkered involvement in its social and political evolution) will not rise or fall based on the continuing existence of 142 Free Street.

How many totems from this one man does the City of Portland need to tell his story?

Why should the dead hand of the past once again serve to suffocate the energy and creativity of our community's present and future?



The shingle-style cottage at 52 Bowdoin St. in Portland that architect John Calvin Stevens called home for nearly 30 years. ***(Billings photo)***

John Calvin Stevens

from page 1

Portland."

So much so that next week, city leaders will declare Oct. 8 John Calvin Stevens Day.

One of Maine's most famous architects, Stevens, who was born Oct. 8, 1855, and died Jan. 25, 1940, designed more than 300 buildings on Portland's peninsula alone and dozens more in the surrounding neighborhoods and islands.

Stevens made a name for himself by mastering the shingle-style cottage that has come to symbolize coastal life in New England. Later, he mastered the Georgian, colonial-style homes made of brick. To see both, one only needs to spend a little time on Bowdoin Street, which has shingle-style cottages on one side of the street and brick revival homes on the other.

One of those homes, 52 Bowdoin St., was Stevens' home for nearly 30 years, Shettleworth said.

Although Stevens is known mostly for his residential designs, Shettleworth said he is also known for his civic, commercial and religious architecture. He was an associate architect commissioned to help design and build Portland City Hall, and he designed State Street Church on High Street and the Nathan Clifford Elementary School on Falmouth Street.

But Shettleworth said Stevens is known not only for his building designs, but for the length of his career.

Stevens started his career when he was 18 and worked right up to his death. "He was involved in architecture for a 70-year period," Shettleworth said.

Next week's proclamation, which will be read at noon on the front steps of Portland City Hall, is the last event of a year-long celebration for the architectural firm Stevens created 125 years ago.

SMRT, formerly Stevens Morton Rose & Thompson, was founded in 1884 and is based on Fore Street. Although it is no longer family owned, his great grandson is still involved in its day-to-day operations at the age of 71.

"It's been a pretty varied practice over the years," SMRT chairman and former company President Paul Stevens said. "In many ways, it isn't really a lot different."

The company experienced most of its growth in the 1980s, he said, when it went from having only 10 employees to about 75. During that time, SMRT ceased designing residences and concentrated solely commercial, civic and health-care buildings.

But when Paul Stevens, a fourth-generation architect, steps down from the company, it will be the end of an era, since there is no fifth-generation Stevens waiting to take over the practice. That's why next week's ceremony, which will also include a Congressional Record of Recognition from a representative of U.S. Sen. Olympia Snowe's office, is so special to him.

"I'm the end," he said. "I've very proud of what firm has accomplished. It's very satisfying to be recognized."

Randy Billings can be reached at 781-3661 ext. 100 or rbillings@theforecaster.net

the Portland FORECASTER

September 30, 2009 | News of The City of Portland | Vol. 23, No. 39

Fire chief looking at alternative space for fire boat crew

By Kate Bucklin

PORTLAND — The fire chief this week planned to inspect space on Maine Wharf that could provide fire-boat crew quarters at a third of the cost proposed at the Maine State Pier.

Chief Fred LaMontagne said he was contacted by Joe Malone of Malone Commercial Brokers Monday to see if he wanted to look at a 2,000-square-foot office that could be converted into living quarters for firefighters.

"We will be looking at that property, probably today or tomorrow," Lamontagne said Tuesday.

Maine Wharf is owned by Eric Cianchette and is next to the Maine State Pier, where the fire boat is docked.

"This could give them some flexibility," Malone said.

The City Council in October is expected to decide whether to spend $1.8 million in Capital Improvement Project funds to build new fire-boat crew quarters at the Casco Bay Garage. Some councilors have spoken out against the proposal, saying it is too costly.

The current quarters for firefighters assigned to the fire boat are inside the Casco Bay Garage and are small (400 square feet) and damp, causing mold and

See page 26

Literacy Volunteers seeks sponsors to stay afloat

By Randy Billings

PORTLAND — Since 1973, Literacy Volunteers of Greater Portland has been providing free tutoring to residents who need help reading, writing and speaking English.

But financial difficulties could doom the organization by the end of the year.

Like some other nonprofits, the future of Literacy Volunteers, whose operating budget is entirely funded by foundations and donations, is in jeopardy because prospective donors are tightening their belts.

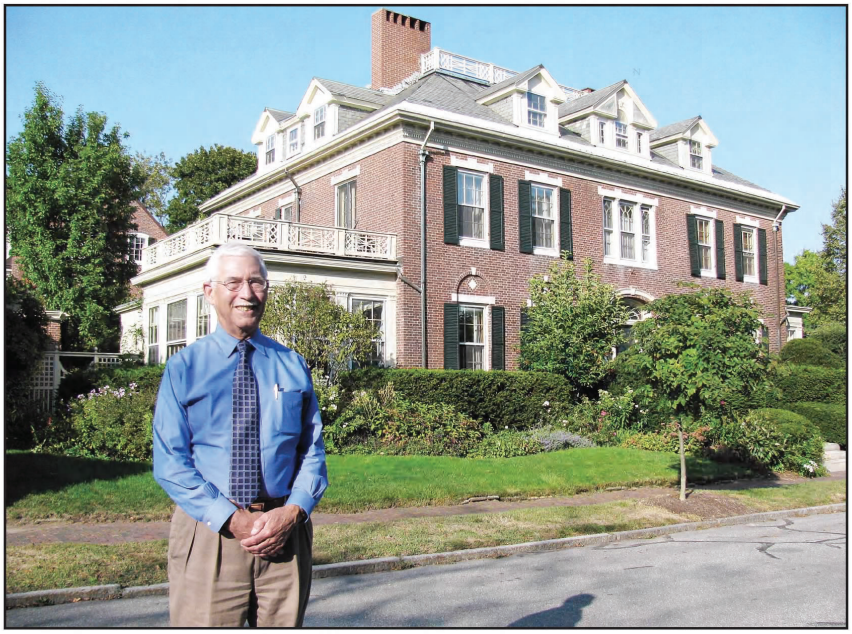
"We're on the brink," Executive Director Phyllis de Fano said. "There's no question about it."

De Fano, who is the only paid full-time staffer in the office at 142 High St., said the nonprofit has been dipping into its reserve account to meet the demands of its annual budget of $65,000. There is currently enough money to continue operating until December, she said.

De Fano said Literacy Volunteers is also considering merging with another organization in an effort to reduce costs, but would not identify the organization.

The economic downturn is forcing many donors and foundations to reduce the what they give to groups like Literacy Volunteers, which is accredited by Proliteracy America. De Fano said the group has survived in recent years by soliciting funding from a wider base of foundations, but the nonprofit is

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Paul Stevens, a fourth-generation architect, stands in front of the Richard Webb house at 29 Bowdoin St. in Portland's West End. The building is one of the best examples of work by his great-grandfather, John Calvin Stevens. ***(Billings photo)***

'An indelible mark'

City to honor the legacy of John Calvin Stevens

By Randy Billings

PORTLAND — If you have spent any amount of time in Portland, or almost anywhere on the coast of New England, chances are you've seen the work of John Calvin Stevens.

Take a walk through the Old Port or a leisurely stroll through the streets of the West End, lined with magnificent towering homes, and you will find his work. Spend a weekend in a summer cottage in Cape Elizabeth or on the Casco Bay islands and you will experience him first-hand.

"He's everywhere," State Historian Earle Shettleworth Jr. said. "He's left an indelible mark on the city of

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Chief promises Bayside more access to police

By Kate Bucklin

PORTLAND — Bayside residents frustrated over what they say is an increase in alcohol-fueled crimes in their neighborhood met with local law enforcement authorities and Preble Street Resource Center officials Tuesday to figure out how to curb the activity.

That behavior includes public drinking, public urinating and defecating, passing out in the street, vomiting in the street and having sex in public, said community organizer Jeff Goldman, who moderated the meeting at Lost Coin Cafe on Portland Street.

The Bayside Neighborhood Watch committee developed a list of recommendations for the Police Department, the Cumberland County district attorney's office, Preble Street and local sellers of alcohol. The recommendations point to changes each could make to help reduce "nuisance crimes."

Police Chief James Craig called Tuesday's meeting, and

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West End residents unhappy with community policing station

By Randy Billings

PORTLAND — Concerned about a perceived rise in crime, the West End Neighborhood Association is collecting signatures to petition city and school leaders to increase the visibility of the Community Policing Center.

It is an effort the district's city councilor, David Marshall, said he finds surprising.

The petition being circulated throughout the West End calls on city leaders to put the West End Community Policing Station at the Reiche Community Center, at 166 Brackett St., by Nov. 15. If that site is not feasible, residents want it located in another, more visible location nearby by Dec. 1.

The policing station is currently housed in Harbor Terrace, a group housing complex at 284 Danforth St. operated by the Portland Housing Authority. It was moved there from a location on Danforth Street several years ago as a cost-cutting measure. City Hall could not immediately

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INSIDE

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Portland shocks Cheverus in dominating fashion
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Series of reviews scheduled for Waynflete proposal
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Fall FITNESS
Special advertising section
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PMA new design 0 views



Rob Neal <rtneal@gmail.com> 11:35 AM (3 minutes ago)
to hp@portlandmaine.gov

The issue is really very simple. Does Portland want to be a city that focuses on the past or on what's best for the future and coming generations?

Historic preservation is certainly important, but not in all cases of potential preservation.

It comes down to this choice: What is more important, being able to say "see how we once looked.... in the past", or "this is how we want the city to look now and in the future".....

Portland is a unique and vibrant small city. We have lots of historic preservation and most of that is good for us. The potential for the new PMA, however, is enormous and would be even more of a cornerstone / foundation of what Portland is about both literally (the physical structure), and symbolically in what statement as a city we are making about our city with the PMA.

I live in Yarmouth, but have lived and worked in the greater Portland area since 1988 when I moved here with my family from Atlanta. The greater Portland region and community is a wonderful place to live, work, and raise children. We are world class in many areas and still evolving in others.

Let's not make a backwards statement about Portland by preserving an antiquated structure that is actually not visually appealing anyway, but more importantly represents a more narrow minded past than the more open and progressive minded direction Portland and the surrounding region has been headed for many years.

Let's move forward!!

--
Best Regards,

Rob Neal
www.robnealconsulting.com
207-838-4645

PC14

Rob – Greetings. All good wishes as you head into tomorrow's discussion of the PMA application.

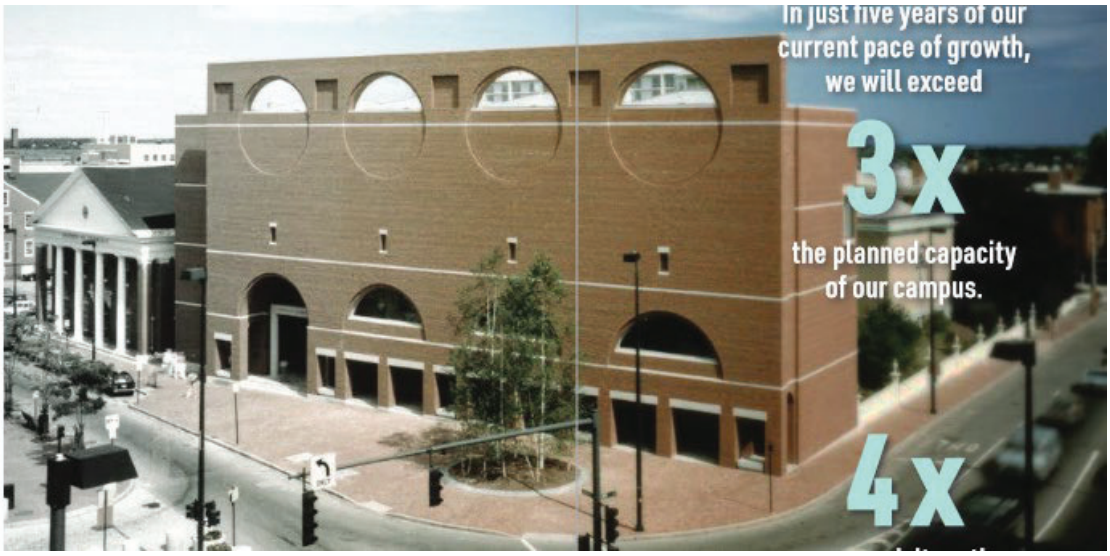
After reviewing the application [much, too much of which is not relevant to the question before the HP Board] seeking redesignation of 142 Free Street as a non-contributing building, based on experience writing, editing and/or reviewing National Register historic district nominations, I conclude 142 Free Street is, indeed, a contributing building in the context of the Commerce Street Historic District.

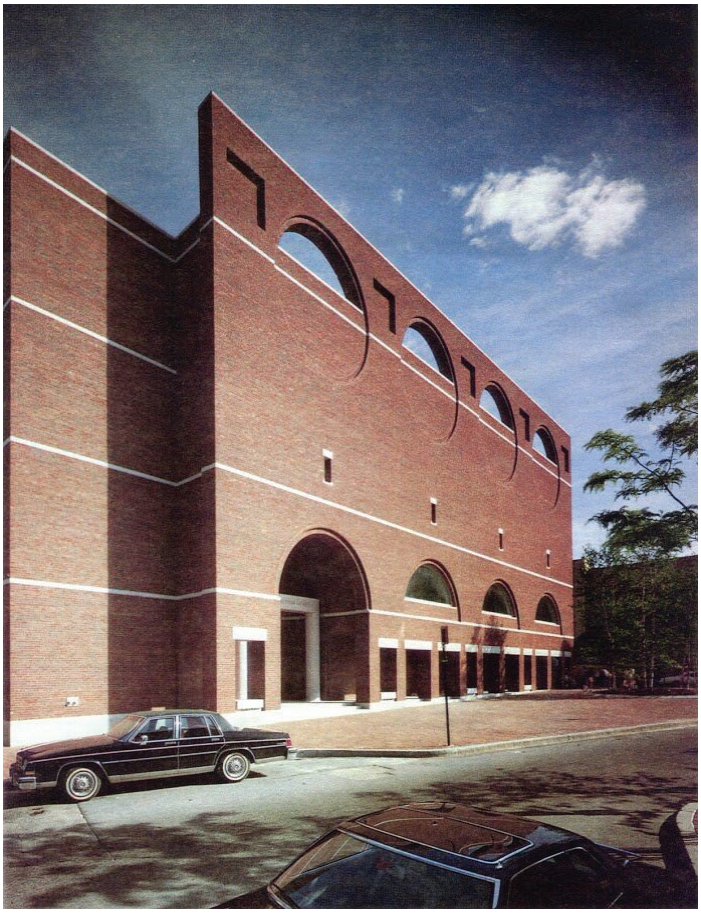
Its 1926 Stevens-designed façade for the Chamber of Commerce has design merit, design integrity and historic significance. Its elegant, history-inflected neoclassicism is very much part of what organizations like the C of C sought in that era – that quintessential era of commerce.
One sees other examples elsewhere in the historic district. And the district includes another superb, Stevens-designed neoclassical building, the 1911 LDM Sweat Memorial Gallery, in the PMA complex itself

A question [see photos attached]: Is the step back of Cobb's Payson Building which shows off the façade of 142 Free Street from Congress Square something the City required? Or was that Cobb's own gesture to a building he admired?

David Chase

The Cobb/Pei Associates PMA building Congress Square elevation steps back, the better to show off the elegant Stevens-designed Chamber of Commerce Building façade of 142 Free Street, keeping that neoclassical building very much part of the visual character of Congress Square.





Former Children's Museum 0 views

Holly <hdmjune@gmail.com> Oct 3, 2023, 7:22:49 PM (13 hours ago)
to hp@portlandmaine.gov

I have been following the "debate" and news concerning the Portland Museum of Art's desire to demolish the beautiful and iconic building on Free Street to put up another building that one can see in any major city in the world.

Speaking as a Maine native, the PMA doesn't need to build an "architecturally significant" building; it already has one at 142 Free Street.

There are only so many older buildings and this building "is Portland". Let's not dilute Portland's charm by turning it into Dallas or Seattle.

If the state historian, Earle Shettleworth, believes in its value what more needs to be said?

I am wondering if this project represents resume enhancement for Mr. Bessire as he appears to be tone deaf and blind to the significance of this building, which is downright odd considering art is tied to history.

Greater Portland Landmarks is absolutely right in their decision.

Holly McKibben, Portland

Don’t demolish! 0 views

Assigned to me

Kathy and Scott <kdillenback@maine.rr.com> 8:05 AM (1 hour ago)

to hp@portlandmaine.gov

The building is old, probably not perfect, but neither is the city of Portland, it seems everyone on the planet is moving here so the place must look good to them. Build the glass box somewhere else - there’s no reason the older museum and the new must be attached. Thanks! Scott Dillenback

On Wed, Oct 4, 2023 at 1:37 AM Rachel Walls <missrachelwalls@gmail.com> wrote:

> Dear Evan,
> I am strongly opposed to allowing the Portland Museum of Art to destroy a historic landmark that is protected. Please do not allow this to happen. I cannot attend the meeting on Wednesday but want you to know there are many of us who value protecting historic buildings in Portland. Please don't allow what happened to Union Station to happen on Congress/Free St. Thank you for your consideration and efforts.
> Rachel A. Walls
> Portland High School Class of 1995

PMA Expansion 0 views



Gregory Sundik <gsundik@gmail.com> 9:17 AM (22 minutes ago)
to hp@portlandmaine.gov

Dear HP Members,

As a Portland native and person with experience in historic preservation, I strongly urge you to not allow the PMA to make any changes, only preservation improvements to the exterior of the old Children's Museum next door.

The inside of the building was heavily modified by the CM, this can be adapted and used by he PMA much as they did the McLellan house.

The building next door is part of the historic fabric of that part of our city. Any argument that says it not fitting with the character of the area is incorrect.

It will be a sad day and it will echo the demolishing of Union Station if you allow the PMA to modify or demolish the facade of the neighboring building.

Feel free to contact me if you have any questions or concerns.

Gregory Sundik
207-450-2509

Former Victoria Mansion PR and Events Director and Board Member

October 4, 2023

To Whom it May Concern:

I'm writing to express my confidence in the leadership at the Portland Museum of Art (PMA) as they work to significantly expand the organization's reach and offerings in the form of an expanded home on Free Street.

In late 2019, the PMA purchased 142 Free Street from the Children's Museum & Theatre of Maine (CMTM), our home for nearly three decades. The sale of the building enabled us to break ground on our new state-of-the-art facility at Thompson's Point. It was also the culmination of years of work by the board and staff at CMTM at the time to identify a larger location for our organization, as we grew rapidly.

In early research, CMTM strongly considered remaining at 142 Free Street and adding to the existing structure. However, studies and financial models showed that it was not a viable option given the significant updates needed to the building in both operating systems and physical accessibility, as well as a lack of opportunity to greatly expand our footprint. I should note that when CMTM moved locations, we donated, sold or took with us the majority of the beloved exhibits that were housed inside. The few relics that remain in the building were not salvageable. As a result of our move, we now attract over 200,000 visitors a year to our new space - double the visitation we were ever able to host at Free Street.

The PMA has played a significant role in creating the vibrant arts and culture community that exists in Portland today. They are the anchor of the Arts District, and their expansion will undoubtedly bring significantly more visitors from near and far to enjoy all the amenities our city has to offer. I am fully in support of the PMA's decision making and look forward to spending time in their new facility when it is complete.

Sincerely,

Julie Butcher Pezzino
Executive Director
207.828.1234 x223
julie@kitetails.org

On Wed, Oct 4, 2023 at 11:04 AM Francesca Galluccio-Steele <cesca.gs@gmail.com> wrote:

> Mr. Evans,
>
> Please distribute my comment below to members of the board for this evening's meeting. Many thanks!
> >
> > Portland has a long and honorable history of historic preservation. The sense of place that such preservation has created helps bind our city into a strong community. It makes no sense to me that the PMA which says it wishes to promote community, chooses to ignore a decades old community decision and actually destroy a well known element of the Congress Square city fabric!
> >
> > As a member of the Portland community, it is the PMA's responsibility to respect the historic district by preserving the exterior of the former Children's Museum. With a little creativity that historic building can be incorporated in the final design. The new building would then be a fuller reflection of the community by representing Wabanaki culture and more recent periods of our city's history.
> >
> > Francesca Galluccio-Steele
> 22 Clifford Street

Public Comment on Congress Street Historic District, 142 Free Street: 0 views

Karen Snyder <karsny@yahoo.com>
to HIstoric Preservation

12:35 PM (1 hour ago)

Dear Historic Preservation Board Members,

I find the PMA's request quite perplexing and disappointing for the following concerning reasons:

- If PMA is so concerned about saving and preserving art cultural history, why do they have such disdain in saving and preserving Portland's building history?
- PMA's Creative director, Graeme Kennedy, said they want to demolish the building in order to "build for their communities". Portland Museum of Art seeks city approval to tear down former Children's Museum (pressherald.com). Who exactly is the PMA "community" if the Portland residents want to save the building?
- Another reason given was there was so many changes to the structure that it's diminished its historical significance. This is a common excuse given by developers as well to demolish and throw in landfills which is environmentally not sustainable even when it is more cost effective to rehabilitate. I know that rehabilitating my two 1850 buildings was way cheaper than demolishing and building new which makes the rental units more affordable.
- I am also concerned about this constant attack on Historic Districts in Portland where only 8% of Portland area is in Historic Districts with one of the highest density in residential population yet the developers and the wealthy constantly attack this 8% of Portland to demolish as much as possible.

It is also disappointing the changes that I have seen PMA undergo through the years from an inviting place where local residents could go to learn art history about Maine artists but to now an elitist enclave where the employees had to unionize.

I encourage the HP board to keep the building as a conforming structure.

Regards,
Karen Snyder
District 1

142 Free Street 0 views



Curt Sachs <sachsarch@gmail.com> 2:34 PM (21 minutes ago)
to hp@portlandmaine.gov, David Sachs

As a practicing preservation architect for the last 35 years, I am writing to discourage the classification of the referenced building as"contributing" in any sense. Although its initial use and architecture are noteworthy, subsequent renovations render the building as "not noteworthy". Its style is gone, though some architectural components are perhaps worth keeping. I support the notion of selective demolition of said structure. Key elements such as the columns might be re-introduced in an exterior courtyard adjacent to the current and/or future PMA buildings. A more sensitive design than Charles Moore's famed postmodern Piazza D'Italia should be embraced and encouraged by the Portland Preservation Department. There lies a compromise the City can offer and still allow PMA's vital expansion. We all know of the demolition mistakes we Portlanders still endure.

As a member of Portland's architecture community, I respectfully respect the request of PMA, with conditional and required re-use caveat so as to retain elements of a once valued building.

Respectfully submitted.

M. Curt Sachs. RA
Studio Curt Sachs

sachsarch@gmail.com
207.615.6628
12 Lewis Street
Portland, Maine 04102

Maine Licensed Architect

142 Free Street 0 views

Assigned to me

Rosanne Griffin <rgriffin2@maine.rr.com> 2:54 PM (1 hour ago)
to hp@portlandmaine.gov

Hello board,
142 Free Street is a historic beautiful building in Portland. It was designated historic because it is!
Should a powerful museum with connections be allowed to change the status because they want to tear it down?
Of course not!
Let's not allow another disaster like the Libby building they already tore down to build the main PMA building.
142 Free street as is will be beautiful as part of the museum, just like the Mclellan house is now also.
Don't be pushed around by the Portland museum of art please.
I know you all know this buildings historic value!
It's one of a kind with no other building like it.
Please save the old Portland that is rapidly changing.

Rosanne Griffin
Born in Portland maine.
Building owner in portland maine.

Rosanne Griffin <rgriffin2@maine.rr.com> 3:08 PM (1 hour ago)
to hp@portlandmaine.gov

Added my legal address!
And agenda item!

> On Oct 23, 2023, at 2:54 PM, Rosanne Griffin <rgriffin2@maine.rr.com> wrote:
>
Agenda item: 142 Free st.

> Hello board,

Legal address:
23 Deer Run Rd
North Yarmouth, ME 04097

really? 0 views

Assigned to me

jim dougherty <jdougherty101@gmail.com> Oct 23, 2023, 5:56:17 PM (16 hours ago)
to hp@portlandmaine.gov

i strongly object to destroying the former chamber of commerce building. just think of the buildings now gone from the the city of portland. too many! let's not take more of our history.
diane bartholomew
freeport maine

Reclassifying of the former Chamber of Commerce Building. 0 views

Assigned to me

Ted Pitas <tpitas58@gmail.com> Oct 23, 2023, 11:22:58 PM (10 hours ago)
to hp@portlandmaine.gov

To the HP board:

I think the PMA has lost their way on this. This building is art in itself. They can place their exhibits in the building with little cost to the museum itself. If they don't have enough space, they can just buy the parking lot next to the Chamber building and request a building permit for whatever they want build there. They will save on demolition costs this way.

Ted Pitas
American Carpentry Service

142 Free Street 0 views

Assigned to me

Dan Skwire <dan.skwire@milliman.com>
to hp@portlandmaine.gov

8:58 AM (1 hour ago)

I am writing to express my concern with the request by the Portland Museum of Art to reclassify the former Chamber of Commerce building as a non-contributing structure so that it can be demolished as part of the PMA's expansion plan. I strongly oppose this request.

I am a long-time Portland resident who lives in the West End and works in the Old Port. We are exceptionally fortunate in Portland that so much of the city's history survives in the real and tangible forms of its historic buildings. These buildings are a key element of our city's identity and they are a key reason that so many people wish to live and visit here. The loss of any historic building is a tragedy—is there anyone here who wouldn't wish to bring back Union Station, whose demolition was one of the inspirations for the historic preservation movement in Portland? The loss of 142 Free Street would be particularly tragic because it is so unnecessary.

The building is an interesting and important one, originally constructed as a theater and later functioning as a church and a museum, among other roles. Its distinctive temple front is instantly recognizable, and has been for over 200 years. I am a member and a supporter of the PMA, and I commend its objective of growing its presence in the city. But to do so at the expense of a distinctive, contributing historic structure is simply irresponsible. Like all of us in Portland, the PMA benefits from the city's historic fabric—it is already the steward of the Winslow Homer studio, the McClellan-Sweat House, the Clapp house, and others. Any future expansion should be done in a manner that provides equal respect and consideration for the Chamber of Commerce Building at 142 Free Stree.

Daniel D. Skwire

10 Grayhurst Park

Portland, Maine 04102

PC27

Agenda Item 142 Free Street 0 views

Patti Shaw <pshaw@maine.rr.com>
to hp@portlandmaine.gov

10:31 AM (1 hour ago)

Good morning,

I am writing to encourage you to preserve 142 Free Street. I understand the museum's desire to expand, the arguement it has been modified from its original construction, however, it represents a time, architectural style, and historical marker for the city of Portland.

Although I no longer own property in Portland, I did own a building,
165-67 Congress , designed and built byF.Fawcett/J.C.Stevens, which had been modified over the years , but its presence on Congress Street adds to the street's charm and an historic era. I worked very hard to maintain the building. Although the new owner is much less concerned with the building, it remains and historic marker. (It actually was the home of the first black bishop, James A. Healey, for a period of time.)

For whatever reason, Portland leaders are allowing the destruction of the beauty, the architectural, history, and the ambience of Portland to disappear. Soon, if this trend continues, the Portland that has brought so many new residents will be no more. Beautiful old buildings replaced with modern square structures as one sees on a walk around Munjoy Hill.

Every generation has to deal with architectural change, however, the city of Portland is very special. To allow yet historic building in the center of Portland to be removed is again destroying the very thread that has made Portland such a wonderful city to visit and reside.

NO to the demolition of 142 Free Street.

By the way, there is a reason why so many European cities destroyed during World War II rebuilt exact replicas of the buildings destroyed. Their beauty enhances their cities.

Regards,
Patricia Shaw
309 Black Point Rd
Scarborough, Me

PLEASE DONT' LET THE PMA TEAR DOWN A HISTORIC BUILDING

0 views

Assigned to me



C/S Gray <gray2914@gmail.com> Oct 24, 2023, 3:29:27 PM (yesterday)

to hp@portlandmaine.gov

I am a Portland native, and a local tour guide. One of the great joys for locals and visitors alike is seeing all of the old historic buildings in town - and learning about their history and significance through the years.

Please keep it that way. Please do not allow PMA to tear down the historic Chamber of Commerce Building.

Sure, it's cheaper and easier to start from scratch with an empty lot.... but at what cost???

Christine Gray

142 free street

0 views

Assigned to me

Jen DeRose <jenlderose@gmail.com> Oct 24, 2023, 8:44:29 PM (yesterday)

to hp@portlandmaine.gov

Hello:

Please do not demolish 142 Free Street. While I have high hopes for a new design for the museum, I am also hopeful that we can find a plan that works around this historic building. We have seen too many historic building lost to what is considered progress — the Franklin Arterial, Union station — and with it, the town's sense of place and history.

What is left of Portland's historic architecture is one of the city's very best qualities—it is what draws people here—and is one of the reasons this city is thriving today. Let's work to maintain that.

Thank you,
J. DeRose
93 pine street

142 Free Street

0 views

Assigned to me

Miles Parker <milesparker26@icloud.com>
to hp@portlandmaine.gov

Oct 25, 2023, 3:15:42 AM (yesterday)

The Chamber of Commerce Building is such a beautiful and enduring part of the Congress Square cityscape that it would be heartbreaking to lose it to PMA's expansion plans.

Reclassifying a building's status that leads to its demolition sets a very dangerous precedent for Portland's architectural heritage. This impressive temple-like building has been charmingly peeking out of the corner of a major city crossroads for 200 years. The structure's association with John Calvin Stevens only enriches its significance

I love Portland. I'm a member of the Portland Museum of Art who supports their commitment to our city but not at the expense of losing the Chamber of Commerce Building.

Don't tear it down!

Sincerely,
Miles Parker
Pariserstr 14
81669 Munich, Germany

Oct 25, 2023, 9:52:36 AM (yesterday)

kathleen casasa <kmcasasa@gmail.com>
to hp@portlandmaine.gov

To Whom It May Concern,
I am writing to express concern about the possible demolition of the building at 142 Free St., formerly the Chamber of Commerce building. This is a stunning building and adds much to character of Portland. I have lived in Portland all my life and have seen the many changes over time. Given all the building on the peninsula most of which is not value added visually to our city it would be ashame to allow this building to be demolished and further impact what makes Portland unique. I hope you will not allow this to happen.
Thank you,
Kathleen Casasa
514 Capisic St.
Portland, Me.

PC32

124 Free Street

0 views

Assigned to me

Eric Handley <ewhcom@gmail.com>
to hp@portlandmaine.gov

Oct 25, 2023, 12:50:34 PM (23 hours ago)

I would like to say that reclassifying 124 Free Street for demolition would set a negative precedent to the historical buildings in the city.

I would like to see the PMA developing a campus that incorporates rather than destroying the historic structures in their domain.

Please don't reclassify this building.
Thanks

Eric Handley
56 Wilson Street Unit 4
Portland, ME 04101

save the historic former Chamber of Commerce Building at 142 Free Street 0 views



Colin Vettier <colin.vettier@gmail.com> 11:31 AM (1 hour ago)

to hp@portlandmaine.gov

Hello,

As a Portland resident I would like to share my concerns about the PMA plan to demolish a significan architectural building of the city.

While the PMA's extansion is something I look forward too, I believe that it should not be to the detriment of existing architectural heritage of our city that is already plagued by luxury condos and parking lots.

In particular, this proposal could set a dangerous precedent. If one property owner is allowed to decide that a historic building should be reclassified and demolished because it is in the way to their plans, then the integrity of all the historic districts that benefit Portland in so many ways may be in jeopardy.

Kindly,
Colin VETTIER

Greater Portland Landmarks
Historic character enriches our lives

PO Box 17533, Portland, ME 04112

25 October 2023

RE: CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Chair O'Brien and Members of the Historic Preservation Board,

Greater Portland Landmarks does not oppose the expansion of the Portland Museum of Art's campus and we are enthusiastic about the prospect of another landmark building being added to the museum's collection. We do not believe preservation of the former Chamber of Commerce Building and the introduction of a contemporary landmark are mutually exclusive.

As we addressed in our statement for the October workshop, Landmarks strongly believes that the former Chamber of Commerce Building clearly meets the criteria for designation as a contributing structure, both in terms of its architectural, historic, and thematic significance within the Congress Street Historic District and its retention of the required level of integrity to its 1926 appearance. The PMA's reclassification request includes a consultant report that focuses largely on interior alterations, which are not under the purview of the Historic Preservation Board, and the early history of the building, rather than the integrity of the building's exterior appearance since its 1926 alteration. The building's exterior is largely unchanged from its appearance in 1926 or from its appearance when it was evaluated for inclusion in the Congress Street Historic District. Greater Portland Landmarks finds no basis in the consultant's report for reclassification of the building as a non-contributing structure.



Image of the former Chamber of Commerce Building during World War II.

While not designated as an individual landmark, the former Chamber of Commerce building, like all contributing buildings, in combination with its neighbors forms the cohesive fabric essential to the

establishment of a historic district. In addition, the former Chamber of Commerce Building meets 4 out of the 6 criteria laid out in ***Subsection 17.4.1.A*** of Portland's Historic Preservation Ordinance. It also meets the criteria laid out in ***Subsection 17.4.1.B.*** and ***Subsection 17.4.2*** of the ordinance**.**

- It is significant to the cultural, historic, architectural heritage of the city.
- It exemplifies a significant architectural style.
- It is the work of an architect whose individual work is significant in the history or development of the City of Portland and the State of Maine.
- As the former home for nearly 60 years of the city's Chamber of Commerce, it expresses and contributes to the theme of the Congress Street Historic District, a cohesive corridor of commercial and civic buildings that are significant for their role in the commercial, social, and architectural development of the city from 1780-1958.
- Although minor alterations have been made to the exterior, it retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its design and reflect its appearance during its use by the Portland Chamber of Commerce.

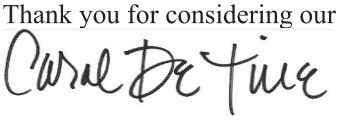
The Portland Museum of Art's collection is significant to the art history and culture of Maine. The largest pieces in the PMA's collection are its five historic buildings. This expansion project is an opportunity to further unify *all* the varied historic buildings on the museum's campus. Greater Portland Landmarks believes that there are options to meet the Museum's worthy goals and to preserve the former Chamber of Commerce Building on Free Street.

Portland has examples of the beneficial results that can occur when demolition plans are reconsidered. One such example occurred in the 1990s when plans to demolish the interior of Portland's Merrill Auditorium were touted as the only means to achieve state-of-the-art acoustics. The demolition plans were resisted by a vocal group of citizens who advocated for a second opinion. Experts capable of improving the concert hall's acoustics while preserving the historic interior were then hired. The result is a beautiful venue that serves as a cultural hub supporting a diverse variety of programming.

Landmarks does not believe the best way forward is the demolition of one of the PMA's largest assets. Instead, we encourage the PMA to work creatively with their architects and with the Historic Preservation Board to seek a Certificate of Appropriateness that incorporates the former Chamber of Commerce building into its campus expansion project.

The vote to reconsider the designation of the former Chamber of Commerce Building is significant not only for this application, but also significant to maintaining the integrity of the ordinance itself and to the preservation of other contributing structures throughout the City's historic districts. We hope that you will apply the criteria of the ordinance in this case as you do in all development projects, large and small, that you consider. In your careful deliberation we urge you to agree that the evidence supports the former Chamber of Commerce building's continued designation as a contributing building within the historic district.

Thank you for considering our views,



Carol De Tine
Vice President of the Board of Trustees
Greater Portland Landmarks

142 Free Street – Historic Preservation Board Hearing, November 2023

Date: 26 October 2023

Re: NOT to demolish the Chamber of Commerce Building (CCB), formally the Children's Museum, per PMA application

I request that the Historic Preservation Board NOT approve the PMA's (Portland Museum of Art) request to demolish the building adjacent to the Payson Building which is in Portland's historic zone for the following reasons:

+ This would set a corrosive precedent to the historic preservation overlay which is clearly written in city code

+ The architect of the Payson (1982) building referenced the CCB in his design process making the CCB significant in understanding the Payson within its urban context

+ The Payson defers to all buildings on the PMA campus by: keeping to scale of the existing buildings, stepping down in its mass to the existing historic buildings, using similar exterior building materials as existing buildings

+ The proposed LEAVER project: dominates the site in scale and height, demolishes the CCB, demolishes parts of the Payson, reorients the entrance away from Congress Square, uses highly contrasting materials to the PMA buildings and surrounding context

+ The proposed project is not 'sustainable design' when compared to utilizing the existing CCB which is in good physical condition, was just used as a museum and has much useful life left

+ The PMA's absurd accusation that because the CCB was renovated in the 1920's during the Jim Crow area in the South, it is "racist" and therefore should be demolished is silly and not worthy of further comment

Thank you,
Robert Kahn,
94 Rackleff St, Portland

Chamber of Commerce Building 0 views

Assigned to me

Dugan Murphy <dugan@duganmurphy.com>
to hp@portlandmaine.gov

Oct 26, 2023, 9:04:20 PM (11 hours ago)

Dear Historic Preservation Board,

I am writing in regards to the Portland Museum of Art's request to reclassify the Chamber of Commerce Building on Free Street to noncontributing within the Congress Street Historic District. I think this request is ridiculous.

This building is over two centuries old with a facade that is well preserved from its redesign a century ago by famed architect John Calvin Stevens. The importance of its presence as part of the historic urban fabric of downtown Congress Street is exactly why all the work was put into researching it and the other contributing structures within that district and getting that district added to Portland's recognized collection of local historic districts. It is exactly why this city decided to adopt a historic preservation ordinance back in 1990. We, as a community, did not put these protections in place, just to have them revoked when a little inconvenient.

The Portland Museum of Art has a lot of property at their disposal. They have been sitting for decades on the amazing, historic Clapp House without using it for anything the public can access. Why not rehabilitate that structure? In 2007 they depleted Portland's woefully small and much-needed affordable housing supply when they demolished the YWCA building on Spring Street. Why not develop that underutilized parking lot and adjacent, unusable green space they put in its place? Why not redesign the interior of the Chamber of Commerce Building, build an addition to it, or pursue any of the many other expansion options available to them currently allowed by law, without going through this bald-faced, bad-faith reclassification process?

The PMA is a creative organization. Please deny this request so they can use that creativity in their ranks to develop an expansion plan that suits their needs *and* the needs of the broader community by preserving the Chamber building.

Dugan Murphy
(he/him)
Resident of the India Street Historic District

142 Free Street 0 views

Assigned to me

William Hall <wpeaks@earthlink.net>
to hp@portlandmaine.gov

Oct 26, 2023, 9:17:36 PM (11 hours ago)

To the members of the Historic Preservation Board:
I appreciated your very good questions and discussion during at the October workshop on the status of 142 Free Street as a contributing structure. For your upcoming public hearing I would like to emphasize just one point from Greater Portland Landmarks' position statement:

- This proposal [to tear down the building] could set a dangerous precedent. If one property owner is allowed to decide that a historic building should be reclassified and demolished because it is in the way of their plans, then the integrity of all the historic districts that benefit Portland in so many ways may be in jeopardy

In addition to being on the Landmarks board, I am a member of the Portland Museum of Art. So I truly admire the PMA's effort to remake its space in a way that takes the museum into the future as a remarkable and exciting public institution.
However, I think it's extremely important to uphold Portland's land use code and reach a decision that is in conformance with the law. 142 Free Street certainly meets key criteria for preservation as a contributing structure. A decision contrary to that, allowing the building to be torn down, risks undermining historic preservation rules that have done so much to make Portland a unique, vibrant, and desirable place to live and visit.
Thank you for your consideration and for your service to the city of Portland.
Bill Hall
317 Pleasant Avenue
Peaks Island
Portland Planning Board member, 2006-2016

PC38

Public Comment: 142 Free Street 0 views

Assigned to me

Dela Murphy @DelaHere <dela@delahere.com> Oct 26, 2023, 9:25:13 PM (11 hours ago)

to hp@portlandmaine.gov

Dear Historic Preservation Board,

I am writing to urge you to maintain the status of 142 Free Street as a Contributing building to the Congress Street Historic District. Designating buildings as such is an intensive and careful process with the intention of celebrating and maintaining a cohesive and historically important streetscape. It's not only inappropriate for an individual, organization, or interest group to lobby or pay to remove a designation to further it's interests, it undermines the integrity of this program and damages our community identity and social goods.

The Portland Museum of Art has every right to expand its campus—and it should!—but I strongly believe that goal can be achieved without razing the former Chamber of Commerce building. In fact, the PMA currently has several underutilized historic buildings on its campus that are unavailable to the public or only partially visioned. Fully utilizing these assets is an opportunity for the museum to celebrate Portland's history and their connection to it without demolition. They also have undeveloped parking areas and green space around their core building and a tremendous amount of creativity and resources at their disposal. A vision is possible that isn't in bad faith.

Thank you for your consideration and for all the work you do!

Warmly,
Dela Murphy
61 India St
India Street Historic District

PC39

142 Free Street, Chamber of Commerce Building 0 views

Assigned to me

Barbara Vestal <vestal@chesterandvestal.com>
to hp@portlandmaine.gov

12:22 AM (8 hours ago)

Chair O'Brien and Historic Preservation Board Members:

I was the chair of the Planning Board in the late 1980s when we worked with a nationally respected consultant, Richard Roddewig, over a couple of years to craft Portland's historic preservation ordinance. He observed that the choices we were making for Portland put us squarely in the middle range of many such ordinances across the nation.

Like these ordinances, we opted to protect not only rare, very special individual "landmark" structures, but also to protect the much more common historic structures that retained their historic integrity and shared a set of character-defining features that contributed to an historic district's unique identity. These were identified as protected "contributing" structures.

An essential part of the value of this type of historic preservation ordinance derives from a mutuality of benefit: a property owner accepts certain regulation of their own property because neighboring owners of similar property are also accepting the same regulation of their property. The sum of the protected historic properties, as a critical mass, has a much greater impact than the individual buildings. The authenticity of place is protected by maintaining the context and protecting the inter-relationships between neighboring buildings throughout the entire district.

It is essential to the integrity of the ordinance that all owners of contributing structures be treated in the same manner, in compliance with the same standards. It is patently unfair for one owner to benefit from its neighbors maintaining the historic context, while at the same time seeking to withdraw from the mutual benefits for its own gain in order to demolish that owner's own historic structure.

In this case, with the Portland Museum of Art (PMA), there can be no claim of surprise about the "contributing" status of the Chamber of Commerce Building. It unquestionably met the criteria and was designated as "contributing" at the time that the City Council approved the designation of the Congress Street Historic District in 2009. This fact was well-known to PMA.

To me, the surprise is that PMA apparently opted to ignore that designation and opted to proceed with a design competition in which they left out the crucial information that the Chamber of Commerce Building was designated as a "contributing" structure in the Congress Street Historic District. Had that information been given to the design teams, it seems like multiple options for a museum expansion could have been (and still could be) productively explored that would not have included demolition of the Chamber of Commerce Building. The range of possible options include incorporation of the Chamber of Commerce Building into the expansion plans in some fashion, or expansion onto adjacent vacant land already owned by the PMA, or acquisition of adjacent vacant land for the expansion.

It is not the job of this Board, nor the job of the City, to determine the expansion strategy for PMA. They appear to have many options for proceeding within the current regulations.

But it is the job of this Board, and the City, to protect the integrity of Portland's Historic Preservation Ordinance, and to see that all owners of similarly situated historic properties receive the same carefully considered, fair and consistent treatment in compliance with the ordinance. The decision should not turn on the identity of the applicant; procedural due process requires that the decision makers focus on the historic structure in question, the Congress Street Historic District, and the Historic Preservation Ordinance. The Chamber of Commerce building is clearly a "contributing" building under the ordinance. That designation should not be reversed, even if the applicant is the PMA.

Regards,

Barbara Vestal
7 Fore Street
Portland, Maine 04101

CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

PC40

0 views

Jack Vreeland <jackvreeland@gmail.com>
to hp@portlandmaine.gov

8:43 AM (2 minutes ago)

Jack Vreeland
447 Deering Avenue
Portland, ME 04103

October 27, 2023

RE: CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Dear Chair O'Brien and Members of the Historic Preservation Board,

The Portland Museum of Art is a tremendous asset to our community. As a member, I applaud the museum's intentions to add much needed space to make the museum more inclusive and diverse -- and to make a dramatic architectural statement.

142 Free Street (the former Chamber of Commerce Building) is undoubtably protected as a "Contributing Structure" as documented by Greater Portland Landmarks and supported by Earle G. Shettleworth, Jr. and Scott Hanson at the prior workshop.

As an institution that celebrates creativity, the PMA could have made integrating 142 Free Street a part of their initial RFP. There are so many brilliant examples around the world of museums integrating both modern and historic structures in wonderful creative ways. The PMA framed the RFP with the understanding that 142 Free Street would definitely be demolished. To have advanced their plans so far without ever addressing this issue was taking a very large risk.

That decision to demolish a protected building is not theirs alone, but is driven by the existing Historic Preservation Ordinance as enforced by this Board, the Planning Board, and the City Council. This building was included as a Contributing Structure following extensive research over years by qualified professionals.The status of the building's exterior appearance is largely unchanged since its 1926 renovation by John Calvin Stevens — and also largely unchanged from when it was rigorously evaluated for inclusion in the Congress Street Historic District. The PMA purchased a protected historic building. This has not changed.

So, the question before you is: do the Historic Preservation rules apply to everyone equally? These rules exist so that the decisions are based not on one building, or one worthy applicant, but on a set of rules that everyone follows. It is that clarity and even-handedness that shapes the overall essence of a community —and that community's fair and equitable treatment.

The consequences of letting this one protected building be demolished would set a dangerous precedent and possibly jeopardize Federal tax funding that flows from having a solid, enforced Historic Preservation Ordinance in place. It is too risky.

If one property owner is allowed to decide that a historic building should be reclassified and demolished because it is in the way of their plans, no matter how worthy, then the integrity of all the Historic Districts that benefit Portland in the many ways documented in the recent Impact Study may be in jeopardy.

I am hoping you will vote to reject the PMA request and encourage them to start exploring creative ways to include the Chamber Building at 142 Free Street in their design. We can have it both ways, a great museum and keep a protected building as part of it.

We are all fortunate to live in this great city with its rich natural and built environment. It is our legacy to maintain what we have for future generations. We are all part of a chain of citizens who have faced difficult choices over time. Fortunately, at some point, rules were established to guide us. I ask now that you uphold these rules.

Sincerely,

Jack Vreeland
447 Deering Ave.
Portland, ME 04103 USA
207-879-9152
jackvreeland@gmail.com

October 27, 2023

Chair O'Brien and Members of the Historic Preservation Board,

You have before you a request from the Portland Museum of Art (PMA) to reclassify the former Chamber of Commerce building at 142 Free Street from its status as a Contributing building in the Congress Street Historic District to a Non-Contributing status, that would then allow the Museum to demolish it.

A primary document sponsored by the Museum to support their case that the Chamber of Commerce building does not contribute to the significance of the historic district is "A History of 142 Free Street and Free Street at Congress Square." The Museum claims that this consultant report supports its assertion that the Chamber building has been so changed over time and its context so changed that it neither represents a building that can help to convey the story of the development of Portland's commercial corridor in the early 20th century nor that retains integrity to convey this story.

The report includes a great deal of documented history for both the building and the Free Street area of the historic district, but it does not evaluate the Chamber of Commerce building in terms of why it was deemed by those who researched and prepared the documentation for the Congress Street Historic District as a Contributing structure in the historic district. As you who serve on this Board know, when a building or an historic district is proposed for historic designation, it is evaluated in the form that it appears at the time of that proposed designation.

The former Chamber of Commerce Building's appearance in 2009 is essentially the same as you see it today and the same as it appeared in 1926 when John Calvin Stevens reworked the building to serve the needs of Portland's business leaders. It is this appearance we see today that references the nearly 60-year tenure of the Chamber of Commerce on this site. Minor alterations have not changed that basic appearance and could be reversed if desired.

I respectfully urge you to uphold the judgements made in 2009 by your colleagues who preceded you on this Historic Preservation Board, and to find that the Chamber of Commerce Building merits its status as a Contributing building in the Congress Street Historic District.

Sally Oldham
118 Congress Street
Portland

PC42

11:36 AM (1 minute ago)

nancy montgomery <montgomerydesign@me.com>
to hp@portlandmaine.gov

Nancy Montgomery
Montgomery Design Inc.
447 Deering Ave., Portland, ME 04103
207-831-8927

October 27, 2023

RE: CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Dear Chair O'Brien and Members of the Historic Preservation Board,

I am writing to encourage you each to oppose reclassification of the former Chamber of Commerce building at 142 Free Street— but even more importantly to me, to support fair and consistent application of the Historic Preservation Ordinance's protections.

Here is my thinking:

1) **Dominos and dangerous precedents:**
If one property owner — no matter how respected and how worthy their goals -- is allowed to decide that a historic building should be reclassified and demolished because it is in the way of ambitoius plans, then the integrity of all the Historic Districts that benefit Portland in the many ways demonstrated in the recent *Trends in Portland's Historic Districts* report may be in jeopardy. I fear a domino effect.

The Chamber building's structural integrity is not in question, a valid reason for reclassification.

2) **More creativity needed, more ways to solve a problem:**
As a PMA member, I have been excited by their campaigns to improve access for all, "art for all", to improve equity, access, and representation. I favor a Museum expansion. And space for more art and interactive experiences, However, much like Merrill City Hall Auditorium, I believe there is NOT only one creative solution to a problem!

I have been personally grieved to watch what might be seen as arrogant and short-sighted to insist that the only solution is to tear down a Contributing Structure at 142 Free Street — despite being surrounded by neighboring empty parking lots. Why not more creative negotiations and thinking outside the box?

Look at Merrill Auditorium's once-controversial Second Opinion Campaign (c.1996), which both rescued the Auditorium's historic balconies and appearance AND vastly improved the acoustics. At that time, the initial architectural plans insisted that gutting the interior was the only way to achieve the goals and ensure good acoustics. Fortunately, citizens rallied and changed that set course. It was difficult but worthwhile. Cannot the PMA take a second creative look?

3) **To me, it was incomprehensible not to address with HP early on** how to deal with the historic building the PMA purchased — knowing it was a HD Contributing building. Exciting creative combinations of modern and historic structures can be seen worldwide. Everything from surrounding/encapsulating the old building to creating exciting dialogues between the Henry Cobb building and the Chamber building.

I was disillusioned to see that the PMA's initial RFP assumed 142 Free Street must be demolished. In their "public comments" feedback events, I said so.

4) **Kindly fact-check** PMA's statement and correct the record:
At the workshop, PMA said something like "**We just followed ___'s suggestions"** (to go ahead planning demolition). I cannot imagine, knowing the Planning Dept's careful considered approach that could be accurate. Words matter. It is my impression that the PMA had input from various sources over several years warning against demolition. Their statement does seem sadly disingenuous to me.

5) **The PMA seemed to assume that** a blanket had been thrown over the Congress Street Historic District and **buildings were not individually vetted.** The PMA said something like, "We don't know what their (City staff) thinking was in designating 142 Free because nobody from that time is here." Scott Hanson, the primary Congress Street HD researcher, resoundingly disproved their theory. The renovations in 1926 by JC Stevens are significant to the Congress Street District's Period of Significance as a vibrant commercial center.

6) The fabric of a historic district is interwoven and interdependent. Does removing one thread endanger millions of dollars in tax benefits to the City as a Cert. Local Govt.? **The idea that a "project of special merit" might arise in the future and allow demolition of a Contributing Structure was proposed years ago. The Federal authorities disallowed that idea. Thus Portland committed to Federal HD limitations and rules when we became a CLG.**

7) **Margaret Gaertner's report missed the point:**
There are misconceptions in her report: Interior changes are not covered by the Historic Preservation Ordinance. Buildings do "grow" and change — as did the Hay Building next door, also renovated by John Calvin Stevens. Former State Historian Earle Shettleworth's evaluation of the significance of the 1926 Chamber remodeling at 142 Free should not be discounted. The JCS renovation of 142 Free into the Chamber is tied to the District's Period of Significance.

8) **Art for all** — yes! But ...
Rules apply to all, too:
The Portland Museum of Art's intent to make Art more accessible to all, with more equity and representation is laudable. But they also need to follow the law. That is equity. That is fairness, too.

Please support the integrity of the H. P. Ordinance by applying it equally to eveybody.

Sincerely,

Nancy Montgomery, interpretive designer
Montgomery Design Inc.
447 Deering Ave., Portland, ME 04103
207-831-8927
montgomerydesign@me.com

To: Portland Historic Preservation Board
From: Earle G. Shettleworth, Jr.
37 Academy Street
Hallowell, Maine 04347
November 1, 2023

Agenda Item: Congress Street Historic District – Reclassification of 142 Free Street as Noncontributing.

On October 4, 2023, I addressed the Board in writing and in person to affirm the significance of 142 Free Street as a work of John Calvin Stevens that contributes to the Congress Street Historic District. As you deliberate on the Portland Museum of Art's application to reclassify 142 Free Street as non-contributing to the district, I wish to comment on the broader implications of your decision.

Since the 1960s, many Portland citizens have worked diligently to preserve the historic character of the city by the establishment of National Register Historic Districts, followed by the creation of local historic districts through the adoption of the historic preservation ordinance in 1990. The success of these efforts is clearly apparent in the critical contribution of historic preservation to making Portland one of the most desirable small cities in America. Those areas protected by the ordinance have experienced major private and public investment that has enhanced the entire city.

Approval of the Portland Museum of Art's application to declassify 142 Free Street would seriously compromise the integrity and purpose of the ordinance by allowing a building certified as significant by the city, the state and the Federal government to be demolished. Moreover, such an action would encourage other property owners to seek similar exemptions, further weakening the effectiveness of the ordinance and placing the city's historic built environment, and thus its quality of life, in jeopardy.

I trust in the good judgment of the Board to maintain the integrity and purpose of the ordinance as it reviews this application.

RE: Reclassification of 142 Free Street 0 views

Assigned to me

Susan Faxon <sfaxon1122@gmail.com>
to hp@portlandmaine.gov, officeofthedirector@portlandmuseum.org

Oct 28, 2023, 6:22:43 PM (yesterday)

Dear Historic Preservation Board,

I write to enthusiastically support the Portland Museum of Art's petition to your board to reclassify 142 Free Street in order to allow the museum to move forward with their innovative and necessary expansion program.

Let me explain what I bring to this conclusion.

I retired to Portland in 2017 after nearly 50 years of experience with issues of historic preservation, including a graduate degree in the topic from Columbia, and over twenty years serving as a founding member of the Design Review Committee, reviewing restorations, adaptive reuse, expansion, and removal of buildings on the 500 acre campus of Phillips Academy, Andover MA. Concurrently I have extensive experience in the museum field, having served as both an administrator and as senior curator of American Art before 1950 at the Addison Gallery of American Art at Phillips. I know first hand the difficult compromises and challenges of deciding the fate of historic structures as well as the caretaking obligations and educational opportunities demanded of the modern museum.

In my opinion the Portland Museum's visionary architectural expansion plan gives tangible evidence of the institution's commitment to serving a wider Portland community and will allow the museum to more easily and creatively share our common artistic heritage with both present and future audiences. Additionally the expansion offers significant improvements to the streetscapes of Free Street and Spring Street. The open character of the museum's new addition on Free Street will provide a counterpoint to the uninviting and off-putting blank brick wall of the Payson Building. It will offer visual access to art both while open and when closed through its pedestrian passage between Free and Spring Street. It unifies and clarifies the museum campus at the same time that it mitigates against the dreary and hodge-podge streetscape that presently exists along Free Street.

Of course the difficulty with the expansion plan is the necessity of either relocating (a proposal worth considering, by the way) or demolishing the Chamber of Commerce building. This is a decision that is hard to make, but as with all preservation decisions, the greater good needs to be given weight (and I believe that in this case the expansion of the museum is the greater good in the ways I have articulated above). I submit that the sacrifice of a rather stolid and unimaginative structure is a fair and necessary measure to allow a project that will enervate and enliven an important streetscape. Finally, I come to this decision with the knowledge that the museum's plans will allow the far more important Greek Revival building on Spring Street, the Charles Quincy Clapp House, to shine. This is a fair trade to my mind.

Sincerely,

Susan Faxon
20 West Street,Apt 21
Portland Maine 04102

The demolition of the former Children's Museum builidng

0 views



Candice Lee <cthorntonlee@gmail.com> 10:42 AM (1 minute ago)

to hp@portlandmaine.gov

While it is not the greatest of buildings, there is an ordinance protecting it and going against it will open Pandora's box. So I vote we keep it and the museum should learn to work with it. They are in possessio of three historic buildings and should regard them as assets instead of liabilities and embrace them wherever they can. Candice Lee, former board member and long time supporter of Landmarks!

142 Free St 0 views



Laura Nixon-Belair <lnixonbelair@gmail.com> 10:51 AM (6 minutes ago)

to hp@portlandmaine.gov

Regarding historic status of 142 Free St. Please do not set precedent that historic buildings can be demolished on the property owners whim. This reclassification proposal could set a dangerous precedent. If one property owner is allowed to decide that a historic building should be reclassified and demolished because it is in the way of their plans, then the integrity of all the historic districts that benefit Portland in so many ways may be in jeopardy. While I feel strongly that 142 Free Street should maintain its status as a Contributing building, I applaud the museum's intentions to create an expansion project that will give them more space and allow for programming for citizens of Portland and surrounding areas. I believe, however, that these goals are not mutually exclusive, and can be reached creatively with a design that doesn't require demolition of the Chamber of Commerce building

Thank you,
Laura

Historic Society Member and South Portland Resident

--
Laura Nixon-Belair

Agenda item: 142 Free Street 0 views

Pam Stagg <pamstagg@verizon.net>
to hp@portlandmaine.gov

10:52 AM (7 minutes ago)

I am against the reclassification of the former Children Museum at 142 Free Street to
a “non-contributing” structure in the Congress Street Historic District. It may have undergone changes over the years but demolition can never be reversed.
While complex and costly, Is there a possibility it could be moved to the adjacent parking lot to satisfy all parties?

Thank you.

Pamela Stagg
749 Congress Street Unit #7
Portland, Maine. 04102.

142 Free Street

0 views

Assigned to me

kaenrath@gmail.com <kaenrath@gmail.com> 11:03 AM (now)

to hp@portlandmaine.gov

Dear Board Members:

I write to urge you to save 142 Free St and not establish a dangerous precedent that could endanger many more of our treasured historic buildings. The historic character of our downtowns enriches our communities and provides a unique sense of place. This is a very important decision that cities and towns around the State of Maine will be closely watching. Thank you for your consideration.

Bryan Kaenrath
Waterville City Manager
5 Greylock Rd.
Waterville, ME 04901

142 Free Street Portland

0 views

Assigned to me

Michele Neilsen <mmneilsen@gmail.com>
to hp@portlandmaine.gov

11:09 AM (1 minute ago)

The Portland Museum of Art should not be allowed to have the former Childrens Museum reclassified as a non contributing structure.

We have lost too many buildings in this old City in the pursuit of “bigger, better shinier” buildings, or as in the case of the lost Union Station, a strip mall and a parking lot.

No is my vote to reclassification!

Michele Neilsen
131 W. Commonwealth Drive
Portland, Maine 04103
mmneilsen@gmail.com

142 Free Street 0 views

Orff, Sonja C <Sonja.Orff@mainehealth.org>
to hp@portlandmaine.gov

11:10 AM (4 minutes ago)

Dear Chair O'Brien and Members of the Historic Preservation Board,

We support the statement attached from Greater Portland Landmarks regarding the building on 142 Free Street.

Please do not allow for the demolition of this contributing building.

Portland is quickly changing and we need to ensure we preserve and protect our historical footprint and the decisions forward that can impact any precedence's.

Please honor and respect two of Portland's most valuable assets (Greater Portland Landmarks/Portland Museum of Art). Their opinions and goals for this community have proven trusty worth time and time again.

Thank you for your consideration,

Sonja Orff & John M. Ney

179 Fowler Road

Cape Elizabeth, Maine

04107

PC51

142 Free Street, Portland 0 views

Ford Reiche <ford@fordreiche.com>
to hp@portlandmaine.gov

11:41 AM (13 minutes ago)

Members of the Portland HP Board,

This is to express my hope that the HP Board will deny PMA's request to reclassify and demolish the historic contributing structure at 142 Free St.

I have owned and fully restored four buildings on the National Register of Historic Places, and for the past several years I have served on the grant application review teams for Maine's two largest funders of historic preservation.

It is very rare for a building listed as historic or contributing to be delisted, and seemingly unprecedented in Maine under the conditions claimed by PMA. When a building is properly designated as an historic structure, whether under local or federal guidelines, it is not a temporary status until something "better" presents itself. PMA purchased this building knowing that.

In an effort to more fully understand the issue with which you are presented, I have consulted a number of preservation authorities in Maine. I have not spoken with a single expert who agrees with the recommendation of the historic preservation consultant hired by PMA on this matter.

Thank you for the volunteer work you do for Portland.

Ford Reiche

142 Free St. 0 views

Assigned to me

George Brown <georgebrown06@gmail.com> 11:51 AM (1 hour ago)
to hp@portlandmaine.gov

Always believed that this building added so much to that area. I would greatly miss it if it was removed.

George Brown
36 Watchic Manor rd
Standish, Me 04084

PC53

Chamber building on Free Street

0 views

Assigned to me

jflint@maine.rr.com <jflint@maine.rr.com>
to hp@portlandmaine.gov

11:52 AM (1 hour ago)

Gentlefolk:

The former Chamber of Commerce building at 142 Free Street is without question a significant Contributing building in the context of its location and neighboring structures. Part of the argument for razing it is that it is too much altered from its original form, but the most recent external alterations are nearly one hundred years old; the original parts are nearly twice that age. It is important to note that the external changes were designed by Portland's noted architect, John Calvin Stevens. The building's permutations and different uses (theater, church, Chamber, Children's Museum) do not diminish its significance, they enhance it.

GPL seems to have taken pains to be diplomatic in opposing the building's destruction. What they have not said, but what some preservationists are thinking, is that in three distinct proposals for PMA's expansion, no provision for integrating the Chamber building appears to have been undertaken, almost as though tearing it down was a foregone conclusion in spite of its status as a protected building. It would have been simple enough to stipulate that each design provide an alternative plan incorporating the Chamber building. That seems not to have been done. An oversight?

I admit prejudice. I worked at the Chamber for around two years in the mid-seventies, first as a work-study student for NAB, then as manager of the Chamber's Business Ethics Division under former City Manager, John Menario. It's a nice building.

I strongly urge The Historic Preservation Commission and City Council to insist that razing the Chamber building is simply not an option; that it must either be incorporated in the expansion or moved intact to a suitable, nearby location.

Sincerely,
Jim Flint

142 Free Street 0 views

Assigned to me

Cherie Wendelken <cheriewendelken@yahoo.com>
to hp@portlandmaine.gov

11:55 AM (1 hour ago)

Dear Board Members,
I was surprised and disappointed to learn that the PMA, which preserves, showcases and helps define the artistic patrimony of Maine, has decided to request demolition of 142 Free Street. To me, an architectural historian, former professor at Harvard, and current resident of Portland, this is a sad disregard of our city's unique architectural patrimony. Visitors and residents alike prize the historic quality of our streets.

There are many reasons for a building's importance - age, unique style, association with historic events or people, or as part of an assemblage of buildings that create a historic urban fabric. Such protected neighborhoods provide an experience of art and history that is freely available for all citizens to experience, requiring no ticket to entry. Although the former Chamber of Commerce building is not designated as an individual landmark, it is architecturally unique, part of a historic neighborhood and deserving of protection.

Too many old building have been demolished in this town in the name of progress and improvements, to the regret of many. Do we want to be left with a city that looks like any other, punctuated by a monumental new building that speaks to the ambitions of one institution rather than the preservation of the urban history of the place which it serves? I hope the Board decides to protect 142 Free Street. It is not the oldest, grandest or most important building in Portland, but it is beautiful and historic and plays a role in creating a special place - its survival through many eras is part of Portland's story and a part of what makes our city a destination of national significance.

Sincerely,
Cherie Wendelken
364 Spring Street
Portland

PMA development Plans

0 views

Assigned to me



Lucas St.Clair <lucasstclair12@gmail.com> 11:59 AM (1 hour ago)

to hp@portlandmaine.gov

Dear HP Board,

Thank you for allowing written comments to voice opinion on the plans that the Portland Museum of Art is working on.

I recently have received two emails from the Greater Portland Landmarks about supporting the blockage of the reclassification of the structure of the former Chamber of Commerce building. I do not support that Greater Portland Landmarks in this case. While the building may meet the criteria to be a contributing building to the Congress St. historic district, it is my belief that a more comprehensive way of approaching this decision should be taken.

While the building that is being considered meets the criteria of the historic district, what the PMA plans to do is far superior for the whole of our city, community, and state. Adding a building that takes into account a 21st vision for construction, energy use, and inclusivity is what our city needs. While I support the understanding and protect our city's history, we should not let it define our future or prevent evolution. The expanded PMA campus will be a Greater Portland Landmark of the future, one that takes into account 21st century needs and helps the city in advance in its vision.

I also must add that the editorializing in their advocacy emails, the Great Portland Landmarks, stands in the face of uniting our great community. The choice of language that they use, including "setting a dangerous precedent" and "jeopardizing the integrity of the historic districts" is hyperbolic at best and at worst undermines their ability to be a partner to a growing city. While I support the historic districts and own a historic building in Portland, I find their perspective on this issue not unifying or helpful.

Thank you so much for your reading this email and considering my point of view when making your decision.

All my best,

Lucas

142 Free Street 0 views

Assigned to me

Bruce Wood <bruceweb607@gmail.com> 12:07 PM (1 hour ago)
to hp@portlandmaine.gov

I am writing in support of the historic building located at 142 Free Street. This building has had many uses over the years and retains a significant percentage of its historic character. It is a key part of the Congress Square neighborhood. To tear it down would be a significant loss to the area.

The Portland Museum of Art has options to expand without adversely impacting the Congress Square neighborhood of which it is a key part. Its main building has character worthy of retaining without competition. To relocate the PMA main entrance from its Congress Square frontage to what effectively is a side entrance without the convenience of the current entrance would be a disgrace to the building and the museum.

The proposal calls for tearing down an historic building worthy of retention as well as forcing the current main building into a second class status.

The PMA can expand by using vacant land and poorly utilized property by building on what today is a parking lot behind 142 Free Street and connecting to 142 Free Street, the Clapp building currently used for storage, and the current main museum building. Those connections can be from the rear of 142 Free Street and the Clapp building and the side of the main building. In this manner, the historic character of the area would not be adversely affected and expansion can be accomplished.

I urge you to vote against changing the designation of 142 Free Street and to encourage the PMA to think anew about how it can expand.

Bruce Wood
607 Chandler's Wharf
Portland, ME 04101

RE: Do not demolish 142 Free Street or change the zone! 0 views

Assigned to me

russo@maine.rr.com <russo@maine.rr.com>
to hp@portlandmaine.gov, info@portlandlandmarks.org

12:26 PM (15 minutes ago)

And for those of you who may not remember, take a look at these photos….Union Station before and after!

Before: 

After: 

And yes, this was considered great architecture in the 1960's….

From: russo@maine.rr.com <russo@maine.rr.com>
Sent: Monday, October 30, 2023 12:17 PM
To: 'hp@portlandmaine.gov' <hp@portlandmaine.gov>
Cc: 'info@portlandlandmarks.org' <info@portlandlandmarks.org>
Subject: Do not demolish 142 Free Street or change the zone!

Are you kidding me? Portland is the City it is because of Landmark and Portland residents who had the vision to save these historic buildings throughout the City, including my Grandfather's family 6 unit at 82 India Street. I remember as a child in the 1960s watching Union Station being demolished for a cheap Arlans Shopping Center and even at my young age at the time I knew that was just wrong!

As a Portland native, lifelong resident, and long-time Realtor, I am against demolishing this historic building. The museum's current building is pretty ugly as it is and I can't imagine what the glass addition monstrosity will look like. Please preserve this piece of Portland history so that we don't look back and regret yet another historic building gone. Let the developers use some creativity in designing the new space around this building. Why bother having zoning if you are not going to abide by it?

Stop the zone changes to accommodate this development madness here and everywhere in the city!

Jean Russo

Harborcity Realty

Portland, Maine

PC58

142 free st

0 views

Assigned to me

jim dougherty <jdougherty101@gmail.com> 12:33 PM (21 minutes ago)

to hp@portlandmaine.gov

I strongly support the PMA expansion but NOT the destruction of the chamber of commerce building. It is a precious part of portland history. Do not make the same mistake made with union station. Instead, retain this handsome building and include it in the PMA expansion plan!

James Dougherty
Freeport Maine
207 522 6560

142 free st 0 views

Heather Meader <heathiewhoo@gmail.com>
to hp@portlandmaine.gov

1:29 PM (16 minutes ago)

I'm writing to you asking that the former children's museum building be kept as a contributing structure and not be reclassified. The history of our beautiful old city is important to preserve, I know this will make it harder for the PMA to expand. I've always thought the old museum was in such an appropriate building because it is a piece of art (architectural art). When I was in highschool I took a photography class at MECA and learned to develop my own prints. One of my favorite was of the children's museum building, the sun casting shadows with the columns.

Thank you for your time
Heather meader
126 bolton St, Portland

Opposition to the reclassification request of 142 Free St. 0 views



Roxanne Eflin <roxanne.eflin@gmail.com> 1:39 PM (9 minutes ago)

to hp@portlandmaine.gov

To the respected members of the Portland Historic Preservation Board:

I am writing in opposition to the PMA's request to reclassify 142 Free Street as noncontributing within the historic district. I support Greater Portland Landmarks' positions on this issue as articulated in their October 25, 2023 written statement.

This former Chamber of Commerce building is character-defining and extremely significant to the community in terms of its role in the commercial, social and architectural development of Portland for nearly 180 years from 1780-1959. A vote to reconsider the historic designation of this building is dangerously precedent setting in numerous ways. Denying this reconsideration request upholds the purpose and intent of Maine's strongest historic preservation ordinance.

PMA expansion is laudable though NOT at the expense of this highly significant historic building, an important contributing structure within the historic district.

Roxanne Eflin
CONSULTING

Roxanne Eflin, MA, GPC, CITM
Roxanne Eflin Consulting
Former Executive Director, Maine Preservation (and former Maine resident)
207.229.9465
6413 Borough Dr., Colorado Springs, CO 80923

142 Free Street 0 views

Assigned to me

Jack Griswold <JackGriswold@outlook.com>
to hp@portlandmaine.gov

Oct 30, 2023, 5:35:58 PM (17 hours ago)

Chair O'Brien and Members of the Historic Preservation Board:

I am writing to support the PMA's request to reclassify the Childrens Museum as a non-contributing structure.

1. 1. To my layman's eye, this Greek Temple-ish building has always seemed an odd duck. It just doesn't fit in. Further, it appears cheaply built from the poured concrete columns with the seams showing, to the square brick end-columns and the window treatments. It is not a particularly appealing or pretty building.

2. 2. Why would we want to preserve this building and prevent something truly transformative and inspiring to be built in its place? That would be a massive loss for Portland and a real abuse of common sense and the intent of historical preservation.

3. 3. I saw that one of the architectural models for the new museum addition proposed to build around the Childrens Museum and encase it in glass. Frankly, that would be ridiculous, and I hope that Greater Portland Landmarks, or other supporters of the current structure, are not pushing to go back to something like that.

4. 4. Why is this just coming up now? Shouldn't this have been dealt with much earlier in the process?

Thank you –

Jack Griswold

38 Deering St.

Portland, ME 04101

Reclassification of 142 Free Street 0 views

Assigned to me

Craig Lorimer <cg4501@icloud.com>
to hp@portlandmaine.gov

Oct 30, 2023, 8:00:43 PM (15 hours ago)

October 30, 2023

To: Portland's Historic Preservation Board

Re: Reclassification of 142 Free Street as a Non-Contributing Structure to the Congress Street Historic District

Dear Board Members:

I would like to offer some comments to the HP Board against the request of the Portland Museum of Art to have the former Chamber of Commerce Building at 142 Free Street to be reclassified as a "Non-Contributing Structure" to the Congress Street Historic District.

I was born in Portland, lived for 20 years in the Greater Portland area, and have been a frequent return visitor to the city in the past decades. Having grown up before the "mall era," Congress Street was the centerpiece of urban life for me. I always admired the historic buildings and the ambience of the district. Congress Square was to some extent the crossroads and hub of the city—Portland's "Times Square," if you will. Even with a variety of architectural styles and signage of different eras, it all blended together well.

The Chamber of Commerce building at 142 Free Street was part of this harmonious blending of historic architecture in Congress Square, and I have long regretted the loss of its handsome neighbor, the Libby Building, which was razed by the Portland Museum of Art. Old photos from the early 20th century show other stately brick buildings on Free Street that were demolished to provide parking lots. Despite these losses, Congress Square still retains much of its historic ambience. The former Chamber of Commerce building is a key factor in holding together the historic character of the area. Its demolition would be a significant loss.

Another concern is the precedent that this would set for other buildings in the historic district that could be reclassified to pave the way for their demolition.

The HP Board is surely aware that much of Portland's economic revival has been due to its historic architecture, even though much was lost during the urban renewal era. Similar benefits can be seen in other historic cities like Bath, ME, Portsmouth, NH, and Charleston, SC, which even better resisted the pressures to sweep away their historic structures. The city where I now live, Madison, WI, has already lost most of its historic buildings, and the loss continues—not through massive urban renewal, but simply in piecemeal fashion by gradual attrition.

I earnestly hope that Portland's HP Board will vote down the request to reclassify 142 Free Street.

Thank you.

Sincerely,

Craig Lorimer

4501 Gregg Road, Madison, WI 53705

142 Free Street 0 views

Assigned to me

Cheri Hudson <hudsoc370@gmail.com>
to hp@portlandmaine.gov

10:15 AM (13 minutes ago)

Dear Historic Preservation Board,

re. Congress Street Historic District - Reclassification of 142 Free Street as Noncontributing

I am very much opposed to the request by the Portland Museum Of Art for reclassification of the former Children's Museum) at 142 Free Street as a "non-contributing" structure in the Congress Street Historic District.

I have long appreciated this iconic Portland building, and the overall Congress Street Historic District. It was a good thing that Portland woke up to historic preservation after the unfortunate demolition of the St. John Street train station in 1961.

The Portland Museum of Art was insincere and calculating in presenting their designs to their members, and the public, without also cueing them that a building with historic significance would have to be destroyed to create what they were proposing. It's as if they proposed to improve their collection by giving out the current paintings to be painted over.

My family and I have been long-time members of the Portland Museum of Art. We enjoy time spend there, and what the PMA has contributed to Portland. I love what they have done to create a campus that works with the historic buildings there, and fail to understand why, in this case, they have chosen to not work within the constraints of the Historic District. They were not unaware of it, but chose to promote designs that involved demolishing 142 Free Street, and to build support for their designs with members, and the public, without being upfront about the impact on the Historic District designations.

Please uphold the designation of 142 Free Street as a contributing structure in the Congress Street Historic District, and in so doing, the validity of having a Historic District at all.

Sincerely,
Cheryl Hudson
61 Leisure Lane
Portland, Maine

October 31, 2023

Re: November 1, 2023, Agenda Item: Congress Street Historic District - Reclassification of 142 Free Street as Noncontributing

To: Chair O'Brien and Members of the Historic Preservation Board
hp@portlandmaine.gov

We are Seth and Laura Sprague and reside at 28 Orchard Street in the Western Promenade Historic District. We urge the Historic Preservation Board (HPB) to deny the Portland Museum of Art's request to reclassify and remove 142 Free Street as a contributing structure in the Congress Street Historic District of 1990, thereby allowing its demolition. Approaching its centennial, the building's facade retains its classical-revival features, designed in 1926 for the Chamber of Commerce by John Calvin Stevens, one of Maine's and the City's foremost architects. Since its inclusion thirty-three years ago, the building still meets the criteria as a contributing structure as described in the City's Historic Preservation Ordinance.

Portland and its citizens have worked for decades to establish the HPB and the historic districts. They protect the architectural resources and streetscapes that give the city its authenticity, historical integrity, visual appeal, and livability. We call upon the Portland Museum of Art, as a leading cultural institution, to uphold the City's other cultural resources, in this case 142 Free Street and the HPB, rather than seek their destruction. Approving a reclassification that would allow 142 Free Street to be demolished sets a dangerous precedent. If the HPB allows a leading cultural institution to overturn the rules, it opens the door for others to do the same and threatens all the City's historic districts for years to come. You will be unable to maintain the integrity of historic districts or your effectiveness as the City's Historic Preservation Board.

No changes at 142 Free Street warrant its reclassification and exclusion from the Congress Street Historic District. We urge you to deny the applicant's request to remove it from the district and allow its demolition.

Thank you.

Sincerely,

Seth and Laura Sprague

removing Portland's history 0 views



Meg Hutchins Broderick <meg@powersrvcs.com> 10:52 AM (16 minutes ago)

to hp@portlandmaine.gov

I write to encourage you to not allow the removal of the historic Chamber of Commerce Building. The look of Portland is changing, the availability of coming to Portland and seeing its history is dwindling for the sake of commercial use.
The museum is not commercial and is a wonderful reason for people to come to Portland, I would hope they could find a way to utilize another historic building.

Please, there must be a better solution, Meg Broderick

Preserving the Former Children's Museum 0 views

Berry Manter <bmanter1@gmail.com>
to hp@portlandmaine.gov

11:07 AM (3 minutes ago)

Dear Planning board members,

I want to add urgent support to NOT designate this 1830's structure as “non-contributing", a building which IS very much visually part of the remaining fabric of historic structures of downtown Portland.

As a graduate of MeCA and an artist, I appreciate contemporary architecture. However, it would be to both Portland's and PMA's longterm “benefit” to integrate resonant design elements into it's future building plans, retaining this nearly 200 year old Free Street structure and reflective of the beautiful historic buildings remaining in its possession. Yes, coherent contemporary additions CAN work. Nothing says “out of touch” and “arrogance” more than not honoring the immediate community of preserved structures. (I stifle my urge to mention 58 Fore…)

Please continue recognizing the former “Chamber of Commerce” building, aka Children's museum, aka Church as “contributing”.

Sincerely,

Berry Manter
46 Eastern Promenade
MeCA ‘92

Hanson Historic Consulting

October 31, 2023

RE: CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Chair O'Brien and Members of the Historic Preservation Board,

As was made clear during your workshop on this proposal, there is no case under the criteria of the Portland Historic Preservation Ordinance for the reclassification of the Portland Chamber of Commerce Building at 142 Free Street from "Contributing" to "Non-Contributing." In fact, during the workshop, the representatives for PMA largely ignored the language of the ordinance and focused on their vision of what "could be" if they are allowed to demolish the building.

For this public hearing, I would like to focus on what else "could be" if PMA is allowed to demolish a building that clearly meets the criteria for a Contributing building in a historic district.

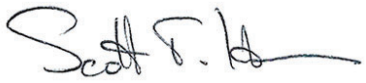
The Congress Street Historic District was certified by the National Park Service on May 25, 2010, for the purpose of allowing the owners of contributing buildings to access state and federal historic tax credits. This certification is based upon documentation that the local historic district is essentially identical to a National Register Historic District.

The NPS letter certifying the district states, "Please be aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for continued benefits under the above laws."

Currently underway historic tax credit projects in the certified district have tens of millions of dollars in state and federal historic tax credits *dependent on the Certified status of the local historic district*.

In conclusion, there is no rational case for removing the Contributing status of the Portland Chamber of Commerce Building at 142 Free Street and significant reasons not to. I urge the Board to unanimously reject this request and to include mention of the likely impact on other property owners' ability to use historic tax credits in their recommendations to the Planning Board and City Council.

Sincerely,



Scott T. Hanson

Hanson Historic Consulting, LLC - 8 Pleasant Street - Topsham, ME 04086 - scott@hansonhistoric.com
207 620 6291

142 Free Street 0 views



Beka Bryer <rmbryer@gmail.com> 11:26 AM (8 minutes ago)

to hp@portlandmaine.gov

Hello,

My name is Beka Bryer, and I live at 174 Clark Street. I am writing in opposition to the plan to reclassify 142 Free Street as a non-contributing structure to the Congress Street Historic District. I love the PMA and its historic buildings, and would prefer to see the 142 Free Street building with all of its important historical architectural features preserved for future generations. While I am delighted that the PMA wants to expand, demolishing a historical building is not the only way for the PMA to grow as a campus that serves the Portland community. To remove this building from the landscape would be a loss for historic preservation in Portland.

--
Rebekah (Beka) Bryer
rmbryer.com
rmbryer@gmail.com | pronouns: she/her/hers

PC69

HP Public Comment - 142 Free Street: Lying to the Public about Rigor of NPS Certification 0 views

George Rheault <george.rheault@gmail.com> 11:43 AM (17 minutes ago)
to HIstoric Preservation, Evan Schueckler, rwi...@portlandmaine.gov, Christine Grimando, j...@portlandmaine.gov, Abigail Reed

One of the most appalling things that took place during the October 4, 2023 workshop regarding the demolition request by the PMA, was how lobbyists for the historic preservation industry (all of whom have a direct stake in historic preservation business including Scott Hanson and Earle Shettleworth either as active consultants or "talking heads") completely misrepresented the process whereby the National Park Service (through its "Technical Preservation Services division) "certifies" local historic districts for federal eligibility for historic tax credits.

Attached is a November 2022 email directly from the chief of the TPS division explaining why my serious concerns about the quality and substance of the Munjoy Hill Historic District were irrelevant to the TPS "rubber-stamp" certification when it was presented by the City of Portland to the Maine State Historic Preservation Office and NPS in the autumn of 2022.

Some VERY important points that should be put into the record to wash away the lies and misrepresentations made by persons like Mr. Hanson and Mr. Shettleworth:

1.) The NPS only undertakes a VERY BRIEF 30-day review of any local historic district. This 30-day review is cursory and ministerial and does not involve looking at anything beyond what the local jurisdiction has put in front of it.

2.) To emphasize further point (#1), the NPS does NOT engage in any independent research or fieldwork to verify or investigate to its own satisfaction any claims to historic value or merit made by a local jurisdiction. Scott Hanson flat out lied to the HPB and the public on October 4th to suggest that any representatives of the NPS were involved in the creation of the Congress Street Historic District including the selection or evaluation of individual properties as "contributing" or "non-contributing" and the attachment makes this clear.

3.) Annually, the NPS receives dozens and dozens of requests from all 50 states (as well as U.S. territories) for local district certifications on a rolling basis and does not have the time, energy or resources to do any deep dives on any of them. Congress has not and probably never will give it the resources to act as anything other than a rubber-stamp with respect to certifying local historic districts. The time when the NPS drills down on individual properties is when tax credits are on the line at which time the NPS looks PAST the local historic district submission and requires a property-owner to submit far more information than was ever required at the initial local district designation stage.

4.) The HPB needs to make it clear to the public that the NPS rubber-stamp of 142 Free Street as part of the Congress Street Historic District in 2009 was in no way some kind of meaningful action on the part of the NPS in terms of weighing in on its historic integrity or merit for permanent preservation. It simply did what it does 99% of the time: which is give its blessing to a local determination that did not look completely daft at the time of certification because the NPS would pay no attention to it any further unless and until a property-owner wanted to apply for historic tax credit subsidies.

Gmail George Rheault <george.rheault@gmail.com>

Re: [EXTERNAL] Re:

Goeken, Brian D <Brian_Goeken@nps.gov> Wed, Nov 23, 2022 at 11:56 AM
To: George Rheault <george.rheault@gmail.com>
Cc: "Brandt, Karen L" <Karen_Brandt@nps.gov>

Mr. Rheault,
You're not understanding what I'm saying -- hopefully this is clearer, although I understand it's not completely addressing your larger complaints about the district and the process that's led to its designation. As part of NPS review, we do consider such factors as the number of contributing vs. non-contributing buildings as well as how individual buildings are classified. But the NPS decision on the district certification request is solely about certifying whether the overall district is National Register eligible for the purposes of the Federal tax incentives program -- it's an up or down decision.

All I'm saying is, in managing expectations: You should not expect, as part of the NPS decision, a list of buildings that the NPS finds to be contributing or comments on whether we agree with every determination the City has made (although we take this information into consideration in our decision). The NPS does not certify whether individual buildings are contributing or non-contributing in determining whether the district meets the criteria for listing on the National Register, and the NPS has no authority to make or require changes to a locally designated district -- those are local decisions, under the local ordinances. If the district was to be certified, a property owner would have to request NPS certification of their individual building as contributing to the district and submit additional information and documentation at the time of applying for Federal tax incentives.

Brian Goeken, AICP
Chief, Technical Preservation Services

National Park Service
Technical Preservation Services
1849 C Street NW, Mail Stop 7243
Washington, DC 20240
202-354-2033 phone
202-230-2960 mobile
Brian_Goeken@nps.gov email
http://www.nps.gov/tps/ website
Sign up for updates from Technical Preservation Services

From: George Rheault <george.rheault@gmail.com>
Sent: Wednesday, November 23, 2022 9:37 AM
[Quoted text hidden]

[Quoted text hidden]

PC70

HP Public Comment - 142 Free Street - Staff Says the HP Ordinance Changed in 2020 - Show the Public What the Changes Were!

0 views

George Rheault <george.rheault@gmail.com> 12:00 PM (10 minutes ago)
to HIstoric Preservation, Evan Schueckler, rwi...@portlandmaine.gov, Christine Grimando, j...@portlandmaine.gov, Abigail Reed

I made a big point in my written public comment for the October 4th workshop to ask the HPB and city staff to explain WHY the HPB in the last decade has had no problem DEMOTING two contributing buildings to "non-contributing" in furtherance of the plans made by two very well-connected property owners to demolish those contributing buildings (183 Brackett Street and 34 Spruce Street).

Furthermore, in both those cases, the City Council's blessing was not required - the demolitions made possible by the switch to "non-contributing" were entirely handled via HPB approval without any further action by the Planning Board or the City Council.

City staff's excuse for this state of affairs was that the city's historic preservation ordinance was somehow made more stringent as part of the interim revisions made in November 2020 as part of "Recode - Phase 1" but the city staff have NOT produced anything in the record to show precisely what those ordinance changes were and how the language now differs requiring the PMA to go through two extra layers of approvals to get to the same result achieved by the owners of 183 Brackett Street and 34 Spruce Street (demotion to "non-contributing" and a clear path for demolition).

If the HPB wants to conduct a thorough process that has integrity and rigor, then it needs to postpone action until city staff have explained what has been happening here with recent conversions of classifications involving "contributing" structures.

If the HPB acted UNLAWFULLY in the cases of 183 Brackett Street and 34 Spruce Street, then that too should be made clear to the public and such a revelation would color the 142 Free Street proceeding and cast doubt that the HPB has acted honorably and consistently in these matters.

142 Free Street 0 views



Staci Hanscom <slpartin_nc@yahoo.com> 1:16 PM (7 minutes ago)

to hp@portlandmaine.gov

I firmly believe that 142 Free Street should remain a contributing structure in the Congress Street Historic District. As a former National Register writer and evaluator for the State of New York, I can say with authority that removing a contributing structure from an historic district undermines the entire purpose of the district itself. 142 Free Street is a historic building, despite any interior changes made through the years. The Portland Museum of Art had/has options to accommodate this building in its original RFP, and they should not be rewarded now for ignoring the rules set out by the Historic Preservation Board of this City.

Staci Hanscom
33 Heather Rd.
Portland

PC72

142 Free Street (Children's Museum building) 0 views

Hilary McKinnon <hilarym@cape-shore.com>
to hp@portlandmaine.gov

2:04 PM (1 hour ago)

Dear Historic Preservation Board,

I agree with every point made by **Landmarks** in support of keeping the Chamber of Commerce / Children's Museum building. I cannot possibly say it any better than they did in their prepared statement we have all received, so I won't try**.**

But please know there are hundreds if not thousands of people who were appalled that the Art Museum plans include bulldozing another original Maine building. There are other options for smart expansion within the Museum property!

I am shocked that it is even possible to change the Historic Designation so that this beloved building can be destroyed. Yes, it sets a dangerous precedent – what is the point of years of thoughtful research and subsequent guidelines and rules if they can all be overturned?!

Please do not destroy this centerpiece of the old original Portland we all love and replace it with ***another*** faceless glass, metal and concrete building that Portland has become choked with recently**.**

No matter how glamorous, shiny and new it looks and photographs now, it will soon be just another modern building and people will long for the old Historic Portland and wonder on who's watch it was destroyed.

Remember the Railroad Terminal?

Remember the Holiday Inn?

Once you destroy it, you can't put it back.

Thank you for upholding Portland's architectural integrity!

Sicerely,

Hilary McKinnon

171 Main Street

Yarmouth, ME 04096

Preserve 142 Free Street 0 views

Herb Adams <hadams@smccme.edu>
to hp@portlandmaine.gov

10:52 AM (5 hours ago)

Members of The Board :

This letter is to advocate that 142 Free Street not be destroyed, and that it be treasured as a contribution to the architecture and heritage that makes Portland unique.

This building was renovated (1926) by John Calvin Stevens and John Howard Stevens. We should treasure our John Calvin Stevens buildings, not tear them down.

This building is a remnant of our powerful cultural heritage, too.

Portions of 142 Free Street are from one of the very first Portland buildings (1829 /1830) built intentionally to be a theatre, in this Puritan-minded town. Here in the 19th Century acted the great Edwin Forrest and the thundering Junius Brutus Booth (father of Edwin and John Wilkes .) Its cultural shadow is a long one.

Our PMA already incorporates and uses 4 or 5 other ancient buildings and mansions that carry the rich history and heritage of our city's past.

As a symbolic connection to that heritage, 142 Free Street should also be added.

PMA is talented and smart enough to do this ; it has proven it can ; and Portland will be enriched once again.

Thank You.
Sincerely,
Herb Adams
Adjunct Professor History and Social Sciences
Southern Maine Community College
hadams@smccme.edu

Dugan Murphy <dugan@duganmurphy.com> Nov 22, 2023, 5:32:54 PM (4 days ago)

to planningboard@portlandmaine.gov

Dear Planning Board,

I am writing in regards to the Portland Museum of Art's request to reclassify the former Chamber of Commerce Building at 142 Free Street to noncontributing within the Congress Street Historic District. I think this request is ridiculous.

This building is over two centuries old with a facade that is well preserved from its redesign a century ago by famed architect John Calvin Stevens. The importance of its presence as part of the historic urban fabric of downtown Congress Street is exactly why all the work was put into researching it and the other contributing structures within that district and getting that district added to Portland's recognized collection of local historic districts. It is exactly why this city decided to adopt a historic preservation ordinance back in 1990. We, as a community, did not put these protections in place, just to have them revoked when a little inconvenient.

The Historic Preservation Board unanimously agrees that this request should be rejected. Please respect their expertise and issue a concurring decision. Doing so would also match public sentiment, as evidenced by the public comments submitted to the Historic Preservation Board in favor of rejection, by a wide margin.

The Portland Museum of Art has a lot of property at their disposal. They have been sitting for decades on the amazing, historic Clapp House without using it for anything the public can access. Why not rehabilitate that structure? In 2007 they depleted Portland's woefully small and much-needed affordable housing supply when they demolished the YWCA building on Spring Street. Why not develop that underutilized parking lot and adjacent, unusable green space they put in its place? Why not redesign the interior of the Chamber of Commerce Building, build an addition to it, or pursue any of the many other expansion options available to them currently allowed by law, without going through this bald-faced, bad-faith reclassification process?

The PMA is a creative organization. Please deny this request so they can use that creativity in their ranks to develop an expansion plan that adheres to the law and suits their needs *and* the needs of the broader community by preserving the Chamber building.

Thank you for thoughtfully considering this issue.

Dugan Murphy
(he/him)
61 India St #3, Portland

Debbie J <dpjonpeaks@gmail.com> Nov 22, 2023, 5:38:42 PM (4 days ago)
to planningboard@portlandmaine.gov

To the Members of the Portland Planning Board:

I am writing in support of the preservation of 142 Free Street, the former Children's Museum and Chamber of Commerce building.

This beautiful and historic building clearly meets the criteria for contributing status. There is no reason for it to be demolished! The PMA can meet their expansion goals while preserving 142 State Street by reconsidering their design concept.

Please do not weaken our city's Historic Preservation Ordinance.

Please do not make the mistake that was made with our beautiful Union Station.

Thank you.

Deborah P. Jordan
33 Lyndon Avenue
Peaks Island, Maine 04108
207-766-5801

Debbie <debjs13@aol.com> Nov 22, 2023, 7:33:55 PM (4 days ago)

to planningboard@portlandmaine.gov

Please keep 142 Free Street as an historic building. Think of what was lost at the St John's Street train station!!
Deborah Johnson
107 Read Street

Doug McCown <douamcc@gmail.com> Nov 22, 2023, 7:41:09 PM (4 days ago)

to planningboard@portlandmaine.gov

Hi, Planning Board. Just to let you know, that I would like to see the facade of that building remain. Thanks, Doug McCown

Sue Yandell <sueyandell@gmail.com> Nov 22, 2023, 8:13:00 PM (4 days ago)

to planningboard@portlandmaine.gov

The original building should have been planned around during the PMA expansion plan. Please preserve the building at 142 Free Street. It is an important historic building in the Portland Downtown. Tearing it down to build something new is against the historic district purpose.

Thank you for your consideration,

Susan Yandell
51 Monument St.
Portland ME 04101

Zack Barowitz <zbarowitz@gmail.com> Nov 22, 2023, 9:13:25 PM (4 days ago)
to Planning Board, George Rheault, Aimee Bessire, Ashley Keenan, Robert J. OBrien

Honorable Members:
As a disproportioned neo-classical example from the eclectic period, 142 Free Street is of very minor significance and, though it may be a contributing building if it were in another location (such as the Western Promenade), it does not contribute to the current or future conditions of Congress Square. It is not contextual to the urban renewal projects (the PMA, Holiday Inn, Congress Square Park, or the Eastland Park Hotel), nor does it contribute to other significant buildings in the vicinity which are styled in a proto-modern vein (the State Theater, et al.).

Congress Square is in dire need of help. Two-way traffic would be an important step, but a landmark piece of architecture would really define the space. Portland is long overdue to have a high-quality, high-profile building in a high visibility location. (In fact, I can't name a great building that has been constructed in my lifetime or even my parents' lifetime.)

Please don't allow past mediocrities ruin a great opportunity for the future.

Respectfully,
Zack Barowitz

Nov 22, 2023, 9:23:37 PM (4 days ago)

jim dougherty <jdougherty101@gmail.com>
to planningboard@portlandmaine.gov

Preserve, please. We have lost too many buildings that are part of our history, only to later how they have been replaced by much less distinctive development.
Preserve 142, please!
Diane Bartholomew
Freeport Maine

Stuart Watson <shw1957@gmail.com> Nov 23, 2023, 7:53:24 AM (4 days ago)

to planningboard@portlandmaine.gov

I completely support the PMA's designation change request.

Stuart Watson
6 Bowdoin St.

Miles Parker <milesparker04101@yahoo.com> Nov 23, 2023, 4:54:45 PM (3 days ago)
to planningboard@portlandmaine.gov

The Chamber of Commerce Building is such a beautiful and enduring part of the Congress Square cityscape that it would be heartbreaking to lose it to PMA's expansion plans.

I was so pleased to see that the Historic Preservation Planning Board unanimously decided not to alter the status of 142 Free St. This impressive temple-like building has been charmingly peeking out of the corner of a major city crossroads for 200 years. The structure’s association with John Calvin Stevens only enriches its significance

Demolition of this enduring Portland landmark would only be met with dismay by very many Portlanders .

I love Portland. I’m a member of the Portland Museum of Art who supports their commitment to our city but not at the expense of losing the Chamber of Commerce Building.

Don't tear it down!

Sincerely,
Miles Parker
Pariserstr 14
81669 Munich, Germany

Nancy Noble <nnoble@mainehistory.org> Nov 24, 2023, 9:08:57 AM (3 days ago)

to planningboard@portlandmaine.gov

Dear Planning Board,

I am writing in support of keeping 142 Free Street as a building on Free Street, as part of our city's landscape. As a church historian, and involved for 20 years in Methodist church history organizations (Commission for Archives and History of the New England Conference of the United Methodist Church, and New England United Methodist Church Historical Society), I have seen churches close, which is heartbreaking enough, but to see church buildings destroyed really saddens my soul. I also work with church records in my role as the Archivist at the Maine Historical Society, and throughout history church buildings were torn down, and a bit of that history is lost every time a church building is destroyed. If you look at the historical record of Portland many of the big beautiful old churches downtown have been torn down to make room for other buildings, not as beautiful. Even though churches often close due to lack of members, the soul of the church should live on, through creative repurposing. I applaud the Children's Museum for keeping the building on Free Street as a museum for many years, and I hope that the Portland Museum of Art will also do so, keeping that history alive through the building.

(Look at the Farnsworth Museum - their Wyeth Center as a beautiful example of showcasing art in a historic church:

https://www.farnsworthmuseum.org/campus/wyeth-center/)

The Free Street building was not only a church, but an important building in our fair city, and tells the history of theater and business in Portland:

https://www.mainememory.net/record/25661

https://www.mainememory.net/record/25662

Thank you so much for the opportunity to speak.

Nancy Noble

Clifford Tremblay <cliff.tremblay@gmail.com> Nov 24, 2023, 3:18:24 PM (2 days ago)

to planningboard@portlandmaine.gov

I am writing to express my deep concern regarding the potential fate of the Chamber of Commerce Building on Free Street and its impact on our community's commitment to historical preservation.

It is not just about a single building; rather, it is about upholding the principles and processes we have diligently established to protect our city's historic fabric. Failure to treat the Chamber of Commerce Building with the respect it deserves would set a detrimental precedent, allowing entities with financial means to disregard the vital procedures in place for preserving our sense of place.

While I may not personally have an affinity for the architecture of the Chamber of Commerce Building, I firmly believe that the Portland Museum of Art should approach its fate with thoughtful consideration. Preservation is not solely about personal preferences; it is about safeguarding our collective history and maintaining the integrity of the processes we have instituted for such purposes.

I implore the PMA to explore alternative options, especially considering their possession of vacant buildings and land along Spring Street. By doing so, they can demonstrate a commitment to responsible development while respecting the essence of our city's history.

I appreciate your attention to this matter and trust that, together, we can ensure the continued preservation of our architectural heritage.

Best regards,

Clifford Tremblay LEED AP

Bruce Wood <bruceweb607@gmail.com> Nov 24, 2023, 6:07:04 PM (2 days ago)

to planningboard@portlandmaine.gov

142 Free Street is an historic building dating back to the early 1800s and is a key part of the Congress Square neighborhood. The building has had several uses over the years but none have significantly changed the external appearance of the building.

The PMA proposal to tear it down and replace it with a new, much larger building would change the appearance and character of the Congress Square neighborhood for the worse. The PMA has space behind 142 Free Street to expand into without impacting the street front appearance of the historic district in which 142 Free Street resides.They also could better use another historic building they own, the Clapp building on Spring Street, which they currently use only for storage, a disgraceful use of a beautiful building.

Require PMA to return to the drawing board and better utilize its buildings and space without destroying the character of its neighborhood.

I urge you to vote against changing the designation of 142 Free Street and to encourage the PMA to think anew about how it can expand.

Bruce Wood
607 Chandler’s Wharf
Portland, ME 04101

Rhoda Renschler <rsrensch@msn.com> Nov 25, 2023, 11:40:59 AM (yesterday)
to planningboard@portlandmaine.gov

To Members of the Planning Board,

Please respect and maintain the historic preservation ordinance of 142 Free Street. By changing the zoning we are reducing the integrity of our committees and the designation process which consisted of multiple hours of thoughtful and careful discernment. A change in zoning of this building jeopardizes the usefulness of further zoning and citizens' participation in their city.

The zoning for 142 Free Street was clear and yet it appears PMA felt it could be above abiding by the law by not clarifying to the competing architects that 142 Free Street was not to be demolished.

A future design could bring forth a fabulous and equally compelling vision for our beloved museum and thereby respect the people's decision to keep 142 Free Street as part of our cityscape.

Rhoda Renschler
37 Channel Road
South Portland, ME
04106

Anita Day <jrzygirl659@yahoo.com> Nov 26, 2023, 8:26:51 AM (yesterday)

to planningboard@portlandmaine.gov

Dear Sir/Madam:

Please do not demolish this beautiful building. I fell in love with the City of Portland when I first visited it in 1992. It felt like a home town rather than a city because it was so clean and safe with lovely parks, old buildings and working waterfront. It had retained so much of its original charm. It was unique. I never thought I would move here, but my circumstances changed and, in 1994, I did move here.

In the years I have lived here, I have seen changes that are slowly eroding the charm and uniqueness of the city. The horrible demolition and new builds on Munjoy Hill, the beggars on every corner, homeless tent camps in the lovely parks and along the streets.

And now you want to demolish a beautiful building. Please protect it; don't destroy it.

Thank you.

Anita Day
7 Celebration Court
Portland, ME 04102

Greater Portland Landmarks

Historic character enriches our lives

PO Box 17533, Portland, ME 04112

24 November 2023

RE: CONGRESS STREET H.D. - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Chair Mazer and Members of the Planning Board,

Greater Portland Landmarks urges you to concur with the Historic Preservation Board's unanimous finding to maintain the designation of the former Chamber of Commerce Building, more recently known as the Children's Museum, as a contributing building within the Congress Street Historic District.

- It more than meets the criteria for contributing status.
- There is strong public support for preserving the building.
- It meets the Portland Plan 2030 goals.
- The Portland Museum of Art's expansion and preservation goals are not mutually exclusive.
- It is important to maintain the fair application and integrity of the historic preservation ordinance.

Clearly Meets Criteria For Contributing Status
Although minor reversible alterations have been made to the exterior, it retains its integrity through its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its design and reflect its appearance during its use by the Portland Chamber of Commerce.

For a building to be designated as a contributing structure, it needs to meet just one of the criteria laid out in Subsection 17.4.1.A of Portland's Historic Preservation Ordinance. The former Chamber of Commerce Building meets 4 out of the 6 criteria. It also meets the criteria laid out in Subsection 17.4.1.B. and Subsection 17.4.2 of the ordinance.

- 17.4.1.A.1 It is significant to the cultural, historic, and architectural heritage of the city as an example of Congress Street's commercial significance in the first half of the 20th century.

- 17.4.1.A.4 It exemplifies a significant architectural style from its 1926 redesign by architects John Calvin Stevens and John Howard Stevens in the Colonial Revival Style, the most popular style of the period.

- 17.4.1.A.5 It is the work of architect John Calvin Stevens and his son John Howard Stevens, whose individual work is significant in the history and development of the City. John Calvin Steven's significance to Portland and Maine's architectural history is rivaled by his historic significance to Portland's Art community and to the PMA itself:

  "*He designed the museum's L.D.M. Sweat Memorial Galleries. More importantly, he was a leader and president of the group that founded the museum. And it was he who secured the patronage that made the institution a reality and gave it staying power. But the Portland Society of Art not only founded the PMA, it created what is now the robust and thriving Maine College of Art, which many consider to be the most highly energized art institution in the art-oriented state of Maine." Portland Press Herald, July 5, 2015*

- 17.4.1.A.6. As the former home for nearly 60 years of the city's Chamber of Commerce, it expresses and contributes to the theme of the Congress Street Historic District, a cohesive corridor of commercial and civic buildings that are significant for their role in the commercial, social, and architectural development of the city from 1780-1958.





A recent image of the building (left) and a 1958 image from the Portland Press Herald (right).

Public Comment on the Importance of Retaining the Chamber of Commerce Building
During the Historic Preservation Board deliberations, the retention of the former Chamber of Commerce building received significant support from the public, with 59 of the 68 public comments submitted to the city opposed to its demolition. The reclassification and demolition of a contributing historic building within one of Portland's historic districts would set a dangerous precedent. One of the public comments regarding the proposed demolition:

"*I write to urge you to save 142 Free St and not establish a dangerous precedent that could endanger many more of our treasured historic buildings. The historic character of our downtowns enriches our communities and provides a unique sense of place. This is a very important decision that cities and towns around the State of Maine will be closely watching." Bryan Kaenrath, Waterville City Manager*

In place for more than thirty years, the ordinance has set out expectations for all applicants to follow. Its fair and equitable application has helped to enhance the city's economic and cultural success. The recently released "Trends in Portland's Historic Districts" report states "Portland's historic character is a…fundamental part of the city's identity, as expressed throughout the City's vision statement and comprehensive City goals."

The Camiros report offers the City recommendations based on comparing Portland's Plan 2030 goals to current land use regulations in order to better align the Land Use Code with the Comp Plan. It recommends that the Recode project "…involve considerations for ensuring that new development respects the city's rich history and that, in the face of new development, essential elements of the city's history are preserved."

Preservation of 142 Free Street Meets Portland's Plan 2030 Goals
"*Portland has been built and rebuilt to endure; we will balance our historic fabric, sound infrastructure, and the best of new technology and design for the future." From the Vision Statement, Portland's Plan 2030.*

The City and the community have invested significant time and funds into improvements to Congress Square, a significant node within the Arts District and the Congress Street Historic District. The PMA's plan, which would necessitate the removal of the former Chamber of Commerce Building, would also remove the existing main entrance to the museum from Congress Square and locate a new entrance on High Street. In our opinion this is counter to the Comprehensive Plan's goals to enhance the downtown, the Arts District, and undermines the ongoing planning and implementation to revitalize Congress Square.

Museum Expansion and Preservation Goals Are Not Mutually Exclusive
Although the applicant has a design proposal that necessitates the former Chamber of Commerce Building's removal, the PMA purchased the building knowing its historic designation and solicited design proposals without acknowledging the building's historic designation to design teams. In fact, the map included with the museum's RFP had no building shown in the location of the Chamber of Commerce Building. Greater Portland Landmarks

supports the PMA's desire to expand, but strongly believes there remains opportunity in the design process to reconsider the demolition of a contributing historic resource and the potential impact of the new addition on Congress Square. The architect's job is to take complex program elements and creatively synthesize those with the existing site. We strongly encourage the PMA to reconsider its proposal and we urge you to agree.



"Developable Space" Site plan of the PMA's existing campus included in the design RFP. 142 Free Street was not depicted.

Reconsideration of the current design path is not unprecedented. In New York State, the Buffalo AKG museum's initial expansion plans by OMA were fundamentally changed based on public reaction to the initial plans. The new building addition, which opened recently, honors the museum's 1905 original building, its 1962 modern addition, and improves the dialogue between the museum and the Frederick Law Olmsted designed park in which the museum sits. The transformed AKG Museum meets all of the museum's goals while preserving and respecting the museum's architectural history.

Portland has examples of the beneficial results that can occur when demolition plans are reconsidered. One such example occurred in the 1990s when plans to demolish the interior of Portland's Merrill Auditorium were touted as the only means to achieve state-of-the-art acoustics. The demolition plans were resisted by a vocal group of citizens who advocated for a second opinion. Experts capable of improving the concert hall's acoustics while preserving the historic interior were then hired. The result is a beautiful historic venue that with its state of the art acoustics, has continued to serve as a cultural hub supporting a diverse variety of programming.

Fair Application of the Ordinance

17.5.9 Amendment or Rescission of a Designation
Amendment or rescission of any designation shall ... follow the procedure set forth in Section 17.5 for designation...The standards for rescission or amendment applied by the Historic Preservation Board, Planning Board, and City Council shall be limited to those provided in Subsections 17.4.1(A) and (B) and Subsection 17.4.2

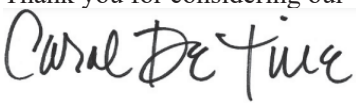
The Historic Preservation Ordinance clearly limits the Planning Board's consideration to those Standards found in Section 17.4.1 (A) and (B). The Historic Preservation Board, although sympathetic to the desire of the PMA to expand, unanimously determined that the former Chamber of Commerce Building meets the standards laid out in

Subsections 17.4.1(A) and (B) and Subsection 17.4.2. The former Chamber of Commerce building continues to warrant its designation as a contributing building within the historic district. Moreover, its retention helps meet key goals of Portland's Plan 2030. We hope that through your careful deliberations, you will agree that the evidence supports its current designation.

Conclusion

The PMA must reconsider its options for expansion. The city block occupied by the PMA includes several surface parking lots, including one owned by the PMA. The reclassification and demolition of a historic building which contributes to the character of the Congress Street corridor and Congress Square, a significant urban gathering space, cannot be allowed when other options exist to meet the museum's space needs while further enhancing the city's streetscapes. We hope that you will reject the PMA's proposal and encourage them to return with a project that retains the integrity of the Congress Street Historic District and creates a world class museum.

Thank you for considering our views,



Carol De Tine
Vice President of the Board of Trustees
Greater Portland Landmarks

Barbara Vestal <vestal@chesterandvestal.com> Nov 26, 2023, 12:46:37 PM (21 hours ago)

to planningboard@portlandmaine.gov

Chair Mazer and Planning Board Members:

I served as the chair of the Planning Board in the late 1980s when we worked with a nationally respected consultant, Richard Roddewig, over a couple of years to craft Portland's historic preservation ordinance. He observed that the choices we were making for Portland put us squarely in the middle range of many such ordinances across the nation.

Like these ordinances, we drafted Portland's ordinance to protect not only rare, very special individual "landmark" structures, but also to protect the much more common historic structures that retained their historic integrity and shared a set of character-defining features that contributed to an historic district's unique identity. These were identified as protected "contributing" structures.

An essential part of the value of this type of historic preservation ordinance derives from a mutuality of benefit: a property owner accepts certain regulation of their own property because neighboring owners of similar property are also accepting the same regulation of their property. The sum of the protected historic properties, as a critical mass, has a much greater impact than the individual buildings. The authenticity of the place is protected by maintaining the context and protecting the inter-relationships between neighboring buildings throughout the entire district.

It is essential to the integrity of the ordinance that all owners of contributing structures be treated in the same manner, in compliance with the same standards. It is patently unfair for one owner to benefit from its neighbors maintaining the historic context, while at the same time seeking to withdraw from the mutual benefits for its own gain in order to demolish that owner's own historic structure.

In this case, with the Portland Museum of Art (PMA), there can be no claim of surprise about the "contributing" status of the Chamber of Commerce Building. It unquestionably met the criteria and was designated as "contributing" at the time that the City Council approved the designation of the Congress Street Historic District in 2009. This fact was well-known to PMA when it purchased the building.

To me, the surprise is that PMA apparently opted to ignore that designation and opted to proceed with a design competition in which they left out the crucial information that the Chamber of Commerce Building was designated as a "contributing" structure in the Congress Street Historic District. Had that information been given to the design teams, it seems like multiple options for a museum expansion could have been (and still could be) productively explored that would not have included demolition of the Chamber of Commerce Building. The range of possible options include incorporation of the Chamber of Commerce Building into the expansion plans in some fashion, or expansion onto adjacent vacant land already owned by the PMA, or acquisition of adjacent vacant land for the expansion.

It is not the job of this Board, nor the job of the City, to determine the expansion strategy for PMA. They appear to have many options for proceeding within the current regulations.

But it is the job of this Board, and the City, to protect the integrity of Portland's Historic Preservation Ordinance, which has been an important part of our regulatory system for over 30 years. Safeguarding the City's historic resources is identified as one of eight overriding policy guides in the comprehensive plan, Portland's Plan 2030. The recently completed analysis of the economic impact of Portland's historic preservation program documents the significant contributions it has over the last 30 years.

Ensuring that all owners of similarly situated historic properties receive the same carefully considered, fair and consistent treatment in compliance with the ordinance is critical to the integrity of the program. Regardless of whether a decision on applicability of the historic preservation ordinance is made by the Historic Preservation Board, the Planning Board or the City Council, the decision should not turn on the identity of the applicant. Procedural due process requires that the decision makers focus on the historic structure in question, the Congress Street Historic District, and the Historic Preservation Ordinance. The former Chamber

of Commerce building is clearly a “contributing” building under the ordinance. That designation should not be reversed, even if the applicant is the PMA. It has other paths it can follow to achieve its programmatic goals while also complying with Portland's ordinances and comprehensive plan.

Thank you for your consideration of this matter.

Regards,

Barbara Vestal
7 Fore Street
Portland, Maine 04101

Dabeard35 <jamie.a.beals@gmail.com> Nov 26, 2023, 10:00:34 PM (12 hours ago)

to planningboard@portlandmaine.gov

Hello,

I am writing in regard to the Portland Museum of Art's plans for this building. Not only would it be a shame to destroy this building in a city where so many historic buildings are being destroyed and replaced with cookie-cutter ugliness, but I feel like it is important that the Historic Preservation Ordinance be applied fairly, holding the PMA to the same standard as other businesses / entities.

The Historic Preservation Ordinance states that the Planning Board and the Council are required to review the PMA's application under the same criteria that the Historic Planning Board was required to apply. It is important that the Planning Board go along with the recommendation of the Historic Preservation Board and uphold the integrity of the Ordinance. I believe that the PMA should be held to the same standards of review of any other applicant, regardless of the vision and goals for their campus; additionally, I think it is possible for the PMA to meet its goals while at the same time preserving the former Chamber of Commerce Building.

Thank you for your time,
Jamie Beals
11 Deering Ave.
Portland

Fwd: 142 Free Street 0 views

Subscribe



Meredith Tipton <mltipton1@gmail.com> 7:05 AM (3 hours ago)

to planningboard@portlandmaine.gov

---------- Forwarded message ---------
From: **Meredith Tipton** <mltipton1@gmail.com>
Date: Sat, Nov 25, 2023, 7:09 AM
Subject: 142 Free Street
To: <planningboard@maine.gov>

I am writing to request that the planning board not allow the demolition of this beautiful historic property on Free Street. We moved from our oceanside home to the historic Westend to immerse ourselves in this unique quality of Portland. I have deep reverence for Portland's historic past. We need to retain and respect all that contributes to this rich history.
The PMA is a wonderful institution and in their quest for expansion should not not have included 142 Free St as part of the available space for development. PMA and it's designers need to get back to the drawing table and make the new design work sans 142 Free St.
Thank you for your thoughtful decision to preserve our historic district.
Meredith Lentz Tipton PhD
75 State Street
Portland, Maine 04101

Berry Manter <berrymanter@yahoo.com>
to Planning Board

8:40 AM (1 hour ago)

Dear Planning board members,

I want to add to the city-wide and urgent support to CONTINUE the designation of the Free Street (former Children's Museum) 1830's structure as "contributing", a building which IS very much visually part of the remaining fabric of historic structures of downtown Portland.

As a graduate of MeCA and an artist, I appreciate contemporary architecture. However, it would be to both Portland's and PMA's longterm "benefit" to integrate resonant design elements into it's future building plans, retaining this nearly 200 year old Free Street structure and reflective of the beautiful historic buildings remaining in its possession. Yes, coherent contemporary additions CAN work. Nothing says "out of touch" and "arrogance" more than not honoring the immediate community of preserved structures. (I stifle my urge to mention 58 Fore's treatment of their historic obligations…)

Please continue recognizing the former "Chamber of Commerce" building, aka Children's museum, aka Church as "contributing".

Sincerely,

Berry Manter
46 Eastern Promenade
MeCA '92

To: Portland Planning Board
From: Earle G. Shettleworth, Jr.
37 Academy Street
Hallowell, Maine 04347
November 27, 2023

Agenda Item: Proposed Historic District Amendment; Congress Street Historic District – Reclassification of 142 Free Street as non-contributing.

I am writing to ask that the Planning Board support the Historic Preservation Board's unanimous finding to maintain the designation of 142 Free Street as a contributing building to the Congress Street Historic District.

As a native of Portland who has studied the history and architecture of the city for sixty years, I can affirm the significance of 142 Free Street as a work of the noted architect John Calvin Stevens that contributes to the historic district. As you consider the request before you to reclassify 142 Free Street as non-contributing to the district, I would like to comment on the broader implications of your decision.

Since the 1960s, many Portland citizens have worked diligently to preserve the historic character of the city by the establishment of National Register Historic Districts, followed by the creation of local historic districts through the adoption of the historic preservation ordinance in 1990. The success of these efforts is clearly apparent in the critical contribution of historic preservation to making Portland one of the most desirable small cities in America. Those areas protected by the ordinance have experienced major private and public investment that has enhanced the entire city.

Approval of the Portland Museum of Art's application to declassify 142 Free Street would seriously compromise the integrity and purpose of the ordinance by allowing a building certified by the city, the state, and the Federal government to be demolished. Moreover, such an action would encourage other property owners to seek similar exemptions, further weakening the effectiveness of the ordinance and placing the city's historic built environment, and thus its quality of life, in jeopardy.

I trust in the good judgement of the Board to maintain the integrity and purpose of the ordinance as it reviews this application.

November 27, 2023

Re: Congress Street Historic District – Reclassification of 142 Free Street as Noncontributing

Chair Mazer and Members of the Planning Board,

I urge you to uphold the unanimous decision of Portland's Historic Preservation Board to maintain the Contributing status for the former Chamber of Commerce building at 142 Free Street. This building clearly meets the criteria as a Contributing building within this historic district and it also retains its integrity to the time in 1926 when it was redesigned by John Calvin Stevens for the Chamber of Commerce. The Chamber used this building as its principal office for nearly 60 years. It is a signature building in this historic district that celebrates the commercial, social and architectural development of the city from 1780 to 1958.

Equally significant as a consideration in this request for reclassification is the importance of upholding and implementing with an even hand Portland's Historic Preservation Ordinance that has been in effect for over 30 years. There has been strong emphasis placed by both our City Council and our City staff on implementing Portland's Land Use Code in a manner that is equitable with predictability and equal treatment for all. The Portland Museum of Art's request to reclassify 142 Free Street asks you to ignore the time-tested provisions of the City's Historic Preservation Ordinance and to make an exception to the rules of that ordinance. Such a decision risks undermining the ordinance which has been responsible for substantial economic investment in this City with millions of dollars of projects using the Historic Rehabilitation Tax Credit and national accolades offered for Portland's authentic historic character and ambiance as a draw for residents and tourists alike.

In summary, I urge you to use your careful deliberations to consider the merits of the Contributing status of 142 Free Street and the integrity of Portland's Historic Preservation Ordinance and to uphold this Contributing designation.

Thank you for considering my views.

Sally Oldham
118 Congress Street

ellen kanner <ellen.t.kanner@gmail.com> 10:01 AM (1 hour ago)

to planningboard@portlandmaine.gov

Greetings,
My vote is to retain and preserve the 142 Free Street building as it offers unique characteristics that make Portland special. What if every building in downtown Portland was modernized and so much history removed (as is happening on the east end and elsewhere in the city!).
Please do not allow the PMA to remove this building. Their architectural design concepts should have encompassed this building as part of the PMA's future plans. Please accept the Historic Preservation (HP) Board's recommendation and preserve this building with its unique architecture, character and history.

Elle Kanner
Business owner, Portland ME
--

City of Portland Planning Board

Re: 142 Free Street – 28 November Workshop

Date: 27 November 2023

Members of the Planning Board,

I am requesting that the Portland Art Museum's (PMA) request to demolish the 142 Free St. building NOT be approved. I have listened carefully to the numerous, changing and mostly flawed statements that PMA representatives have delivered at two Historic Preservation Board (HPB) hearings. Please consider the following:

+ The Historic Preservation Board voted unanimously NOT to accept the PMA's request to demolish the building.

+ The Planning Board is charged with the same zoning ordinance regulations as the HPB. In order to maintain the integrity of the zoning ordinance, the board should likewise vote NOT to approve the PMA request.

+ The PMA has been very well aware of the clearly written historic preservation ordinance in their zone from the start of this project, yet chose to ignore it.

+ Contrary to the PMA's statements that their request is in the public's interest, the PMA did not make any effort to encourage or suggest, and may have dissuaded, the design teams from considering reusing 142 Free St. as a design solution. That action was not in the public's interest as the public was not allowed to view and comment on competition designs retaining the 142 Free St. building.

+ Sustainability with Portland buildings is a city goal. The PMA argues that wood timber, a design feature in the final selected design, is sustainable. Yet, building design professionals understand that reusing an existing structure is more sustainable (less environmental impact) than building new. 142 Free St. is currently classified for museum use and up to building codes for that use - it is a sound structure.

Thank you, Robert Kahn
94 Rackleff St.
Portland, ME

Jack Vreeland
447 Deering Ave., Portland ME 04103
jackvreeland@gmail.com 207-879-9152

November 26, 2023

City of Portland Planning Board
389 Congress St, 4th Floor, Portland, ME 04101

Subject: Public Comment on Historic Preservation Designation;
142 Free Street; Portland Museum of Art, Applicant

Dear Chair Brandon Mazer and Members of the Planning Board,

As a four-decade resident of Portland who has witnessed the positive impact historic preservation has had on our community, I urge you to concur with the Historic Preservation Board's unanimous finding to maintain the designation of the former Chamber of Commerce Building as a contributing building within the Congress Street Historic District and to encourage the Portland Museum of Art to develop a world-class plan while respecting the long-standing Historic Preservation Ordinance.

I recall when Exchange and Commercial Streets were in disrepair, dark and depressing. Congress Street had boarded-up storefronts. Mansions on the Western Promenade were used for storage. Yet visionary community leaders realized that our historic built environment, with proper stewardship, could be a driving force in making this community the thriving place it now is.

Today with the City's recent "Trends in Historic Preservation" document we have the data to confirm just how right they were and how preservation is not a luxury enjoyed by some, but a powerful building block for our entire community with ramifications that include affordability, diversity, and sustainability. The report states: "*Portland's historic character is a critical part of what makes the city special. It is a fundamental part of the city's identity, as expressed throughout the City's vision statement and comprehensive City goals.*"

For this to continue the report recommends: "*Ensure clarity and predictability in the historic preservation regulations and its supporting materials moving forward.*"

"Maintaining a development review and approval process that is fair, consistent, expedient, and understandable helps ensure that real estate investment continues with minimal confusion or cost increases associated with a project's location in a historic district."

The issue before you is, in many ways, the opposite of this recommendation. It would not be fair to other applicants lacking the stature of the PMA. To somehow rely on a loophole carved out for the PMA would be an exception to the rules, not consistent. This process could have been expedient if the PMA had chosen to respect the Historic Preservation Ordinance from the start. The protection of 142 Free Street by the Preservation Ordinance is the same now as it was the day they bought the property. The road to minimal confusion or cost was not the road taken by the PMA.

The PMA clearly was aware of what they own. From their RFP:
Located in the heart of downtown Portland, one of the country's most beloved cities, the museum encompasses a full city block of historically and architecturally significant buildings.

" …*a full city block."* And it states: *142 Free St. is located within the Congress St. Historic District.*

And yet, the site map in the RFP 142 Free Street is just not there.

Simply put, I have one question that perhaps this board can pose to the Portland Museum of Art: At what point in their process did it determine it would not have to follow the provisions of the Historic Preservation Ordinance? Even though the building meets 4 out of the 6 criteria laid out in Subsection 17.4.1.A of Portland's Historic Preservation Ordinance. Were they never advised this would be problematic?

On what grounds did they decide to move forward? I do not like to think, as it was stated at Historic Preservation Board meeting by a PMA representative, "There is only one Portland Museum of Art". To claim special status seems to fly in the face of "Art for All". I think that I and other supporters of the PMA want to think better of them than this outlook would indicate.

The PMA, of course, can make an argument that this expansion will bring jobs and income to Portland and is thus justified. The benefits of an expanded museum do not go away if 142 Free Street is included in the plan. The benefits to our city of historic preservation also have benefits. Again, from the "Trends in Historic Preservation" document: *In addition, Portland's historic character makes its real estate more desirable and valuable and plays a role in bringing visitors to Portland.*

The PMA has stated they investigated keeping the 142 Free Street but determined that would not work. Which seems a major lack of imagination for a creative institution. There are examples all over the world of historic buildings integrated into modern museums. This was such a missed opportunity. But it is not too late for you to direct them to a better way forward.

I implore the board to encourage the PMA to recognize and respect the importance of our Historic Preservation Ordinance while pursuing their admirable goal of a world-class museum expansion. Both objectives are achievable, and I appeal for equitable enforcement of the Congress Street Historic District's provisions.

I sincerely anticipate revised plans that harmonize the PMA's aspirations with our shared commitment to preserving Portland's historical legacy. I thank the board for considering this input and eagerly await further discussions on this matter.

Sincerely,

Jack Vreeland

George Rheault <george.rheault@gmail.com> 11:00 AM (19 minutes ago)

to Planning Board, jmy, Abigail Reed, kkraft

The inclusion of my October 3, 2023 public comment in the Planning Board packet omitted the attachment I had originally included in the October 3rd email (the attachment is a news story about the City's declaration of "John Calvin Stevens Day" in 2009).

The Historic Preservation Board appears to not have considered for a single moment the idea that since our city is peppered with a great many John Calvin Stevens designed structures, it can afford to lose one of them to no great detriment to our built environment, particularly since 142 Free Street is hands-down one of his schlockiest efforts.

---------- Forwarded message ---------
From: **George Rheault** <george.rheault@gmail.com>
Date: Tue, Oct 3, 2023 at 11:07 AM
Subject: HP Public Comment - 142 Free Street: Haven't we venerated John Calvin Stevens ENOUGH?
To: HIstoric Preservation <hp@portlandmaine.gov>

See attachment.

I am pretty sure that the legacy of John Calvin Stevens and his contributions to Portland's physical development (as well as his much more checkered involvement in its social and political evolution) will not rise or fall based on the continuing existence of 142 Free Street.

How many totems from this one man does the City of Portland need to tell his story?

Why should the dead hand of the past once again serve to suffocate the energy and creativity of our community's present and future?



The shingle-style cottage at 52 Bowdoin St. in Portland that architect John Calvin Stevens called home for nearly 30 years. ***(Billings photo)***

John Calvin Stevens

from page 1

Portland."

So much so that next week, city leaders will declare Oct. 8 John Calvin Stevens Day.

One of Maine's most famous architects, Stevens, who was born Oct. 8, 1855, and died Jan. 25, 1940, designed more than 300 buildings on Portland's peninsula alone and dozens more in the surrounding neighborhoods and islands.

Stevens made a name for himself by mastering the shingle-style cottage that has come to symbolize coastal life in New England. Later, he mastered the Georgian, colonial-style homes made of brick. To see both, one only needs to spend a little time on Bowdoin Street, which has shingle-style cottages on one side of the street and brick revival homes on the other.

One of those homes, 52 Bowdoin St., was Stevens' home for nearly 30 years, Shettleworth said.

Although Stevens is known mostly for his residential designs, Shettleworth said he is also known for his civic, commercial and religious architecture. He was an associate architect commissioned to help design and build Portland City Hall, and he designed State Street Church on High Street and the Nathan Clifford Elementary School on Falmouth Street.

But Shettleworth said Stevens is known not only for his building designs, but for the length of his career.

Stevens started his career when he was 18 and worked right up to his death. "He was involved in architecture for a 70-year period," Shettleworth said.

Next week's proclamation, which will be read at noon on the front steps of Portland City Hall, is the last event of a year-long celebration for the architectural firm Stevens created 125 years ago.

SMRT, formerly Stevens Morton Rose & Thompson, was founded in 1884 and is based on Fore Street. Although it is no longer family owned, his great grandson is still involved in its day-to-day operations at the age of 71.

"It's been a pretty varied practice over the years," SMRT chairman and former company President Paul Stevens said. "In many ways, it isn't really a lot different."

The company experienced most of its growth in the 1980s, he said, when it went from having only 10 employees to about 75. During that time, SMRT ceased designing residences and concentrated solely commercial, civic and health-care buildings.

But when Paul Stevens, a fourth-generation architect, steps down from the company, it will be the end of an era, since there is no fifth-generation Stevens waiting to take over the practice. That's why next week's ceremony, which will also include a Congressional Record of Recognition from a representative of U.S. Sen. Olympia Snowe's office, is so special to him.

"I'm the end," he said. "I've very proud of what firm has accomplished. It's very satisfying to be recognized."

Randy Billings can be reached at 781-3661 ext. 100 or rbillings@theforecaster.net

the Portland
FORECASTER

September 30, 2009 | News of The City of Portland | Vol. 23, No. 39

Fire chief looking at alternative space for fire boat crew

By Kate Bucklin

PORTLAND — The fire chief this week planned to inspect space on Maine Wharf that could provide fire-boat crew quarters at a third of the cost proposed at the Maine State Pier.

Chief Fred LaMontagne said he was contacted by Joe Malone of Malone Commercial Brokers Monday to see if he wanted to look at a 2,000-square-foot office that could be converted into living quarters for firefighters.

"We will be looking at that property, probably today or tomorrow," Lamontagne said Tuesday.

Maine Wharf is owned by Eric Cianchette and is next to the Maine State Pier, where the fire boat is docked.

"This could give them some flexibility," Malone said.

The City Council in October is expected to decide whether to spend $1.8 million in Capital Improvement Project funds to build new fire-boat crew quarters at the Casco Bay Garage. Some councilors have spoken out against the proposal, saying it is too costly.

The current quarters for firefighters assigned to the fire boat are inside the Casco Bay Garage and are small (400 square feet) and damp, causing mold and

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Literacy Volunteers seeks sponsors to stay afloat

By Randy Billings

PORTLAND — Since 1973, Literacy Volunteers of Greater Portland has been providing free tutoring to residents who need help reading, writing and speaking English.

But financial difficulties could doom the organization by the end of the year.

Like some other nonprofits, the future of Literacy Volunteers, whose operating budget is entirely funded by foundations and donations, is in jeopardy because prospective donors are tightening their belts.

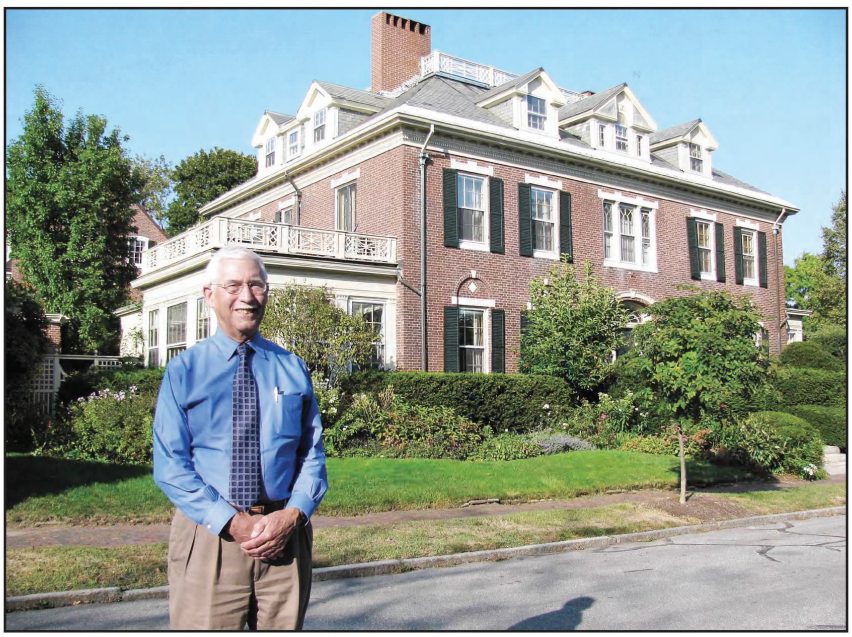
"We're on the brink," Executive Director Phyllis de Fano said. "There's no question about it."

De Fano, who is the only paid full-time staffer in the office at 142 High St., said the nonprofit has been dipping into its reserve account to meet the demands of its annual budget of $65,000. There is currently enough money to continue operating until December, she said.

De Fano said Literacy Volunteers is also considering merging with another organization in an effort to reduce costs, but would not identify the organization.

The economic downturn is forcing many donors and foundations to reduce the what they give to groups like Literacy Volunteers, which is accredited by Proliteracy America. De Fano said the group has survived in recent years by soliciting funding from a wider base of foundations, but the nonprofit is

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Paul Stevens, a fourth-generation architect, stands in front of the Richard Webb house at 29 Bowdoin St. in Portland's West End. The building is one of the best examples of work by his great-grandfather, John Calvin Stevens. ***(Billings photo)***

'An indelible mark'

City to honor the legacy of John Calvin Stevens

By Randy Billings

PORTLAND — If you have spent any amount of time in Portland, or almost anywhere on the coast of New England, chances are you've seen the work of John Calvin Stevens.

Take a walk through the Old Port or a leisurely stroll through the streets of the West End, lined with magnificent towering homes, and you will find his work. Spend a weekend in a summer cottage in Cape Elizabeth or on the Casco Bay islands and you will experience him first-hand.

"He's everywhere," State Historian Earle Shettleworth Jr. said. "He's left an indelible mark on the city of

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Chief promises Bayside more access to police

By Kate Bucklin

PORTLAND — Bayside residents frustrated over what they say is an increase in alcohol-fueled crimes in their neighborhood met with local law enforcement authorities and Preble Street Resource Center officials Tuesday to figure out how to curb the activity.

That behavior includes public drinking, public urinating and defecating, passing out in the street, vomiting in the street and having sex in public, said community organizer Jeff Goldman, who moderated the meeting at Lost Coin Cafe on Portland Street.

The Bayside Neighborhood Watch committee developed a list of recommendations for the Police Department, the Cumberland County district attorney's office, Preble Street and local sellers of alcohol. The recommendations point to changes each could make to help reduce "nuisance crimes."

Police Chief James Craig called Tuesday's meeting, and

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West End residents unhappy with community policing station

By Randy Billings

PORTLAND — Concerned about a perceived rise in crime, the West End Neighborhood Association is collecting signatures to petition city and school leaders to increase the visibility of the Community Policing Center.

It is an effort the district's city councilor, David Marshall, said he finds surprising.

The petition being circulated throughout the West End calls on city leaders to put the West End Community Policing Station at the Reiche Community Center, at 166 Brackett St., by Nov. 15. If that site is not feasible, residents want it located in another, more visible location nearby by Dec. 1.

The policing station is currently housed in Harbor Terrace, a group housing complex at 284 Danforth St. operated by the Portland Housing Authority. It was moved there from a location on Danforth Street several years ago as a cost-cutting measure. City Hall could not immediately

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Series of reviews scheduled for Waynflete proposal
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Fall FITNESS
Special advertising section
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Seth Sprague <sethsprague310@gmail.com> 11:02 AM (22 minutes ago)
to planningboard@portlandmaine.gov

Dear Members of the City of Portland Planning Board

We are Seth and Laura Sprague and reside at 28 Orchard Street in the West End Historic District. We urge the Planning Board to uphold the Historic Preservation Board's decision to deny the Portland Museum of Art's request to reclassify and remove 142 Free Street as a contributing structure in the Congress Street Historic District of 1990, thereby allowing its demolition. Approaching its centennial, the building's facade retains its classical-revival features, designed in 1926 for the Chamber of Commerce by John Calvin Stevens, one of Maine's and the City's foremost architects. Since its inclusion thirty-three years ago, the building still meets the criteria as a contributing structure as described in the City's Historic Preservation Ordinance.

Portland and its citizens have worked for decades to establish Portland's historic districts. They protect the architectural resources and streetscapes that give the city its authenticity, historical integrity, visual appeal, and livability. We call upon the Portland Museum of Art, as a leading cultural institution, to support the City's other cultural resources, in this case 142 Free Street and the Congress Street Historic District, rather than seek their destruction. Approving a reclassification that would allow 142 Free Street to be demolished sets a dangerous precedent, especially given that the Museum has not made a good faith effort to incorporate the building in a new design. If the Planning Board allows a leading cultural institution to overturn the rules, it opens the door for others to do the same and threatens all the City's historic districts for years to come. You will be unable to maintain the integrity of the historic districts or your effectiveness as the Planning Board.

Nothing has happened or changed at 142 Free Street that warrants its reclassification and exclusion from the Congress Street Historic District. We urge you to deny the applicant's request to remove it from the district and allow its demolition.

Thank you.

Sincerely,

Seth and Laura Sprague

28 Orchard St.

George Rheault <george.rheault@gmail.com> 11:20 AM (8 minutes ago)

to Planning Board, jmy, Abigail Reed, kkraft

A 2009 news story (see attachments) indicates that when the locally-designated Congress Street Historic District was created by the City Council, an amendment was tacked on as part of the designation requiring that an annual report be generated (presumably by the Planning Department) detailing development activity taking place in the new Congress Street Historic District. See highlighted sentence at the end of the news article.

Whatever happened to this requirement? Did a subsequent City Council remove this requirement or was it simply never followed through upon?

The Planning Staff should ask the City Clerk's Office for the original Council order, as passed in 2009, to see what the precise language for the annual report was at the time of passage. An explanation should be given to the public regarding what was done to satisfy the requirement and any reports that were actually completed.

It is apparent that the fears of those who opposed the Congress Street Historic District were largely realized. It was a development killer and investment within the Historic District was severely stifled. But the lack of the annual reports (assuming they were never submitted despite the City Council mandating their creation and delivery) makes it hard to chart the development history since the 2009 district designation. It should also be noted that it was ONLY in 2019 that the Congress Street Historic District was certified by the National Park Service for tax credit eligibility - a full TEN years after its initial local designation which was pushed mostly on the basis of properties being able to take advantage of federal historic tax credits.

FYI: The news article is from "The Forecaster," back when it was independent of the Press Herald.

Congress St.

from page 3

than new construction.

Humstone was also among several speakers who touted tax credits as a benefit for property owners within historic districts.

"More than 130 properties can take advantage of (the) tax credits," she said.

Scott Simons, president of the Portland Society of Architects, said his group also supports the proposal. The society questioned several elements of the proposal when it was first released, including height limitations it would impose on the tallest part of the city and confusion relating the the role of the Historic Preservation Board and the Planning Board.

"The modifications to the proposal have made us feel better about it," he said.

Three property owners spoke against the designation.

Chris Campbell said the district would stymie future development and freeze Congress Street in its current state.

Wan Park said he was concerned about added costs and process if he should pursue fixing up his properties on Congress Street.

Ric Quesada, who owns several properties within the district, said that although he is usually a proponent of historic preservation, he does not support the proposal. He said taking advantage of tax credits requires substantial up-front costs for property owners and meeting federal standards. He also expressed disappointment that three of his buildings are included in the district, including one that is surrounded by a parking lot.

The council, however, overwhelmingly supported designating Congress Street and the surrounding area, including a large part of Free Street, as historic. The district runs from Lincoln Park to Bramhall Square.

An amendment was made and passed requiring city staff to report back annually regarding development in the district.

Kate Bucklin can be reached at 781-3661 ext. 106 or kbucklin@theforecaster.net.

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Portland City Council OKs Congress St. historic designation

By Kate Bucklin

PORTLAND — Nearly 200 downtown properties are now part of the city's newest historic district, a designation the City Council unanimously approved Monday following a couple hours of public testimony from historic preservation advocates.

The Congress Street Historic District encompasses about 75 acres along Congress Street and surrounding streets. The historic designation means that any changes proposed to buildings or lots in the district will be subject to the city's Historic Preservation review, either by staff or the Historic Preservation Board, depending on the scope of the project.

Planning the new district began in January 2006 at the direction of the City Council, following a burst of redevelopment along the city's main commercial street. Historic Preservation staff spent nearly two years researching properties in the proposed zone and coming up with a proposal. About a year ago the city began holding forums for property owners and spent several months tweaking the district boundaries to reflect concerns from those property and business owners.

The district was approved by the Historic Preservation Board and the Planning Board in January.

At the public hearing Monday night, historic preservation advocates and fans blitzed City Council Chambers and took turns at the podium, repeatedly promoting the benefits of designating Congress Street as historic.

Arguments in favor of the district ranged from historic preservation being connected to the creative economy and retaining Maine's youth, to property owners being able to take advantage of special tax credits.

Beth Humstone called the district a "catalyst for economic development." She said that rehabilitation is often better

continued page 35

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November 27, 2023
To: Members of the Portland Planning Board
Re: 142 Free Street Agenda Item Comments

Thank you for the opportunity to submit comments on this agenda item.

Reclassifying a building that clearly meets the criteria for a Contributing building of the Congress Street Historic District in order to allow the property owner to demolish the historic structure is not in the best interest of the culture and community of Portland.

Though I will never qualify as Mainer, my connection to Portland is strong and long. My great grandparents immigrated from the Russian Pale to Portland in 1882, joining their uncle who had arrived in 1876. My grandmother was born in 1889 on Middle Street. She was my only grandparent born in the United States.

I spent my summers in Maine as a child and moved “home” to Portland about 100 years after my family first arrived. My career as an educator - and now volunteer docent for Greater Portland Landmarks – has been in the Portland/South Portland area ever since.

My great grandfather was a peddler, who died of tuberculosis in his early 40s. His youngest son opened a cigar store a few doors down Congress Street from Hays Drugstore when he was old enough to do so.

The Hays Building, 142 Free Street, and other Contributing structures in the Congress Street Historic District are beautiful examples of how older buildings can remain vibrant and functional. I have serious concerns that the proposal to reclassify 142 Free Street could set a dangerous precedent and destroy the intent of the ordinance. It would make the designation of Historic Districts and Contributing buildings meaningless and undermine the mission of the ordinance. It feels irresponsible. I urge the Planning Board to hold the PMA to the same standards as any applicant; the integrity of the ordinance should be maintained.

The Portland Museum of Art (PMA) expansion goals and the City’s preservation goals are not mutually exclusive. If the Museum had encouraged proposals that retained the Chamber of Commerce Building, which has been successfully repurposed in the past (including the 1926 redesign by John Calvin Stevens), 21st century architects could have created compelling designs for the expansion that incorporated the 142 Free Street building. I urge the PMA to reconsider their concept design and incorporate the historic building at 142 Free Street.

Thank you for your consideration of these comments,

Faye Y. Gmeiner
15 Tideview Terrace
Kennebunk, ME 04043

George Rheault <george.rheault@gmail.com> 11:35 AM (2 minutes ago)
to Planning Board, jmy, Abigail Reed, kkraft

Please see attached a 2009 Deb Andrews memo to the City Council describing the process leading up to the City Council's decision to create the Congress Street Historic District.

The attachments are missing, but presumably the planning department can find them and post them to the record so the public has a much better sense of what happened back in 2009 to get us to this point.

The question of whether to allow the demolition of 142 Free Street must be contextualized as part of the entire debate between 2006 to 2009 over whether the Congress Street Historic District was a good idea.

As the Deb Andrews memo makes clear, this was a completely political debate with very little to do with actual history or architecture. Indeed the original district was shrunk by over 25% to buy off key elements of the opposition allowing the anti-growth preservationists to emerge victorious.

It is obvious that much of the Congress Street Historic District's properties were arbitrarily arrived at and since politics played such a key role, it is completely fine to once again let politics decide the question. And this is fine - because our decision-makers SHOULD have the discretion to change their minds about the significance and integrity of a "historic" building if the present gives us the opportunity to do something much better at this location.

Recommendation of the Planning Board and Historic Preservation Board

Regarding

1) **DESIGNATION OF "CONGRESS STREET HISTORIC DISTRICT" under the provisions of Article IX of the Land Use Code;**

2) **AMENDMENTS TO HISTORIC PRESERVATION ORDINANCE (Article IX of the Land Use Code); and**

3) **AMENDMENTS TO SITE PLAN ORDINANCE (Article V of the Land Use Code)**

February 9, 2009 Workshop Memo
Portland City Council
Portland, Maine

Submitted by:
Deborah Andrews
Historic Preservation Program Manager

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IV. AMENDMENTS TO HISTORIC PRESERVATION ORDINANCE (Article IX of the Land Use Code)

V. AMENDMENTS TO SITE PLAN ORDINANCE (Article V of the Land Use Code.)

I. INTRODUCTION

The Council will soon begin formal deliberations on recommendations from the Historic Preservation Board and Planning Board regarding:

1) Designation of a portion of Congress Street and its immediate environs as a local historic district (to be known as the "Congress Street Historic District"), subject to the provisions of Article IX (Historic Preservation) of the Land Use Code;

2) Amendments to Article IX of the Land Use Code (historic preservation ordinance); and

3) Amendments to Article V of the Land Use Code (site plan ordinance)

On February 9th, a workshop session has been scheduled to provide an overview of the proposed Congress Street Historic District. Historic Preservation staff will review the history of the initiative, the intent behind designation, and the process by which the district boundaries were developed. Information will also be provided on federal and state historic tax credits that will become available to owners of historic properties within the downtown should the district be approved.

II. RECOMMENDATIONS OF THE HISTORIC PRESERVATION BOARD AND PLANNING BOARD

Historic Preservation Board Recommendation. On November 19, 2008, following a public hearing and final deliberations, the Historic Preservation Board voted unanimously to recommend to the Planning Board (and by extension, the City Council) designation of the proposed "Congress Street Historic District" as delineated in the district boundary maps enclosed as ATTACHMENTS 1a and 1b and as described in the accompanying designation report – ATTACHMENT 2. The Historic Preservation Board's formal recommendation followed a lengthy preliminary review process that included three workshops on the proposal. The proposal itself was the product of almost three years of documentation, analysis and public outreach and was developed by a subcommittee of the Historic Preservation Board and historic preservation staff at the direction of the City Council's Community Development Committee. (A detailed history of the review process is provided in ATTACHMENT 5 of this report.)

Also on November 19th, the Historic Preservation Board voted unanimously to recommend a series of amendments to the historic preservation ordinance and site plan ordinance. Although brought forward in conjunction with the Congress Street Historic District initiative, the proposed amendments, with only one exception, do not relate specifically to the Congress Street district. The historic preservation ordinance amendments are intended to address long-identified ambiguities in the text and to clarify existing provisions. They do not substantively change the nature or scope of the historic preservation regulations or review process. The proposed site plan ordinance amendments are intended to clarify the review process for major developments where

designated landmarks, properties within designated historic districts, or properties immediately adjacent to landmarks or historic district boundaries are involved.

As prescribed in Portland's historic preservation ordinance, the Historic Preservation Board's role in proposed historic district designations is to determine whether the proposed district meets the ordinance's minimum requirements for designation (see ATTACHMENT 13, Division 3. Sec. 14-610) and make a recommendation regarding designation to the Planning Board. The Planning Board's role, in turn, is to review the recommendation and accompanying report of the Historic Preservation Board and make an independent determination as to 1) whether the designation criteria have been met and 2) whether designation of the new district is consistent with the City's Comprehensive Plan. Following its own deliberations, the Planning Board forwards its recommendation regarding district designation to the City Council. Ultimately, the Council has the authority to approve or disapprove the proposed designation.

The review process for proposed ordinance amendments is the same as that for historic district designations.

Planning Board Recommendation. On January 27, 2009, following a public hearing and formal deliberations, the Planning Board voted 5-2 (Silk, Lowry, Patterson, Tevanian and Hall in favor; Odokara and Lewis opposed) to recommend to the City Council designation of the Congress Street Historic District as delineated by the Historic Preservation Board. As a result of their deliberations, the Planning Board recommended one additional text revision to the designation report (which is reflected in the enclosed final report.)

In making its decision to recommend the proposed Congress Street Historic District designation to the Council, the Planning Board was guided by the formal recommendation and accompanying final report of the Historic Preservation Board, but also by its own extensive deliberations, which included three substantive workshops on the initiative. The Planning Board based its recommendation on the Designation Report which sets forth the architectural, historical and cultural significance of the proposed district, information provided in several written staff reports and illustrated presentations, and public testimony received throughout the review process. The Planning Board's formal deliberations on January 27th followed three preliminary workshops on the initiative.

Also on January 27th, the Planning Board voted 5-2 (Odokara, Lewis opposed) to recommend the proposed amendments to the historic preservation ordinance, with one additional clarifying text revision. The Board voted 7-0 to recommend the proposed amendments to the site plan ordinance, again with one final clarifying text revision.

The ordinance amendments enclosed as ATTACHMENTS 13 and 14 incorporate the final text changes recommended by the Planning Board.

III. CONGRESS STREET HISTORIC DISTRICT DESIGNATION

A. Components of the Congress Street Historic District Designation Report

As required by the historic preservation ordinance (see Sec. 14-617), any recommendation for historic district designation must be accompanied by a report that includes the following information:

(a) Explanation of the significance or lack of significance of the nominated district as it relates to the criteria for designation.
(b) Explanation of the integrity or lack of integrity of a nominated historic district.
(c) Relationship of the nominated district to the ongoing effort by the Board to identify and nominate all potential areas, sites, structures and objects that meet the criteria for designation.
(d) A map showing the boundaries of the nominated district.
(e) A list, including the address, of every site, structure and object in each nominated historic district indicating their degree of cultural, historic, architectural or archaeological significance by classification.

ATTACHMENTS 1a and 1b, 2 & 3, together with the content of this staff report, address the ordinance requirements for documentation and analysis.

B. History of Initiative and Public Review Process

In January 2006, the City's Council's Housing and Community Development Committees held a joint workshop to discuss the current designation status of historic properties on the Portland peninsula and to determine whether there was support among Committee members for expanding Portland's historic preservation program to include additional areas for protection. Staff was asked to provide a status report and to illustrate the areas and properties of historic and/or architectural significance that currently fall outside Portland's preservation program.

Although a number of properties and areas were identified, Council members focused primarily on the Congress Street corridor as warranting further protection. It was noted that although several key historic properties have been individually-designated as local Landmarks (City Hall and the Wadsworth Longfellow House as examples), many historically and/or architecturally notable buildings in the downtown core are not currently recognized or protected under Portland's ordinance. It was noted that any new infill development adjacent to historic structures had the potential to significantly impact these historic resources.

Following the staff presentation and discussion, Council committee members instructed the Historic Preservation Board and staff to begin the documentation and analysis required for designation and to solicit public input from potentially affected property owners.

An extensive research, analysis and public outreach process has taken place since that 2006 workshop, resulting in the proposal now before the City Council. A detailed description of the analysis and review process is enclosed as ATTACHMENT 5.

C. Scope of Proposed District

The proposed Congress Street Historic District is an area of 73 acres encompassing the core of Portland's historic commercial downtown between Lincoln Park and Bramhall Square. The district includes 25 Landmark buildings, 115 Contributing buildings, and 51 vacant parcels or Non-contributing structures, which are available for future redevelopment. The boundaries define the concentration of historic structures that have an historical, cultural, and/or architectural relationship to each other, as required for district certification by the National Park Service. Approximately 130 buildings would be eligible for preservation tax credits.

D. Intent of Proposed District Designation

For more than 100 years, Congress Street (and its immediate environs) has functioned as Portland's 'Main Street', serving as the city's commercial, cultural, social and governmental center. Although its role in the city has changed over the last few decades, Congress Street's impressive historic structures tell a story unique to Portland and remain today as valuable community assets. As has been demonstrated in the Old Port, the preservation of historic assets is an important catalyst for economic development and community vitality. Designating Congress Street and its immediate environs as a historic district will not only ensure the preservation and enhancement of valuable historic resources within the downtown now and into the future, but also encourage quality new development and economic vitality.

The specific goals of the proposed district designation are as follows:

* To fulfill a stated objective of the Comprehensive Plan, which calls for the protection of Portland's historic resources through the ongoing identification and designation of eligible landmarks and districts.

* To formally recognize the unique history and architecture that defines Congress Street and its immediate environs.

* To provide future generations the opportunity to experience the many layers and periods of development represented along Portland's "Main Street."

* To ensure that alterations to historic structures within the area are compatible with the buildings' historic character and to prevent the incremental loss of character that can occur through small inappropriate changes over time.

* To ensure that new development within the downtown is commensurate in quality and compatible in character with the historic structures that define the area.

* To stabilize and enhance property values and economic vitality by increasing the attractiveness of the area as a place to live, work and do business.

* To increase the attractiveness of the downtown and arts district to tourists, helping to spread tourism dollars from the Old Port to a wider portion of the city.

* To provide property owners access to federal and state tax incentives available for the rehabilitation of historic properties.

In older cities throughout the country, the establishment of downtown historic districts has proven to be an effective regulatory tool in ensuring that the traditional building stock and visual characteristics that set one community apart from another are maintained and enhanced. Historic districting is based on the premise that by capitalizing on a community's unique assets, you can more effectively avoid the kind of homogenization that increasingly characterizes many American cities. As economist Donovan Rypkema puts it: "the strength of a city is its differentiation from anywhere else…More than any other place a city's downtown with its historic buildings is the concentration of the city's differentiation." The 2007 Brookings Institution Report echoed this view, identifying protection of Maine's unique "quality of place" as one of the highest imperatives if the state is to achieve and sustain economic growth and prosperity. The report specifically named Maine's historic downtowns, along with its forests and coast, as critical to its "quality of place."

Although historic preservation regulations do not govern the use of a building or limit the type of tenants that may occupy the storefronts, they can require that the tenants—be they national corporate entities or local entrepreneurs—conform to review standards aimed at avoiding generic design solutions and reinforcing local character. Once controversial, this form of land use regulation has been in widespread use since the 1960's and is now commonly accepted as a powerful economic development tool.

To date, over 2,300 towns and cities throughout the country have adopted historic district overlay zoning. In many of these communities, all or part of their downtown core is included in a historic district, where façade and storefront renovations, as well as signs and awnings, are subject to review. Many of these local commercial districts host national franchises and chains as well as local businesses. From Charleston, South Carolina to Santa Fe, New Mexico to nearby Portsmouth, New Hampshire, these communities have been successful in using historic preservation standards to achieve architectural and signage solutions that are appropriate to the local context.

What can historic district designation do for Congress Street? Although the upper floors of most of Congress Street's older buildings remain relatively unaltered, a number of the storefronts have suffered from multiple rounds of renovations that have often altered and detracted from the building's historic character. As part of the historic preservation review process, applicants proposing storefront alterations are encouraged to revisit the building's original storefront design or develop a contemporary scheme that complements the historic structure and surrounding context. (The City's collection of 1924 tax photos, which document the early appearance of every taxable structure within the city limits as of that date, is an invaluable tool in guiding applicants toward a successful solution.) In the case of non-contributing buildings that currently detract from the visual character of the downtown, the review process ensures that any new renovation be architecturally cohesive and exhibit quality materials.

While the current site plan review process and B3 design standards can address large scale projects, particularly new construction, they do not come into play for small scale projects. The visual character and integrity of historic buildings can be fundamentally altered as a result of small renovation projects, particularly in the aggregate. By addressing both incremental exterior changes as well as major renovations and new construction, the historic preservation review process is a more effective tool than those currently in place in helping the Congress Street area maintain and enhance its visual appeal and hence, its desirability as a major commercial/cultural destination.

E. Relationship to the Comprehensive Plan

Historic Preservation is identified as a high priority in numerous sections of Portland's Comprehensive Plan. Following are excerpts from the Comp Plan that address historic preservation in the context of future development in the downtown.

The Downtown Vision plan of 1991 makes multiple references to the importance of historic preservation within the downtown and includes the following stated goal:

> *"Preserve and promote the positive qualities and attributes which comprise the Downtown's unique identify and historic fabric, including historic parks and open spaces, and sense of place through the re-use of existing structures and the development of new construction respectful of the built and nature surroundings."*

The Downtown Height Study of 1989 identifies the Congress Street corridor as the appropriate location for tall development on the peninsula. The study recommends that the overall height allowances be achieved through a series of stepbacks to respect the surrounding building fabric. This concept is embodied in the zoning height map currently in effect for the B3 zone.

From the Community Visioning Exercise of 1991, participants cited Portland as

> *"a city that values its natural, architectural and cultural heritage"* and recommended that Portland *"build upon the distinctive fabric of Portland's built environment by rehabilitating historic resources and by developing buildings that respect the scale and character of traditional development patterns"*

From the Historic Preservation Chapter of the Comp Plan:

> "Some of America's most appealing cities are those which possess a distinct or unique flavor or appearance. An important element in a City's distinctiveness is its historic areas and architectural landmarks."

The Sustainable Portland report also identifies historic preservation as an important aspect of the city's efforts to become a sustainable community. From the report:

Environment

Reuse and maintenance of buildings and materials:

- Saves energy and reduces external costs of new construction
- Saves land - Historic Preservation is the *opposite of sprawl.*

Economy

Historic preservation:

- Retains investment in historic business districts
- Promotes tourism, creating a signature "brand" for Portland
- Supports small business and *increases property values* district wide.

Community

Historic preservation:

- Stabilizes neighborhoods
- Generates public value from Portland's unique identity and heritage
- Reinforces community *pride of place*.

See ATTACHMENT 9 for a more detailed discussion of the relationship between sustainability and historic preservation.

F. Economic Impact of Historic Preservation

Portland's historic preservation ordinance has been in place for more than 18 years. Comparing the Old Port in 1989 to the Old Port in 2009 demonstrates that historic district designation has had tangible benefits—not only in the appearance of the buildings, old and new, but also in the vitality of the area. Although it has been documented that commercial rents in the Old Port are higher than in other commercial districts of the city and that the area has high property values, no formal study of the economic impact of historic preservation has been undertaken in Portland. Throughout the country where this type of study and analysis has been done, the findings invariably demonstrate the substantial economic value created through historic preservation programs.

A 2003 report, *Strengthening Communities through Historic Preservation*, produced for the Washington State Community Trade and Economic Development Office, compiled and analyzed studies and data about the economic impact of historic preservation from across the U.S. (Excerpts from this report are found in ATTACHMENT 8.) This and other similar research indicates that investing in historic preservation provides real and significant economic benefits. Recent studies in states such as Maryland, New Jersey, North Carolina, Texas, and Virginia, have collected and analyzed comprehensive data on the economic impacts of preservation. In each instance, the states have discovered that not only have historic preservation initiatives made a demonstrable positive economic impact, but also that the results compare favorably with those of other investment strategies. Historic preservation is much more than the rehabilitation of buildings; according to the data, it is a proven partner in developing local economies. Examples of these findings are presented in the excerpts to the aforementioned report, ATTACHMENT 8. The benefits documented include job creation, tax revenue generation, local trade and merchant

income, environmental benefits, enhanced heritage tourism, protection of architectural character, increased property values, and increased investments in property improvements.

Coming back to Maine, in a 2008 lecture in Biddeford, nationally recognized expert on the economics of historic preservation, Donovan Rypkema, said:

> *Many people think of economic development in terms of manufacturing. For the average manufacturing concern in Maine, 16.8 jobs are created for every million dollars of production. But the same million dollars invested in the rehabilitation of an historic building here in Maine creates 23.6 jobs.*
>
> *A million dollars of manufacturing output in Maine will add, on average, about $524,000 to local household incomes. But a million dollars of rehabilitation will add nearly $783,000. Additionally, since most building components have a life of between 25 and 40 years, a community could rehabilitate 2 to 3 percent of its building stock per year and have perpetual employment in the building trades. And these jobs can't be shipped overseas.*

In summary, the economic benefits of historic preservation are well documented. Since the 1970s, mounting evidence has shown that historic preservation can be a powerful community and economic development strategy. Evidence includes statistics compiled from annual surveys conducted by the National Trust for Historic Preservation and statewide Main Street programs, state-level tourism and economic impact studies, and studies that have analyzed the impact of specific actions such as historic designation, tax credits, and revolving loan funds. Among the findings:

- Creation of local historic districts stabilizes, and often increases residential and commercial property values.
- Increases in property values in historic districts are typically greater than increases in the community at large.
- Historic building rehabilitation, which is more labor intensive and requires greater specialization and higher skills levels, creates more jobs and results in more local business than does new construction.
- Heritage tourism provides substantial economic benefits. Tourists drawn by a community's historic character typically stay longer and spend more during their visit than other tourists.
- Historic rehabilitation encourages additional neighborhood investment and produces a high return for municipal dollars spent.
- Use of a city or town's existing, historic building stock can support growth management policies by increasing the availability of centrally located housing.

G. District Certification and Access to Historic Tax Credits

From the outset of the designation review process, it has been the City's intention to insure that the proposed district meets the National Park Service's requirements for a "Certified Local Historic District." This is important for two reasons. First, in 2005 Portland achieved the designation of Certified Local Government (CLG) by the National Park Service, signifying that

the City's historic preservation ordinance meets federal standards. As a CLG, not only is the City eligible to receive federal funding for its historic preservation program, but it is also guided by National Park Service requirements when designating historic districts.

Second, and perhaps more importantly, a Certified Local Historic District would make all owners of Landmark or Contributing historic properties within the district eligible for state and/or federal tax credits when rehabilitating their buildings. With the recent passage of LD 262, the State of Maine has created a significant new tax incentive program to encourage investment in historic structures and traditional downtown centers. The state tax credit program includes a 25% refundable tax credit for rehabilitation expenses. For affordable housing projects, the credit is 30%. The program also includes a "small projects provision" for rehab projects costing as little as $50,000. (See ATTACHMENT 9 for more information about the state historic tax credit program.) In addition to the state historic tax credit, there is a 20% federal historic tax credit available as well. Although an owner does not have to be part of a certified district to access these credits, their building would have to meet the eligibility requirements for individual listing in the National Register of Historic Places. The qualification requirements for individual listing are much more stringent than for contributing buildings in a district. Some buildings that would qualify *as part of the district* would not achieve Register eligibility status on their own and would therefore not be able to take advantage of the tax credit.

While access to tax credits was not the driving force behind designation of the Congress Street Historic District—indeed, the revised state tax credit program was announced well after this study was commenced—it would seem imprudent not to ensure that the proposed district meets all the necessary requirements for owners within the designated area to gain access to this important financial incentive. By staff's calculation, *130 properties within the proposed district would be eligible for historic tax credits.*

Historic Preservation staff worked closely with the Maine Historic Preservation Commission throughout the development of this proposal to ensure that the proposal, to the extent possible, meets National Park Service requirements. While the Maine Historic Preservation Commission does not have the authority to certify the district, the National Park Service asks for comment from the Commission in evaluating the City's request for district certification.

A letter from the Maine Historic Preservation Commission is enclosed as ATTACHMENT 6. Note that the few outstanding areas identified in MHPC's letter have been addressed to MHPC's satisfaction in the final district boundary map being recommended by the Historic Preservation Board.

H. Summary of Historic Preservation Board Review, Final Recommendation Regarding District Designation

The Historic Preservation Board held three preliminary workshops on the draft proposal before scheduling a public hearing and final deliberations. Workshops were held on September 17, October 1 and October 15. At the second workshop and again at the public hearing, the HP Board spent a considerable amount of time discussing several parcels at the edges of the proposed district that had been called into question by PDD or individual property owners during the first informal workshop. In preparation for these discussions, staff consulted again with the

Maine Historic Preservation Commission on the status of these edge properties and whether removing them from the district would jeopardize efforts to have the new district certified by the National Park Service. MHPC's analysis of and position on these parcels is included in their letter of November 14--see ATTACHMENT 6.) These discussions and analysis ultimately informed the final boundary revisions that the HP Board made in their final deliberations on November 19.

On November 19th, the Historic Preservation Board concluded its review, following a public hearing and formal deliberations. The Board voted unanimously to recommend designation of the "Congress Street Historic District" as delineated in maps enclosed as ATTACHMENTS 1a and1b and as documented in the formal designation report (ATTACHMENT 2) and building inventory (ATTACHMENT 3.)

Note that as a result of the Historic Preservation Board's final deliberations, the historic district boundary map was amended to eliminate a number of additional properties at the edges of the district.

In reviewing the evolution of this proposal, the most significant change from the preliminary proposal first presented to property owners last April to the final recommendation presented to the Planning Board was the reduction in the size of the district. Through a series of boundary revisions, the district was contracted to include only the area with the strongest concentration of historic building stock. The final proposed district encompasses an area of approximately 73 acres, as compared to the 99-acre district originally envisioned—a 26% reduction. In the final proposal, 31 properties originally considered for inclusion in the district are now removed from the boundaries. Please refer to ATTACHMENT 1c for a comparison of the original and final proposed district boundaries.

The initial draft boundaries encompassed a number of areas at the edge of the district without significant concentrations of historic structures. Including these areas would have created a buffer zone ensuring that future development immediately adjacent to key historic structures would be reviewed by the Historic Preservation Board. Inclusion of these areas also would have provided a mechanism to protect and reinforce important gateways into the district. Ultimately, the decision was made to take a more conservative approach and contract the district boundaries. (The rationale behind contracting the district is described in more detail in the HP Board's formal written recommendation to the Planning Board—ATTACHMENT 4.)

Also on November 19th, the Historic Preservation Board voted to recommend a series of amendments to the historic preservation ordinance and site plan ordinance. The proposed text amendments are discussed in the following sections of this report.

I. Summary of Planning Board Review, Final Recommendation Regarding District Designation

The Planning Board held three workshops prior to its formal deliberations on January 27th. The first two workshops were held in close sequence with those of the Historic Preservation Board in order for comments and suggestions from each of the respective boards to be incorporated in the

final draft proposal. A final workshop was held after the Historic Preservation Board had forwarded its formal recommendation to the Planning Board.

At the Planning Board's January 27th public hearing, twenty members of the public offered comment. Those speaking included residents, architects, property owners, developers, real estate professionals, an expert in historic tax credits as well as representatives from Portland's Downtown District, Greater Portland Landmarks, Portland Society of Architects, Maine Historical Society and Maine Preservation. Sixteen individuals spoke in support of the designation, including the representatives of each of the organizations listed above. Four individuals spoke against the proposal.

In deliberations, Chair Silk reminded members that their charge, by ordinance, was to determine whether the minimum criteria for designation under the ordinance were met and whether or not the designation is in compliance with the Comprehensive Plan.

- The majority of the members stated that the proposal clearly meets the minimum criteria requirements of the ordinance for a new district and is consistent with the Comprehensive Plan.
- One member felt that other portions of the Comprehensive Plan could be in conflict with the portions that the proposal is in compliance with, and expressed concerns about the economic impact. He also stated that property owners have done well by Congress St without designation, noting that he "couldn't see where it is broke".
- Others stated that they felt strongly that the proposal is clearly in compliance with the Comp. Plan, noting that new historic districts are planned for and expected in the Comp. Plan, and that the City Council anticipated additional districts when approving the preservation ordinance in 1990.
- A member stated that the aspects of the Comp. Plan calling for new development in the downtown are not contradicted by the designation, as new construction is allowed in districts, and suggested that new buildings in historic districts have generally been better buildings than those outside districts.
- One member noted that the area west of High Street has a different density of landmarks than the area to the east, and wondered whether it was equally qualified for designation. (Staff was allowed to answer -- noting that historic districts typically do not have the density of landmarks found at the core of downtown, pointing out that the entire Old Port district has only six designated Landmarks within its boundaries).
- One member felt the district is too big and that designation might present unintended consequences.
- A member noted that the text changes address issues of duplicative reviews and clarify jurisdictions of the two Boards.

Following deliberations, the Planning Board voted 5-2 (Silk, Lowry, Patterson, Tevanian and Hall in favor; Odokara and Lewis opposed) to recommend to the City Council designation of the Congress Street Historic District as delineated by the Historic Preservation Board.

IV. RECOMMENDED AMENDMENTS TO HISTORIC PRESERVATION ORDINANCE

Although brought forward in conjunction with the Congress Street Historic District initiative, the proposed amendments were not specifically driven by the establishment of a new district. Rather, they are the result of a careful review of the existing ordinance language, which was done during the course of the Congress Street district study. The amendments are intended primarily to address a number of omissions or ambiguities that have long been identified in the existing text. The amendments do not substantively change the nature or scope of the historic preservation regulations or review process; they only clarify them.

Only one amendment relates specifically to the Congress Street Historic District. A provision was added stating that in the Congress Street Historic District new construction within the B3 zone shall follow the dimensional requirements of the underlying zone--- see Sec. 14-651 (a). While this intent is made clear in the district designation report, members of the business community requested that it be added to the ordinance text itself.

ATTACHMENT 13 is a copy of the full text of the historic preservation ordinance with the proposed amendments highlighted.

V. RECOMMENDED AMENDMENTS TO SITE PLAN ORDINANCE

The proposed site plan ordinance amendments are intended to more clearly define the respective jurisdictions and responsibilities of the planning board and historic preservation board where reviews by both boards are required. They are also intended to provide more guidance to the Planning Board when reviewing major projects abutting the boundaries of historic districts.

Based on concerns expressed by the business community about the potential for duplicative design review processes in those instances where a major development falls within a historic district, a new provision has been added. (See ATTACHMENT 14, Sec. 14-526 (a) 18 a.) The provision makes clear that design review authority rests with the Historic Preservation Board where there is overlapping jurisdiction. The provision also makes clear that developments subject to review under the historic preservation ordinance are exempted from the otherwise applicable design standards within the site plan ordinance, with the exception of a small number of specifically identified standards. These outstanding standards relate to issues not typically reviewed by the Historic Preservation Board, such as wind and shadow impacts, and will remain within the jurisdiction of the Planning Board.

In addition to the recommended new standard, an existing review standard is to proposed to be amended. The current standard has been amended to provide more guidance to the Planning Board in its review of projects within 100 feet of a designated individual landmark or historic district boundary—see ATTACHMENT 14, Sec. 14-526 (a) 18 b. Under the existing language, the Planning Board must find that the proposed development is "not incongruous" to the character of the subject landmark or abutting portion of the district. Although "not incongruous" is an accepted term of art within the preservation field and appears in ordinances throughout the country, the Planning

Board has long expressed the view that the terminology is ambiguous and that the standard includes little guidance as to how "not incongruous" is to be determined. Alternative language has been developed which is intended to provide more guidance to the Planning Board. During its final deliberations, the Planning Board appeared to be satisfied that the amended ordinance standard addresses their identified concerns.

See ATTACHMENT 14 for proposed site plan ordinance amendments.

ATTACHMENTS

District Designation

1. Maps
    a. Final recommended district boundary map
    b. District boundary map with individual building classifications
    c. Map showing evolution of district boundaries
2. Designation report
3. List of designated properties
4. Formal recommendation of the HP Board to Planning Board
5. History of Initiative and Public Review Process
6. Letter from Maine Historic Preservation Commission
7. Information on state historic preservation tax credit program
8. Economic impact of historic preservation
9. Sustainability and historic preservation
10. Summary of public outreach and notes from early public forums
11. Letters and e-mails received to date
12. Photos of historic rehab and new construction projects approved under historic preservation ordinance standards

Text Amendments

13. Historic preservation ordinance text, with proposed amendments
14. Proposed site plan ordinance text amendments

Amy Fischer <amy@amyfischerdesign.com> 12:57 PM (1 hour ago)
to planningboard@portlandmaine.gov

To The Portland Planning Board members:

I am writing to support the rejection of the PMA's request to reclassify 142 Free Street. I lived in Portland from 1976 until 1982 and I consider this building a significant structure historically. I do not believe this building should be reclassified as a non-contributing building in the Congress Street Historic District.

I was always shocked by the loss of the Railroad Station, which I knew when I first came to Portland, Maine.

We have learned by now, that once gone, these historic buildings become an architectural loss to the fabric of a city.

Why the Museum did not insist that this building be incorporated into their design as an entry to whatever more modern addition they needed for expansion absolutely stymies me.

Please do not allow this change in classification to occur.

Sincerely,
AMY FISCHER
Camden, ME

russo@maine.rr.com <russo@maine.rr.com> Nov 27, 2023, 4:20:29 PM (16 hours ago)
to planningboard@portlandmaine.gov

Are you kidding me? Portland is the City it is because of Landmark and Portland residents who had the vision to save these historic buildings throughout the City, including my Grandfather's family 6 unit at 82 India Street. I remember as a child in the 1960s watching Union Station being demolished for a cheap Arlans Shopping Center and even at my young age at the time I knew that was just wrong!

As a Portland native, lifelong resident, and long-time Realtor, I am against demolishing this historic building. The museum's current building is pretty ugly as it is and I can't imagine what the glass addition monstrosity will look like. Please preserve this piece of Portland history so that we don't look back and regret yet another historic building gone. Let the developers use some creativity in designing the new space around this building. Why bother having zoning if you are not going to abide by it?

Stop the zone changes to accommodate this development madness here and everywhere in the city!

And for those of you who may not remember, take a look at these photos….Union Station before and after!

Before: 

After: 

And yes, this was considered great architecture in the 1960's….

Jean Russo

Harborcity Realty

Portland, Maine

William Hall <wpeaks@earthlink.net> 10:31 AM (18 minutes ago)
to planningboard@portlandmaine.gov

To the chair and members of the Portland Planning Board:
For today's workshop I would like to emphasize just one point from Greater Portland Landmarks' position statement:

- For a building to be designated as a contributing structure, it needs to meet just one of the criteria laid out in Subsection 17.4.1.A of Portland's Historic Preservation Ordinance. The former Chamber of Commerce Building meets 4 out of the 6 criteria.

In addition to being on the Landmarks board, I am a member of the Portland Museum of Art. So I truly admire the PMA's effort to remake its space in a way that takes the museum into the future as a remarkable and exciting public institution. However, I think it's extremely important to uphold Portland's land use code and reach a decision that is in conformance with the law. 142 Free Street certainly meets key criteria for preservation as a contributing structure. A decision contrary to that, allowing the building to be torn down, risks undermining historic preservation rules that have done so much to make Portland a unique, vibrant, and desirable place to live and visit.
Thank you for your consideration and for your service to the city of Portland.
Bill Hall
317 Pleasant Avenue
Peaks Island
Portland Planning Board member, 2006-2016

Solange Kellermann <solangekell@hotmail.com> 10:59 AM (4 hours ago)

to planning@portlandmaine.gov

Regarding the PMA's request to remove the old Childrens' Museum's historical significance status - wouldn't it have made more sense to make this request before spending a large sum of money to get plans for that plot of land? That poor planning aside, I am opposed to this building being torn down. Portland needs to keep it - it's part of Portland's history.

Solange Kellermann

Andrea Krasker Gavin <andreakrasker@hotmail.com>
to planning@portlandmaine.gov

Feb 5, 2024, 7:44:19 PM (12 hours ago)

Dear Members of the Portland Planning Board,
I am writing to express my support for the former children's museum at 142 Free Street, and my objections to the PMA's plan to demolish the building.
The PMA purchased the building knowing that it exists within the historic district, is itself an historic building and is subject to the rules outlined in Portland's historic ordinance. These rules exist to protect our beautiful city, to allow us to grow while protecting our history and character and to prevent Portland from turning into Anytown, USA.
142 Free Street has stood proudly in Congress Square for years. It is a recognizable landmark. Generations of families made wonderful memories in the building when it served as the children's museum.
As a member of one of those families, I was happy to see the former children's museum become a part of the PMA and looked forward to visiting the building again with my family as an addition to the art museum. I still am hopeful for that outcome. I believe that the PMA is acting with complete disregard for Portland's history and current rules and regulations. They have made no real effort to work with the building that they chose to purchase, or to solicit architectural designs that make use of the current building. Their conduct is disrespectful to the City of Portland and its rules and ordinances as well as disdainful of our history. The PMA should not be allowed to proceed as if rules do not apply to them. They should work with the building that they purchased. As an arts organization, I am confident that they have access to an abundance of creativity in considering how to configure the space to best meet their needs. They have the capacity to be a good neighbor and community member.
Please require the PMA to follow city rules. Please do not allow the destruction of the building at 142 Free Street.
Thank you for your consideration.
Andrea Krasker Gavin
Arlington Street, Portland

Andy Lilienthal <andy@campwinnebago.com> Dec 13, 2023, 3:00:39 PM (19 hours ago)
to planningboard@portlandmaine.gov, Jennifer Graves

Dear Planning Board,

I am writing in support of the Portland Museum of Art's proposed campus expansion. As a student of history, I realize that the loss of the old Children's museum represents a precedent for some and hopefully, this seminal project can be an exception rather than the rule. Such an exception is needed if we are going to continue to help Portland become a regional and national beacon that will attract a diverse population of visitors and those who choose to settle in the city.

Here are some of the most salient and important reasons to allow the project to move forward

1. **The value of this project is what it adds** to Congress Square, Portland, and our communities, not what it takes away.
    a. Once-in-a-lifetime opportunity to define our region by culture.
    b. About way more than HPB or Planning Board—about the city's character, values, and future and should be championed.
    c. We are committed to Congress Square's dynamism.
2. This is phase one of an expansion *and unification* project that will integrate our landmark buildings and maximize our properties holistically.
    a. Free Street provides most economical and integrated art experience with existing campus and orientation, as well as Congress Square (we think that's important)
    b. Spring Street has been identified as a site for support (potential admin, infrastructure, other use) and is targeted for phase 3.
3. Portland's Plan 2030 is rooted in vibrant, diverse, and complete neighborhoods, and **this gets the city on track.**
    a. Thoughtful development, sustainably planned, in partnership with our communities, leading to an economic and cultural city center rooted in the arts, equity, and belonging.
4. **Congress Square, and Portland, needs this now.**
    a. Businesses are closing
    b. Buildings are vacant
    c. City plan in disarray
    d. Other neighborhoods (Washington Ave, Bayside) are thriving and the center of our city is wallowing
5. 142 Free Street is **an outlier of the PMA's campus**
    a. Not a landmark building
    b. Not a highlight of John Calvin Stevens (we should know bc we have 2 that are: Sweat and Homer Studio)
    c. Has problematic history that doesn't speak to Portland's future(Chamber's direct connection with KKK, DeForest Perkins, and the façade's creation)
    d. Has physical features that deter audiences and contrast with Portland Plan vision (formal columns were cited by Children's Museum as a physical barrier for families, new Mainers, and communities of color. They undermined the CMTM's mission and values as a cultural institution.
    e. Again, this is not Union Station 2.0, this is replacing a non-landmark building in a struggling and disconnected neighborhood surrounded by vacant buildings with a landmark, visionary economic driver and grounding cultural epicenter that is collaboratively envisioned, sustainably built, and centered in belonging. A beacon!

1. This is a campus unification and expansion project in 3 phases, sparked by the growth and potential of our mission, *Art for All*.

2. *Art for All* is an innovative mission and vision that drives everything we do through a set of inclusive values. We were the first museum in the country to align our mission and values this way.

3. It's led to a period of unprecedented growth at the museum, with a record number of visitors in 2019, just before the pandemic. But we are running out of room, for people, for events, and for art.

4. Collectors, artists, foundations, and donors from around the world are looking to our museum as a place for their artworks—not New York or larger cities. In the last few years alone we have diversified our collection more significantly than any time in our 140 year history.

5. With *Art For All* as our foundation, it's time to unify and expand our campus and ensure Portland is defined by arts and culture. Developing 142 Free St. is the primary goal of the first phase.

6. The concept is by LEVER Architecture. Led by Chandra Robinson, LEVER is a leader in sustainable and innovative architecture, and one of the few firms in the world led by a woman of color.

7. The choice to partner with LEVER stemmed from a juried, international design competition, with more than 100 teams from 20 countries submitting proposals, and 46% of all lead firms led by women and people of color.

8. It was informed by more than 2,000 responses from our communities, via feedback from comment cards, listening sessions, forums, surveys and more. And as we get closer to breaking ground, we have continued to engage in substantial outreach to communities who have never felt like they belong in museums.

9. Of the 4 finalists, 47% preferred LEVER's concept—something we saw reflected in the PPH's online poll as well with a clear majority voting for LEVER. And of all feedback specific to LEVER's design, 93% was positive.

10. As we were conducting our competition, we also reached out to USM, who conducted an economic impact study based on our RFQ. They found that, when completed, adding 60k Sq. Ft. will double our economic impact across the board—significantly more jobs, labor income, sales, taxes, and direct tourism spending for our communities, businesses, and families.

11. What also excites us is the potential to impact rural and urban communities throughout Maine because of Mass Timber, the primary building material that defines the concept and LEVER's projects. As the most forested state, we have the opportunity to revitalize Maine communities far from Portland's economic center.

12. And we're working to capitalize on Mass Timber's potential by partnering with our representatives, government officials, indigenous leaders, environmental advocates, municipalities, community organizations, and business owners throughout Maine. It's why this project has the backing of USDA, New England Forestry Foundation, US Dept of Housing and Urban Development, and more.

13. Most importantly for our city, this project activates and furthers Portland's Comprehensive Plan 2030 in major ways.

14. When looking at Free Street, you can clearly see the legacy of poor urban planning following WWII. Our neighborhood was razed to make way for redevelopment that never materialized. As the leading cultural organization in the city and oldest arts institution in the state, we now have an opportunity to repair and reinvigorate our neighborhood.

15. The PMA Blueprint dovetails right into the values and structure of Portland's Plan, providing the city with a tailormade project that checks off a host of desired outcomes. From economic goals to connecting the chain to reinforcing the center and completing neighborhoods, The PMA Blueprint is essentially an action plan for the city to leverage.

16. It's particularly aligned around the city's goals for diversity and equity, sustainability, identity, economy, and growth.

17. And The PMA Blueprint couldn't be timelier, because post-pandemic, we need a jolt. Congress Square is failing, with businesses closing at rapid paces, pedestrian traffic incredibly low, and vacant building languishing in what should be the heart of our city.

18. The Schwartz Building has stood vacant for more than 15 years, and local institutions such as Coffee By Design have determined Congress Square is not worth it.

19. We've lost longtime tenants such as Starbucks, Dogfish, and more. Even Harmon's Florists, who had been on Congress Square since 1887, decided to leave this year.

20. Combined with a city redevelopment project for Congress Square and the park that has been mismanaged and left unfinished, the time is now to enable the museum to lead our neighborhood and revitalize our city through this one-in-a-lifetime opportunity.

21. And we have the support of our neighbors, who know this is the right path forward to a vibrant and sustainable future.

22. When looked at holistically and considering the goals of Portland, the cultural and economic impacts, and the post-pandemic realities of our urban needs, we hope the PPH will join the thousands of people who have informed and supported this project. We believe it is exactly what the city needs at this time and for our future.

Many thanks for your consideration.

Best wishes,
Andy

Becky McKinnell <becky@ibeccreative.com> Jan 19, 2024, 3:43:59 PM (5 days ago)

to planningboard@portlandmaine.gov, Graeme Kennedy

To the Portland Planning Board:

My name is Becky McKinnell and I'm the owner of iBec Creative, a local digital agency, and Wildwood Oyster Co., a handbag company headquartered at 177 High Street in Portland.

I am writing in support of the new building that PMA has proposed at 142 Free Street.

I am originally from Massachusetts and went to school at USM in 2003. I fell in love with Portland because of its proximity to the ocean, quaint size, art scene, and unique character. I loved Portland so much that I decided to stay in Maine and start my entrepreneurial journey here.

Even though I appreciate the historic charm of Portland, I am in support of the new building that PMA has proposed because this new building will become the next iconic building in Portland that will last hundreds of years. The PMA Blueprint has been developed with the input of thousands of Portlanders and represents the vision and needs of our diverse and vibrant communities. The economic impacts of The PMA Blueprint will transform our city and revitalize Congress Square.

There are exceptions to every rule and there is no better exception to make than for this thoughtful, inclusive, community building.

Sincerely,
Becky McKinnell

Brian Chin <brian@p3maine.com> Nov 30, 2023, 11:57:19 AM (3 days ago)

to planningboard@portlandmaine.gov, Graeme Kennedy

Dear Members of the Planning Board,

I am writing to you on behalf of p3 Maine, a Portland business located at 434 Cumberland Avenue to express our enthusiastic support for the Portland Museum of Art's Blueprint initiative. As a neighboring business and an active member of our community, we have closely followed the development of this visionary project and believe it represents a critical opportunity for our city.

The PMA Blueprint is not just a plan; it is a culmination of the aspirations and inputs of thousands of Portland residents. It reflects the diverse and vibrant spirit of our communities and offers a tangible expression of our collective vision for the future. The meticulous process of gathering community input has ensured that the Blueprint aligns with the needs and desires of Portland's citizens, making it a true representation of our city's aspirations.

This project is a once-in-a-lifetime opportunity for Portland. It stands to significantly enhance our city's cultural and economic landscape. The full support of the Planning Board is essential to bring this vision to fruition. By backing this initiative, the Board will be championing a project that not only aligns with but also actively promotes the City of Portland's Comprehensive Plan 2030. The PMA Blueprint is more than an expansion of a museum; it is a vital step toward realizing our city's comprehensive plan for the future.

Moreover, the economic impacts of the PMA Blueprint cannot be overstated. It promises to transform our city, bringing a new dynamism to Congress Square and the surrounding areas. The revitalization that this project will bring is crucial for the economic growth and sustainability of Portland. It will enhance the city's appeal to residents, visitors, and businesses alike, creating a ripple effect of positive change throughout the region.

In conclusion, we at p3 firmly believe that the PMA Blueprint is a key to unlocking a brighter, more prosperous future for Portland. We urge the Planning Board to give this project its full and enthusiastic support. Together, we have the opportunity to shape a future that reflects the best of what our city can be.

Thank you for considering our perspective on this matter. We look forward to seeing the positive changes that the PMA Blueprint will bring to our beloved city.

Sincerely,
BRIAN CHIN

Bruce Wood <bruceweb607@gmail.com> Feb 6, 2024, 1:17:11 PM (yesterday)

to planning@portlandmaine.gov

I am writing to support continued historical designation for the structure at 142 Free Street in Portland. This building is substantially unchanged on its exterior from when it was built in the mid-1800s and is a contributing structure in the Congress Street Historic District. It is a key structure in that historic district due to its exterior integrity, representing a kind of structure left over from that era that needs to be preserved for its unique history.

The PMA has vacant land elsewhere in the block that it can expand into without destroying such a contributing building. It could build behind 142 Free Street and tie both the subject building and its other historic buildingsu on Spring Street into the main building without damaging the street appearance of any of them.

Please deny the PMA request and encourage the PMA to consider expanding in another direction.

Bruce Wood
607 Chandler’s Wharf
Portland, Maine 04101

Candice Lee <cthorntonlee@gmail.com> 10:47 AM (2 hours ago)

to planning@portlandmaine.gov

As someone who has been a historic preservations since my preteens when I first saw a historic house, i feel the value of preserving our buildings of note. A great deal of thought and work was done to put through the historic preservation ordinance to protect our buildings. These building are integral to the beauty of our city. Without these buildings our city would be less impressive——danger of being cookie-cutter! if this ordinance is overturned, it would be like opening Pandora's Box. In the future if a historic building is in the way of a developer , they can just use this case as a president and tear down whatever they like. the PMA knew of this ordinance and chose to ignore it. They have space to do what they want to do. They should work with the building and bring harmony to this town as a result. Candice Lee, former board member Greater Portland Landmarks and Victoria Mansion

Carol De Tine Statement to Planning Board Workshop re PMA
28 November 2023

I'm Carol DeTine, 144 Vaughan Street in Portland. I am an architect and have been actively engaged in historic preservation in Portland for many years, including serving on the board of Greater Portland Landmarks.

I have to say that I have never, nor would I ever, advise a client of mine to move forward with design as far as the Museum has, without first going through *this process* to determine whether 142 Free St could be demolished. It was the Museum's choice, and theirs alone, to do that.

They knew that 142 Free Street was protected from demolition when they bought it in 2019. They knew that when they embarked upon a much touted international design competition for the Museum's expansion. Yet, the site map they included in their RFP doesn't even show this building – just a blank space colored in red and labeled "Developable land".

I want to stress that this does not need to be an "either-or" situation. As a native of Buffalo, New York, I followed the design process for the new addition to the Albright Knox Art Gallery in Buffalo very closely. After publicly announcing their design, in the face of objections from the preservation community and the general public, the Albright Knox shifted gears.

They redesigned their project to respect the 1905 original building and the 1962 internationally acclaimed modern addition. Now called the AKG Museum, the new museum opened in September to much fanfare. One attendee said that it was like being at a Bills game. Executive Director Janne Siren said that the new museum was better because of preservation.

Like the Albright Knox, the Portland Museum of Art needs to reconsider its expansion plans. They are still in the Concept Design phase. As Mark Bessire said in his remarks before the Museum's public presentations of the four finalists' designs, quote:

"As we hear from our finalists and experience their visions for the PMA and our region, I'd like to underscore that we are viewing *concepts, not plans*. The

challenge presented to these teams was not to design *THE* new building, rather (to) develop ideas for what our campus *could be*, rooted in our values and in our mission of *Art for All*. The concepts presented ~~(tonight)~~ represent the qualities and character that make each of these finalist teams unique—(they are) not to provide exact blueprints for what's to come." (End quote.)[1]

This statement seems to say that the designs that the Museum is showing all of us are not actually what will be built. Please keep that in mind as you consider the Museum's application.
Reject their application.
Send them back to the Drawing Board.
They can achieve their goals without demolishing 142 Free Street.
Thank you.

[1] from the PMA website. Emphases (italics, all caps) are in the original text; parentheses are my additions/deletions to clarify the statement for reading at the Planning Board workshop.

Catherine Hatchett <catherinehatchett12@gmail.com> Dec 18, 2023, 3:33:51 PM (17 hours ago)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org, lbrenner@portlandmuseum.org

Hello,

My name is Catherine and I'm writing on behalf of my family to show our support for the Portland Museum of Art's Blueprint project. My husband and I moved to Portland from the Washington, DC area over six years ago, and having left behind such an incredible museum scene we were grateful to find a place at the Portland Museum of Art.

However, it's important to us that as we grow our family, the community around us grows. Portland has done such a great job of that by opening the brand new children's museum, which we are also members of. We'd like to transition our son to a museum he can be proud of as he gets older, and this project seems like a step in that direction.

Thank you for your time, projects like the Blueprint project are why we decided to stay and raise our family in this community.

-Catherine, Walker, and Gus Hatchett

Newell, Christopher <christopher.newell@uconn.edu> Dec 4, 2023, 11:30:24 AM (2 days ago)
to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org

To the City of Portland Planning Board,

My name is Chris Newell and I am a citizen of the Passamaquoddy Tribe at Motahkmikuhk where I was born and raised. I am writing this letter in support of the Portland Museum of Art's effort to expand its campus and, in turn, expand Portland's knowledge of its own history, which will require the removal of the existing building known as 142 Free Street.

Let me first be up front and say that I am a member of the winning design team working with LEVER Architecture to design the new wing for the PMA. I hope that knowledge does not deter from the value of what I have to say.

As someone who was on the ground floor with the current winning design before pen was ever put to paper on a proposal, I have intimate knowledge of how the concepts of the design proposal were created and what ultimately pushed the LEVER design over all others.

The most potent qualities of the design LEVER proposed are not just design itself, but the care the principal architect Chandra Robinson took in learning about Wabanaki peoples and our cosmologies and how that inspired the current design that is on the table. The new expansion features a swooping upside down arch roofline that is designed to be aligned to cradle the morning sun on the summer solstice. An important time not just to Wabanaki peoples, but to all peoples.

This care in incorporating Wabanaki peoples and our 12,000 year relational history to the landscape we now call Portland, ME is a nod to a history far beyond the colonial history the current building at 142 Free Street now represents. Colonial history and indeed the creation of Portland itself as a city are the end portions of the story of this current landscape. 142 Free Street represents the needs of colonial America from the 1800's on. The multiple uses of the building are a reflection of that. However, in its current state, it is not a building that can cater to the needs of Portland of the future.

Portland of the future will include children raised from k-12 with Wabanaki curriculum fully imbedded in their education. When those children become adults they will seek out places to educate their own children that reflect the values they were taught. The PMA Blueprint is looking to the very near future and very wisely choosing to expand its view of history to include Wabanaki peoples and our 12,000+ year relation to the land now known as Portland.

Knowing this benefits Portland, but more importantly, all of the region. The new PMA is a look ahead to a new understanding of what history actually is and who the storytellers actually are. It is also in line with the city's current efforts at incorporating Wabanaki histories and contemporary realities in education, but also in the arts. I cite the success of Portland Ovations new show Wabanaki Stories which has now shown to four sold-out crowds at the Merrill Auditorium. Portland is at a beautiful crossroads of awakening and becoming a leader of the country in doing this work in meaningful ways that will effect generations to come.

For the above reasons, please accept my full endorsement of a move ahead with the new PMA Blueprint and the LEVER design. A new building, that will turn the idea of an art museum on its head, and will also signal a new day of inclusive histories of all people of this land.

The ask is to remove the historic landmark designation from 142 Free Street to make way for a better, more informed Portland.

Kci woliwon (Thank you),

Chris Newell
Co-founder
Akomawt Educational Initiative

classical
Uprising

ORATORIO CHORALE • PORTLAND BACH EXPERIENCE • HORIZON VOICES

The City of Portland Planning Board
389 Congress St, 4th Floor
Portland, ME 04101

November 30, 2023

To whom it may concern,

On behalf of Classical Uprising, a Portland-based performing arts nonprofit, it is my great privilege to write in support of the Portland Museum of Art's *Blueprint* project.

As the Artistic Director of Classical Uprising, I have worked in collaboration with the Portland Museum of Art on many occasions and find it to be a beacon of acceptance, cultural appreciation, and a place with deep ties to, and love for, our community. As our city continues to grow and expand, we must remain unified in our goal of nurturing our beloved Portland into a place of creativity and belonging. *Blueprint* is a once-in-a-lifetime opportunity for our city and essential to the health of Maine's artistic ecosystem. It deserves the full support of the City of Portland's Planning Board.

Investing in the arts contributes to many facets of our city, both tangible and intangible. Tangibly, supporting local art and creative placemaking contributes significantly to a strong economy by increasing tourism and creating new jobs, and can be a catalyst for urban renewal and the revitalization of neighborhoods. I urge you to see that *Blueprint* activates and enhances the City of Portland's admirable Comprehensive Plan 2030, specifically speaking to the portion of the plan which reinforces the recognition that downtown Portland remains a predominant locus of arts and culture, economic, and civic health. The arts also play a crucial role in shaping and expressing the intangibles of community identity, fostering a sense of belonging and social cohesion, and even boosting mental health and well-being among Mainers.

Blueprint has been developed with deep respect for and input from thousands of Portlanders, representing the vision and needs of our diverse and vibrant communities. I am excited and fully supportive of the proposed expansion of the Portland Museum of Art and wholeheartedly believe that *Blueprint* will only enhance and embrace the growing performing arts scene in our community and the entire arts ecosystem as a whole.

If you have any questions, I can be reached at emily.isaacson@gmail.com or 207-522-6533.

Sincerely,



Emily Isaacson
Artistic Director

Colin Jones <colin.f.jones@gmail.com> 11:50 AM (25 minutes ago)
to planningboard@portlandmaine.gov

Dear Members of the City of Portland Planning Board,

As a long time member of the Portland Museum of Art and spouse of someone who has dedicated her career to the advancement of the PMA, I am writing to express my unwavering **support for the PMA's request to re-classify 142 Free Street as "non-contributing"** to the Congress Street historic district.

The Portland Museum of Art stands as a beacon for the arts in Portland. The museum enriches the lives of local residents through its programming and exhibitions and serves as a magnet to bring visitors to Portland. The diverse range of programs, workshops, and events cater to individuals of all ages and backgrounds, fostering creativity, sparking dialogue, and nurturing a deeper understanding of art's significance in our lives.

As the Planning Board considers the PMA's request, it should consider the architectural significance of the proposed new building and the economic and cultural benefits that will accrue to Portland from building such an architecturally significant project.

Portland is at a crossroads. The Planning Board should embrace a project that can truly revitalize Congress Square businesses and spur economic development in the surrounding neighborhood.

This building is for the next generation and I urge you to support the PMA's request and support the PMA's vision for 142 Free Street.

Sincerely,
Colin Jones
Yarmouth, Maine

Craig Lorimer <cg4501@icloud.com> Feb 7, 2024, 1:44:01 PM (19 hours ago)
to planning@portlandmaine.gov

February 7, 2024

To: Portland's Planning Board

Dear Board Members:

I would like to offer some comments to the Planning Board against the request of the Portland Museum of Art to override the Historic Preservation criteria and allow the former Chamber of Commerce/ Childrens' Museum Building at 142 Free Street to be reclassified and demolished.

I was born in Portland, lived for 20 years in the Greater Portland area, and have been a frequent return visitor to the city since then. Having grown up before the "mall era," Congress Street was the centerpiece of urban life for me. I always admired the historic buildings and the ambience of the district. Congress Square was to some extent the crossroads and hub of the city—Portland's "Times Square," if you will. Even with a variety of architectural styles and signage of different eras, it all blended together well.

The Chamber of Commerce building at 142 Free Street has been part of this harmonious blending of historic architecture in Congress Square. I have long regretted the loss of its handsome neighbor, the Libby Building, which was razed by the Portland Museum of Art. Old photos from the early 20th century show other stately brick buildings on Free Street that were demolished to provide parking lots. Despite these losses, Congress Square still retains much of its historic ambience. The former Chamber of Commerce building is a key factor in holding together the historic character of the area. Its demolition would be a significant loss. Buildings with Greek Revival architectural elements (portico with columns) were once a prominent feature on the Portland peninsula, but 142 Free Street is one of only three that remain.

Another significant concern is the precedent that this would set for other buildings in the historic district that could be reclassified to pave the way for their demolition. The Portland Museum of Art had other options for achieving its expansion goals without destroying a historic building. It is disappointing that these options were not seriously considered by the museum.

The Planning Board is no doubt aware that much of Portland's economic revival has been due to its historic architecture, even though much was lost during the urban renewal era. Similar benefits can be seen in other historic cities like Bath, ME, Portsmouth, NH, and Charleston, SC, which even better resisted the pressures to sweep away their historic structures. The city where I now live, Madison, WI, has already lost most of its historic buildings, and the loss continues—not through massive urban renewal, but simply in piecemeal fashion by gradual attrition whenever a developer wants to build a big glass and steel structure.

I earnestly hope that Portland's Planning Board will deny the request to reclassify and demolish the historic building at 142 Free Street.

Thank you.

Sincerely,

Craig Lorimer

4501 Gregg Road, Madison, WI 53705

Dana Friis-Hansen <dana@danafriis-hansen.com> 5:47 AM (3 hours ago)
to planning@portlandmaine.gov, Mark H. C. Bessire

Dear Planning Board Members,

I'm writing to address the historic preservation designation of 142 Free Street.

Portland is an amazing—and very actively changing—city. The Portland Museum of Art has a rich, 140-year-old history of which everyone should be proud. And yet, I am so impressed by the ways its leadership, through a broad community conversation and alignment with *Portland's Plan 2030*, is aggressively addressing the institutional limitations of its current physical infrastructure, with creativity, ambition, and inclusion by focusing on the credo, "Art for All."

I make these comments both as the recently retired Director and CEO of the Grand Rapids Art Museum who has worked in museums since 1982, and a PMA visitor since childhood. In fact, my early exposure to the PMA on trips with my grandmother led to my profession in the arts. I love this city, and return often since most of my family still live here, and am a summer resident (since birth).

The Portland Museum of Art has been an essential cultural institution for the city and the state since 1882. In past few decades, it has become recognized nationally and internationally for its art and educational programs and as a leader with innovative approaches to equity, community engagement, and sustainability. The PMA Blueprint, the global reach of open call for architects and selection process, and especially the role of a rigorous public feedback process along the way, represents a level of community commitment rare in the museum world. These processes serve as a solid platform to achieve the projected economic, cultural, and quality of life impact that will come from the completion of a major expansion.

The Grand Rapids Museum of Art, founded in 1910, did not thrive until it moved forward in 2007 to build its current facility, with the mandate to serve as a civic and cultural anchor. With its dramatic building by a then-emerging architect Kulapat Yantrasast, visitors are welcomed from multiple angles and entrances, as well as a broad public terrace, considered "the front porch of the city." Today's museums need to evolve to serve the expectations of current and future generations, with welcoming, engaging, flexible spaces, and the PMA proposal from LEVER Architects and their collaborators does just that—and very well.

Imagining a future based on the pillars of community, collection and campus, the PMA is wise to frame its expanded vision to incorporate and celebrate the cultural significance of its prime location on Congress Square, and it existing structures--the McLellan House, the L.D.M Sweat Memorial Galleries, the Clapp House, and the Payson Building. while addressing the needs and benefits of a 21st century museum facility on adjacent property to serve a growing, increasingly diverse audience within Maine and for those who visit.

I believe deeply in the importance of historic preservation, and with it, opportunity for review in relation to meet community needs and changing times. After reading the detailed report made by Historic Consultant Margaret Gaertner, and viewing the building from all angles in person, I believe a reconsideration and reclassification is due. Claims of its excellence in historical stature, architectural consistency, and community significance no longer holds. Too many alterations have been made across its lifetime to support "Contributing Status" of 142 Free Street, especially with the roofline, cupola, windows, and modern doors when renovated for the Children's' Museum. Viewed within the context of other District properties, including those which the Museum has stewarded with renovations and care, the historical significance of the former Chamber of Commerce is diminished.

I urge you to to weigh the potential of an expanded potential for the Portland Museum of Art in relation to the relative importance of 142 Free Street as it is today.

Sincerely,

Dana Friis-Hansen

706 West Avenue, Austin Texas, 78701

david m. blumenthal <davidblu@msn.com> Feb 2, 2024, 2:47:40 PM (3 days ago)

to planning@portlandmaine.gov, info@portlandlandmarks.org

To: City of Portland Planning Board Members:

I am a former resident of Portland and I have always been interested in the preservation of Portland's buildings
having both architectural and historic merit.

The PMA can achieve its expansion plans without demolishing the former Chamber of Commerce/ Children's Museum Building.

142 Free Street is a contributing structure in both the Spring Street National Historic District (1970) and in the Congress Street Local Historic District (2009).

Do not allow the PMA to destroy one of the City's most attractive and historic buildings.

DMB

David M. Blumenthal, Esq.

TO THE PORTLAND PLANNING BOARD:
142 FREE STREET / PORTLAND MUSEUM OF ART APPLICATION
TO RECLASSIFY THE BUILDING AS NON-CONTRIBUTING
TO THE CONGRESS STREET HISTORIC DISTRICT

10 January 2024

Contrary to the PMA position, 142 Free Street—as transformed in 1926-27 for the Portland Chamber of Commerce—remains a contributing building in the historic district. This has been demonstrated by the city's Historic Preservation Board, testimony submitted by Greater Portland Landmarks, and others.

However, more needs to be stated in refutation of PMA's dog-whistle slur against 142 Free Street. According to the museum's submission, "142 Free Street's current façade…was erected during the Jim Crow era. Our region is one that is striving to become more inclusive, dynamic, and diverse…and some architectural styles can carry unfortunate legacies of the past into the future that undermine these values and goals." Where is the proof? This argument condemns via baseless defamation. At least half the historic buildings in Portland date to the Jim Crow era. What is their future—what future for historic preservation in the city—if the museum's critique prevails? Or is it just Classical Revival buildings that carry "unfortunate legacies of the past"? By PMA's logic, the temple-front US Supreme Court should be demolished. What of the museum's own Classical Revival Sweat Memorial Galleries and Greek Revival Charles Clapp House?

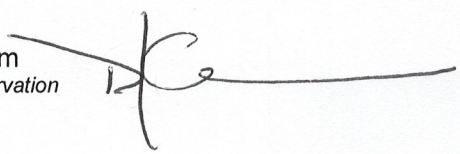
PMA's leadership doesn't acknowledge the Sweat Galleries honor Congressman L.D.M. Sweat, a racist. Sweat voted against repealing the Fugitive Slave Law in 1864. In 1865 he voted against ending slavery through the 13th Amendment. Rather than tarring 142 Free Street with the brush of racism, the museum needs to own its own history. Portland's Victoria Mansion addresses ties to slavery: PMA should too.

Because PMA has no valid case for reclassifying 142 Free Street as non-contributing to the Congress Street Historic District, its submission focuses on a shiny addition designed by LEVER Architecture, touting how it could contribute to diversity and inclusion, how it might make Portland more "welcoming" (ironic, since 142 Free was the city's welcome center for decades). Padded with unsubstantiated assertions, qualifiers and ballyhoo, the proposal states the project "will forever change Maine and New England. We will redefine our region, unite our communities, and sustain our economy for generations to come." Massive overreach. The proposed addition could bring real benefit, but the design is not going to "unite our communities" any more than another design could. Perhaps the most concrete impediment to diversity among PMA visitors is its $25 entrance fee. Make the museum free to city residents; they will come. The economic boost the proposal trumpets is not specific to the LEVER design. All the chest-thumping masks the fact another design incorporating 142 Free Street could do just as much for museum goals, and more for the city's.

Although the PMA Blueprint professes commitment to community values, it fails to acknowledge the museum stands at the center of a historic district valued by the community. Historic preservation has been key to Portland's revival. It too is incorporated into the city's comprehensive plan. In assessing new construction here, context should be considered in that sense. Henry Cobb's Payson Building is a masterpiece of contextualism, yet modern. LEVER Architecture's context-be-damned proposal would fit Portland, Oregon, better than Portland, Maine. Mass timber is a technology centered in the Pacific Northwest. The mass timber fabrication plant nearest Maine stands in Quebec, 500 miles off. The nearest US plant is 1000 miles away. What is "green" about shipping tons of material hundreds, if not thousands of miles? By contrast, the nation's premier maker of brick, equal to that Cobb specified for the Payson Building, is 43 miles from the museum in Auburn, Maine.

Reclassifying 142 Free Street is unwarranted. PMA should reconsider its building plans with a new commitment to its built context and reusing this historic structure.

Thank you for your consideration,
David Chase, York / chase.email@maine.rr.com
PMA member. Four decades' experience in historic preservation & design review of new construction in historic districts



David Chase <chase.email@maine.rr.com> Feb 6, 2024, 4:59:32 PM (21 hours ago)

to planning@portlandmaine.gov

Please confirm that the testimony I submitted in January re historic classification for 142 Free Street will be in the package going to Planning Board members and available to the public on your website.

Thank you for your consideration,
David Chase

David Eaton <deaton@totalmortgage.com> Feb 7, 2024, 3:52:55 PM (17 hours ago)
to planning@portlandmaine.gov

As a former member of the Portland Planning Board, I was involved in a vote to recommend the reclassification of a building in the Portland Company Historic District on Fore Street. I offer this to add some perspective to your current decision. A 1957 building was deemed contributing by the HP Board, but the developer wanted it removed to make room for a large walkway and outdoor plaza between Fore Street and the Eastern Waterfront walkway. City staff negotiated a permanent easement for public access and while the walkway is not yet finished, it will offer a great public asset for all to enjoy in perpetuity. To me at the time, it seemed like a great opportunity at a reasonable cost, and I spoke in favor of the reclassification. The Board agreed and so did the city council a few weeks later. I think the Planning Board's recommendation was that the reclassification was warranted due to the broader public interest served by the plan.

I believe the same logic should apply here. While I am not qualified to comment on the design, there is no doubt an expanded museum it will be a great asset, and open to the public. I know some find the design out of character, and I would leave it to others to weigh in whether any changes are necessary. But the city now has the leverage to fashion a compromise that will make most people satisfied, just as it did on Fore Street. I urge you to be bold and recommend reclassification of the building in question, perhaps with conditions. I believe this will allow the Downtown Historic District will maintain its architectural integrity, while embracing the opportunity to create new Landmarks. A great city should have a great art museum, and you can play a role in that result. Thank you.

David Eaton

52 Neal Street

David Eaton

David Gaines <davegaines@live.com>
to planning@portlandmaine.gov

Feb 6, 2024, 4:02:23 PM (22 hours ago)

Subjedct: Historic Preservation Designation - 142 Free St.

Commenter: David K. Gaines, 49 Deering Street, Portland ME 04101

I support the position of Greater Portland Landmarks that the building at 142 Free Street is a contributing historic building and that the PMA should not be allowed to tear it down and replace it with a building that does not contribute to Portland's sense of place.

The building at 142 Free Street, when seen with the H.H. Hay building and the Payson building of the PMA is an iconic symbol of Portland. It is recognized nearly as much as the Observatory and City Hall. The architects who designed the Payson building in 1980 did so under the assumption that the building at 142 Free Street would be preserved. Demolition of 142 Free Street would degrade the impact of the Payson design as well as the impact of the Hay building. The PMA is a museum in a neighborhood that is itself a museum. 142 Free Street should be preserved, and it should retain its status as a contributing historic structure.

The PMA initiated a public opinion campaign to sway public opinion against preserving 142 Free Street. They implied that the building at 142 Free Street symbolized white racist, Jim Crow culture in Maine. There is no historical evidence to support those remarks. Jim Crow was not in Maine. The PMA should not be rewarded for using such underhanded tactics. Please deny the PMA request to tear down 142 Free Street. It is an important contributor to Portland's sense of place.



David Greenham Consulting

December 5, 2023

Honorable members of the Portland Planning Board and City Council –

Please accept this letter of support for the Portland Museum of Art's Blueprint Project, and their important new building designed by the team at LEVER Architecture.

My name is David Greenham and I have been involved with arts and culture in Maine for more than 30 years. I have been following PMA's Blueprint Project since its inception. I understand and appreciate the concerns raised about replacing the former Chamber of Commerce Building with this new design.

I have great respect for the work of Greater Portland Landmarks and tremendous admiration for state historian Earle Shuttleworth and others who have recommended that this project be redesigned to feature the Stevens-dsigned building. They say that to allow the PMA project to move forward would be 'precedent-setting.'

They're right. It would be unprecedented. That's precisely why you should embrace the plan and remove the historic designation of the former Chamber of Commerce building.

It would be precedent-setting for the current leaders of the city of Portland to support the construction of a building that is not only honors Maine's rich lumbering heritage but is also specifically designed to acknowledge and celebrate the debt that we owe to the Indigenous peoples of our region.

From the beginning of planning LEVER has included Passamaquoddy citizen and former Executive Director of the Abbe Museum Chris Newell as the team's exclusion advisor. Chris is an inspirational and thoughtful leader. "I had always been raised with the worldview that all of the roads, the buildings, everything is an overlay above what our ancestors lived on for 12,000 years sustainably," Newell has said. Through his guidance, the design team and leaders of the PMA embraced the commitment to environmental stewardship and accessibility by adopting Indigenous practices and ideologies. This new building is representative of that commitment.

Greater Portland Landmarks was established in 1964 in the aftermath of the destruction of Portland's famous Union Station a few years earlier. They have realized tremendous success in preserving so many of Portland's important buildings. In partnership with Maine Historic Preservation Commission, and Maine Preservation, and the state's highly successful historic tax credit program many historic properties in Maine have been saved.

But please remember, this isn't a case where a beautiful building like Union Station will be demolished and replaced with a strip mall and a parking lot, or some other kind of 'non-contributing' building. It will be replaced with an iconic and important architectural jewel.

And it's a jewel that is long overdue in Portland and the state of Maine.

Despite the leadership of the aforementioned agencies, and the historic tax credits, there is not a single re-development project that has been so cognizant of ensuring that Maine's Indigenous history is recognized. Most of the projects simply continue to be what Chris Newell and others refer to as "artifacts of colonialism."

The PMA will take one historic structure that has outlived its usefulness and replace it with a stunning, thoughtful, and exciting building that will enhance the experience of a visit to downtown Portland.

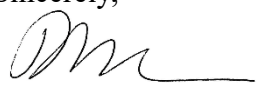
We can learn so much from our Indigenous neighbors. Our job is to recognize that we stand on the shoulders of those who came before us, and we must prepare to support the generations to come. In many cultures this is referred to being 'shoulder ready.'

With their innovative and open design for their building expansion, attached to their already significant architectural holdings, the PMA is making sure that they are shoulder ready to support generations of artists and visitors to Portland.

There are so many challenging issues facing Portland and our state in the coming years. The approval of PMA's request for a designation change will ensure that we have a shining and exciting new landmark that celebrates our wonderful past, while looking brightly towards the future.

I urge your support for the PMA request.

Sincerely,



David Greenham
Principal
David Greenham Arts and Culture Consulting

CÅLM <heycalmcartel@gmail.com> Dec 1, 2023, 7:40:42 AM (3 days ago)

to planningboard@portlandmaine.gov, Gkennedy@portlandmuseum.org

Dear Planning Board Members,

I wholeheartedly support the construction of the new Portland Museum of Art (PMA) building. The current Children's Museum, which we consider to be a preservation of history, lacks any original architecture and serves no purpose in its current state. It has been gutted multiple times, rendering it obsolete. In contrast, the new PMA building offers us the opportunity to preserve the historic pillars and stained glass windows from the old museum while creating a new installation that truly revitalizes our city's cultural landscape.

Let us not cling to a relic that has lost its purpose. By embracing the new PMA building, we can create a landmark that combines the preservation of cherished elements from the past with a dynamic and meaningful contemporary space. This approach will not only honor our history but also invigorate our city's economy, attracting tourism and stimulating growth in our community.

I urge the Planning Board to support the construction of the new Portland Museum of Art building, leveraging the historic elements from the old Children's Museum in a fresh and innovative way. This will provide us with a space that simultaneously honors our heritage and propels us into a vibrant future of culture and economic prosperity.

Thank you for your thoughtful consideration.

Sincerely,

Dax L.

--
Lauren LeMatty
302.377.7546

CALM APOTHECARY

Deborah Fell
377 Cumberland Avenue
Portland, ME 04101

Members of the Planning Board,

I am writing in support of the Portland Museum of Art's expansion plan. The expansion will help create an invigorated downtown through the added infusion of art in a venue that encourages community engagement. The reason not to do it simply perpetuates a tired status quo.

Downtown Portland could use a boost. One sees numerous empty storefronts and office spaces up for lease. It does not feel like a thriving business district.

The negative response to the expansion plan being made by those wanting to keep the old children's museum building takes a narrow outlook. Preserving Portland's historic richness is certainly important. However, is this building, while indeed old, truly central to maintaining the stature of Portland architecture?

The PMA plan will create a setting that is positive for Portland, one that promotes community participation and involvement. It will provide a wide audience with access to art, theater and music and make downtown Portland and Congress Street a desirable destination. More people will mean better opportunities for local businesses to succeed and grow.

Of course, the beauty and history of Portland should be valued and preserved and change can be seen as a loss. However, such choices can be balanced with concerns for the common good. In this case, future gains for the community and the potential for building a new history outweigh holding to the past.

Sincerely,
Deborah Fell

Debbie J <dpjonpeaks@gmail.com> Feb 6, 2024, 5:03:55 PM (21 hours ago)
to planning@portlandmaine.gov

To the Members of the Planning Board:

Why is the demolition of a property protected by Portland's Historic Preservation Ordinance even being considered?

Are all our civic leaders unfamiliar with our city's history, and/or too young to remember the demolition of Portland's beautiful Union Station in 1961?

142 Free Street, the former Children's Museum, meets four of the six criteria for protection, when only meeting one criterion is all that is required. What is the point of having a Historic Preservation Ordinance if it can be cast aside when convenient?

Must we destroy another of our city's historic buildings before we wake up and realize that we are destroying our city?

Please vote against reclassifying and demolishing 142 Free Street.

Thank you.

Deborah P. Jordan
33 Lyndon Avenue
Peaks Island, Maine 04108
207-766-5801

Dee Dee Wacksman <dswacks@hotmail.com> 9:14 AM (4 hours ago)

to planning@portlandmaine.gov

As a new resident of Cumberland county I have been impressed with the quality and number of historic buildings in the community. I have always been drawn to places of significance in the communities where I reside. It seems that the former Children's Museum building is one with a rich history and strong memories for downtown Portland. It would be a shame to destroy it when alternative reuse is available . Remember, once they are gone there's no bringing the back… train depot.
Edith Wacksman
14 Lilac Lane Scarborough

Public Comment: 142 Free Street Reclassification Isaue

Subscribe

0 views



Dela Murphy @DelaHere <dela@delahere.com> 9:57 AM (1 minute ago)

to planning

Dear Planning Board,

I understand the Portland Museum of Art has requested special consideration to reclassify the former Chamber of Commerce Building at 142 Free Street to non-contributing so they may demolish the building. I ask that you concur with the Historic Preservation Board and deny this request.

- Based on the Historic Preservation Ordinance, 142 Free Street meets four of the six criteria to be considered contributing. The law and the building's status under that law is clear.
- The PMA was aware of this status when the building was purchased; however, they launched a design process with the intent to ignore the law. They are acting in bad faith in this redevelopment scheme.
- Special treatment undermines the Historic Preservation Ordinance and runs counter to it's intent. No matter how "prestigious" or "charismatic" a project or entity proffered is, our primary concern under this law should be for the long-term preservation of the buildings and assets we've already established define our city's existing character. New projects like the PMA's have endless opportunities for alternative development that don't chip away at or destroy existing contributing assets.

Please deny this request and affirm the law. Thank you for your thoughtful consideration.

Dela Murphy
61 India St #3, Portland

Hello,

I am writing to the Planning Board in the hope that you will approve the expansion of the Portland Museum of Art's expansion proposal. I am a long-time supporter of the PMA and view the museum as the premier cultural institution in Portland. I have been following with interest the PMA's expansion plans for several years. I was thrilled to see the model of the new facility and was pleased to see that the plans were vetted by the entire Portland community.

I believe that the old Children's Museum building, which is currently owned by the PMA, falls under the auspices of the Historical Preservation Commission and that body has (at least temporarily) blocked the museum's plans for expansion. The Planning Board has the ultimate say in this matter and I urge you to allow the museum to proceed. When the Planning Board weighs the benefits to the citizens of Portland of the multi-million-dollar PMA expansion, against the dubious benefit of preserving the shell of a vacant building, there is simply no comparison.

The newly renovated building will be an architectural gem, showcasing state-of-the-art environmental practices and paying homage in its design and construction materials to Portland's rich Native American history. The architectural plan integrates the various PMA buildings into a unified campus, improving accessibility and drawing both residents and visitors into the heart of Portland, an area that unfortunately has languished The expansion will give new life to this area of the city.

At the present time businesses in the area around the museum are in trouble. Storefronts are vacant, and the trend seems to be accelerating. A multi-million-dollar expansion of the museum, financed largely by individual donors, will send a positive signal to the business community. It will spur growth and show that Portland is a city which is committed to moving forward, a city that values its cultural assets and a city which supports its public institutions. Portland's 2030 Plan lays out these guidelines in some detail.

In general, I am in favor of preserving historical neighborhoods, but I don't think the old Childrens Museum building should be a offered special protection. It has the grim exterior of a courthouse and I understand that it had a rather dubious history as well. What is the benefit to the city of keeping such an isolated structure intact? Is anyone going to come to Portland to look at it? Does it contribute in any way to the city? Who and what does it represent?

Could the old building be somehow incorporated into the new structure as some have proposed? The short answer is NO. Trying to somehow mash the two buildings together would look awful and would be enormously expensive to boot. If the PMA's application is denied, there is really nothing that the museum could really do with the old building other than to sell it, but I can't imagine any business that would want to buy it. It is also likely that many of the donors who have pledged money for the new building would withdraw their pledges, leaving the PMA, and the city of Portland worse off than before.

This is a once in a lifetime opportunity which will not come again. The museum has already raised tens of millions of dollars for construction and it isl likely that they will be able to raise even more money when the project is fully approved by the Planning Commission.

After considering the benefits to the citizens of Portland, I am certain that the board will approve the Portland Museum of Art's proposal as submitted.

Sincerely,

Richard Fleming

TESTIMONY CONCERNING HISTORIC PRESERVATION DESIGNATION—142 FREE ST.

TO: THE PORTLAND PLANNING BOARD

As a young architect in the late 1970's I was proud to be a member of the design team working directly with Harry Cobb of I.M. Pei & Partners on the Payson addition to the Portland Museum of Art (PMA), a design largely based on the preservation and enhancement of historic buildings on the site.

I fully support the idea of PMA expansion, but not as currently proposed. The demolition of the former Chamber of Commerce Building (former Children's Museum) is unnecessary.

After fourteen years at the Pei firm, I entered the real estate business, leading the planning and implementation of several large urban projects. These complicated sites included historic structures, resulting in challenging but ultimately solvable preservation issues.

I subsequently served as President of the Los Angeles Conservancy, by membership the largest local preservation entity in the country. This three-part background---architecture, development and preservation---has convinced me that solutions exist for even the most challenging conflicts these endeavors may face. I believe that this is relevant to the Portland Museum expansion.

The former Chamber of Commerce Building---142 Free Street—is an historic building that has graced Portland for almost 100 years. The PMA leadership has framed their expansion argument as follows: we need adjacent land for expansion and therefore must demolish 142 Free Street. Without this land, expansion is impossible, and the public will reap none of the enormous community benefits that have been advertised.

This either/or proposition is just plain wrong.

The 142 Free Street site is 9800 square feet in size. PMA has jammed its proposed 60,000 square foot expansion into this tight site, resulting in a costly five-story structure that dwarfs its historic neighbors. PMA proposes a glassy new entry on Free Street, permanently closing off the Congress Square entry to the Payson Building, ironically just as the City of Portland is pursuing an expensive re-design of Congress Square that will only enhance the Payson entrance.

All of this, PMA states, is necessary for its expansion. But this position is misleading.

In 2006, PMA purchased the adjacent 38,000 square foot YWCA site in order to "secure the museum's future options and flexibility", to quote the PMA's own website. Now a parking lot and sparsely planted open space that is four times the size of the 142 Free Street property, the YWCA site could easily accommodate expansion with great visibility, its own entrance,

connection to the existing museum buildings, and sufficient land area to yield a cost-effective solution better scaled to the surrounding buildings.

PMA has rejected the YWCA site, claiming that it does not provide a good connection to the Payson Building. I dispute this conclusion; I believe that a motivated architect could create a compelling solution.

But even if PMA is correct, there is yet another alternative: demolish the Administration Wing of the original Payson Building, which is identical in size to 142 Free Street. This would provide an expansion site central to the entire museum complex and would facilitate connection to all museum components, while enabling future expansion to the YWCA site and maintaining the current museum entry fronting on Congress Square. 142 Free Street could house PMA administrative functions.

As one who worked on the original design, I would prefer that the Payson Building remain intact, but it is far better to replace a portion of it than to destroy 142 Free Street.

Portland's unique historic fabric need not be sacrificed in order to facilitate growth. The two are not mutually exclusive, as PMA has unfortunately framed the issue. A win-win outcome can be achieved if pursued in good faith.

PMA's claim that its expansion is totally dependent on the destruction of 142 Free Street is shortsighted and misguided. It deserves to be forcefully challenged by the city and soundly rejected.

Douglas Gardner
4064 Cresthaven Dr.
Westlake Village, CA 91362

PMA's request to permit removal of 142 Free St

Subscribe

0 views



Douglas Howell <doug.howell813@gmail.c… Jan 8, 2024, 8:52:19 PM (13 hours ago)
to planningboard@portlandmaine.gov

Dear Portland Planning Board members.

I am writing this letter to support the Portland Museum of Art's petition to consider removal of the building at 142 Free Street which is currently classified as a contributing historical structure in the Congress Street Historical District.

As long-term supporters of both the Portland Museum of Art and the Greater Portland Landmarks, my wife and I understand and appreciate the value of historic preservation. We purchased a circa 1760 Cape Cod home in 1979. We worked with Ursula Baier at Landmarks, Donald Philbrick JD, President, of Maine, Historical Society and craftsman from Strawberry Bank Museum to restore and expand our home, using historically correct materials. This house, although simple and even basic, has significant value to the town of Cape Elizabeth, as one of the few remaining colonial homes with connections to antiquity. The original homesteader was born in 1690 and arrived in the Massachusetts territory of Maine in about 1725. His lineage includes Sarah Elwell, accused of witchcraft in Salem and Senator Daniel Webster.

I hope to draw a distinction between our 30 year long home project and the building at 142 Free Street.

The appeal of the PMA to ask that the planning board reclassify 142 Free Street as a non-contributing building permits a dramatic, innovative, new landmark art building to proceed. The failure to do so requires careful analysis of the consequence and the negative impact on the city of Portland Comprehensive Plan, 2030.

During my 45 years as a physician at Maine Medical Center, I have witnessed major positive changes in our beloved city. Many of these have resulted from an influx of citizens of varied backgrounds, religions, ethnicities, and education. Their social, business and cultural sophistication need and want this revitalizing expansion that has been carefully developed and presented. We know that, after a lengthy competitive process, worldwide enthusiasm elicited one hundred four applications from top architectural firms in twenty countries. The process to select a winner was presented openly over many months, yielded over two thousand positive responses from local citizens and art devotees in a completely transparent way.

What we have come to realize is that Portland needs a new concept art museum – open, inviting to all, interactive, innovative – to help bind together our newly diverse community. The new major expansion of the PMA promises to become the center of the community, even more than it will function as a community center. At present, I know of no other art museum that has attempted this bold step.

Analysis of the economic, social and cultural impact on Portland of this project, as designed, is projected to be huge. The reigning example of such an innovative project is the Frank Gehry designed Guggenheim Museum Bilbao in Spain. Opened in 1997 in a small city of 350,000, over 4 million visitors toured in the first three years. To date, Time Magazine reported that just

economic activity alone has brought over €3 billion Euros to the Basque region after an overall investment of €100 million. The PMA's proposal is of similar scale, but will be sustainably built of Maine massed timber. This promises to be a once in a lifetime creation of a landmark building built for generations to come.

As planning board members, you are weighing the impact of continuing to list 142 Free Street as a contributing building. Many do not agree. Its historical integrity has been deeply altered from flawed major renovations, and yet, despite four attempted enterprises, it remains a failed building. Its history of failure includes use as a theater, a church, the Chamber of Commerce, and finally the Children's Museum of Maine. The last owners were unable to accomplish their goal of a children's museum serving all of our community and moved to a new modern expanded building. Their frustration with 142 Free Street has been expressed.

Architecturally, little remains of the original building. The most recent renovation in the 1920s by John Calvin Stevens, resulted in the addition of the white columns and portico, hardly a unique or an original feature copied throughout 20th century America. Removal of this minor achievement is justified in my opinion, considering his multiple existing major contributions throughout Portland and our region. We have been told that even his grandson assures us his grandfather would favor removal to permit the planned PMA vision.

In closing, the city and state have much to gain if removing 142 Free Street is allowed. To favor retention of this vastly altered and failed building will harm our city's future. Ironically, that is not the contribution intended by the Congress Street Historic District's creation in 2009.

Douglas Howell MD
South Portland, ME

Dugan Murphy <dugan@duganmurphy.com> Feb 3, 2024, 9:12:07 AM (2 days ago)

to planning@portlandmaine.gov

Dear Planning Board,

I am writing in regards to the Portland Museum of Art's request to reclassify the former Chamber of Commerce Building at 142 Free Street to noncontributing status within the Congress Street Historic District. This request is ridiculous.

This building is over two centuries old with a facade that is well preserved from its redesign a century ago by famed architect John Calvin Stevens. The importance of its presence as part of the historic urban fabric of downtown Congress Street is exactly why all the work was put into researching it and the other contributing structures within that district and getting that district added to Portland's recognized collection of local historic districts. It is exactly why this city decided to adopt a historic preservation ordinance back in 1990. We, as a community, did not put these protections in place, just to have them revoked when a little inconvenient.

Whether or not to reclassify a building is a decision to be made based on the language of the Historic Preservation Ordinance. According to the ordinance, 142 Free Street is contributing. It meets four of the six criteria necessary to achieve this status. The ordinance only requires it to meet *one* of those criteria! So by law, the status is clear.

The Portland Museum of Art knew this when they purchased the building. It was absolutely no secret that there were protections already in place before they acquired it. If they are acting surprised, they are being disingenuous.

The Historic Preservation Board unanimously agrees that this request should be rejected. Please respect their expertise and issue a concurring decision. Doing so would also match public sentiment, as evidenced by the public comments so far, by a wide margin.

The Portland Museum of Art has a lot of property at their disposal. By law, they have many options for developing it, so they really have no grounds for asking the Planning Board to offer them unequal treatment of the law. They have been sitting for decades on the amazing, historic Clapp House without using it for anything the public can access. They have the ability to rehabilitate that structure. In 2007 they depleted Portland's woefully small and much-needed affordable housing supply when they demolished the YWCA building on Spring Street. They could find a new use for that underutilized parking lot and adjacent, unusable green space they put in its place. They could redesign the interior of 142 Free Street , build an addition to it, or pursue any of the many other expansion options available to them currently allowed by law, without going through this bald-faced, bad-faith reclassification process.

The PMA is a creative organization. Please deny this request so they can use that creativity in their ranks to develop an expansion plan that adheres to the law and suits their needs and the needs of the broader community by preserving the Chamber building.

Thank you for thoughtfully considering this issue.

Dugan Murphy
(he/him)
61 India St #3, Portland

To: Portland Planning Board
From: Earle G. Shettleworth, Jr.
37 Academy Street
Hallowell, Maine 04347
February 8, 2024

Agenda Item: Proposed Historic District Amendment, Congress Square Historic District. Reclassification of 142 Free Street as non-contributing.

I am writing to ask that the Planning Board support the Historic Preservation Board's unanimous finding to maintain the designation of 142 Free Street as a contributing building to the Congress Street Historic District. As a native of Portland who has studied the history and architecture of the city for sixty years, I want to affirm the significance of 142 Free Street as a work of John Calvin Stevens that contributes to the district.

While I question many of the statements made by attorney Mary E. Costigan in her January 31, 2024, letter to the Board on behalf of the Portland Museum of Art, I especially dispute her comments regarding Section 17.4.1.(A).

John Calvin Stevens (1855-1940) of Portland is recognized as Maine's leading late 19th-early 20th century architect. His sixty-year practice earned him a national reputation and a place in American architectural history. By the early 1900s, the Colonial Revival was Stevens' style of choice, as it was for many of his contemporaries. Thus, in 1926, when commissioned to transform the Free Street Baptist Church into the Portland Chamber of Commerce, he chose to evoke the historic appearance of the building by replacing its Victorian church façade with the impressive Colonial Revival columned façade we see today. While the architect drew inspiration from a drawing of the building in 1836, the façade is Stevens' original design that expresses his own vision of a classical building to enhance the public space of Congress Square. Columned buildings were then in vogue from Colby College's Miller Library to the U.S. Supreme Court Building.

Moreover, John Calvin Stevens' design for the Portland Chamber of Commerce reflects his advocacy for the early 20th century City Beautiful Movement, in which he sought to improve Portland with such public buildings as City Hall, the Sweat Memorial Gallery, and the Portland Water District complex. In his own words, his purpose was "to have all the city's institutions so built that they become points of interest and beauty." As such, the Stevens façade of 142 Free Street has been an integral part of the fabric of Congress Square for almost a century. It is a perfect companion for the Post-Modern classicism of Henry Cobb's Payson Building of 1983.

Based on my knowledge of Stevens' 1926 Portland Chamber of Commerce, I find Mary Costigan's statement that this project is "not an original design of John Calvin Stevens" to be without merit. Moreover, the fact that Stevens' drawings for the project do not survive should not be interpreted as a lack of significance. It was common practice in Stevens' office to discard drawings unlikely to be needed for future work. When the architect's grandson gave the firm's remaining drawings to the Maine Historical Society in 1972, they accounted for only fifty percent of the office's work.

The architectural significance of 142 Free Street that I have outlined is a primary reason for its listing as a contribution resource to Portland's Congress Street Historic District. Contrary to the Portland Museum's assertion, the City of Portland was correct in including 142 Free Street as a contributing building when it created the Congress Street Historic District in 2009. The appropriateness of this designation was confirmed by the National Park Service when it certified the district for the use of Federal historic tax credits. This designation should remain in place.

Edward Budway <EBudway@egcu.org> 2:02 PM (1 hour ago)

to planningboard@portlandmaine.gov, Gkennedy@portlandmuseum.org

Dear Portland Planning Board,

I am writing to you in support of the Portland Museum of Art (PMA). My organization and I have proudly worked alongside the team at the PMA as they've been an Evergreen Credit Union Community Partner for many years. Like other Portlanders and Mainers, we are very excited for the museum to realize the *The PMA Blueprint* vision and transform Portland's art experience for all.

A collaborative partner, the PMA is embracing the excitement and feedback of the greater Portland Community during their design process. The new blueprint represents a place of growth and opportunity for artists of all types in this city and around the world. With this new facility, the PMA may influence more aspiring artists who need space to learn and grow. Their new museum will also feature community gathering areas which can bring flexibility and opportunities to local organizations and businesses.

The Evergreen team and I are confident that *The PMA Blueprint* can transform our city and can help revitalize Congress Square. Portland Planning Board operations have already made great strides in making the city more walkable and open. The PMA's new facility will help further this work and bring more foot traffic into that area, benefitting local artists, art viewers and businesses alike. My team at Evergreen and I support the museum expansion plans, and we believe that their efforts should be encouraged and supported by those in Portland and beyond.

Sincerely,

Ed Budway

Vice President, Marketing

Evergreen Credit Union

Eileen Gillespie <etgillespie@gmail.com> Nov 28, 2023, 4:11:19 PM (16 hours ago)
to planningboard@portlandmaine.gov

Dear Portland Planning Board,

I am in full support of re-classifying 142 Free Street to non-contributing status.

The PMA Blueprint Project is a once-in-a-lifetime opportunity to revitalize Congress Square and our beautiful city of Portland. The project serves our diverse communities, strengthens our neighborhoods, educates visitors, grows our economies, welcomes all.

The economic impact of this project will transform our city as it activates and enhances the City of Portland's Comprehensive Plan 2030.

I urge the Planning Board to fully support this project.

Thank you!

Eileen Gillespie

Elizabeth Cullen <cullenelizabeth@hotmail.com> Dec 11, 2023, 2:17:14 PM (19 hours ago)
to planningboard@portlandmaine.gov, Graeme Kennedy

To whom it may concern:

I am writing this letter in support of the Portland Museum's Blueprint project.

I am a longtime resident of Brunswick, and an educator in the Brunswick school district for many years.

I am excited to learn of this new proposal for many reasons. The first that comes to mind is that Portland will be able to provide quality activities for our Maine youth, beyond the limitations of the current museum, and at the same time enhance Portland's cultural experiences for our growing diverse population.

Sincerely,

Elizabeth J Cullen

Ella Hudson <ella.hudson@gmail.com> 4:01 PM (2 minutes ago)
to planning@portlandmaine.gov

We are residents of Portland. We believe it would be a mistake to demolish the building at 142 Free Street to allow for expansion at PMA. We have read many opinions and letters that support the expansion (as do I) but without demolishing the building. Greater Portland Landmarks states it thus, "...They [law firm] have counseled us that the decision to redesignate 142 Free Street must be based on the Criteria in the Ordinance. It cannot be based on any other document, such as the new comprehensive plan, “Portland’s Plan 2030”.

The standards for rescission are clearly defined. The Planning Board and the City Council are limited to making their decisions based only on the Ordinance, the same standards the Historic Preservation Board applied in making their November decision.

While 142 Free Street is the focus of our advocacy, the issue is much larger: **Can the City of Portland ignore its own clearly defined ordinance to the benefit of one property owner? The land use rules are clearly set so everyone knows what is possible when they acquire a protected property.** There are many opinions on whether the proposed or the existing building is preferable. However, the City’s Historic Preservation Ordinance, which has been instrumental in Portland’s resurgence over the last thirty years, is very clear."

The rules are definitely clear.

Ella and Knapp Hudson
164 Deepwood Drive
Portland

Emma Gregg Brego
Director of Production
p3 Maine
434 Cumberland Ave
Portland, ME 04101
11/30/23

Planning Board
City of Portland
389 Congress Street
Portland, ME 04101

Dear Members of the Planning Board,

I am writing in my capacity as Director of Production at p3 Maine (and a lover of art!) to express my strong support for the Portland Museum of Art's (PMA) Blueprint. As someone who has been deeply involved in the cultural and economic development of our city, I am convinced that this project is of paramount importance to Portland's future.

The PMA Blueprint is a reflection of extensive community engagement and insight. It stands as a testament to the museum's commitment to embracing the diverse voices and visions of Portland's citizens. This project is more than an expansion; it is a bridge connecting the museum's historical legacy with the future aspirations of our community. The Blueprint's alignment with the input of thousands of Portlanders guarantees that it is not just a plan for the museum, but a plan for the people of Portland.

This initiative represents a transformative opportunity for our city. It is not merely an enhancement of our cultural infrastructure but a catalyst for broader urban renewal and economic growth. The Planning Board's support for the PMA Blueprint is crucial in realizing a project that embodies the spirit and objectives of the City of Portland's Comprehensive Plan 2030.

The economic implications of the PMA Blueprint are particularly compelling. The revitalization of Congress Square and the surrounding areas will spur economic growth, create jobs, and attract tourism. This project will serve as a cornerstone for further development and investment in our city, setting a precedent for thoughtful, community-driven urban planning.

I urge the Planning Board to recognize the transformative potential of the PMA Blueprint and offer it your full support. This project is a unique and critical opportunity to shape the future of Portland in a way that honors our heritage, celebrates our diversity, and embraces the possibilities of the future.

Thank you for your consideration of this important matter. I, along with many others in our community, am eager to witness the positive impact that the PMA Blueprint will have on our city.

Warm regards,



Emma Gregg Brego

Eric Handley <ewhcom@gmail.com> Feb 2, 2024, 6:26:13 PM (3 days ago)

to planning@portlandmaine.gov

Hi

A comment on the proposed reclassification of 142 Free Street by the Portland Museum Of Art.

The reclassification is unnecessary and completely unjustified.

I agree with Portland Landmarks that the museum knew when they bought the building that it is a protected site within the National Register District.

I am a long term PMA member and enjoy multiple visits per year. Especially enjoying the area around High Street with the many older buildings some of which the PMA owns.
The plans submitted by the PMA are out of touch with the area, it would be nicer to see a more integrated expansion plan.

I am against the reclassification and the plans to demolish the building.

Eric Handley
56 Wilson Street Unit 4
Portland 04101

Eric Stark <eric.stark@maine.edu> Feb 6, 2024, 1:12:58 PM (yesterday)

to planning@portlandmaine.gov

Hello Portland Planning
I am writing regarding 142 Free Street and the Portland Museum's desire to reclassify that building. I am an architect and professor of architecture at the University of Maine at Augusta. I live in Portland at 71 Beckett Street in a historic neighborhood (Munjoy Hill).

I strongly urge you to reclassify this building and allow the PMA to progress with their plans for the site and expansion of the museum. Given my experience as an architect, teacher, and homeowner, I am well versed in aspects of historic preservation. In fact, I am a proud member of Greater Portland Landmarks.

However, I strongly disagree with the GPL stand on 142 Free Street. While this building has history (it is old), it does not offer historic significance. It is a fairly nondescript Greek revival structure that has outlived its usefulness. At this point in Portland's history, the PMA has the financial and visionary opportunity to create a world-class museum complex. The benefits of the complex to Portland's cultural and artistic future is clear. In addition, the economic effects to greater Portland should also be clearly understood.

You have a chance to make Portland better for decades to come. Please do not let the small fact that a building was constructed some years ago stand in the way of Portland's progress!

Respectfully submitted,
Eric Stark
71 Beckett St
Portland, ME 04101

Erik Hayward <erik.hayward@gmail.com> Dec 7, 2023, 9:58:58 AM (23 hours ago)

to planningboard@portlandmaine.gov, officeofthedirector@portlandmuseum.org

Dear Members of the Portland Planning Board:

I write to express my full support of the plans presented by the Portland Museum of Art (PMA) as part of its Blueprint Campus Unification Project. The proposed project represents a significant opportunity to bring vitality and progress to the city's arts district and Congress Square, which has not seen the revitalization underway on other parts of the peninsula.

From my experience working in Portland for twenty years and as a Trustee of the PMA, it appears that there is a very vocal minority of citizens opposed to this project based solely on the historic designation (misplaced in my opinion) of 142 Free Street. While I understand their concerns, I wish to convey to the Planning Board that there are many more people in support of this once-in-a-lifetime opportunity.

The regrettable loss of Portland's historic Union Station has served as the galvanizing force for the city's strong preference toward preservation. This is admirable, but it can only be extrapolated so far. The PMA's proposal compares in almost no way to that unfortunate loss which occurred in favor of the development of an uninspiring strip mall on St. John Street.

142 Free street will be replaced with a world-class cultural institution, developed by a renowned group of architects and designed with input from thousands of community members. The building itself, as much as the art and the programming contained therein, will be an attraction to Portland for generations. It will be accessible to all, and it will serve a far better and higher use than any possible reconfiguration of the current structure of 142 Free Street.

I strongly encourage the Portland Planning Board to give its full support to the PMA Blueprint project.

Thank you,
Erik Hayward

Members of the Portland Planning Board:

Following is my letter to Portland Press Herald which speaks in opposition to PMA's request to raze the building at 142 Free Street. Please deny that application.

As the owner and developer of a number of properties in southern Maine, including four past projects on the National Register of Historic Places, I am troubled by the Portland Museum of Art's current attempt to make an end-run around Portland's historic preservation ordinance. Preserved historic buildings are a meaningful part of what has made Portland so widely celebrated as a unique place. This newspaper's longtime home, now the Press Hotel, is a prime example of how historic buildings can be modernized and given new life.

While it is often easier and less costly to tear down an old structure and build new, rehabilitating historic buildings benefits the entire community – and the environment – and the availability of historic tax credits often helps the developer offset added costs.

In Portland, the rules are clear. If a building is deemed a contributing structure within a historic district, as is the 142 Free St. building, it cannot be demolished for reasons of expediency– regardless of who the owner is. The granting of historic preservation status to a building or district is a thorough and deliberative process; it is not a temporary condition until something "bigger and better" comes along. The PMA knew this when they purchased the building just a few years ago.

I hope that the Portland City Council will not bow to the pressure being applied by the PMA, and will uphold the city's historic preservation ordinance. While working with historic buildings requires creativity and extra diligence, there are many of us who have found ways to develop successful projects within Portland's historic districts.

What's important is that we all play by the same rules. That includes the PMA.

Ford Reiche
Freeport

George Brown <georgebrown06@gmail.com> 8:47 AM (2 minutes ago)

to planning@portlandmaine.gov

I'm 75 yrs old and have always admired the lines and design of this landmark. I also remember the Libby building that was torn down to make room for the PMA. 142 High has always been a significant building on the corner of High and Congress. You might as go after the HH Hays building while you're at it. It certainly won't fit into PMA vision for Congress St, it's too old.
Sent from my iPhone

Hailie Posey <hailieposey@gmail.com> Dec 5, 2023, 4:39:25 PM (23 hours ago)

to planningboard@portlandmaine.gov

Dear Planning Board,

Please accept this email in support of the Portland Museum of Art's Blueprint Project. I believe that the exciting vision outlined in the Blueprint Project would be of benefit to Portland and all of Maine by bringing forth enhanced access to art, community engagement around the PMA collections, and economic revitalization. This is such an exciting project and opportunity for Portland.

As a supporter of the revitalization of PMA, I also support the necessary removal of the former Children's Museum building at 142 Free Street. The cultural and economic benefits of the proposed PMA building expansion far outweigh the historical significance of the Children's Museum building. The building has a problematic past, and the columned facade evokes a neoclassical vision that is steeped in prejudice and racism. Preservation of this particular building and its columns should not be the primary impediment to the expansion of the PMA. The former Children's Museum building does not embody the open, equitable, and accessible future we envision for Portland or our region.

Thank you for taking my position into account. I hope that the value of the proposed PMA building including its galleries, performance spaces, and community meeting spaces will remain at top of mind as you make your decision regarding 142 Free Street.

Sincerely,

Hailie Posey
21 Rumery Street
Saco, ME 04072

Hanson Historic Consulting

February 8, 2024

Portland Planning Board
389 Congress Street
Portland, ME 04101

Re: Proposed Reclassification of 142 Free Street

Dear Planning Board Members:

Please let me start by apologizing for the length of this letter. As one of the principal figures involved in the creation and certification of the Congress Street Historic District in 2008-2010, I have first-hand knowledge of how 142 Free Street's classification as "Contributing" was determined. With the personnel turnover in City Hall and the Portland Museum of Art since 2010, I hope the information I have to share can clarify many points of confusion about this question.

From 2005 to 2010, I worked with Deb Andrews in the Portland Planning Department staffing the historic preservation program. I was the principal researcher and co-author, with Deb, for the Congress Street Historic District Designation Report, and prepared the National Park Service Local Historic District Certification Application for the district.

Since leaving the City of Portland, I have written or co-written more than 30 National Register nominations, including commercial district nominations for Augusta, Lewiston, Waterville, Rumford, and Dover-Foxcroft. I have prepared the NPS Certification applications for the Portland Waterfront, Congress Street and Munjoy Hill historic districts in Portland and the West Chelsea historic district in New York City. I have extensive experience in determining Contributing and Non-Contributing status for buildings in commercial historic districts.

When working on the designation report for the Congress Street district, every building, site, structure, and object in the district was thoroughly researched, documented, and carefully analyzed to determine whether they contributed to the historic character and significance of the district. This included the Portland Chamber of Commerce Building at 142 Free Street, which was determined to be Contributing.

The recent report prepared by Margaret Gaertner for the Portland Museum of Art makes a reasonably coherent case for why the Portland Chamber of Commerce Building does not meet the requirements to individually listed in the National Register, and perhaps not to qualify for Landmark status under the Portland Historic Preservation Ordinance. At the same time, it makes an excellent case for why the building *should* be considered Contributing to the significance of the certified local district.

Interior alterations have no relevance to qualification as a Contributing building in a district and the mention of interior alterations in the report should be ignored. Window and door replacement and minor, reversible, alterations to the roof are commonly found on Contributing buildings in historic districts and are regularly approved as alterations under the standards of the ordinance by the Historic

Preservation Board. These in no way render the Chamber of Commerce Building non-contributing.

Historic changes to existing buildings are generally recognized to have significance in their own right if they date to the Period of Significance for the district or property. Additionally, these changes have more importance if also related to the district's Areas of Significance.

Portland's Historic Preservation Ordinance does not require identification of a period of significance when designating a district, unlike the National Register. What is does instead is require that a building be 50 years or older to be considered "contributing" to a district. By default, this creates a period of significance from the construction date of the oldest building in the district until 50 years before the time of designation. For the Congress Street district, this is 1789 to 1960. Alterations made to buildings in the district prior to 1960 are considered historically significant. This, of course, includes the 1926 alterations to the Chamber of Commerce Building by John Calvin Stevens.

While Portland's preservation ordinance does not require identification of the period of significance or areas of significance for a district to be designated, the Certification of the local district by the National Park Service does. The Congress Street Historic District was certified by the National Park Service on May 25, 2010, for the purpose of allowing the owners of contributing buildings to access state and federal historic tax credits. This certification is based upon documentation that the local historic district is essentially identical to a National Register Historic District.

As part of the Certification application, a Period of Significance and Areas of Significance had to be identified for the local district, which were not required for local designation. I worked closely with the Maine Historic Preservation Commission's National Register Coordinator and Guy Lapsley with National Park Service staff in Washington, DC to make these identifications.

The Period of Significance for the Certified Congress Street Historic District is 1785 to 1958 (with two later buildings identified as Contributing due to their exceptional architectural merit). The district is significant under Criteria A in several Areas including "Commerce," and under Criteria C in the Area of Architecture with John Calvin Stevens identified as one of the most important architects whose work is represented in the district.

Needless to say, a building substantially altered to accommodate the Chamber of Commerce in a district with "Commerce" as a primary Area of Significance is significant in that Area and significant to the district. Its architectural significance as a building substantially redesigned by John Calvin Stevens in 1926 hardly needs explanation.

As noted above, Certification of a local historic district allows owners of Contributing buildings access to state and federal historic tax credits. The NPS letter certifying the district (attached) states, "Please be

aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for continued benefits under the above laws."

Currently underway historic tax credit projects in the certified Congress Street district include the Chapman Building (Time & Temp) complex, the Fidelity Trust Company Building, and the New England Telephone and Telegraph Building. I am aware of at least five other historic tax credit projects currently being planned in the Congress Street Historic District. Tens of millions of dollars in state and federal historic tax credits for these projects are dependent on the Certified status of the local historic district.

You have a January 31, 2024, letter from attorney Mary Costigan, representing PMA, offering her opinions about the contributing status of Chamber of Commerce Building and some statements about recent communications with the National Park Service staff regarding possible effects changing the status of the Chamber of Commerce Building's designation status might have on the certification of the district. She then focuses on the "amendment" of certified local historic districts and speculates, "It is questionable whether the City would even have to notify NPS of the change in classification of one building." She also ignores the very relevant question of "why" the museum wants to reclassify the building – which is to demolish it.

As clearly described in the "Portland's Certified Local Government Status - Elimination of Project of Special Merit Provision by City Council – 2005" Memo in your packet, a provision in the Ordinance that would have allowed demolition of contributing buildings for "exceptional" new buildings had to be removed to achieve Certified Local Government status. For Ms. Costigan to argue that finding a loophole in the ordinance to achieve the same result as the rejected "Project of Special Merit" provision would have allowed, would not create any concerns for NPS is wishful thinking.

It is important to understand the differences between a Certified Local Historic District, a Certified Historic Preservation Ordinance, and a Certified Local Government, and how each plays into this issue. They are all distinct certifications by the National Park Service, and all apply to the Portland historic preservation program in different ways. All are potentially negatively affected by the demolition of a Contributing building in a Certified Historic District – in a domino effect. If the Certified District status is lost due the city allowing demolition of a Contributing building, it brings into question whether the Ordinance protections are adequate to quality for Certification of the Ordinance, which then would threaten the Certified Local Government status providing access to historic preservation grant funds.

A local preservation ordinance that allows the demolition of structurally sound Contributing buildings, by whatever means, clearly does not meet NPS requirements for a Certified Ordinance, placing in jeopardy Portland's CLG designation and the NPS Certification of the Congress Street, Waterfront, and Munjoy Hill historic districts. Speculating about the meaning of "amend" in the NPS regulation does not change the very clear meaning of "Please be aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for

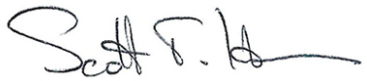
continued benefits under the above laws" in the NPS letter certifying the Congress Street Historic District.

In the real world, changing the designation status for the Chamber of Commerce Building for the purpose of demolishing it would at minimum create uncertainty and confusion for the property owners, developers, investors, and others involved in current and planned historic tax credit projects in Portland's certified historic districts. Projects will be delayed (best case) or cancelled due to this uncertainty. The ability of the City to continue accessing Certified Local Government grant funding would equally become unclear, as this newly created loophole in the preservation ordinance will undermine the City's CLG status.

In conclusion, as the unanimous vote of the Historic Preservation Board makes clear, there is no case under the criteria of the Portland Historic Preservation Ordinance for the reclassification of the Portland Chamber of Commerce Building at 142 Free Street from "Contributing" to "Non-Contributing." Furthermore, doing so would create enormous uncertainty for other property owners in Portland's certified historic districts. The NPS letter certifying the Congress Street district states, "Please be aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for continued benefits under the above laws." Currently underway historic tax credit projects in the certified district have tens of millions of dollars in state and federal historic tax credits *dependent on the Certified status of the local historic district*.

I urge the Board to unanimously reject this request.

Sincerely,



Scott T. Hanson

Hanson Historic Consulting, LLC - 8 Pleasant Street - Topsham, ME 04086 - scott@hansonhistoric.com
207 620 6291

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

May 25, 2010

The Honorable Nicholas M. Mavodones, Jr.
Mayor of Portland
City Hall, 389 Congress Street, Portland, ME 04101-3509

Dear Mayor Mavodones:

The National Park Service is pleased to inform you as duly authorized representative that the Congress Street Historic District has been certified by the Secretary of the Interior for purposes of the Tax Reform Act of 1986, as substantially meeting all the requirements for listing in the National Register of Historic Places.

Individual property owners of depreciable buildings within this district can qualify for the Federal tax incentives for historic preservation by completing the Historic Preservation Certification Application -- Parts 1 and 2 and submitting them to the State Historic Preservation Office (SHPO). Application forms are available directly from the SHPO. Applications should be submitted as early as possible in the planning of a rehabilitation project.

Review boards and commissions should become familiar with the Secretary of the Interior's Standards for Rehabilitation, used by the Secretary in certifying rehabilitation work for the historic preservation tax incentives. The SHPO and the NPS are available to advise individuals and organizations about the Standards.

Please be aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for continued benefits under the above laws.

If you have any questions, please call me at (202) 354-2025.

Sincerely,

Guy M. Lapsley

Guy M. Lapsley
Technical Preservation Services

cc: National Register
ME SHPO

Ian Jacob <iancasperjacob@gmail.com> 10:50 AM (5 hours ago)
to planning@portlandmaine.gov

Chair Mazer and members of the Planning Board,

Given that Portland's Land Use Code is clear about guidance for Amendment or Rescission of Designation (Subsection 17.5.9), it is NOT a question whether one supports or does not support 142 Free St either remaining Contributing or reclassified as Non-Contributing. You must follow the Land Use Code.

Subsection 17.5.9. states you are **only** to follow Subsections 17.4.1 (A) and (B) and Subsection 17.4.2. It does **not** say you are to look to the Comprehensive Plan for guidance. It does **not** say you are to take into account the applicant. The HP Board followed the Land Use Code and so should the Planning Board.

Your task is clear - follow the Subsection 17.5.9.

Thank you for your time and service.

Ian Jacob
59 State St.

Jack Montgomery <jackmontgomeryphotography@gmail.com> 8:50 AM (7 hours ago)
to planningboard@portlandmaine.gov

Dear Members of the Planning Board

I am writing in support of the Portland Museum of Art application for the reclassification of 142 Free Street. I know you have received a lot of communications on this matter, so I will keep mine brief. I spent fifty years studying and practicing law in Portland. I am also a photographer and continue to exhibit my work there as I have for thirty years.. While my wife and I live in Freeport, I have looked to the city as the cultural center of my life for more than half a century.

First, you have an opportunity to allow the construction of a world class facility that will be a great asset to Portland for the decades ahead. It will fill dead space (an empty white elephant of a building) with a dynamic structure that will be a hub for exciting and creative activities, that will draw art lovers to the city, will invigorate the neighborhood surrounding it and will engage every diverse cohort of our growing community.

Second, the so-called “risk of setting a precedent” is illusory. You are not bound by the rules of a court. You make decisions based upon the evidence. You are not bound in any way in future deliberations. Moreover, this circumstance is unique. This application involves a public project of the greatest cultural value. It is not a shopping mall or hotel that is at issue. Please, don’t lock this district in amber at the expense of enhancing Portland as the most dynamic art and cultural center in Northern New England

Third, I would urge you to treat skeptically the argument “I think it’s a great idea but it needs to be done a bit differently and somewhere else”. This deflection can only assure that the idea will die or be pushed out so far into the future that it will not be realized in our lifetime. Please, be bold. Let’s make this wonderful opportunity a reality.

Thank you.

Very truly yours,

Jack Montgomery
Freeport

Jack Vreeland (NMDI) <jackvreeland@gmail.com> 9:48 AM (7 minutes ago)
to planningboard@portlandmaine.gov

Jack Vreeland
447 Deering Ave., Portland ME 04103
jackvreeland@gmail.com

February 7, 2024

City of Portland Planning Board
389 Congress St, 4th Floor, Portland, ME 04101

Subject: Public Comment on Historic Preservation Designation;
142 Free Street; Portland Museum of Art, Applicant

Dear Chair Brandon Mazer and Members of the Planning Board,

I have listened to the meetings of the Historic Preservation Board and Planning Board on the PMA's request. It is now clear that the Historic Preservation Ordinance details the process for the removal of a contributing building. The Greater Portland Landmarks' detailed analysis of this is clear: 142 Free Street is protected. The HPB rightly confirmed this position.

From your last meeting, the question was raised as to what options the Planning Board had in making its decision. It is becoming evident that you are required to adhere to the HP ordinance in making your decision.

The PMA either did not explore this prospect when they purchased the historic contributing building that was and is 142 Free Street, or simply chose to ignore the warnings they were given and assumed they would be given preferential treatment. The consequences of that risk-taking are now apparent. The PMA asking you to not follow the ordinance transfers all the risks they have taken to you. It opens the door to all sorts of questions, not just of basic equity about following our own City's rules but also of undermining the ordinance, which will certainly cause others to insist on the same treatment in the future.

Clarity is essential to the process, and the clear answer is to deny the PMA's request.

My hope is that the Planning Board will ask the PMA to step back and do what they should have done from the start: design a world-class museum that does not require a violation of the historic preservation ordinance.

The PMA insists their proposal is the best and only option. This is simply not true. There are creative examples all over the world of museums that have incorporated historic structures in exciting ways.

It can be done. The ordinance allows great flexibility in incorporating and modifying a contributing building. The Children's Museum's changes to 142 Street are evidence of this fact.

The PMA attaches many projected benefits to their expansion. All of which I support. Please encourage them to come to you with a creative solution that meets their objectives without asking you to ignore the HP ordinance.

Merrill Auditorium, as it stands today, is the product of a similar situation. A plan was put forward that would have demolished the historic features of the auditorium. The "Second Opinion Committee" showed that a better option could attain the acoustics without destroying the horseshoe balconies. Fortunately, this path was taken. We all benefit from this change of direction: a magnificent interior as well as better acoustics.

I hope everyone can now start to work towards a creative solution that will draw broad support. Please deny the PMA's request and encourage them to seek other solutions.

Thank you for your attention.

Sincerely,

Jack Vreeland

Janet Antich <jajantich@gmail.com> Dec 2, 2023, 10:27:21 AM (yesterday)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org

To Members of the Planning Board:

We are writing to voice our support for the PMA Blueprint Project as it faces opposition from Portland Greater Landmarks.

As community members and neighbors to the PMA, we were involved as part of the Architect Selection Process Committee, which allowed us insight into the thoughtful and careful process with which the PMA began developing the design and concept for reunifying the museum campus.

Their initial intention, and the design they selected, represent a unique vision to make a space that will meet the needs of our diverse and vibrant communities. While the facade of a building holds importance, architecture is also about the space(s) created, and about the people who will enjoy those spaces. The new design aims to create a place that is open and welcoming to all, one in which the facade does not read as impenetrable.

Realizing that not all people may feel that a museum is a safe space for them, making the design itself open and engaging will be a clear message of inclusivity. The design calls for use of sustainable mass timber, materials which also help make this an exciting and unique approach.

The PMA plan presents an opportunity for Portland to walk the talk, to create spaces for this community to be present and be represented...to create a new landmark which is not something that has been seen before, but is proudly forward thinking.

We do understand the importance of historical landmarks ... there are places where a building like this might not make sense. But in this site and location, within the landscape of buildings and development of public spaces in downtown Portland, we believe the plans for the new PMA building would only bring positive transformation and deserves the full support of the planning board.

Thank you for your consideration.

Janet E Antich

russo@maine.rr.com <russo@maine.rr.com> 10:19 AM (3 hours ago)
to planning@portlandmaine.gov, Info

My comments for the record against razing 142 Free Street.

As a Portland native, lifelong resident, and long-time Realtor, I am against demolishing this historic building. The museum's current building and the proposed addition are too futuristic for this city. Please preserve this piece of Portland history (as Portland Landmarks works so hard to do) so that we don't look back and regret yet another historic building gone. Let the developers use some creativity in designing the new space around this building. Let's go with the plan that incorporates this historical building into the new building and keep the architectural integrity intact. Why bother having historical zoning if you are not going to abide by it?

And for those of you who may not remember, take a look at these photos….Union Station before and after!

Before: 

After: 

And yes, this was considered great architecture in the 1960's….

Jean Russo

Harborcity Realty

Portland, Maine

207 775-1991

Jennifer Graves <jenhgraves@gmail.com> Dec 7, 2023, 9:45:51 AM (23 hours ago)
to planningboard@portlandmaine.gov

Dear Members of the City of Portland Planning Board,

I am writing to express my support for the Portland Museum of Art's request to remove the designation of 142 Free Street as a "contributing building" to the Congress Street historic district.

I am a former resident of Morning Street in Portland (2000-2006) and a 23-year employee of the Portland Museum of Art. As such, it's been a privilege to witness the tremendous amount of time, effort, and passion that my colleagues and our board have dedicated to planning for an expansion that will not only accommodate the extraordinary growth we are experiencing in our collections and programs but will also be a world-class example of inclusivity and accessibility for museums: the PMA Blueprint.

I have listened with interest to the Historic Preservation Board's meetings on this matter, as well as the November 28th Planning Board meeting. I understand the complexities that the Planning Board and the City are facing with respect to un-designating a contributing building. However, I urge you to think long-term about the impact that the museum's growth could have on our community if the PMA is allowed to move forward. Our staff and board leadership have dedicated years of research and discussion to bring the organization to this point—it has not happened in a vacuum. There is reason and thought behind each decision that has gone into the creation of the PMA Blueprint.

Who in this community would benefit from 142 Free Street continuing to sit empty, falling further into disrepair and being ignored by prospective buyers, had the PMA not purchased the building from the Children's Museum? Does Congress Square need another vacant, dilapidated space marred by graffiti? What a heartbreaking prospect for those who love the City of Portland.

The PMA Blueprint expansion and campus unification project is, without a doubt, a once-in-a-lifetime opportunity for Portland. Let's work together—the PMA, the preservation community, and the City of Portland—to make the PMA Blueprint happen. The value that the PMA and the Blueprint project bring to this community far outweighs any value that 142 Free Street, in its current state, could ever possibly offer.

Thank you for your service to the City of Portland.

Sincerely,
Jennifer Graves
Cumberland

Jen Roth <jjroth315@yahoo.com> Dec 1, 2023, 3:56:41 PM (2 days ago)

to planningboard@portlandmaine.gov, Allyson Martin, Graeme Kennedy

Dear Portland Planning Board-

I write to you today to ask for your support in the progress of The Portland Museum of Art Blueprint project. This project, and your support, will help to create new jobs, and stimulate the economy in an integral and important part of town much in need of a *boost*. The project will provide a safe and inclusive space for **all community** members to gather.

Congress Square sees businesses closing their doors daily and this is not okay. Why not support a project that will have such a positive impact on the growth, development, and inclusivity of Congress Square? This is truly a once-in-a-lifetime opportunity for the community and the city of Portland. This project deserves the full support of the Planning Board. The PMA Blueprint has been developed with input from thousands of Portlanders and (the PMA Blueprint) represents the vision and needs of our diverse and vibrant communities. This is a project that only has positive and long-lasting benefits for Portland.

I encourage you to support this initiative. It will be an amazing addition to a city in need of a boost. Thank you for your time and consideration.

Jennifer Roth
Proud PMA supporter

Letter in support of PMA's "Blueprint Project"

Subscribe

0 views



Jim Scherer <jim@jimscherer.com> Dec 6, 2023, 4:45:32 PM (16 hours ago)

to planningboard@portlandmaine.gov

To the Planning Board:

I am a member at the PMA and a 6 year resident in Falmouth ME, and I write to you to support the Museum's project.

Among Portland's cultural attractions, the PMA is right at the front. When we moved here 6 years ago from Boston, having a museum like the PMA made a difference in making our decision to move here. The vision for the new museum simply confirms that we made the right choice

It dismays me to know that there is resistance to this plan on the part of some. The Museum has clearly done its due diligence over at least two years, in consultation with multiple parties. In my opinion, the current structure at 142 Free Street has seen its day.

The Blueprint Project envisions a vibrant future for the entire city - let's embrace that!

With appreciation for letting me share these thoughts,
Jim Scherer
77 Babbidge Road
Falmouth, ME 04105

Jo Israelson <welcomingthestrangerart@gmail.com> Feb 5, 2024, 5:55:00 PM (14 hours ago)
to planning@portlandmaine.gov

February 6, 2024
TO: Planning Board
FR: Jo Israelson (former Munjoy Hill resident)
RE: **Children's Museum**

As an advocate for historic districts, I am challenging a request by the Portland Museum of Art to change the historic status of the former Chamber of Commerce/Children's Museum of Maine building at 142 Free Street so that the museum can demolish the building as part of its planned expansion.

As an artist, I am opposed to reclassifying and demolishing the **Children's Museum,** a "contributing structure" within the Congress Street Historic District, for these reasons:

- The building meets four of the six criteria under Portland's Historic Preservation Ordinance (when only one is necessary);
- There is strong public support for preserving the building;
- It is important to maintain fair application and integrity of the Historic Preservation Ordinance.

David Chase, noted preservationist has recently written:

> *Destroying 142 Free Street and trashing the Payson Building smack of contempt for history, contempt for context, contempt for local ordinances."*

No property owner should have the ability to arbitrarily demolish a historic structure, even if they feel that a new building replacement will be more "beautiful." Beauty is in the eye of the beholder.

The Children's Museum represents a different kind of beauty - much like a broken Japanese ceramic bowl repaired using Kintsugi technique. The bowl holds history – of the clay, of the artist and of its heritage. Its beauty is 'preserved' to be shared by everyone. The Childrens' Museum – as a container-does the same.

Joan Troccoli <jctroccoli@gmail.com> 3:55 PM (6 minutes ago)
to planningboard@portlandmaine.gov, Jennifer Graves

To: Portland Planning Commission
From: Joan Carpenter Troccoli, Ph. D.
Date: 8 February 2024

I am writing in support of the Portland Museum of Art's request that the current building at 142 Free Street be reclassified as "non-contributing" to the Congress Street Historic District, thus permitting the construction of LEVER Architects' design for an addition to the PMA to proceed.

My professional career as an art historian, curator, and museum administrator was centered around the preservation and interpretation of works of art. In retirement it has been my privilege to serve on the Board of Trustees of the PMA and contribute my enthusiastic support to its staff, who share my belief that art has a unique capacity to promote our understanding of the past and our appreciation for works of the human imagination across many cultures. At the same time, we believe that art museums are much more than repositories of things made by artists who lived long ago or far away. Art museums address our community's present and help shape its future. To fulfill their mission, museums must dedicate themselves to helping living people discover the myriad sources of enrichment, spiritual solace, and creative inspiration that reside in works of art.

Portland is growing rapidly, and it is natural to worry that the city may lose its historic character. The PMA has demonstrated its respect for Portland's past in its stewardship of the historic buildings on its downtown campus as well as its rescue and restoration of Winslow Homer's studio on Prouts Neck.

Successful cities are dynamic entities in which past, present, and future coexist in mutually beneficial ways. No building going up in Portland today will more effectively contribute to the essential interplay of old and new than that envisioned by LEVER for the PMA. The warmth of its mass timber structure and the tantalizing transparency of its walls of glass will invite citizens and visitors to explore the wonders within. At night, this building will be a beacon of light on Free Street and Congress Square. At every hour it will furnish panoramic views of the city and its natural setting.

It demands a tremendous investment of time, money, talent, courage, and goodwill to add a building of such quality and transformative potential to our cityscape. Much has already been done to realize this visionary work of architecture and the program it will contain. It would be a tragedy for the city to reject such an extraordinary opportunity. Please support the declassification of 142 Free Street.

Yours sincerely,

Joan Carpenter Troccoli, Ph. D.

Joanne Sterling <jsterling@rcn.com> Jan 6, 2024, 3:47:05 PM (3 days ago)
to planningboard@portlandmaine.gov

To the Portland Planning Board:

I am writing to support the declassification of 142 Free Street as a historically significant building to facilitate the Portland Museum of Art's expansion plans into Congress Square. Even though its exterior was designed by John Calvin Stevens, the building currently at 142 Free Street is not a landmark building. It has undergone many renovations both inside and out. The building's physical features would hinder the PMA from implementing its plans to build a cultural epicenter that is collaboratively envisioned and sustainably built.

The PMA's plan to integrate a new building with its existing landmark buildings will orient the campus toward Congress Square and add to its dynamism, not take something away. An enhanced PMA campus in the Congress Square location will further define the area as "The Arts District." It will also create an attractive blend of historically-preserved buildings and a new sustainably-built contemporary one.

Portland’s Plan 2030 is rooted in vibrant, diverse, and complete neighborhoods, and the PMA's_proposal is on track with this plan. This is not Union Stations 2.0; it's a well-thought-out plan that will lead to a cultural city center rooted in the arts that builds community.

Approving the PMA's plan for expansion will give Congress Square the momentum that will help it thrive. I urge the Portland Planning Board to recommend that 142 Free Street be declassified as a historically significant building to enable the Portland Museum of Art to implement its ground-breaking plan for renovation.

Regards,
Joanne Sterling
107 Pleasant Ave.
Peaks Island, Maine
04108

Jody Sataloff <jsataloff@gmail.com> 11:22 AM (1 hour ago)

to planningboard@portlandmaine.gov, Graeme Kennedy

Good morning,

I'm writing this letter on behalf of the Portland Museum of Art's Blueprint Project.

After studying the various points raised by both sides of the issue, I am convinced that moving forward with this project is in the best interest of the city of Portland. Most compelling to me, perhaps, is the very fact that the exterior of 142 Free Street has, over the years, been changed on several occasions and in different ways without any concern for historic preservation and accuracy. Clearly historic preservation did not impede that work! That, coupled with the fact that the Greek Revival columns on the building connote a time of prejudice and racism as they were constructed by a Portland Chamber of Commerce that had close ties to the Ku Klux Klan. Even the Children's Museum itself, which formerly occupied the space, felt the effects of the negative impact of said columns and as a result offers its full support of the Blueprint Project.

It seems that the Project's positive effect on the city of Portland, both culturally and economically, outweighs any historical value of the building itself, and I urge you all to put aside your concerns and support the Museum's moving forward with the project.

I thank you for your time,
Most sincerely,

Jody Sataloff

9:53 AM (1 hour ago)

John Coleman <jcoleman@theviaagency.com>
to planningboard@portlandmaine.gov, Mark Bessire

Dear Planning Board and City Council Members,

My name is John Coleman, I am a citizen of Portland and I love this great City and want to see it prosper in the years to come. I am writing to give my full support to the new building expansion proposed by the Portland Museum of Art that will replace the old children's museum building. As way of background, I am the owner of the Baxter Library Building at 619 Congress St. I spent a great deal of my time and money renovating and protecting this great historical landmark, and see that the integrity and historical value of the Baxter Library Building is an important asset to our community. I believe some buildings are worth saving. But I also believe some aren't and every generation has an imperative to mark its epic with bold and visionary statements that claim their moment in time. The new PMA building is that kind of statement.

A few reasons why I believe this to be true:

1. A powerful and inclusive community statement: It's hard to do anything that is bold AND inclusive. Competing voices and needs can water things down. Watching how the PMA conducted their design process - that allowed for many points of input from many different constituents - gave me great confidence that the resulting design will serve the needs of the broadest array of our community members and while retaining its impact and uniqueness. In all honesty, the winning design wasn't necessarily my personal favorite, but I so believed in the process that I completely trust the best design and team was chosen.

2. Portland needs to be loud and proud: I am also the Chair and Founder of The VIA Agency, and spending decades of my life in advertising I have learned that real change happens when people have the courage to pursue big ideas. This new building is a BIG idea. And it will transform the entire City, if we are brave enough to bring it into existence. In our section of the City, Congress Square, I have seen its life slowly slip away with too many empty storefronts and not enough people and energy. This new building will be a dramatic shot of adrenaline that will be felt throughout our City and beyond.

3. Letting go can be liberating: There are times when the best path forward can only be followed by letting go of the things that hold us back. One of the goals of the museum expansion is to invite everyone to feel part of our creative community and to have more people feel engaged by the power of art. Too often museums are places that make people feel not wanted or welcomed. The false facade of the old children's museum, that is scabbed onto a blocky nondescript brick building that has seen many alterations over the years, seems to convey memories of plantations and palaces that were built to say "some of us are welcome, others are definitely not ". We should let go of this old relic and do everything we can to support the building of the inviting and visionary new PMA building.

Thank you all for your dedication and service to our great City.

With appreciation and gratitude,

John Coleman

JUDITH SANER <jasaner@aol.com> Dec 7, 2023, 9:46:33 AM (23 hours ago)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org

To Portland Planning Board -
I am writing in support of the Portland Art Museum's proposed Blueprint Project for expansion with the adjacent property. This will be a "win-win" for museum attendees and for the city. The additional space and plans for use of the areas will open up incredible opportunities for broader community involvement and activities for all ages. A chance to continue to bring in a diverse audience, including more space for children's programs. And enhanced spaces for adults to enjoy too. The new building will bring people from near and far to see the innovative architecture and experience the site and the incredible collection of art inside.
The Portland Art Museum has been a draw for me for many years, and when I'm there I also patronize the restaurants and shops. I look forward to continuing this experience when the new building is completed. Please give it your approval.
Sincerely,
Judith Saner
York, Maine

Greater Portland Landmarks
Historic character enriches our lives

PO Box 17533, Portland, ME 04112

8 February 2024

RE: CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Chair Mazer and Members of the Planning Board,

We offer the following comments in addition to the letter submitted by our attorneys at Murray, Plumb & Murray.

Greater Portland Landmarks supports the expansion of the Portland Museum of Art but does not believe that the expansion necessitates the demolition of 142 Free Street, an action that would occur if the building was reclassified as non-contributing. Landmarks believes that the former Chamber of Commerce Building at 142 Free Street (more recently known as the Children's Museum building), clearly meets the historic preservation ordinance's criteria for designation as a contributing structure in a historic district. Landmarks strongly believes that the evidence that led to the building's original designation as a contributing building in the historic district continues to exist and meets the minimum criteria set forth in the Ordinance.

EVALUATION BASED ON CRITERIA
During any district designation process, each structure or site is carefully evaluated and assigned a classification of Landmark, contributing, or non-contributing. This was done for the Congress Street Historic District and documentation on each building was included as part of the required designation materials that were reviewed and approved by the Historic Preservation Board, the Planning Board, and the City Council.

Section 17.5.9 of the Ordinance, *"Amendment or Recission of a Designation"* identifies the standards for recission or amendment. The standards for a decision by the Planning Board are limited to those provided in Subsections 17.4.1(A) and (B), and Subsection 17.4.2. Subsection 17.4.1(A), sets out the minimum criteria for determining a building's significance, Subsection 17.4.1(B) sets out the criteria for determining if a historic district possesses a significant concentration, linkage, or continuity of structures, and Subsection 17.4.2, sets out the criteria for assessing the building's integrity, meaning its ability to convey its historical associations or attributes. The status of 142 Free Street was carefully considered. As we demonstrate below, the building met all of the criteria when it was originally classified as contributing. No significant changes to the building since that date or new information regarding its structural instability have been presented by the applicant that justify a change in the original determination. We encourage the Planning Board to consider the following in your discussion of the owner's request to reclassify the former Chamber of Commerce Building to noncontributing.

142 Free Street Still Meets the Minimum Criteria for Determining Significance

17.4.1.A. The ordinance limits consideration by the Board to the following criteria in making a determination on … an area, site, structure, or object for designation by ordinance as a landmark or district:
17.4.1.A.1. Its value as a significant example of the cultural, historic, architectural, archaeological, or related aspect of the heritage of the City of Portland, State of Maine, New England region, or the United States:

- The Chamber of Commerce Building is an example of the commercial significance of Congress Street within Portland in the first half of the 20th century. It is also an example of the significance and prominence of Portland's business community within the state and northern New England in the first half of the 20th century. At the turn of the 20th century Congress Street from City Hall to Congress Square was noted for its fashionable shops and large department stores. Particularly between 1900 and 1930, the Congress Street business district replaced Exchange Street and the

Old Port area as the business center of the city. At Congress Square this new commercial prominence is reflected in the construction of the Schwartz Building (1920), Eastland Hotel (1927), State Theater (1929), the third-story addition to the 1826 C.Q. Clapp Block/H.H. Hay Block (1922), and the alteration of the former Free Street Baptist Church for use by the Chamber of Commerce (1926).

17.4.1.A.4. Its exemplification of a significant architectural type, style, or design distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.

- Redesigned in 1926 in the Colonial Revival Style, architects John Calvin Stevens and John Howard Stevens utilized the most popular style of the period. By the turn of the 20th century the Colonial Revival Style was one of the most predominant styles of architecture on the East Coast. It had quickly become the fashionable style in architecture following the Columbian Exposition of 1893 in Chicago. The style surged in prominence following World War I and again following World War II.

17.4.1.A.5. Its identification as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States.

- John Calvin Stevens and his son John Howard Stevens are perhaps the most well-known and documented architects working in Portland at the turn of the 20th century. John Calvin Stevens' significance to Portland and Maine's architectural history is rivaled by his historic significance to Portland's Art community and to the PMA itself:

  "He designed the museum's L.D.M. Sweat Memorial Galleries. More importantly, he was a leader and president of the group that founded the museum. And it was he who secured the patronage that made the institution a reality and gave it staying power. But the Portland Society of Art not only founded the PMA, it created what is now the robust and thriving Maine College of Art, which many consider to be the most highly energized art institution in the art-oriented state of Maine."
  Portland Press Herald, July 5, 2015.

  In addition to the Chamber of Commerce Building other significant examples of the Colonial Revival style by the firm include Biddeford City Hall (1896), South Portland's Roosevelt School (1927), Fryeburg Academy's Curtis and Cutter Halls (1930) and Portland's US Post Office (1934) on Forest Avenue.

17.4.1.A.6. Its representation of a significant cultural, historic, architectural, archaeological, or related theme expressed through distinctive areas, sites, structures, or objects that may or may not be contiguous.

- The Chamber of Commerce Building is a contributing building within the Congress Street Historic District, an area locally designated in 2009 to document Portland's business district. The building's use by the Portland Chamber of Commerce for its offices from 1926-1993 expresses the commercial theme of the district. The building and its use are integral to an understanding of the Congress Street business district's development during the first half of the 20th century.

142 Free Street Still Possesses a Significant Linkage with Other Structures within the Historic District.

17.4.1.B. In the case of a nominated historic district, the Board shall also determine whether there is an interrelationship of resources within it which creates an identifiable entity, even if composed of a wide variety of resources. A district must convey a visual sense of the overall historic environment or be a grouping of historically or functionally related properties. A historic district can comprise both individually distinctive historic resources and historic resources that may lack individual distinction, but which contribute to the significance and visual character of the district as a whole.

The "eclecticism and layering of historical periods is the essence of the district's character and what makes it unique among Portland's historic districts."
Congress Street Historic District, Local Designation Narrative.

- While this section applies to historic districts, as stated above, the former Chamber of Commerce Building is a contributing building within the Congress Street Historic District. The Congress Street Historic District's commercial and civic buildings form a cohesive corridor that are physically related. They are also thematically related by their significant role in the commercial, social, and architectural development of the city. The former Chamber of Commerce Building expresses the commercial theme of the district and contributes to the district's visual character through its relationship to other historic buildings at Congress Square.

    - Although adjacent to a large parking lot, the Chamber of Commerce Building is visually related to its neighbors across Free Street, 133-135 Free Street (c1810-1820) and the Landmark-designated Charles Q Clapp Block/HH Hay Block at 588 Congress Street (built 1826 and altered 1922 by John Calvin Stevens). The Chamber of Commerce Building is also thematically related to 133-135 Free Street and the HH Hay Block. All three are early buildings altered to meet the changing needs of the evolving business district in the early 20th century.

    - The former Chamber of Commerce Building is also visually related to its neighbor, the Payson Wing of the Portland Museum of Art. The Payson Building, although built less than 50 years ago, is considered part of the Landmark-designated Museum campus. Together the two buildings' monumental facades help to define the eastern boundary of Congress Square, a significant node within the historic district.

142 Free Street Still Meets the Criteria of Building Integrity

The National Parks Service standards upon which Portland's ordinance is based, do not require the materials, features, and spaces of buildings to be original to be considered "historic" and "character-defining." A structure can be significant not only for the way it was originally constructed or crafted, but also for the way it was adapted at a later period to illustrate changing tastes, attitudes, and uses over a period of time. The Congress Street Historic District is largely significant as a commercial corridor, and the 1926 alterations of the 142 Free Street building reflect the evolving commercial character of Congress Square in the early 20th century. The period of its history from 1926 onward is the time-period from which its integrity is considered.

17.4.2. Integrity of Landmarks and Historic Districts. Any area, structure, or object that meets the criteria in Section 17.4.1 must also have sufficient integrity of location, design, condition, materials, and workmanship to make it worthy of preservation or restoration.

- **The former Chamber of Commerce Building possesses integrity of location** as it remains in its historic Free Street location.
- **The building retains its integrity of design**, although altered by replacement windows and doors, and additions necessary for code requirements and its use as a museum, the major Colonial Revival design features of the Chamber of Commerce building as designed by the Stevens firm (in particular at the Free Street elevation) have not been irretrievably destroyed. The building retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its design and reflect its appearance during its use by the Portland Chamber of Commerce. In the technical language of the historic preservation ordinance, the building retains its design integrity, its ability to convey the historical association and the physical attributes that were present during the nearly 60 years the building served as the Chamber's headquarters.
- **The building retains its integrity of condition,** as it is structurally sound according to the applicant's statements before the Historic Preservation Board, although like any building that has not been updated for a period of time, it would need to have some alterations for code requirements for any potential new use.
- **The building retains its integrity of materials**, although some historic materials have been lost through the replacement of windows and doors, the structure still retains significant amounts of historic materials including the masonry walls and extensive decorative trim and details of the temple front. In fact, the building's exterior condition is like many of its neighbors within the Congress Street Historic District. Most of the buildings within the district have undergone updates and alterations such as window or storefront replacements since their period of construction. However, the district's contributing buildings typically retain their original (mainly brick) facades, storefront use, and character-defining architectural details.

- **The building retains its integrity of workmanship**, although some historic workmanship was lost through the replacement of windows and doors, the structure still retains significant evidence of historic workmanship in the masonry walls and in the extensive decorative trim and details of the front façade. The loss of original window, door, and storefront materials is typical in the historic district.

The Chamber of Commerce Building was first identified as historically significant when it was included within the boundary of the Spring Street Historic District when that district was added to the National Register of Historic Places in 1970. After that listing, the building's exterior was minimally altered for its use by the Children's Museum in the early 1990s. Alterations to accommodate new uses are not necessarily evidence of lack of integrity, in fact the review standards are intentionally flexible to accommodate changes that facilitate a building's reuse (see attached images). When the building was documented for the Congress Street Historic District's designation report, the code required additions and rooftop alterations by the Children's Museum were noted and the alterations did not affect its contributing status. The alterations are reversible and therefore the altered features are not "irretrievably lost". The alterations have not significantly altered the character defining features of the building's Colonial Revival style, form, and primary facade, and do not detract from the overall appearance of the building.

A comparison using the 1958 Portland Press Herald photograph presented in the applicant's report and a more recent image of the buildings makes it clear that although alterations have occurred, the building retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its Colonial Revival design and reflect its appearance during the building's nearly 60 year use by the Portland Chamber of Commerce.





CONCLUSION

For a building to be designated as a contributing structure, it needs to meet just one of the criteria laid out in ***Subsection 17.4.1.A*** of Portland's Historic Preservation Ordinance**.** The former Chamber of Commerce Building meets 4 out of the 6 criteria. It also meets the criteria laid out in ***Subsection 17.4.1.B.*** and ***Subsection 17.4.2*** of the ordinance**.**

- It is significant to the cultural, historic, architectural heritage of the city.
- It exemplifies a significant architectural style.
- It is the work of an architect whose individual work is significant in the history or development of the City of Portland and the State of Maine.
- As the former home for nearly 60 years of the city's Chamber of Commerce, it expresses and contributes to the theme of the Congress Street Historic District, a cohesive corridor of commercial and civic buildings that are significant for their role in the commercial, social, and architectural development of the city from 1780-1958.
- Although minor alterations have been made to the exterior, it retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its design and reflect its appearance during its use by the Portland Chamber of Commerce. In the technical language of the historic preservation ordinance, the building retains its integrity, its ability to convey its

historical association and the physical attributes that were present during the nearly 60 years the building served as the headquarters of Portland's Chamber of Commerce.

The former Chamber of Commerce building continues to warrant its designation as a contributing building within the historic district. There is no basis for rescinding its designation. We hope that through your careful deliberations, you will agree that the evidence supports its current designation.

We urge the applicant to work with their consultants to incorporate142 Free Street into their proposal, and to return to the Historic Preservation Board to obtain a Certificate of Appropriateness so that they may move forward with their expansion plans to create a more welcoming and inclusive museum.

Thank you for considering our views,



Carol De Tine
Vice President of the Board of Trustees
Greater Portland Landmarks

Attachment:
Images of altered buildings which retain their historic character and significance in Portland's historic districts.

Changes

Alterations and additions do not render a building non-historic. Often alterations are part of a building's story and are examples of the district's evolution as the following examples illustrate.



Maine Historical Society


Library of Congress

In 1922 John Calvin Stevens altered the Charles Q. Clapp Block, adding a third story to the 1826 building. The building, long the home of the Hay Drug Store, was listed as an individual Landmark in the National Register of Historic Places in 1978. The substantial addition did not affect the building's eligibility for designation.

MECA's home, the former Porteous Mitchell and Braun Department Store, was initially only three bays wide, when built in 1904. It was doubled in size in 1911, and expanded to the rear (1917-1928) until it reached through the block to Free Street in 1953. Despite this series of expansions and a comprehensive redesign of its storefront, the building was found eligible for listing in the National Register in 1996. In 2009, the building was included as a landmark structure within the locally-designated Congress Street Historic District.









The George Hunt Block at 660 Congress (left), designated a Landmark building in the Congress Street Historic District, was built in 1886 as a residence, but significantly altered at the turn-of-the century with the addition of two storefronts for commercial use. Around the corner, the Dr. Israel Dana House at Longfellow Square was altered by a commercial storefront addition for the Maine Publicity Bureau in 1921. It is a contributing building in the Congress Street Historic District. These buildings, with their significant later modifications, tell a story about the area's evolution from a primarily residential neighborhood to Portland's commercial "Main Street", and contribute to one's understanding of Congress Street's development.

Alterations

Alterations and additions like the cupola and dormers added to accommodate the Children's Museum have not destroyed the architectural integrity of 142 Free Street. Guided by the Preservation Ordinance's *Review Standards* alterations and additions are often approved to accommodate new uses in historic buildings.





Dormers are often approved in Portland's historic districts. Several former warehouse buildings along Commercial Street in the Waterfront Historic District, including the Blake Building (left) have dormer additions. The dormers were found to meet the Preservation Ordinance's review standards and do not materially alter the building's historic character. Note also the significant modern addition to the left of the original building which was reviewed and approved by the Historic Preservation Board to accommodate a new use. These alterations and the addition do not affect the original building's contributing status within the historic district. Similarly the long shed dormer on the Chase Block (right) at 217 Commercial Street was reviewed and approved by the Historic Preservation Board to accommodate a new use and does not affect the original building's contributing status within the Waterfront Historic District.





The Historic Preservation Ordinance and its review standards (which are based on the Secretary of the Interior's *Standards*) are purposely flexible to accommodate changes needed for new uses and to meet code requirements. A new ADA entrance at the Rackleff Block at 129 Middle Street (left) replaces an original raised entrance. The building is individually listed on the National Register of Historic Places and is a landmark in the Waterfront Historic District. At 10 Dana Street (right), a new stair and elevator addition provides access to the upper floors of the McLaughlin Block, a contributing building in the Waterfront Historic District.

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February 7, 2024

Sent by email
Brandon Mazer, Chair
City of Portland Planning Board
389 Congress Street
4th Floor
Portland, Maine 04101
planningboard@portlandmaine.gov

Re: Planning Board Consideration of Reclassification of 142 Free Street as Noncontributing

Dear Chair Mazer and Members of the City of Portland Planning Board:

This firm serves as counsel to Greater Portland Landmarks (hereinafter "**Landmarks**"), which has worked tirelessly for more than half a century to ensure that Portland preserves its sense of place for all by advocating for the preservation and revitalization of the city's rich architectural history. In furtherance of this critical objective, Landmarks opposes the request (the "**Request**") by the Portland Museum of Art (the "**PMA**") to reclassify the Chamber of Commerce building (the "**Building**") located at 142 Free Street as not contributing to the Congress Street Historic District.

Landmarks will provide public comment objecting to the reclassification of the Building on the grounds that the building continues to satisfy the criteria set forth in section 17.4.1.A of the City of Portland zoning ordinance, the "**Recode**," and section 17.4.2 of the ReCode (collectively the "**Criteria**").

We write separately on behalf of Landmark to explain to the Board that the ReCode expressly forbids the Board from considering any provisions in the City's comprehensive plan, "Portland's Plan 2030" (the "**Plan**"), when it contemplates whether to recommend to the City Council that the Building be reclassified. Because the Board *only* has the authority to recommend a change to the classification of the Building by applying the Criteria, it would be a legal error for the Board to recommend the reclassification of the Building based on any provision of the Plan. Moreover, as Carol DeTine, Vice President of Greater Portland Landmarks illustrates in the attached letter, when the Board assesses 142 Free Street under the Criteria, the only conclusion the Board can come to is that the building should retain its classification.

We also wish to provide clarity with respect to the question of what impact the declassification and subsequent demolition of 142 Free Street may have on the Congress Street Certified Historic District.[1]

[1] Mary Costigan's January 31, 2024 letter to the Board speculates about the impact on the certification of the Historic District as possibly having a de minimus effect but no clearly defined answer. The attached Park Service letter proves otherwise.

The attached letter from the National Park Service, issued in 2010, states unequivocally: "Please be aware that changes to the historic district as presently certified *will* render its certification null and void and *will require recertification* of the revised district for continued benefits under the law." What that means in practical terms is when the Certified District status is lost due to the City allowing demolition of 142 Free Street (a contributing building) it brings into question whether the Ordinance protections are adequate to qualify for Certification of the Ordinance, which then would threaten the Certified Local Government status providing access to historic preservation grant funds. The negative domino effect will ripple well beyond the loss of "just" one historic building.

I. The Criteria are the only substantive standards the Board may consider when reviewing the Request.

Any request to reclassify a structure is governed by ReCode § 17.5.9.[2] It provides:

> Amendment or rescission of any designation shall be upon the request of a person or persons authorized to nominate the property or properties affected, or upon request of the City Council, and shall follow the procedure set forth in Section 17.5 for designation. The City Council may rescind or amend a designation only after all of these procedures have been followed. The standards for rescission or amendment applied by the Historic Preservation Board, Planning Board, and City Council shall be limited to those provided in Subsections 17.4.1(A) and (B) and Subsection 17.4.2. Amendments may include reclassification of a portion of a contributing property to noncontributing status, refinement or correction of design guidelines, maps, and other parts of any designation.[3]

This means that (a) the process outlined in Recode § 17.5 provides the *exclusive* procedure by which the Historic Preservation Board, the Board and the City Council consider a request for the redesignation of a structure and (b) the ultimate decision as to whether to redesignate that structure *must* be based on compliance with the Criteria—not the Plan.

There are other scenarios when the Recode either requires or allows for the Board or Council to consider the Plan. When review occurs in accordance with ReCode § 17.4.1.D, the Board and Council are required to consider not only the criteria set forth in subsection A but also "the historic preservation goals included in [the Plan]" and "the effect of such designation on other aspects of the [Plan]."[4] The ReCode also authorizes the Board, when making its recommendation to the Council regarding the *designation* of a historic district or structure, to articulate "recommendations with respect to the [Plan] relating to the proposed designation.[5]

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[2] The ReCode uses the term "amendment" to describe the process by which the classification of a structure is changed. *See* ReCode § 17.5.9.

[3] ReCode § 17.5.9 (emphasis added).

[4] ReCode § 17.4.1.D.

[5] ReCode § 17.5.7. The authority to provide such a recommendation is an exercise of the Board's broad power to prepare and recommend proposed revisions to the Plan to the Council. ReCode § 21.10.B ("[T]he [Board] shall have the following jurisdiction and authority: . . . . To prepare and recommend to the [Council] changes in and amendments to the [Plan].")

The presence of language in other provisions of Article 17 of the ReCode expressly providing the Board and Council the authority to make a historic designation based on the Plan and the absence of that language in ReCode § 17.5.9 can only be reasonably interpreted as a purposeful decision by the drafters of the ReCode to *not* allow the Board and Council to rely on its interpretation of the Plan in deciding whether or not to allow for rescission of the designation of the structure.[6] Therefore, the recommendation of the Board and the decision of the Council *must be* based on the Criteria—nothing more, nothing less.

The Criteria are listed in ReCode § 17.4.1.A ("Minimum criteria for designation") and ReCode § 17.4.2 ("Integrity of landmarks and historic districts"). They require the Board and Council to limit its consideration of the Request to the following characteristics of the Building:

1. "Its value as a significant example of the cultural, historic, architectural, archeological or related aspect of the heritage of the City of Portland, State of Maine, New England region, or the United States."[7]

2. "Its location as a site of a significant historic or prehistoric event or activity which may have taken place within or which involved the use of any existing structure on the property."[8]

3. "Its identification with a person or persons who significantly contributed to the cultural, historic, architectural, archeological or related aspect of the development of the City of Portland, State of Maine, New England region, or the United States."[9]

4. "Its exemplification of a significant architectural type, style or design distinguished by innovation, rarity, uniqueness or overall quality of design, detail, materials or craftsmanship."[10]

5. "Its identification as the work of an architect, designer, engineer or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States."[11]

6. Its representation of a significant cultural, historic, architectural, archeological or related theme expressed through distinctive areas, sites, structures or objects that may or may not be contiguous.[12]

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[6] *See Aydelott v. City of Portland*, 2010 ME 25, ¶ 12, 990 A.2d 1024 (Holding that the absence of a standard in one section of an ordinance present in another "suggests an intentional distinction"); *see also Russello v. United States*, 464 U.S. 16, 23 (1983) ("Where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." (alterations omitted)).
[7] ReCode § 17.4.1.A.1.
[8] ReCode § 17.4.1.A.2.
[9] ReCode § 17.4.1.A.3.
[10] ReCode § 17.4.1.A.4.
[11] ReCode § 17.4.1.A.5.
[12] ReCode § 17.4.1.A.6.

7. "Any . . . structure . . . that meets the criteria in section 14-610 must also have sufficient integrity of location, design, condition, materials and workmanship to make it worthy of preservation or restoration."[13]

ReCode § 17.5.9 expressly provides that the Board cannot consider factors beyond the Criteria in reviewing a request to redesignate a structure.[14] Thus, by the plain terms of the ReCode, the Board is prohibited from considering anything other than the Criteria when assessing whether the Building should be redesignated.

II. The Board lacks the authority to consider the Plan because that power is not expressly provided to it by ordinance or statute.

Even if the ReCode did not expressly prevent the Board from considering factors other than the Criteria, the fact that the ReCode does not expressly grant that power to the Board means they do not have the authority to review the Request based on its compliance with other standards, such as the provisions of the Plan.

Municipalities lack the inherent authority to regulate private property.[15] Rather, "[m]unicipal corporations, as public bodies, may exercise only such powers as the Legislature has conferred upon them by law or which may have been granted to them directly by the Constitution."[16] By extension, if a power a municipal board purports to exercise is not expressly granted to it by statute or ordinance, then the board simply lacks the legal authority to act in that manner and any decision it reached based on an exercise of such authority is *ultra vires* and void.[17]

Furthermore, municipal boards cannot reach a decision based on its interpretation of a comprehensive plan unless expressly authorized to do so because the plan's provisions are *not* standards to be applied in the context of considering a particular application or request. By statute, municipalities may control the use of private property through the implementation of zoning regulations if those regulations are "consistent with" the comprehensive plan and the municipality adopts a zoning map.[18] The provisions of the comprehensive plan are not themselves regulations: "the comprehensive plan is just that—a

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[13] ReCode § 17.4.2.

[14] ReCode § 17.5.9 ("The standards for rescission or amendment applied by the Historic Preservation Board, Planning Board, and City Council shall be limited to those provided in Subsections 17.4.1(A) and (B) and Subsection 17.4.2." (emphasis added)).

[15] *Town of Windham v. LaPointe*, 308 A.2d 286, 290 (Me. 1973) ("A town has no right to appropriate or interfere with private property, except so far as that right has been conferred by statute, either expressly or by necessary implication."). As the Law Court explained in *Pike Indus., Inc. v. City of Westbrook:*

> Land use regulation is an area in which the Legislature has explicitly restricted the home rule authority of municipal governments. Thus, municipalities may not, under the guise of home rule authority, circumvent the zoning procedures of the land use regulation statute.

2012 ME 78, ¶ 17, 45 A.3d 707.

[16] *Schwanda v. Bonney,* 418 A.2d 163, 165 (Me. 1980).

[17] *See Robinson v. Bd. of Appeals of Town of Kennebunk*, 356 A.2d 196, 200 (Me. 1976) (instructing that when a municipal board "clothe[s] its actions with a discretion nowhere granted to it by the [o]rdinance," then "[t]he [b]oard's action is therefore ultra vires and void").

[18] 30-A M.R.S.A. § 4352.

plan—and the ordinances adopted pursuant to the plan are its regulatory teeth."[19] Whereas the comprehensive plan "sets out what is to be accomplished," the ordinance provisions adopted by the municipality sets out concrete standards to ensure that the plan's objectives are realized."[20] As a result, the Board may only decide whether to recommend to the Council that the Building be reclassified based on the substantive review standards set forth in the ReCode (i.e., the Criteria) and not the Plan.

We look forward to appearing before you when the Board takes up this matter at a future hearing. Until then, please let us know if the Board has any questions.

All our best,

Elizabeth A. Boepple, Bar No. 4422
eboepple@mpmlaw.com

Sean R. Turley, Bar No. 6351
sturley@mpmlaw.com

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[19] Nestle Waters N. Am., Inc. v. Town of Fryeburg, 2009 ME 30, ¶ 19, 967 A.2d 702.
[20] *Id.* ¶ 24 ("The ordinance is the translation of the comprehensive plan's goals into measurable requirements for applicants.")

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

May 25, 2010

The Honorable Nicholas M. Mavodones, Jr.
Mayor of Portland
City Hall, 389 Congress Street, Portland, ME 04101-3509

Dear Mayor Mavodones:

The National Park Service is pleased to inform you as duly authorized representative that the Congress Street Historic District has been certified by the Secretary of the Interior for purposes of the Tax Reform Act of 1986, as substantially meeting all the requirements for listing in the National Register of Historic Places.

Individual property owners of depreciable buildings within this district can qualify for the Federal tax incentives for historic preservation by completing the Historic Preservation Certification Application -- Parts 1 and 2 and submitting them to the State Historic Preservation Office (SHPO). Application forms are available directly from the SHPO. Applications should be submitted as early as possible in the planning of a rehabilitation project.

Review boards and commissions should become familiar with the Secretary of the Interior's Standards for Rehabilitation, used by the Secretary in certifying rehabilitation work for the historic preservation tax incentives. The SHPO and the NPS are available to advise individuals and organizations about the Standards.

Please be aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for continued benefits under the above laws.

If you have any questions, please call me at (202) 354-2025.

Sincerely,

Guy M. Lapsley

Guy M. Lapsley
Technical Preservation Services

cc: National Register
ME SHPO

Letter of Support: Historic Preservation Designation - 142 Free Street

Subscribe

0 views

Justin Alfond <jalfond@gmail.com>
to planningboard@portlandmaine.gov

11:51 AM (4 hours ago)

Historic Preservation Designation - 142 Free Street

February 8th, 2024

Dear Chair Mazer and esteemed members of the Portland Planning Board,

My name is Justin Alfond and I live at 143 Vaughan Street in Portland. I am writing to support the Portland Museum of Art's Blueprint Forward project and the re-classifying of 142 Free Street to "non-contributing" status.

I spent eight years representing the City of Portland in the Maine State Senate. During my public service, I learned a lot about listening to multiple viewpoints and appreciating the passion of those involved. With complex policy decisions, I believe one of the best approaches is to ask: "what will be better for the entire community?" After reviewing all sides' best arguments, I believe that approving the PMA's re-classifying is the best option for our entire community today and long into the future.

Walking around Congress Square illustrates major challenges for our city. It has been under construction for years, and recently three major businesses adjacent to the square have closed. Vacancies, combined with the possibility that future additional phases of Congress Square improvements by the city appear to be on hold, makes this decision even more pressing to our community.

Hundreds of community members have engaged with the PMA's vision for this project. Area businesses, arts institutions and many in the neighborhood and across our city are supportive of this relevant and forward-looking vision.

Supporting the PMA project will allow our community to enjoy a world-class building and educational and gathering space. Supporting the PMA project will allow their programming to flourish. Re-classifying will translate into tangible investments throughout Portland's economy. Finally, as your board knows better than most, the museum's plan is consistent with - and enhances - the City of Portland's Comprehensive 2030 Plan.

I urge you to fully support the re-classifying 142 Free Street to "non-contributing" status for the betterment of our fine city.

Sincerely,

Justin Alfond
143 Vaughan Street
Portland, ME 04102

Justin Alfond <jalfond@gmail.com> Nov 28, 2023, 5:34:59 PM (15 hours ago)

to planningboard@portlandmaine.gov

Dear Chair Mazer and esteemed members of the Portland Planning Board,

My name is Justin Alfond and I live at 143 Vaughan Street in Portland. I am writing to support the re-classifying of 142 Free Street to “non-contributing” status.

The Portland Museum of Art has spent years working on a transformation project to replace the former Children's Museum and Theater of Maine. Their process of engaging the community was thorough and thoughtful. It's my understanding that the PMA Blueprint had thousands of Portlanders involved. The PMA request for proposal attracted architectural teams from around the globe and shined a bright light on the Portland community, architecture and its future. We are on the cusp of a once in a lifetime opportunity to support an inclusive design and programming in the heart of downtown.

It's worth noting that the PMA Blueprint is consistent with the City of Portland's Comprehensive 2030 Plan and enhances it. Additionally, the economic impact during and after the completion of the building will be dramatic for our city and state. Once completed the PMA building will further the revitalization plan for Congress Square.

I fully support the re-classifying 142 Free Street to “non-contributing” status and believe that it should receive full support from the Planning Board.

Sincerely,

Justin Alfond
143 Vaughan Street
Portland, ME 04120

Karen Snyder <karsny@yahoo.com> 8:04 AM (1 hour ago)
to Planning and Urban Development

Dear Planning Board Members,

I support the continued designation of 142 Free St. as a "contributing" status within Congress Street Historic District for just some of the following reasons:

- In the **Historic Preservation Ordinance, subsection 17.4.1.A**, only 1 of 6 criteria status can legally be met to become a "contributing" status. **142 Free St. building meets 4 of 6 of this criteria status in subsection 17.4.1.A.**

- The PMA's expansion can ACCOMODATE this building to showcase what architects in the past could build unlike what is being built now which it seems only cold, unimaginative, big square boxes with rectangular shapes with no open space or vegetation can only be mustered. Consequently, this architectural style of building will NEVER be replicated again and should continue to be protected.

- To remove a "contributing" designation status **would set a bad precedence for the future of Portland' historical buildings** that any building can illegally be stripped of historical protection in order for any organization no matter what reason given to disrespect and disregard's Portland's historical buildings.

- For Portland Art Museum management and benefactors to respect the "historical and cultural contribution" from artists but yet disregard and disrespect the 142 Free St. building's "cultural, architectural, and historical contribution" is quite disingenuous and hypocritical of them.

Consequently, the above primary reason that 142 Free St. LEGALLY adheres to the Historic Preservation ordinance to remain as "contributing" designation status in the Congress St Historic District should be enough for the Planning Board to ensure the "contributing" status designation within the Congress St. Historic District remains intact.

Regards,
Karen Snyder
D1 72 Waterville St

Karen Watson <kbwats@me.com> Dec 11, 2023, 10:13:55 PM (11 hours ago)

to planningboard@portlandmaine.gov, Jennifer Graves

Dear members of the planning board,
I am writing in support of the Portland Museum of Art's plan to expand.
The new building at 142 Free Street will benefit all residents and visitors to our city. The expansion will create an open space for all.
Please consider the future and help bring vibrancy and this welcoming new building to life.
The museum draws visitors from all over the country. Portland Museum of Art is ready to take the museum and the city forward.
Please vote to allow this exciting new chapter unfold.

Sincerely,
Karen Watson
6 Bowdoin St
Portland Maine

Dear Portland Planning Board: Marpheen Chan, Brandon Mazer, Justin Baker, Maggie Stanley, Sean Murphy, David Silk and Austin Smith,

My name is Kristin Valdmanis and I am the President of the Board of Directors of the Children's Museum and Theatre of Maine. I am writing today to express my full support for the PMA's visionary project at our former home, 142 Free Street.

Here is a bit of real estate background. In 2019, CMTM and PMA entered into an agreement to sell our building. This arrangement was crucial for us. With the proceeds of the sale, we could finally move to Thompson's Point. For years, we struggled to find a buyer, chasing lowball offers, changing agents and companies, and aggressively marketing the space to our local community. There was no serious interest in 142 Free Street from any organizations in Portland. We attempted to bargain with all kinds of entities, including other non-profits, retail operations and government agencies. No luck.

In my opinion, no one in our city stepped up to shepherd the space. The only other possible offer that we considered was from a California-based supermarket chain that wanted to convert the building into a warehouse. Picturing that active corner of our city as cold storage space for an out of state group broke my heart as an art lover, as community leader and as a citizen. I strongly advocated to sell to the PMA because I believe that Portland will be stronger and better because of their stewardship.

The PMA is uniquely situated to turn that land into something revolutionary- a building that has been collectively developed with input of thousands of Portlanders and represents the vision and needs of our diverse and vibrant communities. This is a once-in-a-lifetime opportunity for our city, and deserves full support from the Planning Board. The PMA Blueprint activates and enhances the City of Portland's Comprehensive Plan 2030 and the economic impacts of The PMA Blueprint will transform our city and revitalize Congress Square.

In addition to serving on CMTM's board, I am also a board member of the PMA and MECA&D. I have also assisted in the revitalization of TEMPOArt, a public art forum in town. I care deeply about our creative community and work tirelessly to support their work. I believe wholeheartedly in the PMA's mission "ART FOR ALL", an admirable and bravely bold idea in the museum world where art is often hidden from the public behind imposing and opaque walls. Imagine the message we will send to all of the people of Portland and Maine when the transparent, glass walls rise from the old brick foundation of the Children's Museum and clearly, openly invite everyone to take part in the inspiring, eclectic collection at the PMA.

To that end, please note that the columns at 142 Free Street were often viewed by our CMTM visitors as an impediment. Many families (especially New Mainers) reported to us that they did not feel welcome entering our building because the formal, antiquated entrance created both a physical barrier (which could be much more ADA compliant) as well as psychologically intimidating. A large impetus for us to move to a modern, more generous space on Thompson's

Point was the misplaced, misused and out of date architecture of 142 Free St. To our board and staff, those columns silently spoke volumes to our visitorship. They seemed to imply that our museum was a formal institution that controlled the experience and the message. We at CMTM deeply value belonging, but our space clearly did not communicate that to the public.

Finally, on a personal note, I am a lover of old things. I am the daughter of both a museum educator and a historian. I am a collector of antiques and the keeper of many family heirlooms. I lived for years in the Richard Webb House at 29 Bowdoin Street in the West End and I painstakingly renovated a late 1800's cottage in Scarborough to bring it back to life. I do not believe in change for change sake. All things considered, I prefer to preserve things from the past for future generations. And yet, I find the insistence on protecting 142 Free Street as it stands to be misguided and overly academic. I do not proclaim to understand all of the nuances of the historic code and the legal issues connected to classification. But I do understand people. People want to feel inspired, connected and appreciated. Our buildings should reflect that welcoming desire. 142 Free Street does not. A new PMA building will do that beautifully.

Thank you very much for your service to our city and commitment to our growth and development. I respect your time and effort. Thank you for considering my point of view.

Sincerely,
Kristin Kellogg Valdmanis
35 Winslow Homer Road
Scarborough, ME 04074
kvaldmanis@hotmail.com
617-365-0345

December 4, 2023

Dear Portland Planning Board,

Re: The PMA Blueprint

I have enjoyed a decades long relationship with the Portland Museum of Art, both professionally and personally. I am writing this letter to urge you to support The PMA Blueprint.

The state of the world, our Country, Maine, and Portland is such that anyone trying to see a project through from concept to completion faces a dizzying number of obstacles. Sadly, we have gotten much better at stopping things from happening than we are at facilitating things. In my opinion Greater Portland Landmarks is another example of a well-intended group that believes its narrow view of what constitutes acceptable development should trump the views of the thousands of Portlanders who engaged with the PMA during the initial phases of The PMA Blueprint. The Portland Planning Board has the opportunity to take a larger view; to recognize what a unique and rare opportunity the PMA Blueprint presents; to realize how well it aligns with the City of Portland's Comprehensive Plan 2030; and to facilitate the revitalization of an entire sector of the city.

My experience with the PMA is that they are very thoughtful and highly genuine in their approach to their role in our community. I have never worked with any organization more committed to being truly inclusive for all the right reasons and with the correct perspective that it is the only path to real prosperity for everyone.

Years of being in a leadership position have taught me that no decision is popular with everyone, and I am sure that your service on the Planning Board reinforces that. I would encourage you to side with the considerable number of us who are confident that for decades to come the Portland Museum of Art as depicted in the PMA Blueprint will contribute far more to the people of Portland than the existing structure.

Sincerely,

Larry Wold

Lauren Collins <lauren.elis.collins@gmail.com>
to planningboard@portlandmaine.gov

Dec 1, 2023, 7:22:24 AM (3 days ago)

Dear Planning Board Members,

I am writing to passionately express my unwavering support for the construction of the new Portland Museum of Art (PMA) building in our beloved city. This exciting project holds tremendous economic potential, and we need not fear that embracing new architecture will undermine the preservation of our historic buildings. Just look to our neighboring city of Boston as an example of how new and historic architecture can beautifully coexist.

Boston has long been hailed as a city that embraces both innovation and history. It effortlessly blends modern architectural marvels with its rich historic landmarks, creating a captivating urban landscape. The Hancock Tower, for instance, stands tall and sleek amidst the iconic brownstone buildings of Beacon Hill. This harmonious blend showcases how a city can appreciate and celebrate its past while paving the way for a vibrant and prosperous future.

The new Portland Museum of Art building presents a similar opportunity for our city. By embracing this project, we can follow in Boston's footsteps and strike that perfect balance between preserving our historical charm and embracing the economic benefits that the PMA building will undoubtedly bring.

In conclusion, I implore the Planning Board to seize this once-in-a-lifetime opportunity by supporting the construction of the new Portland Museum of Art building. Let us draw inspiration from cities like Boston and create a harmonious blend of new and historic architecture that showcases our commitment to progress and our rich cultural heritage.

Thank you for considering my viewpoint on this vital matter. I trust that the Planning Board will make a well-informed decision in the best interest of our community.

Sincerely,

Lauren Collins

Portland, Maine

Lauren Fensterstocknew <lauren@laurenfensterstock.co… Jan 7, 2024, 9:50:44 AM (2 days ago)
to planningboard@portlandmaine.gov, mdion@portlandmaine.gov, Graeme Kennedy, Elizabeth Jones, mbessire@portlandmuseum.org

January 7, 2024

Dear Mayor Dion and Planning Committee,

As a Portland resident of 24 years and an artist, I have been teeming with excitement at the prospect of our city building a world class museum campus that broadcasts all Maine has to offer and boldly leads our city into a green future. When I planned to write this letter, I was going to tell you how I followed the long inclusive process Portland Museum of Art took to develop the proposed site. I planned to write about the many levels of outreach I was able to participate in as a community member: sitting in on a listening session with artists; attending three community meetings before, during, and after the architecture selection process; and watching the live public presentations by architects. But having just received an advocacy letter against the project, I am struck by the larger issue at hand: *who does historic districting serve?*

Portland is home to numerous complete and original John Calvin Stevens buildings preserving the work and legacy of an architect who built over 1000 buildings in Maine. The structure at 142 Free St, formerly the home of the Children's Museum, was not built but *renovated* by Stevens. This shows that the architect himself valued the role of updating, innovating, and revisiting the needs of a community as it evolves. In keeping with this ethos, the building has been altered and changed numerous times over the years.

In the 24 years I have lived in Maine, this city has changed dramatically. So has our world. As a city, we have become more diverse and we have begun to speak with greater clarity about the inequities of our great nation's past. Portland Museum of Art has played a significant role in these changes: as they diversified their staff in major leadership positions, and emphasized programming that tells the history of our state through previously unheard voices.

A recent letter in the Press Herald argues that the historic ordinance "was designed so that we all play by the same rules and that no private property owner, developer, or public institution – regardless of its power and influence – gets to choose which buildings remain and which can be destroyed." The truth is that we don't all get to play by the same rules when historic districting preserves an inequitable past in favor of building a meaningful future. Families of influence and long tenure have been able to build and preserve a city that supports white Protestant legacies. In 1923, at just about the time of the John Calvin Stevens's Free Street renovation, Portland's Committee of 100 was instituted with help from Portland's active chapter of the KKK to limit the power of Jews, Catholics, and other "people from away" in this city. This white Protestant lock on municipal power was cemented just before the 1926 renovation of 142 Free St. with John Calvin Stevens's Colonial Revival facade, an architectural style that glorifies an idealized American mythos and reverberates with contemporaneous efforts to decrease the power of rising civil rights movements and growth in immigration.

An unyielding emphasis on preserving the past assures that those who have been in power remain in power. Portland's history is vibrant, and I am proud to be a part of this city. But as a Jew living in Portland, I wince when I hear anecdotal stories of The Cumberland Club and the Portland Country Club's refusal to admit Jews, the loss of a major Synagogue

to arson, and the removal of the Armenian and Jewish neighborhoods that were destroyed to lay Franklin arterial in 1967. A rigid emphasis on preserving a selective architectural past allows those in power to preserve their narratives and remain in positions of urban prominence while creating a stranglehold on others to have a voice or place.

For our city to be truly equitable, to be forward looking rather than backward, we must take brave steps. This involves embracing uncomfortable change and a willingness to create space for diverse narratives in the very heart of our public squares. If new voices can only speak on empty lots and peripheral parcels, they will remain forever marginalized. To prioritize equity, we must be willing to make space for it to occur. There are greater examples of JCS's work throughout the state of Maine, that show his vision more clearly than this much built and rebuilt structure. What does it say about our community when we cannot loosen our grasp on any small shard of history to make space for something truly extraordinary and groundbreaking?

Ultimately, I want to move toward beauty in all its forms. The possibility of adding an exciting, innovative building that draws from Wabanaki traditions and utilizes state-of-the-art ecological technologies to forefront Maine's timber industry is a breathtakingly exciting prospect. I ask that we take a moment to appreciate the enormity of this proposal: what it means to the diverse people of Maine, what these free public spaces and programming will inspire, and what this prominent example of a green future will yield. The press and audiences this project will draw will raise the profile of Maine's creative economy and further a tourist boom. The green innovations will encourage more sustainable building and show Maine as a leader in the urgent ecological crisis of our moment. It will also be beautiful. The benefits of this project outweigh any loss of a previous structure. This is a chance to look forward. Let us not miss the opportunities ahead, because we are unable to let go. Holding onto the past, makes us who we thought we were. Let's become who we can be.

Lauren Fensterstock.

Portland, Maine

Lauren Fensterstock

January 7, 2024

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Lauren Fensterstock.
Portland, Maine

Lauren LeMatty <laurenlematty@gmail.com> Nov 30, 2023, 7:51:15 PM (3 days ago)
to planningboard@portlandmaine.gov

Dear Planning Board Members,

I am writing to passionately express my unwavering support for the construction of the new Portland Museum of Art (PMA) building in our beloved city. This exciting project is of immense significance to our community, and for good reason. The PMA Blueprint has been developed in collaboration with thousands of Portlanders- a blueprint that mirrors our collective vision and needs, making this a project that belongs to our diverse and vibrant communities. Denying support for this ambitious development would be a significant disservice to the people of Portland and deprive us of a rare opportunity to enhance our cultural landscape.

Large art museums bring inclusive benefits to diverse communities. They embody welcoming spaces that draw people from various backgrounds together to appreciate and engage with art. The new PMA building will be no exception, boasting accessibility measures to ensure everyone can participate and enjoy the cultural and artistic offerings seamlessly. From wheelchair ramps to glass walls that let everyone see in, a higher caliber of space for programming that promotes inclusivity, these institutions create a unifying environment where people can convene and celebrate the diversity defining our communities. By embracing the input of our diverse communities in the shaping of the museum's vision and programming, it becomes a potent instrument for community engagement, fostering a sense of pride and ownership among fellow community members.

Additionally, the economic impact of the new Portland Museum of Art building cannot be overstated. It presents an incredible opportunity for Portland to benefit from an increase in foot traffic, tourism, and cultural activities that the project brings to Congress Square. This influx of visitors will provide an infusion of economic revival, breathing much-needed life into the surrounding area. A perfect example is the Guggenheim Museum Bilbao- a museum that transformed Bilbao's economy and attracted tourists from around the world. The project proved to be a catalyst for economic transformation, leading to the emergence of new hospitality, entertainment, and creative sectors. The economic legacy of this museum is a testament to how a new museum can transform a city's fortunes, and we cannot afford to miss out on such an incredible opportunity!

In conclusion, I urge the Planning Board to embrace the new Portland Museum of Art building project. It is a once-in-a-lifetime opportunity that we must not pass up. By giving it full support, we contribute to the realization of the city's long-term goals and objectives. It is time to act and embrace the winds of change positively. Let's create a culturally rich, vibrant, and inclusive city that we can all be proud of.

Thank you for considering my perspective on this critical matter. I trust that the Planning Board will make a well-informed decision in the best interest of our community.

Sincerely,

Lauren LeMatty

Elizabeth Parsons <ecparsons33@hotmail.com> Nov 30, 2023, 12:21:49 PM (3 days ago)

to planningboard@portlandmaine.gov, Victoria Pelletier

As historic district property owners who have had significant interaction with HP board and staff, we cannot imagine designing a major change to our residence that we knew ahead of time would go against the rules. Rationales given for the PMA's request seem a bit of a stretch—to put it mildly: the building dates from the Jim Crow era (What's the specific connection?); Congress Square is "struggling" (By what measures?): a new building will accord with the Comp Plan (How does creating enormous waste then using enormous amounts of new materials demonstrate eco-consciousness—a theme that runs throughout the plan?).

Our suggestion: recommend that the Council tell the PMA to abide by the same rules as the rest of us.

Lin and Elizabeth Parsons
44 Winter Street

marcgup@maine.rr.com <marcgup@maine.rr.com> 11:40 AM (1 hour ago)
to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org, Lane Brenner

To the Portland Planning Board,

I am a member of the Portland Museum of Art and a past member of Greater Portland Landmarks. I have also been a supporter of both organizations over the years and wanted to express my deepest support for the PMA Blueprint project. I also am an active community member and support many local organizations from Equality Maine, the Animal Refuge League, Portland Recovery Center, and the South Portland Food Cupboard.

A new innovative museum building at 142 Free Street will allow for more gallery space, performance space, and free community space. The winning design proposal will help with the continued economic revitalization of Portland in addition to providing a positive cultural impact for the city.

Increased jobs, more tourism, and more tax revenue along with a space that is welcoming and inclusive makes this an easy choice for me. I hope that the Planning Board will allow this project to move forward. The Blueprint project will be a wonderful addition to downtown Portland.

Best, Marc Gup

Dear Chair Mazer and esteemed members of the Portland Planning Board,

I am the co-founder of Indigo Arts Alliance. My husband Daniel Minter is the other founder of IAA. We have lived in Portland Maine for over twenty years and throughout our time have been very active in arts and culture across the state of Maine. I currently serve on the Maine Arts Commission and Daniel is a Board member of Creative Portland. We live at 441 Deering Ave in Portland.

I am writing to support the re-classifying of 142 Free Street to "non-contributing" status.
It is clear that the PMA Blueprint is consistent with the City of Portland's Comprehensive 2030 Plan and significantly adds to the vision of said plan. The economic impact during and after the completion of the building will benefit our city and state greatly. I was one of the many community members who was asked to participate in the informational sessions for this initiative. I have no doubt the new museum will make Portland a downtown destination that will enliven the currently un-welcoming corner of Free Street. The new museum structure reflects the inclusive vision of every community member who participated in the process of visioning the what the new museum could and should be.

As a person of color living in the state of Maine, this is a moment to undo the associations with the Ku Klux Klan (Chamber's direct connection with KKK, DeForest Perkins, and the façade's creation) and instead celebrate the diversity, values, and aspirations of ALL community members. Historic preservation has its benefits but not always. Especially when the existing structure is not even a landmark building. I grew up in Richmond, VA where there are countless "historically significant" structures. The uprisings of 2020 illuminated the fact that history has many stories, not all of which are factual or useful for all citizens. In the case of that state, the people were heard and many of those structures came down. This took bravery along with an innovative mindset toward progress.

I truly hope that you will take my advocacy for the PMA Blueprint seriously. The project has been thoughtfully developed and will surely lead to an economic and cultural city center rooted in the arts, equity, and belonging.

Most Sincerely,
Márçia Minter, PhD hc | She, Her
Chief Officer of Strategic Growth and Innovation
Indigo Arts Alliance
60 Cove St. Portland, ME 04101

Matt Cahill <matt@hogfish.org> Dec 6, 2023, 6:58:39 PM (13 hours ago)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org, Lane Brenner, Edwin Cahill

To the Portland Planning Board,

I am the co-founder & director of Hogfish, a regenerative arts production company and artist residency in Cape Elizabeth and Portland. My husband and Hogfish co-founder and director Edwin Cahill was born at Maine Med and raised in Scarborough. His parents, Jon and Jan Cahill, were elementary school teachers in the Scarborough Public School system. His father Jon Cahill founded the popular “Gym Dandies” children’s circus group in Scarborough.

Edwin’s artistic and performance career began in Portland: from leading roles at Portland Players, to piano recitals, to dancing as the Rat King in Maine State Ballet's “Nutcracker”, and led him all the way to Broadway, starring alongside such legends as Judy Kaye and Donna Murphy as well as working with Hal Prince and Stephen Sondheim.

When Edwin and I first met as artists in New York City in 2012, we realized that we both shared the experience of gay men trying to work in a field where stories about people like us were minimal to non-existent. We dreamed of a new company that was truly for all: where we and artists from other under-represented backgrounds on stage and film could be fully themselves, where audiences could see and be inspired by the true cornucopia of the human experience, where a community could be strengthened through arts that show a world where everyone truly matters and has a voice. That dream became Hogfish.

At first we thought this dream would stay in New York City. Edwin speaks about leaving Portland as a gay artistic teenager in the 90’s, feeling that it was a city that did not welcome him as he fully was, eager for the diversity and artistic excellence of big cities. A classic brain/talent drain scenario.

And yet, on visits to Portland for the holidays and to see Edwin’s family, we both started to get the sense that it might be possible after all to return to Maine as our full selves, a gay married couple, artists, and producers of Hogfish. Maine’s recognition of same-sex marriage in 2012, federal recognition in 2015, a food scene far more diverse than Edwin's childhood favorites of Carburs and the Village Cafe, and the region and field leading work in the visual arts done by the Portland Museum of Art which so closely mirrored are dreams with Hogfish of making art for truly for all, eventually inspired Edwin to once again call Maine home in 2018 and for us to begin our own non-profit arts company Hogfish in 2021.

As a new arts company in Portland with a kindred mission to the regional anchor of the PMA, we know that the PMA’s leadership in the field has not only been a large part of what led us to call Maine home, but many other diverse artists and humans, whom we rely upon to build our community, make our art, and draw ever more diverse and talented people to the city. We also know from experience as producers that the greatest necessities for our work always boil down to time, space, and money. And featuring work by artists who have traditionally been excluded from the canon means we need more space. Either you choose one at the exclusion of the other, past colonial masterworks at the expense of marginalized voices, or marginalized voices at the expense of past colonial masterworks, or you create more space to hold both, and create a dialogue between them, where all can feel seen, heard, and welcome. It seems to us that is what the PMA is doing with its Blueprint project.

The whole country is slowly coming to terms with our colonial past and how to have conversations around it that feel fruitful and like they lead towards a greater sense of community rather than a diminished one. Statues and buildings are being torn down, names taken off buildings, because when space is limited, as it is for the PMA in Portland, the only realistic way to move forward for all is to say goodbye to stories, statues, and buildings that no longer serve the community we want to be, and to make new space, buildings, and programming that start to help us imagine a better world together. The PMA and their new building are doing just that, and I urge you with every fiber of my being as a new resident, artist, and small non-profit director of the greater Portland area and family member and friend of many Portland residents to support the PMA’s Blueprint project.

Thank you for your time and consideration,
Matt Cahill

Maury Bohan <bohanm@icloud.com> 2:21 PM (2 hours ago)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org, Lane Brenner

To the Portland Planning Board,

When my husband and I moved to the Portland area in 2019 to be closer to grandchildren, we were excited to find that, in addition to the beauty and warmth of the area, we could also enjoy a community rich in cultural settings and events. To us, the Portland Museum of Art offered a lovely collection to enjoy on a rainy day, or a place to which we could bring guests visiting our city. We are thrilled, now, by the plans for expansion, and expect that in the future, the PMA will be the centerpiece of our visits to Portland, rather than just a filler. This is because the plan calls not for simply a new "structure". Rather, we will see a world-class, expertly designed building (envisioned alongside Maine's Indigenous communities), with three-times the gallery and performance space, a welcoming first floor meant for community gathering, and restaurant space to ensure that one can truly spend the day enjoying the art. This will be a true landmark for the city, and a major step in revitalizing the Congress Square neighborhood.

We understand the concerns that some people have about the removal of the old Children's Museum. The building as it stands now, however, is not the same one that was built in 1830. Those Greek columns added in 1926 make for a tight, unwelcoming entrance with which the former occupants struggled. The new structure, on the other hand, with its breathtaking open facade, is expected to double the current number of PMA jobs, and add in 2027 approximately $4.2 million in state and local tax revenue.

Given that thousands of visitors left their suggestions during the comments period of the design phase (and their winning vote honored), we feel that there is great support for the city to approve this one-in-a-lifetime cultural centerpiece for our region and ensure a vibrant, arts-focused, community. We hope the Planning Board will agree!

Sincerely,
Maury Bohan

MURRAY PLUMB & MURRAY
ATTORNEYS AT LAW

Elizabeth A. Boepple
eboepple@mpmlaw.com
(207) 523-8215

Sean R. Turley Esq.
sturley@mpmlaw.com
(207) 523-8202

February 7, 2024

Sent by email
Brandon Mazer, Chair
City of Portland Planning Board
389 Congress Street
4th Floor
Portland, Maine 04101
planningboard@portlandmaine.gov

Re: Planning Board Consideration of Reclassification of 142 Free Street as Noncontributing

Dear Chair Mazer and Members of the City of Portland Planning Board:

This firm serves as counsel to Greater Portland Landmarks (hereinafter "**Landmarks**"), which has worked tirelessly for more than half a century to ensure that Portland preserves its sense of place for all by advocating for the preservation and revitalization of the city's rich architectural history. In furtherance of this critical objective, Landmarks opposes the request (the "**Request**") by the Portland Museum of Art (the "**PMA**") to reclassify the Chamber of Commerce building (the "**Building**") located at 142 Free Street as not contributing to the Congress Street Historic District.

Landmarks will provide public comment objecting to the reclassification of the Building on the grounds that the building continues to satisfy the criteria set forth in section 17.4.1.A of the City of Portland zoning ordinance, the "**Recode**," and section 17.4.2 of the ReCode (collectively the "**Criteria**").

We write separately on behalf of Landmark to explain to the Board that the ReCode expressly forbids the Board from considering any provisions in the City's comprehensive plan, "Portland's Plan 2030" (the "**Plan**"), when it contemplates whether to recommend to the City Council that the Building be reclassified. Because the Board *only* has the authority to recommend a change to the classification of the Building by applying the Criteria, it would be a legal error for the Board to recommend the reclassification of the Building based on any provision of the Plan. Moreover, as Carol DeTine, Vice President of Greater Portland Landmarks illustrates in the attached letter, when the Board assesses 142 Free Street under the Criteria, the only conclusion the Board can come to is that the building should retain its classification.

We also wish to provide clarity with respect to the question of what impact the declassification and subsequent demolition of 142 Free Street may have on the Congress Street Certified Historic District.[1]

[1] Mary Costigan's January 31, 2024 letter to the Board speculates about the impact on the certification of the Historic District as possibly having a de minimus effect but no clearly defined answer. The attached Park Service letter proves otherwise.

The attached letter from the National Park Service, issued in 2010, states unequivocally: "Please be aware that changes to the historic district as presently certified *will* render its certification null and void and *will require recertification* of the revised district for continued benefits under the law." What that means in practical terms is when the Certified District status is lost due to the City allowing demolition of 142 Free Street (a contributing building) it brings into question whether the Ordinance protections are adequate to qualify for Certification of the Ordinance, which then would threaten the Certified Local Government status providing access to historic preservation grant funds. The negative domino effect will ripple well beyond the loss of "just" one historic building.

I. The Criteria are the only substantive standards the Board may consider when reviewing the Request.

Any request to reclassify a structure is governed by ReCode § 17.5.9.[2] It provides:

> Amendment or rescission of any designation shall be upon the request of a person or persons authorized to nominate the property or properties affected, or upon request of the City Council, and shall follow the procedure set forth in Section 17.5 for designation. The City Council may rescind or amend a designation only after all of these procedures have been followed. The standards for rescission or amendment applied by the Historic Preservation Board, Planning Board, and City Council shall be limited to those provided in Subsections 17.4.1(A) and (B) and Subsection 17.4.2. Amendments may include reclassification of a portion of a contributing property to noncontributing status, refinement or correction of design guidelines, maps, and other parts of any designation.[3]

This means that (a) the process outlined in Recode § 17.5 provides the *exclusive* procedure by which the Historic Preservation Board, the Board and the City Council consider a request for the redesignation of a structure and (b) the ultimate decision as to whether to redesignate that structure *must* be based on compliance with the Criteria—not the Plan.

There are other scenarios when the Recode either requires or allows for the Board or Council to consider the Plan. When review occurs in accordance with ReCode § 17.4.1.D, the Board and Council are required to consider not only the criteria set forth in subsection A but also "the historic preservation goals included in [the Plan]" and "the effect of such designation on other aspects of the [Plan]."[4] The ReCode also authorizes the Board, when making its recommendation to the Council regarding the *designation* of a historic district or structure, to articulate "recommendations with respect to the [Plan] relating to the proposed designation.[5]

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[2] The ReCode uses the term "amendment" to describe the process by which the classification of a structure is changed. *See* ReCode § 17.5.9.

[3] ReCode § 17.5.9 (emphasis added).

[4] ReCode § 17.4.1.D.

[5] ReCode § 17.5.7. The authority to provide such a recommendation is an exercise of the Board's broad power to prepare and recommend proposed revisions to the Plan to the Council. ReCode § 21.10.B ("[T]he [Board] shall have the following jurisdiction and authority: . . . . To prepare and recommend to the [Council] changes in and amendments to the [Plan].")

The presence of language in other provisions of Article 17 of the ReCode expressly providing the Board and Council the authority to make a historic designation based on the Plan and the absence of that language in ReCode § 17.5.9 can only be reasonably interpreted as a purposeful decision by the drafters of the ReCode to *not* allow the Board and Council to rely on its interpretation of the Plan in deciding whether or not to allow for rescission of the designation of the structure.[6] Therefore, the recommendation of the Board and the decision of the Council *must be* based on the Criteria—nothing more, nothing less.

The Criteria are listed in ReCode § 17.4.1.A ("Minimum criteria for designation") and ReCode § 17.4.2 ("Integrity of landmarks and historic districts"). They require the Board and Council to limit its consideration of the Request to the following characteristics of the Building:

1. "Its value as a significant example of the cultural, historic, architectural, archeological or related aspect of the heritage of the City of Portland, State of Maine, New England region, or the United States."[7]

2. "Its location as a site of a significant historic or prehistoric event or activity which may have taken place within or which involved the use of any existing structure on the property."[8]

3. "Its identification with a person or persons who significantly contributed to the cultural, historic, architectural, archeological or related aspect of the development of the City of Portland, State of Maine, New England region, or the United States."[9]

4. "Its exemplification of a significant architectural type, style or design distinguished by innovation, rarity, uniqueness or overall quality of design, detail, materials or craftsmanship."[10]

5. "Its identification as the work of an architect, designer, engineer or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States."[11]

6. Its representation of a significant cultural, historic, architectural, archeological or related theme expressed through distinctive areas, sites, structures or objects that may or may not be contiguous.[12]

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[6] *See Aydelott v. City of Portland*, 2010 ME 25, ¶ 12, 990 A.2d 1024 (Holding that the absence of a standard in one section of an ordinance present in another "suggests an intentional distinction"); *see also Russello v. United States*, 464 U.S. 16, 23 (1983) ("Where Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed that Congress acts intentionally and purposely in the disparate inclusion or exclusion." (alterations omitted)).
[7] ReCode § 17.4.1.A.1.
[8] ReCode § 17.4.1.A.2.
[9] ReCode § 17.4.1.A.3.
[10] ReCode § 17.4.1.A.4.
[11] ReCode § 17.4.1.A.5.
[12] ReCode § 17.4.1.A.6.

7. "Any . . . structure . . . that meets the criteria in section 14-610 must also have sufficient integrity of location, design, condition, materials and workmanship to make it worthy of preservation or restoration."[13]

ReCode § 17.5.9 expressly provides that the Board cannot consider factors beyond the Criteria in reviewing a request to redesignate a structure.[14] Thus, by the plain terms of the ReCode, the Board is prohibited from considering anything other than the Criteria when assessing whether the Building should be redesignated.

II. The Board lacks the authority to consider the Plan because that power is not expressly provided to it by ordinance or statute.

Even if the ReCode did not expressly prevent the Board from considering factors other than the Criteria, the fact that the ReCode does not expressly grant that power to the Board means they do not have the authority to review the Request based on its compliance with other standards, such as the provisions of the Plan.

Municipalities lack the inherent authority to regulate private property.[15] Rather, "[m]unicipal corporations, as public bodies, may exercise only such powers as the Legislature has conferred upon them by law or which may have been granted to them directly by the Constitution."[16] By extension, if a power a municipal board purports to exercise is not expressly granted to it by statute or ordinance, then the board simply lacks the legal authority to act in that manner and any decision it reached based on an exercise of such authority is *ultra vires* and void.[17]

Furthermore, municipal boards cannot reach a decision based on its interpretation of a comprehensive plan unless expressly authorized to do so because the plan's provisions are *not* standards to be applied in the context of considering a particular application or request. By statute, municipalities may control the use of private property through the implementation of zoning regulations if those regulations are "consistent with" the comprehensive plan and the municipality adopts a zoning map.[18] The provisions of the comprehensive plan are not themselves regulations: "the comprehensive plan is just that—a

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[13] ReCode § 17.4.2.

[14] ReCode § 17.5.9 ("The standards for rescission or amendment applied by the Historic Preservation Board, Planning Board, and City Council shall be limited to those provided in Subsections 17.4.1(A) and (B) and Subsection 17.4.2." (emphasis added)).

[15] *Town of Windham v. LaPointe*, 308 A.2d 286, 290 (Me. 1973) ("A town has no right to appropriate or interfere with private property, except so far as that right has been conferred by statute, either expressly or by necessary implication."). As the Law Court explained in *Pike Indus., Inc. v. City of Westbrook:*

> Land use regulation is an area in which the Legislature has explicitly restricted the home rule authority of municipal governments. Thus, municipalities may not, under the guise of home rule authority, circumvent the zoning procedures of the land use regulation statute.

2012 ME 78, ¶ 17, 45 A.3d 707.

[16] *Schwanda v. Bonney,* 418 A.2d 163, 165 (Me. 1980).

[17] *See Robinson v. Bd. of Appeals of Town of Kennebunk*, 356 A.2d 196, 200 (Me. 1976) (instructing that when a municipal board "clothe[s] its actions with a discretion nowhere granted to it by the [o]rdinance," then "[t]he [b]oard's action is therefore ultra vires and void").

[18] 30-A M.R.S.A. § 4352.

plan—and the ordinances adopted pursuant to the plan are its regulatory teeth."[19] Whereas the comprehensive plan "sets out what is to be accomplished," the ordinance provisions adopted by the municipality sets out concrete standards to ensure that the plan's objectives are realized."[20] As a result, the Board may only decide whether to recommend to the Council that the Building be reclassified based on the substantive review standards set forth in the ReCode (i.e., the Criteria) and not the Plan.

We look forward to appearing before you when the Board takes up this matter at a future hearing. Until then, please let us know if the Board has any questions.

All our best,

Elizabeth A. Boepple, Bar No. 4422
eboepple@mpmlaw.com

Sean R. Turley, Bar No. 6351
sturley@mpmlaw.com

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(207) 773-5651

[19] Nestle Waters N. Am., Inc. v. Town of Fryeburg, 2009 ME 30, ¶ 19, 967 A.2d 702.
[20] *Id.* ¶ 24 ("The ordinance is the translation of the comprehensive plan's goals into measurable requirements for applicants.")

Greater Portland Landmarks
Historic character enriches our lives
PO Box 17533, Portland, ME 04112

8 February 2024

RE: CONGRESS STREET HISTORIC DISTRICT - RECLASSIFICATION OF 142 FREE STREET AS NONCONTRIBUTING

Chair Mazer and Members of the Planning Board,

We offer the following comments in addition to the letter submitted by our attorneys at Murray, Plumb & Murray.

Greater Portland Landmarks supports the expansion of the Portland Museum of Art but does not believe that the expansion necessitates the demolition of 142 Free Street, an action that would occur if the building was reclassified as non-contributing. Landmarks believes that the former Chamber of Commerce Building at 142 Free Street (more recently known as the Children's Museum building), clearly meets the historic preservation ordinance's criteria for designation as a contributing structure in a historic district. Landmarks strongly believes that the evidence that led to the building's original designation as a contributing building in the historic district continues to exist and meets the minimum criteria set forth in the Ordinance.

EVALUATION BASED ON CRITERIA
During any district designation process, each structure or site is carefully evaluated and assigned a classification of Landmark, contributing, or non-contributing. This was done for the Congress Street Historic District and documentation on each building was included as part of the required designation materials that were reviewed and approved by the Historic Preservation Board, the Planning Board, and the City Council.

Section 17.5.9 of the Ordinance, *"Amendment or Recission of a Designation"* identifies the standards for recission or amendment. The standards for a decision by the Planning Board are limited to those provided in Subsections 17.4.1(A) and (B), and Subsection 17.4.2. Subsection 17.4.1(A), sets out the minimum criteria for determining a building's significance, Subsection 17.4.1(B) sets out the criteria for determining if a historic district possesses a significant concentration, linkage, or continuity of structures, and Subsection 17.4.2, sets out the criteria for assessing the building's integrity, meaning its ability to convey its historical associations or attributes. The status of 142 Free Street was carefully considered. As we demonstrate below, the building met all of the criteria when it was originally classified as contributing. No significant changes to the building since that date or new information regarding its structural instability have been presented by the applicant that justify a change in the original determination. We encourage the Planning Board to consider the following in your discussion of the owner's request to reclassify the former Chamber of Commerce Building to noncontributing.

142 Free Street Still Meets the Minimum Criteria for Determining Significance

17.4.1.A. The ordinance limits consideration by the Board to the following criteria in making a determination on … an area, site, structure, or object for designation by ordinance as a landmark or district:
17.4.1.A.1. Its value as a significant example of the cultural, historic, architectural, archaeological, or related aspect of the heritage of the City of Portland, State of Maine, New England region, or the United States:

- The Chamber of Commerce Building is an example of the commercial significance of Congress Street within Portland in the first half of the 20th century. It is also an example of the significance and prominence of Portland's business community within the state and northern New England in the first half of the 20th century. At the turn of the 20th century Congress Street from City Hall to Congress Square was noted for its fashionable shops and large department stores. Particularly between 1900 and 1930, the Congress Street business district replaced Exchange Street and the

Old Port area as the business center of the city. At Congress Square this new commercial prominence is reflected in the construction of the Schwartz Building (1920), Eastland Hotel (1927), State Theater (1929), the third-story addition to the 1826 C.Q. Clapp Block/H.H. Hay Block (1922), and the alteration of the former Free Street Baptist Church for use by the Chamber of Commerce (1926).

17.4.1.A.4. Its exemplification of a significant architectural type, style, or design distinguished by innovation, rarity, uniqueness, or overall quality of design, detail, materials, or craftsmanship.

- Redesigned in 1926 in the Colonial Revival Style, architects John Calvin Stevens and John Howard Stevens utilized the most popular style of the period. By the turn of the 20th century the Colonial Revival Style was one of the most predominant styles of architecture on the East Coast. It had quickly become the fashionable style in architecture following the Columbian Exposition of 1893 in Chicago. The style surged in prominence following World War I and again following World War II.

17.4.1.A.5. Its identification as the work of an architect, designer, engineer, or builder whose individual work is significant in the history or development of the City of Portland, the State of Maine, the New England region, or the United States.

- John Calvin Stevens and his son John Howard Stevens are perhaps the most well-known and documented architects working in Portland at the turn of the 20th century. John Calvin Stevens' significance to Portland and Maine's architectural history is rivaled by his historic significance to Portland's Art community and to the PMA itself:

  "He designed the museum's L.D.M. Sweat Memorial Galleries. More importantly, he was a leader and president of the group that founded the museum. And it was he who secured the patronage that made the institution a reality and gave it staying power. But the Portland Society of Art not only founded the PMA, it created what is now the robust and thriving Maine College of Art, which many consider to be the most highly energized art institution in the art-oriented state of Maine."
  Portland Press Herald, July 5, 2015.

  In addition to the Chamber of Commerce Building other significant examples of the Colonial Revival style by the firm include Biddeford City Hall (1896), South Portland's Roosevelt School (1927), Fryeburg Academy's Curtis and Cutter Halls (1930) and Portland's US Post Office (1934) on Forest Avenue.

17.4.1.A.6. Its representation of a significant cultural, historic, architectural, archaeological, or related theme expressed through distinctive areas, sites, structures, or objects that may or may not be contiguous.

- The Chamber of Commerce Building is a contributing building within the Congress Street Historic District, an area locally designated in 2009 to document Portland's business district. The building's use by the Portland Chamber of Commerce for its offices from 1926-1993 expresses the commercial theme of the district. The building and its use are integral to an understanding of the Congress Street business district's development during the first half of the 20th century.

142 Free Street Still Possesses a Significant Linkage with Other Structures within the Historic District.

17.4.1.B. In the case of a nominated historic district, the Board shall also determine whether there is an interrelationship of resources within it which creates an identifiable entity, even if composed of a wide variety of resources. A district must convey a visual sense of the overall historic environment or be a grouping of historically or functionally related properties. A historic district can comprise both individually distinctive historic resources and historic resources that may lack individual distinction, but which contribute to the significance and visual character of the district as a whole.

The "eclecticism and layering of historical periods is the essence of the district's character and what makes it unique among Portland's historic districts."
Congress Street Historic District, Local Designation Narrative.

- While this section applies to historic districts, as stated above, the former Chamber of Commerce Building is a contributing building within the Congress Street Historic District. The Congress Street Historic District's commercial and civic buildings form a cohesive corridor that are physically related. They are also thematically related by their significant role in the commercial, social, and architectural development of the city. The former Chamber of Commerce Building expresses the commercial theme of the district and contributes to the district's visual character through its relationship to other historic buildings at Congress Square.

    - Although adjacent to a large parking lot, the Chamber of Commerce Building is visually related to its neighbors across Free Street, 133-135 Free Street (c1810-1820) and the Landmark-designated Charles Q Clapp Block/HH Hay Block at 588 Congress Street (built 1826 and altered 1922 by John Calvin Stevens). The Chamber of Commerce Building is also thematically related to 133-135 Free Street and the HH Hay Block. All three are early buildings altered to meet the changing needs of the evolving business district in the early 20th century.

    - The former Chamber of Commerce Building is also visually related to its neighbor, the Payson Wing of the Portland Museum of Art. The Payson Building, although built less than 50 years ago, is considered part of the Landmark-designated Museum campus. Together the two buildings' monumental facades help to define the eastern boundary of Congress Square, a significant node within the historic district.

142 Free Street Still Meets the Criteria of Building Integrity

The National Parks Service standards upon which Portland's ordinance is based, do not require the materials, features, and spaces of buildings to be original to be considered "historic" and "character-defining." A structure can be significant not only for the way it was originally constructed or crafted, but also for the way it was adapted at a later period to illustrate changing tastes, attitudes, and uses over a period of time. The Congress Street Historic District is largely significant as a commercial corridor, and the 1926 alterations of the 142 Free Street building reflect the evolving commercial character of Congress Square in the early 20th century. The period of its history from 1926 onward is the time-period from which its integrity is considered.

17.4.2. Integrity of Landmarks and Historic Districts. Any area, structure, or object that meets the criteria in Section 17.4.1 must also have sufficient integrity of location, design, condition, materials, and workmanship to make it worthy of preservation or restoration.

- **The former Chamber of Commerce Building possesses integrity of location** as it remains in its historic Free Street location.
- **The building retains its integrity of design**, although altered by replacement windows and doors, and additions necessary for code requirements and its use as a museum, the major Colonial Revival design features of the Chamber of Commerce building as designed by the Stevens firm (in particular at the Free Street elevation) have not been irretrievably destroyed. The building retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its design and reflect its appearance during its use by the Portland Chamber of Commerce. In the technical language of the historic preservation ordinance, the building retains its design integrity, its ability to convey the historical association and the physical attributes that were present during the nearly 60 years the building served as the Chamber's headquarters.
- **The building retains its integrity of condition,** as it is structurally sound according to the applicant's statements before the Historic Preservation Board, although like any building that has not been updated for a period of time, it would need to have some alterations for code requirements for any potential new use.
- **The building retains its integrity of materials**, although some historic materials have been lost through the replacement of windows and doors, the structure still retains significant amounts of historic materials including the masonry walls and extensive decorative trim and details of the temple front. In fact, the building's exterior condition is like many of its neighbors within the Congress Street Historic District. Most of the buildings within the district have undergone updates and alterations such as window or storefront replacements since their period of construction. However, the district's contributing buildings typically retain their original (mainly brick) facades, storefront use, and character-defining architectural details.

- **The building retains its integrity of workmanship**, although some historic workmanship was lost through the replacement of windows and doors, the structure still retains significant evidence of historic workmanship in the masonry walls and in the extensive decorative trim and details of the front façade. The loss of original window, door, and storefront materials is typical in the historic district.

The Chamber of Commerce Building was first identified as historically significant when it was included within the boundary of the Spring Street Historic District when that district was added to the National Register of Historic Places in 1970. After that listing, the building's exterior was minimally altered for its use by the Children's Museum in the early 1990s. Alterations to accommodate new uses are not necessarily evidence of lack of integrity, in fact the review standards are intentionally flexible to accommodate changes that facilitate a building's reuse (see attached images). When the building was documented for the Congress Street Historic District's designation report, the code required additions and rooftop alterations by the Children's Museum were noted and the alterations did not affect its contributing status. The alterations are reversible and therefore the altered features are not "irretrievably lost". The alterations have not significantly altered the character defining features of the building's Colonial Revival style, form, and primary facade, and do not detract from the overall appearance of the building.

A comparison using the 1958 Portland Press Herald photograph presented in the applicant's report and a more recent image of the buildings makes it clear that although alterations have occurred, the building retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its Colonial Revival design and reflect its appearance during the building's nearly 60 year use by the Portland Chamber of Commerce.





CONCLUSION

For a building to be designated as a contributing structure, it needs to meet just one of the criteria laid out in ***Subsection 17.4.1.A*** of Portland's Historic Preservation Ordinance**.** The former Chamber of Commerce Building meets 4 out of the 6 criteria. It also meets the criteria laid out in ***Subsection 17.4.1.B.*** and ***Subsection 17.4.2*** of the ordinance**.**

- It is significant to the cultural, historic, architectural heritage of the city.
- It exemplifies a significant architectural style.
- It is the work of an architect whose individual work is significant in the history or development of the City of Portland and the State of Maine.
- As the former home for nearly 60 years of the city's Chamber of Commerce, it expresses and contributes to the theme of the Congress Street Historic District, a cohesive corridor of commercial and civic buildings that are significant for their role in the commercial, social, and architectural development of the city from 1780-1958.
- Although minor alterations have been made to the exterior, it retains its temple-form, major fenestration patterns, and the architectural details of its primary facade that are character defining elements of its design and reflect its appearance during its use by the Portland Chamber of Commerce. In the technical language of the historic preservation ordinance, the building retains its integrity, its ability to convey its

historical association and the physical attributes that were present during the nearly 60 years the building served as the headquarters of Portland's Chamber of Commerce.

The former Chamber of Commerce building continues to warrant its designation as a contributing building within the historic district. There is no basis for rescinding its designation. We hope that through your careful deliberations, you will agree that the evidence supports its current designation.

We urge the applicant to work with their consultants to incorporate142 Free Street into their proposal, and to return to the Historic Preservation Board to obtain a Certificate of Appropriateness so that they may move forward with their expansion plans to create a more welcoming and inclusive museum.

Thank you for considering our views,



Carol De Tine
Vice President of the Board of Trustees
Greater Portland Landmarks

Attachment:
Images of altered buildings which retain their historic character and significance in Portland's historic districts.

Changes

Alterations and additions do not render a building non-historic. Often alterations are part of a building's story and are examples of the district's evolution as the following examples illustrate.



Maine Historical Society


Library of Congress

In 1922 John Calvin Stevens altered the Charles Q. Clapp Block, adding a third story to the 1826 building. The building, long the home of the Hay Drug Store, was listed as an individual Landmark in the National Register of Historic Places in 1978. The substantial addition did not affect the building's eligibility for designation.

MECA's home, the former Porteous Mitchell and Braun Department Store, was initially only three bays wide, when built in 1904. It was doubled in size in 1911, and expanded to the rear (1917-1928) until it reached through the block to Free Street in 1953. Despite this series of expansions and a comprehensive redesign of its storefront, the building was found eligible for listing in the National Register in 1996. In 2009, the building was included as a landmark structure within the locally-designated Congress Street Historic District.









The George Hunt Block at 660 Congress (left), designated a Landmark building in the Congress Street Historic District, was built in 1886 as a residence, but significantly altered at the turn-of-the century with the addition of two storefronts for commercial use. Around the corner, the Dr. Israel Dana House at Longfellow Square was altered by a commercial storefront addition for the Maine Publicity Bureau in 1921. It is a contributing building in the Congress Street Historic District. These buildings, with their significant later modifications, tell a story about the area's evolution from a primarily residential neighborhood to Portland's commercial "Main Street", and contribute to one's understanding of Congress Street's development.

Alterations

Alterations and additions like the cupola and dormers added to accommodate the Children's Museum have not destroyed the architectural integrity of 142 Free Street. Guided by the Preservation Ordinance's *Review Standards* alterations and additions are often approved to accommodate new uses in historic buildings.





Dormers are often approved in Portland's historic districts. Several former warehouse buildings along Commercial Street in the Waterfront Historic District, including the Blake Building (left) have dormer additions. The dormers were found to meet the Preservation Ordinance's review standards and do not materially alter the building's historic character. Note also the significant modern addition to the left of the original building which was reviewed and approved by the Historic Preservation Board to accommodate a new use. These alterations and the addition do not affect the original building's contributing status within the historic district. Similarly the long shed dormer on the Chase Block (right) at 217 Commercial Street was reviewed and approved by the Historic Preservation Board to accommodate a new use and does not affect the original building's contributing status within the Waterfront Historic District.





The Historic Preservation Ordinance and its review standards (which are based on the Secretary of the Interior's *Standards*) are purposely flexible to accommodate changes needed for new uses and to meet code requirements. A new ADA entrance at the Rackleff Block at 129 Middle Street (left) replaces an original raised entrance. The building is individually listed on the National Register of Historic Places and is a landmark in the Waterfront Historic District. At 10 Dana Street (right), a new stair and elevator addition provides access to the upper floors of the McLaughlin Block, a contributing building in the Waterfront Historic District.

United States Department of the Interior

NATIONAL PARK SERVICE
1849 C Street, N.W.
Washington, D.C. 20240

May 25, 2010

The Honorable Nicholas M. Mavodones, Jr.
Mayor of Portland
City Hall, 389 Congress Street, Portland, ME 04101-3509

Dear Mayor Mavodones:

The National Park Service is pleased to inform you as duly authorized representative that the Congress Street Historic District has been certified by the Secretary of the Interior for purposes of the Tax Reform Act of 1986, as substantially meeting all the requirements for listing in the National Register of Historic Places.

Individual property owners of depreciable buildings within this district can qualify for the Federal tax incentives for historic preservation by completing the Historic Preservation Certification Application -- Parts 1 and 2 and submitting them to the State Historic Preservation Office (SHPO). Application forms are available directly from the SHPO. Applications should be submitted as early as possible in the planning of a rehabilitation project.

Review boards and commissions should become familiar with the Secretary of the Interior's Standards for Rehabilitation, used by the Secretary in certifying rehabilitation work for the historic preservation tax incentives. The SHPO and the NPS are available to advise individuals and organizations about the Standards.

Please be aware that changes to the historic district as presently certified will render its certification null and void and will require recertification of the revised district for continued benefits under the above laws.

If you have any questions, please call me at (202) 354-2025.

Sincerely,

Guy M. Lapsley

Guy M. Lapsley
Technical Preservation Services

cc: National Register
ME SHPO

TO THE PORTLAN PLANNING BOARD

As a native Portlander and former resident of the city, I am writing to you, imploring you, in fact, to allow the Portland Museum of Art to pursue its goal of enhancing, improving and revitalizing Congress Square Park by allowing the museum to replace 142 Free St with a building more appropriate to the times.

I cannot fathom why there is so much opposition to this investment in the future. The building's many iterations over the last 150 years most recently morphed into The Childrens' Museum. A worthy cause, a worthy building – but not its original intent. The museum would take this initiative to the next generation as a custodian of enrichment to the landscape and its architecture. Imagine the economic impact the structure would have on the city, transforming Congress Square into a community for all. Not that the current updates have not helped; far from it. But this project would complete the picture and bring the entire area even into the next century.

This is a once-in-a-lifetime opportunity to represent the vision of our vibrant community. For the sake of the future, I urge the Planning Board to support the Museum's proposal.

As a trustee of the Museum for over 20 years, I of course have a bias; but I want that bias to be recognized by championing the Museum's Plan for the Future.

Cordially,
Nancy Kaye, Trustee Emeritus
Portland Museum of Art

February 8, 2024

Subject: Public Comment on Historic Preservation Designation; 142 Free Street; Portland Museum of Art, Applicant

City of Portland Planning Board
389 Congress St, 4th Floor
Portland, ME 04101

Dear Chair Brandon Mazer and Members of the Planning Board,

Despite supporting the idea of a PMA expansion, I am writing once again to encourage you each to reject the Portland Museum of Art's lengthy, but unconvincing arguments reclassify to 142 Free Street as non-contributing.

Here is why:
1) **No less an authority than former State Historian Earle Shettleworth has vouched for the architectural integrity and historical significance** of the "changed" 142 Free Street.

2) Architectural Historian Scott Stevens has personally **written to vouch for the thorough vetting process when 142 Free was designated.** Thus, its incarnation as City's Chamber of Commerce was significant and embodies the theme of Congress Street's commercial Historic District between 1780-1958.

3) **The minor exterior changes** (what the HPO governs) made during its adaptation to the Children's Museum are not enough to destroy its character as Colonial Revival style and the ongoing impression we get as we walk Congress Street — much as it made during its life as a center of the City's business and industry for 60 years.

4) That the plans to our own and other John Calvin Stevens buildings were discarded by the hundreds when the architects moved offices is irrelevant.

5) **The Historic Preservation Ordinance and its fair even-handed application and clear processes** has contributed greatly to our City. (See the Economic Impact report).

6) **The PMA is a steward of multiple historic building**s — both the unused Children's Museum and the Clapp House.
Why can not radically inclusive and respectful redesign of their historic campus be possible? I include the I.M. Pei/Cobb building, of course.
Museums and campuses all over the world have successfully employed other architects **less wedded to former plans**.
Why not try?

7) Art for All? **Rules apply to all, too**:
The Portland Museum of Art's intent to make Art more accessible to all, with more equity and representation is laudable. But they also need to follow the law. That is equity. That is fairness, too.

8) **How could ignoring** Historic Preservation protections of a contributing structure **NOT be precedent-setting**?

Please encourage the PMA to revisit their design plans and find a more creative solution that respects their significant historic assets. **It should be possible to have a win/win for** creative adaptive re-use of a **protected historic building and an exciting museum expansion.**

Please oppose reclassification and demolition of the former Chamber of Commerce building at 142 Free Street.
I count on you to **support the integrity of the H. P. Ordinance by applying it equally to everybody.**

Thank you for listening.

Sincerely,

Nancy Montgomery, interpretive designer
Montgomery Design Inc.

447 Deering Ave., Portland, ME 04103
montgomerydesign@me.com

Nonsee Oumkasem <NOumkasem@portlandmuseum.org> 2:28 PM (1 hour ago)
to planningboard@portlandmaine.gov, Graeme Kennedy

Hi,

I would like to share my original ideas that initially came to mind, and I also respect other people's ideas, avoiding political discussions.

Firstly, the city of Portland is flourishing, attracting people from around the world to want to move here. Expanding the PMA will create jobs for the community and attract more visitors, providing a venue for out of state seminars and art appreciation. Local businesses need visitors from various locations to boost their services, contributing to economic growth.

These will greatly benefit our incredible city!

Nonsee
Manager of Visitor Experience & Safety
Pronouns: He/Him/His
Portland Museum of Art
Seven Congress Square
(Shipping: 99 Spring Street)
Portland, Maine 04101

Paige Carter <paige.davis@gmail.com> 10:41 AM (2 minutes ago)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org

To Portland Planning Board Members,

Today I write in support of the Portland Museum of Art's Project Blueprint, because of the importance to the city of Portland and more broadly to our great state. This is a once-in-a-lifetime opportunity for our city and deserves full support from the Planning Board.

The details of this project have not been planned and developed in a vacuum. Rather, the PMA Blueprint has been developed with input of thousands of Portlanders and represents the vision and needs of our diverse and vibrant communities.

Not only has the Museum incorporated perspectives from the community, we have also aligned to Portland's long term planning. The Blueprint Project activates and enhances the City of Portland’s Comprehensive Plan 2030.

The economic impacts of this initiative will help to drive the transformation of our city and revitalize Congress Square.

It is my hope that the Portland Planning Board will join us in support of the Blueprint Project.

Best,
Paige Carter, Portland Museum of Art Trustee

patricia barber <rugbyvet88@yahoo.com> 8:15 AM (27 minutes ago)

to planning@portlandmaine.gov, patricia barber

To the Portland Planning Board
Jan 8, 2024
From: Patty Barber 21 King St Hiram Maine 04041
Regarding: Historic Designation Preservation 142 Free Street

Dear Planning Board Members;
I am writing in opposition to any redesignation of this Historic District or any buildings within, especially 142 Free Street.
I cannot believe that this item is even up for consideration. Did we learn nothing from the destruction of Union Station?
These Historic Buildings are the backbone of Portland. They are the link to the past, and the hope of the future stating that we in Maine are respectful of our roots, and treat all history with the reverence it deserves. Once these buildings are gone, they can never come back. Any attempt to 'reproduce it' will fall far short and be a mockery of the original. And the idea being floated to 'keep the facade' and tear down the rest is ludicrous.
These buildings have a soul and a personality and have withstood and witnessed much, similar to my elderly grandmother, and great uncle who came as immigrants to Portland and whose descendants have flourished here in Maine.
I urge you to vote no on any redesignation of 142 Free Street and retain the original building in whole. Portland made a promise to preserve these structures. Please don't renege on that promise to us.

Sincerely,
Patty Barber
whose ancestors came to Portland in the early 1900's and embraced its traditions

Patrick Boothe <boothepr@gmail.com> Feb 7, 2024, 4:20:48 PM (16 hours ago)
to planningboard@portlandmaine.gov

To The Members of the Planning Board, City Council, and Portland community,

As a resident of Portland and a dedicated architect within our vibrant community, I often stand at the intersection of history and innovation, advocating passionately for the preservation of our cherished heritage while embracing the boundless possibilities of contemporary design. It is with great enthusiasm that I offer my unwavering support for the reclassification of 142 Free Street within the Congress Street Historic District.

With a career steeped in the restoration of our architectural treasures, I have witnessed firsthand the transformative power of preserving our past. Guided by principles of the National Park Standards for Historic Rehabilitation, I have had the privilege of breathing new life into more than a dozen buildings, each a testament to our collective commitment to honoring our roots.

In researching the question at 142 Free Street, I read Margaret Gaertner's illuminating report, "A History of 142 Free Street and Free Street at Congress Square," dated 7/5/2023, it becomes abundantly clear that the evolution of this building warrants a reconsideration of its classification. The layers of time, marked by alterations and the shifting landscape of Free Street, paint a portrait of change and adaptation that cannot be overlooked.

Yet, beyond the confines of history, I am compelled to acknowledge the potential in front of us. The proposal put forth by the Portland Museum of Art expansion represents not only a remarkable architectural endeavor but also a beacon of inspiration for our community. In its boldness, we find a promise of renewal, a symbol of progress that speaks to the limitless horizons of our collective imagination.

In supporting this endeavor, we affirm our commitment not only to preserving our past but also to fostering a future rich with innovation and creativity. It is in the delicate balance between tradition and innovation that we find the true essence of our identity as a community.

With gratitude for the opportunity to lend my voice to this important discussion, I extend my wholehearted endorsement for the reclassification of 142 Free Street to be a non-contributing building of the historic district. May we continue to chart a course guided by reverence for our heritage and boundless optimism for the future.

Warm regards,

Patrick Boothe, AIA
Maine Licensed Architect
86 Woodford Street, Portland, Maine 04103

PC Pollard <mloretta60@gmail.com> Jan 14, 2024, 6:35:18 PM (2 days ago)
to planningboard@portlandmaine.gov

To the Chair and members of the Planning Board,

Please recognize that the Directors of the PMA's assertion that *why* they propose to ignore 142 Free Street's status as a contributing building in the Congress St. historic district is because the new building they intend to replace it with is so special, is hardly justification for ignoring the law.

The Historic Preservation Ordinance requires the same level of scrutiny to *remove* a building from its contributing status as was required in the first place to *include* it. Nothing about the building has so significantly changed that could justify its demolition according to the law.

Thank you,
Penny Pollard
29 Deering St.

eter Callnan <pcallnan@honeckotoole.com> 9:26 AM (3 hours ago)
to planning@portlandmaine.gov

This message was sent securely using Zix®

I've lived in Portland since 1985 and have always thought the building to be impressive and elegant. Let's not make a big mistake and destroy it. It can surely be put to good use and be an important part of redesigning Congress Square.

Thank you for your consideration.

Peter J Callnan, CPA

104 North Street
Portland, Me 04101

February 7, 2024

Portland Planning Board
City Hall
389 Congress Street
Portland, ME 04101

By E-mail to planningboard@portlandmaine.gov and planning@portlandmaine.gov

Re: 142 Free Street – Application for declassification as a "contributing structure" in the Congress Street Historic District

Dear Members of the Portland Planning Board:

It is exciting that the Portland Museum of Art is planning a significant expansion of its landmark headquarters between Spring Street and Congress Square. There is a concern, however, that its focus on the site of the former Chamber of Commerce/Children's Museum building next door may violate both the letter and the spirit of Portland's laws and ordinances regulating the historic character of large parts of the city.

Over the last half-century, Portland has established some 11 historic districts covering a good part of the Peninsula. Some of these are National Register Historic Districts, accepted and approved by the National Park Service. Others were established under Portland's own historic preservation ordinance and then certified by the National Park Service as Certified Local Historic Districts.

Under both regimens, the standards for becoming a historic district are similar. The area in question must contain a certain proportion of "contributing" buildings or structures that impart to the district a distinct sense of historical authenticity. This is determined by a painstaking inventory of the structures within the proposed boundaries to determine which ones can be considered "contributing" based on a number of defined criteria. These inventories are usually assembled with the help of expert consultants. They are then reviewed successively, first by the Portland Historic Preservation Board, then by the Planning Board and finally by the City Council.

Once a building has been finally classified as "contributing" to a historic district, however, it can legally be "declassified" only upon a positive finding by Portland's governing body that 1) the building was wrongly classified in the first instance and does not in fact meet the criteria with which it was associated, or 2) the building has become seriously deteriorated since it was classified. There is no provision that permits declassifying a contributing building because its owner would like to replace it with a new, even a splendid new, structure. There is no provision that permits declassifying a contributing building because the City's comprehensive plan has come to promote development of a different kind.

These are the rules by which City and its various departments and Boards are required to play. And it is easy to see that these rules are vital and necessary to maintenance of historic districts and the advantages that they bring. The historic districts would have little meaning or stability if city officials could declassify a protected structure based on a proposal to build something new and attractive in its place.

It might be noted that the stability of historic districts is very important to the National Park Service. If it gets the impression that a city is not faithfully adhering to the rules by which historic districts are created and maintained, it is empowered to withdraw its certification of the district or the city as a sponsor of districts and cut of access to millions of dollars in tax credits as well as direct grants for historic preservation purposes.

As the Planning Board considers the request of the Portland Museum of Art to declassify the contributing structure here in question, the only consideration should be whether the original classification was in error. There does not appear to be any suggestion that the building has deteriorated to an extent to warrant declassification on that ground. While it is not the purpose of this letter to address this point, it does appear that the building in question was originally found to satisfy not merely one, but several of the criteria to be classified as "contributing." It would be remarkable if, upon reexamination, it is found to have satisfied none of them.

Portland's historic districts have effectively preserved a sense of past epochs of Portland's history. They play a major role in making Portland an attractive goal for tourists and visitors as well as a special place within which to live and work. As documented in a recent third-party evaluation, the presence of Portland's historic districts has brought a net economic benefit to the city.

More specifically, redevelopers of contributing buildings in both National Register and certified local historic districts are eligible for Federal and State income tax credits for restoring and repurposing their properties. Portland property owners have received tens of millions of dollars in such tax credits, and pending projects stand to receive millions of dollars more.

It is respectfully requested that the Portland Planning Board, in considering the PMA case, will be guided by governing law and ordinances and will reach a decision that respects the integrity of Portland's historic districts. While the PMA is to be applauded and encouraged in its plans for expansion, such expansion must respect the legally protected fabric of the city in which it has its home.

Sincerely,



Peter L. Murray

Peter Quesada <pquesada@forerivercompany.com> Feb 6, 2024, 1:26:01 PM (yesterday)
to planningboard@portlandmaine.gov, Ric Quesada

I am writing regarding the upcoming public hearing to consider the request of the Portland Museum of Art to reclassify the former Children's Museum as a non-contributing building in the Congress Street Historic District. Terbax Realty, of which we are the shareholders, owns the building at 562 Congress Street and 123 Free Street, on the corner of Free and Oak Streets in the Historic District. We are in favor of the re-classification. We believe the building has been so modified over the years that there is little left to justify considering the building 'contributing,' that the change will not jeopardize the integrity or atmosphere of that portion of the Historic District, and that the proposed redevelopment will in fact enhance the Portland Museum, a or perhaps the core component of the Historic District. Thank you for this opportunity to comment.

Peter Quesada
Terbax Realty
5 Milk Street
PO Box 7525
Portland, ME 04112
(207) 772-6404
(207) 772-9078 fax
Direct line: (207) 772-8286 x203
pquesada@forerivercompany.com

Philip Pendleton <pependle@gmail.com> Feb 7, 2024, 1:49:15 PM (19 hours ago)

to planning@portlandmaine.gov

I am Philip E Pendleton, Portland resident and an architectural historian and historic preservation professional for some 35 years.

The PMA is an impressive cultural institution, and practically everyone in town is looking forward to seeing the museum expand its facilities and its exhibit presentation.

However, that does not give the PMA management the right to run roughshod over the city's historic architectural landscape, or over the city's legal structure of safeguards that were implemented to protect and promote its architectural integrity and status as a livable community.

The PMS is fully capable of adjusting its plans to protect 142 Free Street and integrate that structure into the plan as a contributing component.

Sincerely,

Phil Pendleton
77 Park Street, Apt D
Sent from my iPhone

Randy Harding <rzharding@gmail.com> Dec 10, 2023, 10:27:13 AM (22 hours ago)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org

Dear Planning Board members,

I am writing to you in support of the proposed expansion for the Portland Museum of Art (PMA).

I support removing the historic designation of the former Children's Museum and Theatre of Maine building needed to allow them to proceed with the expansion.

PMA's new building with its mass timber, terracotta, and glass, and with nods to Maine communities and history, will be a stunning new cultural landmark. They sponsored an international design competition which included several months of taking community input. The result is a design from the winning firm LEVER architectural that is truly for people and for communities and tailored specific to Portland and all of Maine.

This will far exceed the community value of maintaining an older building that is relatively unknown and insignificant when compared to other historic landmarks.

Thank you
Randy Harding

Rebecca Falzano <rebecca.falzano@gmail.com> Dec 12, 2023, 12:38:33 PM (20 hours ago)
to planningboard@portlandmaine.gov, Graeme Kennedy

Dear Members of the Portland Planning Board,

I am writing to express my wholehearted support for the Portland Museum of Art's ambitious Blueprint project and the proposed reclassification of the existing structure at 142 Free Street. As a concerned and engaged member of the community and a Portland business owner, I firmly believe that this project represents a crucial step towards revitalizing our city both economically and culturally.

The PMA's commitment to engaging with the community over the past two years through extensive sessions, workshops, town halls, and surveys is commendable. The inclusive approach taken in the open and juried international design competition, which involved showcasing 3D models of proposed designs for public feedback, demonstrates a genuine effort to ensure that the project aligns with the values and aspirations of the diverse communities it serves.

Here are some key reasons why I support the PMA Blueprint project and the reclassification of 142 Free Street:

1. **Economic Revitalization:** The transformation of Congress Square and the doubling of the museum's impact are promising prospects for downtown Portland. Bringing in over 300,000 visitors annually will undoubtedly have a positive economic impact, providing new opportunities for local businesses and contributing to the overall vibrancy of our city.
2. **Cultural Impact:** In the face of global challenges such as the pandemic and climate change, it is evident that strong cultural centers are essential for the resilience and sustainability of cities. The PMA, with its rich collection and commitment to fostering a sense of belonging for all, plays a pivotal role in securing Portland's cultural heart.

While acknowledging the importance of preserving our history, I believe there are instances where exceptions are warranted. In the case of 142 Free Street, the building's troubled history and the need for growth make a compelling case for reclassification. The changes made to the structure over the years, coupled with its association with the Ku Klux Klan, underscore the importance of reassessing its status.

The columns and Neoclassical design, while historically significant, carry a troubling legacy that inhibits the inclusive and welcoming atmosphere that the PMA aims to create. Understanding the potential interpretations of architectural styles is crucial, and I believe that supporting a structure with such a problematic past may hinder the city's progress toward a more inclusive and equitable future.

In conclusion, I applaud the PMA's vision for the future and its dedication to creating a museum that reflects the values, diversity, and aspirations of our community. I urge you to consider the broader impact of the PMA Blueprint project on our city's economic and cultural landscape and support the reclassification of 142 Free Street as a step towards building a more inclusive and forward-looking Portland.

Thank you for your time and consideration. I look forward to witnessing the positive transformation that the PMA Blueprint project will bring to our beloved city.

Sincerely,

Rebecca Falzano
4 Mountain Road
Falmouth, ME 04105
rebecca.falzano@gmail.com

reene patterson <reenemaine@gmail.com> Feb 2, 2024, 2:11:59 PM (3 days ago)

to planning@portlandmaine.gov

Dear Planning Board Members,

I am writing to you to express my sincere regret that we could possibly lose another irreplaceable historic building in the City of Portland. And the fact that it is the Portland Museum of Art that wants to remove the old Chamber of Commerce building and replace it with a modern addition to the existing Museum is unconscionable. It definitely has made me consider ending my Museum membership.

I volunteer for Greater Portland Landmarks at both the Observatory and at the 5th Maine Regiment Memorial Hall on Peaks Island. This organization has worked very hard to bring attention to the residents of Portland, and the entire State, of the importance of maintaining our important historic structures. We have only to remember the loss of Union Station to understand that once gone, these beautiful buildings can never be replaced.

I am sure the PMA can incorporate 142 Free St. into their new expansion plans. Just like the Current Museum building integrated the McClellan House and the Sweat Memorial Galleries, the old Chamber of Commerce building needs to remain in place.

Please consider the fact that once a building is gone, it is gone forever.

Thank you,
Reene Patterson
19 Maple Street, Apt. C
Brunswick ME 04011

Rhoda Renschler <rsrensch@msn.com>
to planning@portlandmaine.gov

8:36 AM (7 minutes ago)

Thank you all for your service to our community.

Please retain the zoning that was put in place to protect the historic fabric of our community and save 142 Free Street. Support an alternative to the museum expansion for a new design could be spectacular and more innovative.

Portland can have both: historic districts with exciting new designs.

Rhoda Renschler
37 Channel Road
South Portland, Maine
04106

Richard Barnes <richard.barnes05@gmail.com> 11:34 AM (1 hour ago)

to planning@portlandmaine.gov

Dear Planning Board members,

This building is covered by the Portland Historic District ordinance, which has been in place since 1970 and re-confirmed in 2009. PMA Trustees knew this when they purchased the building, and it was known to the four architectural firms that were invited to submit to the design competition for the Museum's expansion.

To request that this building be torn down in the face of that history because the Trustees chose a design firm that wanted them to press for a change in designation for a building that has been deemed to be of historic significance on two different occasions is cynicism of the highest order.

The ordinance was enacted after the destruction of Union Station, the loss of which still resonates today. PMA and the Payson Bldg, the McClellan-Swett House are key elements of Portland Downtown, the Arts District, and stand out amid so many other cookie-cutter buildings that dot the Peninsula. The PMA can expand in a manner that preserves one of John Calvin Stevens' major downtown buildings.

Do not grant the request.

Richard Barnes

Sally <oldhamseg@gmail.com> Feb 7, 2024, 4:07:11 PM (17 hours ago)

to planning@portlandmaine.gov, Kevin Kraft

Dear Chair Mazer and Members of the Planning Board,
I write to urge you to uphold the contributing status of 142 Free Street, the former Chamber of Commerce Building, within the Congress Street Historic District. The City's Corporation Counsel has advised city staff that the recommendation regarding this reclassification request must be based on the criteria included in the city's ordinance. Other considerations are not relevant to this decision.
The museum's attorney has provided a statement essentially stating that the building meets none of the ordinance's criteria for significance. The unanimous opinion of the Historic Preservation Board to uphold the contributing status is based on their familiarity with relevant federal, state and local standards. With my experience having worked at the National Register of Historic Places in the Department of the Interior, I believe they have evaluated the contributing status accurately. The carefully researched statements regarding evidence of the building's contributing qualities are clearly delineated also in Greater Portland Landmarks' written statement.
The consultant report submitted by the museum contains interesting facts about the history of the building, but it fails to synthesize this information and to evaluate it based on federal, state and local Preservation guidelines. The 1926 appearance of the former Chamber of Commerce Building, designed by John Calvin Stevens and John Howard Stevens, provides the basis for determining this to be a contributing building in the historic district.
In conclusion, I urge you to carefully evaluate the information before you and to recommend to the City Council that the contributing status of 142 Free Street be maintained.

Thank you for considering my views,
Sally Oldham
118 Congress Street
Portland

Samuel Carter <samuel.m.carter@gmail.com> Feb 6, 2024, 2:23:58 PM (23 hours ago)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org

To the Portland Planning Board:

I support the Portland Museum of Art's planned expansion onto the site of the current 142 Free Street building.

I strongly urge you to support the demolition of that current building that is a clash of architectural styles (Federalist meets Greek revival?) and which has no reasonable means of expanding the Museum's need for increased gallery space, administrative offices, secure on-site storage, and studios for visiting artists. The floorplan in the current building is terribly laid out due to the former occupants' needs to bring it up to ADA compliance.

Opponents to the Museum's expansion project claim the current building has historical value merely because a jobber architect who designed houses on the West End had his name associated with this building. But these same opponents likely aren't members of the Museum, do not visit the museum periodically to enjoy the art on display, or support the Museum's mission to inject much-needed vitality into the heart of Portland. "Look at what happened to Union Station!" they cry, overlooking the fact that Union Station was not a jumbled up mess and was indeed an example of beauty in architecture, where form followed function. The hue and cry of "Historic Preservation!" in Portland should not necessarily be applied always to tawdry, boring, and uninspiring coagulations of brick and mortar.

With the expansion of the Portland Museum of Art into a new, larger, more accessible, and (let's be honest) attractive space, tourists from around the world will want to visit Portland. The economic impact of the project will increase the number of jobs and grow the city's income. This isn't just some project for elitists -- the expansion into a new building will have a lasting economic impact on citizens living in and around Portland, and will inspire regional artists (not known for their "elite" tendencies) to pursue their passion.

Please approve the Portland Museum of Art's expansion project.

Thanks,
Sam Carter
Yarmouth resident and Museum member

Sarah Mills <scmills45@gmail.com> 11:48 AM (1 hour ago)

to planningboard@portlandmaine.gov

I am in agreement with Greater Portland Landmarks in its position regarding the PMA re-design, specifically, preserving 142 Free Street.

I am surprised that those at the PMA who have been involved in developing the new plans have ignored the current status of this historic building. I hope that it was a mistake and not a situation of extreme hubris, disregarding the current status.

Sincerely,
Sarah Cross Mills, Portland Citizen

sarahWithAnH <sarah.vatter@gmail.com> 3:29 PM (18 minutes ago)

to planningboard@portlandmaine.gov, gkennedy@portlandmuseum.org, Lane Brenner

Dear Portland Planning Board,

I hope this message finds you well. I'm reaching out to you as a fellow community member who cares deeply about our neighborhood's growth and cultural vibrancy.

To that end, I was surprised to learn that something so many Portlanders, myself included, have excitedly followed along with and voted for, The PMA's Blueprint initiative, is facing opposition. It's disheartening to see a project that so many got to take part in between attending the architects' presentations at a town hall-style meeting and viewing all holds so much promise being met with resistance.

This community-supported initiative will make Portland a downtown destination and seeks to replace the aging and intimidating corner of Free Street with a more innovative museum structure, one that reflects the inclusive vision of every community member who participated in the process of the new building.

I understand that growth often involves tough decisions, and I hope you will keep in mind that this building has undergone numerous alterations with zero regard for historic consistency. Moreover, the associations with the Ku Klux Klan underscore the need for change and some homage to the original inhabitants of this land, as the new building will do. Our community deserves a space that truly represents our diversity, values, and aspirations.

As a Maine resident for over ten years, I thank you for standing with our community and honoring the cultural growth and downtown revitalization that so many of us envision for Portland.

Regards,

Sarah Vatter
sarah.vatter@gmail.com
23 Bramhall Street
Portland, ME 04102

Sean Wilkinson <sean@might-main.com> Dec 7, 2023, 4:31:25 PM (16 hours ago)
to planningboard@portlandmaine.gov, Graeme Kennedy

Hello, my name is Sean Wilkinson, and I am writing in support of Portland Museum of Art's Blueprint Project.

A lifelong Mainer, I always loved visiting Portland, and moved here in 1997 to attend Maine College of Art. My art history lectures were in the auditorium in the Payson Building, and I've always loved walking through the galleries there. I was a work-study student in MECA's admin office in the Clapp House (now owned by PMA), and loved the contrast of that Greek Revival building standing across the street from the Brutalist hotel across the street. I loved how they were united by the timeless modernity of the Payson Building. I worked as a bartender at Free Street Taverna (now the defunct DogFish), and loved that little postage stamp brick saltbox, across the street from the rambling flatiron-looking Hay Block that pointed down to the Porteous Building where I attended many classes. I took my graphic design classes in the Baxter Building, and I loved how that Romanesque Revival building was abutted by the gritty Fine Arts Cinema (now Geno's), and the low-slung Joe's Smoke Shop — what looked like a small house dropped in the middle of a parking lot. I lived in the Trelawney Building, and looked out over this varied landscape with a lot of love. Portland has always felt like a city that adapts and evolves to the changing needs of its populace, and improves its position when it can (that little low-slung smoke shop is now a well designed apartment building overlooking Longfellow Square, and Joe's has a vastly improved new home on the first floor). Portland evolves. Portland does not stagnate. That's what makes it feel like home.

I started a business called Might & Main here in 2010, branding and designing dozens of restaurants around the city. We've worked on restaurant brands in a wide variety of buildings, from Eventide, Hugo's, and Honey Paw in a 1920s former garage and storefront on Middle Street; to Central Provisions in a 5-story 1800s grocery store and barrel repository; to Woodford F&B, in a former mid-century car dealership; to EVO, in a newly built hotel occupying a former parking lot. They've all become icons of the city. They've all won prestigious culinary awards. And they've been able to attain this status because they have the customers to support their businesses. They have the customers because people see Portland as a creative destination full of iconic places. A destination that's always adapting and improving. A place where arts, culture, and cuisine abut a vital working waterfront and a hearty population of intrepid locals. It seems short sighted to me that the kind of incredible evolution that the Blueprint Project would bring to our city should be halted by stubborn clinging to something that feels historic, yet hasn't been a vital part of Portland's downtown for decades.

We started working with The Children's Museum years ago to launch the campaign of their new building on Thompson's Point, and there were many reasons this move was necessary. Chief among them were the unwelcoming and outdated facade that felt out of place on today's Free Street, and the decrepit state of the building itself. In the winter months, everyone in the cramped meeting room would wear coats, jackets, hats, and sometimes gloves because the building never quite reached a comfortable temperature. Their move to the Point has signaled an amazing evolution of their brand, and increased capacity for their incredible work, but also the failure of their old building to function as a basic structure. In my love letter to the city of Portland, 142 Free Street never quite registers as something worth noting.

What *does* excite me is the opportunity to create another world-class advancement for Portland at the hands of the PMA. Their vision is like nothing I've seen for our city, and could prove to bring life back to a withering downtown center — to bring more visitors to patronize our restaurants, galleries, venues, hotels, and shops. To support the people who make those establishments work every day. To support the great people who have worked to effect positive change in the city, and not stand stubbornly in history for the sake of history, only to obstruct the kind of evolution that has made Portland a legendary destination year after year.

I've had the good fortune to work all around the country, and to see what makes a city seem relevant and inviting. Shouldn't we be the stewards of our current, relevant history? The new history that reflects our growing, diversifying community? This isn't the same Portland of the 1900s, thank goodness. We need more visionary projects like this museum's expansion, and less obstinate naysaying in the face of promise and change.

Thank you,

February 7, 2024

Dear Members of the Planning Board,

Re:142 Free Street

We write to urge you to deny the Portland Museum of Art's request to remove the Contributing designation from the former Chamber of Commerce Building at 142 Free Street.

As residents of the West End Historic District for over forty years, we appreciate the benefits that have accrued to our neighborhood and the city from the creation and maintenance of our Historic Districts and the Historic Preservation Ordinance. We rely on the city to enforce and protect this and all other ordinances.

The designation of 142 Free Street as a Contributing building was correct and justified when the Congress Street Historic District was created in 2009. For its extensive headquarters renovation in 1926, the Chamber of Commerce chose the John Calvin Stevens firm, the city's most prominent architects at the time. They produced a Colonial Revival style building that made a clear statement that still speaks to us today of their city's economic vitality and strong civic pride. The key features of the facade – the temple form, window pattern, and architectural details – all survive in Portland's commercial center. Nothing has changed these contributing factors, and, after a thorough review of the facts, the Historic Preservation Board's decision recently confirmed the original designation. No sound basis exists for the Planning Board to overrule the Preservation Board's judgement in this matter.

The PMA's request to demolish the building is shameful. The Museum has made no effort to try to comply with the ordinance. Rather, they decided they know best what is worthy of preservation. They have planned from the beginning of their expansion project to attack the building's designation and, through that, our Historic Preservation Ordinance. Simply put, they must be held to the same standard as any other citizen, institution, builder, or developer if our Historic Preservation Ordinance is to maintain its integrity.

We urge you to uphold 142 Free Street's designation as a Contributing building. Then the Museum can revert to a process they should have followed from the outset: bring the community together around an expansion that meets their needs and respects the community they serve by adhering to the Historic Preservation Ordinance.

Thank you.

Sincerely,



Seth and Laura Sprague

28 Orchard St.
Portland, ME 04102

Shirley Helfrich <shirley.helfrich@gmail.com> 10:52 AM (3 hours ago)

to planning@portlandmaine.gov

To: Planning Board members
From: Shirley Helfrich, 60 Candlewyck Terrace, Portland, ME 04102

I urge you to consider the importance of upholding the historic preservation policies for the city of Portland that are currently in place. Regardless of whether the building at 142 Free Street is of historic importance to everyone, in my opinion it is crucial to maintain the integrity of the process that was begun to maintain the historic value of buildings in our city. I was dismayed to learn that the design I voted for disregarded these policies, and to my knowledge, the Portland Museum of Art did not make the demolition of 142 High Street widely known in the design process for the public. I would recommend that the museum consider alternate plans at this time, even though I understand it would involve further expense and new design submissions. Thank you.

Shirley Helfrich
Portland Museum of Art member

SMCCLOSKEY@maine.rr.com <SMCCLOSKEY@maine.... Feb 4, 2024, 2:23:36 PM (18 hours ago)
to planning@portlandmaine.gov

Dear Planning Board,

Below is a letter that I sent to the Portland Press Herald. Thanks for reading it.

The PMA's high-handed effort to defy the Historic Preservation Ordinance's protection of 142 Free Street makes me wonder if such an ordinance, had it been in place in 1961, would have saved the late and lamented Union Station from the wrecker's ball. Possibly not, as the developer at that time could have won over the deciders with arguments similar to the PMA's in favor of demolishing the former Children's Museum.

The irony is that every business in the strip mall that replaced Union Station could have been housed within it. On the same hand, every aspect of the PMA's goals for expansion could be accommodated within a design that preserves 142 Free Street. Indeed, the PMA has such a design in hand--the one submitted by one of the four finalists in the design competition, Toshiko Mori's group.

I ask the Planning Board to keep the present classification of 142 Free Street and encourage the PMA and Portland Landmarks to work together cooperatively so that each can achieve its worthy goals.

Staci Hanscom <slpartin_nc@yahoo.com> Feb 6, 2024, 12:28:00 PM (yesterday)
to planning@portlandmaine.gov

I firmly believe that 142 Free Street should remain as a contributing structure in the Spring Street National Register Historic District (1970) and in the Congress Street Local Historic District (2009). As a former National Register writer and evaluator for the State of New York, I can say with authority that removing a contributing structure from an historic district undermines the entire purpose of the district itself. 142 Free Street is a historic building, despite any interior changes made through the years. The Portland Museum of Art had/has options to accommodate this building in its original RFP, and they should not be rewarded now for ignoring the rules set out for historic preservation on the city, state and national level.

Below I have attached an article, which appears to be relevant to the issue, assuming the ordinance mentioned is still on the books.

The Lewiston Journal - Google News Archive Search

Staci Hanscom
33 Heather Rd.
Portland

tina petra <tinapetra@gmail.com> Dec 2, 2023, 12:36:58 PM (yesterday)

to planningboard@portlandmaine.gov, Jennifer Graves

To whom it may concern:

I am writing in support of the PMA's endeavor to build a special and architecturally significant addition to the currently existing museum buildings, which no longer provide adequate space. This design has been developed over many months of research and input from a broad variety of the Portland community in order to best represent the needs of our diverse population.

Other research included the commission of a comprehensive history of the 142 Free Street building site. In it, historian Margaret Gaertner carefully outlined the various iterations of the oft-changed building over the past almost 200 years. A theater became a church, another church, then a Chamber of Commerce and then a Children's Museum. Each time the building changed hands, it also changed physically--steeples added, windows changed, brick to stucco over brick. In 1992 it was declared a historically significant building by the Preservation Board of Portland. But the building as it remains now, has literally only the facade built in 1922 with John Calvin Stevens as architect. It was not "designed" by him per se, but created from a historical drawing that he believed represented what the original theater looked like. Because of the many changes, it is far from the building that was originally there.

The PMA is a champion of architecture, and has a collection of historically significant buildings now that are carefully maintained, including one in a beaux-arts style designed by John Calvin Stevens. Therefore, the decision regarding the status of the existing 142 Free street was not made lightly.

The new, sustainable building, designed by LEVER Architects and to be built largely from Mass Timber, will add to that collection. I truly believe that it will become a beloved structure, with its open design welcoming to all. The economic impacts of the Blueprint Project will help revitalize Congress Square and bring attention to the city. It will enhance the City of Portland's Comprehensive Plan 2030.

Because of the above, I ask that you vote in favor of reclassifying the existing 142 Free Street building as a non-contributing structure.

Sincerely,

Tina Petra
Trustee, Portland Museum of Art

Tony Payne <tpayne53@gmail.com> Feb 2, 2024, 12:47:05 PM (3 days ago)

to planningboard@portlandmaine.gov, Elizabeth Jones

Born and raised in Portland, I photographed the demolition of the Libby Building on Congress Square that made way for the new museum. I recorded that transformation as I did with the construction of One City Center, another investment in Portland's future. I love how cities evolve and reinvent themselves.

While the Libby Building had stood for years housing a variety of businesses, it had no particular thread to explain its significance to Portland's heritage. Similarly, though the one-time chamber of commerce building on Free Street has housed various non-profits, it isn't a site of such significance that it's restoration and repurposing would become a must-see landmark.

In contrast, the proposed modern addition to the I.M. Pei-designed museum would be a significant addition to the cultural fabric of the Congress Square District, Portland's "heart of the arts".

I am a huge fan of historic properties having managed a dozen restored 1860s buildings in the Old Port during the Old Port's 1980s resurgence. I also was the originator of Friends of Post Office Park that transformed a government services parking lot to green space. I love the vitality of this city.

Every great city not only boasts world-class museums but showcases their collections in visually interesting properties.

Please let the museum continue its immeasurably positive contribution to Portland's reputation with a significant landmark addition.

Thank you for your consideration and public service. - Tony Payne

Tony Payne

Victoria Bonebakker <vbonebakker@gmail.com> Feb 7, 2024, 4:17:15 PM (16 hours ago)
to planningboard@portlandmaine.gov

> I am writing to urge you to respect the 3 decades old Historic Preservation Ordinance under which 142 Free Street was designated as a Contributing Structure, its having been determined as meeting 4 out of the 6 criteria when only 2 were required. To disrespect the Ordinance is in effect eviscerate it. Accepting the requested reclassification is to create an exception and a precedent that will fatally weaken the protections of the Ordinance, as one proposed demolition follows another until Portland loses its history, its character and its appeal going forward.
> The Portland Museum of Art's presumption that it can bully its way over the intended hurdle of the Ordinance is reprehensible. It was aware of 142Free Street's status as a contributing structure when it purchased the building and when it commissioned the new design, which not incidentally tinkers with both the facade and the back of the award winning Payson building. The museum owns a large empty lot on Spring Street (as well as the Clapp house). Its expansion should take place there. The Payson building is a more than sufficient presence on Congress Square.
> I urge the Planning Board to deny the Museum's request to reclassify 142 Free St from a contributing to a non contributing structure.
>
> Victoria Bonebakker
> 91 Park Street
> Portland 04101

142 Free Street 0 views

Subscribe

William Hall <wpeaks@earthlink.net> 10:09 AM (6 hours ago)
to planningboard@portlandmaine.gov

To the chair and members of the Portland Planning Board:
For this important public hearing, I would like to emphasize just one point from Greater Portland Landmarks' position statement:

- For a building to be designated as a contributing structure, it needs to meet just one of the criteria laid out in Subsection 17.4.1.A of Portland's Historic Preservation Ordinance. The former Chamber of Commerce Building meets 4 out of the 6 criteria.

In addition to being on the Landmarks board, I am a member of the Portland Museum of Art. So I truly admire the PMA's effort to remake its space in a way that takes the museum into the future as a remarkable and exciting public institution. I just don't believe that a good redesign has to include the demolishing a perfectly sound historic building.
I do think it's extremely important to uphold Portland's land use code and reach a decision that is in conformance with the law. 142 Free Street certainly meets key criteria for preservation as a contributing structure. A decision contrary to that, allowing the building to be torn down, risks undermining historic preservation rules that have done so much to make Portland a unique, vibrant, and desirable place to live and visit.
In a related but different perspective, the greenest building is frequently the one that is already built. Tearing down 142 Free Street, with the wasteful loss of its embodied energy and then the disposal of remains, does not seem to conform to the city's efforts to mitigate the effects of climate change and global warming.
Thank you for your consideration and for your service to the city of Portland.
Bill Hall
317 Pleasant Avenue
Peaks Island
Portland Planning Board member, 2006-2016

Alexander Jaegerman, FAICP
398 Spring Street
Portland, ME 04102

February 9, 2024

Re: Historic Preservation Designation – 142 Free Street

Chair Mazer and Members of the Portland Planning Board:

I am writing to urge you to recommend to the City Council that the former Chamber of Commerce building and Childrens Museum at 142 Free Street must retain its Contributing Building status under the Historic Preservation Ordinance.

When the Historic Preservation ordinance was adopted originally in 1990, it included a provision called Project of Special Merit that would have enabled the City Council to allow a new civic building to displace a contributing building. That provision was eliminated from the ordinance in 2005 when the City amended the ordinance to comply with the Secretary of the Interior's Standards for Historic Preservation to qualify Portland to become a Certified Local Government. The amendments were the result of an audit of Portland's ordinance conducted by the Maine Historic Preservation Commission that identified several provisions in Portland's ordinance that would have disqualified Portland from designation as a CLG.

The building at 142 Free Street has been determined to meet the criteria for a contributing building by the Historic Preservation Board. Ample testimony has been provided by experts from Greater Portland Landmarks, Earle Shettleworth, and others demonstrating that the building meets four of the six criteria, while only one is needed to qualify. These findings are practically beyond dispute. The Planning Board is tasked with upholding the ordinances of the City of Portland. To do so in this case, you must vote to retain the Contributing Building status of 142 Free Street.

Thank you for your consideration.

Alec Jaegerman

Kevin Kraft <kkraft@portlandmaine.gov>

Fwd: Certified Local District

Goeken, Brian D <Brian_Goeken@nps.gov> Sun, Feb 11, 2024 at 9:23 PM
To: Evan Schueckler <evans@portlandmaine.gov>
Cc: "Johnson, Mike D" <Mike.D.Johnson@maine.gov>, "Moody, Cristin A" <cristin_moody@nps.gov>, Christine Grimando <cdg@portlandmaine.gov>, Kevin Kraft <kkraft@portlandmaine.gov>, Amy McNally <amcnally@portlandmaine.gov>

Evan, we have reviewed the submitted information on a preliminary basis and would advise you that, based on the information provided, this would be considered an amendment to the district and would need to be submitted for our review under 36 CFR 67.9(i). If you would like us to review such a submission on a preliminary basis, we can do so. The information should be submitted to the SHPO, with the same information to request certification plus the information identified in subsection(i).

Brian Goeken, AICP
Chief, Technical Preservation Services

National Park Service
Technical Preservation Services
1849 C Street NW, Mail Stop 7243
Washington, DC 20240
202-354-2033 phone
202-230-2960 mobile
Brian_Goeken@nps.gov email
http://www.nps.gov/tps/ website
Sign up for updates from Technical Preservation Services

From: Evan Schueckler <evans@portlandmaine.gov>
Sent: Friday, January 12, 2024 2:55 PM
To: Goeken, Brian D <Brian_Goeken@nps.gov>
Cc: Johnson, Mike D <Mike.D.Johnson@maine.gov>; Moody, Cristin A <cristin_moody@nps.gov>; Christine Grimando <cdg@portlandmaine.gov>; Kevin Kraft <kkraft@portlandmaine.gov>; Amy McNally <amcnally@portlandmaine.gov>
Subject: [EXTERNAL] Re: Certified Local District