# PLANNING BOARD

Tuesday, May 27, 2025 at 4:30 PM
Room 24 (Ground Level of City Hall) and Zoom

**MEMBERS**
Brandon Mazer, Chair
David Silk, Vice Chair
Michael Fox
Nicholas Messina
Kelsey Robertson
Austin Smith
Joseph Zamboni

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## AGENDA:

**PUBLIC HEARING - 4:30 PM**

1. **ROLL CALL AND DECLARATION OF QUORUM**
2. **COMMUNICATION AND REPORTS**
3. **REPORT OF ATTENDANCE AT THE MEETING HELD ON MAY 13, 2025.**

   Workshop
   61 Preble Street: Messina, Robertson, Silk, Smith, and Zamboni present. Fox absent. Mazer recused.

   Public Hearing
   315 Cumberland Avenue: Messina, Robertson, Silk, Smith, and Zamboni present. Fox absent. Mazer recused.

4. **REPORTS OF DECISIONS AT THE MEETING HELD ON MAY 13, 2025.**

   i. Master Development Plan Amendment; 315 Cumberland Avenue; Reveler Development, Applicant. Smith motioned and Zamboni seconded a motion to approve the Master Development Plan Amendment. Vote 5-0 (Fox absent and Mazer recused). Smith motioned and Zamboni seconded a motion to adopt the approval letter as the Planning Board's decision, and to authorize the Board Chair to sign the approval letter as drafted. Vote 5-0 (Fox absent and Mazer recused).

5. **NEW BUSINESS**

   i. Major Site Plan and Subdivision; 9 Boyd Street; Cumberland Housing, LP, Mayo Housing, LP, and Portland Housing Development Corporation, Applicant. The Planning Board will hold a hybrid public hearing to consider a major site plan application to facilitate the development of two new multi-family affordable housing buildings. Phase 2, located at the corner of Cumberland Avenue and Boyd Street, will consist of 92 units. Phase 3, located at the intersection of Mayo and Oxford Streets, will consist of 27 units. The subject parcel is situated within the Mixed-Use B1 and B2b zoning districts. No on-site parking is proposed for this development. A project and plan summary are available for viewing on the city's CSS Portal (https://css.portlandmaine.gov/) by referencing Plan Number PL-003283-2025.

**WORKSHOP - 5:30 PM**

i. Major Site Plan and Traffic Movement Permit; 385 Congress Street; Portland Music Holdings, LLC, Applicant. The Planning Board will hold a hybrid workshop to consider a major site plan and traffic movement permit application to facilitate the development of an approximately 65,340 square foot entertainment venue with capacity for up to approximately 3,300 patrons, which would also include food and beverage services, administrative offices, and indoor and outdoor lounge area, and back-of-house operations areas. The subject property is located downtown, and is within the B-3 Downtown Business 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-003179-2024.

9 Boyd Street – Phases II and III
Major Site Plan Application
PL-003283-2025
Portland Housing Development Corporation, Applicant

| | | | |
|---|---|---|---|
| **Submitted to:** | Portland Planning Board | **Prepared By:** | Eric Freeman |
| **Public Hearing Date:** | May 27, 2025 | **Date:** | May 22, 2025 |

## I. INTRODUCTION

The Portland Housing Development Corporation (PHDC) has submitted a Major Site Plan and Subdivision application to facilitate the construction of two multifamily residential buildings with a total of 119 units, along with associated site landscaping and public realm improvements, on property located at 9 Boyd Street & 70 East Oxford Street in the B-1 and B-2b zones. This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code Site Plan Standards, Section 13.6 and Subdivision Standards, Section 14.4.

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 May 15 and May 16, 2025 edition of the Portland Press Herald.

**Applicant:** Portland Housing Authority.
**Applicant Representatives:** Acorn Engineering, Ryan Senatore Architecture



Figure 1: Perspective Rendering

## II. REQUIRED REVIEWS

| *Review* | *Applicable Standards* |
|---|---|
| Site Plan | Section 13.6 |
| Subdivision | Section 14.4 |

## III. PROJECT DATA

| | |
|---|---|
| Existing Zoning | B-1, B-2b |
| Property Size | 42,253 SF |
| Existing Use | Three, 10-unit public housing buildings |
| Proposed Development Program | Two multifamily buildings with a total of 119 residential unit along with site landscaping and public realm improvements. |

## IV. EXISTING CONDITIONS AND SURROUNDING AREA

The existing site is located at the intersection of Oxford and Boyd Streets in the East Bayside Neighborhood. Currently the "COMB" block consists of four, 10-unit multifamily buildings that were constructed in the late 1960's, and which are owned by the Portland Housing Authority. The block also features two small parking lots, grassed open space, and mid-block pedestrian connectivity between Mayo and Boyd Streets.

The site is located in the vicinity of two recent Portland Housing Authority redevelopment Projects that have added approximately 80 affordable housing units to the neighborhood. The development site features a steep grade, with the property sloping between six and ten percent, from Cumberland Avenue to Oxford Street.




Figure 2: The existing site

### PHASE I – 2024

Phase I of the COMB block redevelopment (PL-002845-2024) was approved by the Planning Board on July 9, 2024. Phase I would involve the construction of a six story, 55 -unit multifamily building at the corner of Boyd and Oxford Streets. This phase also included a shared courtyard, which would directly connect to open space developed under phases II and III. Six ADA parking spaces were included in this phase in a

parking lot accessed from Oxford Street. Phase I would also involve curb and sidewalk improvements along Boyd and Oxford Streets.

The full Staff Report for Phase I can be found here: [9 Boyd Street Staff Report (PL-002845-2024)]

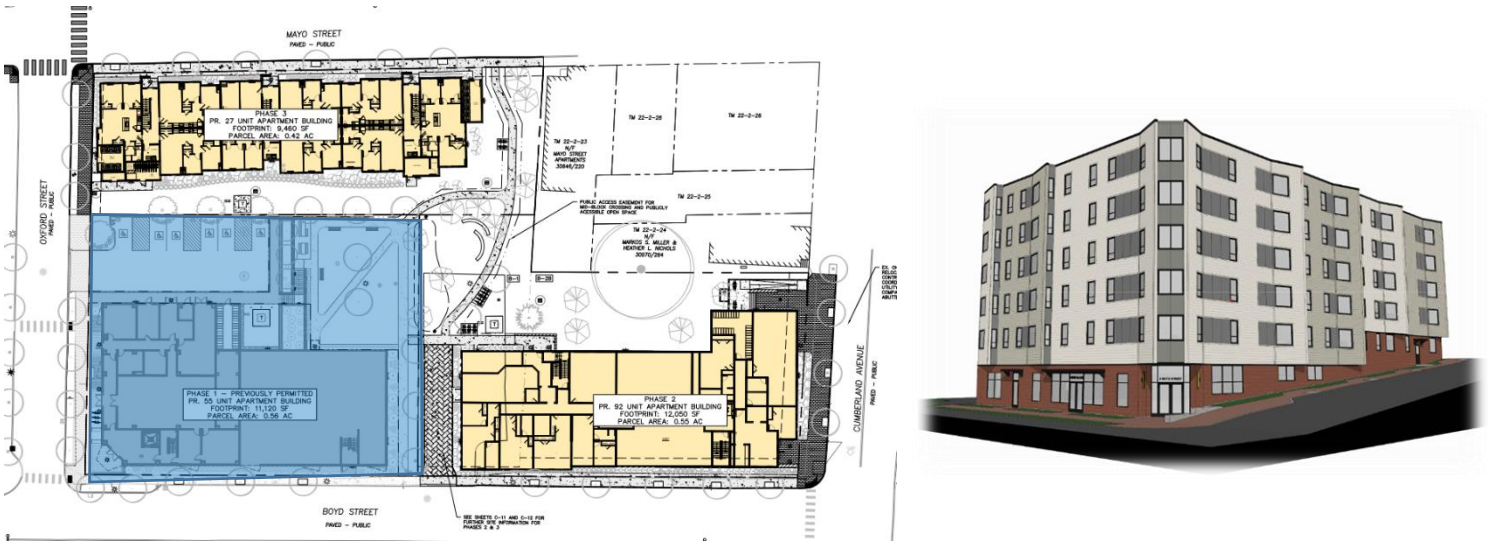



Figure 3: Phase I Site Plan and Rendering

## V. PROPOSED DEVELOPMENT

The proposed development involves two distinct phases of construction across two lots within the COMB block.

### PHASE II

Phase II of the COMB block redevelopment would involve the construction of a seven-story, 92-unit affordable housing building located at the corner of Boyd Street and Cumberland Avenue. The proposed building would include 82 affordable housing units and 10 market-rate units. The building would feature 45 studio units, 42 one-bedroom units and five two-bedroom units.

Given the significant grade change along Boyd Street, the first floor of the building would be a half-level and would house mechanical space, a fitness room and four residential units. This floor would also include a trash room with direct access to a service driveway. This driveway would allow service vehicles to access the site for maintenance, trash removal and deliveries. The service driveway would be paved with concrete pavers to allow for pedestrian access. No other vehicular access is proposed for Phase II.

The primary resident entrance and lobby area for the building would be located on the second floor of the building at the corner of Boyd Street and Cumberland Avenue. The second floor would also house a mail room, staff office, bicycle storage and a community room. Floors three through seven would be entirely residential. Each floor includes shared laundry facilities.

Phase II involves the reconstruction of approximately 170 feet of sidewalk on Boyd Street and 100 feet of sidewalk on Cumberland Avenue. Nine new street trees would be planted as part of Phase II, and new landscaping would be installed along the building's street frontages to provide visual buffering. Additional site landscaping includes nine new canopy trees, bushes, accent plantings and grassed open space. A

concrete pedestrian walkway would provide a direct, publicly-accessible connection from Boyd Street through the site to Mayo Street. Bike racks would be installed along the walkway.

Phase II would be served by existing public water, sewer and electrical infrastructure. The building would connect to existing water mains on Boyd Street with a 4-inch water service connection. Sewer service would be provided with a new connection to the existing 18-inch sewer main on Boyd Street.

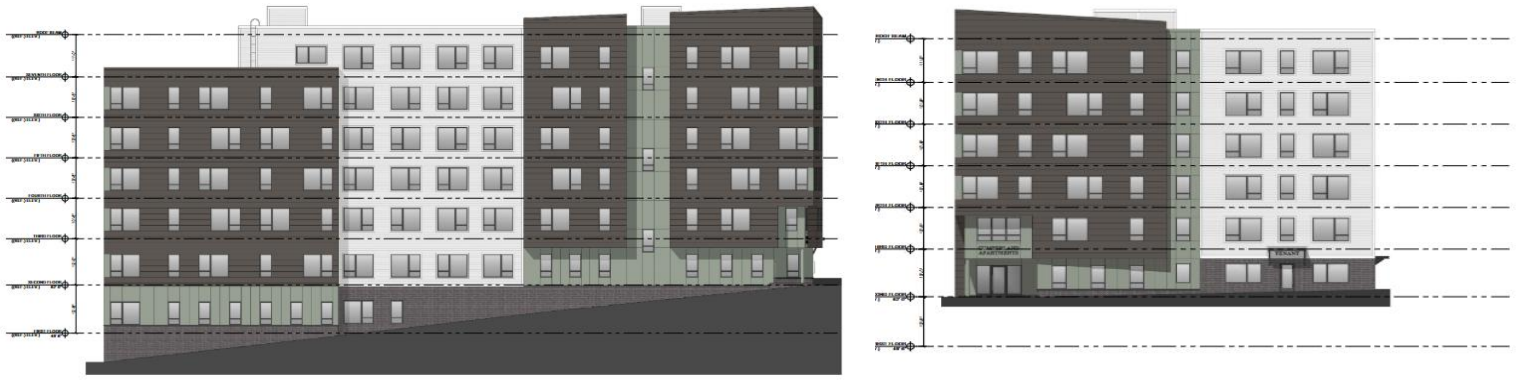


Figure 4: Phase II Elevations from Boyd Street and Cumberland Avenue

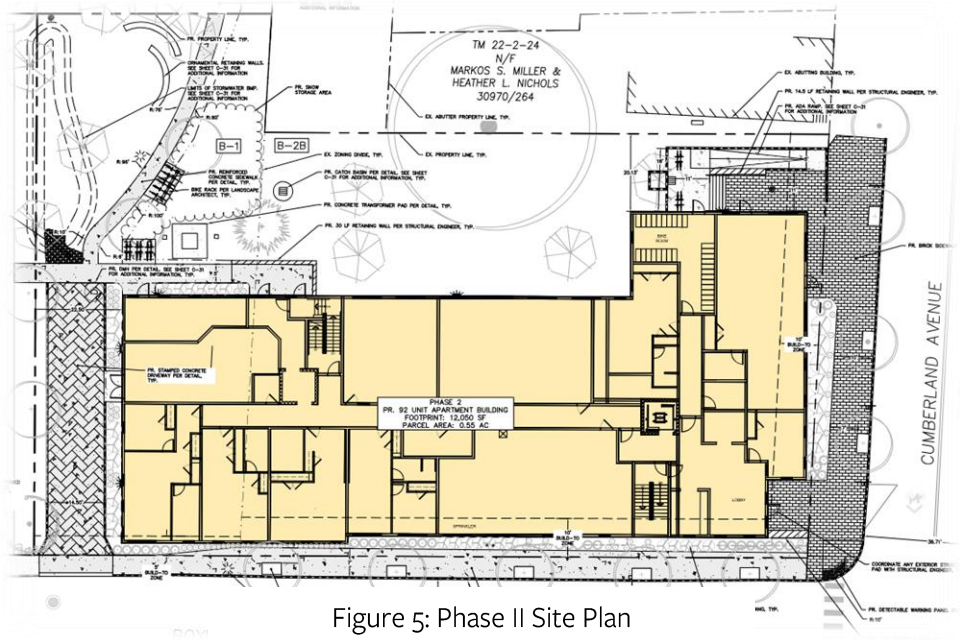



Figure 5: Phase II Site Plan

PHASE III

Phase III would involve the construction of a three-story, 27-unit townhome building located at the corner of Oxford and Mayo Streets. The building would feature 19 two-bedroom units and eight three-bedroom units.

The building is divided into three modules, each with its own primary entrance along Mayo Street. Each module would have its own internal circulation and shared laundry facilities. Solid waste rooms would be located on each end of the building, with one fronting Mayo Street and another fronting Oxford Street,

with these rooms being only accessible from the exterior of the building. Secure bike storage is provided at the rear of the building.

Phase III would involve the reconstruction of approximately 240 feet of sidewalk on Mayo Street and 100 feet along Oxford Street. Nine new street trees would be planted along Mayo and Oxford Streets. Additional site landscaping would include 10 new canopy trees, shrubs, accent plantings and grassed open space. Four new canopy trees would be planted to provide shade and buffering to the six-space parking lot provided as part of Phase I of the COMB block redevelopment. A concrete pedestrian walkway would provide a direct pedestrian access between Mayo Street and Boyd Street.
Phase III would be served by existing water and sewer services on Mayo Street. Stormwater treatment would be provided with catch basins directing stormwater flow to subsurface sand filter and stormwater detention tank located underneath the phase I parking lot.



Figure 6: Phase III Mayo Street Elevation

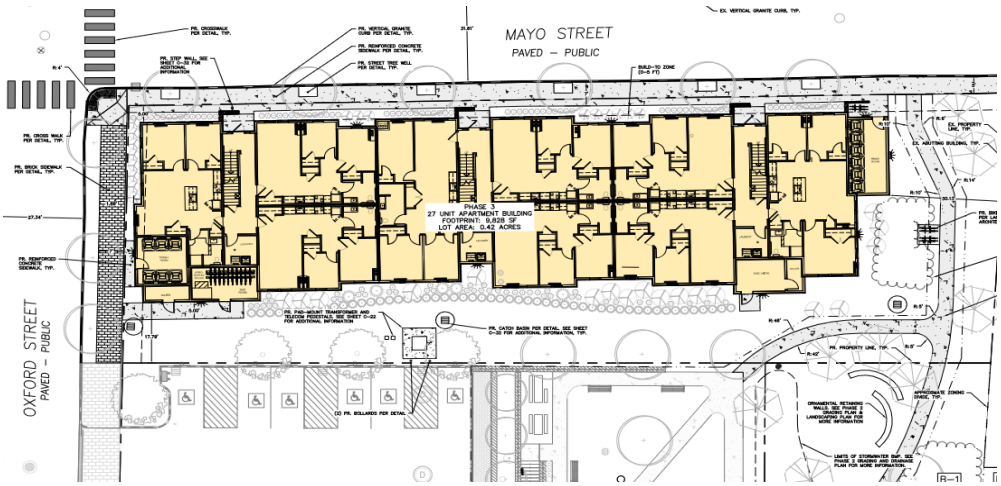



Figure 7: Phase III Site Plan

## VI. RIGHT, TITLE, & INTEREST

The applicant has demonstrated right, title and interest to the parcels involved in this application. Portland Housing Development Corporation (PHDC) is the co-applicant and developer, and the sole Manager of the COMB Block. PHDC is a Maine 501(c)(4) nonprofit corporation and directly affiliated with the Portland

Housing Authority.

Full Right, Title and Interest documentation is included as Attachment D

## VII. FINANCIAL & TECHNICAL CAPACITY

The applicant intends to submit this project to MaineHousing this fall for consideration for a 9% allocation award for Low Income Housing Tax Credits (LIHTC). The tax credits would generate equity to help fund the proposed redevelopment. A tax credit investor would be identified if a notice of an award is received.

PHDC has several relationships with banks and would be selecting a bank partner for construction financing. Typical terms are expected for this loan, which would extend the duration of the construction period with interest-only payments at a market-based interest rate typical of such loans.

Full financial capacity documentation is included as attachment G

Acorn Engineering and Ryan Senatore Architecture have demonstrated capacity and experience working on commercial and residential projects of a similar scale in Portland. (Attachment H)

## VIII. ZONING ANALYSIS

Phase II lies in both the B-1 and B-2b zones. Phase III lies within the B-1 zone. The proposed use is a use that is permitted by right within the B1 / B2-b zones.

| PHASE II | Required B-1 | Required B-2b | Proposed |
|---|---|---|---|
| Lot Size | None | None | 23,958 SF |
| Street Frontage | 20 ft. | None | 310 ft. |
| Build-to Zone | 0-5 ft. | 0-10 ft. | 3.2 ft / 5.2 ft. |
| Build-to Percentage | 100% | 100% | 100% |
| Rear Setback | None | None | 22.5 ft. |
| Building Height | 65 ft. (affordable housing bonus) | 75 ft. | 63 ft. / 74.5 ft. |
| Off-street parking spaces | None | None | None |

| PHASE III | Required B-1 | Proposed |
|---|---|---|
| Lot Size | None | 24,403 SF |
| Street Frontage | 20 ft. | 312 ft. |
| Build-to Zone | 0-5 ft. | 5 ft. |
| Build-to Percentage | 100% | 95% * |
| Building Height | 55 ft. | 44 ft. |
| Lot Coverage | Up to 100% | 44.6% |
| Landscaped Open Space | None | 38% |
| Off-street parking spaces | None | None |

A. Build-to Percentage

The applicant is requesting that the Board approve an exception to the build-to-zone requirement for the Phase III building, specifically for the two solid waste rooms, situated on either side of the proposed building. The applicant cites Sec. 7.6.5.B.2, which notes that build-to-zone requirements shall not apply to

secondary building components. Given the use of these rooms for solid waste storage, and the fact that they are not internally connected with the rest of the building, staff are supportive of this exception and recommend that the Board approve the additional setback for these attached structures, which extend approximately two feet beyond the build-to-zone requirement.

## IX. SITE PLAN STANDARDS (Section 13.6) | FINDINGS OF FACT

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 13.6. Review comments and Findings of Fact are provided below.

1. Transportation Standards (Section 13.6.1)

A. Impact on surrounding street systems

Vehicular access to the site would be limited to the service driveway behind the Phase II building along Boyd Street. No other vehicular connections to existing streets are proposed. Based on the information provided in the application materials this standard has been met.

B. Access and circulation

This application includes the reconstruction of sidewalks on all four street frontages of the COMB block. Given the steep grade descending from Cumberland Avenue towards Oxford Street, sidewalks along Boyd and Mayo Streets would be reconstructed using concrete pavers, while the sidewalks along Cumberland Avenue and Oxford Street would be rebuilt using brick. All of the sidewalks would be rebuilt to city standards.

The site does not feature any shared internal vehicular circulation. Internal pedestrian circulation within the site would be provided with publicly-accessible pathways connecting all three phases of the COMB block redevelopment and providing mid-block pedestrian permeability between Mayo and Boyd Streets. A public easement would be established within the open space area to guarantee public access through the site. Based on the information provided in the application materials this standard has been met.

C. Public transit access

The site is within ¼ mile of transit stops on METRO routes 1, 7, 8, 9A/B and Breez.

D. Parking

Per Article 18 off-street parking is not required. No off-street parking is proposed as part of this application. Phase I of the COMB block redevelopment included six ADA-accessible parking spaces, which can be utilized by residents of Phases II and III.

Secure bike storage is provided in each phase. A total of 46 bicycle spaces would be provided in Phase II and 20 spaces would be provided in Phase III. Each phase meets the City's requirement of one bicycle space per two dwelling units. Based on the information provided in the application materials this standard has been met.

E. Transportation demand management (TDM)
This application is not a commercial or mixed-use development and thus does not require a TDM plan. Therefore, this standard is not applicable.

2. Environmental Quality Standards (Section 13.6.2)

A. Preservation of significant natural features
Given that this is an urban infill site, there are no known significant natural features on this site. The applicant has provided a Low-Impact Development (LID) scorecard and received 82 points, which exceeds the threshold of 80 points required to demonstrate compliance with LID standards. Based on the information provided in the application materials this standard has been met.

B. Site landscaping and buffers
The site's interior would be planted with a mixture of canopy trees, understory trees, shrubs, and accent plantings. A total of 37 new trees are being proposed including 18 new street trees.

**Phase II:** Includes Nine new street trees; four on Cumberland Avenue and five on Boyd Street. This phase also includes eight internal shade tree plantings within the shared open space area. This phase will also include a landscaped flowerbed extending into the public right-of-way on Cumberland Avenue. The Department of Public Works has indicated that they are supportive of entering into a maintenance agreement with the applicant to allow landscaping to extend into the right-of-way.

**Phase III:** Includes nine new street trees; three on Mayo and six Oxford Street. 10 internal shade tree plantings are proposed. Canopy trees would be planted to provide buffering between the site and the Phase I parking area.

Additional site landscaping includes bushes, shrubs, flowerbeds and grassed open space. Open space areas for all three phases of the COMB block would be interconnected. Internal pathways and hardscaped areas will use concrete pavers that meet solar reflectivity standards.

The Phase II service driveway will be partially screened with three new shade trees located between the driveway and the Phase I building.

Based on the information provided in the application materials this standard has been met.




Figure 7: Landscaped open space area

C. Water quality / storm water management/erosion control

The project is required to provide for stormwater management in accordance with Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 standards for stormwater management. The Applicant has submitted a stormwater management report and a grading and drainage plan to indicate erosion and sedimentation control measures and stormwater treatment for the proposed development.

Phase II Stormwater infrastructure would consist of an underdrained soil filter and "Stormtree" BMP to provide treatment for non-roof impervious surfaces. An ADS Stormtech chamber system would be provided beneath the service driveway, which is routed to an outlet control structure to control discharge rates before entering the separated storm sewer in Boyd Street.

Phase III stormwater infrastructure would consist of catch basins and storm drains to connect the development to the detention & treatment system that was installed as part of Phase I, which was designed to have capacity for the Phase III landscaped and impervious area.

A full stormwater report is included as attachment I

Based on the information provided in the application materials this standard has been met.

## 3. Public Infrastructure and Community Safety Standards (Section 13.6.3)

A. Consistency with City Master Plans

There are no long-range plans that apply to this project.

B. Public safety and fire prevention

Emergency vehicles would be able to access the site via existing public streets and via the Phase II service driveway. Open space areas are designed with clear sightlines, and lighting to promote

public safety. Open space will be almost fully enclosed by residential buildings, which will promote natural surveillance of public spaces. All buildings feature secure resident entrances to provide controlled access to private spaces. Based on the information provided in the application materials this standard has been met.

C. Availability and capacity of public utilities

The proposed buildings would be served via underground electrical conduit, with a riser proposed on the utility pole along Boyd Street across from the Phase II parcel. Utility providers have been contacted to verify their ability to serve the proposed project. Central Maine Power and Portland Water district have provided ability to serve letters. The Phase II building would be connecting into the existing sanitary sewer main along Boyd Street, while the Phase III building would connect to sewer mains on Mayo Street. Based on the information provided in the application materials this standard has been met.

## 4. Site Design Standards (Section 14.6.4)

A. Massing, ventilation, and wind impact

The Phase II building is of similar height and scale to the existing "Solterra" building located at 58 Boyd Street and the approved Phase I building located at the corner of Boyd and Oxford Streets. The COMB block has been designed to ensure that larger multifamily buildings front Franklin Street, while the smaller Phase III building is smaller in scale as it abuts the East Bayside neighborhood.

There are no anticipated impacts with respect to building massing, ventilation, or wind, associated with this application. Based on the information provided in the application materials this standard has been met.

B. Shadows

The Phase II building is over 65 feet in height and requires a shadow impact analysis to demonstrate that the building would not have an adverse shadow impact on adjacent public spaces.

The applicant has provided a shadow analysis of the Phase II building demonstrating that shadow impacts to the Boyd Street community garden would be limited to early morning hours between March and August. The full shadow analysis is included as attachment 52. Based on the information provided in the application materials this standard has been met.

C. Snow and ice loading

The proposed building is not anticipated to create snow or ice loading impacts on abutting properties or rights-of-way. The applicant has detailed snow storage locations on the included plans. Based on the information provided in the application materials this standard has been met.

D. View corridors

The development as proposed does not obstruct any public view corridors as identified in the City of Portland Design Manual. This standard is not applicable.

E. Historic resources
The proposed building does not lie within a historic district and is not subject to Historic Preservation review. This standard is not applicable.

F. Exterior lighting
The proposed development includes full cutoff / dark sky compliant light fixtures to minimize light spillover. A full photometric plan and lighting schedule was included within the application. Proposed lighting fixtures outlined in the photometric plan meet the standards outlined in Section 8 of the Technical Manual. No architectural or specialty lighting is proposed. A full photometric plan included as attachment 51. Based on the information provided in the application materials this standard has been met.

G. Noise and vibration
HVAC, air handling units, and other necessary equipment would be installed on the building's rooftops within a screened mechanical penthouse. Given their placement, and the development's proximity to other residential development, such equipment is not anticipated to result in adverse noise or vibration impacts to abutting property. Based on the information provided in the application materials this standard has been met.

H. Signage and wayfinding
No wayfinding signage is proposed as part of this application. Therefore, this standard is not applicable.

I. Zoning-related design standards
The project was reviewed under the Land Use Code section 13.6.4.I for design standards in the B-1 mixed-use zones and as a multi-family residential development. Design review comments centered on building entrances, street-level windows, building materiality and open space programming. Staff requested the applicant examine building entrances to provide visual distinction and create a stronger sense of engagement with the street. Staff also requested the applicant provide additional information regarding programming and use of open space areas. A full design review can be found as attachments S1 and S2

## X. SUBDIVISION REVIEW

Section 14.4.1 of the City's Land Use Code establishes standards under which Subdivision applications must be reviewed. Per this section, Subdivisions shall adhere to the following requirements:

A. **Water or Air Pollution**
Refer to site plan assessment of stormwater management and erosion control.

B. **Sufficient Water Supply**
The applicant has provided an ability to serve request to the Portland Water District. The applicant will be required to provide a finalized ability to serve letter from PWD prior to issuance of a building permit.

C. **Impacts to Existing Water Supply**
Refer to site plan assessment of public utilities.

D. Soil Erosion & Stormwater Detention
Refer to site plan assessment of water quality, stormwater management, and erosion control standards.

E. Impacts to Highways & Public Roads
Refer to site plan assessment of transportation standards.

F. Adequate Sewer & Stormwater Disposal
A wastewater capacity authorization has been provided. Based on the information provided in the application materials this standard has been met.

G. Impacts to City Solid Waste & Sewage
This application would utilize a private hauler for solid waste removal. The applicant has provided a wastewater capacity authorizatio Water Resources staff have determined that existing sewer networks have adequate capacity to serve the proposed development. Based on the information provided in the application materials this standard has been met.

H. Adverse Impacts on Visual, Historic & Natural Resources
This application has demonstrated compliance with Low-Impact Development standards. The existing site does not feature historic resources. Based on the information provided in the application materials this standard has been met.

I. Compliance with Comprehensive Plan
The application fully complies with zoning and Site Plan requirements. The site is an urban redevelopment site which provides new housing capacity in an urban neighborhood, which is a goal identified in Portland's 2017 Comprehensive Plan. Based on the information provided in the application materials this standard has been met.

J. Financial and Technical Capacity
Refer to Section VII of this report.

K. Shoreland Zone Impacts
Not applicable. The project is not located within the shoreland zone.

L. Groundwater Quality & Quantity
Refer to site plan assessment of water quality, stormwater management, and erosion control. The proposed development provides stormwater treatment for waters that may infiltrate into the underlying soil and groundwater, and the development would be serviced by public water and waste-water. Based upon this, no adverse groundwater impacts are anticipated. Based on the information provided in the application materials this standard has been met.

M. Flood Risk
Not Applicable. The site is not located in a flood zone.

N. Stormwater Management

Refer to the site plan assessment of the site plan assessment of stormwater management. A full stormwater management report has been included as attachment I.

O. **Depth-to-Shore Frontage Ratio**
Not Applicable

## XI. NEIGHBORHOOD MEETING & PUBLIC COMMENT

The applicant held a neighborhood meeting on April 30, 2025 at 5:30 PM. The in-person meeting was held in the community room at the Solterra building located at 58 Boyd St. Five members of the public were in attendance. Public comment centered on construction phasing, parking and site buffering. A full sign-in sheet and meeting minutes are included as attachment T

## XII. STAFF RECOMMENDATION

Subject to the proposed motions and conditions of approval listed below, Planning & Urban Development Department staff recommends that the Planning Board find that the proposed Site Plan and Subdivision at 9 Boyd Street (PL-003283-2025) meets the applicable standards of Portland's Land Use Code.

## XIII. PROPOSED MOTIONS

### A. SUBDIVISION REVIEW

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 May 27, 2025 for application PL-003283-2025 at 9 Boyd Street relevant to the subdivision regulations; and the testimony presented at the Planning Board hearing, the Planning Board finds that the plan [is/is not] in conformance with the subdivision standards of the Land Use Code and [approves/does not approve] the application, subject to the following conditions:

PRIOR TO ISSUANCE OF A BUILDING PERMIT:

1. That the Subdivision Plat shall be finalized to the satisfaction of the Planning Authority, Department of Public Works, and Corporation Counsel prior to signature by the Planning Board,

2. The public access easement through the open space area shall be finalized to the satisfaction of the Planning Authority, Department of Public Works, and Corporation Counsel prior to the Planning Board signature of the subdivision plat.

### B. SITE PLAN REVIEW

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 May 27, 2025 for application # PL-003283-2025 at 9 Boyd Street relevant to the site plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board [finds/does not 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 APPLYING FOR A BUILDING PERMIT:

1. The Applicant shall submit a draft maintenance agreement for review and consideration by the Department of Public Works pertaining to the maintenance of landscaping and plantings within the Public Right-of-Way on Cumberland Avenue.

2. The applicant shall provide an ability to serve letter from the Portland Water District for both phases of the development

### C. PLANNING BOARD DECISION

On the basis of the findings, conclusions and recommendations contained in the Planning Board report for the public hearing on May 27, 2025 related to application PL-003283-2025 for 9 Boyd Street, which is attached to the draft approval letter and incorporated therein, the Planning Board **[adopts/does not adopt]** the approval letter as drafted as the Planning Board's decision for application PL-003283-2025 and authorizes the Planning Board Chair to sign the approval letter as drafted.

## ATTACHMENTS

### Public Comment

None Received

### Staff Materials

S1. Phase 2 Design Review
S2. Phase 3 Design Review
S3. Site Plan Review Worksheet

### Applicants Submittal

A. Cover Letter
B. Site Plan Checklist
C. Zoning Assessment
D. RTI
E. Easements
F. Site Plan & Subdivision Review Standards
G. Financial Capacity
H. Technical Capacity
I. Stormwater Management Report
J. Erosion and Sedimentation Control Report
K. Fire Department Letter
L. Wastewater Capacity
M. Lighting
N. Architectural Design Narrative
O. Utilities
P. Construction Management Report
Q. Solid Waste Disposal

R. Parking Analysis
S. Low Impact Design
T Neighborhood Meeting Certification
U. Comment Response Letter 5-14-25
V. Phase 2 - Design Review Response
W. Phase 3 - Design Review Response

## Drawings

1. Cover Sheet & Legend
2. General Notes
3. Subdivision Plat
4. Survey
5, Overall Site Plan
6. Phase 2 Site Plan
7. Phase 3 Site Plan
8. Phase 2 Grading & Drainage Plan
9. Phase 3 Grading & Drainage Plan
10. Phase 2 Utility Plan
11. Phase 3 Utility Plan
12. Utility Details -1
13. Utility Details - 2
14. Stormwater BMP Details
15. Drainage Details - 1
16. Drainage Details - 2
17. Site Details - 1
18. Site Details - 2
19. Erosion & Sedimentation Control Details
20. Erosion & Sedimentation Control Notes
21, Construction Management Plan - Phase 2
22. Construction Management Plan - Phase 3
23. Phase 2 Planting Plan
24. Phase 3 Planting Plan
25. Open Space Exhibit
26. Phase 2 First Floor Plan
27. Phase 2 Second Floor Plan
28. Phase 2 Third Floor Plan
29. Phase 2 Fourth Floor Plan
30. Phase 2 Fifth Floor Plan
31. Phase 2 Seventh Floor Plan
31. Phase 2 Sixth Floor Plan
32. Phase 2 South Elevation
33. Phase 2 East Elevation
34. Phase 2 North Elevation A
35. Phase 2 North Elevation B
36. Phase 2 West Elevation

37. Phase 2 Section 1
38. Phase 2 Section 2
39. Phase 2 Perspective Views
40. Phase 3 First Floor Plan
41. Phase 3 Second Floor Plan
42. Phase 3 Third Floor Plan
43. Phase 3 North & West Elevations
44. Phase 3 South & East Elevations
45. Phase 3 Materials
46. Phase 3 Perspective Views
47. Phase 3 Sections
48. Stormtech Details
49. Details
50. Details
51.Lighting Plan
52. Shadow Study

**Design Review**
**Planning and Urban Development Department**

| | |
|---|---|
| **Subject:** | 9 Boyd Street - Phase 2 |
| **Zone:** | B-1; B-2b |
| **Date of Review:** | Monday, May 5, 2025 |
| **Reviewer(s):** | Design Review |
| | Sean King (Urban Designer), Eric Freeman (Planner), Andrew Graminski (Planning & Development Review Manager), Neha Sunil Pol (Planner) |
| **Project ID:** | PL-003283-2025 |

## I. DESIGN REVIEW CRITERIA

The project at 9 Boyd Street Phase 2 was reviewed according to the City's Land Use Code section 13.6.4.I. for design standards in the B-1, B2-b mixed-use zones and as a multi-family residential development.

## II. REQUEST FOR ADDITIONAL INFORMATION

Staff requests additional information for the proposed mechanical equipment, appurtenances and screening at the roof level for the Phase 2 building. The Applicant is requested to submit the following:

1. Roof-level plans
2. Architectural renderings with long views to capture proposed rooftop appurtenance and screening

## III. DESIGN REVIEW COMMENTS: **bold** text denotes recent updates met, and **red** text denotes standards not met to require resubmission.

***(c) B1 & B-2b STANDARDS***

*a. Urban street wall: In the **B-1** and **B-2b** zones it shall be required that buildings shall be located to create and preserve an urban street wall*

Staff comment – Phase 2:
The proposed Phase 2 development creates an urban street wall along the majority of property frontages, except for a twenty-two-foot width break to accommodate a service driveway at Boyd Street and a twenty-foot break at the northeast corner of the building to allow for pedestrian access. In addition, the proposed Phase 2 building is minimally setback from the property frontage to allow for planting areas adjacent to the public sidewalk that Staff finds appropriate to screen less active building facades along Boyd Street.

*c. Building entrances: In the **B-1** and **B-2b** zones building entrances shall be oriented toward, located adjacent to, and directly accessible from, a sidewalk in a public right-of-way.*

Staff comment – Phase 2:
The proposed Phase 2 development locates two primary building entrances along Cumberland Ave. The building entrance, which is located at the corner of Boyd Street is proposed for residents and is recessed with lighting in the soffit. The other building entrance is located along Cumberland Ave for a community space and is articulated with a canopy. Staff recommends that the Applicant consider incorporating the proposed signage onto the canopies above both building entries for greater visibility of residents and community space users. In addition, Staff recommends that the Applicant consider extending or wrapping

the canopy above the community space entrance along Cumberland towards the northeast corner of the building.

d. *Windows: In the **B-1**, 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 – Phase 2:
The proposed Phase 2 development includes windows along the ground level at Cumberland Ave that allow for views into the building by passersby. Staff requests that the Applicant submit window specifications that indicate the window transparency to meet .7 or greater at the ground level.

The windows along the Boyd Street frontage are organized to provide privacy for the residential units at the ground level where the existing street grade slopes downward from Cumberland Ave. Staff recommends that the Applicant consider more expansive storefront windows at the Community Space along Cumberland Ave to provide additional visibility at the ground level.

**e.** *Façade character: In the **B-1**, 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 – Phase 2:
The proposed Phase 2 development achieves an active presence along the ground level of the building with articulated building entries and rhythm of fenestrations along Cumberland Ave. that Staff finds appropriate.

Staff observes that the existing street grade that slopes downward from Cumberland Ave creates challenges for the proposed façade, in particular the blank wall areas that cannot accommodate windows due to the interior building program. The Applicant has indicated screening with vegetation between the public sidewalk and building frontage that begins to buffer the blank façade. However, Staff recommends either a change in wall plane, masonry detailing, or a combination of architectural features along the Boyd Street façade and southwest corner to reduce the visual presence of the blank facades from the public sidewalk.

f. *Building design: **B-1**, B-2 and **B-2b** buildings shall be designed to be compatible with their residential and commercial neighbors.*

Staff comment – Phase 2:
The proposed Phase 2 building design incorporates a variety of façade planes and exterior materials that Staff finds to reduce the overall building scale that is compatible with the surrounding residential and commercial neighbors.

g. *Building materials: Façade materials of buildings located in the **B-1**, B-2 and **B-2b** zones shall be compatible with those materials of surrounding residential and commercial use.*

Staff comment – Phase 2:
Based on the submitted elevations and renderings, Staff finds that the proposed building façade materials are compatible with materials such as brick, cementitious panels, horizontal clapboard and trim commonly utilized throughout the surrounding residential buildings. Staff requests that the Applicant submit proposed façade materials and incorporate into the building elevations.

i. *Landscaping and buffers: In the **B-1**, 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 – Phase 2:
Staff finds that the Phase 2 development provides sufficient landscape screening around the perimeter of buildings and parking areas to buffer abutting properties.

(g) Multi-family standards. Multiple-family shall meet the following design standards:

1. *The exterior design of the proposed structure including architectural style, façade materials, roof pitch, building form and height, window pattern and spacing, porches and entryways, cornerboard and trim details, and facade variation in projecting or recessed building elements, shall be designed to complement and enhance the nearest residential neighborhood. The design of exterior facades shall provide positive visual interest by incorporating appropriate architectural elements;*

Staff comment: The surrounding context of the neighborhood is comprised of large footprint multi-family structures, two-to-four storied multi-family residential structures on individual parcels and single-family residences. Architectural style varies throughout the neighborhood and generally relates to each building's scale. The proposed Phase 2 development is directly comparable to the adjacent large footprint multi-family structures that include a flat roof form, façade variation through projections and varied exterior materials that Staff finds is compatible with the surrounding context.

Staff requests additional information for the proposed mechanical equipment, appurtenances and screening at the roof level for the Phase 2 building.

2. *The proposed development shall respect the existing relationship of buildings to public streets. New development shall be integrated with the existing city fabric and streetscape including building placement, landscaping, lawn areas, porch and entrance areas, fencing, and other streetscape elements;*

Staff comment: Staff finds the Phase 2 building located along Boyd Street and Cumberland Ave closely related to adjacent properties that orient buildings towards the street and provide various entries directly accessible from the public sidewalk for residents. In addition, Staff finds the buildings are minimally setback at the property frontage to provide appropriate width for a public sidewalk and street trees, as well as transitional space with plantings along the property frontage.

3. *Open space on the site for all … multiple-family development shall be integrated into the development site. Such open space in a special needs independent living unit or a multiple-family development shall be designed to complement and enhance the building form and development proposed on the site. Open space functions may include but are not limited to buffers and screening from streets and neighboring properties, yard space for residents, play areas, and planting strips along the perimeter of proposed buildings;*

Staff comment: The proposed Phase 2 development includes open space through a pathway network that is accessible for all residents, landscaping around building perimeters, lawn areas, and seating opportunities on the site and adjacent to the public sidewalk that Staff finds appropriate.

4. *The design of proposed dwellings shall provide ample windows to enhance opportunities for sunlight and air in each dwelling in principal living areas and shall also provide sufficient storage areas;*

Staff comment: Staff finds the allocation of windows for each proposed dwelling to be generally appropriate. In addition, sufficient storage is proposed within each dwelling unit.

5. *The scale and surface area of parking and driveways and paved areas are arranged and landscaped to properly screen vehicles from adjacent properties and streets;*

Staff comment: The development proposes to screen all surface parking areas with trees and shrubs from abutting properties that Staff finds acceptable.

**Design Review**
**Planning and Urban Development Department**

| | |
|---|---|
| **Subject:** | 9 Boyd Street - Phase 3 |
| **Zone:** | B-1 |
| **Date of Review:** | Monday, May 5, 2025 |
| **Reviewer(s):** | Sean King (Urban Designer), Eric Freeman (Planner), Andrew Graminski (Planning & Development Review Manager), Neha Sunil Pol (Planner) |
| **Project ID:** | PL-003283-2025 |

## I. DESIGN REVIEW CRITERIA

The project at 9 Boyd Street Phase 3 was reviewed according to the City's Land Use Code section 13.6.4.I. for design standards in the B-1 mixed-use zones and as a multi-family residential development.

## II. REQUEST FOR ADDITIONAL INFORMATION

Staff requests additional information for the proposed mechanical equipment, appurtenances, and screening at the roof level for the Phase 3 building. The Applicant is requested to submit the following:

1. Roof-level plans
2. Architectural renderings with long views to capture proposed rooftop appurtenance and screening

## III. DESIGN REVIEW COMMENTS: **bold** text denotes recent updates met, and **red** text denotes standards not met to require resubmission.

***(c) B1 & B-2b STANDARDS***

a. *Urban street wall: In the **B-1** zone it shall be required that buildings shall be located to create and preserve an urban street wall*

Staff comment – Phase 3:
The proposed Phase 3 development creates an urban street along the majority of property frontages with the exception of a twenty-nine-foot width break as an open space corridor on Mayo Street and a seventeen-foot width area break for service entries that Staff finds appropriate.

c. *Building entrances: In the **B-1** zone building entrances shall be oriented toward, located adjacent to, and directly accessible from, a sidewalk in a public right-of-way.*

Staff comment – Phase 3:
The proposed Phase 3 development locates a primary building entry for each of the three building modules articulated with a suspended canopy with soffit lighting that Staff finds appropriate and contextual with the surrounding neighborhood.

d. *Windows: In the **B-1** zone 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 passersby.*

Staff comment – Phase 3:

The proposed Phase 3 development includes windows along the ground level at Mayo Street, which the Staff finds do not need to allow views into the building to maintain privacy for residential units. Furthermore, the transitional planting space between the public sidewalk and the building provides for additional screening of residential units at the ground level that Staff finds appropriate.

**e.** *Façade character: In the **B-1** zone, 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 – Phase 3:
The proposed Phase 3 development is oriented toward the public sidewalk that includes building entries that are recessed, articulated with canopies and a clear fenestration pattern that Staff finds creates an active presence along the sidewalk.

f. *Building design: **B-1** buildings shall be designed to be compatible with their residential and commercial neighbors.*

Staff comment – Phase 3:
Staff finds the proposed Phase 3 building module design is compatible with the surrounding residential buildings with façade projections and arrangement of windows that step down to mitigate the existing grade change along Mayo Street.

g. *Building materials: Façade materials of buildings located in the **B-1** zone shall be compatible with those materials of surrounding residential and commercial use.*

Staff comment – Phase 3:
Based on the submitted elevations and renderings, Staff finds that the proposed building façade materials are compatible with materials such as brick, cementitious panels, horizontal clapboard, and trim commonly utilized throughout the surrounding residential buildings. Staff requests that the Applicant submit proposed façade materials and incorporate them into the building elevations.

i. *Landscaping and buffers: In the **B-1** zone 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 – Phase 3:
Staff finds that the Phase 3 development provides sufficient landscape screening around the perimeter of buildings and parking areas to buffer abutting properties.

(g) Multi-family standards. Multiple-family shall meet the following design standards:

1. *The exterior design of the proposed structure including architectural style, façade materials, roof pitch, building form and height, window pattern and spacing, porches and entryways, cornerboard and trim details, and facade variation in projecting or recessed building elements, shall be designed to complement and enhance the nearest residential neighborhood. The design of exterior facades shall provide positive visual interest by incorporating appropriate architectural elements;*

Staff comment: The surrounding context of the neighborhood is comprised of large footprint multi-family structures, two-to-four storied multi-family residential structures on individual parcels, and single-family residences. Architectural style varies throughout the neighborhood and generally relates to each

building's scale. The proposed Phase 3 development is directly comparable to the adjacent multi-storied residential structures that include flat roof forms, frequent façade variation with projecting window bays, articulated entrances, and exterior materials that Staff finds to complement the nearest residential neighborhood.

Staff requests additional information for the proposed mechanical equipment, appurtenances, and screening at the roof level for the Phase 3 building.

2. *The proposed development shall respect the existing relationship of buildings to public streets. New development shall be integrated with the existing city fabric and streetscape including building placement, landscaping, lawn areas, porch and entrance areas, fencing, and other streetscape elements;*

Staff comment: Staff finds the Phase 3 building located along Mayo Street and Oxford Street closely relates to adjacent properties that orient buildings toward the street and provide various entries directly accessible from the public sidewalk for residents. In addition, Staff finds the buildings are minimally setback at the property frontage to provide appropriate width for a public sidewalk and street trees, as well as transitional space with plantings along the property frontage.

3. *Open space on the site for all … multiple-family development shall be integrated into the development site. Such open space in a special needs independent living unit or a multiple-family development shall be designed to complement and enhance the building form and development proposed on the site. Open space functions may include but are not limited to buffers and screening from streets and neighboring properties, yard space for residents, play areas, and planting strips along the perimeter of proposed buildings;*

Staff comment: The proposed Phase 3 development includes open space through a pathway network that is accessible for all residents, landscaping around building perimeters, lawn areas, and seating opportunities on the site and adjacent to the public sidewalk that Staff finds appropriate.

4. *The design of proposed dwellings shall provide ample windows to enhance opportunities for sunlight and air in each dwelling in principal living areas and shall also provide sufficient storage areas;*

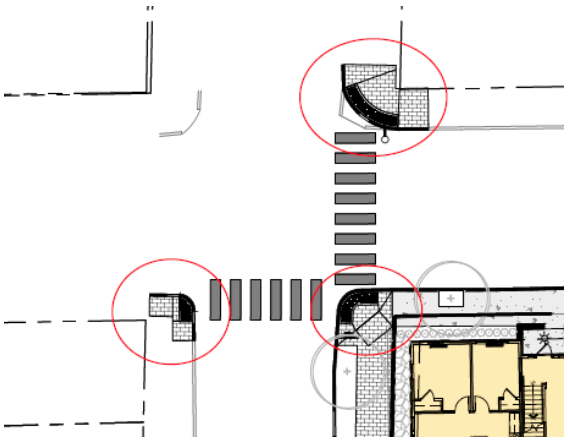
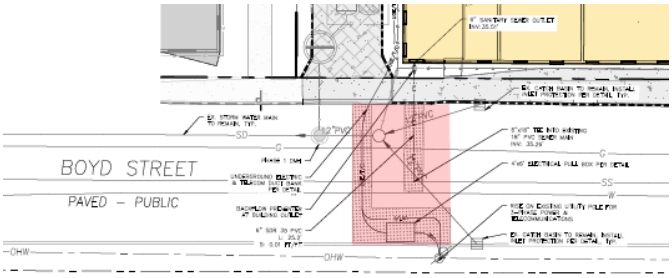
Staff comment: Staff finds the allocation of windows for each proposed dwelling to be generally appropriate. In addition, sufficient storage is proposed within each dwelling unit.

5. *The scale and surface area of parking and driveways and paved areas are arranged and landscaped to properly screen vehicles from adjacent properties and streets;*

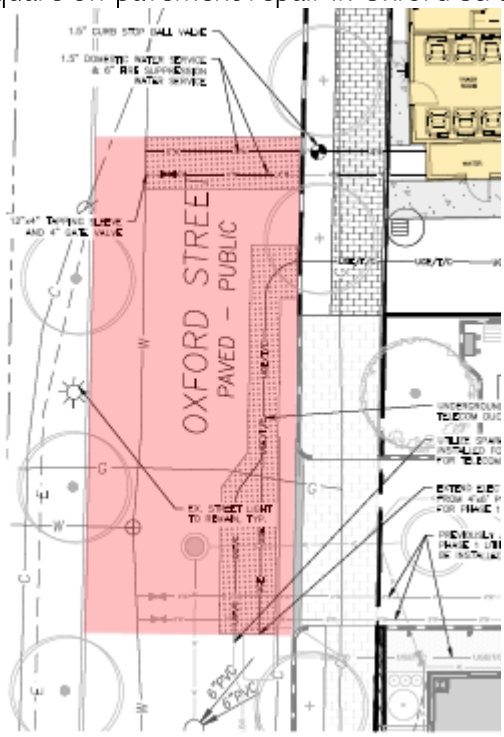
Staff comment: The development proposes to screen all surface parking areas with trees and shrubs from abutting properties that Staff finds acceptable.

# Site Plan Review Standards (Sec. 13.6)

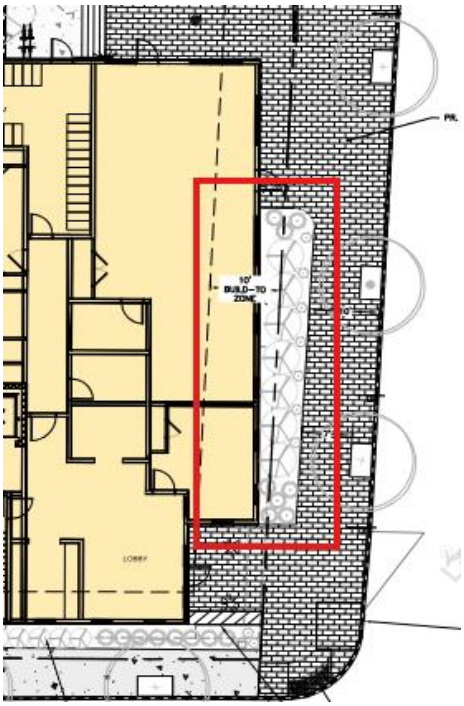
## Transportation Standards (Sec. 13.6.1)

| *Standard* | *Discussion* | *Finding* |
|---|---|---|
| *Impact on Surrounding Street Systems* | Overview:<br>This project is not expected to generate more than 100 vehicle trips per hour. A TMP is not required. The Phase II building will provide a driveway accessed via Boyd Street that will be used for building servicing and trash.<br><br>Updates Requested<br>• C-10 - Replace ramps at Oxford & Mayo intersection in concrete<br><br>• C-21 - Cumberland Ave is under Moratorium until 8/17/28. A moratorium repair will be required. The applicant shall get permission from the Department of Public Works prior to any work within the street Right of Way.<br><br>• C-21 - Square off pavement repair in Boyd Street<br> | Not Met |

- C-22 - Square off pavement repair in Oxford Street




- C-31 - Provide additional spot grades on the Boyd Street Curb Cut -.Is the pedestrian path slope ADA compliant?

| | | |
|---|---|---|
| | • Plantings and landscaping should not extend into City RoW along Cumberland Avenue<br> | |
| *Access and Circulation* | Overview:<br>Public sidewalks along Cumberland, Oxford, Mayo and Boyd Streets will provide direct pedestrian access to the site from all sides. Sidewalks will be improved and rebuilt using brick on Cumberland Avenue and Oxford Street, and concrete pavers on Boyd and Mayo Streets, Within the site, paved walkways will provide mid-block pedestrian access between building and to shared open space amenities. These walkways will be publicly accessible.<br><br>Curbing and ADA-complaint ramps will be installed at all corners.<br><br>Updates Requested<br><br>• Given the increase in pedestrian activity in the area, we request the applicant perform an assessment of providing a crosswalk across Cumberland Avenue at Boyd Street. There is concern that pedestrians will not walk to Franklin Street or to the east side of Locust Street to cross Cumberland Avenue<br><br>• Provide detail of the materiality of walkways within the site. | Not Met |

| | | |
|---|---|---|
| *Public Transit Access* | Overview:<br>The site is within ¼ mile of multiple METRO routes on Congress Street. The applicant is not proposing any off-site transit stop Improvements.<br>Updates Requested<br>• The applicant should consider coordinating with METRO regarding potential stop improvements on Congress Street | Met |
| Parking | Overview:<br>This application does not propose any new surface parking. There are six ADA parking spaces located in the previously approved first phase. Bicycle parking is provided in each building.<br>Updates Requested:<br>• None | Met |
| *Transportation Demand Management* | Overview:<br>This application does not require a TDM Plan.<br>Updates Requested<br>• None – Not applicable to this application. | Met |
| **Environmental Quality Standards (Sec. 14.6.2)** | | |
| *Standard* | *Discussion* | *Finding* |
| *Preservation of Significant Natural Features and Landscape Preservation* | Overview:<br>The site is a redevelopment within an existing urban neighborhood. There are no significant natural features on the site.<br>Updates Requested<br>• None | Met |
| *Site Landscaping and Buffers* | Overview:<br>This application proposes new street trees along Cumberland, Mayo and Boyd Streets. New trees will also be planted within the site in publicly accessible open space areas.<br><br>18 new trees will be planted as part of Phase II<br>19 new trees will be planted as part of Phase III<br><br>Solid waste containers will be located within the building and will not be visible from public rights of way.<br>Updates Requested<br>• None | Met |
| *Water Quality, Stormwater Management* | Overview:<br>This project is required to comply with Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 standards for stormwater management. The applicant has provided a full stormwater management report detailing pre and post-development conditions. Stormwater | Not Met |

| | | |
|---|---|---|
| *and Erosion Control* | treatment for Phases II and III will be partially treated by a previously approved stormwater system installed as part of Phase I<br><br>Updates Requested<br><br>• Please provide a narrative summarizing how impervious surface has been minimized (parking and driveway minimum dimensions, transportation alternatives provided, etc.).<br>•<br>• Please provide a narrative detailing what is innovative about the proposed site design and stormwater improvements proposed.<br><br>• The applicant has requested 6 points under the category "Treatment Requirements and Conveyance Achieved Through Vegetated Systems." While the treatment for the Phase 2 site work is addressed through a vegetated soil filter system, the Phase 3 treatment relies on a subsurface vault system. Given that only a portion of the overall treatment is achieved through vegetated means, we recommend that 3 points be awarded for this category. | |

## *Public Infrastructure and Community Safety Standards (Sec. 14.6.3)*

| *Standard* | *Discussion* | *Finding* |
|---|---|---|
| *Consistency with City Master Plans* | Overview:<br>There are no City Master Plans that apply to this application.<br><br>Updates Requested:<br>• None | Met |
| *Public Safety and Fire Prevention* | Overview:<br>Emergency vehicles will have access to the site via existing public streets. The applicant is working with City Staff to resolve questions related to site addressing.<br><br>Updates Requested<br>• None | Met |
| *Public Utilities* | Overview:<br>The project will be served by public water, gas, electrical, and telecom. Ability to Serve letters have been sent to the respective utility companies.<br>The Phase II building will connect to the existing sanitary sewer main on Cumberland Avenue. The Phase III building will connect to the existing sanitary sewer main on Mayo Street<br><br>Updates Requested<br>• None | Met |

## *Site Design Standards (Sec. 14.6.4)*

| *Standard* | *Discussion* | *Finding* |
|---|---|---|
| *Massing, Ventilation and Wind Impact* | Overview:<br>No impacts are anticipated<br>Updates Requested<br>• None | Met |
| *Shadow* | Overview:<br>Not applicable<br>Updates Requested<br>• None | Met |
| *Snow and Ice Loading* | Overview:<br>The applicant has provided a snow storage and removal plan.<br>Updates Requested<br>• None | Met |
| *View Corridors* | Overview:<br>Not Applicable – This site is not within a protected view corridor.<br>Updates Requested<br>• None – Not Applicable to this Application<br><br>Staff request that the applicant provide perspective views of the COMB block to better visualize built-out site and the potential visual impact of rooftop utilities. | Not Met |
| *Historic Resources* | Overview:<br>This site is not within a historic district<br>Updates Requested:<br>• Not Applicable | Met |
| *Exterior Lighting* | Overview:<br>The applicant has submitted a full lighting and photometric plan. Proposed lighting fixtures meet Technical Manual standards<br>Updates Requested<br>• None | Met |
| Noise and Vibration | Overview:<br>No significant noise or vibration impacts are anticipated<br>Updates Requested<br>• None | Met |
| Signage and Wayfinding | Overview:<br>No signage is proposed as part of this application<br>Updates Requested<br>• None | Met |
| Design Standards | Overview:<br>See attached design memo<br>Updates Requested<br>• See attached design memo | Not Met |

ACORN ENGINEERING, INC.

Planning & Urban Development Department
Attn: Matthew Grooms, Development Review Service Manager
City of Portland, Maine
389 Congress Street, 4th Floor
Portland, ME 04101

April 4, 2025

Subject: Major Site Plan Application – COMB Block Phases 2 & 3
70 East Oxford Street, Portland, ME

Mr. Grooms:

On behalf of Cumberland Housing, LP, Mayo Housing, LP and Portland Housing Development Corporation (PHDC), we are pleased to submit a Major Site Plan Application for a proposed affordable housing redevelopment in Portland's East Bayside neighborhood. The proposed project is within a 0.97-acre parcel located at 70 East Oxford Street (Chart 22, Block H1, Lot 1), otherwise known as the COMB Block (Cumberland-Oxford-Mayo-Boyd). The subject parcel (remaining land outside of previous Phase 1 approvals) is currently within two different zoning districts, including the Mixed-Use B1 (Mayo Street portion) and B2b (Cumberland Avenue portion) districts. The project proposes two multifamily buildings: Phase 2 at the corner of Cumberland Avenue and Boyd Street, and Phase 3 along Mayo Street at the intersection with Oxford Street.

Mayo Housing, LP and Cumberland Housing, LP are the applicants and owners of the developments located along Mayo Street and at the corner of Cumberland Avenue and Boyd Street respectfully. Portland Housing Development Corporation (PHDC) is the co-applicant and developer, and the Sole Manager of both Mayo Housing, LP and Cumberland Housing, LP. PHDC is a Maine 501(c)(4) nonprofit corporation and instrumentality of Portland Housing Authority (current landowner). PHA and PHDC have interlocking Boards and share the mission to preserve and expand affordable housing in Portland, Maine.

The Phase 2 building at the corner of Cumberland and Boyd will be a 92-unit multifamily consisting of (45) studios, (42) 1-bedroom, and (5) 2-bedroom units. This building will also contain amenities for residents and space for building management on the ground floor. The Phase 3 building along Mayo Street will be a 27-unit building with (19) 2-bedroom and (8) 3-bedroom units.

Site improvements associated with the project include reconstructed sidewalks along the project frontage of Cumberland, Oxford, Mayo, and Boyd Streets, with installation of street trees. Internal sidewalks will also be installed for site circulation between all buildings within the development and access to the open space constructed as part of Phase 1 and expanded with Phases 2 and 3. A stamped concrete access driveway will be installed west of the Phase 2 building for servicing the building. No parking is proposed to be constructed on site. The project will upgrade existing utilities servicing the site and install stormwater detention and treatment facilities to meet the City's stormwater requirements.

The project is subject to a Major Site Plan Development 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: Site Plan Checklist
- Section C: Zoning Assessment
- Section D: Right, Title, Interest
- Section E: Easements
- Section F: Site Plan & Subdivision Standards Assessment
- Section G: Financial Capacity
- Section H Technical Capacity
- Section I: Waiver Table
- 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: Low-Impact Design

Drawings:

- Civil Site Plan Set dated 4/4/25.
- Architectural Plan Set dated 4/4/25.
- Landscaping Plan Set dated 4/4/25.

## Planning & Urban Development Department

# MAJOR AND MINOR SITE PLAN DOCUMENT CHECKLIST

**Please submit each document as a separate PDF file.**
**Please confirm by electronically checking the boxes in the left-hand column.**

## General Application Documents

| Indicate Below | Required of All Applications |
|---|---|
| ☑ | **Project Description**<br>• Cover letter with detailed project description |
| ☑ | **Completed Checklist** (this document) |
| ☑ | **Evidence of Right, Title, and Interest**<br>• Deeds, leases, or purchase and sale agreements |
| ☑ | **Financial Capacity**<br>• Letter or evidence from a financial institution or third-party verifying financial capacity to undertake the project. |
| ☑ | **Technical Capacity**<br>• Evidence of technical capability of applicant and consultants – resume and/or examples of past projects. |
| ☑ | **Site Plan Standards**<br>• Summary of project compliance with site plan standards of the land use code. |
| ☑ | **ZoningAssessment** (the link to the form can be found **here**)<br>• Summary of compliance with use and dimensional standards of the land use code. |

| Indicate Below | | Only if Applicable |
|---|---|---|
| Yes | N/A | |
| ☑ | ☐ | **Waiver Requests** (the link to the form can be found **here**)<br>• Written request for waiver describing request and compliance with applicable waiver standards. |
| ☑ | ☐ | **Summary of Existing or Proposed Easements or Covenants**<br>• Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way. |
| ☐ | ☑ | **Evidence of State or Federal Approvals**<br>• Permits or letters of non-jurisdiction |

## Additional Documents

| Indicate Below | | Only if Applicable |
|---|---|---|
| Yes | N/A | |
| ☑ | ☐ | **Construction Management Plan**, including traffic control plan.<br>• Provide construction management narrative in accordance with the City's Construction Management Template. |
| ☐ | ☑ | **Traffic Study and/or other Transportation Plans**<br>• Detailed in Sec. 2 of the Technical Manual |
| ☐ | ☑ | **Significant Natural Features Narrative** |

| | | |
|---|---|---|
| | | • Identify significant natural features, wildlife habitats, fisheries habitats, or archaeological sites as detailed Ch. 14, Article 13, located on or near the project site, and describe protection methods during and after construction. |
| ☑ | ☐ | **Stormwater Management Report**<br>• Detailed in Sec. 14 of the Technical Manual |
| ☑ | ☐ | **City Master Plan Narrative**<br>• Detail project's consistency with City adopted Master Plans. |
| ☑ | ☐ | **Evidence of Utility Capacity**<br>• Provide letter from all utility providers demonstrating capacity to service the project. |
| ☑ | ☐ | **Solid Waste Narrative**<br>• Detail the amount of solid waste and recyclable material anticipated to be generated by the development, and information on how waste will be collected and removed. |
| ☑ | ☐ | **Life/Safety Code Analysis Narrative**<br>• Detail how the project complies with NFPA 1 and other Fire Department technical standards. |
| ☑ | ☐ | **Design Narrative**<br>• Detail how the project complies with any applicable design standards contained within the Land Use Code or City of Portland Design Manual. |
| ☐ | ☐ | **HVAC and Manufacturing Equipment Verification**<br>• Provide verification from manufacturer that equipment meets applicable state and federal emissions requirements. |
| ☐ | ☐ | **Low Impact Development (LID) Analysis**<br>• Provide a narrative detailing how the subdivision complies with the low impact development requirements listed in Section 3 of the Technical Manual, along with a completed LID scorecard. |

## MAJOR AND MINOR SITE PLAN DRAWINGS CHECKLIST

**Please upload the following drawings with the listed details into ProjectDox as separate PDFs. All drawings must be submitted in a 24 x 36 inch sheet size.**

### Boundary Survey (Stamped by a Licensed Surveyor in accordance with Sec. 14 of the Technical Manual)

### Site Plan(s) (Stamped by a Maine Licensed Professional Engineer)

| Indicate Below | |
|---|---|
| | **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, including firm that produced plans. |
| ☑ | North arrow |
| ☑ | Date of preparation and revision history block. |
| ☑ | Tax parcel (chart, block, and lot) number |

| Indicate Below | | |
|---|---|---|
| Yes | N/A | **Existing Conditions Plan** |
| ☑ | ☐ | 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 locations of test pits and borings |
| ☑ | ☐ | Zoning boundary lines, including overlays |
| ☑ | ☐ | Location of all existing easements and rights-of-way. |
| Indicate Below<br>Yes | N/A | **Proposed Site Plan** |
| ☑ | ☐ | 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 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 |
| Indicate Below<br>Yes | N/A | **Utility Plan** |
| ☑ | ☐ | 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 the site |
| Indicate Below<br>Yes | N/A | **Grading and Drainage Plan** |
| ☑ | ☐ | Proposed grades |
| ☑ | ☐ | Proposed stormwater management measures meeting Technical Manual standards |
| ☑ | ☐ | Any proposed alteration of a watercourse or wetlands |
| ☑ | ☐ | Any groundwater protection measures |
| ☐ | ☑ | Proposed buffers and preservation measures for wetlands or significant natural features |
| Indicate Below<br>Yes | N/A | **Landscape Plan** |
| ☑ | ☐ | Existing vegetation to be preserved and preservation measures |

| | | |
|---|---|---|
| ☑ | ☐ | Proposed landscaping, screening, and street trees, including caliper widths for trees |
| ☑ | ☐ | Planting schedule, including street trees detailing species, quantity of plantings, and size at planting. |
| Indicate Below<br>Yes | N/A | **Architectural Plans and Renderings** |
| ☑ | ☐ | Exterior building elevations, color renderings, illustrations of all sides. |
| ☑ | ☐ | Axonometric and street-level views for structures greater than three stories in height. |
| ☑ | ☐ | Context drawings |
| ☑ | ☐ | Floor plans |
| Indicate Below<br>Yes | N/A | **Construction Management Plan** |
| ☑ | ☐ | Specifics on traffic control, sidewalk sheds, and pedestrian rerouting |
| ☑ | ☐ | Construction management plan and narrative based upon site plan in accordance with the City's construction management template. |
| Indicate Below<br>Yes | N/A | **Other** |
| ☑ | ☐ | Details and cross-sections |

Portland, Maine Yes. Life's good here.

Planning & Urban Development Department

Phase 2 (Cumberland Ave Building)

ZONING ANALYSIS Relevant Zone(s) B1/B2

All Projects:

| | Required | Proposed |
|---|---|---|
| Lot Size | NA/NA | 0.55 AC |
| Area Per Dwelling Unit | NA/NA | 260 SF |
| Minimum Street Frontage | 20'/NA | 310' |
| Front Yard Minimum | NA/NA | 0.1' |
| Front Yard Maximum | NA/NA | 5.2' |
| Rear Yard | NA/NA | 22.5' |
| Yard Right | NA/NA | NA |
| Yard Left | NA/NA | NA |
| Side Street Setback | NA/NA | NA |
| Step Back | 0-5'/0-10' | 3.2'/5.2' |
| Maximum Lot Coverage | NA/NA | NA |
| Minimum Lot Coverage | NA/NA | NA |
| Maximum Height | 55'/75'* | 53.3' |
| Open Space | NA/NA | NA |
| Maximum Impervious Area | NA/NA | NA |
| Pavement Setback | NA/NA | NA |
| Floor Area Ratio | NA/NA | NA |
| Off Street Parking Spaces | NA/NA | 0 |
| Loading Bays | NA/NA | NA |
| Other 1 | NA/NA | NA |
| Other 2 | NA/NA | NA |
| Other 3 | NA/NA | NA |

*10' BONUS FOR ELIGIBLE AFFORDABLE HOUSING PROJECTS

## Planned Residential Unit Developments (PRUD) Requirements

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

## Affordable Housing Density Bonuses (if applicable)

| | Bonus Increase or Decrease | Maximum Allowable With Bonus | Proposed |
|---|---|---|---|
| Density | NA | NA | NA |
| Height | 10' | 65'/85' | 53.1'/64.1' |
| Setback Reduction | NA | NA | NA |
| Recreation Space | NA | NA | NA |
| Maximum Accessory Building Length | NA | NA | NA |
| Minimum Setbacks | NA | NA | NA |
| Minimum Building Separation | NA | NA | NA |
| Minimum Open Space | NA | NA | NA |
| | | | |
| Explanatory Text 1 (optional): | | | |
| Explanatory Text 2 (optional): | | | |
| Explanatory Text 3 (optional): | | | |

Phase 3 (Mayo St Building)

ZONING ANALYSIS Relevant Zone(s) B1/B2

All Projects:

| | Required | Proposed |
|---|---|---|
| Lot Size | NA/NA | 0.55 AC |
| Area Per Dwelling Unit | NA/NA | 260 SF |
| Minimum Street Frontage | 20'/NA | 310' |
| Front Yard Minimum | NA/NA | 0.1' |
| Front Yard Maximum | NA/NA | 5.2' |
| Rear Yard | NA/NA | 22.5' |
| Yard Right | NA/NA | NA |
| Yard Left | NA/NA | NA |
| Side Street Setback | NA/NA | NA |
| Step Back | 0-5'/0-10' | 3.2'/5.2' |
| Maximum Lot Coverage | NA/NA | NA |
| Minimum Lot Coverage | NA/NA | NA |
| Maximum Height | 55'/75'* | 53.3' |
| Open Space | NA/NA | NA |
| Maximum Impervious Area | NA/NA | NA |
| Pavement Setback | NA/NA | NA |
| Floor Area Ratio | NA/NA | NA |
| Off Street Parking Spaces | NA/NA | 0 |
| Loading Bays | NA/NA | NA |
| Other 1 | NA/NA | NA |
| Other 2 | NA/NA | NA |
| Other 3 | NA/NA | NA |

*10' BONUS FOR ELIGIBLE AFFORDABLE HOUSING PROJECTS

## Planned Residential Unit Developments (PRUD) Requirements

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

## Affordable Housing Density Bonuses (if applicable)

| | Bonus Increase or Decrease | Maximum Allowable With Bonus | Proposed |
|---|---|---|---|
| Density | NA | NA | NA |
| Height | 10' | 65'/85' | 53.1'/64.1' |
| Setback Reduction | NA | NA | NA |
| Recreation Space | NA | NA | NA |
| Maximum Accessory Building Length | NA | NA | NA |
| Minimum Setbacks | NA | NA | NA |
| Minimum Building Separation | NA | NA | NA |
| Minimum Open Space | NA | NA | NA |
| | | | |
| Explanatory Text 1 (optional): | | | |
| Explanatory Text 2 (optional): | | | |
| Explanatory Text 3 (optional): | | | |

# D. Evidence of Right, Title & Interest

Attached is documentation for the proposed project parcel which gives Portland Housing Development Corporation, Mayo Housing, LP and Cumberland Housing, LP right, title and interest for the proposed project.

Included is the Deed for the parcel, and Option Agreements for Phase 2 and 3 Parcels to PHDC and Cumberland Housing, LP and Mayo Housing, LP for each respective phase's parcel.

Portland Housing Development Corporation (PHDC) is the co-applicant and developer, and the Sole Manager of the COMB Block Phase One, LP General Partner. PHDC is a Maine 501(c)(4) nonprofit corporation and instrumentality of Portland Housing Authority (current landowner). PHA and PHDC have interlocking Boards and share the mission to preserve and expand affordable housing in Portland, Maine.

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THIS INDENTURE, dated as of the **second** day of **June**, 1970, by and between the PORTLAND RENEWAL AUTHORITY, a corporation incorporated and existing under and by virtue of the Private and Special Laws of the State of Maine, 1951, Chapter 217 and Amendments thereto (hereinafter sometimes referred to as the Authority) and the PORTLAND HOUSING AUTHORITY, a public body corporate and politic, duly organized and existing under the laws of the State of Maine and exercising public and essential governmental functions, of said Portland, County of Cumberland and State of Maine (hereinafter sometimes referred to as the "Redeveloper"):

WITNESSETH, That:

WHEREAS the Authority is the owner of the below described parcels of land and is desirous of conveying the same to the Redeveloper; and

WHEREAS the Authority has been duly authorized by virtue of an order by the City Council for the City of Portland which approved and authorized the execution and delivery of a quit claim deed with covenants from the Authority to the Redeveloper, duly passed on **May 4, 1970** and which order became effective on **May 14, 1970** and by virtue of a resolution of the Board of Commissioners of said Authority which approved and authorized the execution and delivery of a quit claim deed with covenants from said Authority to the Redeveloper adopted on **April 23, 1970** ; and

WHEREAS the Redeveloper is desirous of purchasing said parcels of land, subject to the encumbrances set forth herein,

NOW, THEREFORE, in consideration of the premises and of the mutual covenants herein contained and of the sum of Nine Thousand Two Hundred Forty ($9,240.00) Dollars paid by the Redeveloper to the Authority, the receipt whereof upon delivery hereof the Authority hereby acknowledges, the Authority does hereby remise, release, bargain, sell and convey, and forever quitclaim unto the Redeveloper, its successors and assigns, forever, the following described parcels of land:

1. Description of Parcel 38E

A certain lot or parcel of land situated on the northerly sideline of Cumberland Avenue, lying between Boyd Street and Mayo Street, in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at the intersection formed by the northerly sideline of Cumberland Avenue and the easterly sideline of Boyd Street; thence northwesterly by the easterly sideline of Boyd Street 158 feet, more or less, to land now or formerly of Arthur H. Wakefield and Eiryl Wakefield; thence in a general easterly direction by the southerly sideline of land now or formerly of said Arthur H. Wakefield et al 110 feet to the southeasterly corner of land of said Wakefield et al; thence northwesterly by the easterly sideline of land of said Arthur H. Wakefield et al 38 feet, more or less, to the southwesterly corner of land now or formerly of Giovina Ferrante; thence in a general easterly direction by the southerly sideline of said Ferrante 111 feet

more or less, to the westerly sideline of Mayo Street; thence in a general southerly direction by the westerly sideline of Mayo Street 58 feet, more or less, to the northeasterly corner of land now or formerly of the Portland Congregation of Jehovah's Witnesses, Inc; thence in a general westerly direction by the northerly sideline of land of said Jehovah's Witnesses Inc., to the northwesterly corner of land of said Jehovah's Witnesses, Inc.; thence in a general southerly direction by the westerly sideline of land of said Jehovah's Witnesses, Inc., and by land now or formerly of warren DiPietro and Grace DiPietro 144 feet, more or less, to the northerly sideline of Cumberland Avenue; thence in a general westerly direction by the northerly sideline of Cumberland Avenue 110 feet, more or less, to the intersection formed by said northerly sideline of Cumberland Avenue and the easterly sideline of Boyd Street and the point of beginning.

Together with all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises, and including all right, title and interest conveyed in any and to so much of Cumberland Avenue and Fox Street as was acquired by the Portland Renewal Authority as is described in a Statement of Taking dated November 30, 1962, and recorded in Cumberland County Registry of Deeds in Book 2720, page 251. Plan of said area being recorded in said Registry in Plan Book 61, pages 64 and 65.

Meaning and intending to convey and hereby conveying the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Hattie Branch by warranty deed dated May 3, 1963, and recorded in Cumberland County Registry of Deeds in Book 2747, Page 180, the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by William H. Ham et al, by Warranty Deed dated June 23, 1960, and recorded in Cumberland County Registry of Deeds in Book 2548, page 41, the lot of land conveyed to this Authority by Richard P. Twomey et al by Warranty Deed dated April 25, 1963 and recorded in Cumberland County Registry of Deeds in Book 2744, page 128, the lot of land conveyed to this Authority by Richard P. Twomey et al by Warranty Deed dated March 30, 1962 and recorded in Cumberland County Registry of Deeds in Book 2664, page 370, the lot of land conveyed to this Authority by Gordon T. Taylor et als, by deeds dated June 27, 1963 and recorded in Cumberland County Registry of Deeds in Book 2765, pages 351, 362, 367 and 373, the lot of land conveyed to this Authority by Laurina Ferrante et al by Warranty Deed dated February 10, 1962 and recorded in Cumberland County Registry of Deeds in Book 2660 page 479, and the lot of land conveyed to this Authority by Carmine DiLallo by Administrator's Deed dated October 17, 1967 and recorded in Cumberland County Registry of Deeds in Book 3015, page 339.

2. <u>Description of Parcel 36E</u>

A certain lot or parcel of land, situated on the southerly sideline of Oxford Street adjoining the easterly sideline of Boyd Street in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at the intersection formed by the southerly sideline of Oxford Street and the easterly sideline of Boyd Street; thence in a general easterly direction by the southerly

sideline of Oxford Street 145 feet, more or less, to land now or formerly of Gertrude M. Grady; thence in a general southerly direction by the westerly sideline of land of said Gertrude M. Grady 60 feet, more or less, to land now or formerly of Vincent Black and Laurebelle Black; thence in a general westerly direction by the northerly sideline of land of said Vincent Black et al 36.1 feet to land now or formerly of Clyde Harriman and Ethel Harriman; thence in a general northerly direction by the easterly sideline of land of said Clyde Harriman et al 10 feet, more or less to the northeasterly corner of land of said Clyde Harriman et al; thence in a general westerly direction by the northerly sideline of land of said Clyde Harriman et al 108 feet, more or less, to the easterly sideline of Boyd Street; thence in a general northerly direction by the easterly sideline of Boyd Street 47 feet, more or less, to the intersection formed by said easterly sideline of Boyd Street and the southerly sideline of Mayo Street, and the point of beginning.

Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises. Meaning and intending to convey and hereby conveying the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Arthur W. Simmons by Warranty Deed dated April 1, 1960 and recorded in Cumberland County Registry of Deeds in Book 2531, page 308, the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Mitchell D. Goffin by Warranty Deed dated April 1, 1960 and recorded in Cumberland County Registry of Deeds in Book 2531, page 310, the lot of land conveyed to the Portland Renewal Authority by Ralph Amergian by Warranty Deed dated September 17, 1965 and recorded in Cumberland County Registry of Deeds in Book 2922, page 268, and the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Mollie D. Finkelman by Warranty Deed dated May 6, 1960 and recorded in Cumberland County Registry of Deeds in Book 2535, page 479.

3. Description of Parcel 60

A certain lot or parcel of land situated on the southerly sideline of Oxford Street adjoining the westerly sideline of Mayo Street in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at the point of intersection formed by the southerly sideline of Oxford Street and the westerly sideline of Mayo Street; thence in a general westerly direction by the southerly sideline of Oxford Street 38 feet, more or less, to land now or formerly of Gertrude M. Grady; thence in a general southerly direction by the easterly sideline of land of said Grady 75 feet, more or less, to land now or formerly of Vincent Black and Laurebelle Black; thence in a general easterly direction by the northerly sideline of land of said Vincent Black et al 38 feet, more or less to the westerly sideline of Mayo Street; thence in a general northerly direction by the westerly sideline of Mayo Street 75 feet, more or less, to the southerly sideline of Oxford Street and the point of beginning.

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Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying the lot of land conveyed to this Authority by Val Valeriani et al, by Warranty Deed dated December 4, 1964, and recorded in Cumberland County Registry of Deeds in Book 2869, page 247.

4. Description of Parcel 26E

A certain lot or parcel of land situated on the northerly sideline of Oxford Street adjoining, in part, the easterly sideline of Boyd Street in the City of Portland, County of Cumberland and State of Maine, being more particularly described as follows:

Beginning at the intersection formed by the northerly sideline of Oxford Street and the easterly sideline of Boyd Street; thence in a general northerly direction by the easterly sideline of Boyd Street 105 feet, more or less, to land now or formerly of Maria Pesce; thence in a general easterly direction by the southerly sideline of land of said Pesce 110 feet, more or less, to land now or formerly of Nicholas DiPietro and Katherine DiPietro; thence in a general southerly direction by the westerly sideline of land of said Nicholas DiPietro et al 35 feet, more or less, to the southwesterly corner thereof; thence in a general easterly direction by the southerly sideline of land of said Nicholas DiPietro et al 45 feet, more or less, to land now or formerly of Mekail Amergian; thence in a general southerly direction by the westerly sideline of land of said Amergian 70 feet, more or less, to the northerly sideline of Oxford Stree; thence in a general westerly direction by the northerly sideline of Oxford Street 90 feet, more or less, to land now or formerly of Charles Rosenbloom; thence in a general northerly direction by the easterly sideline of land of said Rosenbloom 75 feet, more or less, to the northeasterly corner thereof; thence in a general westerly direction by the northerly sideline of land of said Rosenbloom 20 feet, more or less, to the northwesterly corner thereof; thence in a general southerly direction by the westerly sideline of land of said Rosenbloom, 75 feet, more or less to the northerly sideline of Oxford Street; thence in a general westerly direction by the northerly sideline of Oxford Street 31 feet, more or less, to its intersection with the easterly sideline of Boyd Street and the point of beginning.

This conveyance is made, subject to whatever rights the owners of the property at 81-83 Oxford Street may have to use and maintain a sewer line leading from their property to the sewer line in Boyd Street.

Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying the lot of land conveyed to this Authority by Santo DiDonato by Warranty Deed dated April 18, 1962, and recorded in Cumberland County Registry of Deeds in Book 2668, page 147, the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now

Portland Renewal Authority) by Bella R. Finkelman et al, by Warranty Deed dated September 21, 1960, and recorded in Cumberland County Registry of Deeds in Book 2564, page 42, the lot of land conveyed to this Authority by Steve A. Notis by Warranty Deed dated November 19, 1965, and recorded in Cumberland County Registry of Deeds in Book 2935, page 229, and the lot of land conveyed to this Authority by Mekail Amerikian et al by Warranty Deed dated June 7, 1966, and recorded in Cumberland County Registry of Deeds in Book 2960, page 403.

5. Description of Parcel 61

A certain lot or parcel of land situated on the westerly sideline of Mayo Street, in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at a point on the westerly sideline of Mayo Street, said point being 115 feet northerly of the point of intersection formed by said westerly sideline of Mayo Street and the northerly sideline of Oxford Street, said point also marking the northeasterly corner of land now or formerly of Nicholas DiPietro and Katherine DiPietro; thence in a general westerly direction by the northerly sideline of said Nicholas DiPietro et al 100 feet, more or less, to land now or formerly of Maria Pesce; thence in a general northerly direction by the easterly sideline of land of said Pesce and by land of Frank P. Briggs 45 feet, more or less to land now or formerly of Esther Pearl Hensley; thence in a general easterly direction by the southerly line of said Hensley 100 feet, more or less, to the westerly sideline of Mayo Street; thence in a general southerly direction by the westerly sideline of Mayo Street 45 feet, more or less, to the northeasterly corner of land now or formerly of Nicholas DiPietro et al and the point of beginning.

Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying the lot of land conveyed to this Authority by Paul J. McCormick, Jr. by deed dated December 13, 1961, and recorded in Cumberland County Registry of Deeds in Book 2649, page 346.

6. Description of Parcel 64

A certain lot or parcel of land situated on the northerly sideline of Oxford Street, adjoining the easterly sideline of Smith Street in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at the monument at the junction of the northeasterly side of Smith Street with the northwesterly side of Oxford Street and running thence northwesterly by Smith Street seventy (70) feet to a stake; thence northeasterly and parallel with Oxford Street, seventy-four (74) feet, eleven (11) inches to a stake; thence southeasterly in the rear of the house and adjoining land formerly of Charlotte R. Shaw, seventy (70) feet to Oxford Street; thence southwesterly by said Oxford Street seventy-three (73) feet to the point of beginning.

Also a certain strip of land in the rear of said house; said strip of land is described in the deed recorded in Cumberland County Registry of Deeds in Book 309, Page 466, as being bound and described as follows:

Beginning at a point on the northwesterly sideline of the premises herein above described at a point which is sixty (60) feet northeasterly of Smith Street; thence northwesterly by land formerly of one Orr, thirty (30) feet to land formerly of one Pennell, thence northeasterly by said Pennell land fourteen (14) feet to land formerly of one Shaw; thence southeasterly by said Shaw land thirty (30) feet to the premises hereinabove described; thence southwesterly by said premises fourteen (14) feet to the point of beginning.

Together with a right and easement in common with Margaret F. Mulkern, her heirs and assigns, to use a five (5) foot strip northeasterly of the boundary of land herein conveyed, or described in deed of Margaret F. Mulkern to this Grantor, dated May 16, 1958, recorded in said Registry of Deeds in Book 2411, Page 128.

Meaning and intending to convey and hereby conveying the lot of land conveyed to this Authority by YOUR HOME, INC., by Warranty Deed dated November 24, 1965, and recorded in Cumberland County Registry of Deeds in Book 2935, Page 227.

Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

7. Description of Parcel 29E

A certain lot or parcel of land situated on the northerly sideline of Oxford Street and the westerly sideline of Anderson Street, in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at the intersection formed by the northerly sideline of Oxford Street and the westerly sideline of Anderson Street; thence in a general westerly direction by the northerly sideline of Oxford Street 81 feet, more or less, to land now or formerly of Anacam, Inc.; thence in a general northerly direction by the easterly sideline of land of sand Anacam, Inc., 100 feet, more or less, to land now or formerly of Pearl E. Flaherty; thence in a general easterly direction by the southerly sideline of land of said Flaherty 81 feet, more or less, to the westerly sideline of Anderson Street; thence in a general southerly direction by the westerly sideline of Anderson Street 30 feet, more or less, to land now or formerly of Emma Florence Fitts; thence in a general westerly direction by the northerly sideline of land of said Fitts 45 feet, more or less, to the northwesterly corner of land of said Fitts; thence in a general southerly direction by the westerly sideline of land of said Fitts 30 feet, more or less, to the southwesterly corner of land of said Fitts; thence in a general easterly direction by the southerly sideline of land of said Fitts 45 feet, more or less, to the westerly sideline of Anderson Street; thence in a general southerly direction by the westerly sideline of Anderson Street 38 feet, more or less, to the northerly sideline of Oxford Street and the point of beginning.

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Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Margaret A. Mullen by Warranty Deed dated June 1, 1960, and recorded in Cumberland County Registry of Deeds in Book 2542, page 173, the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Peter E. Carpenter by Warranty Deed dated April 8, 1960, and recorded in said Registry in Book 2532, page 145, and the lot of land conveyed to this Authority by Maybelle E. Haley et al by Warranty Deed dated February 25, 1965, and recorded in said Registry in Book 2940, page 11.

8. Description of Parcel 48E

A certain lot or parcel of land situated on the easterly sideline of Smith Street, northerly of Oxford Street, and extending in part to the westerly sideline of Mayo Street in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at a point on the easterly sideline of Smith Street, said point being 100 feet, more or less, northwesterly of the intersection formed by said easterly sideline of Smith Street and the northerly sideline of Oxford Street, said point also marking the northwesterly corner of land now or formerly of Anthony G. Ciazzo and Mary R. Ciazzo; thence in a general northerly direction by the easterly sideline of Smith Street 100 feet, more or less, to land now or formerly of Robert W. Gunn; thence in a general easterly direction by the southerly sideline of land of said Gunn and by land now or formerly of Bronet Sanuk and Margaret L. Sanuk 115 feet, more or less, to the southeasterly corner of land of said Bronet Sanuk et al; thence in a general northerly direction by the easterly sideline of land of said Bronet Sanuk et al 30 feet, more or less, to land now or formerly of Jacob Lamport et al; thence in a general easterly direction by the southerly sideline of land of said Jacob Lamport et al 60 feet, more or less, to the westerly sideline of Anderson Street; thence in a general southerly direction by the westerly sideline of Anderson Street 65 feet, more or less, to land now or formerly of John F. Hughes; thence in a general westerly direction by the northerly sideline of land of said Hughes 84 feet, more or less, to the northwesterly corner thereof; thence in a general southerly direction by the westerly sideline of land of said Hughes and by land now or formerly of Pearl E. Flaherty 62 feet, more or less, to the southwesterly corner of land of said Flaherty and to a point on the northerly sideline of land now or formerly of Anacam, Inc; thence in a general westerly direction by the northerly sidelines of land now or formerly of Anacam, Inc., of Your Home, Inc., and of Anthony G. Ciazzo and Mary R. Ciazzo 110 feet, more or less, to the easterly sideline of Smith Street and the point of beginning.

Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying the lo

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of land conveyed to this Authority by the Administrator of Veterans' Affairs by deed dated February 13, 1968 and recorded in Cumberland County Registry of Deeds in Book 3030, page 108, the lot of land conveyed to this Authority by Salvatore, Inc., by Warranty Deed dated January 10, 1963, and recorded in Cumberland County Registry of Deeds in Book 2727, page 46, the lot of land conveyed to this Authority by Linwood B. Whitney et al, by Warranty Deed dated November 29, 1962, and recorded in Cumberland County Registry of Deeds in Book 2720, page 49, and the lot of land acquired by the Authority by condemnation action on June 9, 1965.

9. Description of Parcel 18C

A certain lot or parcel of land situated on the northerly sideline of Lancaster Street, adjoining the westerly sideline of Anderson Street in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at the point of intersection formed by the northerly sideline of Lancaster Street and the westerly sideline of Anderson Street; thence in a general westerly direction by the northerly sideline of Lancaster Street 105 feet, more or less, to land of the Portland Housing Authority; thence in a general northerly direction by the easterly sideline of land of said Portland Housing Authority 80 feet, more or less, to the southerly sideline of Anderson Lane; thence in a general easterly direction by the southerly sideline of Anderson Lane 69 feet, more or less, to land formerly of George Durfee and Mary Pinkham, now of the Portland Housing Authority; thence in a general southerly direction by the westerly sideline of land formerly of said George Durfee et al, on the following three courses: first, in a general southerly direction 23 feet to a point; thence in a general easterly direction 3 feet to a point, and, finally, in a general southerly direction 10 feet to the southwesterly corner of land formerly of said George Durfee et al; thence in a general easterly direction by the southerly sideline of land formerly of said George Durfee et al 33 feet to the westerly sideline of Anderson Street; thence in a general southerly direction by the westerly sideline of Anderson Street 47 feet, more or less, to the northerly sideline of Lancaster Street and the point of beginning.

Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now the Portland Renewal Authority), by A. Frances Robishaw, by Warranty Deed dated October 4, 1960, and recorded in Cumberland County Registry of Deeds in Book 2566, page 381, and the lot of land conveyed to this Authority by Constantino Piacentini, by Warranty Deed dated February 6, 1964, and recorded in said Registry in Book 2803, page 135.

10. Description of Parcel 12

A certain lot or parcel of land situated on the southerly sideline of Madison Street and lying between Anderson Street and Greenleaf Street, in the City of Portland, County of Cumberland

and State of Maine, and being more particularly described as follows:

Beginning at the corner formed by the intersection of the easterly sideline of Anderson Street with the southerly sideline of Madison Street; thence by said Madison Street N 66° 36' E 239.76 feet to the corner formed by the intersection of the southerly sideline of said Madison Street with the westerly sideline of Greenleaf Street; thence by said Greenleaf Street S 23° 27' 30" E 160.19 feet to the corner formed by the intersection of the westerly sideline of said Greenleaf Street with the northerly sideline of Monroe Street; thence by said Monroe Street S 66° 33' 30" W 239.69 feet to the corner formed by the intersection of the northerly sideline of said Monroe Street with the easterly sideline of said Anderson Street N 23° 29' W 160.36 feet to the point of beginning.

Said above described courses are magnetic and of the date of 1959.

Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying the lot of land conveyed to this Authority by the County of Cumberland by warranty Deed dated September 7, 1965, and recorded in Cumberland County Registry of Deeds in Book 2920, page 581.

11. Description of Parcel 13E

A certain lot or parcel of land situated on the southerly sideline of Monroe Street in the City of Portland, County of Cumberland and State of Maine, and being more particularly described as follows:

Beginning at a point on the southerly sideline of Monroe Street, said point being distant 80 feet easterly from the point of intersection of said southerly sideline of Monroe Street and the easterly sideline of Anderson Street, said point also marking the northeasterly corner of land now or formerly of Beverly Ann Hayden; thence in a general southerly direction by the easterly sideline of land of said Hayden 100 feet to the northwesterly corner of land now or formerly of Nicholas DiPietro and Katherine DiPietro; thence in a general easterly direction by the northerly sideline of land of said Nicholas DiPietro et al 40 feet to the northeasterly corner thereof; thence in a general southerly direction by the easterly sideline of land of said Nicholas DiPietro 80 feet to the northerly sideline of Oxford Street; thence in a general easterly direction by the northerly sideline of Oxford Street 120 feet, more or less, to the westerly sideline of Greenleaf Street; thence in a general northerly direction by the westerly sideline of Greenleaf Street; thence in a general northerly direction by the westerly sideline of Greenleaf Street 83 feet, more or less, to land now or formerly of King Butland; thence in a general westerly direction by the southerly sideline of land of said Butland 80 feet, more or less, to the southwesterly corner thereof; thence in a general northerly direction by the westerly

sideline of land of said Butland 33 feet, more or less, to the northwesterly corner thereof; thence in a general easterly direction by the northerly sideline of land of said Butland 80 feet, more or less, to the westerly sideline of Greenleaf Street; thence in a general northerly direction by the westerly sideline of Greenleaf Street 33 feet, more or less, to land now or formerly of Maurice G. Harding; thence in a general westerly direction by the southerly sidelines of land of said Harding and by land now or formerly of Perley V. Patrick and Alice R. Patrick 80 feet, more or less, to the southwesterly corner of land of said Perley V. Patrick et al; thence in a general northerly direction by the westerly sideline of land of said Perley V. Patrick et al 32 feet, more or less, to the southerly sideline of Monroe Street; thence in a general westerly direction by the southerly sideline of Monroe Street 80 feet, more or less, to land now or formerly of Beverly Ann Hayden and the point of beginning.

Also all right, title and interest, if any, in and to all passageways, lanes, streets or alleys adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying the lot of land conveyed to this Authority by the County of Cumberland by warranty Deed dated September 7, 1965, and recorded in Cumberland County Registry of Deeds in Book 2920, page 585, the lot of land conveyed to this Authority by Helen M. Jones, by Executor's Deed dated February 1, 1963, and recorded in said Registry in Book 2731, page 229, the lot of land conveyed to the Slum Clearance Authority (now Portland Renewal Authority) by Richard C. Payson et al by Quit Claim Deed dated November 3, 1960, and recorded in said Registry in Book 2575, page 167, the lot of land conveyed to this Authority by Annie M. Kelley, by warranty Deed dated November 24, 1961, and recorded in said Registry in Book 2645, page 412, and the lot of land conveyed to this Authority by Roland B. Roberts et al by Warranty Deed dated February 19, 1965, and recorded in said Registry in Book 2881, page 148.

12. Description of Parcel 20P

A certain lot or parcel of land situated on the southerly sideline of Lancaster Street westerly of Boyd Street in the City of Portland, County of Cumberland and State of Maine and being more particularly described as follows:

Beginning at a drill hole at the corner formed by the intersection of the westerly sideline of Boyd Street with the southerly sideline of Lancaster Street; thence from said point of beginning and by said Lancaster Street S 48° 56' 21" W 152.10 feet to an iron on the easterly sideline of the Franklin Street Arterial Highway; thence by said Franklin Street by a convex curve to the southeast, having a radius of 2,827.79 feet a distance of 112.77 feet measured on the arc thereof to an iron at a point of tangent in said Franklin Street; thence continuing by said Franklin Street S 48° 43' 15" E 31.98 feet to an iron at the former location of the northerly sideline of Heath Street; thence by said former location of Heath Street N 48° 56' 21" E 138.15 feet to a drill hole in the westerly sideline of Boyd Street; thence by said Boyd Street N 42° 21' 07" W 143.75 feet to the point of beginning. Said above described courses are based on true Meridian as determined by the Maine State Highway Commission.

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The above described premises are hereby conveyed subject to an easement granted to the City of Portland dated 1970 and recorded in Cumberland County Registry of Deeds in Book , Page

Also all right, title and interest, if any, in and to all passageways, alleys, streets and lanes adjoining, abutting and/or running with the above described premises.

Meaning and intending to convey and hereby conveying a part of the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority), by Sumner G. Whittier as Administrator of Veterans' Affairs, by Quit Claim Deed dated May 25, 1959, and recorded in Cumberland County Registry of Deeds in Book 2474, page 286, the lot of land conveyed to this Authority by Charles Boyd Coleman, by Quit Claim Deed dated January 17, 1962, and recorded in said Registry in Book 2656, Page 324; a part of the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Terese Hubbard, by Warranty Deed dated January 11, 1960, and recorded in said Registry in Book 2520, page 139, a part of the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Leonard Pelletier, by Warranty Deed dated April 7, 1960, and recorded in Said Registry in Book 2532, page 147, the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by Samuel C. Modes, by Warranty Deed dated October 28, 1959, and recorded in said Registry in Book 2508, page 265, the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority) by V. Grace Wood, by Warranty Deed dated August 4, 1959, and recorded in said Registry in Book 2490, page 354, and the lot of land conveyed to the Slum Clearance and Redevelopment Authority (now Portland Renewal Authority), by Edward L. Delaney, by Warranty Deed dated August 21, 1959, and recorded in said Registry in Book 2494, Page 316.

The above described premises are hereby conveyed subject to the following restrictions, covenants and agreements:

1. The redeveloper, its successors and assigns, will and shall devote the above described premises to the uses specified in the Redevelopment and Renewal Plan for the Bayside Park Urban Renewal Project, Me. R-1, dated the thirteenth day of February, AD 1958, approved by resolution of the Authority and by order of the City Council for the City of Portland under date of November 3, 1958, and duly recorded under date of November 3, 1958, in the Clerk's office for the City of Portland, Maine, in Volume 75, page 325, as amended to date and in accordance with the zoning ordinance for the City of Portland dated December 18, 1961.

2. The Redeveloper, its successors and assigns, will not and shall not devote the premises or any part thereof to any other use than the uses specified for the above described premises in accordance with said Plan, as amended to date or contrary to any of the applicable limitations or requirements of said plan.

3. The Redeveloper, its successors and assigns, will not

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and shall not effect any covenant, agreement, lease, or other instrument whereby the property is restricted on the basis of race, creed, color or national origin in the sale, lease or occupancy thereof, and will and shall comply with all Federal, State and local Laws, in effect from time to time, prohibiting discrimination or segregation by reason of race, religion, color or national origin in the sale, lease or occupancy of the property, and further, covenants and agrees not to discriminate on the basis of race, color, creed or national origin in the sale, lease or rental, or in the use or occupancy of the demised property or any improvement erected or to be erected therein, or any part thereof.

4. The Redeveloper, its successors and assigns, will not and shall not devote the premises or any part thereof except in accordance with the following special restrictions, covenants and agreements which are hereby made a part of this Indenture.

a) The Redeveloper shall construct on the premises hereby conveyed a housing project designated to provide housing for low-income families, in accordance with the Annual Contributions Contract as amended from time to time, between the Redeveloper and the Public Housing Administration.

b) The Redeveloper herein, its successors and assigns, shall not convey said premises to any person, firm or corporation other than a public body unless the deed by which such conveyance is effected shall contain the following covenant and restriction:

> "This conveyance is subject to all of the restrictions, covenants and agreements contained in the Indenture by which said premises were conveyed to the Portland Housing Authority, and in addition, the Grantee, its successors and assigns shall not reconstruct, demolish or subtract from the buildings and structures now on said land, nor make any additions thereto or extensions thereof without prior written approval of the Portland Renewal Authority, which approval shall not unreasonably be withheld.
>
> "The foregoing, like all of the other covenants contained in the aforesaid Indenture to the Portland

Housing Authority from the Portland Renewal Authority, shall be a covenant running with the land and shall be enforceable in the same manner as prescribed in the original Indenture from the Portland Renewal Authority for the enforcement of the covenants therein contained."

The covenants in this conveyance in Paragraphs 1, 2, 3, and 4 shall be covenants running with the land and covenants to the same effect, which shall be and shall be expressed to be covenants running with the land, shall be contained in any instruments from the Redeveloper or from its successors and assigns to any future Grantee or to its successors and assigns covering the premises or any portion thereof or interest therein. All such covenants shall be enforceable by the Portland Renewal Authority and its successors and assigns.

c) All covenants relating to discrimination as presented in paragraph three (3) of this instrument, shall be covenants running with the land in perpetuity.

It is intended and agreed that the covenants provided in Paragraphs 1, 2, 3, and 4 shall be covenants running with the land binding to the fullest extent permitted by law and equity for the benefit and in favor of, and enforceable by, the Authority , its successors and assigns, the City, and any successor in interest to the property, or any part thereof, and the owner of any other land (or of any interest in such land) in the project area which is subject to the land use requirements and restirctions of the Urban Renewal Plan and the United States (in the case of the covenant provided in paragraph 3) against the Redeveloper, its successors and assigns, and every successor in interest to the Property or any part thereof or any interest therein, and any party in possession or occupancy of the Property or any part thereof.

TO HAVE AND TO HOLD the same, together with all the privileges and appurtenances thereunto belonging, to the said Portland Housing Authority, its successors and assigns, to its use and behoof forever and the Authority does covenant with the said Portland Housing Authority, its successors and assigns, that it will warrant and forever defend the premises to it the said Portland Housing Authority, its successors and assigns

forever against the lawful claims and demands of all persons claiming by, through or under it.

ATTEST:

Thomas F. Valleau
Secretary

PORTLAND RENEWAL AUTHORITY

By Charles W. Redman, Jr.
Charles W. Redman, Jr.
Chairman

ATTEST:

George G. Mulligan
Secretary

PORTLAND HOUSING AUTHORITY

By Thomas F. Monaghan
Thomas F. Monaghan
Chairman

STATE OF MAINE
COUNTY OF CUMBERLAND, SS

Portland, Maine

On this 1st day of June, 1970, personally appeared Charles W. Redman, Jr., to me personally known, who, being by me duly sworn, did say that he is the Chairman of the Portland Renewal Authority; that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by the authority of its commission; and that said Charles W. Redman, Jr. acknowledged said instrument to be his free act and deed in his said capacity and the free act and deed of said corporation.

Before me,

Justice of the Peace
Notary Public

STATE OF MAINE
COUNTY OF CUMBERLAND, SS

Portland, Maine

On this 1st day of June, 1970, personally appeared Thomas F. Monaghan, to me personally know, who, being by me duly sworn, did say that he is the Chairman of the Portland Housing Authority; that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by the authority of its commission; and that said Thomas F. Monaghan acknowledged said instrument to be his free act and deed in his said capacity and the free act and deed of said corporation.

Before me,

X
Justice of the Peace
Notary Public

JUN 2 1970

REGISTRY OF DEEDS, CUMBERLAND COUNTY, MAINE
Received at 1 H 41 M P.M. and recorded in
BOOK 3129 PAGE 374 Edward P. Thyng Register

**OPTION TO PURCHASE AND LEASE AGREEMENT**
(COMB Block Phase 1 – Land Only)

THIS OPTION TO PURCHASE AND LEASE AGREEMENT ("Agreement") dated this 11th day of March, 2024, is by and among PORTLAND HOUSING AUTHORITY, a public body corporate and politic organized as Maine municipal housing authority having a mailing address of 970 Baxter Boulevard, Portland, ME 04103 ("PHA"), PORTLAND HOUSING DEVELOPMENT CORPORATION, a Maine nonprofit corporation having a mailing address of 970 Baxter Boulevard, Portland, ME 04103 or its assigns ("PHDC"), and COMB BLOCK PHASE ONE, LP, a Maine limited partnership having a mailing address of 970 Baxter Boulevard, Portland, ME 04103, or its assigns ("LP") .

RECITALS

WHEREAS, PHA is the owner of a certain parcel of land at 20 & 24 Mayo Street and 9 & 25 Boyd Street, Portland, Maine and all improvements, buildings and fixtures presently on said land (the "Property"); and

WHEREAS, PHA has applied to the Department of Housing and Urban Development Special Application Center ("HUD") for authority to demolish the existing buildings, to remove the Property from the Public Housing Program through a disposition under Section 18 of the United States Housing Act of 1937 (collectively, the "Disposition"), and develop new Project Based Section 8 affordable housing (the "New Project"); and

WHEREAS, in order to facilitate the New Project, PHA wishes to grant to PHDC and option to purchase a portion of the Property approximately shown on the survey attached hereto as **Exhibit A** (the "Premises") on the terms set forth herein;

WHEREAS, in order to facilitate the financing and development of the New Project using Federal Low Income Housing Tax Credits ("LIHTC"), PHDC wishes to grant to LP an option to lease the Premises through a long-term ground lease on the terms set forth herein (the "Ground Lease").

NOW, THEREFORE, in consideration of one dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Option Period; Exercise of Option. PHA hereby grants PHDC the option to purchase the Premises (the "Purchase Option") for a period extending through December 31, 2027 (the "Option Period"). Concurrent with the Purchase Option and for the Option Period, PHDC hereby grants LP an option to lease the Premises (the "Lease Option" and collectively with the Purchase Option, the "Options").

    a. PHDC and LP may exercise the Options at any time during the Option Period by giving written notice to PHA of their intent to exercise the Option (the "Option Notice"). Said Option Notice shall also serve as notice to PHDC of LP's desire to exercise the Lease Option. An Option Notice signed by both PHDC and LP and

delivered to PHA by hand or certified mail, return receipt request is sufficient notice of both Options.

b. The Options and the obligation of PHA, PHDC and LP to perform their respective obligations hereunder shall be conditional upon (i) approval by HUD of Disposition (ii) receipt of all required municipal and state approvals for the development of the New Project; (iii) an award of LIHTC for the New Project.

2. Purchase Price. Subject to adjustment as set forth below, PHDC shall pay PHA a purchase price equal to One Dollar ($1.00) (the "Purchase Price") plus any additional amount that HUD may require be paid to PHA in connection with the Disposition.

3. Lease Terms. If the Lease Option is exercised, the Ground Lease from PHDC to LP will be for a term of 95 years, with rent due for entire term equal to $10.00 and all operating expenses to be paid by LP, or such other terms as the lenders and investors for the New Project may require.

4. Closing. If PHDC and LP exercise the Options, closing shall take place at a date, time and location mutually agreed upon by PHA, PHDC and LP ("Closing").

5. Conditions to Closing. If PHDC and LP exercise the Options, the following terms and provisions shall apply:

a. PHA, PHDC, and LP respective obligations to close on the transactions contemplated herein shall be conditioned upon (i) approval of the Disposition by HUD; (ii) receipt of all required municipal and state approvals for the New Project; (iii) and an award of LIHTC for the New Project.

b. Title to the Premises shall be conveyed to PHDC by good and sufficient Quitclaim Deed with Covenant, free from encumbrances except provisions of existing building and zoning laws and any covenants and/or easements of record provided same do not interfere with the intended use of the New Project; such real estate taxes for the then current tax period which are not due and payable on the date of delivery of such deed; utility and access easements in common with areas retained by PHA's, and any matters of record which in PHDC and LP's opinion does not interfere with the New Project. PHDC and LP shall notify PHA of any defects in title that would make PHA unable to give title to the Premises as herein stipulated. PHA shall be obligated to proceed in good faith to cure any such title defect(s). If required, the Closing shall be extended to allow PHA time to cure any such title defects, but in no event shall the Closing be extended more than thirty (30) days for such purposes. If a title defect exists, PHDC and LP may elect, by written notice to PHA, either (i) to accept title to the Premises subject to any uncured defects in title or (ii) to terminate the Option, whereupon any extension fee(s) paid by PHDC or LP to PHA shall be immediately refunded to PHDC or LP as the case may be, the obligations of all parties hereunder shall cease, and neither party shall have any claim against the other by reason of this Agreement;

c. Each party shall pay one-half of the Maine state transfer tax unless one of the parties is exempt, in which case no transfer tax shall be due from the exempt party.

6. Representations.

a. PHA represents, covenants and warrants to PHDC and LP that:

i. PHAis the current owner of the Premises, and, subject to approval by HUD, has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by PHA of the obligations hereunder will not conflict with, or result in breach of any regulation, order, judgment, injunction or decree of any court or governmental authority or any agreement or instrument to which PHA is a party or by which PHA is bound.

ii. There are no agreements or contracts affecting the Premises or any use of the Premises that would not be terminable at will by PHDC without penalty from and after the Closing, other than those for which PHA will be seeking approval from HUD in connection with its Disposition application.

b. PHDC represents, covenants and warrants to PHA and LP that PHDC has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by PHDC of its obligations hereunder: (i) have been duly authorized by all requisite action; and (ii) will not conflict with, or result in a breach of, any of the terms, covenants and provisions of the by-laws or articles of organization of PHDC or any law or any regulation, order, judgment, writ, injunction or decree of any court or governmental authority, or any agreement or instrument to which PHDC is a party or by which it is bound.

c. LP represents, covenants and warrants to PHA and PHDC that LP has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by LP of its obligations hereunder: (i) have been duly authorized by all requisite action; and (ii) will not conflict with, or result in a breach of, any of the terms, covenants and provisions of the by-laws or articles of organization of LP or any law or any regulation, order, judgment, writ, injunction or decree of any court or governmental authority, or any agreement or instrument to which LP is a party or by which it is bound.

7. Notice. Whenever notice is given or required to be given by either of the parties hereto to the other, it shall be deemed to have been given if in writing and mailed by certified or registered mail, return receipt requested, postage prepaid, or hand delivered, addressed to the parties at the address set forth in the first paragraph above or to such other address(es) as either party shall have last designated by like notice in writing. All notices shall be effective upon hand delivery or mailing, whichever first occurs.

8. Further Assurances. The parties agree that up to and after the date of Closing, they shall do such things and execute, acknowledge and deliver any and all additional instruments,

documents and materials as either party may reasonably request to fully effectuate the purposes of this Agreement.

9. Buyer's Access. PHDC and LP and others whom they may designate shall have the right, at all reasonable times, at PHDC or LP's sole cost and expense, risk and hazard, to enter upon the Premises to examine and/or show the same and make, or cause to be made, engineering studies with respect thereto, including, without limitation, surveying, conducting test borings in order to determine sub-soil conditions, and in general conducting all other tests, analysis and studies of the Premises which PHDC or LP deems prudent in connection with the Disposition and the New Project. PHDC or LP (as the case may be) shall restore the Premises following any testing as reasonably as possible to its pre-existing condition, unless otherwise agreed by PHA.

10. Construction of Agreement. This instrument, executed in duplicate, is to be construed as a Maine contract, is to take effect as a sealed instrument, sets forth the entire contract between the parties, is binding upon and inures to the benefit of the parties hereto and their respective heirs, devisees, executors, administrators, successors and assigns, and may be canceled, modified or amended only by a written instrument executed by PHA, PHDC and LP. The captions are used only as a matter of convenience and are not to be considered a part of this Agreement or to be used in determining the intent of the parties to it. Time is of the essence with respect to all dates set forth in this Agreement.

11. Risk of Loss. At all times until Closing, the risk of loss shall remain with PHA.

12. Assignment. PHDC or LP may assign their interest in this Agreement to any party affiliated with PHDC or LP and formed for the purpose of carrying out the New Project.

*Remainder of Page Intentionally Blank – Signature Page to Follow*

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

**PORTLAND HOUSING AUTHORITY**
By: _____
Brian Frost
Its: Executive Director

**PORTLAND HOUSING DEVELOPMENT CORPORATION**
By: _____
Brian Frost
Its: President

**COMB BLOCK PHASE ONE, LP**
**By: COMB Block Development, LLC**
By: _____
Brian Frost
Its: President

STATE OF MAINE

COUNTY OF CUMBERLAND, SS. March 11, 2024

Personally appeared the above-named, Brian Frost, Executive Director of Portland Housing Authority, President of Portland Housing Development Corporation, and President of PortHouse, LLC, the general partner of Franklin Towers, LP and acknowledged the foregoing instrument to be his free act and deed and the free act and deed of the foregoing entities.

Before me,

_____
Notary Public/Attorney at Law

Printed Name

Cynthia R. LaRochelle
Notary Public - Maine
My Commission Expires
11/09/2027

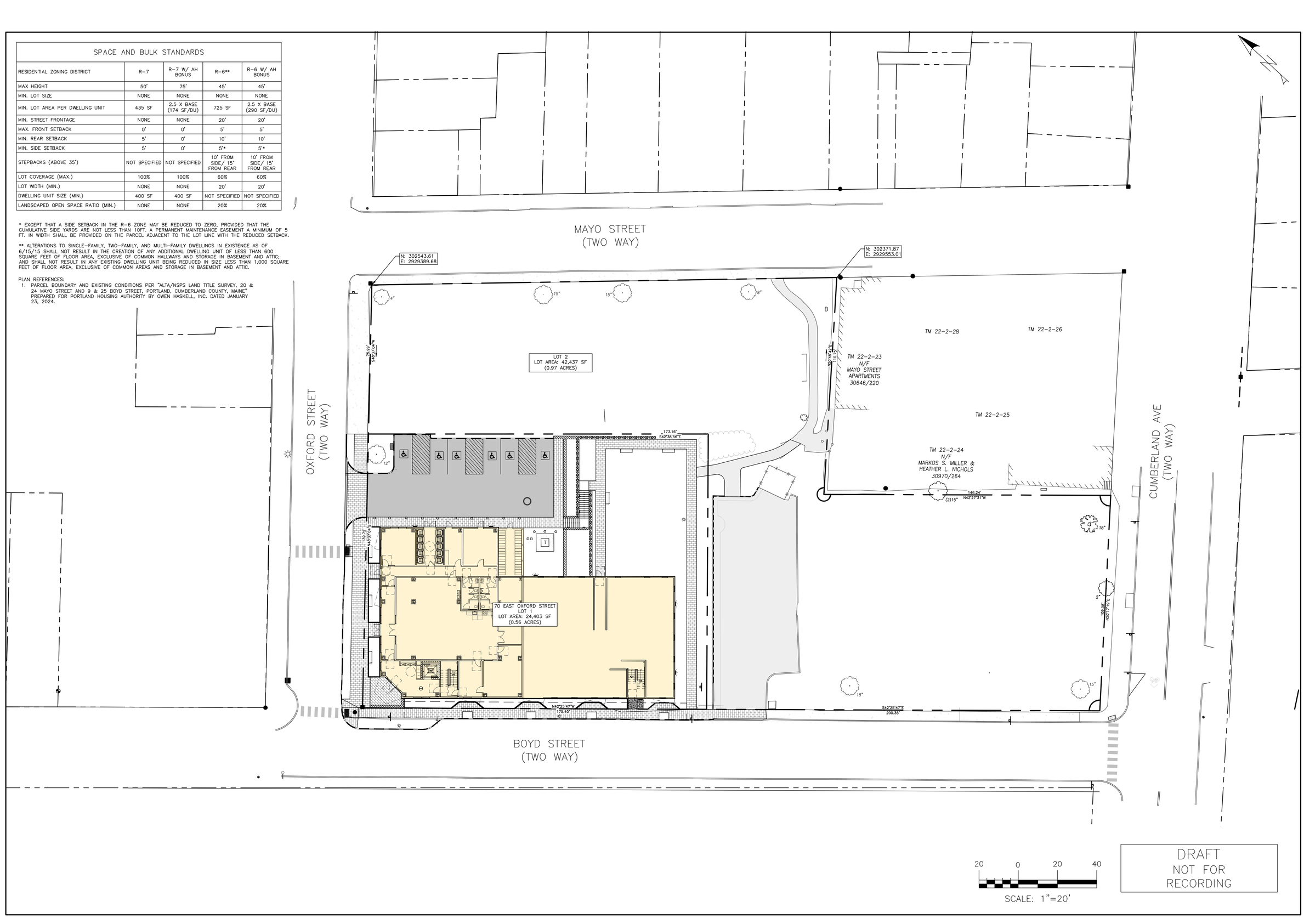
# EXHIBIT A

| SPACE AND BULK STANDARDS | | | | |
|---|---|---|---|---|
| RESIDENTIAL ZONING DISTRICT | R-7 | R-7 W/ AH BONUS | R-6** | R-6 W/ AH BONUS |
| MAX HEIGHT | 50' | 75' | 45' | 45' |
| MIN. LOT SIZE | NONE | NONE | NONE | NONE |
| MIN. LOT AREA PER DWELLING UNIT | 435 SF | 2.5 X BASE (174 SF/DU) | 725 SF | 2.5 X BASE (290 SF/DU) |
| MIN. STREET FRONTAGE | NONE | NONE | 20' | 20' |
| MAX. FRONT SETBACK | 0' | 0' | 5' | 5' |
| MIN. REAR SETBACK | 5' | 0' | 10' | 10' |
| MIN. SIDE SETBACK | 5' | 0' | 5'* | 5'* |
| STEPBACKS (ABOVE 35') | NOT SPECIFIED | NOT SPECIFIED | 10' FROM SIDE/ 15' FROM REAR | 10' FROM SIDE/ 15' FROM REAR |
| LOT COVERAGE (MAX.) | 100% | 100% | 60% | 60% |
| LOT WIDTH (MIN.) | NONE | NONE | 20' | 20' |
| DWELLING UNIT SIZE (MIN.) | 400 SF | 400 SF | NOT SPECIFIED | NOT SPECIFIED |
| LANDSCAPED OPEN SPACE RATIO (MIN.) | NONE | NONE | 20% | 20% |

* EXCEPT THAT A SIDE SETBACK IN THE R-6 ZONE MAY BE REDUCED TO ZERO, PROVIDED THAT THE CUMULATIVE SIDE YARDS ARE NOT LESS THAN 10FT. A PERMANENT MAINTENANCE EASEMENT A MINIMUM OF 5 FT. IN WIDTH SHALL BE PROVIDED ON THE PARCEL ADJACENT TO THE LOT LINE WITH THE REDUCED SETBACK.

** ALTERATIONS TO SINGLE-FAMILY, TWO-FAMILY, AND MULTI-FAMILY DWELLINGS IN EXISTENCE AS OF 6/15/15 SHALL NOT RESULT IN THE CREATION OF ANY ADDITIONAL DWELLING UNIT OF LESS THAN 600 SQUARE FEET OF FLOOR AREA, EXCLUSIVE OF COMMON HALLWAYS AND STORAGE IN BASEMENT AND ATTIC; AND SHALL NOT RESULT IN ANY EXISTING DWELLING UNIT BEING REDUCED IN SIZE LESS THAN 1,000 SQUARE FEET OF FLOOR AREA, EXCLUSIVE OF COMMON AREAS AND STORAGE IN BASEMENT AND ATTIC.

PLAN REFERENCES:
1. PARCEL BOUNDARY AND EXISTING CONDITIONS PER "ALTA/NSPS LAND TITLE SURVEY, 20 & 24 MAYO STREET AND 9 & 25 BOYD STREET, PORTLAND, CUMBERLAND COUNTY, MAINE" PREPARED FOR PORTLAND HOUSING AUTHORITY BY OWEN HASKELL, INC. DATED JANUARY 23, 2024.




| ISSUED FOR | BY | DATE |
|---|---|---|
| CONCEPT | MKT | 3/11/2024 |

DRAWING NAME: SUBDIVISION PLAT

PROJECT NAME: 70 EAST OXFORD STREET REDEVELOPMENT

CLIENT: PORTLAND HOUSING AUTHORITY
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101


ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655



THIS PLAN SHALL NOT BE ADOPTED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, IS USED SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.


| | |
|---|---|
| FILE: | 1215_CIVIL |
| JN: | #### |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | DSH |
| CHECKED BY: | WHS |

DRAWING NO.
PLAT-1

**OPTION TO PURCHASE AND LEASE AGREEMENT**
(COMB Block Mayo – Land Only)

THIS OPTION TO PURCHASE AND LEASE AGREEMENT ("Agreement") dated this 6th day of February, 2025, is by and among PORTLAND HOUSING AUTHORITY, a public body corporate and politic organized as Maine municipal housing authority having a mailing address of 970 Baxter Boulevard, Portland, ME 04103 ("PHA"), PORTLAND HOUSING DEVELOPMENT CORPORATION, a Maine nonprofit corporation having a mailing address of 970 Baxter Boulevard, Portland, ME 04103 or its assigns ("PHDC"), and MAYO HOUSING, LP, a Maine limited partnership having a mailing address of 970 Baxter Boulevard, Portland, ME 04103, or its assigns ("LP") .

RECITALS

WHEREAS, PHA is the owner of a certain parcel of land at 20 & 24 Mayo Street and 9 & 25 Boyd Street, Portland, Maine and all improvements, buildings and fixtures presently on said land (the "Property"); and

WHEREAS, PHA received approval from the Department of Housing and Urban Development Special Application Center ("HUD") for authority to demolish the existing buildings, to remove the Property from the Public Housing Program through a disposition under Section 18 of the United States Housing Act of 1937 (collectively, the "Disposition"), and to develop the Property into a new Project Based Section 8 affordable housing (the "New Project"); and

WHEREAS, in order to facilitate the New Project, PHA wishes to grant to PHDC an option to purchase a portion of the Property approximately shown on the survey attached hereto as **Exhibit A** (the "Premises") on the terms set forth herein;

WHEREAS, in order to facilitate the financing and development of the New Project using Federal Low Income Housing Tax Credits ("LIHTC"), PHDC wishes to grant to LP an option to lease the Premises through a long-term ground lease on the terms set forth herein (the "Ground Lease").

NOW, THEREFORE, in consideration of one dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Grant of Options; Option Period; Exercise of Options. PHA hereby grants PHDC the option to purchase the Premises (the "Purchase Option") for a period extending through December 31, 2028 (the "Option Period") and PHDC hereby accepts the grant of the Option to Purchase upon the terms set forth herein. Concurrent with the Purchase Option and for the Option Period, PHDC hereby grants LP an option to lease the Premises (the "Lease Option" and collectively with the Purchase Option, the "Options"). The Option granted by PHA and the option granted by PHDC shall contain sufficient easements for access and utilities, including storm water drainage and

shared parking rights over other land now or formerly of PHA sufficient for the development of the New Project.

a. PHDC and LP may exercise the Options at any time during the Option Period by giving written notice to PHA of their intent to exercise the Option (the "Option Notice"). Said Option Notice shall also serve as notice to PHDC of LP's intent to exercise the Lease Option. An Option Notice signed by both PHDC and LP and delivered to PHA by hand or certified mail, return receipt request is sufficient notice of the exercise of both Options.

b. The Options and the obligation of PHA, PHDC and LP to perform their respective obligations hereunder shall be conditional upon: (i) approval by HUD of the Disposition; (ii) receipt of all required municipal and state approvals for the development of the New Project; and (iii) an award of LIHTC for the New Project.

2. Purchase Price. Subject to adjustment as set forth below, PHDC shall pay PHA a purchase price equal to One Dollar ($1.00) (the "Purchase Price") plus any additional amount that HUD may require be paid to PHA in connection with the Disposition.

3. Lease Terms. If the Lease Option is exercised, the Ground Lease from PHDC to LP will be for a term of 95 years, with rent due for entire term equal to $10.00 and all operating expenses to be paid by LP at the time of commencement of the Lease, or upon such other terms as the lenders and investors for the New Project may require.

4. Closing. If PHDC and LP exercise the Options, the closing shall take place at a date, time and location mutually agreed upon by PHA, PHDC and LP ("Closing").

5. Conditions to Closing. If PHDC and LP exercise the Options, the following terms and provisions shall apply:

a. PHA, PHDC, and the LP's respective obligations to close on the transactions contemplated herein shall be conditioned upon (i) approval of the Disposition by HUD; (ii) receipt of all required municipal and state approvals for the New Project; and (iii) and an award of LIHTC for the New Project.

b. Title to the Premises shall be conveyed to PHDC by good and sufficient Quitclaim Deed with Covenant, free from encumbrances except provisions of existing building and zoning laws and any covenants and/or easements of record provided that the same do not interfere with the intended use of the New Project; such real estate taxes for the then current tax period which are not due and payable on the date of delivery of such deed; utility and access easements in common with areas retained by PHA's, and any matters of record which in PHDC and LP's opinion does not interfere with the New Project. PHDC and LP shall notify PHA of any defects in title that would make PHA unable to give title to the Premises as herein stipulated. PHA shall be obligated to proceed in good faith to cure any such title defect(s). If required, the Closing shall be extended to allow PHA time to cure any such title defects, but in no event shall the Closing be extended more than thirty (30) days for such purposes. If a title defect exists, PHDC and LP may elect, by

written notice to PHA, either (i) to accept title to the Premises subject to any uncured defects in title or (ii) to terminate the Option, whereupon any extension fee(s) paid by PHDC or LP to PHA shall be immediately refunded to PHDC or LP as the case may be, the obligations of all parties hereunder shall cease, and neither party shall have any claim against the other by reason of this Agreement;

c. Each party shall pay one-half of the Maine state transfer tax unless one or both of the parties is exempt, in which case no transfer tax shall be due from the exempt party.

6. Representations.

a. PHA represents, covenants and warrants to PHDC and LP that:

i. PHA is the current owner of the Premises, and, subject to approval by HUD, has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by PHA of the obligations hereunder will not conflict with, or result in breach of any regulation, order, judgment, injunction or decree of any court or governmental authority or any agreement or instrument to which PHA is a party or by which PHA is bound.

ii. There are no agreements or contracts affecting the Premises or any use of the Premises that would not be terminable at will by PHDC without penalty from and after the Closing, other than those for which PHA will be seeking approval from HUD in connection with its Disposition application.

b. PHDC represents, covenants and warrants to PHA and LP that PHDC has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by PHDC of its obligations hereunder: (i) have been duly authorized by all requisite action; and (ii) will not conflict with, or result in a breach of, any of the terms, covenants and provisions of the by-laws or articles of organization of PHDC or any law or any regulation, order, judgment, writ, injunction or decree of any court or governmental authority, or any agreement or instrument to which PHDC is a party or by which it is bound.

c. The LP represents, covenants and warrants to PHA and PHDC that LP has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by LP of its obligations hereunder: (i) have been duly authorized by all requisite action; and (ii) will not conflict with, or result in a breach of, any of the terms, covenants and provisions of the by-laws or articles of organization of LP or any law or any regulation, order, judgment, writ, injunction or decree of any court or governmental authority, or any agreement or instrument to which LP is a party or by which it is bound.

7. Notice. Whenever notice is given or required to be given by either of the parties hereto to the other, it shall be deemed to have been given if in writing and mailed by certified or registered mail, return receipt requested, postage prepaid, or hand delivered, addressed to the parties at the address set forth in the first paragraph above or to such other address(es) as either party shall have last designated by like notice in writing. All notices shall be effective upon hand delivery or mailing, whichever first occurs.

8. Further Assurances. The parties agree that up to and after the date of Closing, they shall do such things and execute, acknowledge and deliver any and all additional instruments, documents and materials as either party may reasonably request to fully effectuate the purposes of this Agreement.

9. Buyer's Access. PHDC and LP and others whom they may designate shall have the right, at all reasonable times, at PHDC or LP's sole cost and expense, risk and hazard, to enter upon the Premises to examine and/or show the same and make, or cause to be made, engineering studies with respect thereto, including, without limitation, surveying, conducting test borings in order to determine sub-soil conditions, and in general conducting all other tests, analysis and studies of the Premises which PHDC or LP deems prudent in connection with the Disposition and the New Project. PHDC or LP (as the case may be) shall restore the Premises following any testing as reasonably as possible to its pre-existing condition, unless otherwise agreed by PHA.

10. Construction of Agreement. This instrument, executed in duplicate, is to be construed as a Maine contract, is to take effect as a sealed instrument, sets forth the entire contract between the parties, is binding upon and inures to the benefit of the parties hereto and their respective heirs, devisees, executors, administrators, successors and assigns, and may be canceled, modified or amended only by a written instrument executed by PHA, PHDC and LP. The captions are used only as a matter of convenience and are not to be considered a part of this Agreement or to be used in determining the intent of the parties to it. Time is of the essence with respect to all dates set forth in this Agreement.

11. Risk of Loss. At all times until Closing, the risk of loss shall remain with PHA.

12. Assignment. PHDC or LP may assign their interest in this Agreement to any party affiliated with PHDC or LP and formed for the purpose of carrying out the New Project.

*Remainder of Page Intentionally Blank – Signature Page to Follow*

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

**PORTLAND HOUSING AUTHORITY**
By: _____
Brian Frost
Its: Executive Director

**PORTLAND HOUSING DEVELOPMENT CORPORATION**
By: _____
Brian Frost
Its: President

**MAYO HOUSING, LP**
**By: COMB Block Development, LLC**
By: _____
Brian Frost
Its: President

STATE OF MAINE

COUNTY OF CUMBERLAND, SS. February 6, 2025

Personally appeared the above-named, Brian Frost, Executive Director of Portland Housing Authority, President of Portland Housing Development Corporation, and President of COMB Block Development, LLC, the general partner of MAYO HOUSING, LP and acknowledged the foregoing instrument to be his free act and deed in each of his capacities and the free act and deed of each of the foregoing entities.

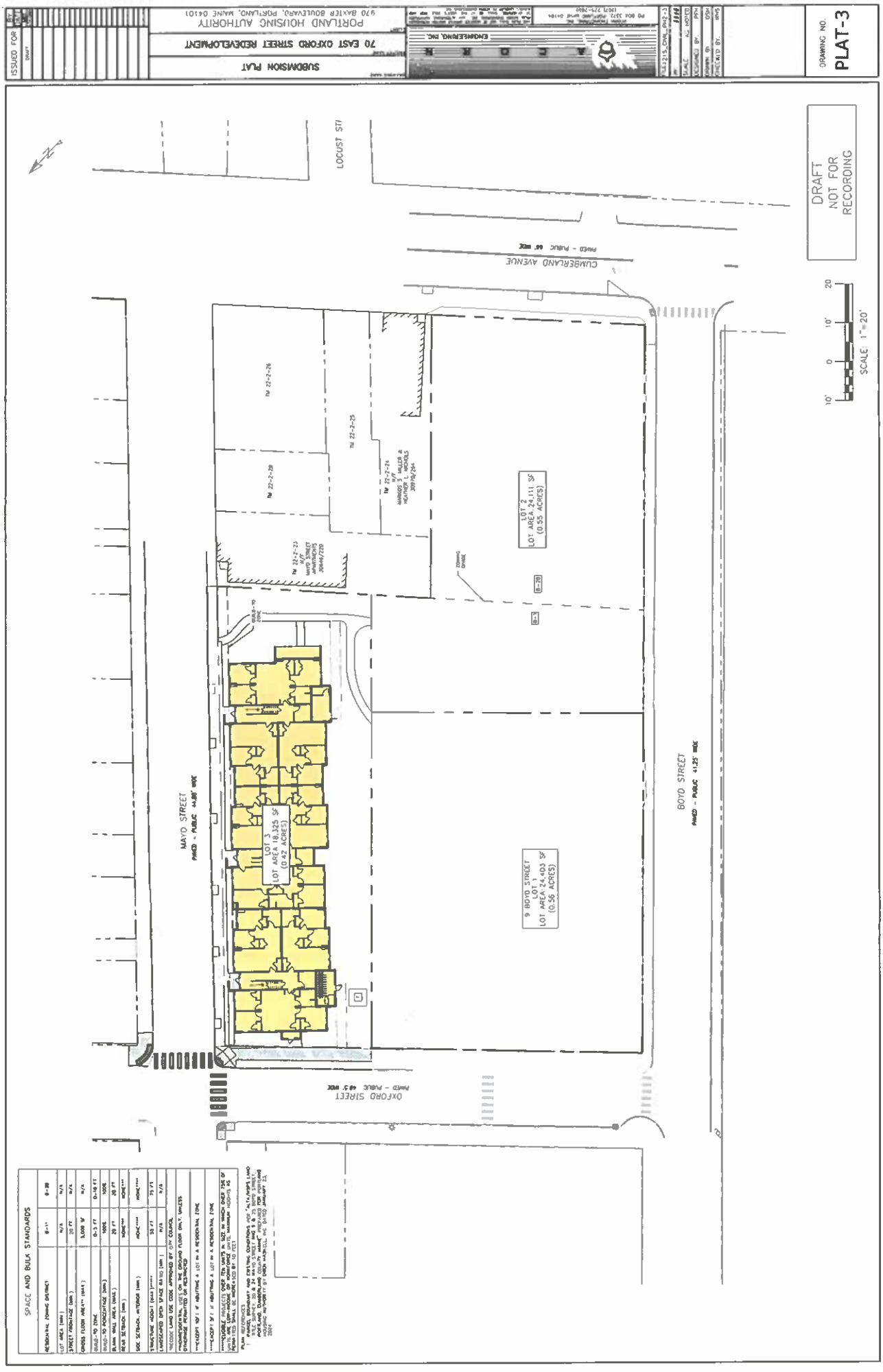
Before me,

_____
Notary Public/Attorney at Law

Cynthia R. LaRochelle
Notary Public - Maine
My Commission Expires
11/09/2027

_____
Printed Name

# EXHIBIT A


ISSUED FOR
SUBDIVISION PLAT
70 EAST OXFORD STREET REDEVELOPMENT
PORTLAND HOUSING AUTHORITY
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101
ENGINEERING, INC.
DRAWING NO.
PLAT-3
DRAFT
NOT FOR
RECORDING
SCALE: 1" = 20'
LOCUST ST
CUMBERLAND AVENUE
PAVED - PUBLIC 66' WIDE
MAYO STREET
PAVED - PUBLIC 44.88' WIDE
OXFORD STREET
PAVED - PUBLIC 49.5' WIDE
BOYD STREET
PAVED - PUBLIC 41.25' WIDE
LOT 3
LOT AREA 18,325 SF
(0.42 ACRES)
LOT 2
LOT AREA 24,111 SF
(0.55 ACRES)
9 BOYD STREET
LOT 1
LOT AREA 24,403 SF
(0.56 ACRES)
B-3
B-2B
SPACE AND BULK STANDARDS

**OPTION TO PURCHASE AND LEASE AGREEMENT**
(COMB Block Cumberland – Land Only)

6th THIS OPTION TO PURCHASE AND LEASE AGREEMENT ("Agreement") dated this day of February, 2025, is by and among PORTLAND HOUSING AUTHORITY, a public body corporate and politic organized as Maine municipal housing authority having a mailing address of 970 Baxter Boulevard, Portland, ME 04103 ("PHA"), PORTLAND HOUSING DEVELOPMENT CORPORATION, a Maine nonprofit corporation having a mailing address of 970 Baxter Boulevard, Portland, ME 04103 or its assigns ("PHDC"), and CUMBERLAND HOUSING, LP and BOYD HOUSING, LP, Maine limited partnerships having a mailing address of 970 Baxter Boulevard, Portland, ME 04103, or their assigns (collectively known as "the LPs")
.

RECITALS

WHEREAS, PHA is the owner of a certain parcel of land at 20 & 24 Mayo Street and 9 & 25 Boyd Street, Portland, Maine and all improvements, buildings and fixtures presently on said land (the "Property"); and

WHEREAS, PHA received approval from the Department of Housing and Urban Development Special Application Center ("HUD") for authority to demolish the existing buildings, to remove the Property from the Public Housing Program through a disposition under Section 18 of the United States Housing Act of 1937 (collectively, the "Disposition"), and develop new Project Based Section 8 affordable housing (the "New Project"); and

WHEREAS, in order to facilitate the New Project, PHA wishes to grant to PHDC an option to purchase a portion of the Property approximately shown on the survey attached hereto as **Exhibit A** (the "Premises") on the terms set forth herein;

WHEREAS, in order to facilitate the financing and development of the New Project using Federal Low Income Housing Tax Credits ("LIHTC"), PHDC wishes to grant to the LPs an option to enter into a ground lease of the Premises upon the terms set forth herein (the "Ground Lease").

NOW, THEREFORE, in consideration of one dollar ($1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Option Period; Grant of Option to Purchase and Options to Lease; Exercise of Option. PHA hereby grants PHDC the option to purchase the Premises (the "Purchase Option") for a period extending through December 31, 2028 (the "Option Period") and PHDC hereby accepts the grant of the Option to Purchase upon the terms set forth herein. Concurrent with the Purchase Option and for the Option Period, PHDC hereby grants to the LPs an option to enter into a ground lease of the Premises and which leases will include easements or lease rights for access, utilities (including stormwater drainage) and shared parking within the New Project and/or upon other adjoining property now or formerly of PHA. Furthermore, The LPs, as ground lessees under the Ground Lease shall have the right to create a two unit condominium upon the Premises and shall

have the option to enter into two subleases of the Premises, one to be granted to each LP, and with each sublease to be comprised of one of the two condominium units created upon the Premises (the "Subleases") or to develop the New Project as one leased parcel without creating a condominium to accommodate the development of the New Project by one LP under one ground lease. The Option to Purchase, the Option to Lease and the Option to Sublease shall be referred to herein as the "Options"). Alternatively, in the event that tax counsel for the New Project or its lenders or investor determines that having two ground leases, one to each LP for each condominium unit from the outset is preferred over having a ground lease to the two LPs and subleases to each LP for each condominium unit, then the LPs shall have the right and option to obtain two separate ground leases from PHDC from the outset.

a. PHDC and the LPs may exercise the Options at any time during the Option Period by giving written notice to PHA of their intent to exercise the Options (the "Option Notice"). Said Option Notice shall also serve as notice to PHDC of the LPs' intent to exercise the Lease Options. An Option Notice signed by PHDC and the LPs and delivered to PHA by hand or certified mail, return receipt request is sufficient notice of the exercise of the purchase and lease Options.

b. The Options and the obligation of PHA, PHDC and the LPs to perform their respective obligations hereunder shall be conditional upon (i) approval by HUD of the Disposition (ii) receipt of all required municipal and state approvals for the development of the New Project; (iii) and one or more LIHTC awards sufficient for the development of the New Project.

2. Purchase Price. Subject to adjustment as set forth below, PHDC shall pay PHA a purchase price equal to One Dollar ($1.00) (the "Purchase Price") plus any additional amount that HUD may require be paid to PHA in connection with the Disposition.

3. Lease Terms. If the Lease Options are exercised, the Ground Lease from PHDC to the LPs, and the subleases for each condominium unit, if the New Project is developed as a condominium, will each be for concurrent terms of 95 years, with rent due for entire terms under the Lease and under each sublease to be equal to $10.00 with all operating expenses to be paid by the Lessee under the Ground Lease, or by the LPs, proportionally as sublessees, in accordance with the condominium documents, or upon such other terms as the lenders and investors for the New Project may require. In the event that PHDC and the LPs elect to develop the New Project with one owner, then there shall be one lease for the entire premises without the need to create a condominium or to enter into the Subleases, with one of the LPs to be the lessee and developer of the New Project as the LPs and PHDC may establish.

4. Closing. If PHDC and the LPs exercise the Options, closing shall take place at a date, time and location mutually agreed upon by PHA, PHDC and the LPs ("Closing").

5. Conditions to Closing. If PHDC and the LPs exercise the Options, the following terms and provisions shall apply:

a. PHA, PHDC, and the LPs respective obligations to close on the transactions contemplated herein shall be conditioned upon (i) approval of the Disposition by

HUD; (ii) receipt of all required municipal and state approvals for the New Project; (iii) and an award of LIHTC for the New Project.

b. Title to the Premises shall be conveyed to PHDC by good and sufficient Quitclaim Deed with Covenant, free from encumbrances except provisions of existing building and zoning laws and any covenants and/or easements of record provided that the same do not interfere with the intended use of the New Project; such real estate taxes for the then current tax period which are not due and payable on the date of delivery of such deed; utility and access easements in common with areas retained by PHA's, and any matters of record which in PHDC and the LPs' opinions do not interfere with the New Project. PHDC and the LPs shall notify PHA of any defects in title that would make PHA unable to give title to the Premises as herein stipulated. PHA shall be obligated to proceed in good faith to cure any such title defect(s). If required, the Closing shall be extended to allow PHA time to cure any such title defects, but in no event shall the Closing be extended more than thirty (30) days for such purposes. If a title defect exists, PHDC and the LPs may elect, by written notice to PHA, either (i) to accept title to the Premises subject to any uncured defects in title or (ii) to terminate the Option, whereupon any extension fee(s) paid by PHDC or the LPs to PHA shall be immediately refunded to PHDC or the LPs as the case may be, the obligations of all parties hereunder shall cease, and neither party shall have any claim against the other by reason of this Agreement;

c. Each party shall pay one-half of the Maine state transfer tax unless one or both of the parties is exempt, in which case no transfer tax shall be due from the exempt party.

6. Representations.

a. PHA represents, covenants and warrants to PHDC and the LPs that:

i. PHA is the current owner of the Premises, and, subject to approval by HUD, has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by PHA of the obligations hereunder will not conflict with, or result in breach of any regulation, order, judgment, injunction or decree of any court or governmental authority or any agreement or instrument to which PHA is a party or by which PHA is bound.

ii. There are no agreements or contracts affecting the Premises or any use of the Premises that would not be terminable at will by PHDC without penalty from and after the Closing, other than those for which PHA will be seeking approval from HUD in connection with its Disposition application.

b. PHDC represents, covenants and warrants to PHA and the LPs that PHDC has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the

performance by PHDC of its obligations hereunder: (i) have been duly authorized by all requisite action; and (ii) will not conflict with, or result in a breach of, any of the terms, covenants and provisions of the by-laws or articles of organization of PHDC or any law or any regulation, order, judgment, writ, injunction or decree of any court or governmental authority, or any agreement or instrument to which PHDC is a party or by which it is bound.

c. Each LPs represent, covenant and warrant to PHA and PHDC that the LPs have the legal right, power and authority to enter into this Agreement and to perform all of their obligations hereunder, and the execution and delivery of this Agreement and the performance by the LPs of their obligations hereunder: (i) have been duly authorized by all requisite action; and (ii) will not conflict with, or result in a breach of, any of the terms, covenants and provisions of the by-laws or articles of organization of the LPs or any law or any regulation, order, judgment, writ, injunction or decree of any court or governmental authority, or any agreement or instrument to which the LPs are a party or by which they are bound.

7. Notice. Whenever notice is given or required to be given by either of the parties hereto to the other, it shall be deemed to have been given if in writing and mailed by certified or registered mail, return receipt requested, postage prepaid, or hand delivered, addressed to the parties at the address set forth in the first paragraph above or to such other address(es) as either party shall have last designated by like notice in writing. All notices shall be effective upon hand delivery or mailing, whichever first occurs.

8. Further Assurances. The parties agree that up to and after the date of Closing, they shall do such things and execute, acknowledge and deliver any and all additional instruments, documents and materials as either party may reasonably request to fully effectuate the purposes of this Agreement.

9. Buyer's Access. PHDC and the LPs and others whom they may designate shall have the right, at all reasonable times, at PHDC or the LPs' sole cost and expense, risk and hazard, to enter upon the Premises to examine and/or show the same and make, or cause to be made, engineering studies with respect thereto, including, without limitation, surveying, conducting test borings in order to determine sub-soil conditions, and in general conducting all other tests, analysis and studies of the Premises which PHDC or the LPs deem prudent in connection with the Disposition and the New Project. PHDC or the LPs (as the case may be) shall restore the Premises following any testing as reasonably as possible to its pre-existing condition, unless otherwise agreed by PHA.

10. Construction of Agreement. This instrument, executed in duplicate, is to be construed as a Maine contract, is to take effect as a sealed instrument, sets forth the entire contract between the parties, is binding upon and inures to the benefit of the parties hereto and their respective heirs, devisees, executors, administrators, successors and assigns, and may be canceled, modified or amended only by a written instrument executed by PHA, PHDC and the LPs. The captions are used only as a matter of convenience and are not to be considered a part of this Agreement or to be used in determining the intent of the parties to it. Time is of the essence with respect to all dates set forth in this Agreement.

11. Risk of Loss. At all times until Closing, the risk of loss shall remain with PHA.

12. Assignment. PHDC or the LPs may assign their interest in this Agreement to any party affiliated with PHDC or the LPs and formed for the purpose of carrying out the New Project.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

**PORTLAND HOUSING AUTHORITY**

By: _____
Brian Frost
Its: Executive Director

**PORTLAND HOUSING DEVELOPMENT CORPORATION**

By: _____
Brian Frost
Its: President

**CUMBERLAND HOUSING, LP**
**By: COMB Block Development, LLC**

By: _____
Brian Frost
Its: President

**BOYD HOUSING, LP**
**By: COMB Block Development, LLC**

By: _____
Brian Frost
Its: President

*[Notary acknowledgement on following page]*

STATE OF MAINE

COUNTY OF CUMBERLAND, SS. February 20, 2025

Personally appeared the above-named Brian Frost, Executive Director of Portland Housing Authority, President of Portland Housing Development Corporation, and President of COMB Block Development, LLC, the general partner of CUMBERLAND HOUSING, LP and BOYD HOUSING, LP and acknowledged the foregoing instrument to be his free act and deed in each of his capacities and the free act and deed of the foregoing entities.

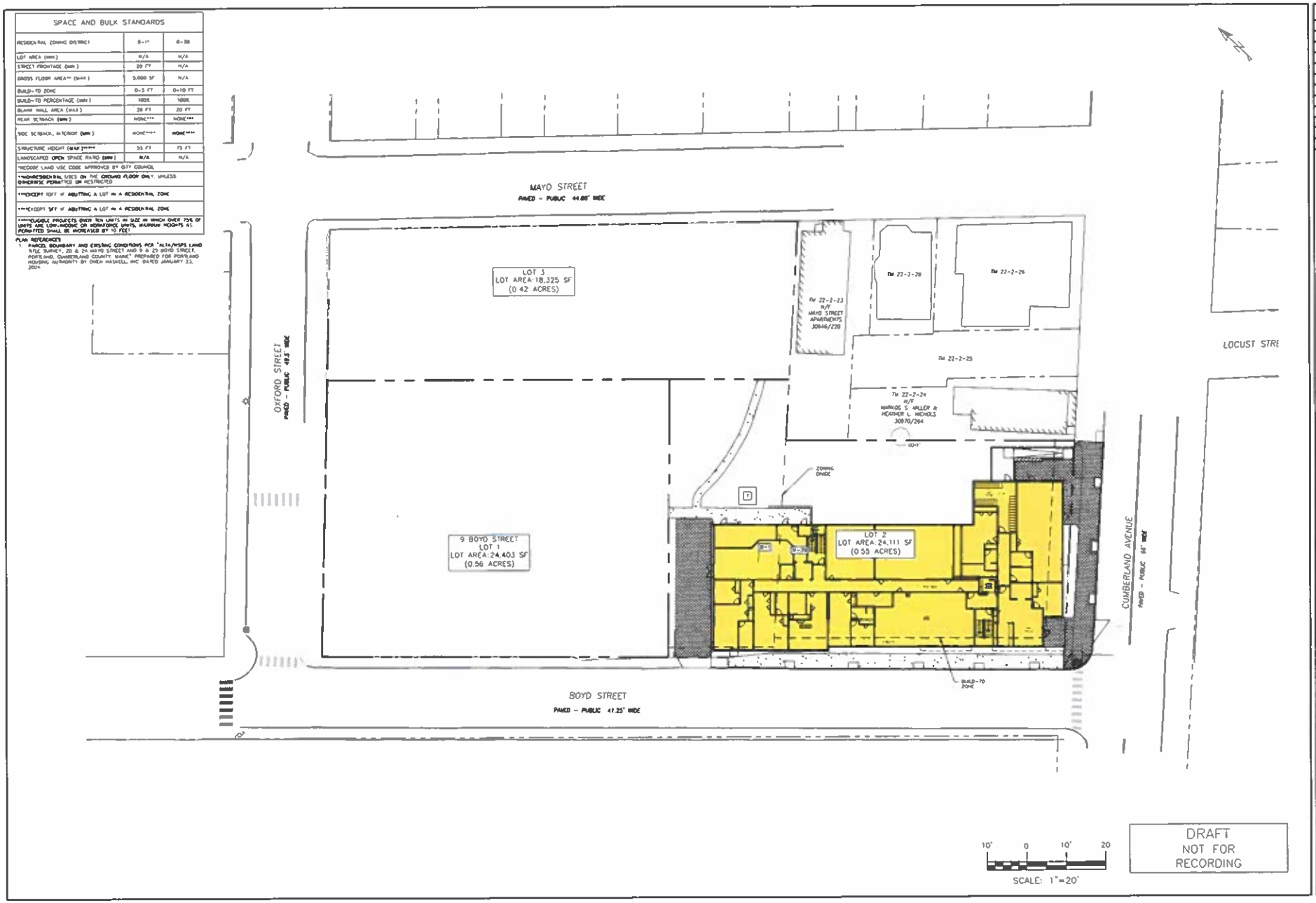
Before me,

Notary Public/Attorney at Law

Printed Name

Cynthia R. LaRochelle
Notary Public - Maine
My Commission Expires
11/09/2027

# EXHIBIT A


SPACE AND BULK STANDARDS
RESIDENTIAL ZONING DISTRICT
B-1*
B-2B
LOT AREA (MIN.)
N/A
N/A
STREET FRONTAGE (MIN.)
20 FT
N/A
GROSS FLOOR AREA** (MAX.)
5,000 SF
N/A
BUILD-TO ZONE
0-5 FT
0-10 FT
BUILD-TO PERCENTAGE (MIN.)
100%
100%
BLANK WALL AREA (MAX.)
20 FT
20 FT
REAR SETBACK (MIN.)
NONE***
NONE***
SIDE SETBACK, IN REAR (MIN.)
NONE***
NONE***
STRUCTURE HEIGHT (MAX.)***
35 FT
75 FT
LANDSCAPED OPEN SPACE RATIO (MIN.)
N/A
N/A
*PER CODE LAND USE CODE APPROVED BY CITY COUNCIL
**NONRESIDENTIAL USES ON THE GROUND FLOOR ONLY. UNLESS OTHERWISE PERMITTED OR RESTRICTED
***EXCEPT 10FT IF ABUTTING A LOT IN A RESIDENTIAL ZONE
***EXCEPT 5FT IF ABUTTING A LOT IN A RESIDENTIAL ZONE
****ELIGIBLE PROJECTS WHERE TEN UNITS OR MORE OR WHICH OVER 75% OF UNITS ARE LOW-INCOME OR WORKFORCE UNITS, MAXIMUM HEIGHTS AS PERMITTED SHALL BE INCREASED BY 10 FEET
PLAN REFERENCES
1. PARCEL BOUNDARY AND EXISTING CONDITIONS PER "ALTA/NSPS LAND TITLE SURVEY, 20 & 24 MAYO STREET AND 9 & 25 BOYD STREET, PORTLAND, CUMBERLAND COUNTY, MAINE" PREPARED FOR PORTLAND HOUSING AUTHORITY BY OWEN HASKELL, INC DATED JANUARY 23, 2024
MAYO STREET
PAVED - PUBLIC 44.88' WIDE
LOT 3
LOT AREA: 18,325 SF
(0.42 ACRES)
OXFORD STREET
PAVED - PUBLIC 49.5' WIDE
Tax 22-2-23
R/T
MAYO STREET
APARTMENTS
30846/220
Tax 22-2-28
Tax 22-2-26
Tax 22-2-25
Tax 22-2-24
R/T
MARKOS S. MILLER &
HEATHER L. NICHOLS
30970/264
LOCUST STRE
ZONING
DIVIDE
9 BOYD STREET
LOT 1
LOT AREA: 24,403 SF
(0.56 ACRES)
LOT 2
LOT AREA: 24,111 SF
(0.55 ACRES)
CUMBERLAND AVENUE
PAVED - PUBLIC 66' WIDE
BUILD-TO
ZONE
BOYD STREET
PAVED - PUBLIC 41.25' WIDE
10' 0 10' 20
SCALE: 1"=20'
DRAFT
NOT FOR
RECORDING
ISSUED FOR
DRAFT
BY
DATE
SUBDIVISION PLAT
70 EAST OXFORD STREET REDEVELOPMENT
PORTLAND HOUSING AUTHORITY
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101
ENGINEERING, INC.
FILE1215_CIVIL_PH2-3
SCALE: AS NOTED
DESIGNED BY: RFH
DRAWN BY: DSH
CHECKED BY: WHS
DRAWING NO.
PLAT-2

# E. Summary of Written Easements

Exiting Easements:

There are no existing easements shown on the plan titled ALTA / NSPS Land Title Survey dated December 22, 2023, prepared by Owen Haskell, Inc.

Proposed Easements:

There is a proposed public access easement that will encumber portions of the Phase 1, 2, & 3 parcels. The access easement will encumber a mid-block crossing from Boyd to Mayo street, and the open space area that is mostly located on Phase 1, but also is located on portions of Phase 2 & 3. The easement is labeled on plan sheet C-10, Overall Site Plan.

Utility Easements will also be required from the proposed respective lots/owners to Central Maine Power to service the proposed pad mount transformers as shown on C-21 & C-22.

# F. Site Plan & Subdivision Review Standards

The following outline is made in accordance with the City of Portland Code of Ordinances, Chapter 14 Land Use. Specifically, Article 13 Section 6 Site Plan Review Standards and Article 14 Section 5.

**OVERVIEW**

The proposed project has been designed to conform to City standards where possible as demonstrated in the following narrative.

## 13.6.1 Transportation Standards

A. Impact on Surrounding Street Systems:

1. The project will not generate 100 or more cars during peak hour; therefore, a Traffic Movement Permit will not be required. The project is not anticipated to create any significant hazard to safety to the surrounding street network. Vehicular access to the site will be updated per technical manual standards. The Phase 2 building will be provided a drive that will be used for servicing the building and trash pickup. No parking is to be provided on site.

2. No substantial increase in congestion on any streets is anticipated.

B. Access and Circulation:

1. In General:

This project conforms with the design standards of Section 13.6.1.B as demonstrated in the following narrative:

a) All site access and internal circulation will be designed in accordance with the standards set forth in Section 1 of the Technical Manual.

b) The site does not feature any shared vehicular circulation, parking, or transportation infrastructure. Shared pedestrian pathways are proposed and will be encumbered with a public access easement that's span's all of PHDC's parcels on the block (Phases 1, 2 & 3).

c) Sidewalks exist along Cumberland Avenue, Mayo Street, Oxford Street and Boyd Street and will provide direct pedestrian access to the site. The sidewalk will be improved along the project frontages as part of the project. Additionally, internal walkways are provided which provide a mid-block crossing between Mayo and Boyd Streets and access to the open space on the parcel.

d) Rights of public access will be granted for the proposed internal walkways and open space.

e) Vehicular access to the driveway will be provided off of Boyd Street, which is classified as a Local Street and no conflicts are anticipated with turning movements or traffic flows. Pedestrian access to the proposed buildings will be directly to existing sidewalks or internal walkways.

2. Curb and Sidewalks:

a) There is existing curbing and sidewalks along project frontages on Mayo Street, Boyd Street, Oxford Street and Cumberland Avenue.

b) Curbing and sidewalks along project frontages on Mayo Street, Boyd Street, Oxford Street and Cumberland Avenue will be reconstructed to City of Portland standards as shown the Site Plans.

c) Not applicable.

d) Not applicable.

C. Public Transit Access:

1. The development is not located along an existing public transit route; therefore, no transit shelter is required.

2. Not applicable.

3. Not applicable.

D. Parking:

1. Vehicular parking:

a) No vehicular parking is provided within the site, which complies with the standards of Article 18.

b) Not applicable.

c) Not applicable.

2. Bicycle parking

a) Per Table 18-A, a minimum of 46 bicycle parking spaces are required for the Phase 2 building, and a minimum of 14 bicycle parking spaces are required for the Phase 3 building. For the Phase 2 building, 31 bicycle parking spaces

are provided with racks within the bicycle room. An additional 16 spaces are provided on 8 bike racks located outside of the building. A minimum of 14 bicycle parking spaces are required for the Phase 3 building. 20 bicycle parking spaces are provided with stacking bike racks within the bike room.

b) Not applicable.

3. Snow Storage:

a) Snow storage locations are provided on the Site Plans. The property manager will be responsible for the management of snow removal from the site as necessary during larger storm events.

b) Snow storage shall not be located where it interferes with pedestrian walkways or stormwater management systems. Landscaping in designated snow storage areas shall be such that it can withstand the snow pile.

4. Electric Vehicle (EV) charging

a) No parking is proposed on the site, therefore, no EV spaces are required.

E. Transportation Demand Management (TDM):

1. A TDM plan is not required for the development.

2. Not applicable.

**13.6.2 Environmental Quality Standards**

A. Preservation of Significant Natural Features:

1. There are no known Significant Natural Features present on the project site.

2. Not applicable.

3. Not applicable.

B. Site landscaping and buffers.

1. On-Site Landscaping

a) **Landscape Narrative: COMB Block Redevelopment – Phases 2 & 3**
The redevelopment of Phases 2 and 3 enhances connectivity, walkability, and urban greening, fostering a dynamic and inclusive neighborhood. Midblock pathways improve permeability, linking Boyd and Mayo Streets while connecting to the Phase 1 courtyard and a less formal seating area and rain garden. The landscape blends seamlessly across the site, providing a suite of amenities that respond to the site's steep topography while ensuring accessibility and community engagement.

Street trees along sidewalks define the public realm, provide shade, and enhance the pedestrian experience. Additional tree plantings throughout the site establish communal spaces and reinforce the urban canopy. Thoughtful tree removals will address health, safety, and infrastructure needs, while new plantings will prioritize resilience, biodiversity, and long-term sustainability.

**Urban Canopy Renewal**
The redevelopment carefully balances preservation and renewal of the tree canopy.

- **Phase 2 removals:** A 18" DBH spruce (coordinated with City staff for potential use as a holiday tree at Monument Square), a 18" DBH Pin Oak, and a mature Yew.
- **Phase 2 Proposed trees:**18 new trees are proposed planted.
- **Phase 3 removals:** A 4" Maple, a 15" Zelkova, a 15" Elm, and an 8" Maple.
- **Phase 3 Proposed Trees:** 19 new **trees** will be planted to enrich the streetscape and public spaces with diverse, climate-adaptive species.

b) See above.

c) Not Applicable.

2. Buffers and screening
   a) The proposed solid waste containers will be located within the proposed building and not viewable from public sidewalks and adjacent streets. Ground-mounted transformers are provided away from the public right of way and will not be immediately visible right of way due to plantings and building locations.

   b) No surface parking is proposed as part of the project.

   c) Not applicable

   d) The surrounding developments are similar in nature and compatible with the proposed residential development, resulting in no detrimental impacts that would necessitate evergreen vegetated buffers. See attached Landscape Narrative for more information.

3. Parking and vehicle display lot landscaping.

   a) Not applicable, no parking is proposed as part of this project.

   b) Not applicable.

   c) Not applicable.

4. Non-vehicular hardscape
   a) All uncovered paving for non-vehicular use shall have a minimum Solar Reflective Index (SRI) of 33 initially and 28 once aged three years. The walkways within the project will be typical concrete sidewalks. No asphalt paving is proposed.

5. Street trees

   a) Street trees are provided at 25-35 linear feet along the city right of way.

   b) Not applicable.

   c) There are no existing heritage or feature mature trees located on the property.

C. Water Quality, Stormwater Management and Erosion Control:

1. Stormwater

   a) The drainage patterns for stormwater draining onto the lot in its pre-development state will generally be maintained post-development. No ponding on or flooding of adjacent lots will be caused by the development.

   b) There will be no increase in volume or rate of stormwater draining from the lot onto adjacent lots or City property. See attached Stormwater Management Report for more information.

   c) There will be no increase in volume or rate of stormwater entering the city's separated storm drain system. See attached Stormwater Management Report for more information.

2. A site-specific Stormwater Management Plan has been developed for the project to show compliance with Section 5 of the Technical Manual, including standards of MDEP Chapter 500. Please refer to the Stormwater Management Report for this information.

3. 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.

4. The existing subsurface and adjacent slope conditions are suitable to support the proposed development. The proposed development shall not adversely impact the development site or any abutting property. Refer to section K Erosion and Sedimentation Control Report for more information.

**13.6.3 Public Infrastructure and Community Safety Standards**

A. Consistency with City Master Plans:

1. The project has been designed to be consistent with the City's Zoning Ordinance and off-site infrastructure.

2. An easement will be granted to Central Maine Power for the locations of the primary transformer vaults. The developers are currently will work with a general contractor to determine if temporary construction easements may be necessary and will provide supplemental information when available.

B. Public Safety and Fire Prevention:

1. Public Safety Design

a) The site has long viewing aisles and minimal spaces obscured from view.

b) Access to the site will be controlled by the property manager to ensure authorized/appropriate access.

c) This project will provide new site lighting and the design will promote natural surveillance and access control.

2. Emergency Access

a) Access to the site has been designed to comply with the Section 3 Public Safety standards of the Technical Manual.

C. Public Utilities:

1. The project will be served by public water, gas, electrical, and telecom. Ability to Serve letters have been sent to the respective companies. See attached Utility Narrative for the most current correspondence from utility companies.

2. The proposed buildings will be served via underground electrical conduit.

3. All storm drain, sanitary sewer, and water supply lines will be constructed in accordance with the standards of the Technical Manual.

4. The Mayo Street building will connect to the existing sanitary sewer main along Mayo Street and the Cumberland Avenue building will be connect to the existing sanitary sewer main along Boyd Street.

5. Proposed solid waste containers will be located within each building and will be screened from view.

**13.6.4 Site Design Standards**

A. Massing, Ventilation and Wind Impact:

1. Please refer to Section O, Architectural Design Narrative.
2. Please refer to Section O, Architectural Design Narrative.
3. Please refer to Section O, Architectural Design Narrative.

B. Shadows:

1. Please refer to Section O, Architectural Design Narrative.

C. Snow and Ice Loading:

1. Please refer to Section O, Architectural Design Narrative.

D. View Corridors:

1. Please refer to Section O, Architectural Design Narrative.

E. Historic Resources:

1. The development is not located in a Historic District.
2. There are no known archaeological resources on the site.
3. Not applicable.

F. Exterior Lighting:

1. Site Lighting.

   a) Exterior lighting will be designed to meet the requirements of Section 12 of the Technical Manual. See Section N: Lighting for additional information.

   b) Any lighting that may adversely impact the abutting properties will feature side shielding.

2. Architectural and Specialty Lighting.

   a) No architectural or specialty lighting is proposed.

   b) No up-lighting is proposed.

3. Street Lighting.

   a) One new street light is proposed along Boyd Street. The street lighting will be in conformance with the City's Technical Manual.

G. Noise and Vibration:

1. The HVAC system will meet the applicable state and federal emissions requirements and will also be screened and directed away from abutters.

H. Signage and Wayfinding:

1. Signage shall be designed to complement the building and its immediate context while conforming to the standards set forth in the City of Portland Land Use Code.

2. Signage will not adversely affect visibility at any intersections on or off the site.

I. Design Standards:

1. The project has been designed to meet the standards set forth in the Mixed-Use B1 (Mayo Street portion) and Business Community B2b (Cumberland Avenue portion) zoning districts. The project proposes to construct a 27-unit townhome building along Mayo Street as well as a 92-unit multi-family apartment building on the corner of Cumberland Avenue and Boyd Street. and other site and utility improvements. Please refer to the Site Plan and Architectural Drawings for additional information.

2. The development is not located within a Historic District.

**14.5.1 Technical Standards**
The proposed project and associated improvements shall adhere to all applicable Standards of the City of Portland Technical Manual, with the exception of the waiver request within Section I: Waiver Table.

**14.5.2 Timing of subdivision improvements**
The proposed work sequence is outlined in Section Q: Construction Management Plan.

**14.5.3 Subdivision Names**
Subdivision plat is included within the plan.

**14.5.4 Streets**

A. No new streets are proposed as part of the subdivision. Public streets impacted by the development will be reconstructed as shown on the Civil Plans.

B. No new streets are proposed as part of the subdivision.

C. No new streets are proposed as part of the subdivision. A pedestrian way will be constructed as a mid-block crossing and provide access to publicly accessible open space.

D. Not applicable.

E. Not applicable.

F. Not applicable.

G. Not applicable.

H. Not applicable.

I. Proposed sidewalks shall be constructed as specified in other sections of this ordinance and the City of Portland Technical Manual.

**14.5.5 Sewers and storm drains**

A. Storm drains systems are provided, see Plan Sheet C-31 & C-32. Storm drain will flow to the existing municipal separated storm drain.

B. Stormwater infrastructure within the City Right of Way that is intended for city maintenance shall be constructed to the satisfaction of the Public Works Authority. No stormwater infrastructure within the private portion of the Site is intended for City maintenance.

C. The developer will construct all sewers and storm drains to the satisfaction of the Public Works Authority.

**14.5.6 Blocks**

A. The entire subdivision will be constructed within a portion of an existing City block, bound by Cumberland Avenue, Oxford Street, Boyd Street, and Mayor Street. No new block is proposed as part of the subdivision.

B. A mid-block pedestrian crossing is provided as shown on the Site Plan and Subdivision Plat. The crossing will be encumbered with a public access easement.

C. No changes to the existing block dimensions are proposed as part of the subdivision.

D. No changes to the existing block dimensions are proposed as part of the subdivision.

**14.5.7 Lots**

A. All lots shall conform to all relevant provisions of the City of Portland Code of Ordinances.

B. Ordinances shall be coordinated with CMP for maintenance of pad-mounted electrical transformers and primary electrical services brought onto the site.

C. No lots are reserved for business, commercial or industrial purposes.

D. Side lot lines are provided at right angles to street lines to the maximum extent possible.

### 14.5.8 Public Open Space

A. A portion of the subdivision which spans Phases 1 & 2 is preserved for publicly accessible open space.

B. The publicly accessible open space within the subdivision is not intended for public ownership, but will be retained by the developer and encumbered with a public access easement.

C. The publicly accessible open space is not intended for common ownership.

### 14.5.9 Access to shoreline

A. Not applicable, there is no shore frontage within the subdivision.

B. Not applicable, no portion of the subdivision is within the Shoreland Overlay Zone.

### 14.6 Additional requirements for nonresidential subdivisions

A. Not applicable – the subdivision does not propose industrial or commercial uses.

B. Not applicable – the subdivision does not propose industrial or commercial uses.

C. Not applicable – the subdivision does not propose industrial or commercial uses.

DRY LANDSCAPE ARCHITECTURE

April 4, 2024

Mark Reiland - City of Portland Arborist
Parks, Recreation & Facilities
Forestry, Parks & Horticulture
212 Canco Road - Suite A
Portland, ME. 04103

**Landscape Narrative: COMB Block Redevelopment – Phases 2 & 3**

The redevelopment of Phases 2 and 3 enhances connectivity, walkability, and urban greening, fostering a dynamic and inclusive neighborhood. Midblock pathways improve permeability, linking Boyd and Mayo Streets while connecting to the Phase 1 courtyard and a less formal seating area and rain garden. The landscape blends seamlessly across the site, providing a suite of amenities that respond to the site's steep topography while ensuring accessibility and community engagement.

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The redevelopment carefully balances preservation and renewal of the tree canopy.

- **Phase 2 removals:** A 18" DBH spruce (coordinated with City staff for potential use as a holiday tree at Monument Square), a 18" DBH Pin Oak, and a mature Yew.
- **Phase 2 Proposed trees:**18 new trees are proposed planted.
- **Phase 3 removals:** A 4" Maple, a 15" Zelkova, a 15" Elm, and an 8" Maple.
- **Phase 3 Proposed Trees:** 19 new **trees** will be planted to enrich the streetscape and public spaces with diverse, climate-adaptive species.

These improvements create a vibrant, tree-lined environment that strengthens community connections, enhances ecological health, and ensures a welcoming, resilient neighborhood for generations to come.

We would be happy to meet onsite and discuss the plans further. If you have any questions or concerns regarding this tree removal plan, please do not hesitate to contact me at Dry-la@outlook.com or you can reach me at (603)496-8020. We value your input and are open to discussing any alternative solutions that may align with our project goals while addressing your concerns. We are committed to keeping the community informed throughout the process and working together to create a balance between progress and preserving our natural environment.

Thank you for your attention to this matter. We appreciate your understanding and cooperation as we work towards the successful completion of the COMB block project.

Sincerely,

Braden Drypolcher, Principal
Dry Landscape Architecture, LLC.



# G. Financial Capacity

A letter from the Applicant confirming financial capacity is attached to this section.

PORTLAND HOUSING DEVELOPMENT CORPORATION

# Financing Capacity
# COMB Block Phase 2 & 3

Portland Housing Development Corporation (PHDC), an instrumentality of Portland Housing Authority (PHA), self-certifies it has the financial capacity and experience to secure financing and complete the construction of COMB Block Phase 2 and Phase 3. Assembly of financing is in the early stages and will be completed within the development timeline based on PHDC's existing relationships and strong track record.

PRE-DEVELOPMENT

PHDC self-finances pre-development expenses with unrestricted funds and is reimbursed at construction loan closing.

CONSTRUCTION FINANCING

PHDC has several relationships with banks and will be selecting a bank partner for construction financing of both phases. Typical terms are expected for this loan, which will extend the duration of the construction period with interest-only payments at a market-based interest rate typical of such loans. PHDC has successfully obtained construction financing on multiple projects in recent years, including, $8.2 million at Solterra Apartments (58 Boyd St), $12.2 million at Washington Gardens (577 Washington Ave), $17.1 million and $11.9 million at Front Street, and $33.4 million at Harbor Terrace (284 Danforth St).

LOW INCOME HOUSING TAX CREDIT

In the past seven years, PHDC has been awarded nine Low Income Housing Tax Credits (LIHTC) awards for Solterra Apartments, Washington Gardens, Front Street Phases 1 and 2, 337 Cumberland Ave, Equinox Apartment, Winter Landings, Harbor Terrace, and COMB Block Phase 1. These include both 9% and 4% LIHTC deals.

It is expected COMB Block Phase 2 will be submitted this fall to the competition for a 9% allocation award for Low Income Housing Tax Credits (LIHTC) from MaineHousing. COMB Block Phase 3 is expected to be submitted to the competition for a LIHTC award in Fall 2026. The tax credits will generate equity to fund redevelopment. A tax credit investor will be identified after notice of an award.

Our organization is experienced in and knowledgeable of the competitive nature of the LIHTC funding rounds and have maximized our points for this project under the latest Qualified Allocation Plan (QAP). **Planning Board approval by August 2025 will provide COMB Block Phase 2 with additional "readiness" QAP points and is essential for the project to secure a LIHTC award in the upcoming application round.**

PERMANENT FINANCING

PHDC will secure a permanent senior loan for the project from either MaineHousing or a private bank. PHDC has successfully obtained permanent financing or commitments for permanent financing on multiple projects in recent years, including $8.5 million at 58 Boyd St, $8.8 million at Washington Gardens, $13.8 million and $7.5 million at Front St, and $15.2 million at Harbor Terrace.

PHDC anticipates applying for Affordable Housing Program (AHP) funds from either the Federal Home Loan Bank of Boston or New York.

OPERATING SUBSIDY

The COMB Block currently operates as Public Housing. Using HUD's Section 18 Demolition & Disposition program, the project is eligible to receive up to 40 Section 8 Project Based Vouchers (PBVs). The project will benefit from PBVs, guaranteeing that those households will pay no more than 30% of their income towards housing costs.

STAFF EXPERIENCE & CAPACITY

PHDC staff have over 30 years of experience in real estate development, sustainable design, community planning, finance, and construction. They have collectively developed nearly 2,000 affordable homes in their careers. PHDC utilizes private and public financing to renovate PHA's aging multifamily housing stock and create new units of attractive, affordable and workforce housing for Portland residents. Our real estate development team is practiced in environmentally responsible building techniques, smart growth planning and community revitalization. This experience allows PHDC to secure and assemble project financing from a broad range of local, state, and federal sources.

PHDC's new construction and preservation projects provide residents with quality, energy-efficient homes in growing Portland neighborhoods and areas of opportunity. These projects help foster sustainable and diverse and vibrant communities near transit, schools, services, and jobs. PHDC's efforts, in concert with public and private partnerships, encourage community revitalization, create essential affordable housing opportunities, and contribute to a better built environment for future generations.

# H. Technical Capacity

A letter from the Applicant summarizing & confirming technical capacity is attached to this section.

PORTLAND HOUSING DEVELOPMENT CORPORATION

# Technical Capacity
# COMB Block Phases 2 & 3

Portland Housing Development Corporation (PHDC), an instrumentality of Portland Housing Authority (PHA), has assembled a highly qualified team of professionals for the preparation of this project. All members of this team have significant experience with this type of project and many have worked together on similar projects. The project is being designed by a multi-disciplinary team of design professionals. All members of the design team have proven experience working on projects located in the City of Portland.

PHDC staff have over 30 years of experience in real estate development, sustainable design, community planning, finance, and construction. They have collectively developed nearly 2,000 affordable homes in their careers. PHDC utilizes private and public financing to renovate PHA's aging multifamily housing stock and create new units of attractive, affordable and workforce housing for Portland residents. Our real estate development team is practiced in environmentally responsible building techniques, smart growth planning and community revitalization. This experience allows PHDC to secure and assemble project financing from a broad range of local, state, and federal sources.

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**PORTLAND HOUSING AUTHORITY**
Owner
970 Baxter Blvd., Portland, ME 04103
207-773-4753
Contact: Brian Frost, Executive Director

**Mayo Housing, LP**
**C/O Portland Housing Development Corporation**
Applicant
970 Baxter Blvd., Portland, ME 04103
207-773-4753
Contact: Sarah Tatarczuk, Development Officer

**Cumberland Housing, LP**
**C/O Portland Housing Development Corporation**
Applicant
970 Baxter Blvd., Portland, ME 04103
207-773-4753
Contact: Justin Barker, Development Officer

**RYAN SENATORE ARCHITECTURE**
Architect
500 Congress Street, Suite 2, Portland, ME 04101
Contact: Ryan Senatore, Principal

**ACORN ENGINEERING, INC**
Civil Engineer
PO Box 3372, Portland, ME 04104
207-775-2655
Contact: Peter Heil, Project Manager

**DRY LANDSCAPE ARCHITECTURE, LLC**
Landscape Architect
603-496-8020
Contact: Braden Drypolcher, Principal

**OWEN HASKELL, INC**
Surveyor
390 US Route One, Unit 10, Falmouth, ME 04105
207-774-0424
Contact: Randy Loubier, Professional Land Surveyor

**DRUMMOND WOODSUM**
Attorney
84 Marginal Way, Suite 600, Portland, ME 04101-2480
207-772-1941
Contact: Gary Vogel

A C O R N
ENGINEERING, INC.

# STORMWATER MANAGEMENT REPORT

**Prepared For:**

**Portland Housing Development Corporation**
**Mayo Housing, LP & Cumberland Housing, LP**
**970 Baxter Boulevard**
**Portland, ME 04103**

**Prepared By:**

**Acorn Engineering, Inc.**
**PO Box 3372**
**Portland, Maine 04104**




**April 2025**
**Revised May 2025**

## INTRODUCTION

Acorn Engineering, Inc. has been retained by Portland Housing Development Corporation, Mayo Housing, LP and Cumberland Housing, LP to provide civil engineering services for the proposed work located at 70 East Oxford Street, Portland, ME 04101. The site is currently comprised of four (4) apartment buildings with surface parking and landscaping. The property consists of approximately 1.53 acres of land near Portland's Franklin Arterial. The proposed project 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 13.6.2.C.
- 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

## EXISTING CONDITIONS

The proposed project site is located at 70 East Oxford Street, bounded by Boyd Street, Mayo Street and Cumberland Avenue. An ALTA/NSPS Land Title Survey has been prepared by Owen Haskell, Inc., dated December 22, 2023.

The existing property is covered by approximately 49.6% impervious surfaces including the four (4) apartment buildings, 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 demolish the existing (4) buildings located on the parcel of the 70 East Oxford Street development. The previously permitted first phase of the development will construct a 55-unit apartment building on the southeast corner of the lot, at the corner of Boyd and Oxford Street. Along with Phase 1, site improvements including a parking area, open space, sidewalks, and utility improvements will occur. An ADS Stormtech chamber system will be installed within the parking area for stormwater detention, which will flow to an outlet control structure and a Stormfilter stormwater treatment BMP.

Phase 2 of the proposed development will consist of a 92-unit apartment building on the southwest corner of the lot, at the intersections of Cumberland Avenue and Boyd Street. The site improvements will consist of a concrete driveway to provide service access to the building, concrete walkways, and landscaped open space. Stormwater infrastructure will consist of an underdrained soil filter and Stormtree BMP to provide treatment for non-roof impervious surfaces. An ADS Stormtech chamber system will be provided beneath the driveway, which is routed to an outlet control structure to control flows before entering the separated storm sewer in Boyd Street.

Phase 3 of the proposed development will consist of a 27-unit apartment building on the northeast side of the parcel along Mayo Street and at the corner of Mayo and Oxford Streets. Site improvements will consist of concrete sidewalks to access the Mayo St sidewalk, Phase 1 & 2 open space and service entries on the building. Catch basins and storm drains will be installed to connect the development to the detention & treatment system that was installed as part of Phase 1, which was designed to have capacity for the Phase 3 landscaped and impervious area.

The project anticipates incorporating Maine DEP approved stormwater Best Management Practices (BMP) to meet the General and Flooding Standards, as well as meeting more stringent DPW standards for discharging into the City's separated storm sewer systems.

## GENERAL STANDARDS – WATER QUALITY

Phase 2 of the proposed project was designed to provide water quality treatment through the use of an underdrained soil filter and a Stormtree proprietary BMP. This proprietary system is an approved system per Appendix B. of the MDEP Volume III BMPs Technical Design Manual.

Phase 3 of the proposed development will provide primary water quality treatment Stormfilter proprietary BMP that was approved as part of Phase 1 of the development. This system was sized based on the projected impervious area that is to be constructed as part of Phase 3. See the previously submitted Phase 1 Stormwater Management Report for more information regarding sizing of the Phase 1 treatment BMPs.

The stormwater treatment BMP's are designed to provide treatment per City of Portland Technical Manual, Chapter 5 requirements. The Municipal code states: "*Stormwater quality treatment shall be provided for: 1. Projects which do not require a state stormwater permit: a. 95% of new impervious area b. 80% of new developed area c. 95% of non-roof redeveloped impervious area*"

*Treatment Area*

The development shall provide water quality treatment in accordance with the City of Portland for no less than 95% of the non-roof redeveloped impervious area. The entirety of the site is considered "redeveloped area". The following is a summary of existing and proposed impervious area within the redeveloped portion of the site:

| | **Table 1 – Treatment Area** | | |
|---|---|---|---|
| | Existing Impervious Area | Non-Roof Redeveloped Impervious Area | Non-Roof Redeveloped Impervious Area with Treatment |
| Phase 2 | 11,350 SF | 2,680 SF* | 2,680 SF (100%) |
| Phase 3 | 11,080 SF | 730 SF** | 730 SF (100%) |
| *546 SF Excluded per Technical Manual 5.2.2.B.4.<br>**640 SF Excluded per Technical Manual 5.2.2.B.4. | | | |

*Underdrained Soil Filter Sizing*

The UDSF soil filter areas are then sized upon the following equation:

[(Imp. SF x 0.05) + (Veg. SF x 0.02)] = Filter Area (SF)

The water quality volume is then analyzed to ensure the first 18" of ponding is capturing the required runoff. The required treatment volume is characterized by the following equation:

$$\left(\frac{\text{Imp. SF x 1.0"}}{\text{12"/1'}}\right) + \left(\frac{\text{Veg. SF x 0.4"}}{\text{12"/1'}}\right) = \text{Treatment Volume (CF)}$$

The following table summarizes each VUSF's required & proposed filter areas & treatment volumes:

| **Table B: VUSF Sizing Summary** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| UDSF | Sub-catchment | Total Tributary Area (SF), | Impervious Area (SF) | Vegetated Area (SF) | Filter Area Required (SF) | Treatment Volume Required (CF) | Filter Area Provided (SF) | Treatment Volume Provided (CF) |
| 1 | 2.1 | 7,095 | 2,270 | 4,825 | 210 | 350 | 265 | 645 |

*MDEP Standards*

Phases 2 and 3, through a common scheme of development, will bring the project into the requirements of meeting Maine Stormwater Law General Standards for greater than an acre of impervious area on the site throughout all three phases. The total impervious area on the site is 44,960 sf. Treatment requirements for the project are determined by MDEP Chapter 500 4.C. General Standards, Section (2)(d) Redevelopment Project.

The existing land uses and pollutant rankings are as follows:

| **Table 1 – Land Use Pollutant Summary Table: Existing Conditions** | | | |
|---|---|---|---|
| **Land Use** | **Pollutant Ranking** | **Area (Acres)** | **Weighted Average Ranking** |
| Roads where idling may occur; high use parking lots | 5 | 0 | 0 |
| Other roads; medium use parking lots | 4 | 0.21 | 0.84 |
| Other parking lots and driveways; flat asphalt rooftops; roofs on an industrial facility | 3 | 0 | 0 |
| Other rooftops; bikeways; grassed areas mowed more than twice per year; walkways/foot traffic only pavement | 2 | 1.32 | 2.64 |
| Non-grass landscaped areas; stormwater treatment/storage systems (except buffers) | 1 | 0 | 0 |
| Total | | **1.52** | 3.48 |
| **Weighted Average** | | | **2.28** |

The proposed land uses and pollutant rankings are as follows:

| **Table 2 – Land Use Pollutant Summary Table: Proposed Conditions** | | | |
|---|---|---|---|
| **Land Use** | **Pollutant Ranking** | **Area (Acres)** | **Weighted Average Ranking** |
| Roads where idling may occur; high use parking lots | 5 | 0 | 0 |
| Other roads; medium use parking lots | 4 | 0.08 | 0.24 |
| Other parking lots and driveways; flat asphalt rooftops; roofs on an industrial facility | 3 | 0.74 | 2.22 |
| Other rooftops; bikeways; grassed areas mowed more than twice per year; walkways/foot traffic only pavement | 2 | 0.57 | 1.14 |
| Non-grass landscaped areas; stormwater treatment/storage systems (except buffers) | 1 | 0.13 | 0.13 |
| Total | | **1.52** | 3.73 |
| **Weighted Average** | | | **2.45** |

Plans showing the pre- and post-development pollutant rankings are included as Attachments 1 & 3 with this report.

Subtracting the pre-development weighted average from the post-development weighted average yields 0.17. Per Table 3 of MDEP Chapter 500, the project must treat 60% of the proposed developed area. The treatment requirements are as follows:

| **Table A: Treatment Summary** | | | |
|---|---|---|---|
| Total Project Redeveloped Area (SF) | Treatment Requirement – Redeveloped Area | Total Redeveloped Area Requiring Treatment (SF) | Area Treated (SF) |
| 66,840 | 60% | 40,104 | 46,693 |

## FLOODING STANDARD – WATER QUANTITY

To meet the City's minimum Stormwater Detention Requirement, the project is subject to provide a minimum detention volume of 1" of rainfall over the entire project impervious area being proposed on the parcel with a maximum outflow rate of 0.1 CFS until the on-site detention system reaches its design capacity. Phase 3 of the project will utilize the ACS Stormtech SC-800 Chamber System for stormwater detention system that was installed as part of Phase 1. See the Phase1 Stormwater Management Report & plans for details regarding that system. Phase 2 will install another Stormtech SC-800 Chamber System in the proposed driveway. Before being discharged to the city storm drain in Boyd Street, anoutlet control structure provides an orifice system to control flows to meet the mximum outflow rate during design storm events.

See below table for the project redevelopment requirements and calculations for water quality volume.

| **Table 5 – DPW Detention Volume Requirement** | | | |
|---|---|---|---|
| | Project Impervious Area (SF) | Total Detention Volume Required (CF) | Detention Volume Provided (CF) |
| Phase 1 SC-800 Chamber System | 18,432 (Phase 1) + 11,178 (Phase 3) = 29,610 | 2,467 | 2,582 |
| Phase 2 SC-800 Chamber System | 15,280 | 1,273 | 1,595 |

To meet the 0.1 CFS requirement, an outlet control structure is provided on the outlet of each detention system. See plan details for information regarding the Outlet Control Structures.

A model has been provided to show 0.1 CFS at the detention storage volume and is included within the post-development HydroCAD calculations provided.

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 D – CN 80

Post-Development

- Pavement, Walkways, Roofs – CN 98
- >75% Grass Cover (new landscaping) – Good, HSG D – CN 80

*Pre-development Calculations*

The pre-development model was broken into three separate subcatchments.

- Subcatchment 1 – This tributary area include the interior and western of the site, which currently surface flows to Oxford Street where it enters the city storm drain system through a catch basin within Oxford Street.
- Subcatchment 2 – This tributary area includes the southern portion of the site and upper parking lot, which is currently caught by a drainage system and discharged to the storm drain system in Boyd Street.
- Subcatchment 3 – This tributary area includes the northeastern edge of the site, which currently surface flows to the Mayo Street gutter and enters the storm drain system through the manhole at the corner of Mayo St and Oxford St.

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) |
|---|---|---|---|
| POI 1 | 1.7 | 2.7 | 3.6 |
| POI 2 | 1.2 | 2.0 | 2.7 |
| POI 3 | 0.5 | 0.9 | 1.1 |

*Post-development Calculations*

The post-development model was broken into three separate sub catchments.

- Subcatchment 1.1 – This tributary area includes the roof of the Phase 1 building.
- Subcatchment 1.2 - This tributary area includes the roof of the Phase 3 building.
- Subcatchment 1.3 – This tributary area includes the proposed Phase 1 parking area and open space which spans Phase 1 and 3, consisting of landscaped and grassed areas as well as concrete walkways.
- Subcatchment 2.1 – This tributary area includes the Phase 2 concrete driveway and interior open space of Phase 2 consisting of grassed and landscaped areas, concrete walkways, and the proposed underdrained soil filter.
- Subcatchment 2.2 – This tributary area includes the roof of the Phase 2 building.
- Subcatchment 2.3 – This grassed area to the east of the proposed Phase 2 building which is moderately sloped and drains to a proposed catch basin which is routed to the stormwater detention system.
- Subcatchment 2.4 – This tributary area is comprised of brick and concrete walkways.
- Subcatchment 3.1 – This tributary area includes the northeastern edge of the site, which will surface flow to the Mayo Street gutter and enters the storm drain system through the manhole at the corner of Mayo St and Oxford St.

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) |
|---|---|---|---|
| POI 1 | 1.0 | 2.4 | 3.5 |
| POI 2 | 0.6 | 1.8 | 2.2 |
| POI 3 | 0.0 | 0.1 | 0.1 |

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-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 |
| POI 1 | 1.7 | 1.1 | 2.7 | 2.6 | 3.6 | 3.7 |
| POI 2 | 1.2 | 0.6 | 2.0 | 1.8 | 2.7 | 2.2 |
| POI 3 | 0.5 | 0.0 | 0.9 | 0.1 | 1.1 | 0.1 |

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

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 |
|---|---|---|
| Deerfield Loamy Fine Sand | 0.17 | 0.17 |
| Hinckley 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 Plan
Attachment B: Post-Development Watershed Plan
Attachment C: HydroCAD Calculations
Attachment D: Medium Intensity Web Soil Survey
Attachment E: Pre-development Pollutant Ranking Plan
Attachment F: Post-development Pollutant Ranking Plan

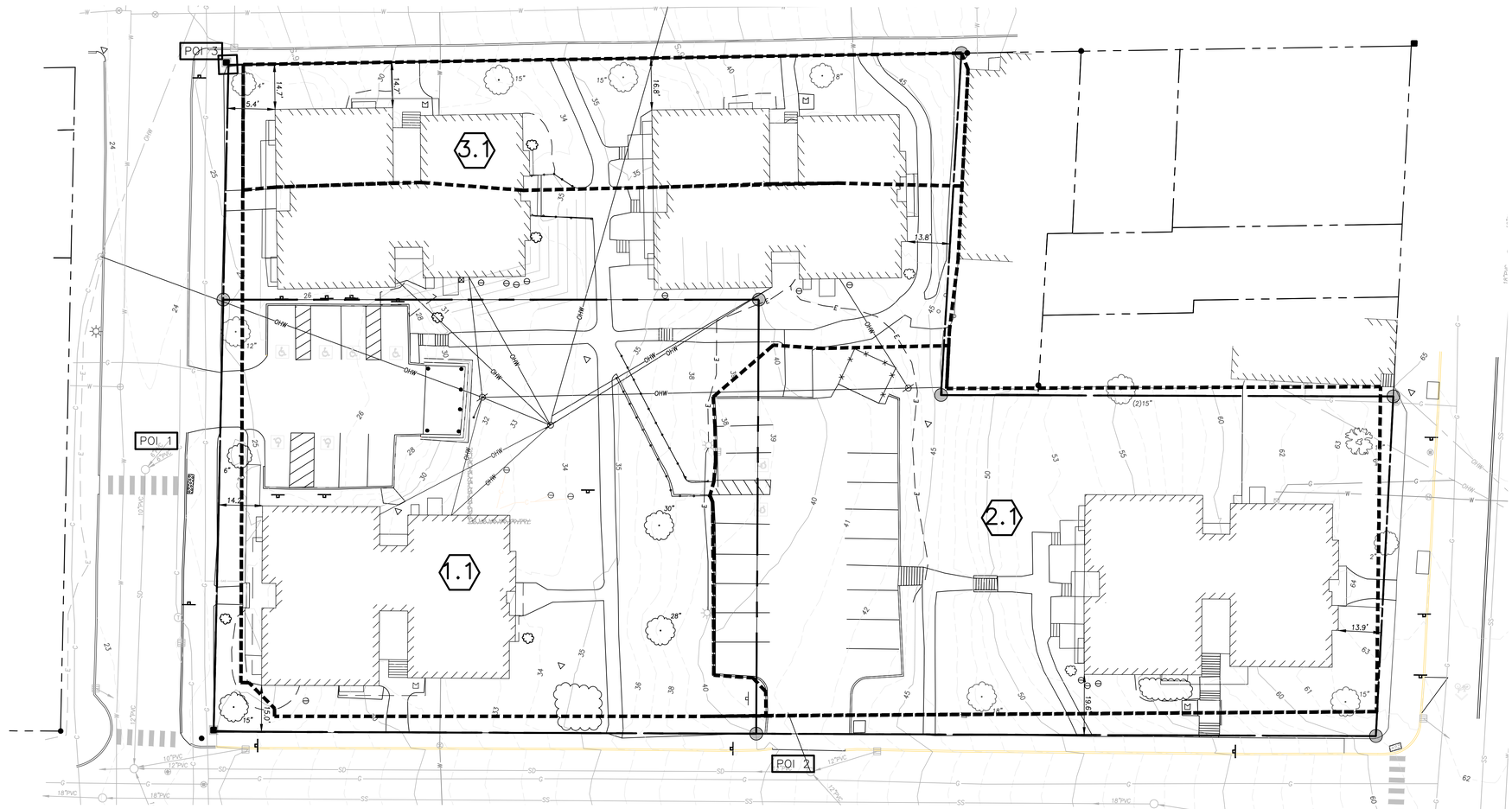
GENERAL NOTES:

REFER TO STORMWATER REPORT FOR MORE INFORMATION.

1 — SUBCATCHMENT

SUBCATCHMENT EXTENTS

POI 1 — POINT OF INTEREST (POI)




20 0 20 40

SCALE: 1"=20'

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH | 4/4/2025 |

DRAWING NAME: PRE-DEVELOPMENT WATERSHED PLAN

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

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| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

DRAWING NO.
SW-1

GENERAL NOTES:

REFER TO STORMWATER REPORT FOR MORE INFORMATION.

1 — SUBCATCHMENT

SUBCATCHMENT EXTENTS

POI 1 — POINT OF INTEREST (POI)

1 — POND

MAYO STREET
PAVED – PUBLIC

OXFORD STREET
PAVED – PUBLIC

CUMBERLAND AVENUE
PAVED – PUBLIC

BOYD STREET
PAVED – PUBLIC

TM 22-2-23
N/F
MAYO STREET
APARTMENTS
30646/220

TM 22-2-28

TM 22-2-26

TM 22-2-25

TM 22-2-24
N/F
MARKOS S. MILLER &
HEATHER L. NICHOLS
30970/264

POI 1

POI 2

POI 3

1.1

1.2

1.3

2.1

2.2

2.3

2.4

P1

P2.1

P2.2

ST

OHW

10' 0 10' 20

SCALE: 1"=20'

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR | BY | DATE
MAJOR SITE PLAN SUBMISSION | MKT | 4/7/2025

DRAWING NAME: POST-DEVELOPMENT WATERSHED PLAN

PROJECT NAME: COMB BLOCK PHASES 2 & 3

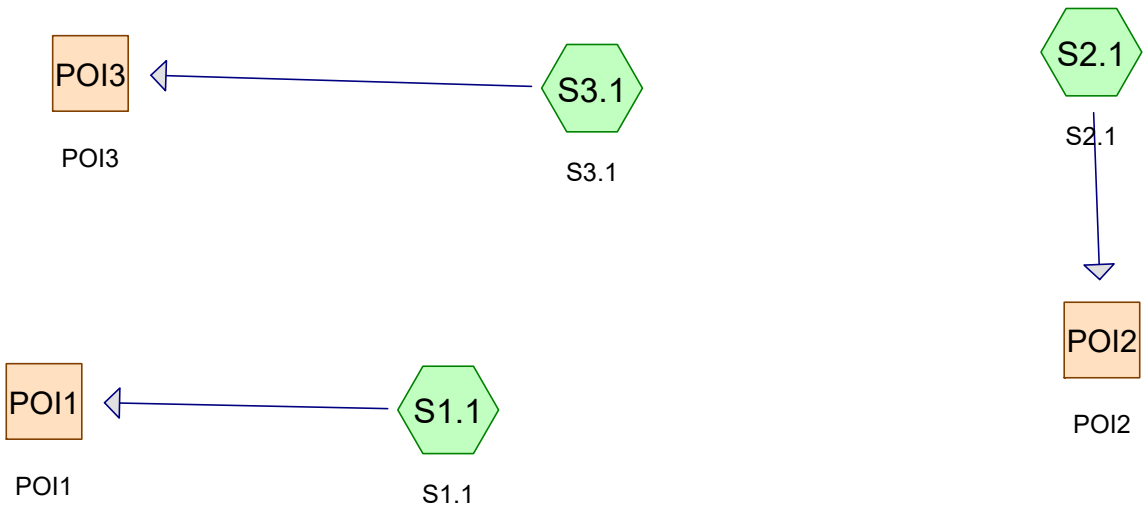
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

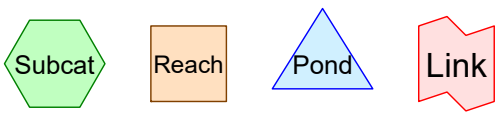
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JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

DRAWING NO.
SW-2




**Routing Diagram for 1215 Pre-Development**
Prepared by HP Inc., Printed 3/13/2024
HydroCAD® 10.00-26 s/n 00620 © 2020 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.686 | 80 | >75% Grass cover, Good, HSG D (S1.1, S2.1, S3.1) |
| 0.440 | 98 | Roofs, HSG D (S1.1, S2.1, S3.1) |
| 0.314 | 98 | Unconnected pavement, HSG D (S1.1, S2.1, S3.1) |
| **1.440** | **89** | **TOTAL AREA** |

## Soil Listing (all nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 0.000 | HSG A | |
| 0.000 | HSG B | |
| 0.000 | HSG C | |
| 1.440 | HSG D | S1.1, S2.1, S3.1 |
| 0.000 | Other | |
| **1.440** | | **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 |
|---|---|---|---|---|---|---|---|
| 0.000 | 0.000 | 0.000 | 0.686 | 0.000 | 0.686 | >75% Grass cover, Good | S1.1, S2.1, S3.1 |
| 0.000 | 0.000 | 0.000 | 0.440 | 0.000 | 0.440 | Roofs | S1.1, S2.1, S3.1 |
| 0.000 | 0.000 | 0.000 | 0.314 | 0.000 | 0.314 | Unconnected pavement | S1.1, S2.1, S3.1 |
| **0.000** | **0.000** | **0.000** | **1.440** | **0.000** | **1.440** | **TOTAL AREA** | |

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 S1.1: S1.1** Runoff Area=29,855 sf 53.01% Impervious Runoff Depth>1.95"
Tc=6.0 min CN=90 Runoff=1.62 cfs 0.111 af

**Subcatchment S2.1: S2.1** Runoff Area=23,313 sf 51.22% Impervious Runoff Depth>1.87"
Tc=6.0 min CN=89 Runoff=1.22 cfs 0.083 af

**Subcatchment S3.1: S3.1** Runoff Area=9,561 sf 53.34% Impervious Runoff Depth>1.95"
Tc=6.0 min CN=90 Runoff=0.52 cfs 0.036 af

**Reach POI1: POI1** Inflow=1.62 cfs 0.111 af
Outflow=1.62 cfs 0.111 af

**Reach POI2: POI2** Inflow=1.22 cfs 0.083 af
Outflow=1.22 cfs 0.083 af

**Reach POI3: POI3** Inflow=0.52 cfs 0.036 af
Outflow=0.52 cfs 0.036 af

**Total Runoff Area = 1.440 ac Runoff Volume = 0.230 af Average Runoff Depth = 1.92"**
**47.61% Pervious = 0.686 ac 52.39% Impervious = 0.754 ac**

## Summary for Subcatchment S1.1: S1.1

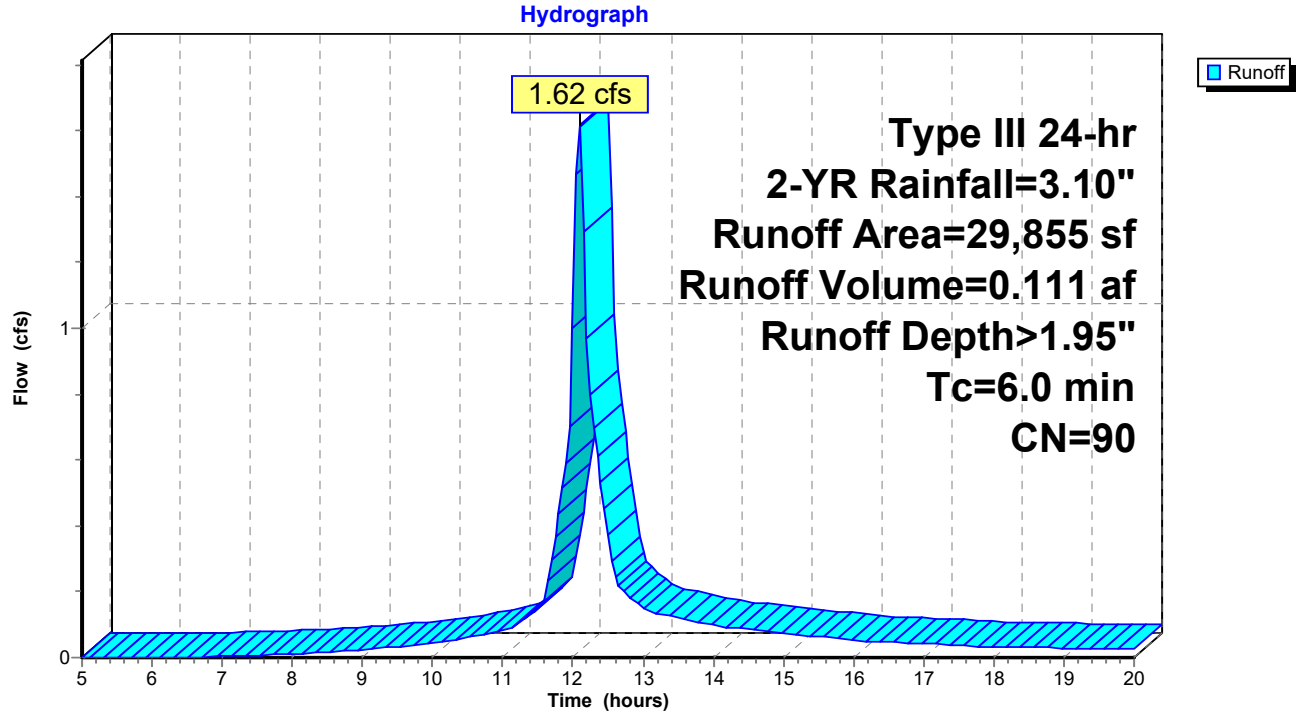
Runoff = 1.62 cfs @ 12.09 hrs, Volume= 0.111 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 14,030 | 80 | >75% Grass cover, Good, HSG D |
| 10,101 | 98 | Roofs, HSG D |
| 5,724 | 98 | Unconnected pavement, HSG D |
| 29,855 | 90 | Weighted Average |
| 14,030 | | 46.99% Pervious Area |
| 15,825 | | 53.01% Impervious Area |
| 5,724 | | 36.17% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S1.1: S1.1



## Summary for Subcatchment S2.1: S2.1

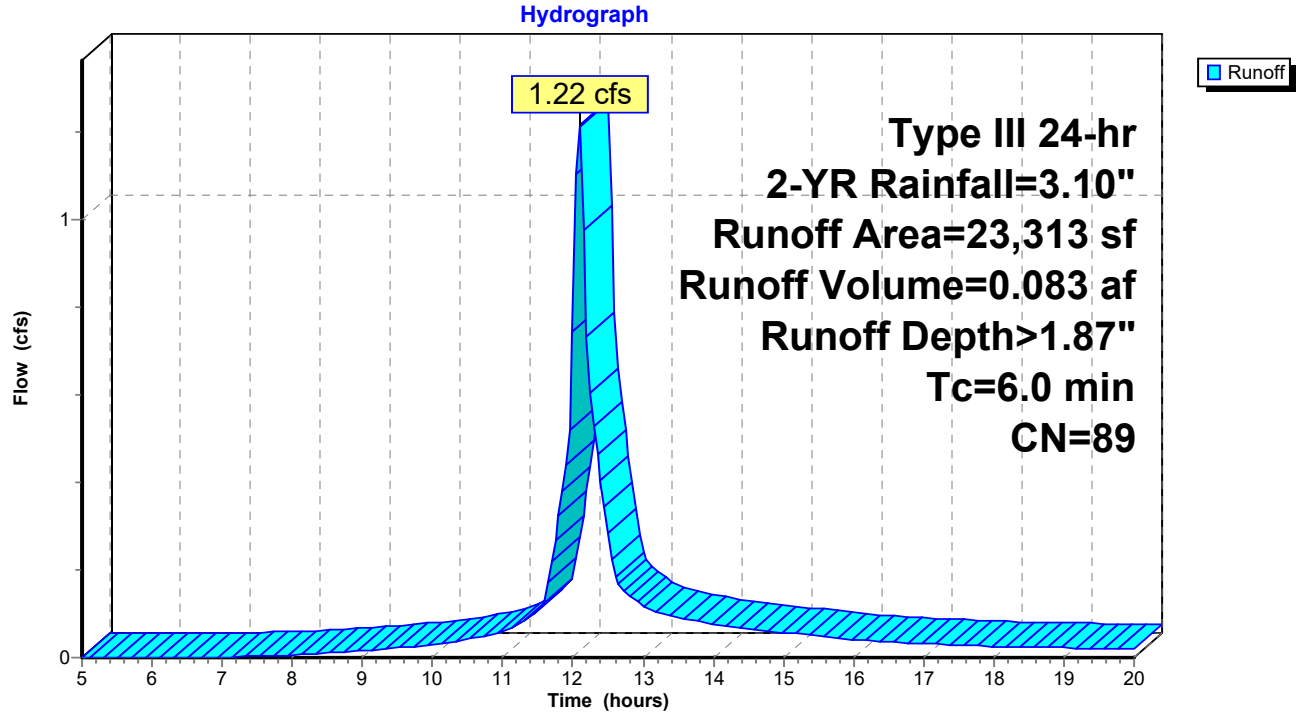
Runoff = 1.22 cfs @ 12.09 hrs, Volume= 0.083 af, Depth> 1.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 11,373 | 80 | >75% Grass cover, Good, HSG D |
| 4,899 | 98 | Roofs, HSG D |
| 7,041 | 98 | Unconnected pavement, HSG D |
| 23,313 | 89 | Weighted Average |
| 11,373 | | 48.78% Pervious Area |
| 11,940 | | 51.22% Impervious Area |
| 7,041 | | 58.97% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S2.1: S2.1



## Summary for Subcatchment S3.1: S3.1

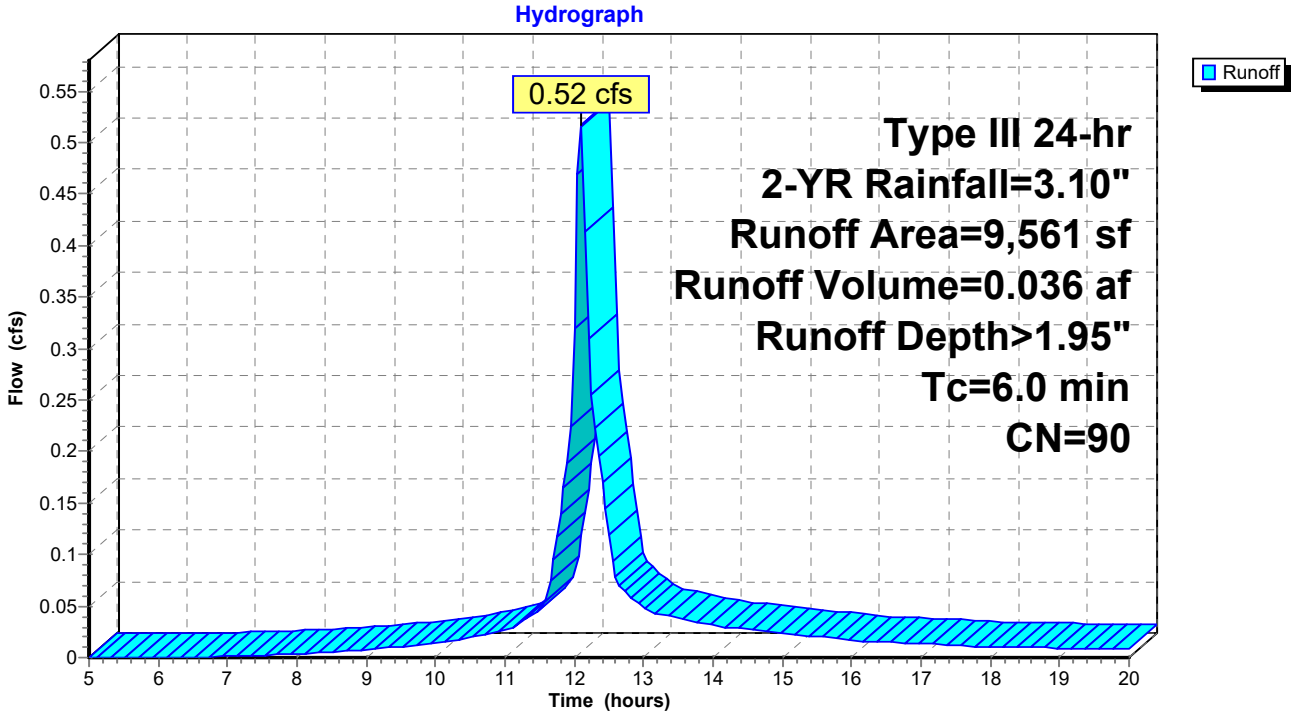
Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af, Depth> 1.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 4,461 | 80 | >75% Grass cover, Good, HSG D |
| 4,173 | 98 | Roofs, HSG D |
| 927 | 98 | Unconnected pavement, HSG D |
| 9,561 | 90 | Weighted Average |
| 4,461 | | 46.66% Pervious Area |
| 5,100 | | 53.34% Impervious Area |
| 927 | | 18.18% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S3.1: S3.1

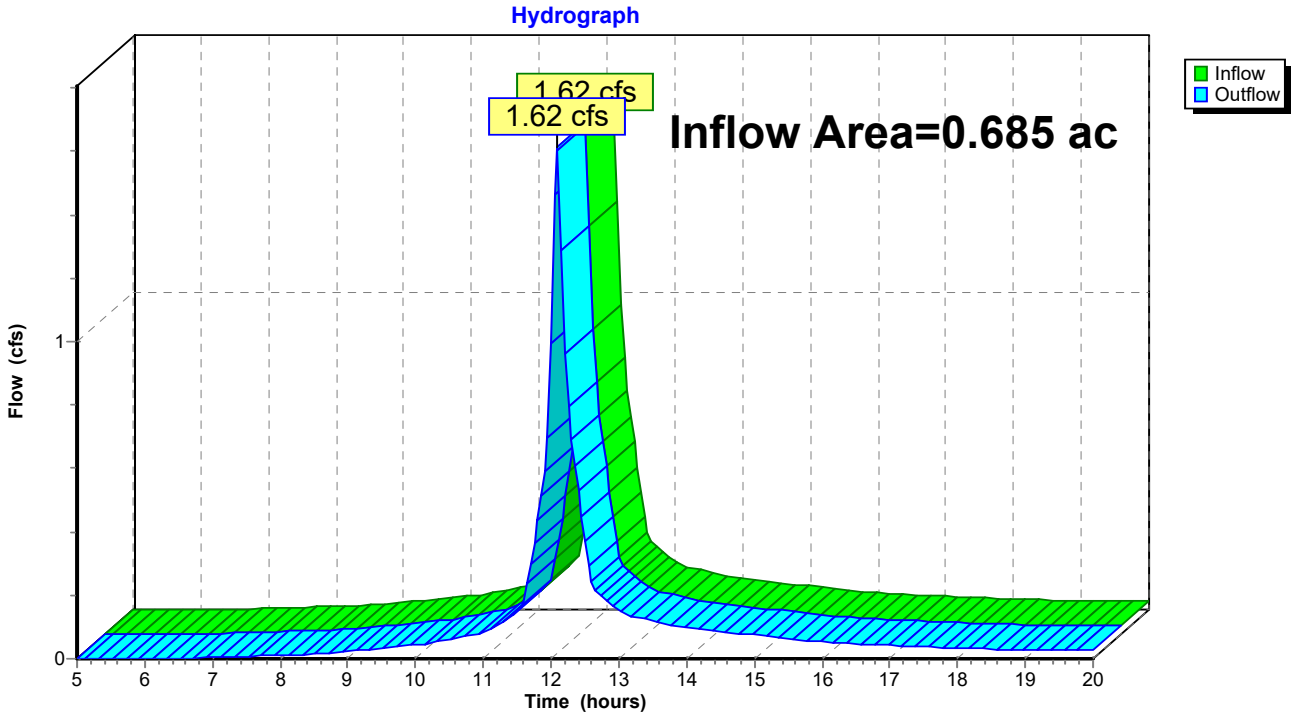


## Summary for Reach POI1: POI1

Inflow Area = 0.685 ac, 53.01% Impervious, Inflow Depth > 1.95" for 2-YR event
Inflow = 1.62 cfs @ 12.09 hrs, Volume= 0.111 af
Outflow = 1.62 cfs @ 12.09 hrs, Volume= 0.111 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

## Reach POI1: POI1

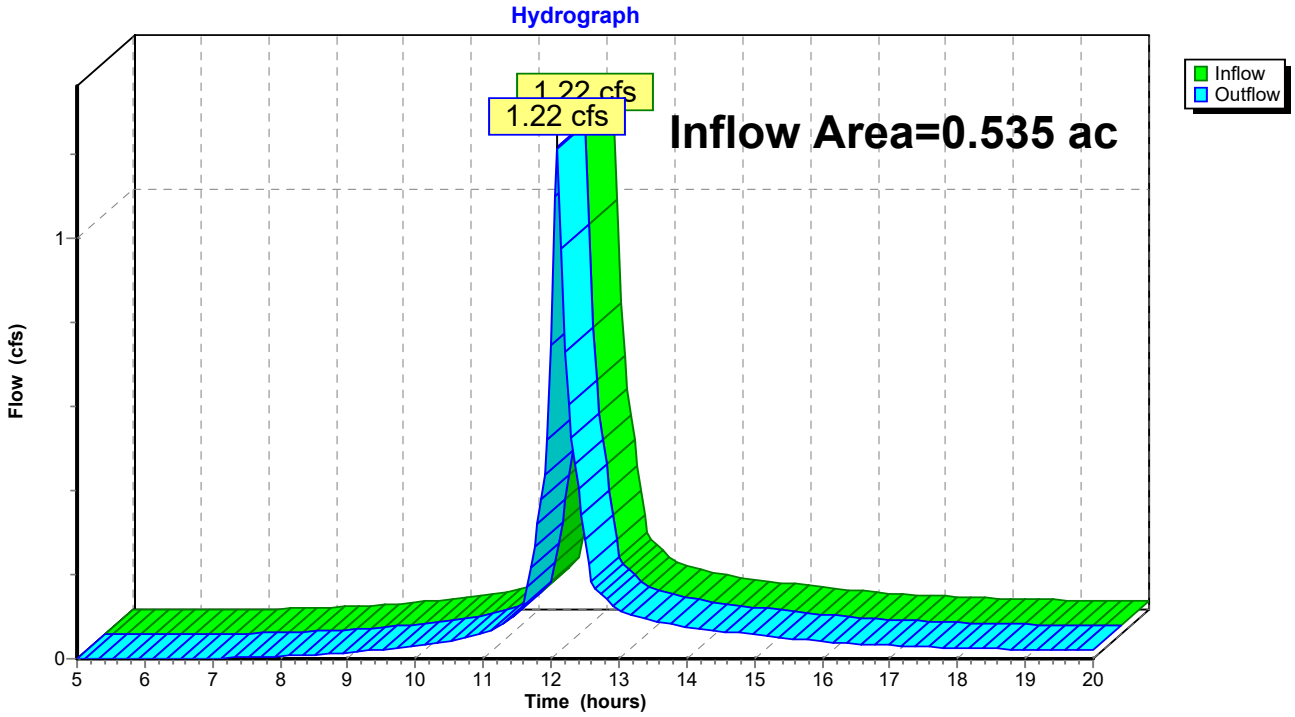


## Summary for Reach POI2: POI2

Inflow Area = 0.535 ac, 51.22% Impervious, Inflow Depth > 1.87" for 2-YR event
Inflow = 1.22 cfs @ 12.09 hrs, Volume= 0.083 af
Outflow = 1.22 cfs @ 12.09 hrs, Volume= 0.083 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

## Reach POI2: POI2

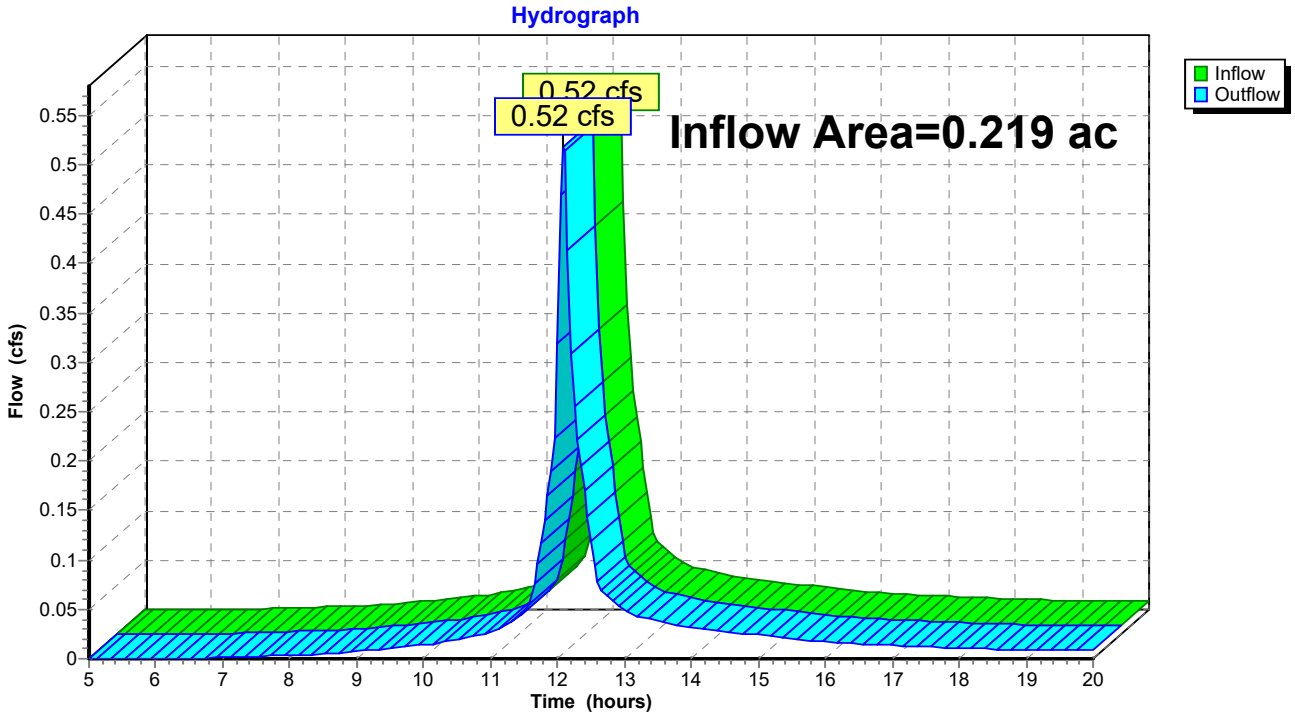


## Summary for Reach POI3: POI3

Inflow Area = 0.219 ac, 53.34% Impervious, Inflow Depth > 1.95" for 2-YR event
Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af
Outflow = 0.52 cfs @ 12.09 hrs, Volume= 0.036 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

## Reach POI3: POI3



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 S1.1: S1.1** Runoff Area=29,855 sf 53.01% Impervious Runoff Depth>3.30"
Tc=6.0 min CN=90 Runoff=2.66 cfs 0.188 af

**Subcatchment S2.1: S2.1** Runoff Area=23,313 sf 51.22% Impervious Runoff Depth>3.20"
Tc=6.0 min CN=89 Runoff=2.03 cfs 0.143 af

**Subcatchment S3.1: S3.1** Runoff Area=9,561 sf 53.34% Impervious Runoff Depth>3.30"
Tc=6.0 min CN=90 Runoff=0.85 cfs 0.060 af

**Reach POI1: POI1** Inflow=2.66 cfs 0.188 af
Outflow=2.66 cfs 0.188 af

**Reach POI2: POI2** Inflow=2.03 cfs 0.143 af
Outflow=2.03 cfs 0.143 af

**Reach POI3: POI3** Inflow=0.85 cfs 0.060 af
Outflow=0.85 cfs 0.060 af

**Total Runoff Area = 1.440 ac Runoff Volume = 0.391 af Average Runoff Depth = 3.26"**
**47.61% Pervious = 0.686 ac 52.39% Impervious = 0.754 ac**

## Summary for Subcatchment S1.1: S1.1

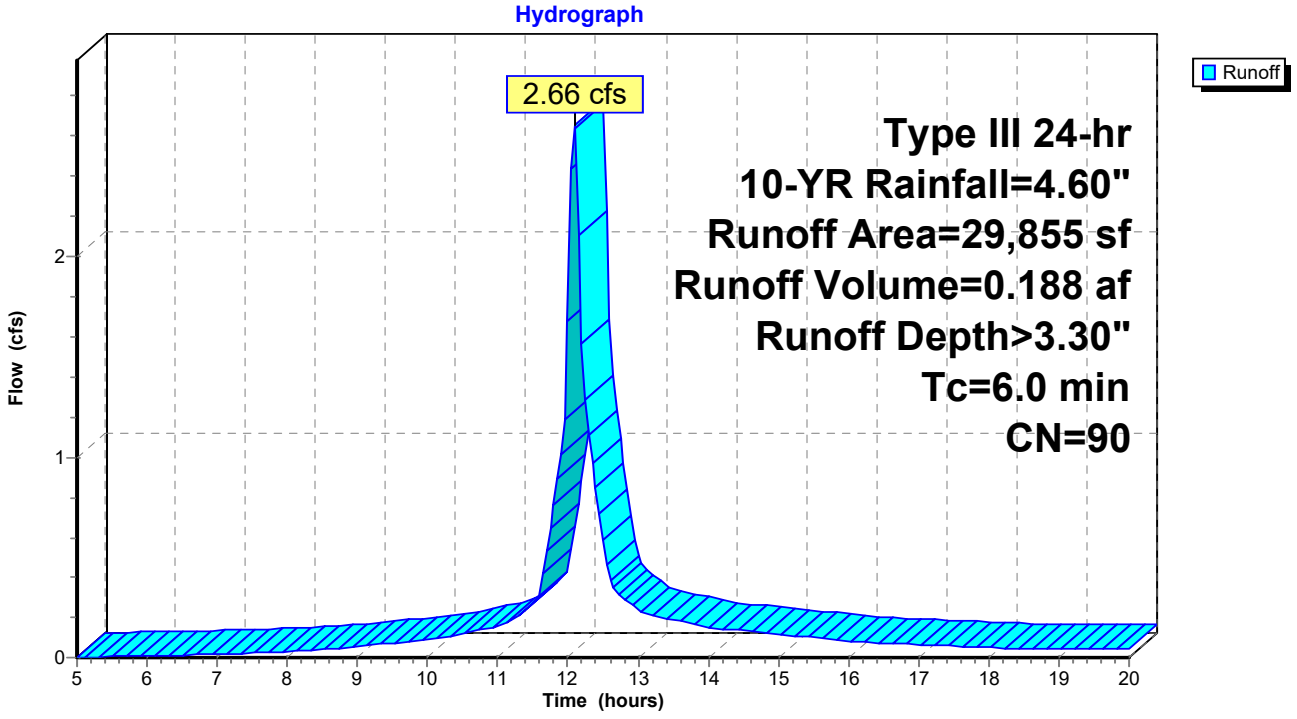
Runoff = 2.66 cfs @ 12.09 hrs, Volume= 0.188 af, Depth> 3.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 14,030 | 80 | >75% Grass cover, Good, HSG D |
| 10,101 | 98 | Roofs, HSG D |
| 5,724 | 98 | Unconnected pavement, HSG D |
| 29,855 | 90 | Weighted Average |
| 14,030 | | 46.99% Pervious Area |
| 15,825 | | 53.01% Impervious Area |
| 5,724 | | 36.17% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S1.1: S1.1



## Summary for Subcatchment S2.1: S2.1

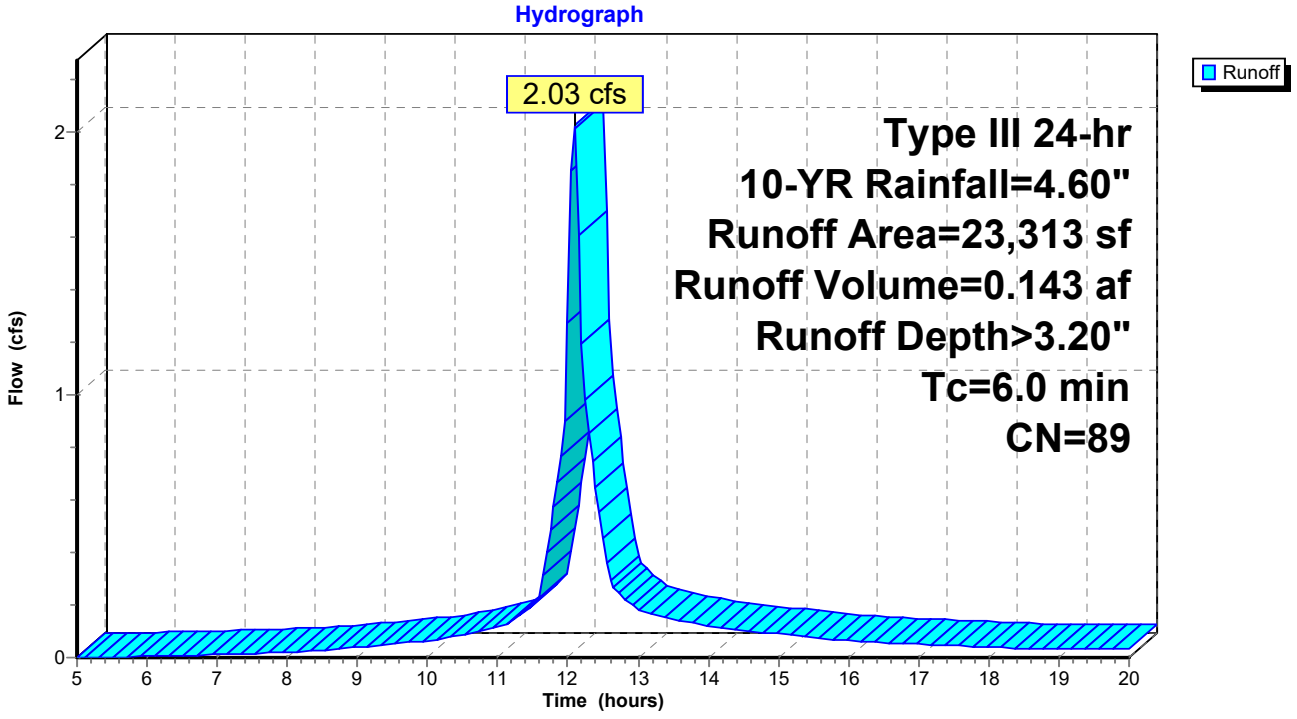
Runoff = 2.03 cfs @ 12.09 hrs, Volume= 0.143 af, Depth> 3.20"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 11,373 | 80 | >75% Grass cover, Good, HSG D |
| 4,899 | 98 | Roofs, HSG D |
| 7,041 | 98 | Unconnected pavement, HSG D |
| 23,313 | 89 | Weighted Average |
| 11,373 | | 48.78% Pervious Area |
| 11,940 | | 51.22% Impervious Area |
| 7,041 | | 58.97% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S2.1: S2.1



## Summary for Subcatchment S3.1: S3.1

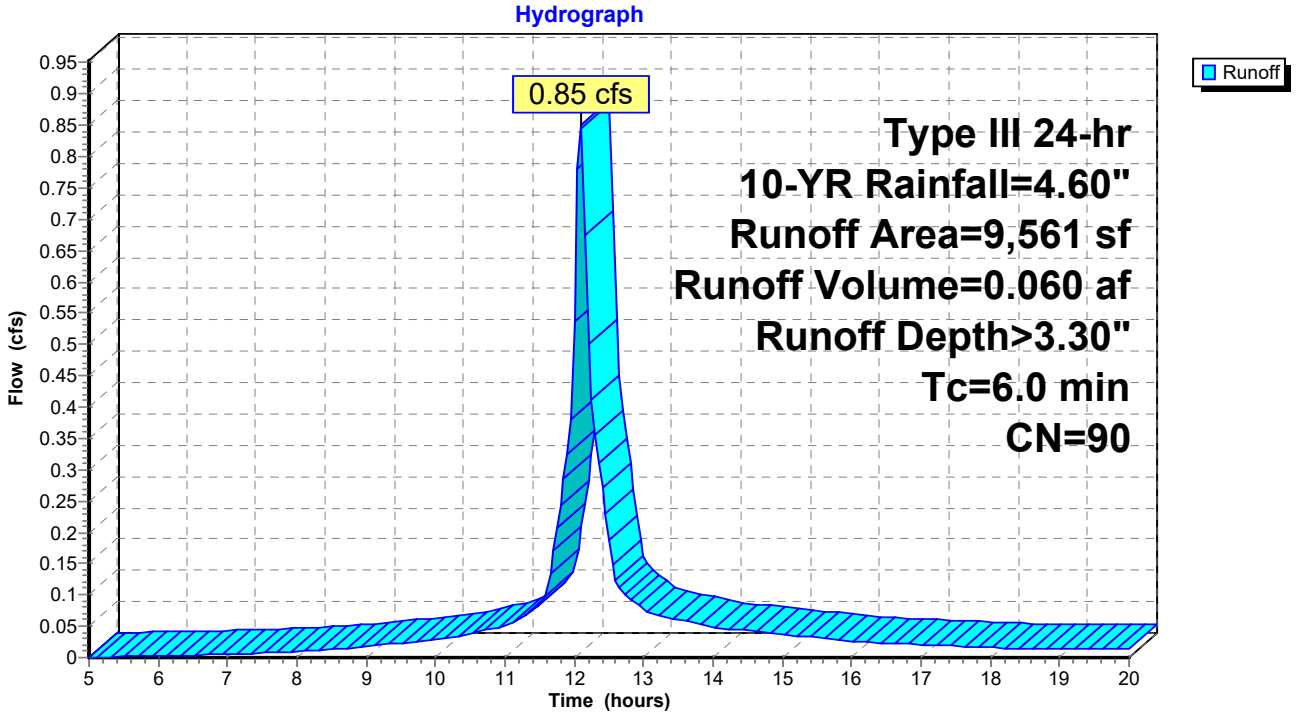
Runoff = 0.85 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 3.30"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 4,461 | 80 | >75% Grass cover, Good, HSG D |
| 4,173 | 98 | Roofs, HSG D |
| 927 | 98 | Unconnected pavement, HSG D |
| 9,561 | 90 | Weighted Average |
| 4,461 | | 46.66% Pervious Area |
| 5,100 | | 53.34% Impervious Area |
| 927 | | 18.18% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S3.1: S3.1

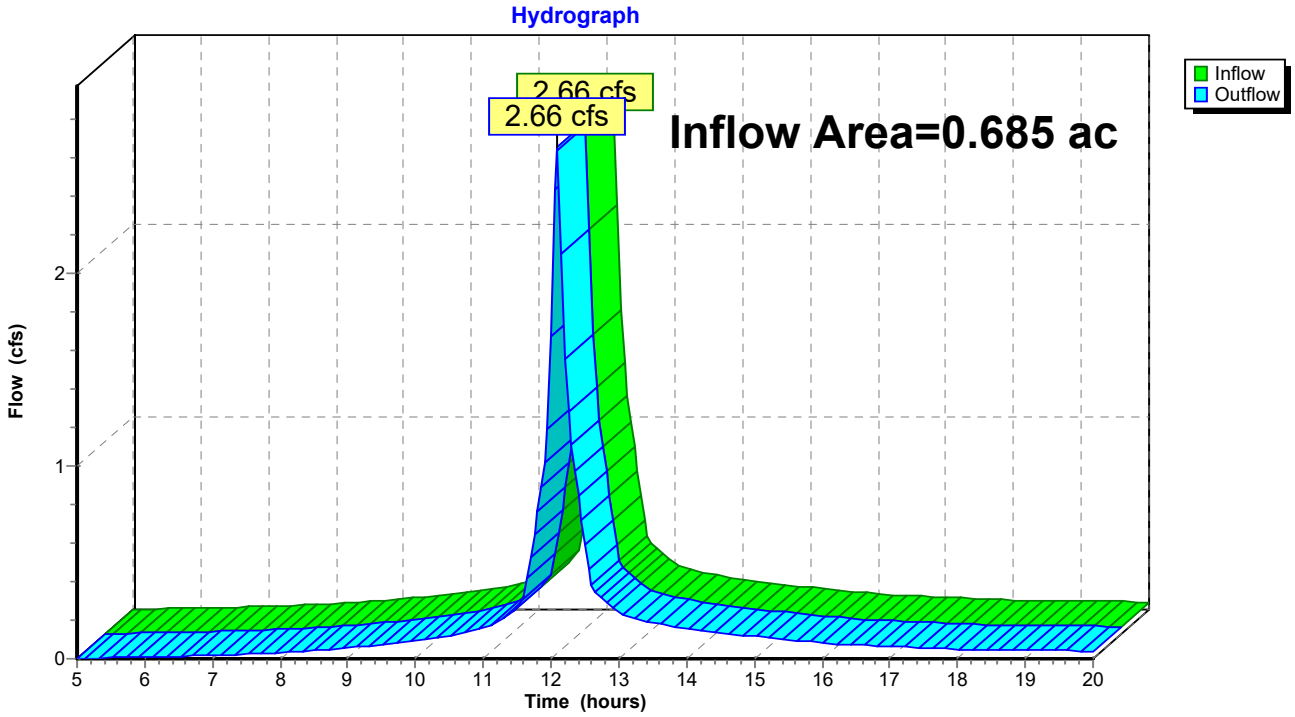


## Summary for Reach POI1: POI1

Inflow Area = 0.685 ac, 53.01% Impervious, Inflow Depth > 3.30" for 10-YR event
Inflow = 2.66 cfs @ 12.09 hrs, Volume= 0.188 af
Outflow = 2.66 cfs @ 12.09 hrs, Volume= 0.188 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Reach POI1: POI1

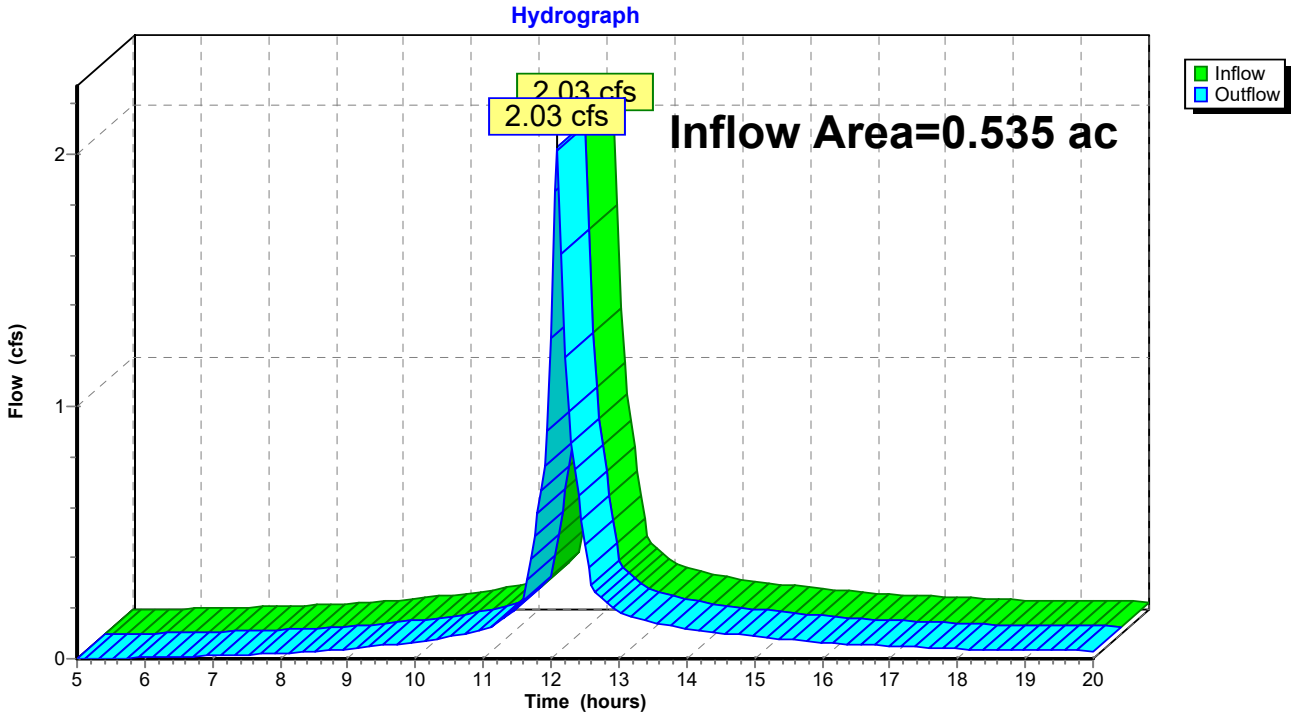


## Summary for Reach POI2: POI2

Inflow Area = 0.535 ac, 51.22% Impervious, Inflow Depth > 3.20" for 10-YR event
Inflow = 2.03 cfs @ 12.09 hrs, Volume= 0.143 af
Outflow = 2.03 cfs @ 12.09 hrs, Volume= 0.143 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Reach POI2: POI2

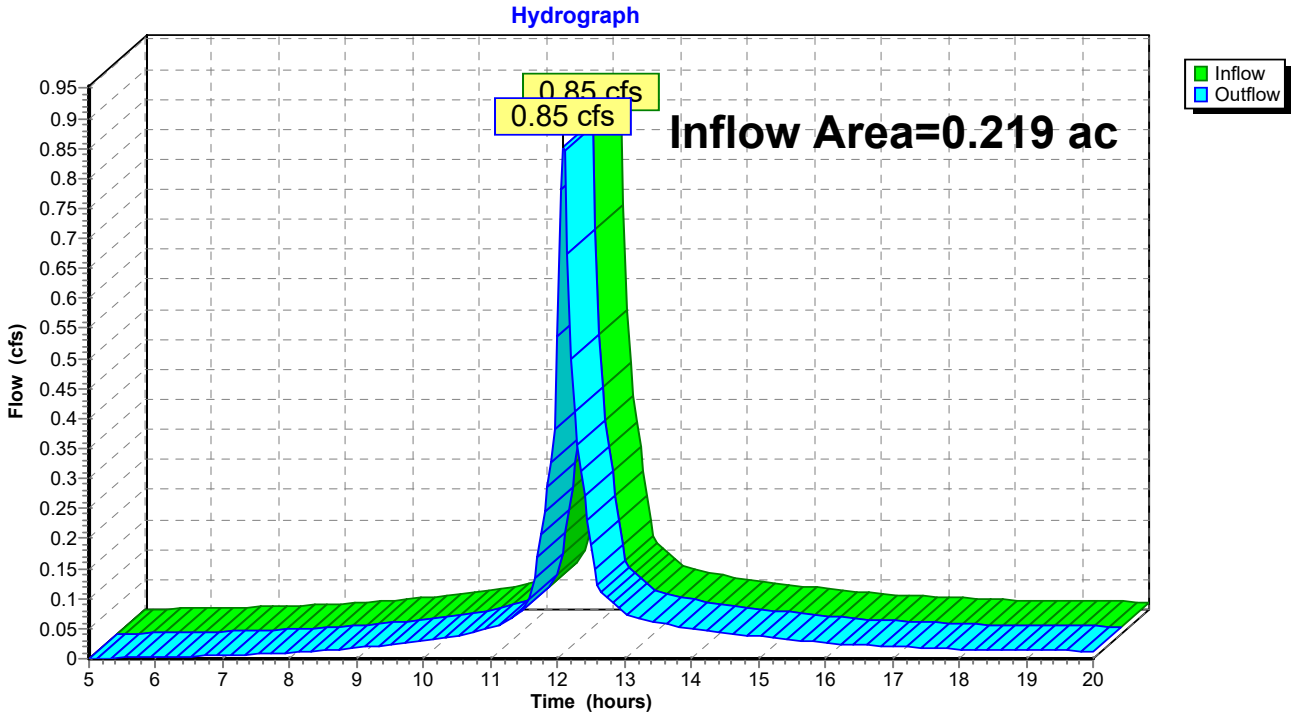


## Summary for Reach POI3: POI3

Inflow Area = 0.219 ac, 53.34% Impervious, Inflow Depth > 3.30" for 10-YR event
Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.060 af
Outflow = 0.85 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

## Reach POI3: POI3



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 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 S1.1: S1.1** Runoff Area=29,855 sf 53.01% Impervious Runoff Depth>4.40"
Tc=6.0 min CN=90 Runoff=3.49 cfs 0.251 af

**Subcatchment S2.1: S2.1** Runoff Area=23,313 sf 51.22% Impervious Runoff Depth>4.29"
Tc=6.0 min CN=89 Runoff=2.68 cfs 0.191 af

**Subcatchment S3.1: S3.1** Runoff Area=9,561 sf 53.34% Impervious Runoff Depth>4.40"
Tc=6.0 min CN=90 Runoff=1.12 cfs 0.080 af

**Reach POI1: POI1** Inflow=3.49 cfs 0.251 af
Outflow=3.49 cfs 0.251 af

**Reach POI2: POI2** Inflow=2.68 cfs 0.191 af
Outflow=2.68 cfs 0.191 af

**Reach POI3: POI3** Inflow=1.12 cfs 0.080 af
Outflow=1.12 cfs 0.080 af

**Total Runoff Area = 1.440 ac Runoff Volume = 0.523 af Average Runoff Depth = 4.36"**
**47.61% Pervious = 0.686 ac 52.39% Impervious = 0.754 ac**

## Summary for Subcatchment S1.1: S1.1

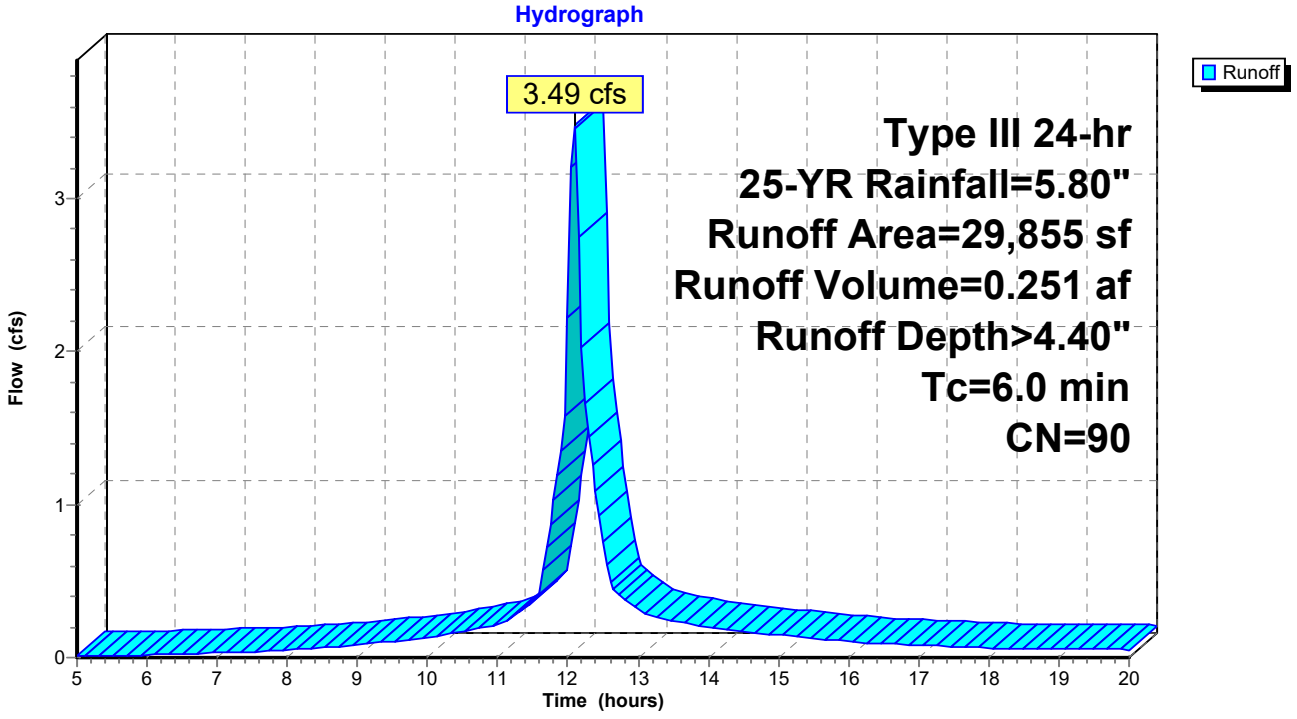
Runoff = 3.49 cfs @ 12.09 hrs, Volume= 0.251 af, Depth> 4.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 14,030 | 80 | >75% Grass cover, Good, HSG D |
| 10,101 | 98 | Roofs, HSG D |
| 5,724 | 98 | Unconnected pavement, HSG D |
| 29,855 | 90 | Weighted Average |
| 14,030 | | 46.99% Pervious Area |
| 15,825 | | 53.01% Impervious Area |
| 5,724 | | 36.17% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S1.1: S1.1



## Summary for Subcatchment S2.1: S2.1

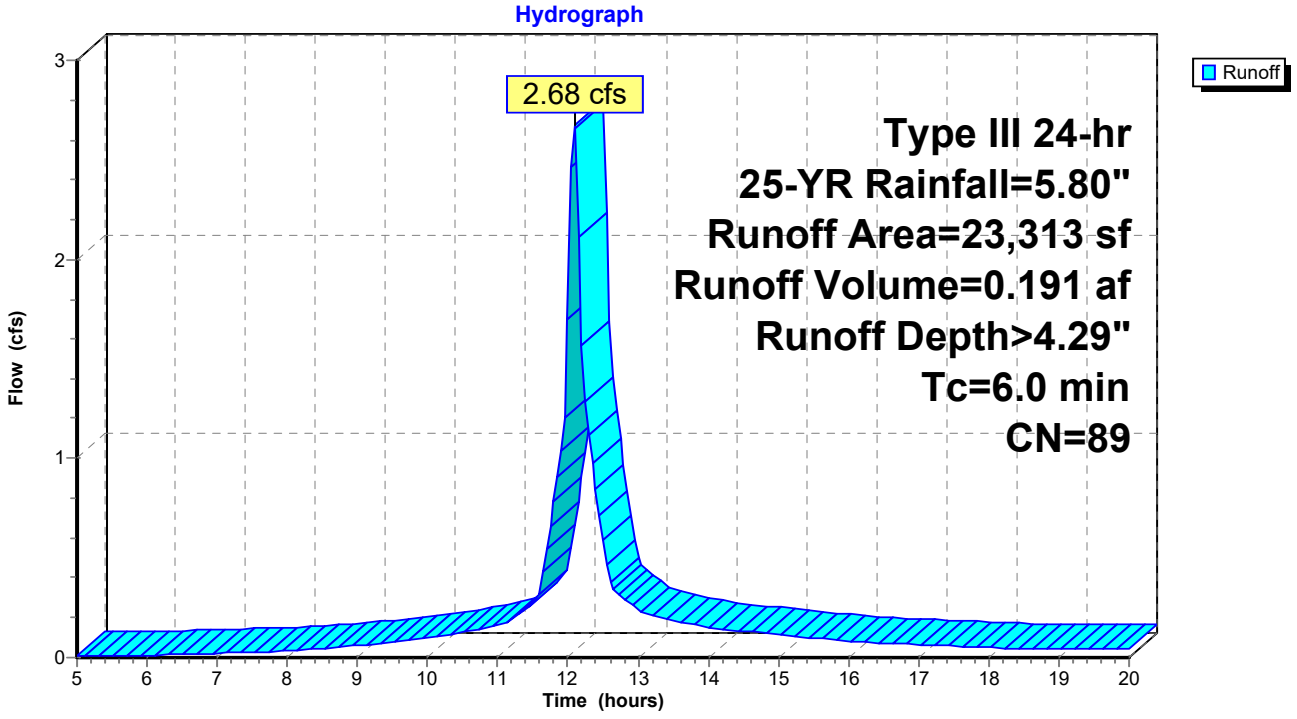
Runoff = 2.68 cfs @ 12.09 hrs, Volume= 0.191 af, Depth> 4.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 11,373 | 80 | >75% Grass cover, Good, HSG D |
| 4,899 | 98 | Roofs, HSG D |
| 7,041 | 98 | Unconnected pavement, HSG D |
| 23,313 | 89 | Weighted Average |
| 11,373 | | 48.78% Pervious Area |
| 11,940 | | 51.22% Impervious Area |
| 7,041 | | 58.97% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S2.1: S2.1



## Summary for Subcatchment S3.1: S3.1

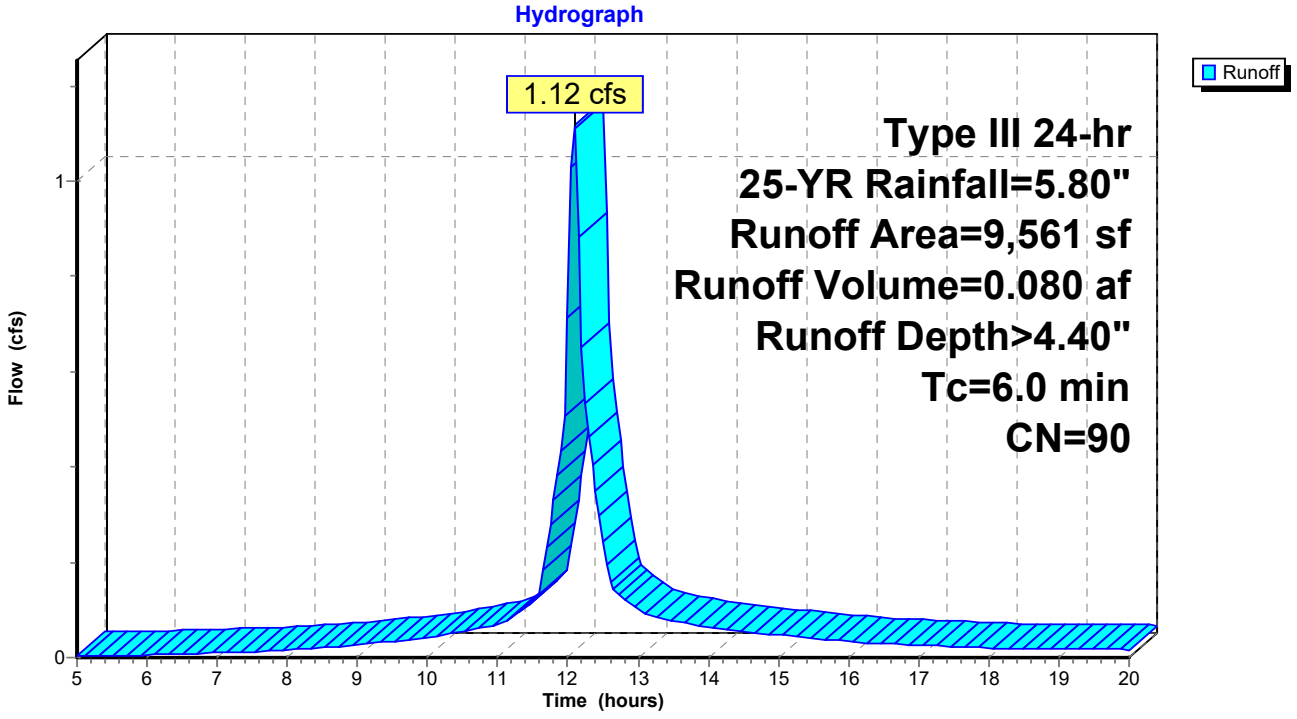
Runoff = 1.12 cfs @ 12.09 hrs, Volume= 0.080 af, Depth> 4.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 4,461 | 80 | >75% Grass cover, Good, HSG D |
| 4,173 | 98 | Roofs, HSG D |
| 927 | 98 | Unconnected pavement, HSG D |
| 9,561 | 90 | Weighted Average |
| 4,461 | | 46.66% Pervious Area |
| 5,100 | | 53.34% Impervious Area |
| 927 | | 18.18% Unconnected |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, DIRECT ENTRY** |

## Subcatchment S3.1: S3.1

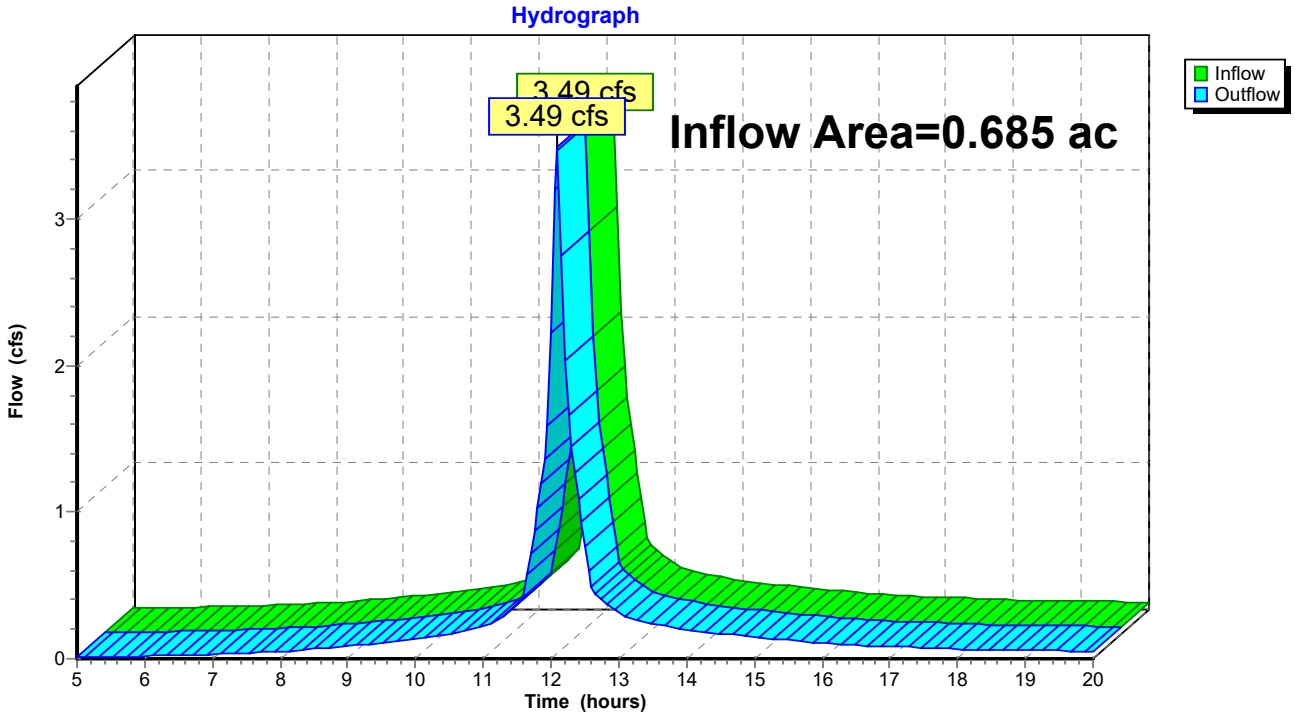


## Summary for Reach POI1: POI1

Inflow Area = 0.685 ac, 53.01% Impervious, Inflow Depth > 4.40" for 25-YR event
Inflow = 3.49 cfs @ 12.09 hrs, Volume= 0.251 af
Outflow = 3.49 cfs @ 12.09 hrs, Volume= 0.251 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Reach POI1: POI1

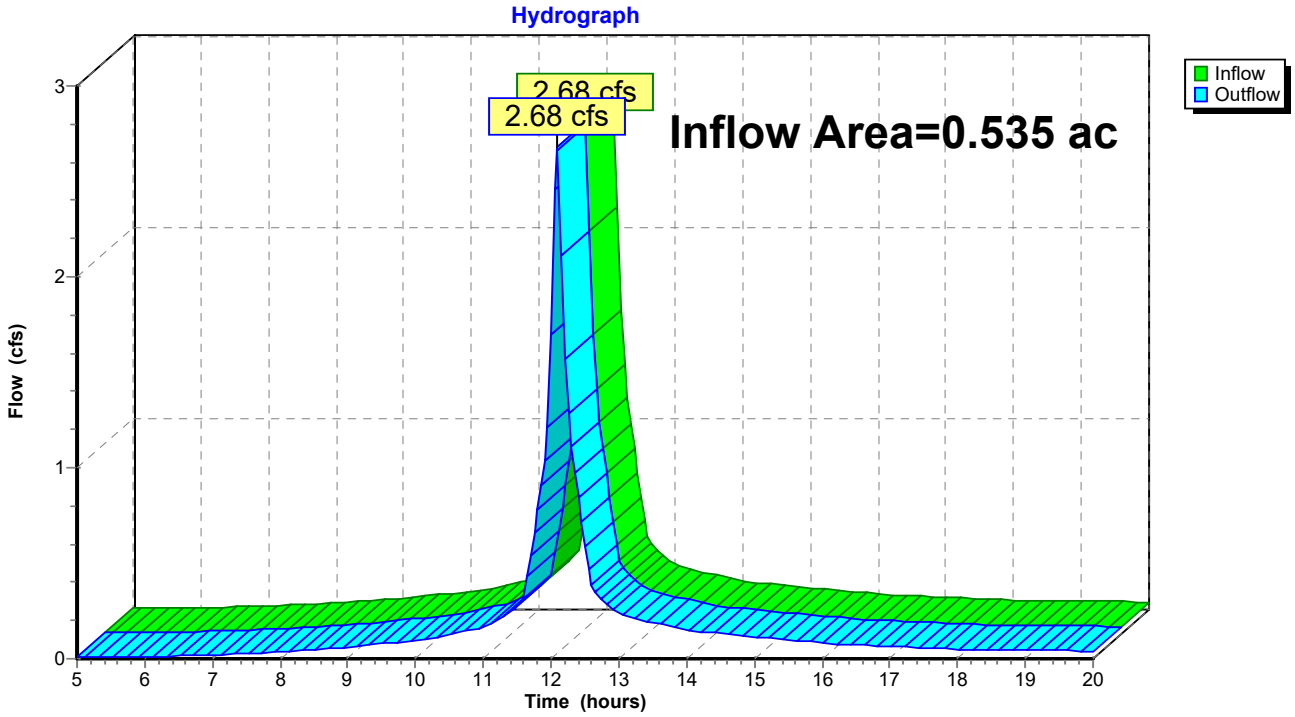


## Summary for Reach POI2: POI2

Inflow Area = 0.535 ac, 51.22% Impervious, Inflow Depth > 4.29" for 25-YR event
Inflow = 2.68 cfs @ 12.09 hrs, Volume= 0.191 af
Outflow = 2.68 cfs @ 12.09 hrs, Volume= 0.191 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

## Reach POI2: POI2

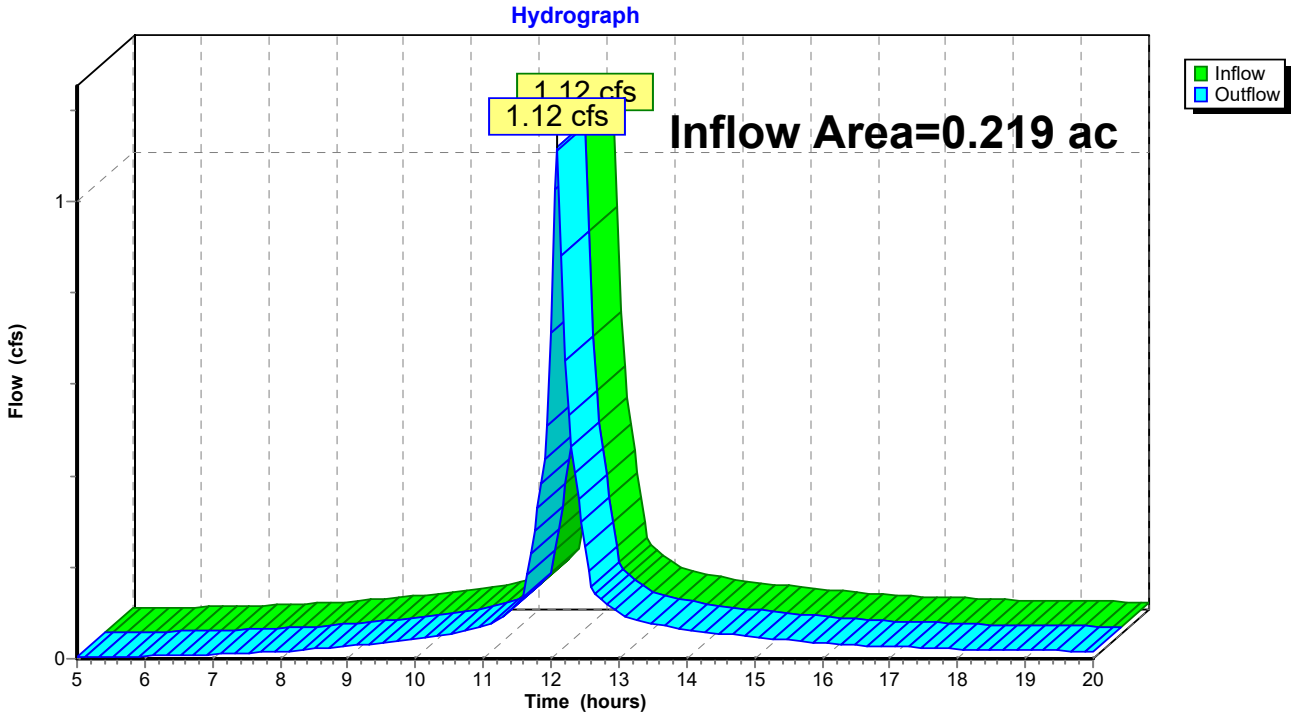


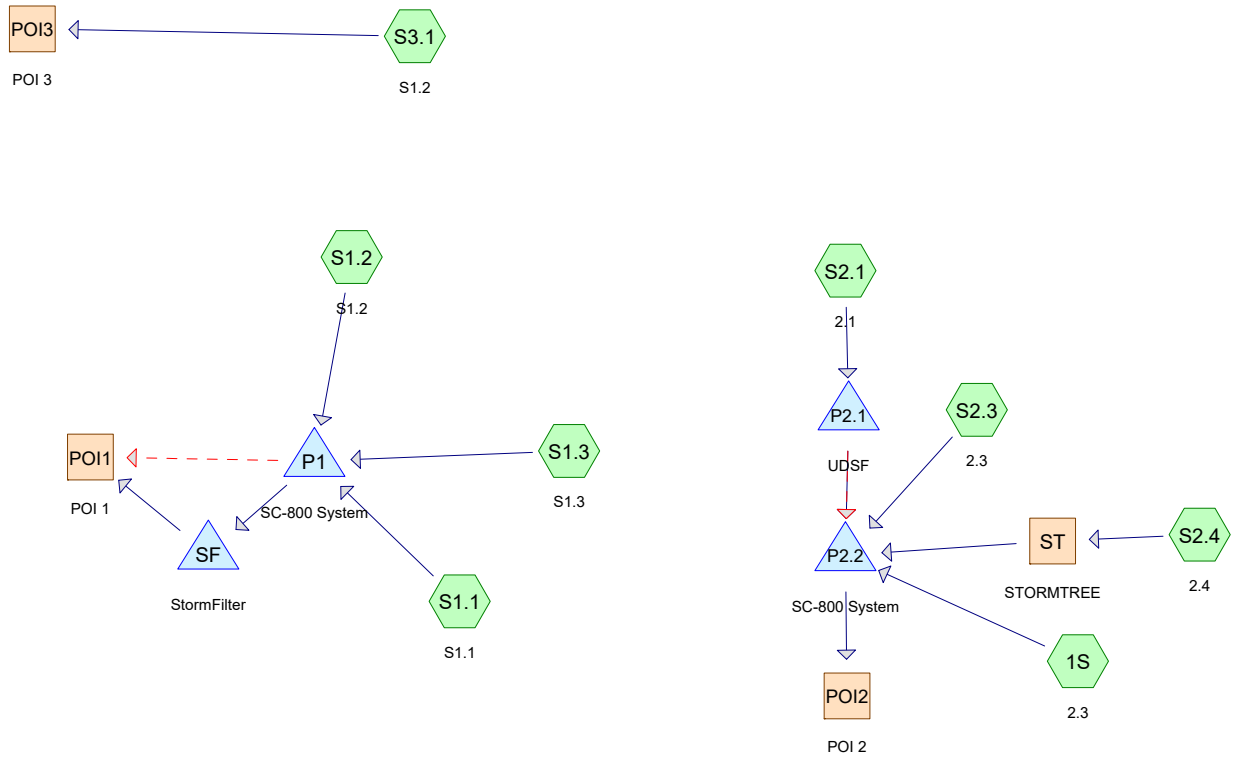
## Summary for Reach POI3: POI3

Inflow Area = 0.219 ac, 53.34% Impervious, Inflow Depth > 4.40" for 25-YR event
Inflow = 1.12 cfs @ 12.09 hrs, Volume= 0.080 af
Outflow = 1.12 cfs @ 12.09 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Reach POI3: POI3






Subcat Reach Pond Link

**Routing Diagram for 1215 Post-Development PH2-3**
Prepared by Acorn Engineering, Printed 5/14/2025
HydroCAD® 10.20-6a s/n 00620 © 2024 HydroCAD Software Solutions LLC

## Rainfall Events Listing (selected events)

| Event# | Event Name | Storm Type | Curve | Mode | Duration (hours) | B/B | Depth (inches) | AMC |
|---|---|---|---|---|---|---|---|---|
| 1 | 2-YR | Type III 24-hr | | Default | 24.00 | 1 | 3.10 | 2 |
| 2 | 10-YR | Type III 24-hr | | Default | 24.00 | 1 | 4.60 | 2 |
| 3 | 25-YR | Type III 24-hr | | Default | 24.00 | 1 | 5.80 | 2 |

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.485 | 80 | >75% Grass cover, Good, HSG D (S1.3, S2.1, S2.3, S2.4, S3.1) |
| 0.228 | 98 | Paved parking, HSG D (S1.3, S2.1, S2.4) |
| 0.756 | 98 | Roofs, HSG D (1S, S1.1, S1.2) |
| **1.469** | **92** | **TOTAL AREA** |

## Soil Listing (all nodes)

| Area (acres) | Soil Group | Subcatchment Numbers |
|---|---|---|
| 0.000 | HSG A | |
| 0.000 | HSG B | |
| 0.000 | HSG C | |
| 1.469 | HSG D | 1S, S1.1, S1.2, S1.3, S2.1, S2.3, S2.4, S3.1 |
| 0.000 | Other | |
| **1.469** | | **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 |
|---|---|---|---|---|---|---|---|
| 0.000 | 0.000 | 0.000 | 0.485 | 0.000 | 0.485 | >75% Grass cover, Good | S1.3, S2.1, S2.3, S2.4, S3.1 |
| 0.000 | 0.000 | 0.000 | 0.228 | 0.000 | 0.228 | Paved parking | S1.3, S2.1, S2.4 |
| 0.000 | 0.000 | 0.000 | 0.756 | 0.000 | 0.756 | Roofs | 1S, S1.1, S1.2 |
| **0.000** | **0.000** | **0.000** | **1.469** | **0.000** | **1.469** | **TOTAL AREA** | |

## Pipe Listing (all nodes)

| Line# | Node Number | In-Invert (feet) | Out-Invert (feet) | Length (feet) | Slope (ft/ft) | n | Width (inches) | Diam/Height (inches) | Inside-Fill (inches) | Node Name |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | P2.1 | 34.83 | 34.75 | 16.3 | 0.0049 | 0.010 | 0.0 | 6.0 | 0.0 | |

Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 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: 2.3** Runoff Area=12,054 sf 100.00% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=98 Runoff=0.81 cfs 0.065 af

**Subcatchment S1.1: S1.1** Runoff Area=11,070 sf 100.00% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=98 Runoff=0.75 cfs 0.060 af

**Subcatchment S1.2: S1.2** Runoff Area=9,800 sf 100.00% Impervious Runoff Depth>2.82"
Tc=6.0 min CN=98 Runoff=0.66 cfs 0.053 af

**Subcatchment S1.3: S1.3** Runoff Area=17,957 sf 38.89% Impervious Runoff Depth>1.83"
Tc=6.0 min CN=87 Runoff=0.86 cfs 0.063 af

**Subcatchment S2.1: 2.1** Runoff Area=7,095 sf 32.04% Impervious Runoff Depth>1.75"
Tc=6.0 min CN=86 Runoff=0.33 cfs 0.024 af

**Subcatchment S2.3: 2.3** Runoff Area=4,094 sf 0.00% Impervious Runoff Depth>1.32"
Tc=6.0 min CN=80 Runoff=0.14 cfs 0.010 af

**Subcatchment S2.4: 2.4** Runoff Area=709 sf 96.47% Impervious Runoff Depth>2.73"
Tc=6.0 min CN=97 Runoff=0.05 cfs 0.004 af

**Subcatchment S3.1: S1.2** Runoff Area=1,204 sf 0.00% Impervious Runoff Depth>1.32"
Tc=6.0 min CN=80 Runoff=0.04 cfs 0.003 af

**Reach POI1: POI 1** Inflow=0.99 cfs 0.145 af
Outflow=0.99 cfs 0.145 af

**Reach POI2: POI 2** Inflow=0.95 cfs 0.093 af
Outflow=0.95 cfs 0.093 af

**Reach POI3: POI 3** Inflow=0.04 cfs 0.003 af
Outflow=0.04 cfs 0.003 af

**Reach ST: STORMTREE** Inflow=0.05 cfs 0.004 af
Outflow=0.05 cfs 0.004 af

**Pond P1: SC-800 System** Peak Elev=20.78' Storage=3,296 cf Inflow=2.27 cfs 0.175 af
Primary=0.99 cfs 0.145 af Secondary=0.00 cfs 0.000 af Outflow=0.99 cfs 0.145 af

**Pond P2.1: UDSF** Peak Elev=35.42' Storage=98 cf Inflow=0.33 cfs 0.024 af
Outflow=0.27 cfs 0.023 af

**Pond P2.2: SC-800 System** Peak Elev=38.02' Storage=1,660 cf Inflow=1.25 cfs 0.102 af
Outflow=0.95 cfs 0.093 af

**Pond SF: StormFilter** Inflow=0.99 cfs 0.145 af
Primary=0.99 cfs 0.145 af

**Total Runoff Area = 1.469 ac Runoff Volume = 0.281 af Average Runoff Depth = 2.29"**
**33.01% Pervious = 0.485 ac 66.99% Impervious = 0.984 ac**

## Summary for Subcatchment 1S: 2.3

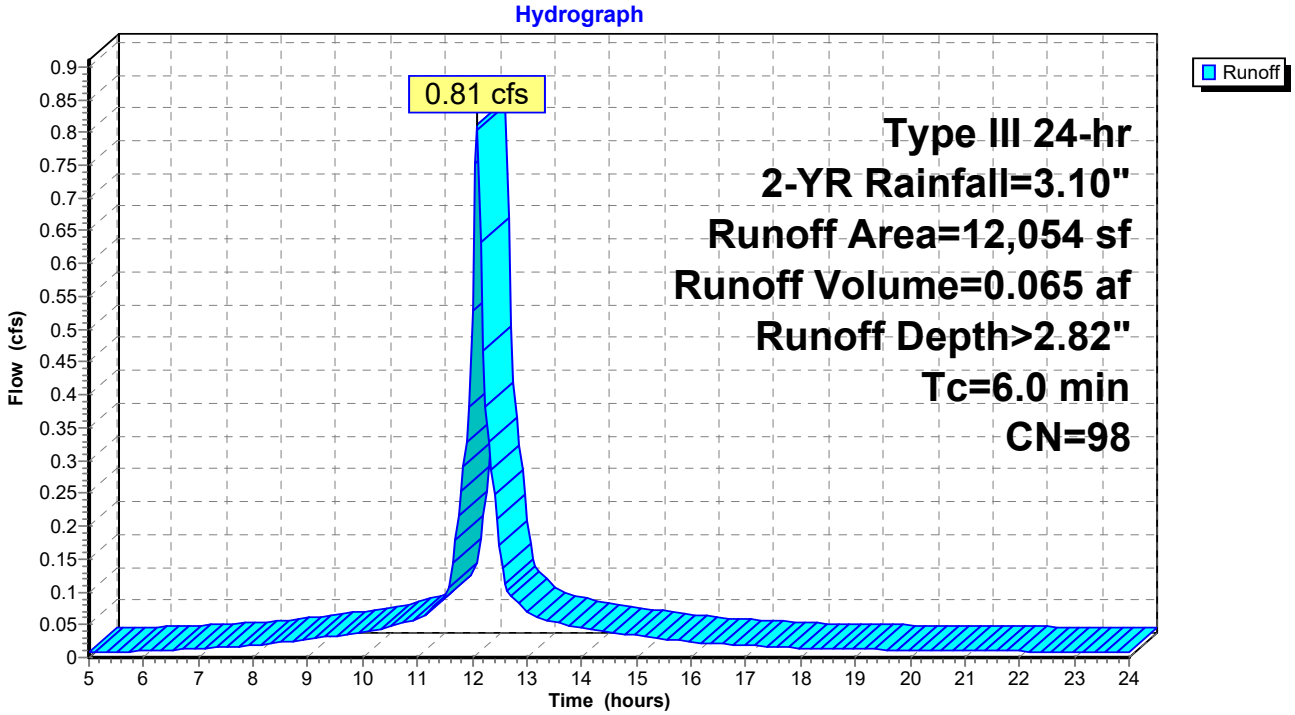
Runoff = 0.81 cfs @ 12.09 hrs, Volume= 0.065 af, Depth> 2.82"
Routed to Pond P2.2 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 12,054 | 98 | Roofs, HSG D |
| 12,054 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment 1S: 2.3



## Summary for Subcatchment S1.1: S1.1

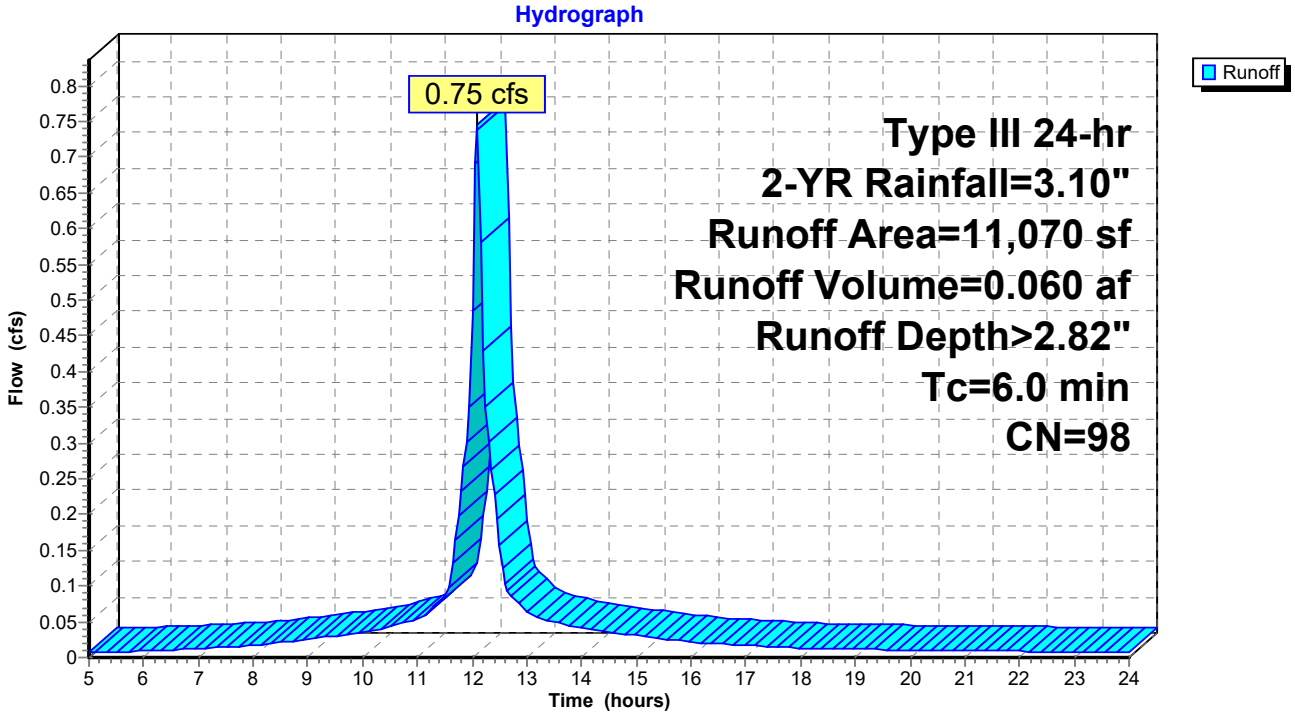
Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 2.82"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 11,070 | 98 | Roofs, HSG D |
| 11,070 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, dIRECT eNTRY** |

## Subcatchment S1.1: S1.1



## Summary for Subcatchment S1.2: S1.2

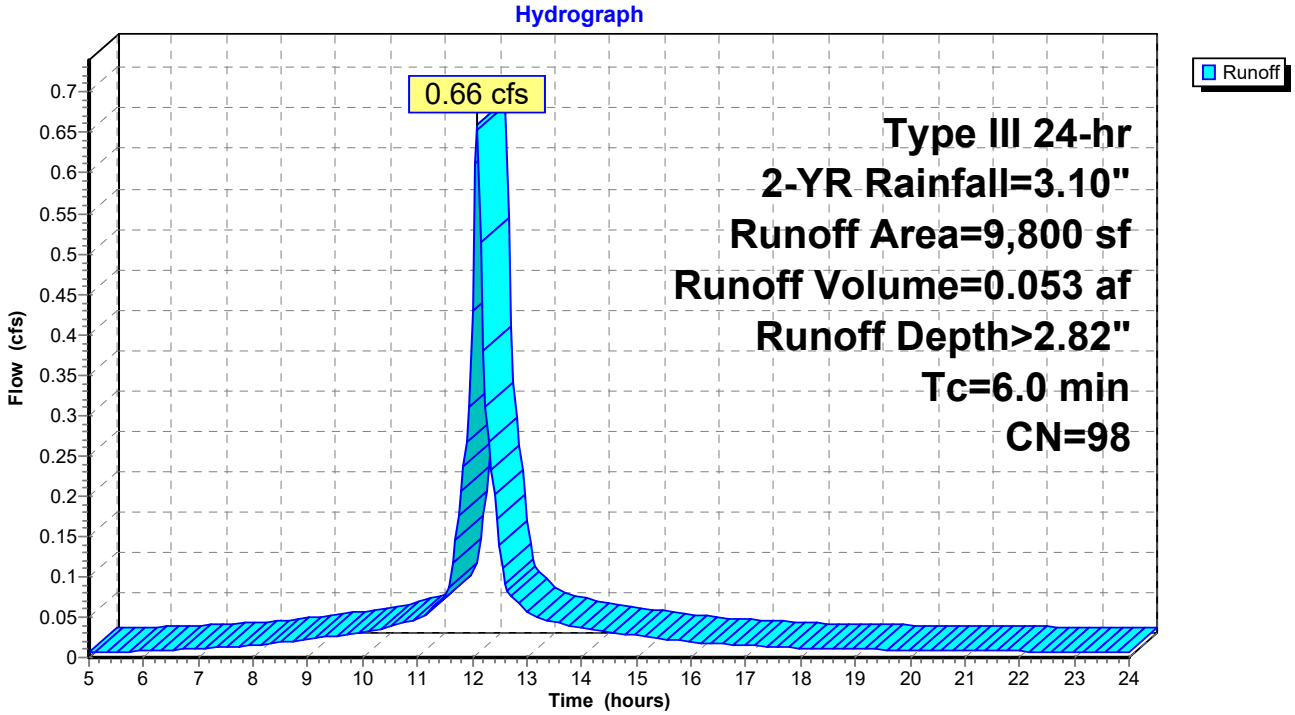
Runoff = 0.66 cfs @ 12.09 hrs, Volume= 0.053 af, Depth> 2.82"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 9,800 | 98 | Roofs, HSG D |
| 9,800 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S1.2: S1.2



## Summary for Subcatchment S1.3: S1.3

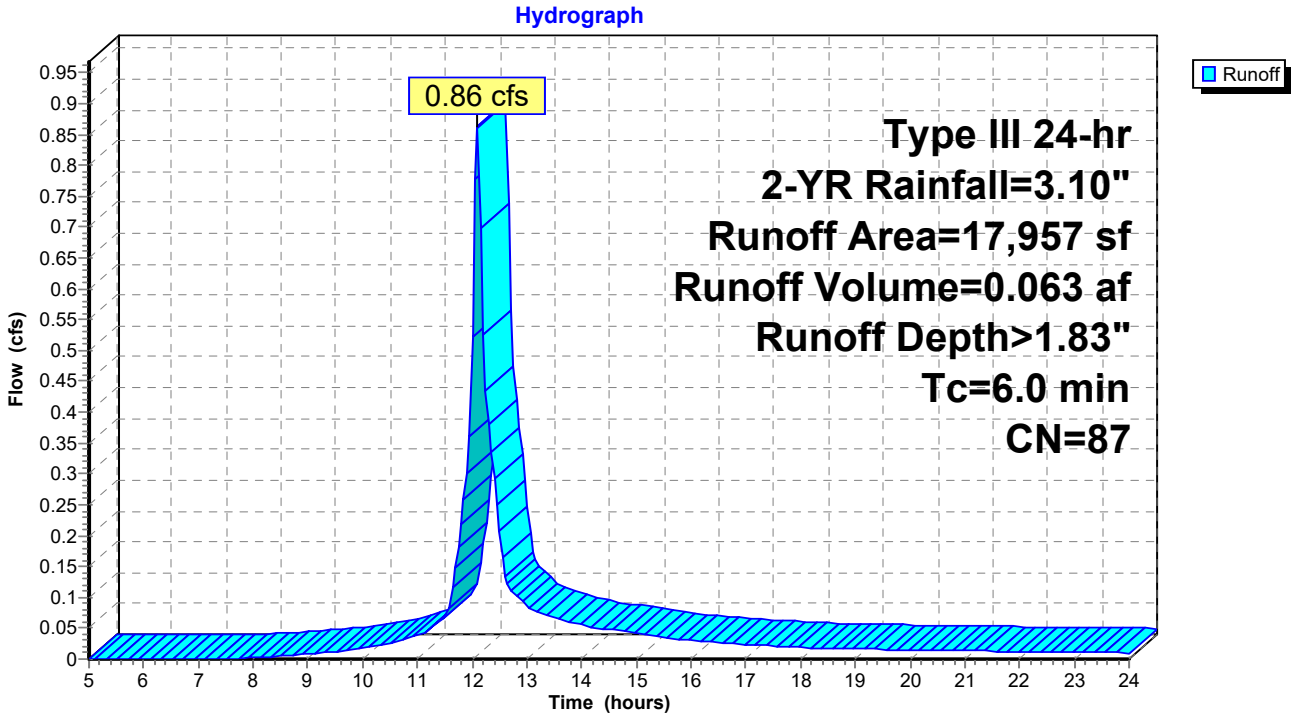
Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.063 af, Depth> 1.83"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 6,984 | 98 | Paved parking, HSG D |
| 10,973 | 80 | >75% Grass cover, Good, HSG D |
| 17,957 | 87 | Weighted Average |
| 10,973 | | 61.11% Pervious Area |
| 6,984 | | 38.89% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, dIRECT eNTRY** |

## Subcatchment S1.3: S1.3



## Summary for Subcatchment S2.1: 2.1

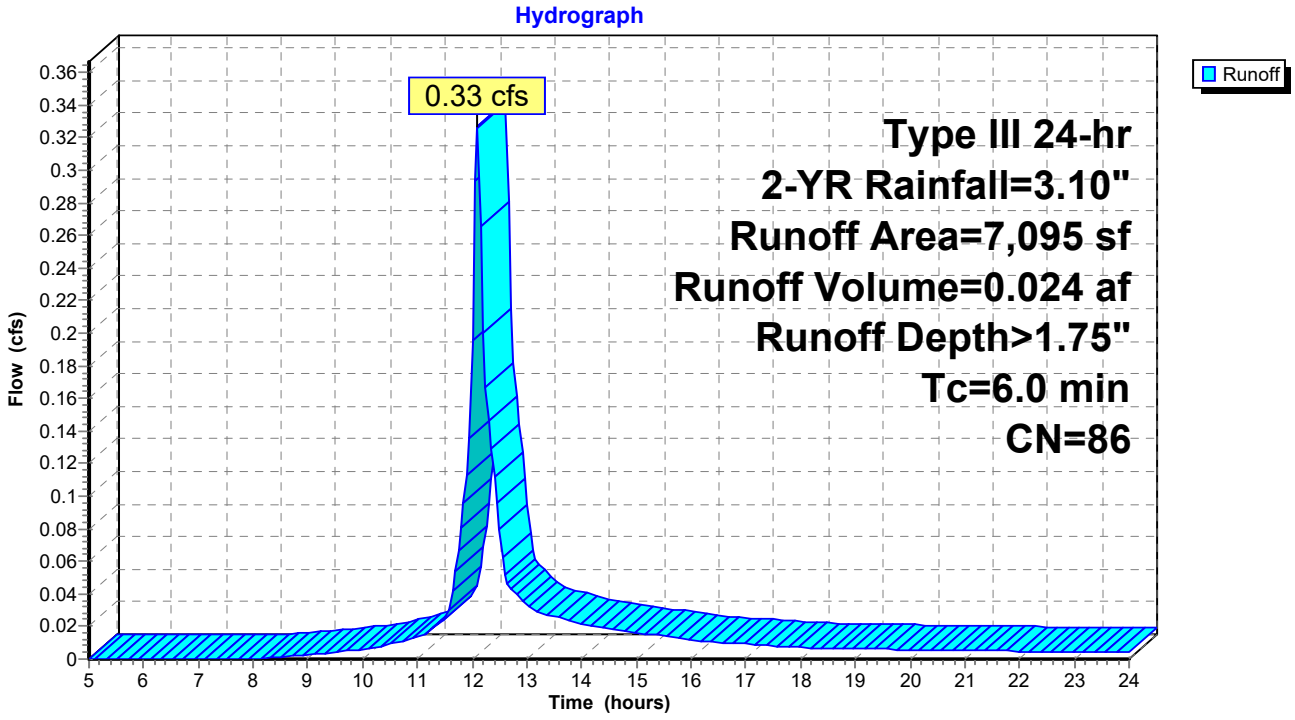
Runoff = 0.33 cfs @ 12.09 hrs, Volume= 0.024 af, Depth> 1.75"
Routed to Pond P2.1 : UDSF

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 4,822 | 80 | >75% Grass cover, Good, HSG D |
| 2,273 | 98 | Paved parking, HSG D |
| 7,095 | 86 | Weighted Average |
| 4,822 | | 67.96% Pervious Area |
| 2,273 | | 32.04% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S2.1: 2.1



## Summary for Subcatchment S2.3: 2.3

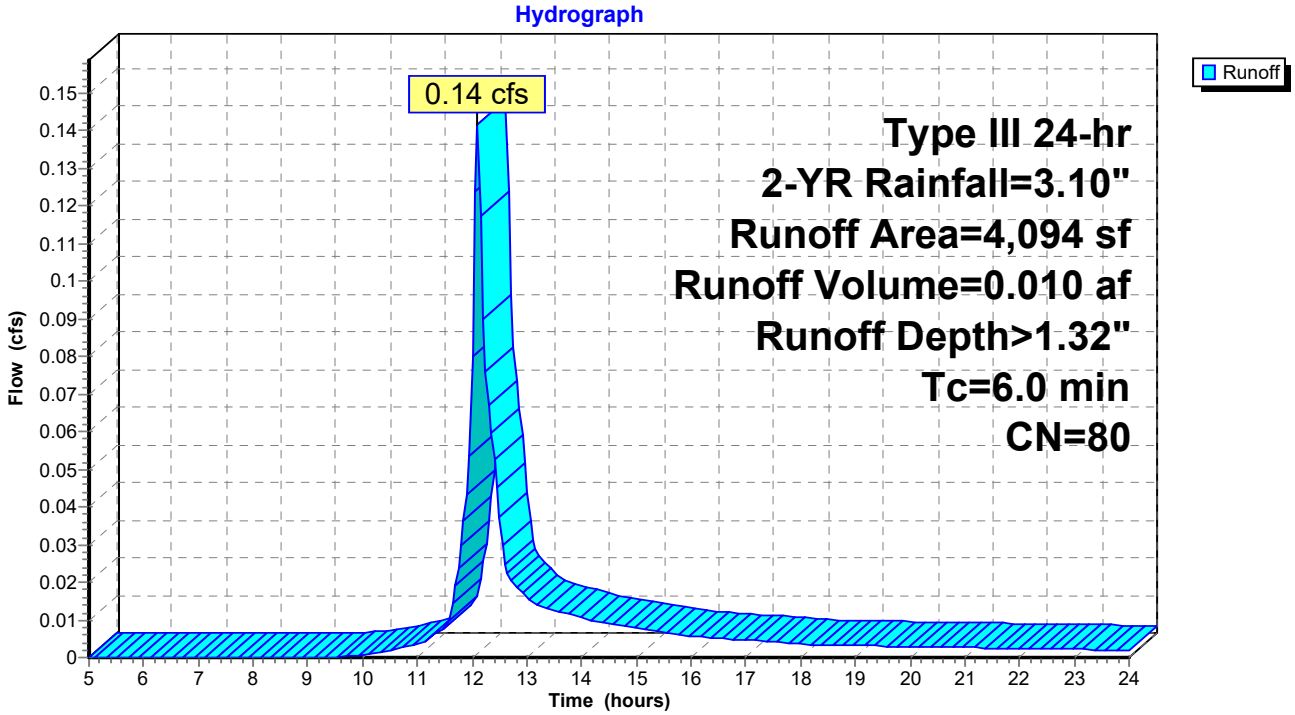
Runoff = 0.14 cfs @ 12.10 hrs, Volume= 0.010 af, Depth> 1.32"
Routed to Pond P2.2 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 4,094 | 80 | >75% Grass cover, Good, HSG D |
| 4,094 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Subcatchment S2.3: 2.3



## Summary for Subcatchment S2.4: 2.4

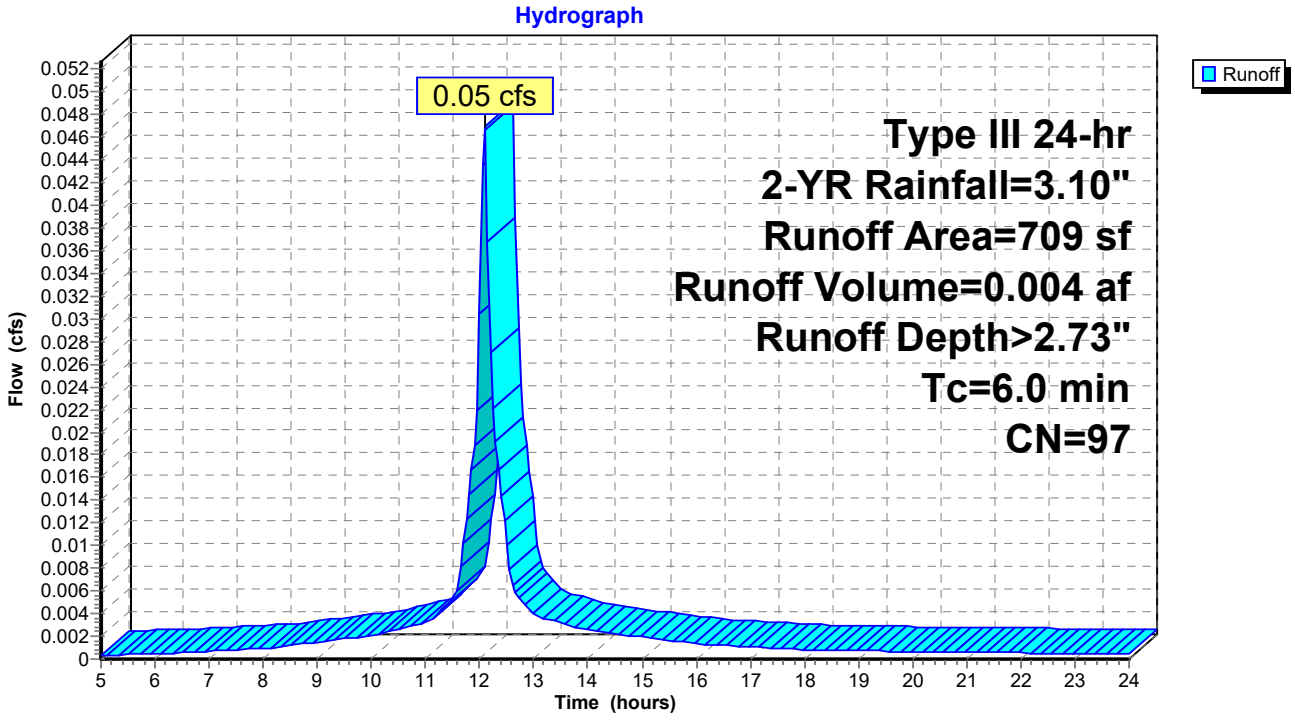
Runoff = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af, Depth> 2.73"
Routed to Reach ST : STORMTREE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 25 | 80 | >75% Grass cover, Good, HSG D |
| 684 | 98 | Paved parking, HSG D |
| 709 | 97 | Weighted Average |
| 25 | | 3.53% Pervious Area |
| 684 | | 96.47% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Subcatchment S2.4: 2.4



## Summary for Subcatchment S3.1: S1.2

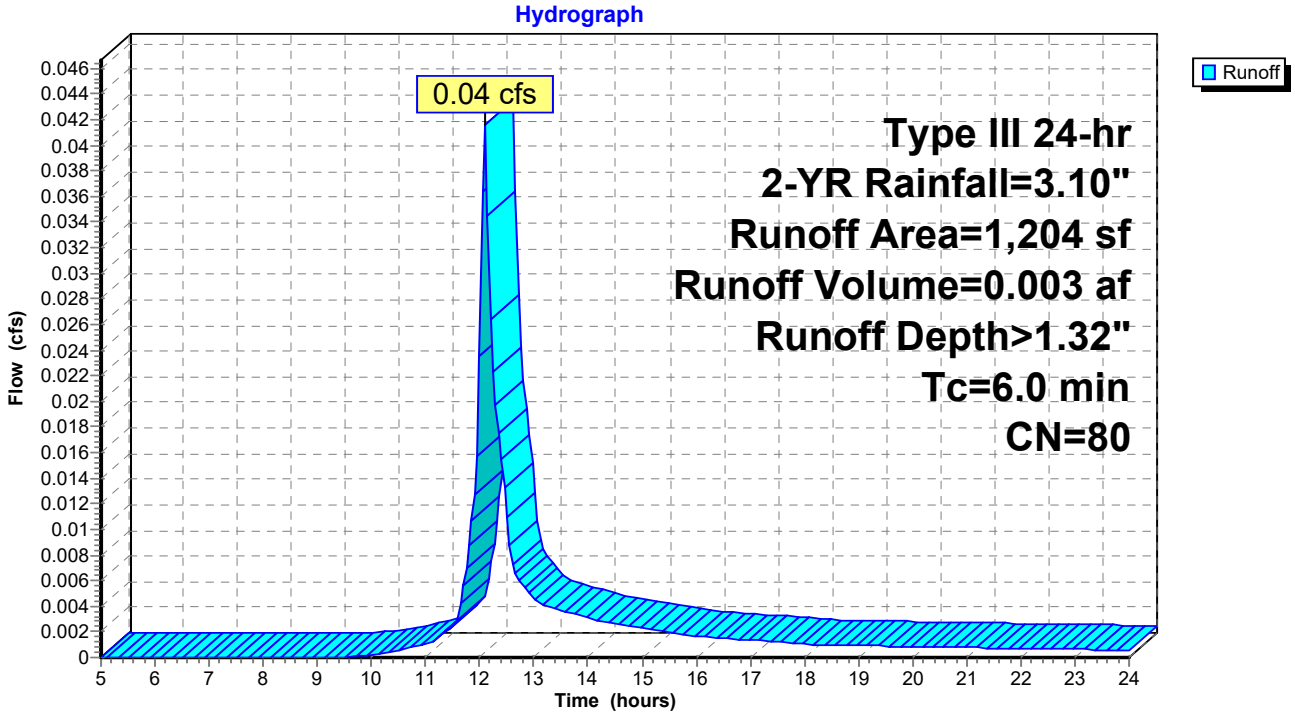
Runoff = 0.04 cfs @ 12.10 hrs, Volume= 0.003 af, Depth> 1.32"
Routed to Reach POI3 : POI 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YR Rainfall=3.10"

| Area (sf) | CN | Description |
|---|---|---|
| 1,204 | 80 | >75% Grass cover, Good, HSG D |
| 1,204 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S3.1: S1.2

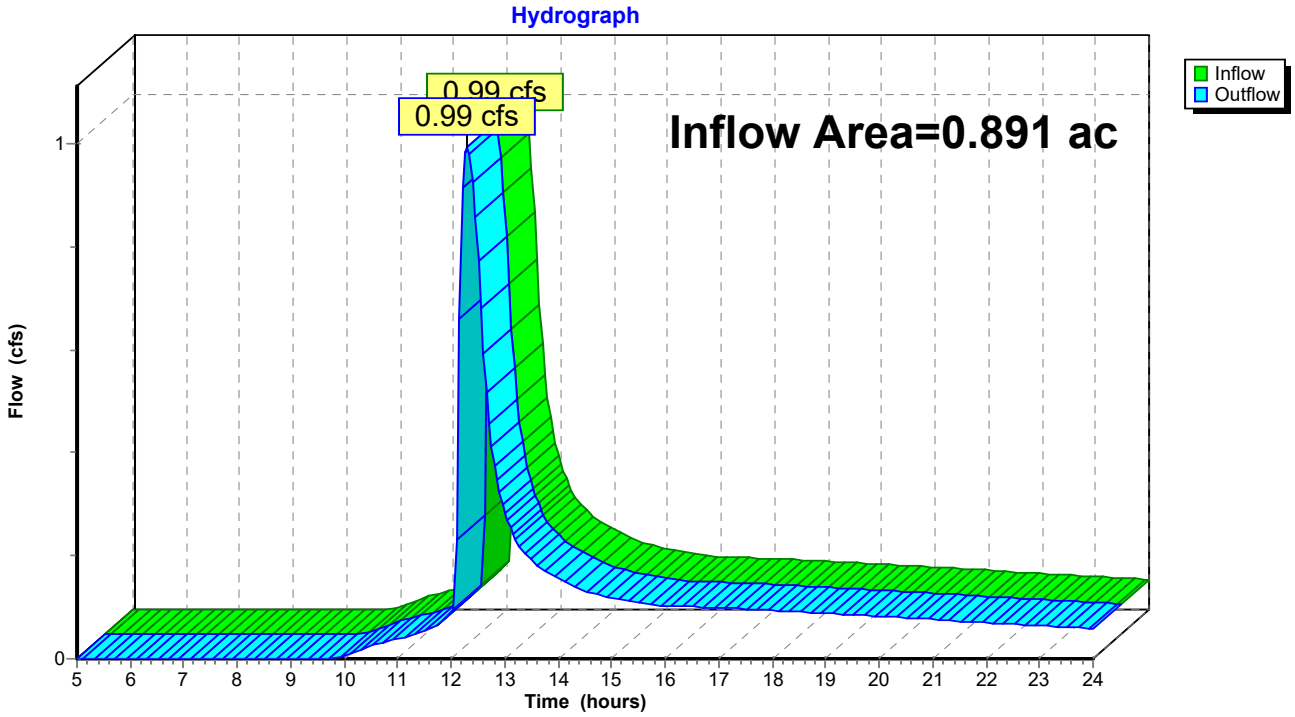


## Summary for Reach POI1: POI 1

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 1.95" for 2-YR event
Inflow = 0.99 cfs @ 12.29 hrs, Volume= 0.145 af
Outflow = 0.99 cfs @ 12.29 hrs, Volume= 0.145 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI1: POI 1

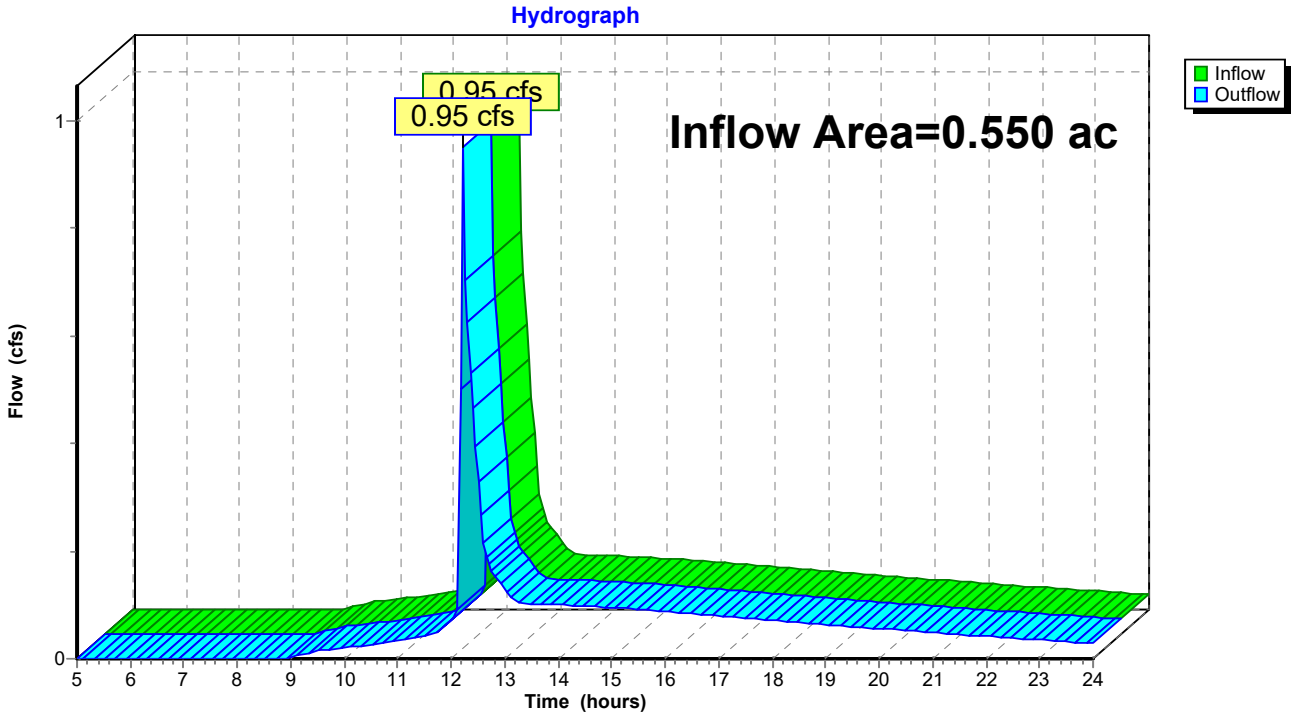


## Summary for Reach POI2: POI 2

Inflow Area = 0.550 ac, 62.67% Impervious, Inflow Depth > 2.04" for 2-YR event
Inflow = 0.95 cfs @ 12.22 hrs, Volume= 0.093 af
Outflow = 0.95 cfs @ 12.22 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI2: POI 2

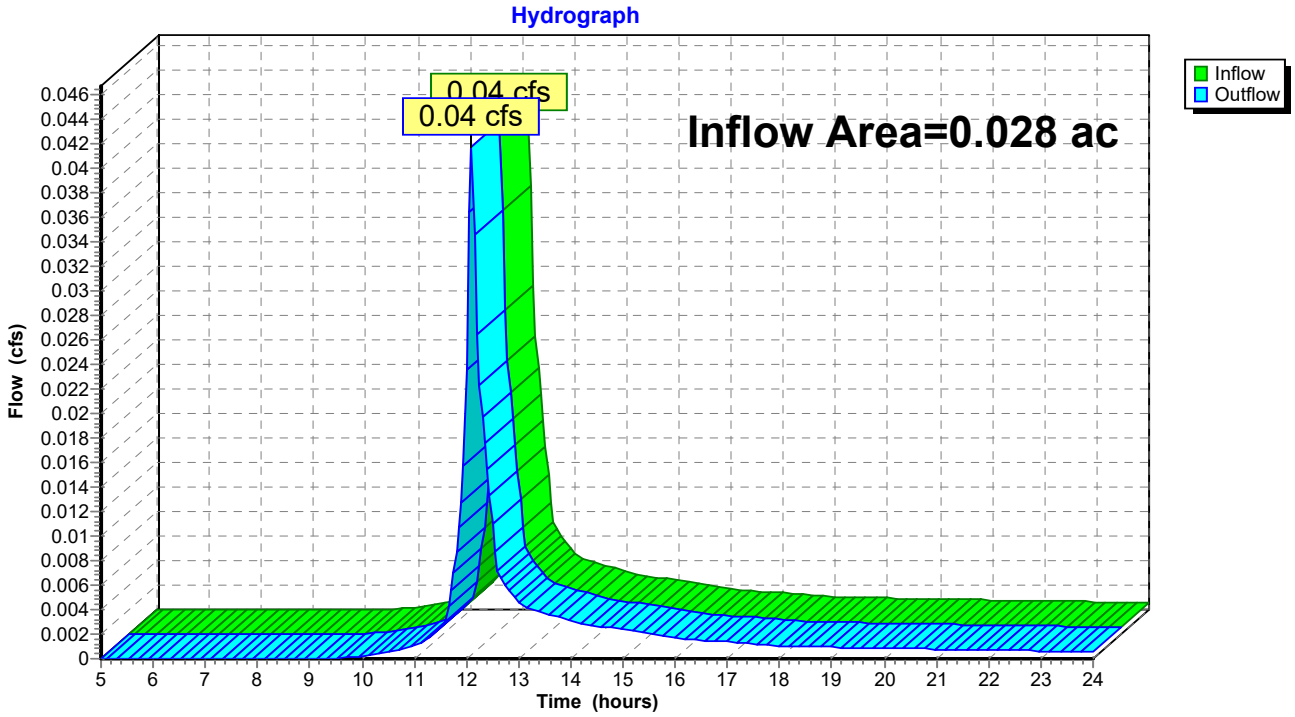


## Summary for Reach POI3: POI 3

Inflow Area = 0.028 ac, 0.00% Impervious, Inflow Depth > 1.32" for 2-YR event
Inflow = 0.04 cfs @ 12.10 hrs, Volume= 0.003 af
Outflow = 0.04 cfs @ 12.10 hrs, Volume= 0.003 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI3: POI 3

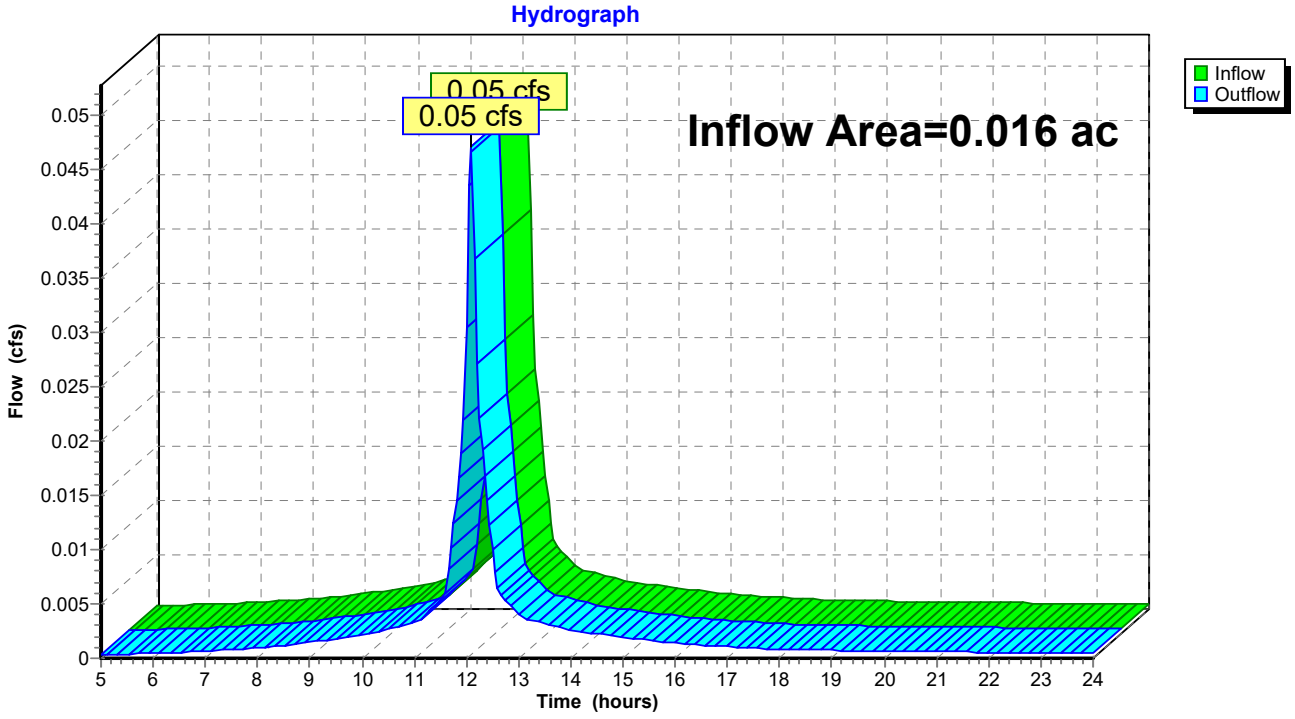


## Summary for Reach ST: STORMTREE

Inflow Area = 0.016 ac, 96.47% Impervious, Inflow Depth > 2.73" for 2-YR event
Inflow = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af
Outflow = 0.05 cfs @ 12.09 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P2.2 : SC-800 System

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach ST: STORMTREE



## Summary for Pond P1: SC-800 System

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 2.36" for 2-YR event
Inflow = 2.27 cfs @ 12.09 hrs, Volume= 0.175 af
Outflow = 0.99 cfs @ 12.29 hrs, Volume= 0.145 af, Atten= 56%, Lag= 12.0 min
Primary = 0.99 cfs @ 12.29 hrs, Volume= 0.145 af
Routed to Pond SF : StormFilter
Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
Routed to Reach POI1 : POI 1

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 20.78' @ 12.29 hrs Surf.Area= 1,900 sf Storage= 3,296 cf

Plug-Flow detention time= 216.5 min calculated for 0.145 af (83% of inflow)
Center-of-Mass det. time= 146.9 min ( 932.3 - 785.3 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 17.97' | 2,637 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc)<br>8,607 cf Overall - 2,014 cf Embedded = 6,593 cf x 40.0% Voids |
| #2 | 18.47' | 1,646 cf | **ADS_StormTech SC-800 +Cap** x 32 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>32 Chambers in 4 Rows<br>Cap Storage= 3.4 cf x 2 x 4 rows = 27.4 cf |
| #3 | 18.47' | 368 cf | **ADS_StormTech SC-800 +Cap** x 7 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>7 Chambers in 2 Rows<br>Cap Storage= 3.4 cf x 2 x 2 rows = 13.7 cf |
| | | 4,651 cf | Total Available Storage |

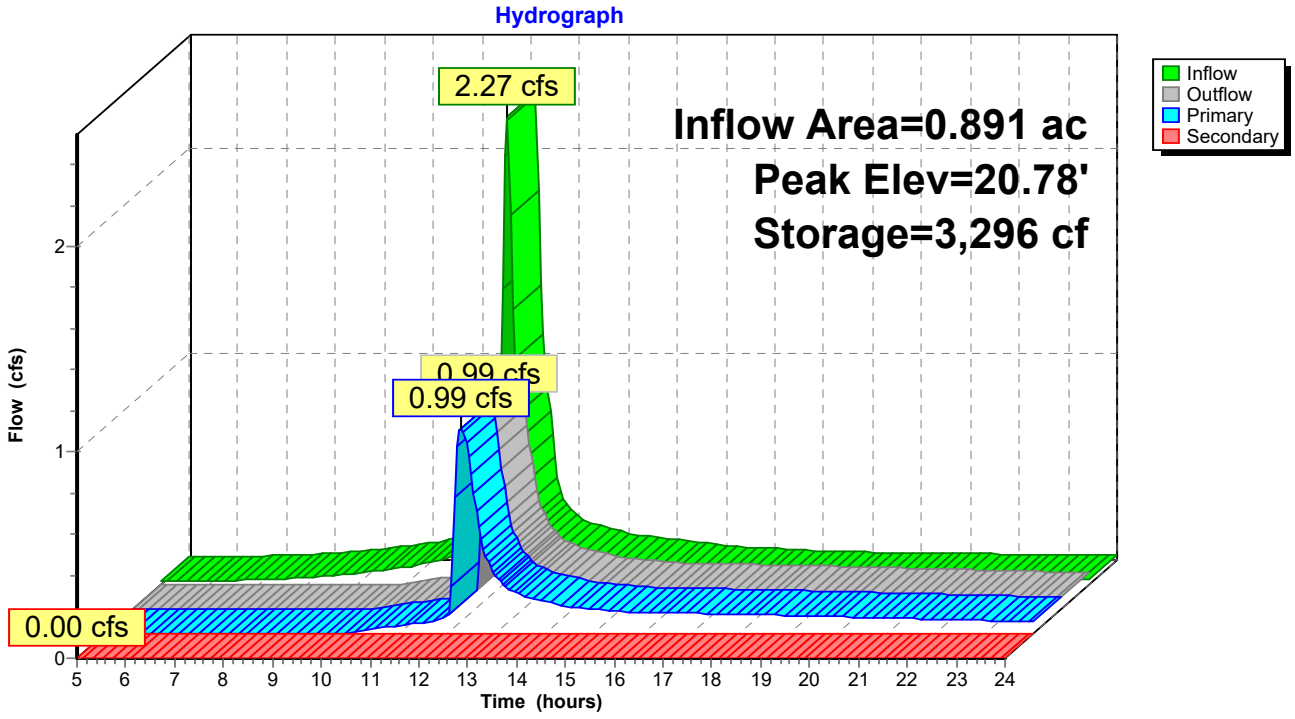
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 17.97 | 1,900 | 0 | 0 |
| 21.72 | 1,900 | 7,125 | 7,125 |
| 22.50 | 1,900 | 1,482 | 8,607 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 18.58' | **10.0" Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #2 | Device 1 | 18.60' | **1.8" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 23.00' | **6.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |
| #4 | Device 1 | 20.15' | **7.7" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #5 | Secondary | 21.50' | **8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |

**Primary OutFlow** Max=0.99 cfs @ 12.29 hrs HW=20.78' (Free Discharge)
└─**1=Orifice/Grate** (Passes 0.99 cfs of 3.51 cfs potential flow)
  └─**2=Orifice/Grate** (Orifice Controls 0.12 cfs @ 6.98 fps)
  └─**3=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 0.87 cfs @ 2.70 fps)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=17.97' (Free Discharge)
└─**5=Orifice/Grate** ( Controls 0.00 cfs)

## Pond P1: SC-800 System



## Summary for Pond P2.1: UDSF

Inflow Area = 0.163 ac, 32.04% Impervious, Inflow Depth > 1.75" for 2-YR event
Inflow = 0.33 cfs @ 12.09 hrs, Volume= 0.024 af
Outflow = 0.27 cfs @ 12.15 hrs, Volume= 0.023 af, Atten= 16%, Lag= 3.4 min
Primary = 0.27 cfs @ 12.15 hrs, Volume= 0.023 af
Routed to Pond P2.2 : SC-800 System

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 35.42' @ 12.15 hrs Surf.Area= 265 sf Storage= 98 cf

Plug-Flow detention time= 33.7 min calculated for 0.023 af (96% of inflow)
Center-of-Mass det. time= 12.7 min ( 836.1 - 823.4 )

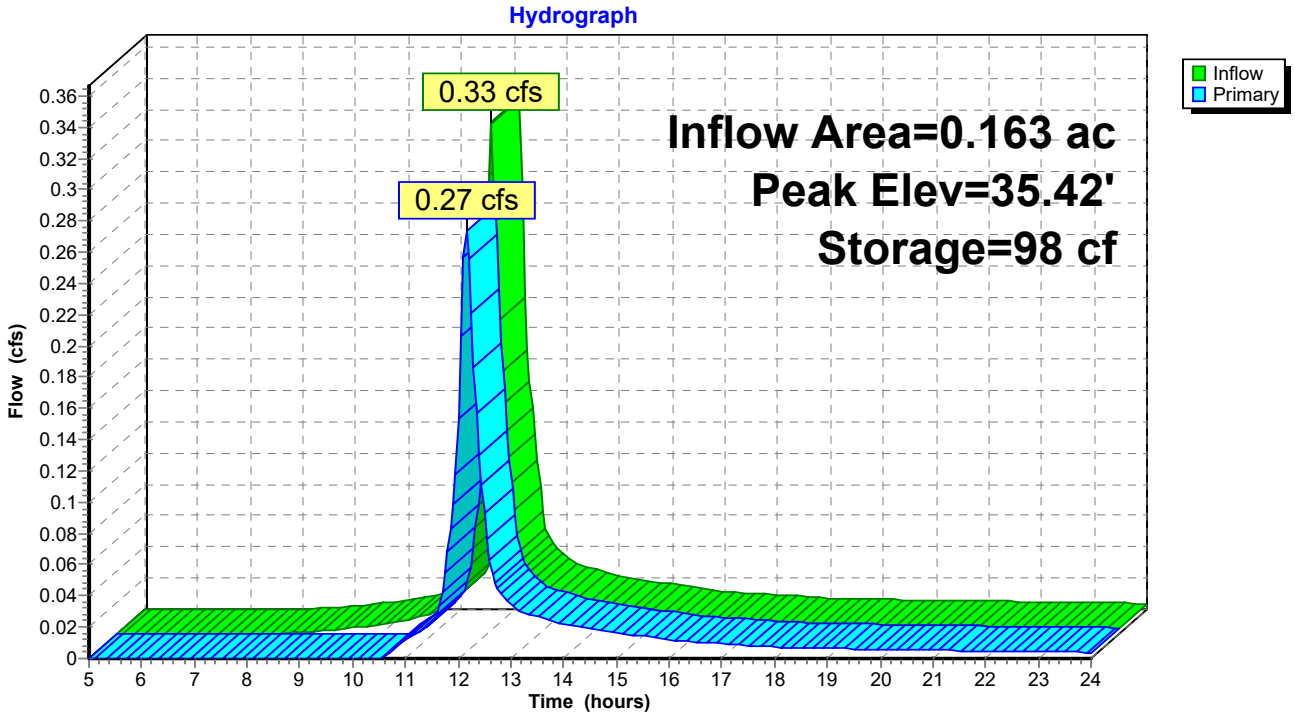
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 34.50' | 1,367 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Voids (%) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|---|
| 34.50 | 265 | 0.0 | 0 | 0 |
| 35.50 | 265 | 40.0 | 106 | 106 |
| 35.51 | 265 | 10.0 | 0 | 106 |
| 37.00 | 265 | 10.0 | 39 | 146 |
| 37.01 | 265 | 100.0 | 3 | 148 |
| 38.50 | 820 | 100.0 | 808 | 957 |
| 39.00 | 820 | 100.0 | 410 | 1,367 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 34.83' | **6.0" Round Culvert**<br>L= 16.3' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 34.83' / 34.75' S= 0.0049 '/' Cc= 0.900<br>n= 0.010, Flow Area= 0.20 sf |
| #2 | Device 1 | 34.83' | **4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 38.50' | **6.0" Horiz. Orifice/Grate X 2.00** C= 0.600<br>Limited to weir flow at low heads |

**Primary OutFlow** Max=0.27 cfs @ 12.15 hrs HW=35.42' (Free Discharge)
└**1=Culvert** (Passes 0.27 cfs of 0.49 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.27 cfs @ 3.14 fps)
└**3=Orifice/Grate** ( Controls 0.00 cfs)

## Pond P2.1: UDSF



## Summary for Pond P2.2: SC-800 System

Inflow Area = 0.550 ac, 62.67% Impervious, Inflow Depth > 2.22" for 2-YR event
Inflow = 1.25 cfs @ 12.09 hrs, Volume= 0.102 af
Outflow = 0.95 cfs @ 12.22 hrs, Volume= 0.093 af, Atten= 24%, Lag= 7.2 min
Primary = 0.95 cfs @ 12.22 hrs, Volume= 0.093 af
Routed to Reach POI2 : POI 2

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 38.02' @ 12.20 hrs Surf.Area= 774 sf Storage= 1,660 cf

Plug-Flow detention time= 188.9 min calculated for 0.093 af (92% of inflow)
Center-of-Mass det. time= 146.4 min ( 936.4 - 789.9 )

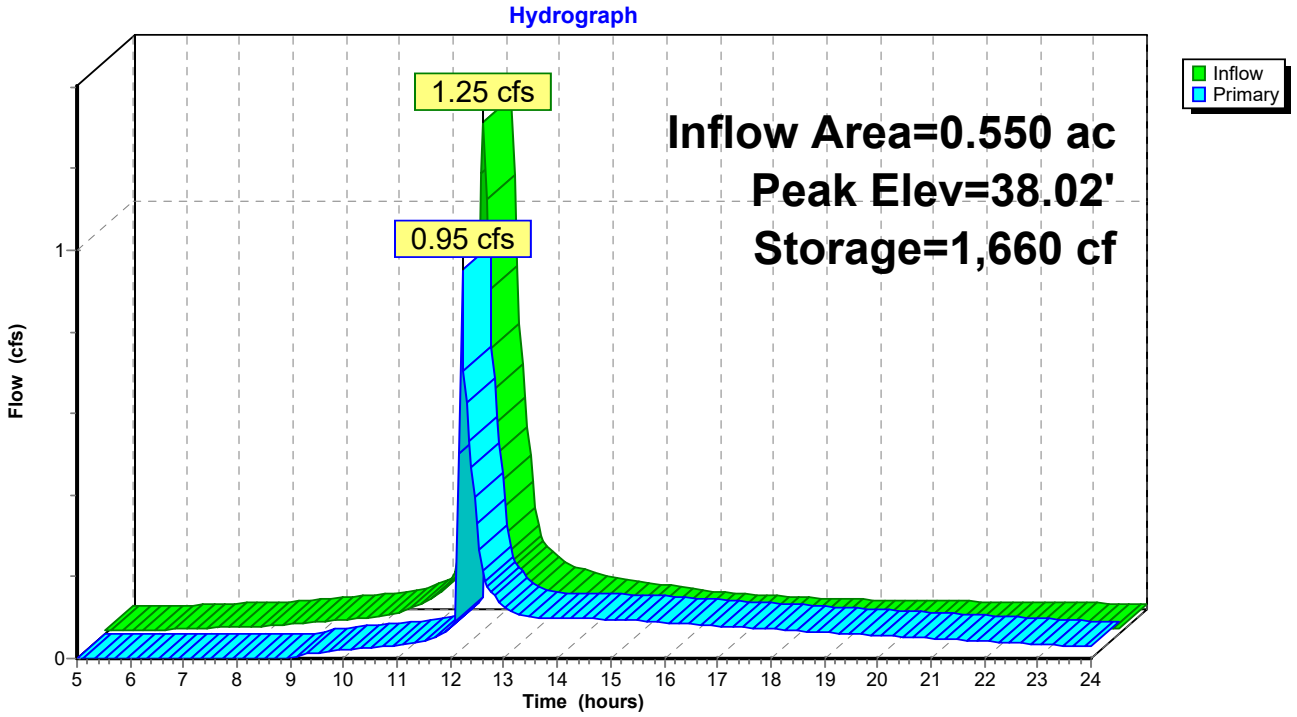
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 33.37' | 1,457 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc)<br>4,009 cf Overall - 368 cf Embedded = 3,641 cf x 40.0% Voids |
| #2 | 33.87' | 368 cf | **ADS_StormTech SC-800 +Cap** x 7 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>7 Chambers in 2 Rows<br>Cap Storage= 3.4 cf x 2 x 2 rows = 13.7 cf |
| | | 1,824 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 33.37 | 774 | 0 | 0 |
| 37.12 | 774 | 2,903 | 2,903 |
| 38.55 | 774 | 1,107 | 4,009 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 33.97' | **12.0" Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #2 | Device 1 | 34.00' | **1.4" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 37.90' | **6.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=0.83 cfs @ 12.22 hrs HW=38.01' (Free Discharge)
↑└**1=Orifice/Grate** (Passes 0.83 cfs of 7.12 cfs potential flow)
↑ ├**2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 9.57 fps)
└**3=Sharp-Crested Rectangular Weir** (Weir Controls 0.73 cfs @ 1.09 fps)

## Pond P2.2: SC-800 System

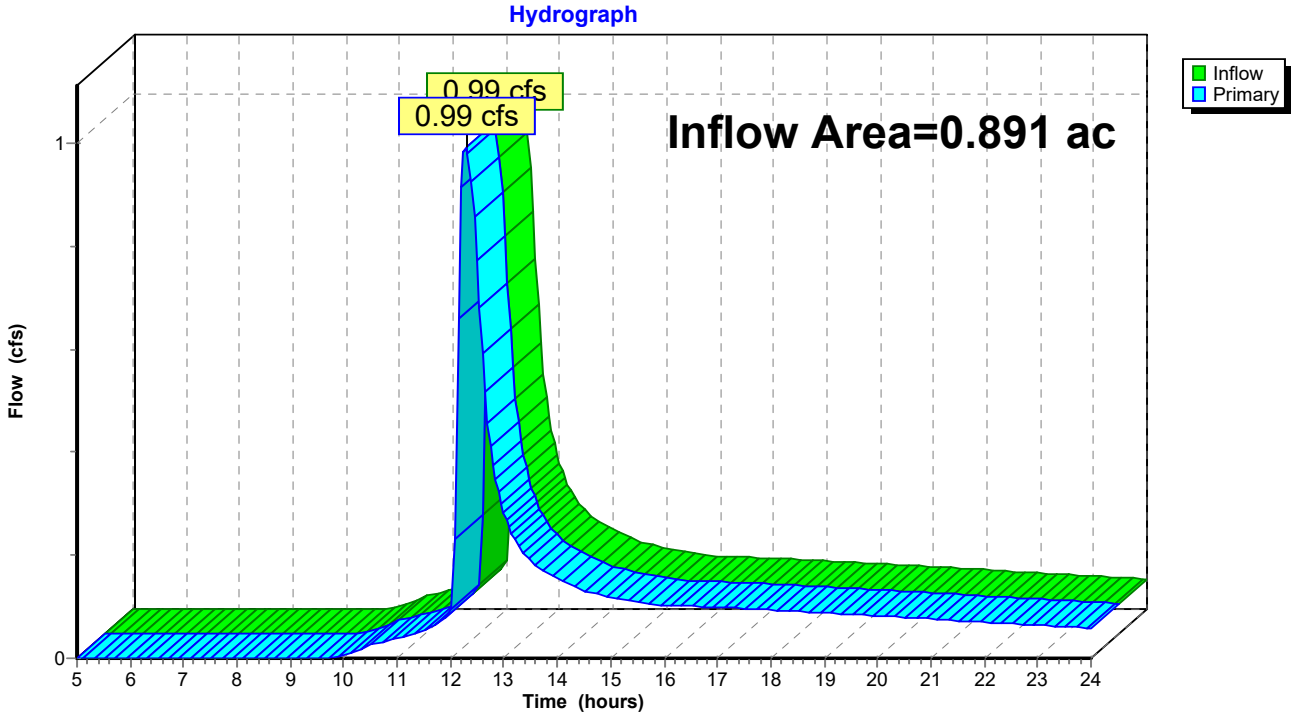


## Summary for Pond SF: StormFilter

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 1.95" for 2-YR event
Inflow = 0.99 cfs @ 12.29 hrs, Volume= 0.145 af
Primary = 0.99 cfs @ 12.29 hrs, Volume= 0.145 af, Atten= 0%, Lag= 0.0 min
Routed to Reach POI1 : POI 1

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

### Pond SF: StormFilter



Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 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: 2.3** Runoff Area=12,054 sf 100.00% Impervious Runoff Depth>4.25"
Tc=6.0 min CN=98 Runoff=1.21 cfs 0.098 af

**Subcatchment S1.1: S1.1** Runoff Area=11,070 sf 100.00% Impervious Runoff Depth>4.25"
Tc=6.0 min CN=98 Runoff=1.12 cfs 0.090 af

**Subcatchment S1.2: S1.2** Runoff Area=9,800 sf 100.00% Impervious Runoff Depth>4.25"
Tc=6.0 min CN=98 Runoff=0.99 cfs 0.080 af

**Subcatchment S1.3: S1.3** Runoff Area=17,957 sf 38.89% Impervious Runoff Depth>3.19"
Tc=6.0 min CN=87 Runoff=1.49 cfs 0.110 af

**Subcatchment S2.1: 2.1** Runoff Area=7,095 sf 32.04% Impervious Runoff Depth>3.09"
Tc=6.0 min CN=86 Runoff=0.57 cfs 0.042 af

**Subcatchment S2.3: 2.3** Runoff Area=4,094 sf 0.00% Impervious Runoff Depth>2.54"
Tc=6.0 min CN=80 Runoff=0.28 cfs 0.020 af

**Subcatchment S2.4: 2.4** Runoff Area=709 sf 96.47% Impervious Runoff Depth>4.17"
Tc=6.0 min CN=97 Runoff=0.07 cfs 0.006 af

**Subcatchment S3.1: S1.2** Runoff Area=1,204 sf 0.00% Impervious Runoff Depth>2.54"
Tc=6.0 min CN=80 Runoff=0.08 cfs 0.006 af

**Reach POI1: POI 1** Inflow=2.36 cfs 0.241 af
Outflow=2.36 cfs 0.241 af

**Reach POI2: POI 2** Inflow=1.96 cfs 0.152 af
Outflow=1.96 cfs 0.152 af

**Reach POI3: POI 3** Inflow=0.08 cfs 0.006 af
Outflow=0.08 cfs 0.006 af

**Reach ST: STORMTREE** Inflow=0.07 cfs 0.006 af
Outflow=0.07 cfs 0.006 af

**Pond P1: SC-800 System** Peak Elev=21.85' Storage=4,159 cf Inflow=3.59 cfs 0.279 af
Primary=1.98 cfs 0.237 af Secondary=0.38 cfs 0.004 af Outflow=2.36 cfs 0.241 af

**Pond P2.1: UDSF** Peak Elev=36.54' Storage=134 cf Inflow=0.57 cfs 0.042 af
Outflow=0.52 cfs 0.041 af

**Pond P2.2: SC-800 System** Peak Elev=38.11' Storage=1,687 cf Inflow=2.06 cfs 0.165 af
Outflow=1.96 cfs 0.152 af

**Pond SF: StormFilter** Inflow=1.98 cfs 0.237 af
Primary=1.98 cfs 0.237 af

**Total Runoff Area = 1.469 ac Runoff Volume = 0.451 af Average Runoff Depth = 3.68"**
**33.01% Pervious = 0.485 ac 66.99% Impervious = 0.984 ac**

## Summary for Subcatchment 1S: 2.3

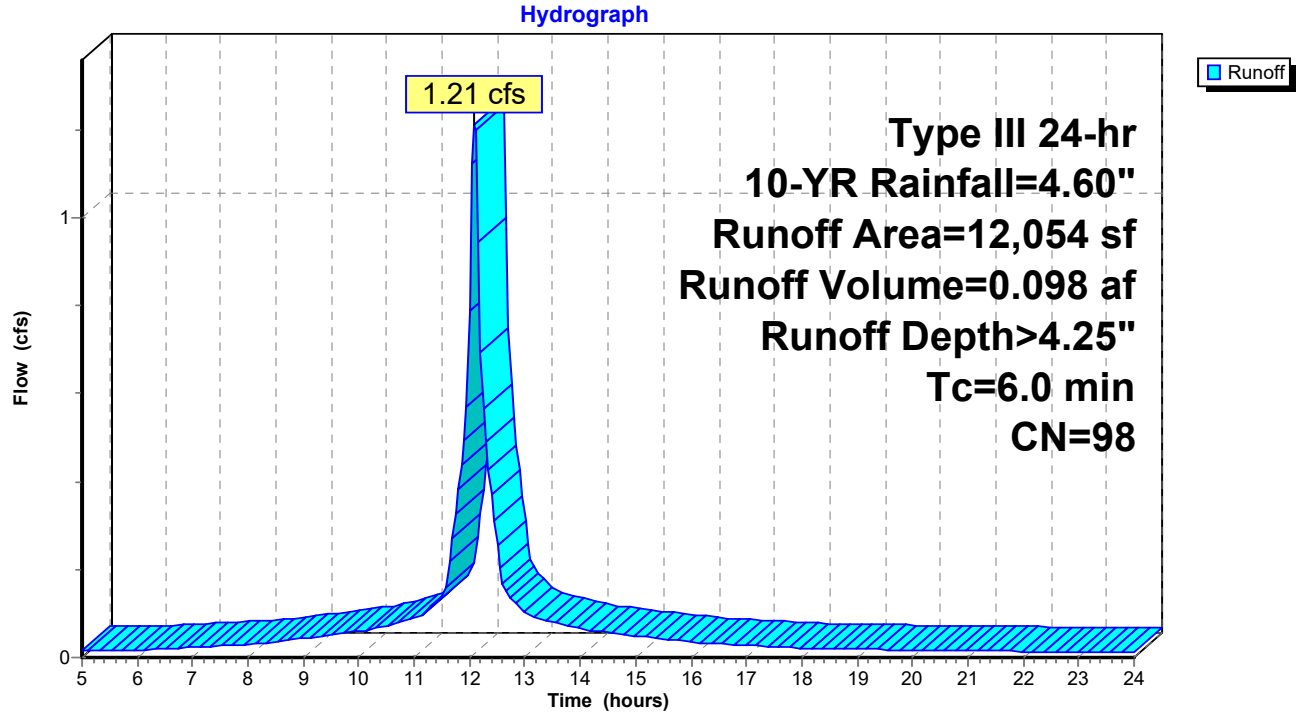
Runoff = 1.21 cfs @ 12.09 hrs, Volume= 0.098 af, Depth> 4.25"
Routed to Pond P2.2 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 12,054 | 98 | Roofs, HSG D |
| 12,054 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment 1S: 2.3



## Summary for Subcatchment S1.1: S1.1

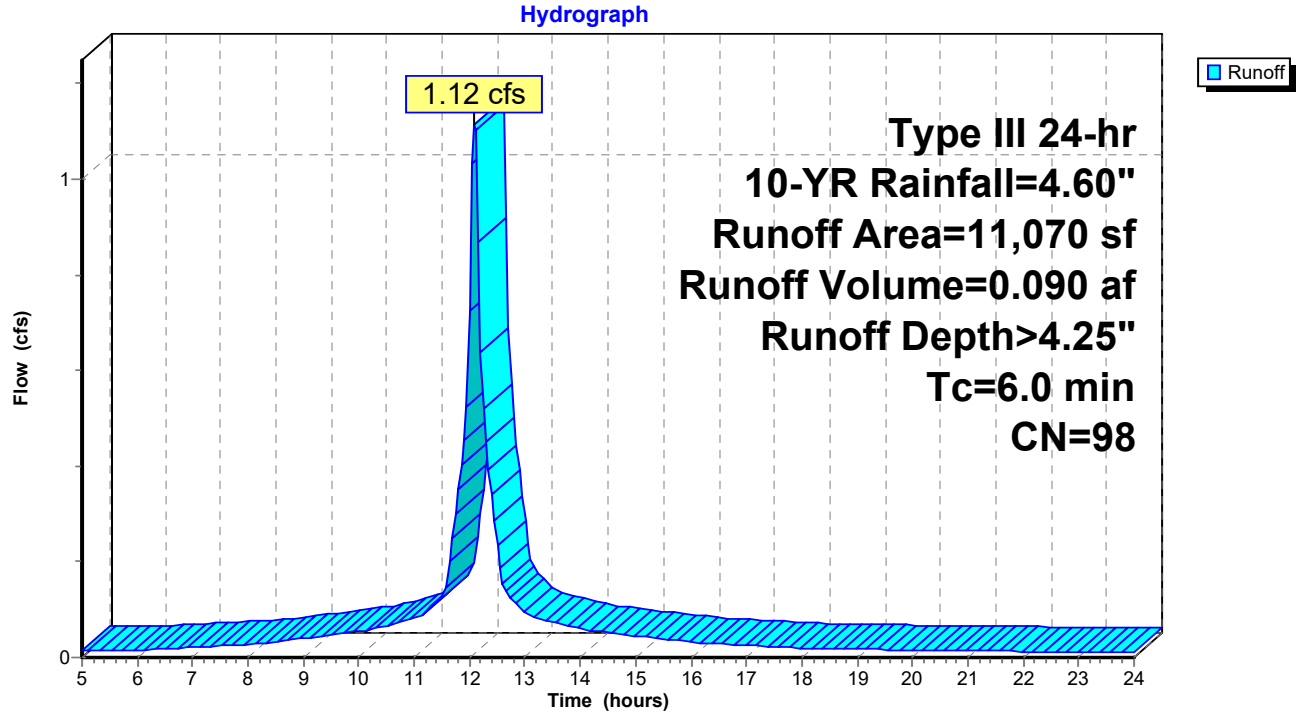
Runoff = 1.12 cfs @ 12.09 hrs, Volume= 0.090 af, Depth> 4.25"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 11,070 | 98 | Roofs, HSG D |
| 11,070 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, dIRECT eNTRY** |

### Subcatchment S1.1: S1.1



## Summary for Subcatchment S1.2: S1.2

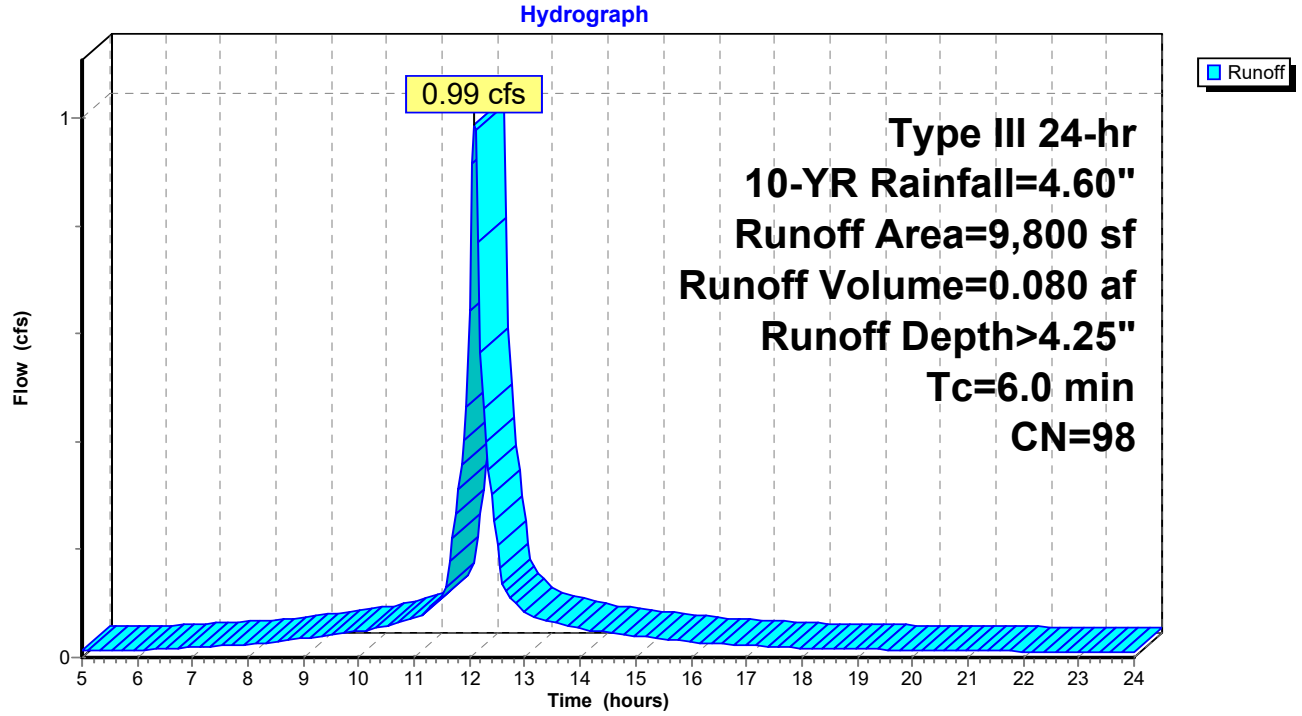
Runoff = 0.99 cfs @ 12.09 hrs, Volume= 0.080 af, Depth> 4.25"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 9,800 | 98 | Roofs, HSG D |
| 9,800 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S1.2: S1.2



## Summary for Subcatchment S1.3: S1.3

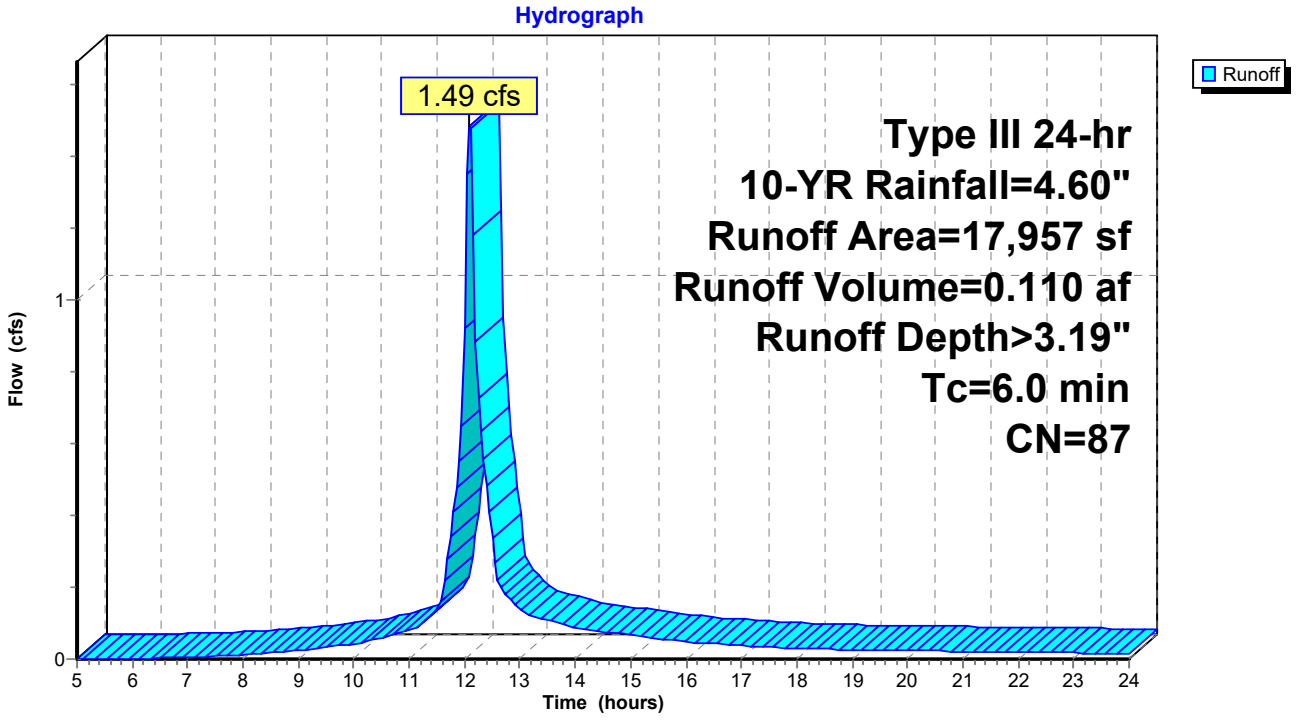
Runoff = 1.49 cfs @ 12.09 hrs, Volume= 0.110 af, Depth> 3.19"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 6,984 | 98 | Paved parking, HSG D |
| 10,973 | 80 | >75% Grass cover, Good, HSG D |
| 17,957 | 87 | Weighted Average |
| 10,973 | | 61.11% Pervious Area |
| 6,984 | | 38.89% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, dIRECT eNTRY** |

### Subcatchment S1.3: S1.3



## Summary for Subcatchment S2.1: 2.1

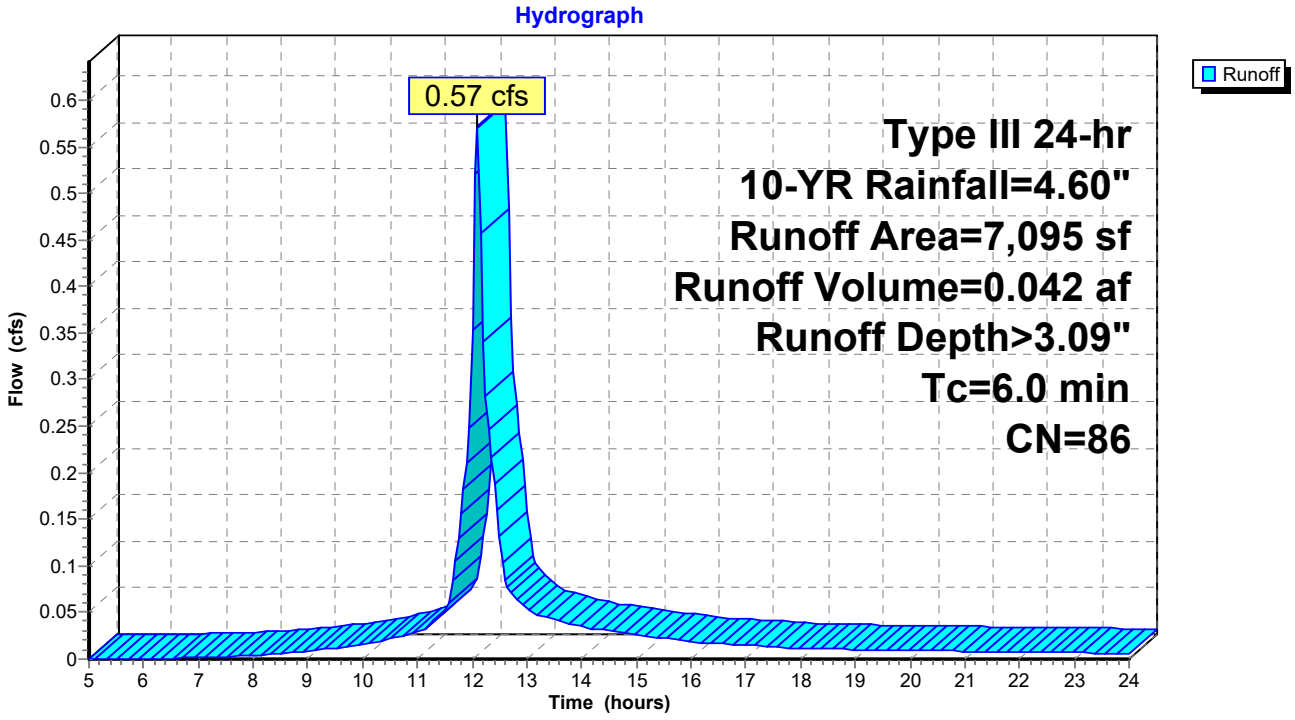
Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 3.09"
Routed to Pond P2.1 : UDSF

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 4,822 | 80 | >75% Grass cover, Good, HSG D |
| 2,273 | 98 | Paved parking, HSG D |
| 7,095 | 86 | Weighted Average |
| 4,822 | | 67.96% Pervious Area |
| 2,273 | | 32.04% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S2.1: 2.1



## Summary for Subcatchment S2.3: 2.3

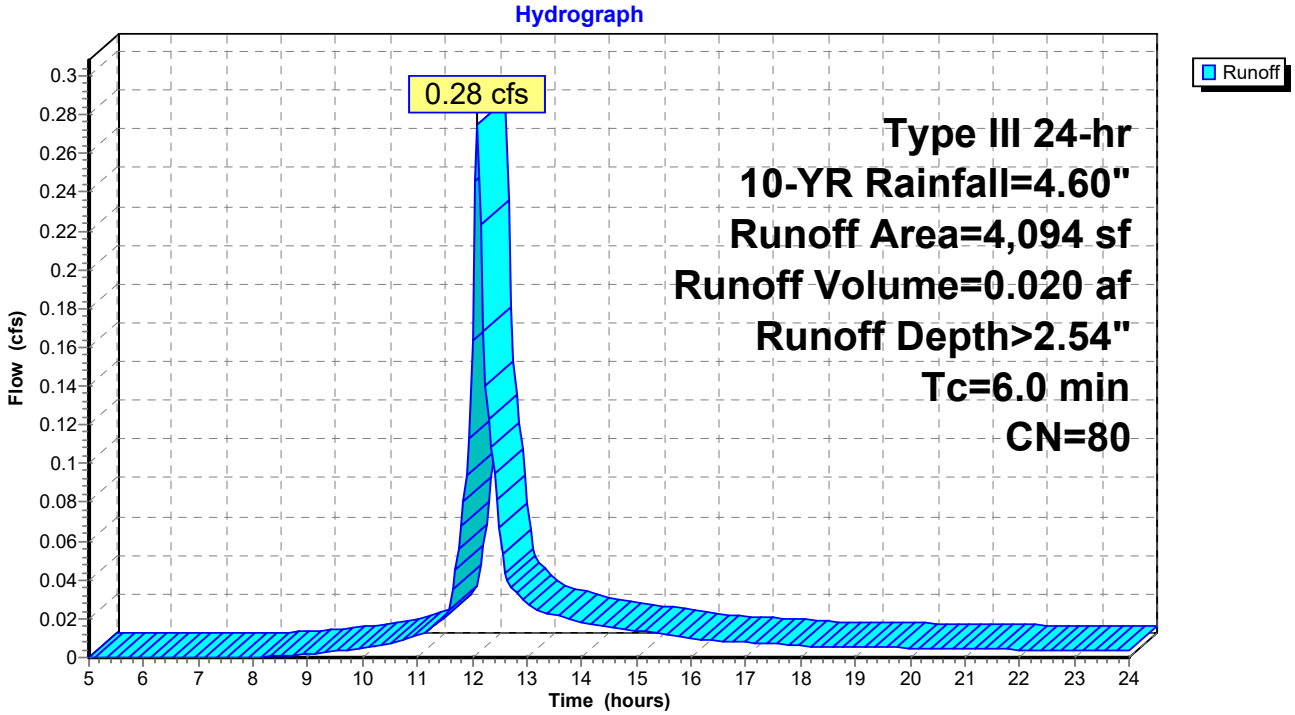
Runoff = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af, Depth> 2.54"
Routed to Pond P2.2 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 4,094 | 80 | >75% Grass cover, Good, HSG D |
| 4,094 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S2.3: 2.3



## Summary for Subcatchment S2.4: 2.4

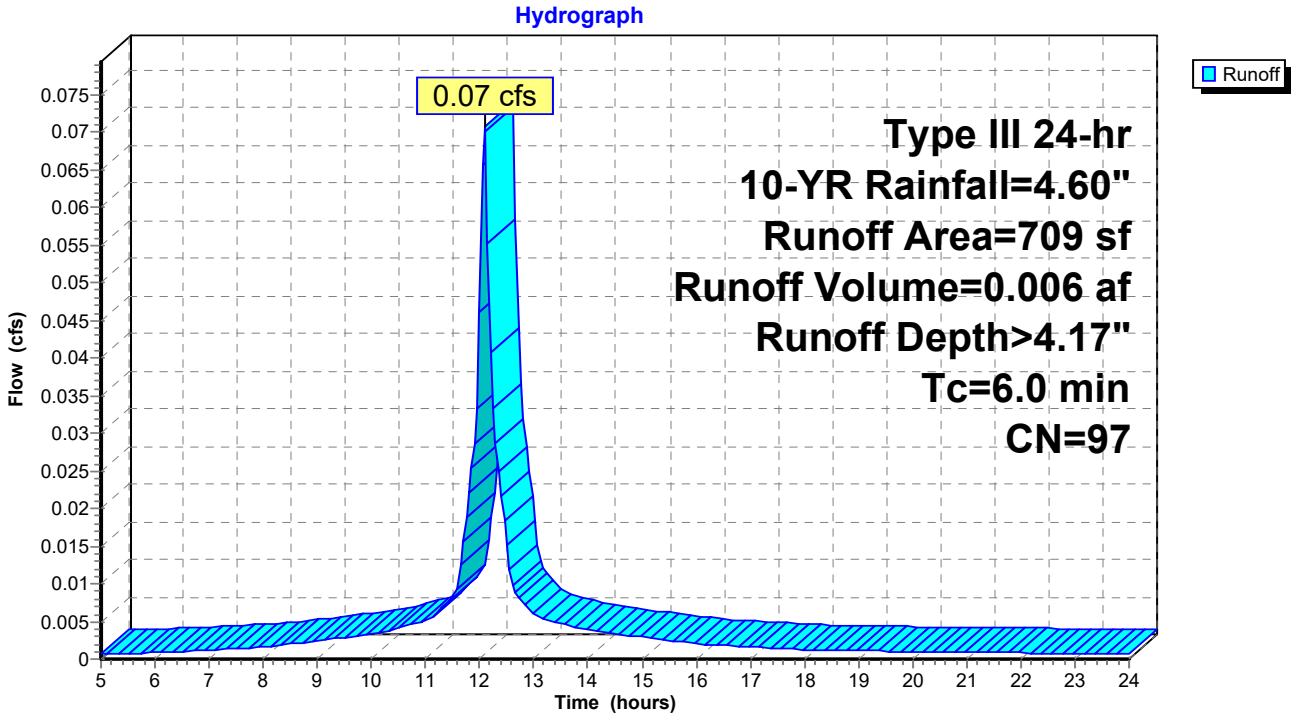
Runoff = 0.07 cfs @ 12.09 hrs, Volume= 0.006 af, Depth> 4.17"
Routed to Reach ST : STORMTREE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 25 | 80 | >75% Grass cover, Good, HSG D |
| 684 | 98 | Paved parking, HSG D |
| 709 | 97 | Weighted Average |
| 25 | | 3.53% Pervious Area |
| 684 | | 96.47% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S2.4: 2.4



## Summary for Subcatchment S3.1: S1.2

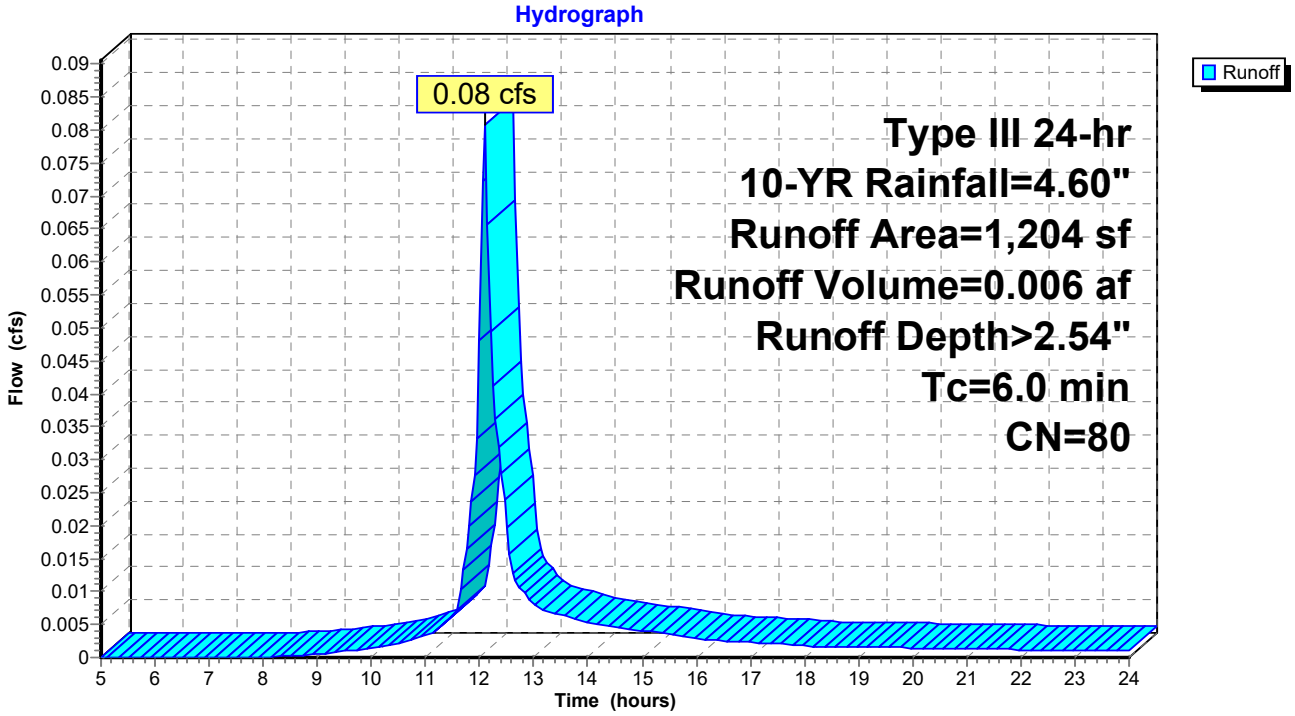
Runoff = 0.08 cfs @ 12.09 hrs, Volume= 0.006 af, Depth> 2.54"
Routed to Reach POI3 : POI 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-YR Rainfall=4.60"

| Area (sf) | CN | Description |
|---|---|---|
| 1,204 | 80 | >75% Grass cover, Good, HSG D |
| 1,204 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S3.1: S1.2

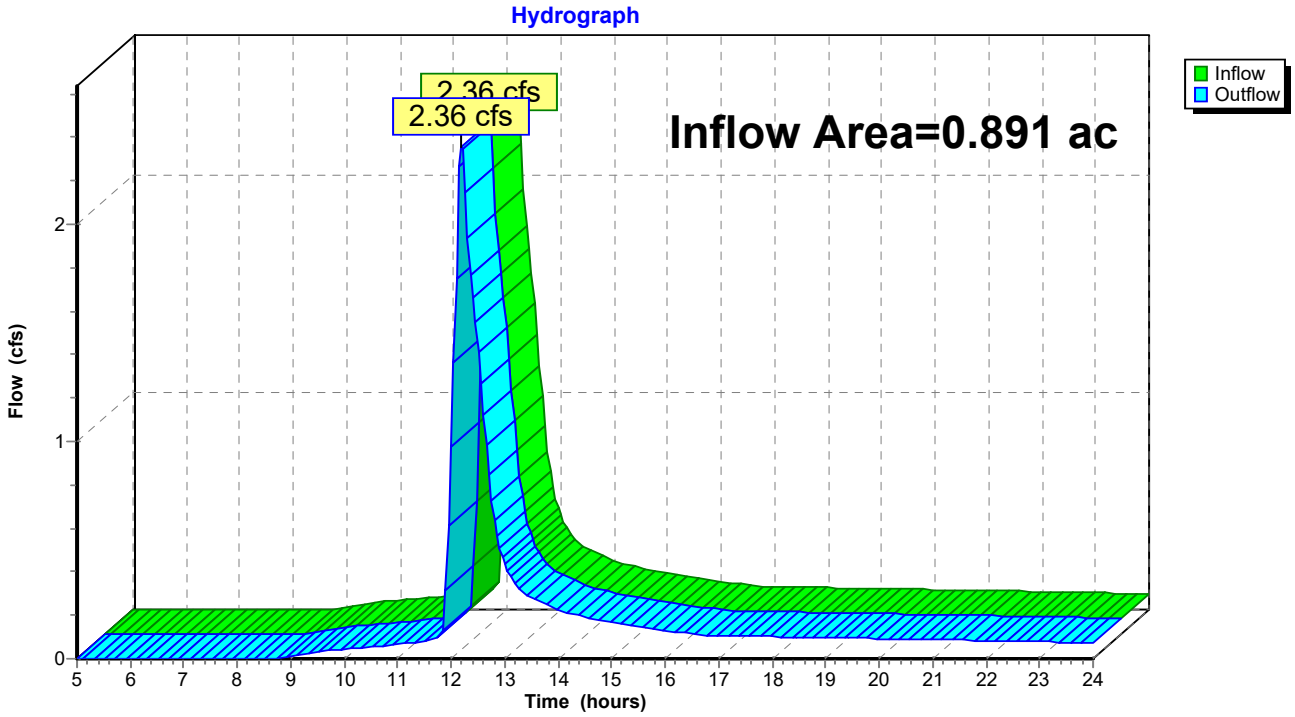


## Summary for Reach POI1: POI 1

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 3.25" for 10-YR event
Inflow = 2.36 cfs @ 12.19 hrs, Volume= 0.241 af
Outflow = 2.36 cfs @ 12.19 hrs, Volume= 0.241 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI1: POI 1

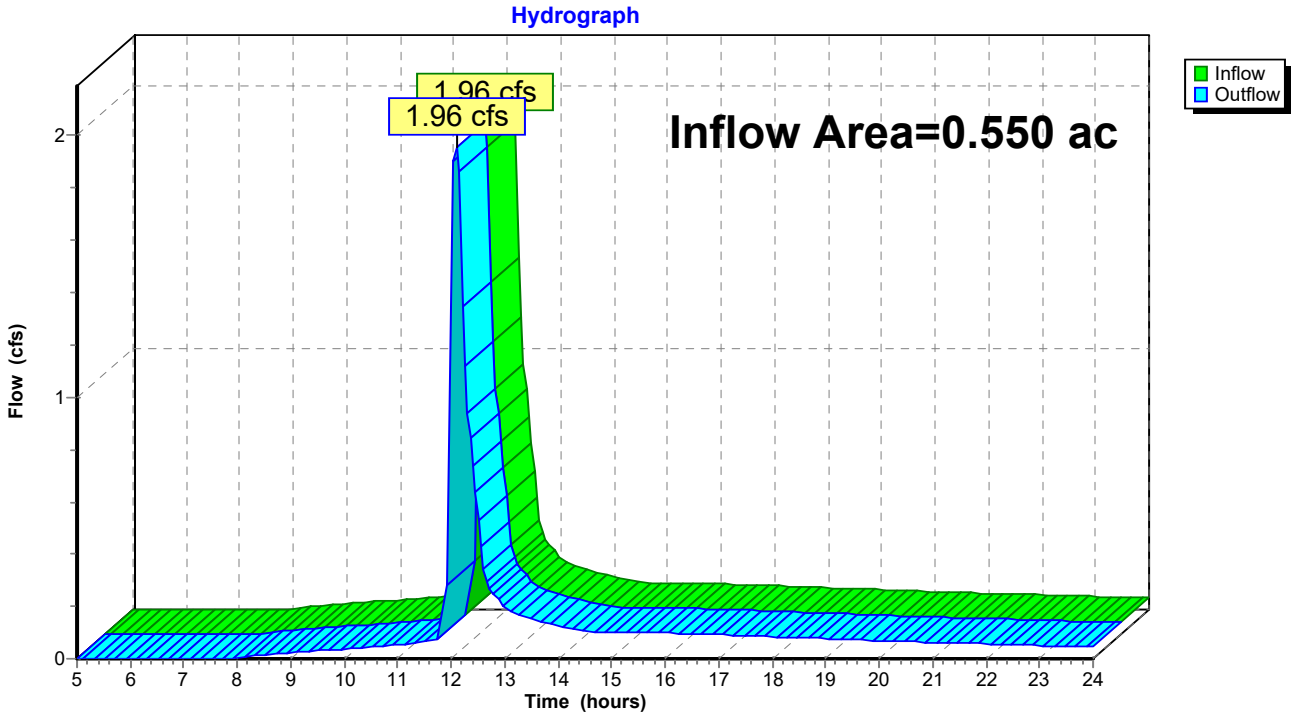


## Summary for Reach POI2: POI 2

Inflow Area = 0.550 ac, 62.67% Impervious, Inflow Depth > 3.33" for 10-YR event
Inflow = 1.96 cfs @ 12.09 hrs, Volume= 0.152 af
Outflow = 1.96 cfs @ 12.09 hrs, Volume= 0.152 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI2: POI 2

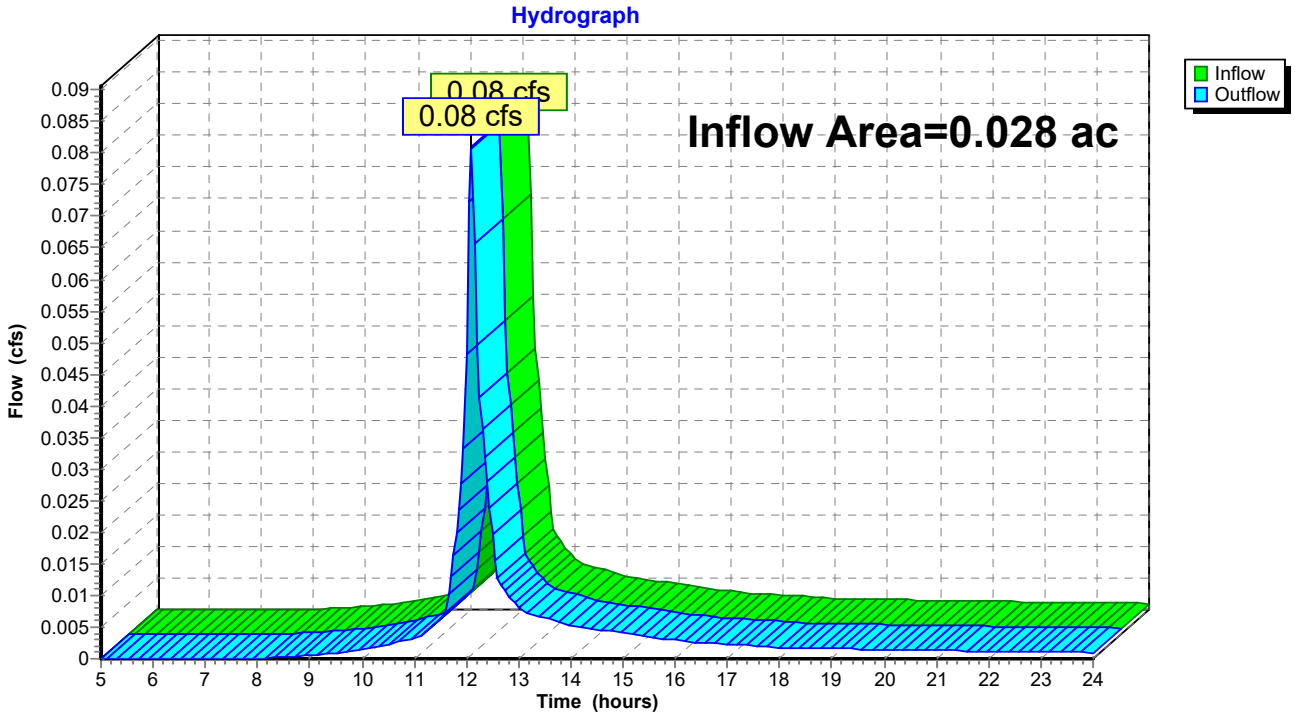


## Summary for Reach POI3: POI 3

Inflow Area = 0.028 ac, 0.00% Impervious, Inflow Depth > 2.54" for 10-YR event
Inflow = 0.08 cfs @ 12.09 hrs, Volume= 0.006 af
Outflow = 0.08 cfs @ 12.09 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI3: POI 3

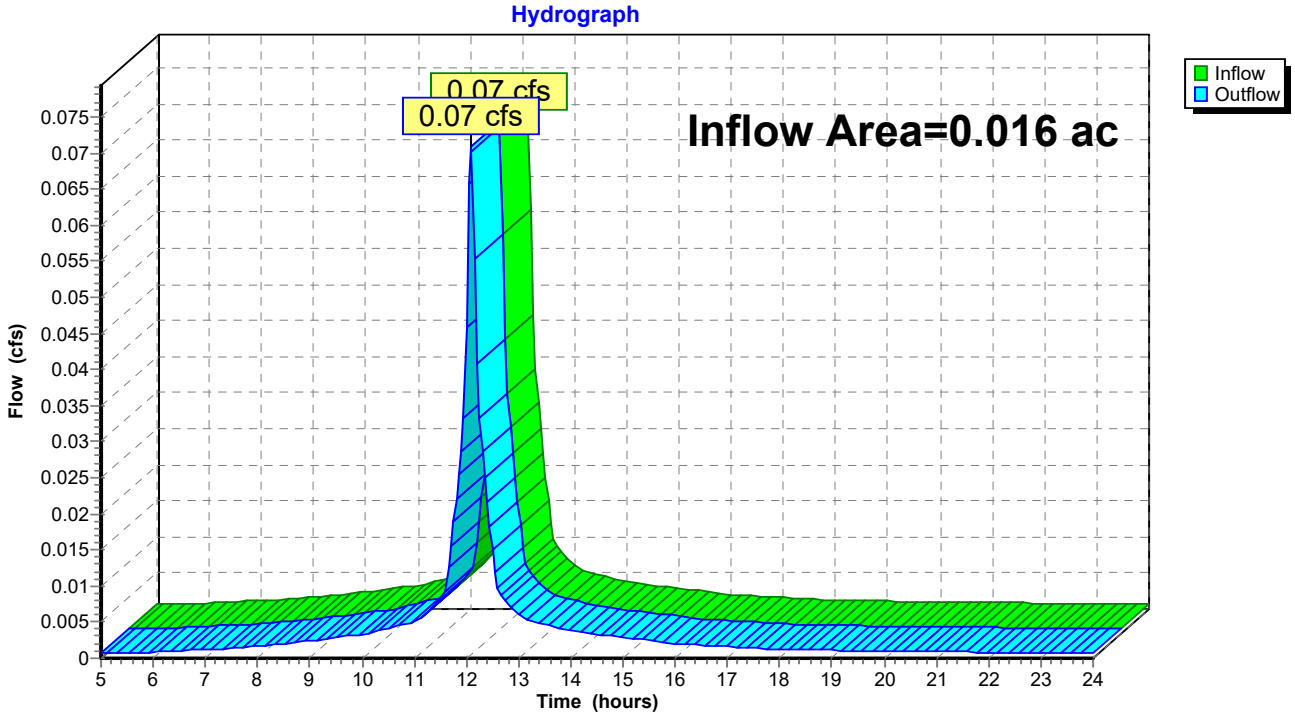


## Summary for Reach ST: STORMTREE

Inflow Area = 0.016 ac, 96.47% Impervious, Inflow Depth > 4.17" for 10-YR event
Inflow = 0.07 cfs @ 12.09 hrs, Volume= 0.006 af
Outflow = 0.07 cfs @ 12.09 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P2.2 : SC-800 System

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

### Reach ST: STORMTREE



## Summary for Pond P1: SC-800 System

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 3.76" for 10-YR event
Inflow = 3.59 cfs @ 12.09 hrs, Volume= 0.279 af
Outflow = 2.36 cfs @ 12.19 hrs, Volume= 0.241 af, Atten= 34%, Lag= 6.1 min
Primary = 1.98 cfs @ 12.19 hrs, Volume= 0.237 af
Routed to Pond SF : StormFilter
Secondary = 0.38 cfs @ 12.19 hrs, Volume= 0.004 af
Routed to Reach POI1 : POI 1

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 21.85' @ 12.19 hrs Surf.Area= 1,900 sf Storage= 4,159 cf

Plug-Flow detention time= 154.4 min calculated for 0.241 af (86% of inflow)
Center-of-Mass det. time= 95.0 min ( 873.8 - 778.8 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 17.97' | 2,637 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc)<br>8,607 cf Overall - 2,014 cf Embedded = 6,593 cf x 40.0% Voids |
| #2 | 18.47' | 1,646 cf | **ADS_StormTech SC-800 +Cap** x 32 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>32 Chambers in 4 Rows<br>Cap Storage= 3.4 cf x 2 x 4 rows = 27.4 cf |
| #3 | 18.47' | 368 cf | **ADS_StormTech SC-800 +Cap** x 7 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>7 Chambers in 2 Rows<br>Cap Storage= 3.4 cf x 2 x 2 rows = 13.7 cf |
| | | 4,651 cf | Total Available Storage |

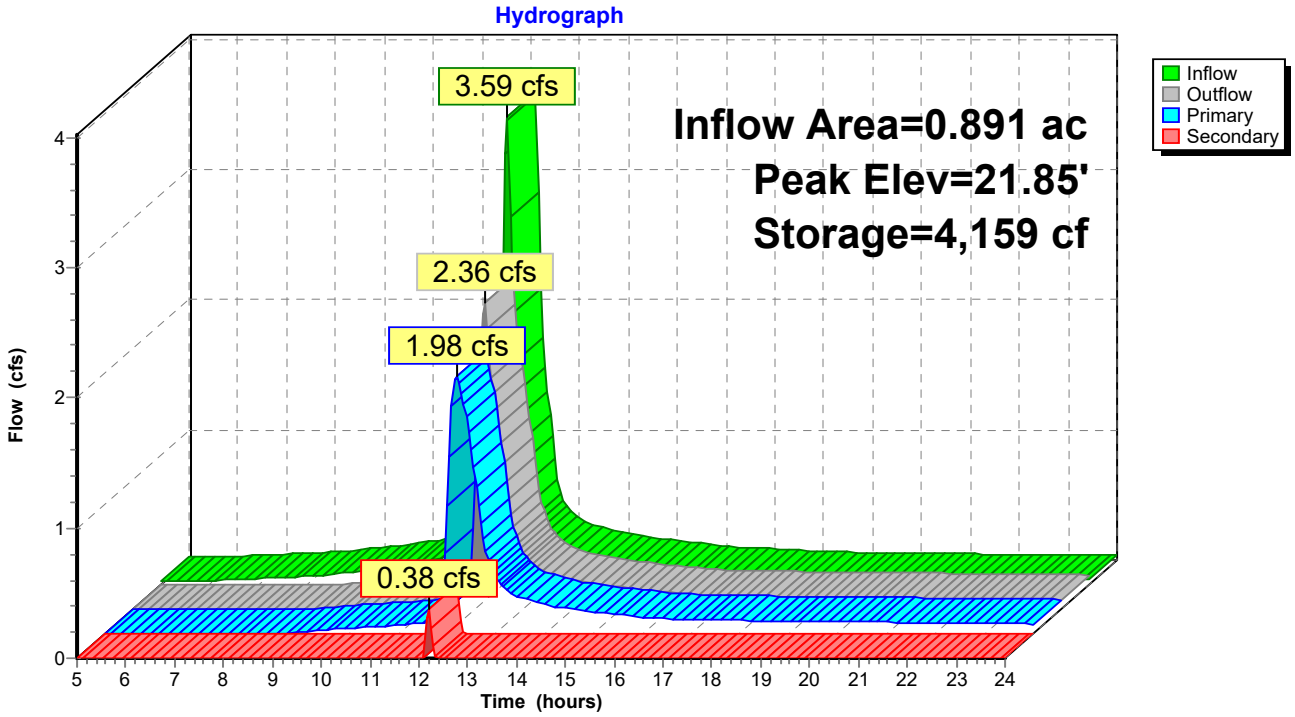
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 17.97 | 1,900 | 0 | 0 |
| 21.72 | 1,900 | 7,125 | 7,125 |
| 22.50 | 1,900 | 1,482 | 8,607 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 18.58' | **10.0" Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #2 | Device 1 | 18.60' | **1.8" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 23.00' | **6.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |
| #4 | Device 1 | 20.15' | **7.7" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #5 | Secondary | 21.50' | **8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |

**Primary OutFlow** Max=1.97 cfs @ 12.19 hrs HW=21.84' (Free Discharge)
└─**1=Orifice/Grate** (Passes 1.97 cfs of 4.43 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.15 cfs @ 8.57 fps)
  ├─**3=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 1.82 cfs @ 5.64 fps)

**Secondary OutFlow** Max=0.36 cfs @ 12.19 hrs HW=21.84' (Free Discharge)
└─**5=Orifice/Grate** (Orifice Controls 0.36 cfs @ 1.99 fps)

## Pond P1: SC-800 System



## Summary for Pond P2.1: UDSF

Inflow Area = 0.163 ac, 32.04% Impervious, Inflow Depth > 3.09" for 10-YR event
Inflow = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af
Outflow = 0.52 cfs @ 12.13 hrs, Volume= 0.041 af, Atten= 9%, Lag= 2.1 min
Primary = 0.52 cfs @ 12.13 hrs, Volume= 0.041 af
Routed to Pond P2.2 : SC-800 System

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 36.54' @ 12.13 hrs Surf.Area= 265 sf Storage= 134 cf

Plug-Flow detention time= 23.0 min calculated for 0.041 af (98% of inflow)
Center-of-Mass det. time= 10.2 min ( 817.3 - 807.1 )

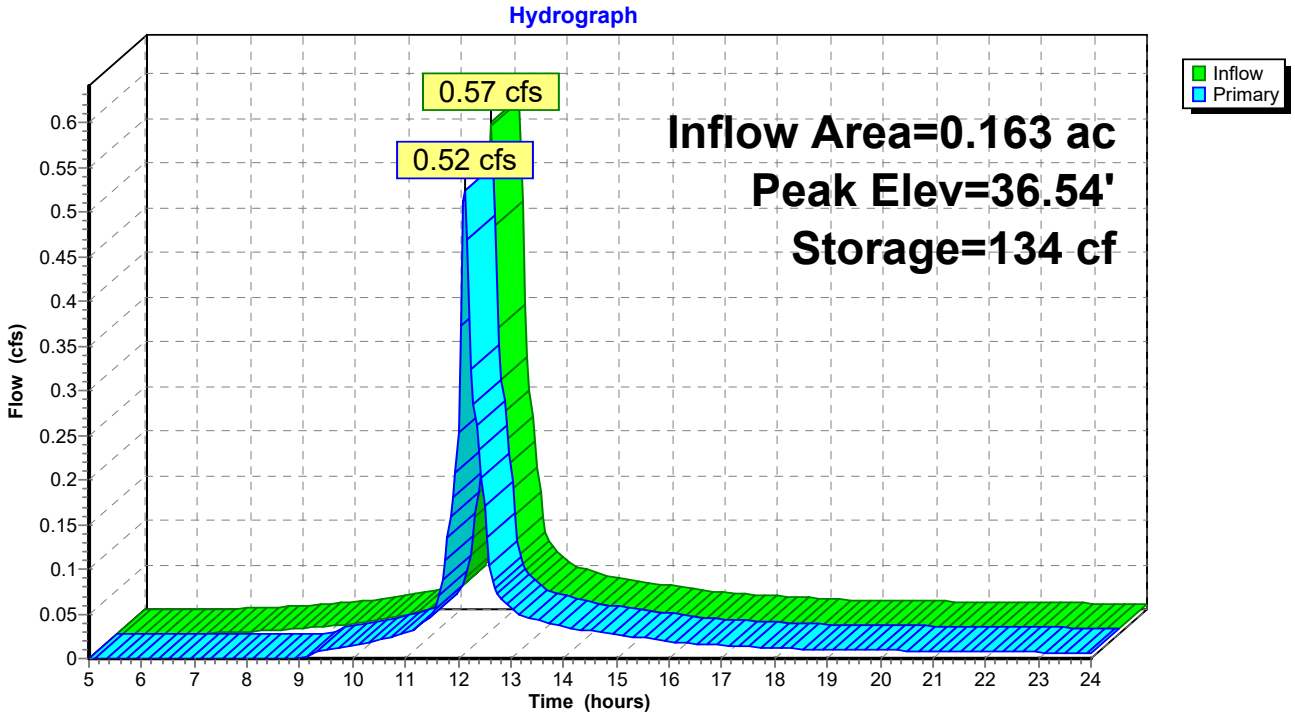
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 34.50' | 1,367 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Voids (%) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|---|
| 34.50 | 265 | 0.0 | 0 | 0 |
| 35.50 | 265 | 40.0 | 106 | 106 |
| 35.51 | 265 | 10.0 | 0 | 106 |
| 37.00 | 265 | 10.0 | 39 | 146 |
| 37.01 | 265 | 100.0 | 3 | 148 |
| 38.50 | 820 | 100.0 | 808 | 957 |
| 39.00 | 820 | 100.0 | 410 | 1,367 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 34.83' | **6.0" Round Culvert**<br>L= 16.3' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 34.83' / 34.75' S= 0.0049 '/' Cc= 0.900<br>n= 0.010, Flow Area= 0.20 sf |
| #2 | Device 1 | 34.83' | **4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 38.50' | **6.0" Horiz. Orifice/Grate X 2.00** C= 0.600<br>Limited to weir flow at low heads |

**Primary OutFlow** Max=0.51 cfs @ 12.13 hrs HW=36.48' (Free Discharge)
└**1=Culvert** (Passes 0.51 cfs of 1.12 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.51 cfs @ 5.87 fps)
└**3=Orifice/Grate** ( Controls 0.00 cfs)

## Pond P2.1: UDSF



## Summary for Pond P2.2: SC-800 System

Inflow Area = 0.550 ac, 62.67% Impervious, Inflow Depth > 3.59" for 10-YR event
Inflow = 2.06 cfs @ 12.10 hrs, Volume= 0.165 af
Outflow = 1.96 cfs @ 12.09 hrs, Volume= 0.152 af, Atten= 5%, Lag= 0.0 min
Primary = 1.96 cfs @ 12.09 hrs, Volume= 0.152 af
Routed to Reach POI2 : POI 2

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 38.11' @ 12.09 hrs Surf.Area= 774 sf Storage= 1,687 cf

Plug-Flow detention time= 139.6 min calculated for 0.152 af (93% of inflow)
Center-of-Mass det. time= 100.3 min ( 884.2 - 783.9 )

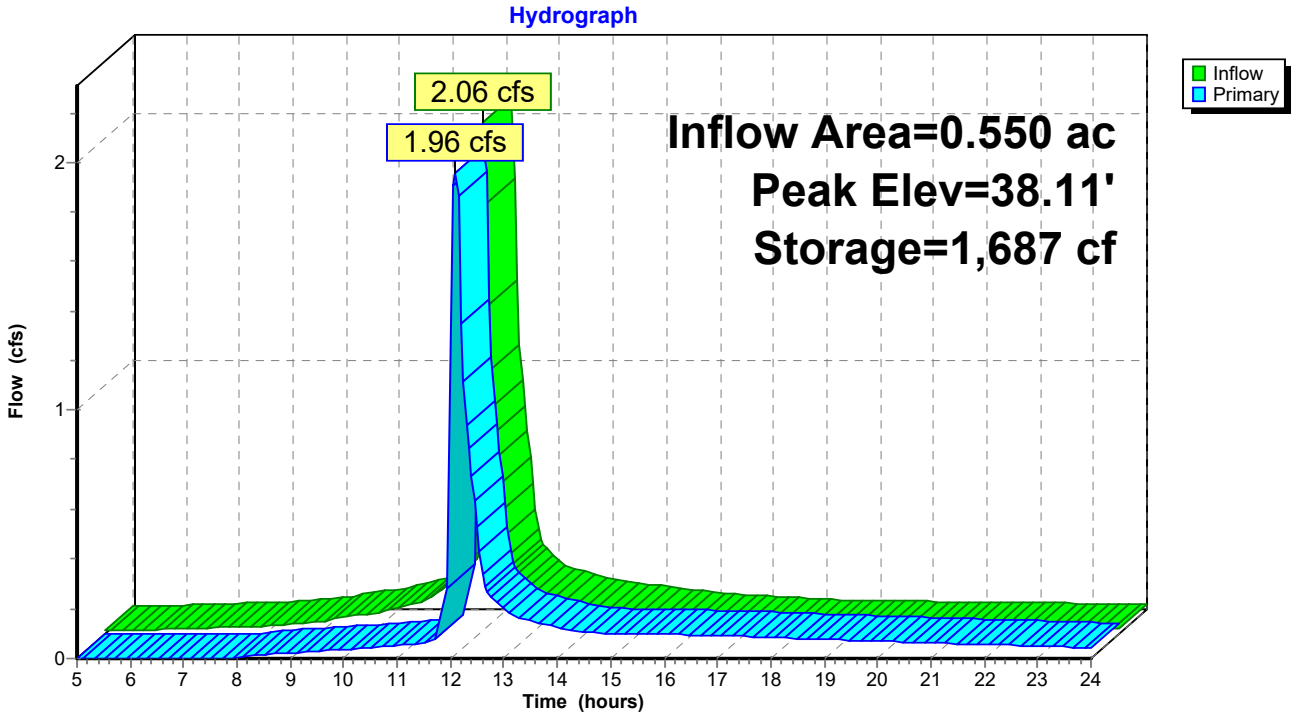
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 33.37' | 1,457 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc)<br>4,009 cf Overall - 368 cf Embedded = 3,641 cf x 40.0% Voids |
| #2 | 33.87' | 368 cf | **ADS_StormTech SC-800 +Cap** x 7 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>7 Chambers in 2 Rows<br>Cap Storage= 3.4 cf x 2 x 2 rows = 13.7 cf |
| | | 1,824 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 33.37 | 774 | 0 | 0 |
| 37.12 | 774 | 2,903 | 2,903 |
| 38.55 | 774 | 1,107 | 4,009 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 33.97' | **12.0" Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #2 | Device 1 | 34.00' | **1.4" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 37.90' | **6.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=1.94 cfs @ 12.09 hrs HW=38.11' (Free Discharge)
↑**1=Orifice/Grate** (Passes 1.94 cfs of 7.21 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 9.69 fps)
**3=Sharp-Crested Rectangular Weir** (Weir Controls 1.83 cfs @ 1.49 fps)

## Pond P2.2: SC-800 System

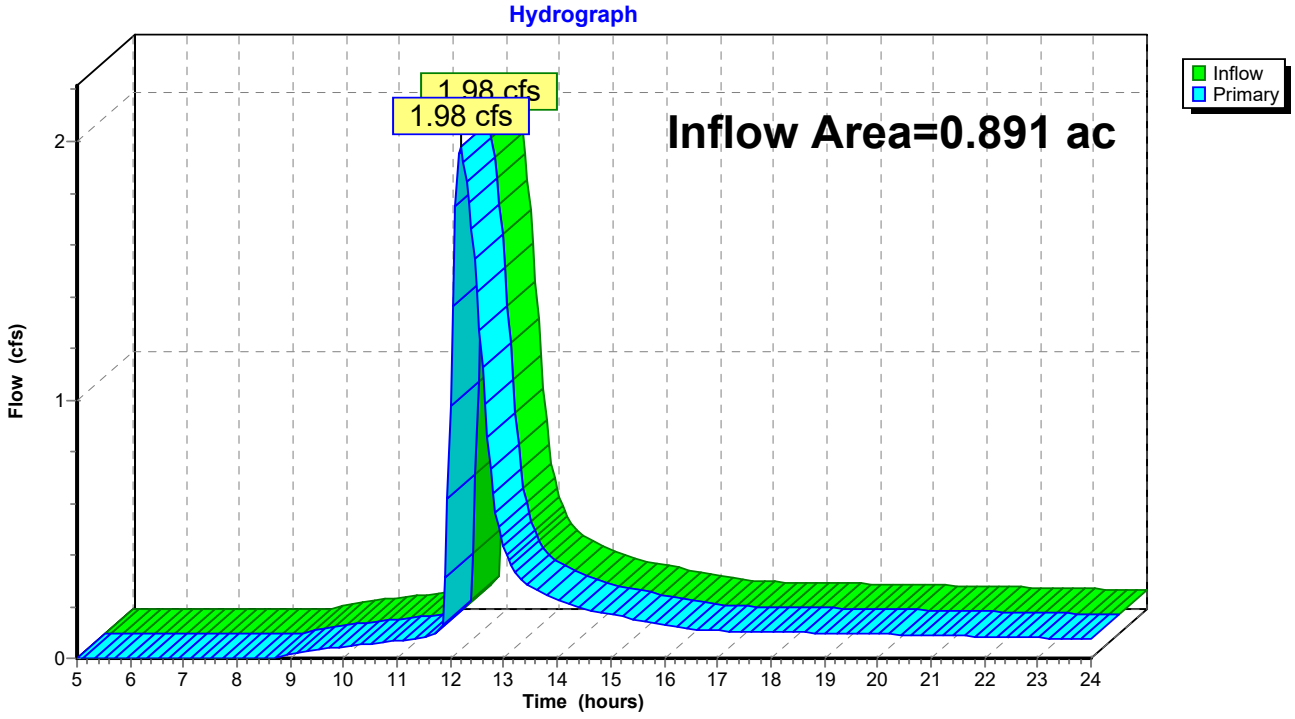


## Summary for Pond SF: StormFilter

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 3.19" for 10-YR event
Inflow = 1.98 cfs @ 12.19 hrs, Volume= 0.237 af
Primary = 1.98 cfs @ 12.19 hrs, Volume= 0.237 af, Atten= 0%, Lag= 0.0 min
Routed to Reach POI1 : POI 1

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

### Pond SF: StormFilter



Time span=5.00-24.00 hrs, dt=0.05 hrs, 381 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: 2.3** Runoff Area=12,054 sf 100.00% Impervious Runoff Depth>5.40"
Tc=6.0 min CN=98 Runoff=1.54 cfs 0.124 af

**Subcatchment S1.1: S1.1** Runoff Area=11,070 sf 100.00% Impervious Runoff Depth>5.40"
Tc=6.0 min CN=98 Runoff=1.41 cfs 0.114 af

**Subcatchment S1.2: S1.2** Runoff Area=9,800 sf 100.00% Impervious Runoff Depth>5.40"
Tc=6.0 min CN=98 Runoff=1.25 cfs 0.101 af

**Subcatchment S1.3: S1.3** Runoff Area=17,957 sf 38.89% Impervious Runoff Depth>4.32"
Tc=6.0 min CN=87 Runoff=1.99 cfs 0.148 af

**Subcatchment S2.1: 2.1** Runoff Area=7,095 sf 32.04% Impervious Runoff Depth>4.22"
Tc=6.0 min CN=86 Runoff=0.77 cfs 0.057 af

**Subcatchment S2.3: 2.3** Runoff Area=4,094 sf 0.00% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=80 Runoff=0.39 cfs 0.028 af

**Subcatchment S2.4: 2.4** Runoff Area=709 sf 96.47% Impervious Runoff Depth>5.32"
Tc=6.0 min CN=97 Runoff=0.09 cfs 0.007 af

**Subcatchment S3.1: S1.2** Runoff Area=1,204 sf 0.00% Impervious Runoff Depth>3.60"
Tc=6.0 min CN=80 Runoff=0.11 cfs 0.008 af

**Reach POI1: POI 1** Inflow=3.52 cfs 0.320 af
Outflow=3.52 cfs 0.320 af

**Reach POI2: POI 2** Inflow=2.62 cfs 0.201 af
Outflow=2.62 cfs 0.201 af

**Reach POI3: POI 3** Inflow=0.11 cfs 0.008 af
Outflow=0.11 cfs 0.008 af

**Reach ST: STORMTREE** Inflow=0.09 cfs 0.007 af
Outflow=0.09 cfs 0.007 af

**Pond P1: SC-800 System** Peak Elev=22.36' Storage=4,544 cf Inflow=4.65 cfs 0.364 af
Primary=2.30 cfs 0.298 af Secondary=1.22 cfs 0.022 af Outflow=3.52 cfs 0.320 af

**Pond P2.1: UDSF** Peak Elev=37.12' Storage=180 cf Inflow=0.77 cfs 0.057 af
Outflow=0.61 cfs 0.056 af

**Pond P2.2: SC-800 System** Peak Elev=38.15' Storage=1,702 cf Inflow=2.61 cfs 0.216 af
Outflow=2.62 cfs 0.201 af

**Pond SF: StormFilter** Inflow=2.30 cfs 0.298 af
Primary=2.30 cfs 0.298 af

**Total Runoff Area = 1.469 ac Runoff Volume = 0.589 af Average Runoff Depth = 4.82"**
**33.01% Pervious = 0.485 ac 66.99% Impervious = 0.984 ac**

## Summary for Subcatchment 1S: 2.3

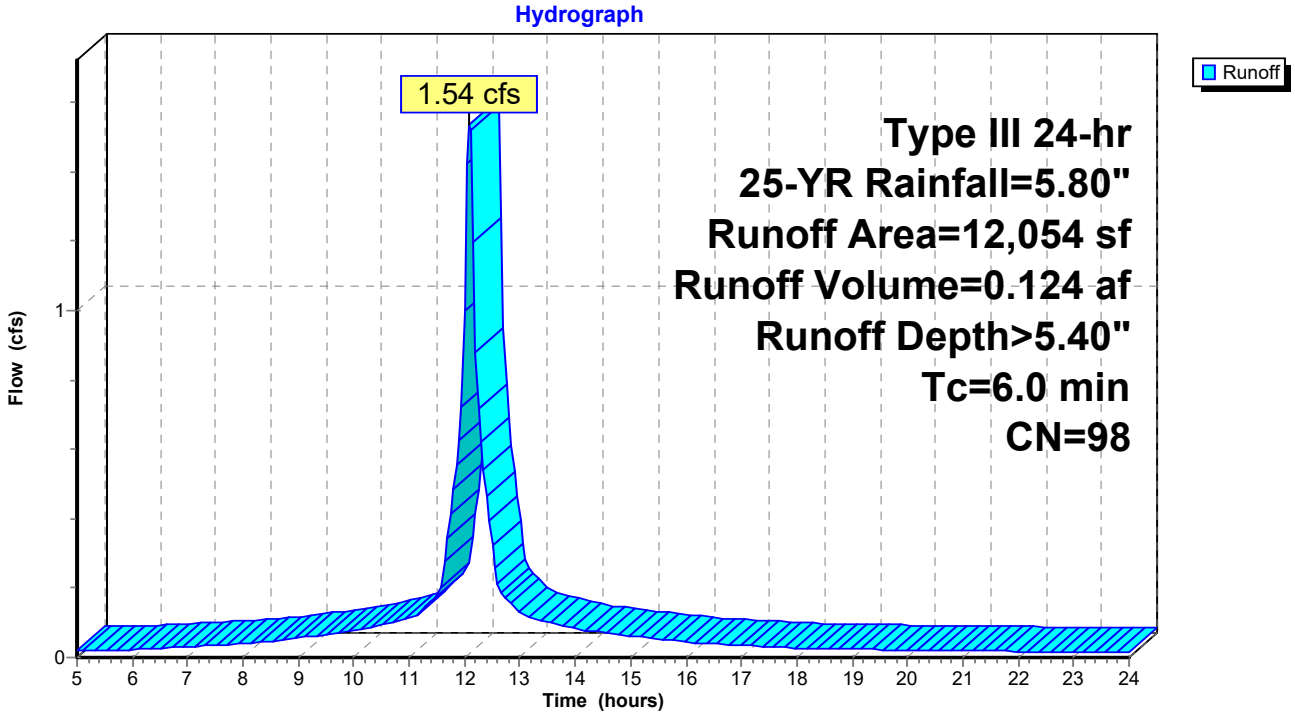
Runoff = 1.54 cfs @ 12.09 hrs, Volume= 0.124 af, Depth> 5.40"
Routed to Pond P2.2 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 12,054 | 98 | Roofs, HSG D |
| 12,054 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment 1S: 2.3



## Summary for Subcatchment S1.1: S1.1

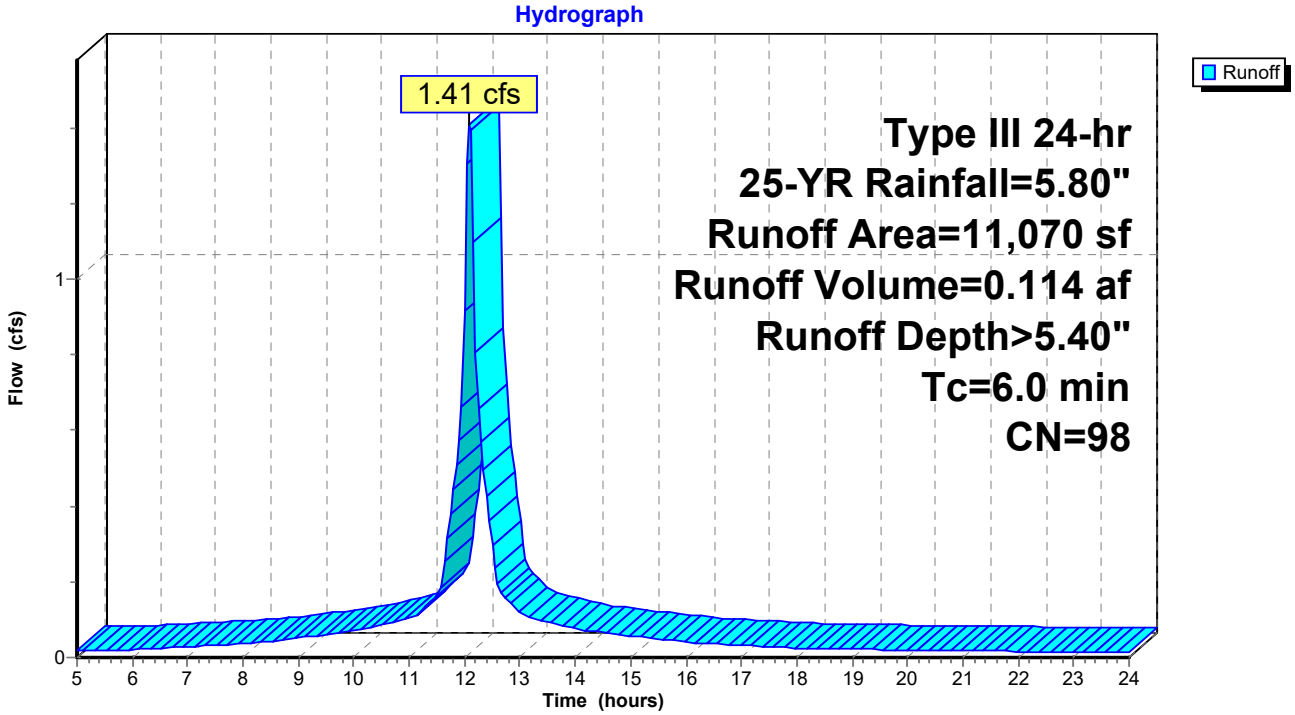
Runoff = 1.41 cfs @ 12.09 hrs, Volume= 0.114 af, Depth> 5.40"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 11,070 | 98 | Roofs, HSG D |
| 11,070 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, dIRECT eNTRY** |

### Subcatchment S1.1: S1.1



## Summary for Subcatchment S1.2: S1.2

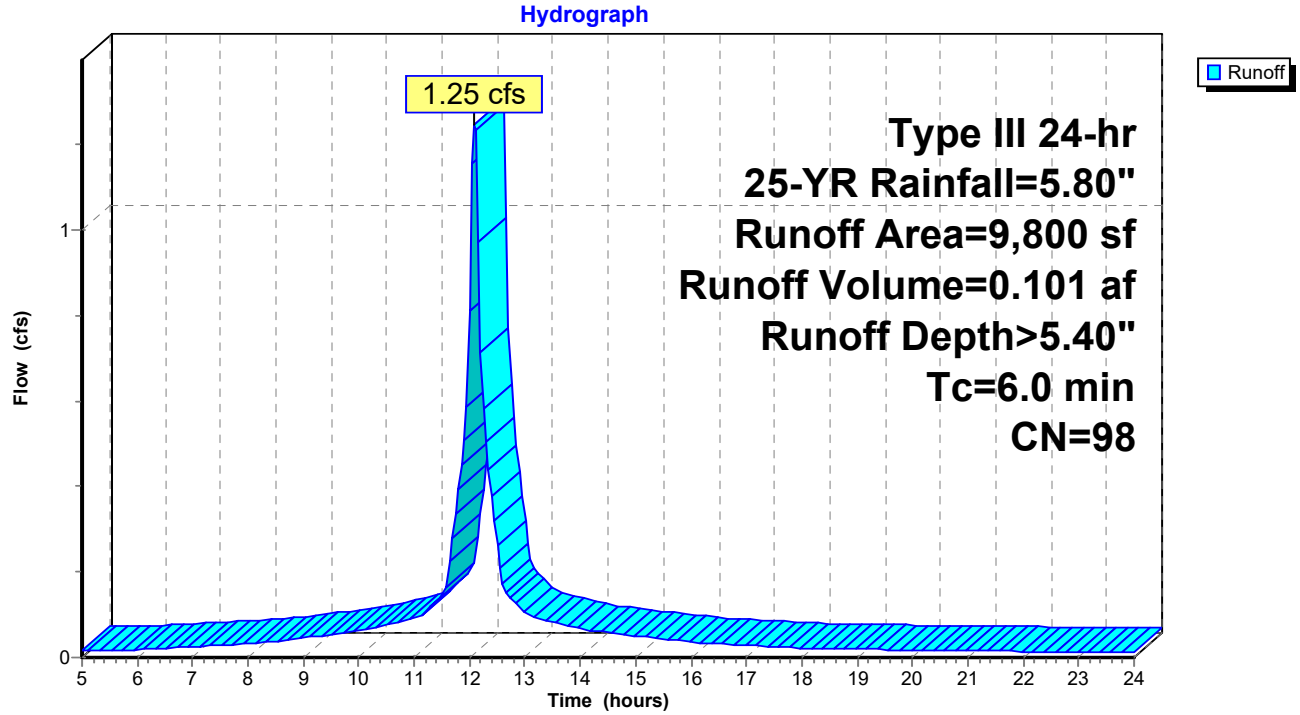
Runoff = 1.25 cfs @ 12.09 hrs, Volume= 0.101 af, Depth> 5.40"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 9,800 | 98 | Roofs, HSG D |
| 9,800 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S1.2: S1.2



## Summary for Subcatchment S1.3: S1.3

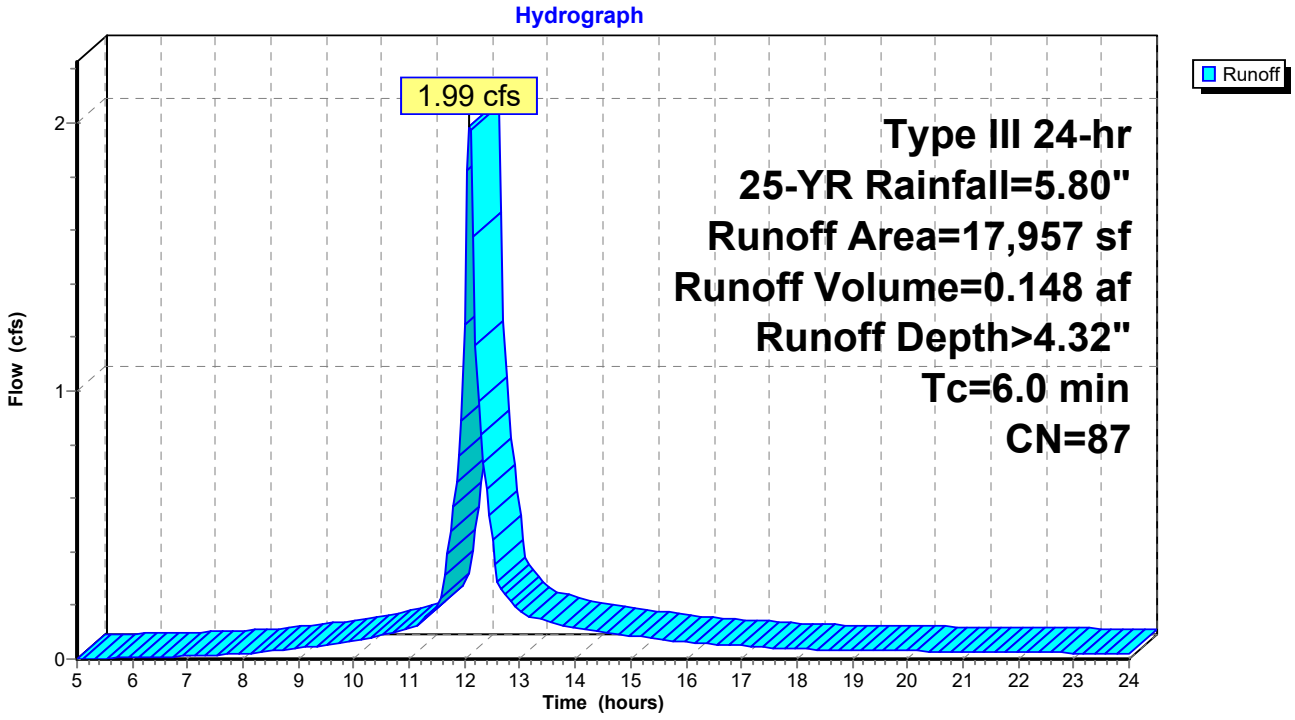
Runoff = 1.99 cfs @ 12.09 hrs, Volume= 0.148 af, Depth> 4.32"
Routed to Pond P1 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 6,984 | 98 | Paved parking, HSG D |
| 10,973 | 80 | >75% Grass cover, Good, HSG D |
| 17,957 | 87 | Weighted Average |
| 10,973 | | 61.11% Pervious Area |
| 6,984 | | 38.89% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, dIRECT eNTRY** |

### Subcatchment S1.3: S1.3



## Summary for Subcatchment S2.1: 2.1

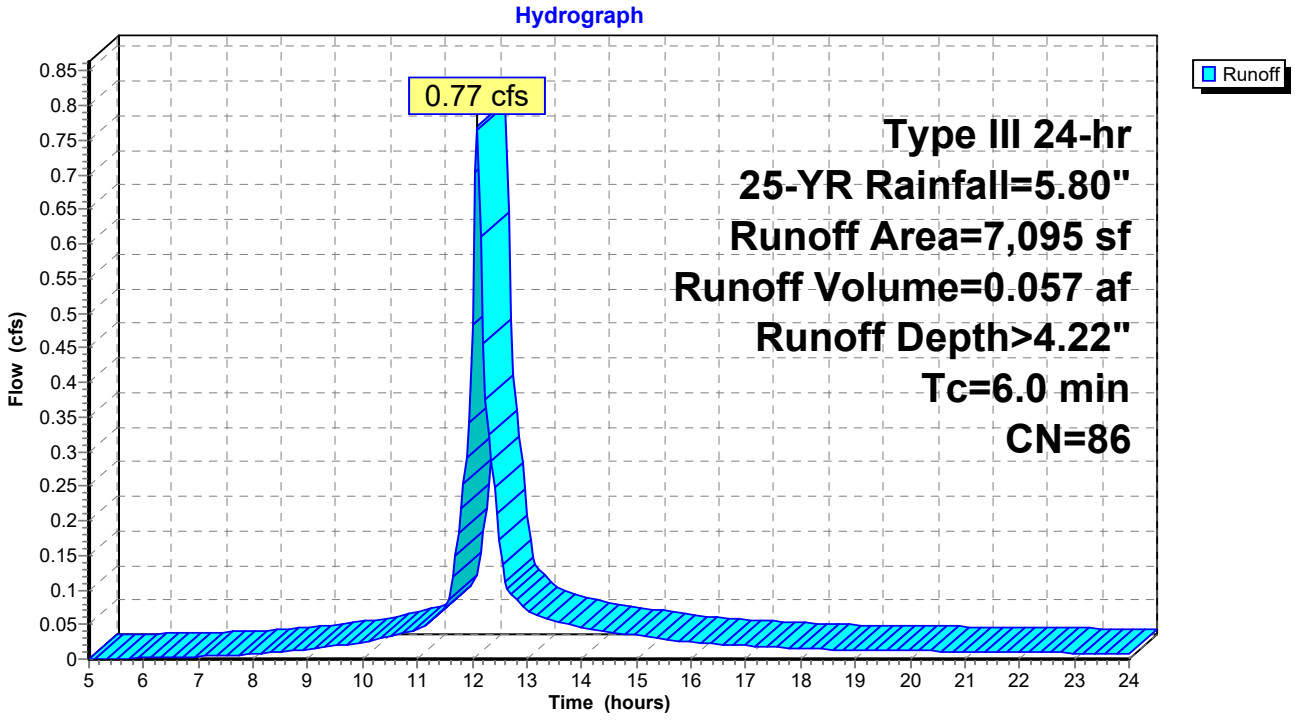
Runoff = 0.77 cfs @ 12.09 hrs, Volume= 0.057 af, Depth> 4.22"
Routed to Pond P2.1 : UDSF

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 4,822 | 80 | >75% Grass cover, Good, HSG D |
| 2,273 | 98 | Paved parking, HSG D |
| 7,095 | 86 | Weighted Average |
| 4,822 | | 67.96% Pervious Area |
| 2,273 | | 32.04% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S2.1: 2.1



## Summary for Subcatchment S2.3: 2.3

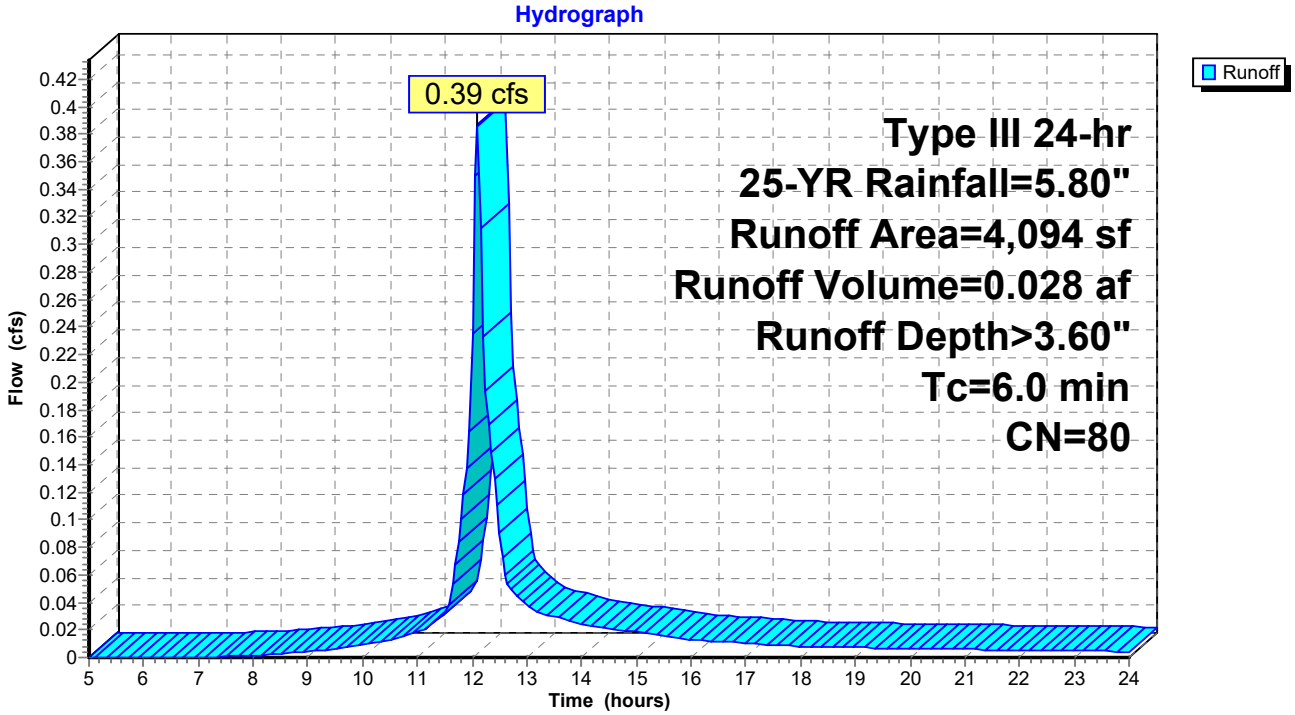
Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.028 af, Depth> 3.60"
Routed to Pond P2.2 : SC-800 System

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 4,094 | 80 | >75% Grass cover, Good, HSG D |
| 4,094 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S2.3: 2.3



## Summary for Subcatchment S2.4: 2.4

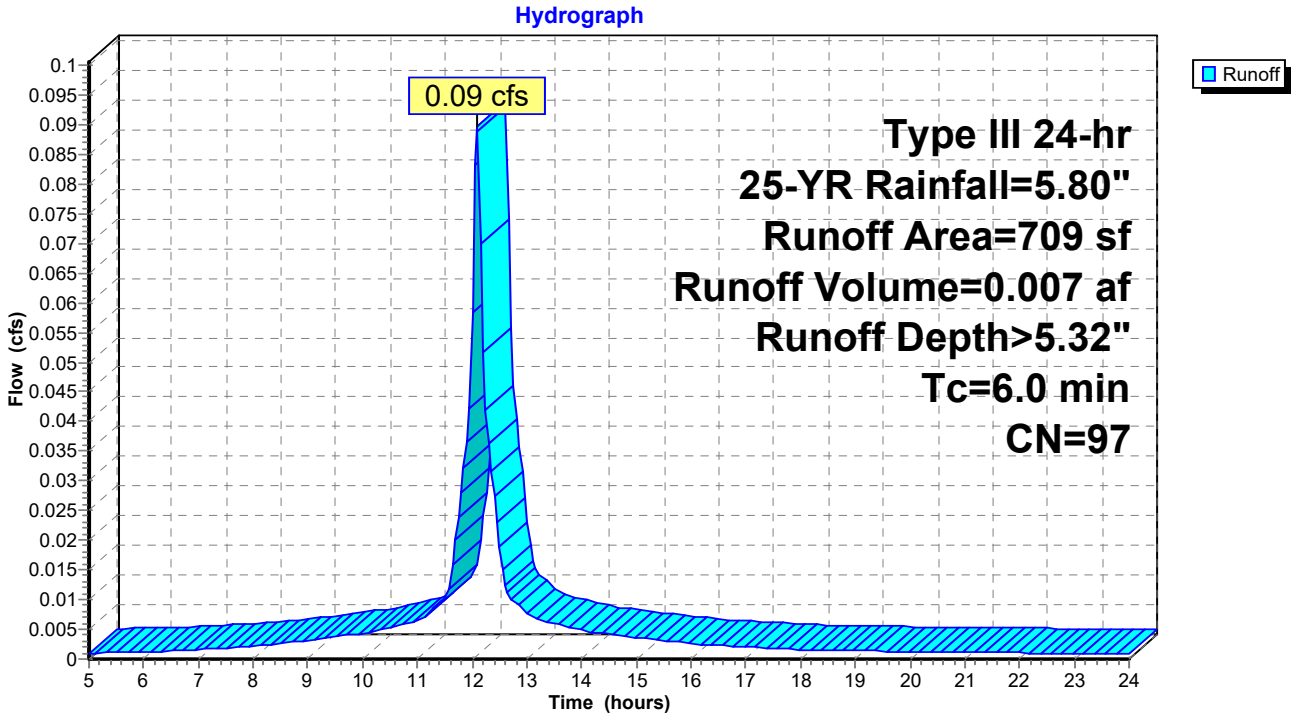
Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Depth> 5.32"
Routed to Reach ST : STORMTREE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 25 | 80 | >75% Grass cover, Good, HSG D |
| 684 | 98 | Paved parking, HSG D |
| 709 | 97 | Weighted Average |
| 25 | | 3.53% Pervious Area |
| 684 | | 96.47% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Subcatchment S2.4: 2.4



## Summary for Subcatchment S3.1: S1.2

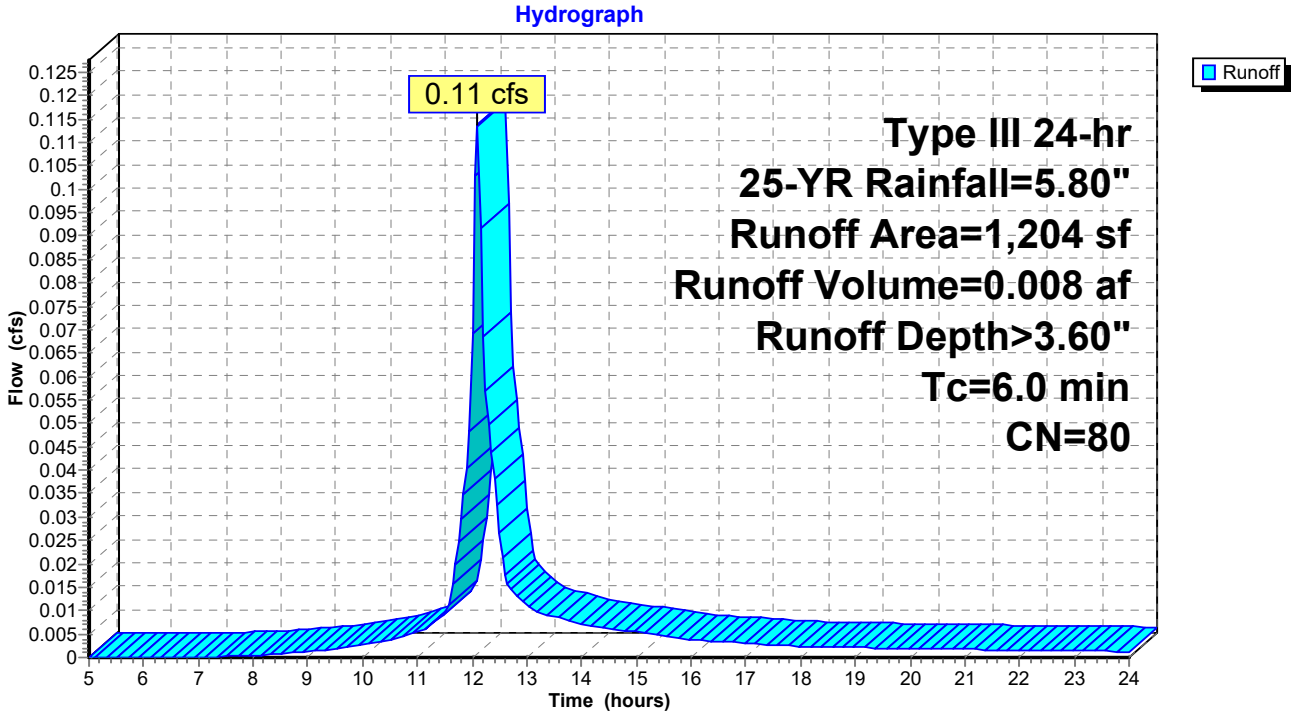
Runoff = 0.11 cfs @ 12.09 hrs, Volume= 0.008 af, Depth> 3.60"
Routed to Reach POI3 : POI 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-YR Rainfall=5.80"

| Area (sf) | CN | Description |
|---|---|---|
| 1,204 | 80 | >75% Grass cover, Good, HSG D |
| 1,204 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

### Subcatchment S3.1: S1.2

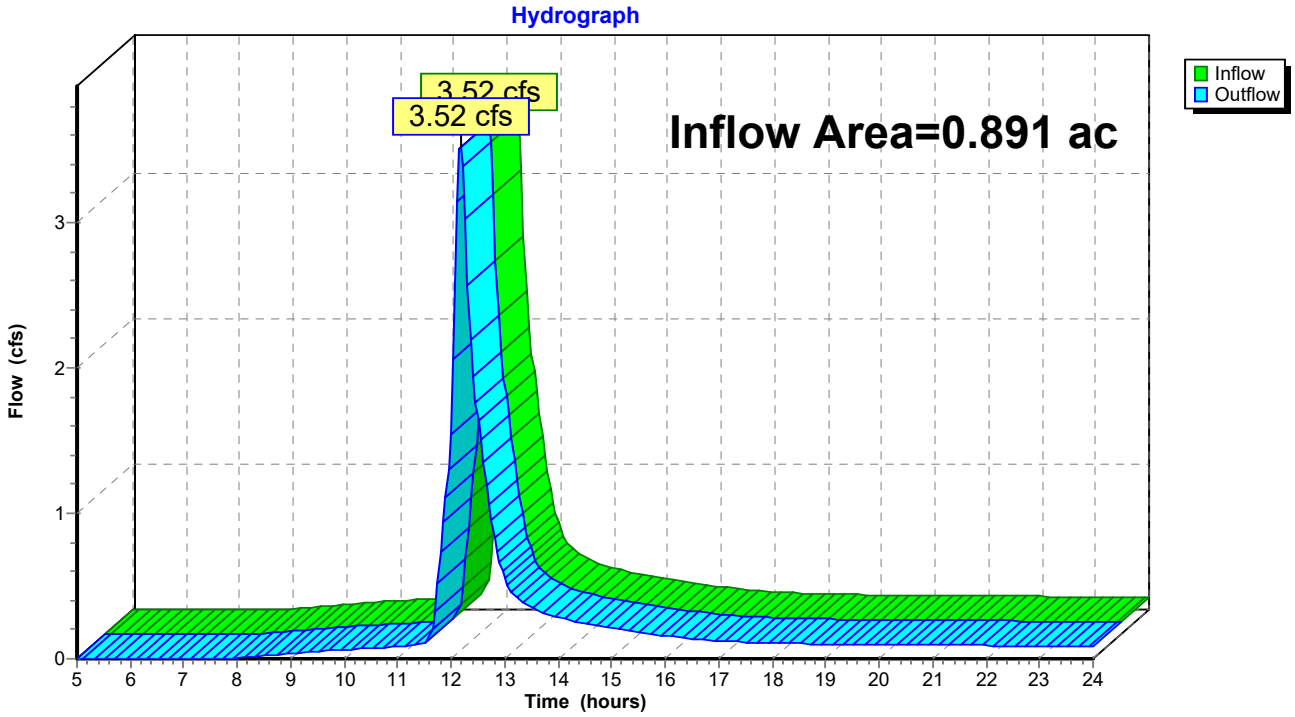


## Summary for Reach POI1: POI 1

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 4.31" for 25-YR event
Inflow = 3.52 cfs @ 12.16 hrs, Volume= 0.320 af
Outflow = 3.52 cfs @ 12.16 hrs, Volume= 0.320 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI1: POI 1

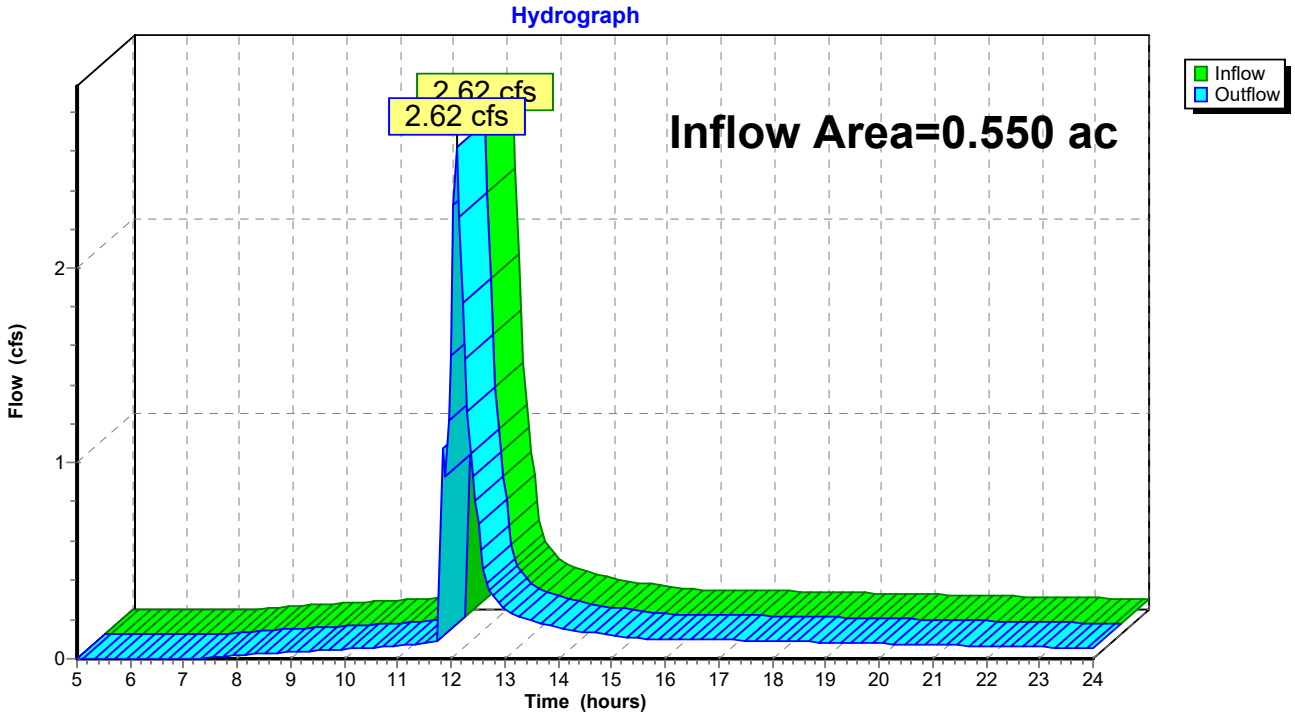


## Summary for Reach POI2: POI 2

Inflow Area = 0.550 ac, 62.67% Impervious, Inflow Depth > 4.38" for 25-YR event
Inflow = 2.62 cfs @ 12.10 hrs, Volume= 0.201 af
Outflow = 2.62 cfs @ 12.10 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI2: POI 2

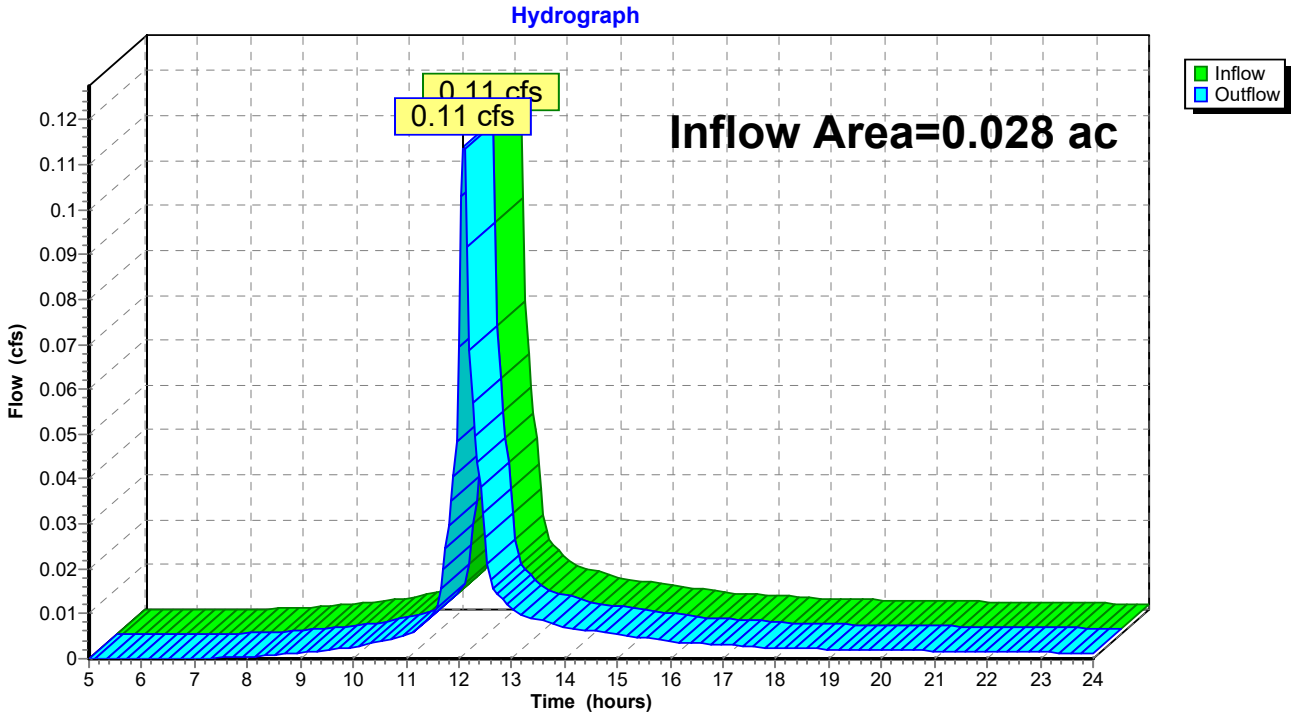


## Summary for Reach POI3: POI 3

Inflow Area = 0.028 ac, 0.00% Impervious, Inflow Depth > 3.60" for 25-YR event
Inflow = 0.11 cfs @ 12.09 hrs, Volume= 0.008 af
Outflow = 0.11 cfs @ 12.09 hrs, Volume= 0.008 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

## Reach POI3: POI 3

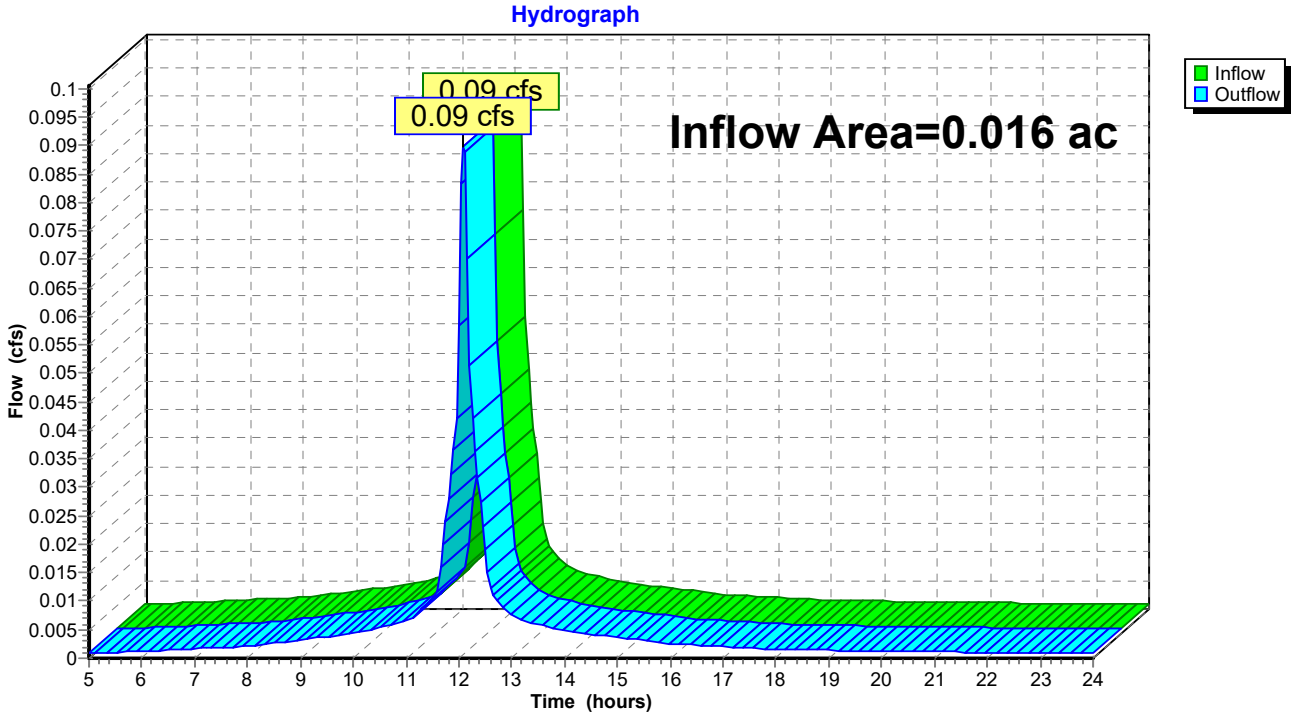


## Summary for Reach ST: STORMTREE

Inflow Area = 0.016 ac, 96.47% Impervious, Inflow Depth > 5.32" for 25-YR event
Inflow = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af
Outflow = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P2.2 : SC-800 System

Routing by Stor-Ind+Trans method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

### Reach ST: STORMTREE



## Summary for Pond P1: SC-800 System

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 4.90" for 25-YR event
Inflow = 4.65 cfs @ 12.09 hrs, Volume= 0.364 af
Outflow = 3.52 cfs @ 12.16 hrs, Volume= 0.320 af, Atten= 24%, Lag= 4.5 min
Primary = 2.30 cfs @ 12.16 hrs, Volume= 0.298 af
Routed to Pond SF : StormFilter
Secondary = 1.22 cfs @ 12.16 hrs, Volume= 0.022 af
Routed to Reach POI1 : POI 1

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 22.36' @ 12.16 hrs Surf.Area= 1,900 sf Storage= 4,544 cf

Plug-Flow detention time= 128.4 min calculated for 0.319 af (88% of inflow)
Center-of-Mass det. time= 73.9 min ( 849.0 - 775.2 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 17.97' | 2,637 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc)<br>8,607 cf Overall - 2,014 cf Embedded = 6,593 cf x 40.0% Voids |
| #2 | 18.47' | 1,646 cf | **ADS_StormTech SC-800 +Cap** x 32 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>32 Chambers in 4 Rows<br>Cap Storage= 3.4 cf x 2 x 4 rows = 27.4 cf |
| #3 | 18.47' | 368 cf | **ADS_StormTech SC-800 +Cap** x 7 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>7 Chambers in 2 Rows<br>Cap Storage= 3.4 cf x 2 x 2 rows = 13.7 cf |
| | | 4,651 cf | Total Available Storage |

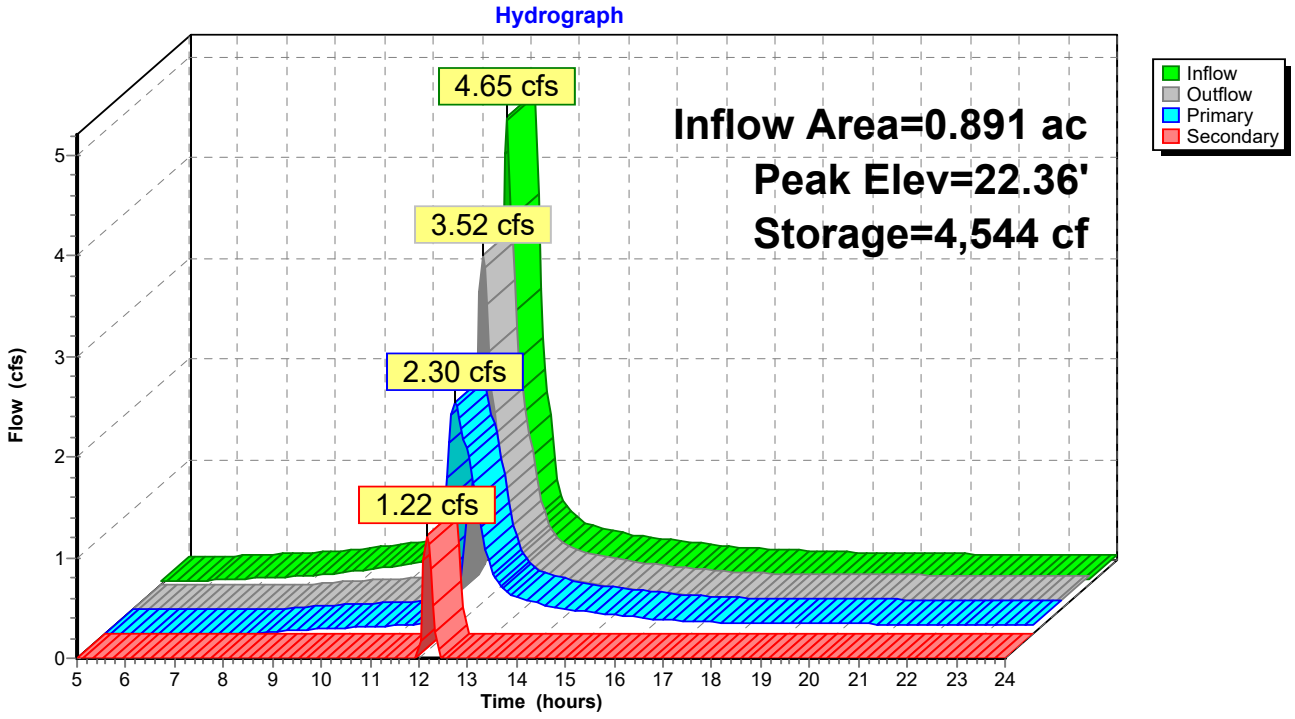
| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 17.97 | 1,900 | 0 | 0 |
| 21.72 | 1,900 | 7,125 | 7,125 |
| 22.50 | 1,900 | 1,482 | 8,607 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 18.58' | **10.0" Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #2 | Device 1 | 18.60' | **1.8" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 23.00' | **6.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |
| #4 | Device 1 | 20.15' | **7.7" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #5 | Secondary | 21.50' | **8.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |

**Primary OutFlow** Max=2.29 cfs @ 12.16 hrs HW=22.33' (Free Discharge)
└─**1=Orifice/Grate** (Passes 2.29 cfs of 4.80 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.16 cfs @ 9.21 fps)
  ├─**3=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)
  └─**4=Orifice/Grate** (Orifice Controls 2.13 cfs @ 6.57 fps)

**Secondary OutFlow** Max=1.19 cfs @ 12.16 hrs HW=22.33' (Free Discharge)
└─**5=Orifice/Grate** (Orifice Controls 1.19 cfs @ 3.41 fps)

## Pond P1: SC-800 System



## Summary for Pond P2.1: UDSF

Inflow Area = 0.163 ac, 32.04% Impervious, Inflow Depth > 4.22" for 25-YR event
Inflow = 0.77 cfs @ 12.09 hrs, Volume= 0.057 af
Outflow = 0.61 cfs @ 12.15 hrs, Volume= 0.056 af, Atten= 21%, Lag= 3.7 min
Primary = 0.61 cfs @ 12.15 hrs, Volume= 0.056 af
Routed to Pond P2.2 : SC-800 System

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 37.12' @ 12.15 hrs Surf.Area= 307 sf Storage= 180 cf

Plug-Flow detention time= 19.1 min calculated for 0.056 af (98% of inflow)
Center-of-Mass det. time= 9.1 min ( 807.5 - 798.4 )

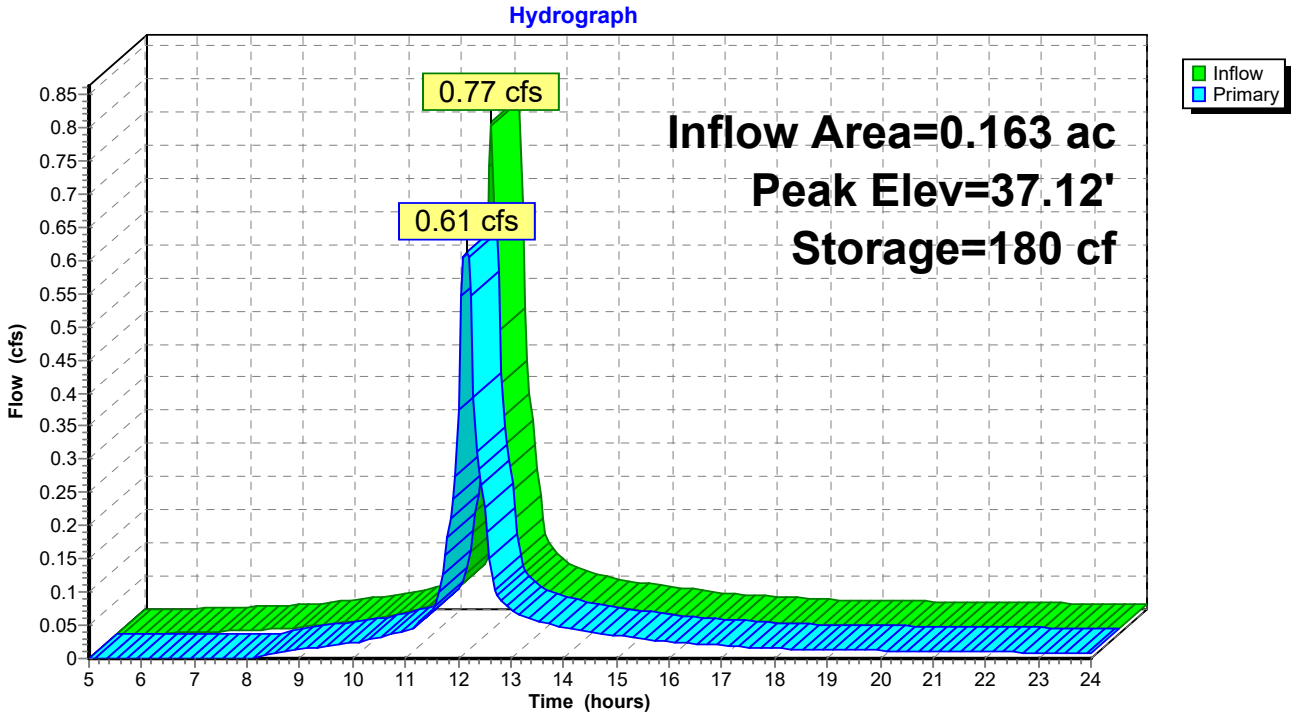
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 34.50' | 1,367 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Voids (%) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|---|
| 34.50 | 265 | 0.0 | 0 | 0 |
| 35.50 | 265 | 40.0 | 106 | 106 |
| 35.51 | 265 | 10.0 | 0 | 106 |
| 37.00 | 265 | 10.0 | 39 | 146 |
| 37.01 | 265 | 100.0 | 3 | 148 |
| 38.50 | 820 | 100.0 | 808 | 957 |
| 39.00 | 820 | 100.0 | 410 | 1,367 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 34.83' | **6.0" Round Culvert**<br>L= 16.3' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 34.83' / 34.75' S= 0.0049 '/' Cc= 0.900<br>n= 0.010, Flow Area= 0.20 sf |
| #2 | Device 1 | 34.83' | **4.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 38.50' | **6.0" Horiz. Orifice/Grate X 2.00** C= 0.600<br>Limited to weir flow at low heads |

**Primary OutFlow** Max=0.61 cfs @ 12.15 hrs HW=37.12' (Free Discharge)
└**1=Culvert** (Passes 0.61 cfs of 1.35 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.61 cfs @ 7.02 fps)
└**3=Orifice/Grate** ( Controls 0.00 cfs)

## Pond P2.1: UDSF



## Summary for Pond P2.2: SC-800 System

Inflow Area = 0.550 ac, 62.67% Impervious, Inflow Depth > 4.72" for 25-YR event
Inflow = 2.61 cfs @ 12.09 hrs, Volume= 0.216 af
Outflow = 2.62 cfs @ 12.10 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.4 min
Primary = 2.62 cfs @ 12.10 hrs, Volume= 0.201 af
Routed to Reach POI2 : POI 2

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 38.15' @ 12.10 hrs Surf.Area= 774 sf Storage= 1,702 cf

Plug-Flow detention time= 116.8 min calculated for 0.201 af (93% of inflow)
Center-of-Mass det. time= 78.8 min ( 859.2 - 780.4 )

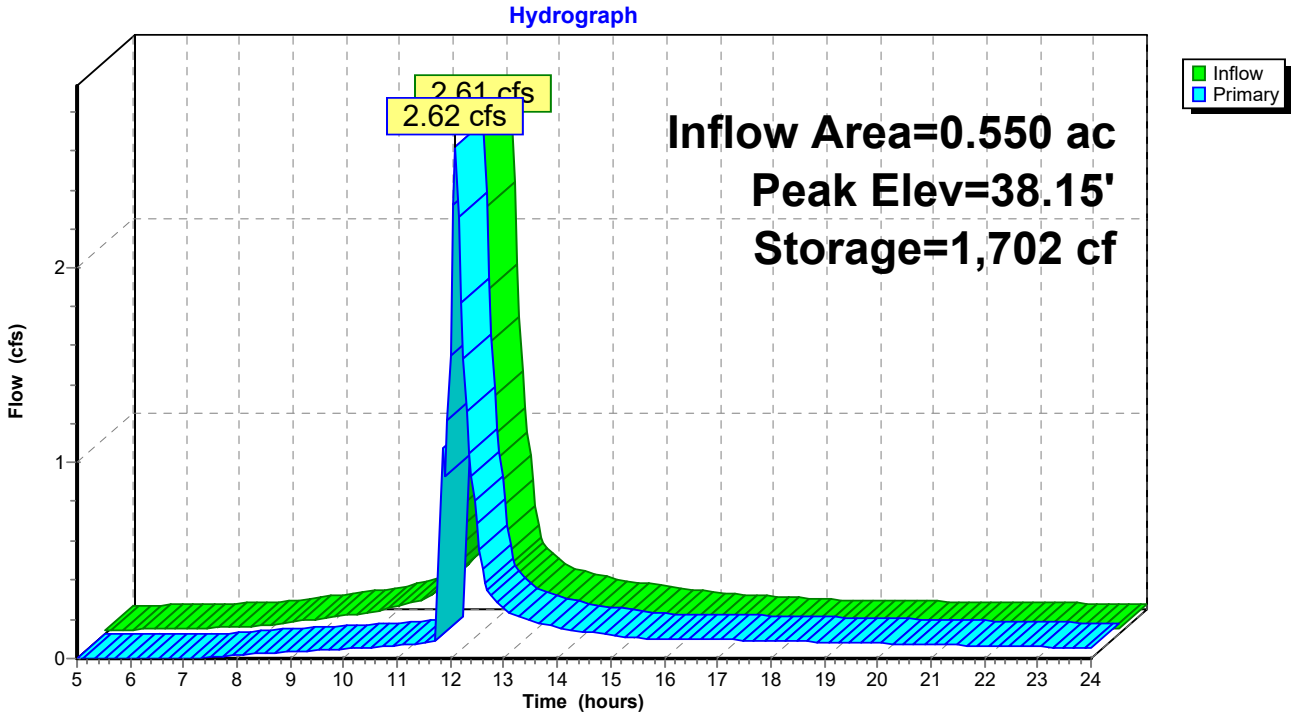
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 33.37' | 1,457 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc)<br>4,009 cf Overall - 368 cf Embedded = 3,641 cf x 40.0% Voids |
| #2 | 33.87' | 368 cf | **ADS_StormTech SC-800 +Cap** x 7 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>7 Chambers in 2 Rows<br>Cap Storage= 3.4 cf x 2 x 2 rows = 13.7 cf |
| | | 1,824 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 33.37 | 774 | 0 | 0 |
| 37.12 | 774 | 2,903 | 2,903 |
| 38.55 | 774 | 1,107 | 4,009 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 33.97' | **12.0" Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #2 | Device 1 | 34.00' | **1.4" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 37.90' | **6.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=2.59 cfs @ 12.10 hrs HW=38.15' (Free Discharge)
↑**1=Orifice/Grate** (Passes 2.59 cfs of 7.26 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 9.74 fps)
**3=Sharp-Crested Rectangular Weir** (Weir Controls 2.49 cfs @ 1.65 fps)

## Pond P2.2: SC-800 System

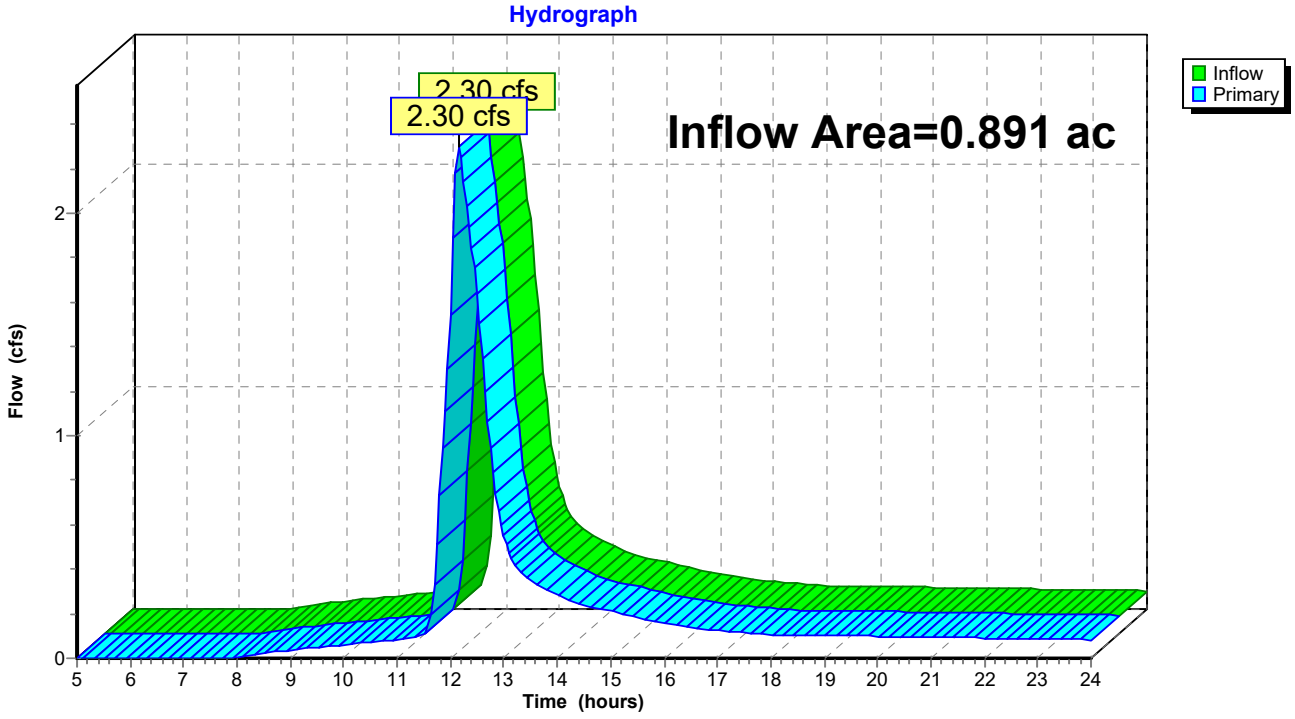


## Summary for Pond SF: StormFilter

Inflow Area = 0.891 ac, 71.74% Impervious, Inflow Depth > 4.02" for 25-YR event
Inflow = 2.30 cfs @ 12.16 hrs, Volume= 0.298 af
Primary = 2.30 cfs @ 12.16 hrs, Volume= 0.298 af, Atten= 0%, Lag= 0.0 min
Routed to Reach POI1 : POI 1

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs

### Pond SF: StormFilter



## Rainfall Events Listing (selected events)

| Event# | Event Name | Storm Type | Curve | Mode | Duration (hours) | B/B | Depth (inches) | AMC |
|---|---|---|---|---|---|---|---|---|
| 1 | DETENTION PH2 | Type III 24-hr | | Default | 24.00 | 1 | 2.40 | 2 |

## Summary for Pond P2.2: SC-800 System

Inflow Area = 0.550 ac, 62.67% Impervious, Inflow Depth > 1.60" for DETENTION PH2 event
Inflow = 0.92 cfs @ 12.09 hrs, Volume= 0.073 af
Outflow = 0.10 cfs @ 12.92 hrs, Volume= 0.067 af, Atten= 89%, Lag= 49.4 min
Primary = 0.10 cfs @ 12.92 hrs, Volume= 0.067 af
Routed to Reach POI2 : POI 2

Routing by Stor-Ind method, Time Span= 5.00-24.00 hrs, dt= 0.05 hrs
Peak Elev= 37.88' @ 12.92 hrs Surf.Area= 774 sf Storage= 1,617 cf

Plug-Flow detention time= 228.7 min calculated for 0.066 af (90% of inflow)
Center-of-Mass det. time= 182.5 min ( 976.2 - 793.8 )

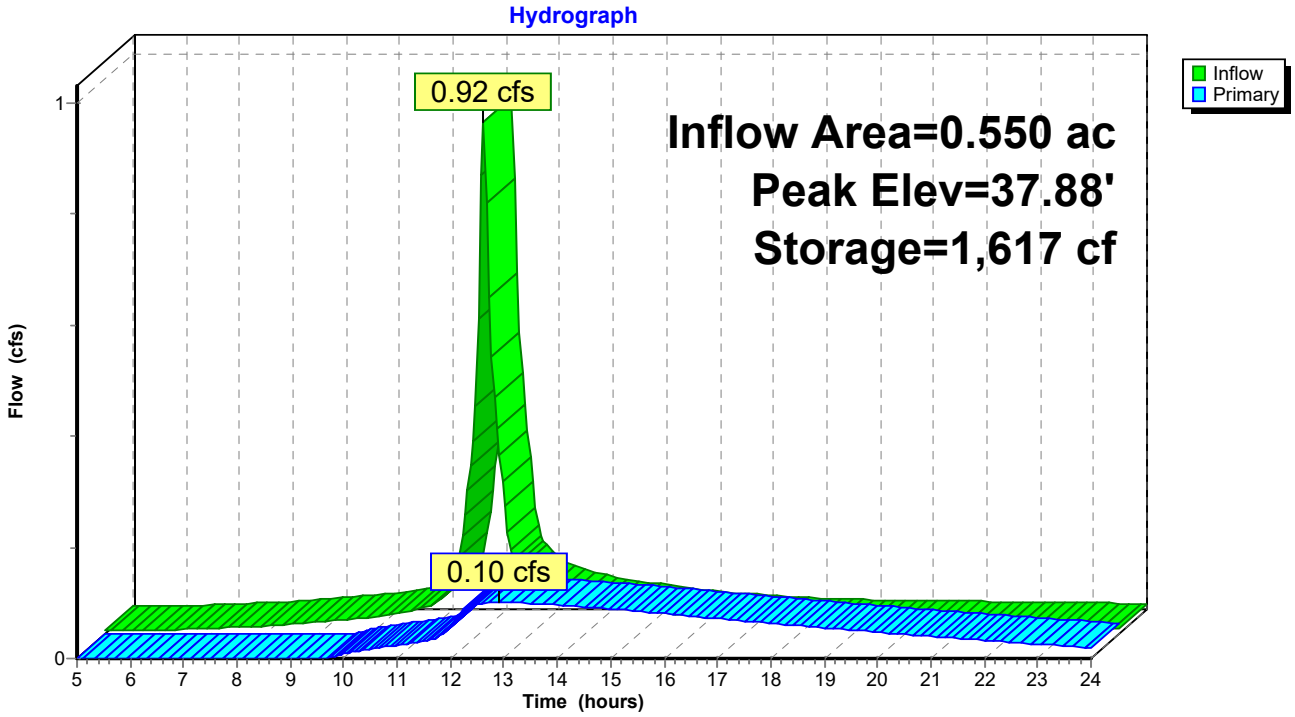
| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 33.37' | 1,457 cf | **Custom Stage Data (Prismatic)**Listed below (Recalc)<br>4,009 cf Overall - 368 cf Embedded = 3,641 cf x 40.0% Voids |
| #2 | 33.87' | 368 cf | **ADS_StormTech SC-800 +Cap** x 7 Inside #1<br>Effective Size= 45.0"W x 33.0"H => 7.11 sf x 7.12'L = 50.6 cf<br>Overall Size= 51.0"W x 33.0"H x 7.55'L with 0.43' Overlap<br>7 Chambers in 2 Rows<br>Cap Storage= 3.4 cf x 2 x 2 rows = 13.7 cf |
| | | 1,824 cf | Total Available Storage |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 33.37 | 774 | 0 | 0 |
| 37.12 | 774 | 2,903 | 2,903 |
| 38.55 | 774 | 1,107 | 4,009 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 33.97' | **12.0" Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #2 | Device 1 | 34.00' | **1.4" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 37.90' | **6.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=0.10 cfs @ 12.92 hrs HW=37.88' (Free Discharge)
└**1=Orifice/Grate** (Passes 0.10 cfs of 6.98 cfs potential flow)
├**2=Orifice/Grate** (Orifice Controls 0.10 cfs @ 9.41 fps)
└**3=Sharp-Crested Rectangular Weir** ( Controls 0.00 cfs)

## Pond P2.2: SC-800 System



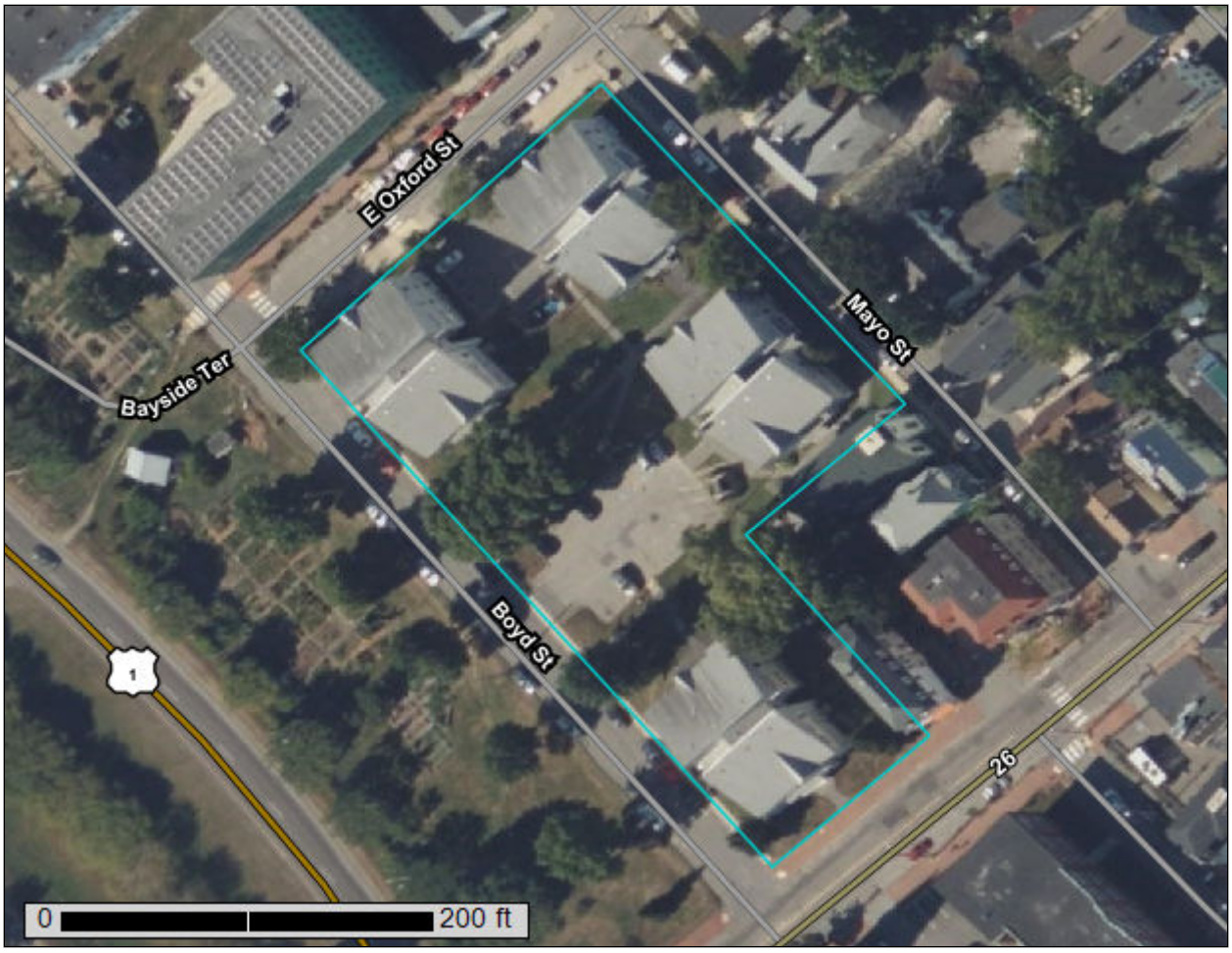
United States Department of Agriculture

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




January 11, 2024

# 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.




Map Scale: 1:797 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 10 20 40 60

Feet
0 35 70 140 210

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 |
|---|---|---|---|
| DeB | Deerfield loamy fine sand, 3 to 8 percent slopes | 0.1 | 5.1% |
| HlB | Hinckley loamy sand, 3 to 8 percent slopes | 1.5 | 94.9% |
| **Totals for Area of Interest** | | **1.5** | **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

## DeB—Deerfield loamy fine sand, 3 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 2xfg9
*Elevation:* 0 to 1,190 feet
*Mean annual precipitation:* 36 to 71 inches
*Mean annual air temperature:* 39 to 55 degrees F
*Frost-free period:* 145 to 240 days
*Farmland classification:* Farmland of statewide importance

### Map Unit Composition

*Deerfield and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Deerfield

#### Setting

*Landform:* Outwash deltas, outwash terraces, outwash plains, kame terraces
*Landform position (three-dimensional):* Tread
*Down-slope shape:* Concave, convex, linear
*Across-slope shape:* Convex, linear, concave
*Parent material:* Sandy outwash derived from granite, gneiss, and/or quartzite

#### Typical profile

*Ap - 0 to 9 inches:* loamy fine sand
*Bw - 9 to 25 inches:* loamy fine sand
*BC - 25 to 33 inches:* fine sand
*Cg - 33 to 60 inches:* sand

#### Properties and qualities

*Slope:* 3 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Moderately well drained
*Runoff class:* Very 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:* About 15 to 37 inches
*Frequency of flooding:* None
*Frequency of ponding:* None
*Maximum salinity:* Nonsaline (0.0 to 1.9 mmhos/cm)
*Sodium adsorption ratio, maximum:* 11.0
*Available water supply, 0 to 60 inches:* Moderate (about 6.5 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 2w
*Hydrologic Soil Group:* A
*Ecological site:* F144AY027MA - Moist Sandy Outwash
*Hydric soil rating:* No

## HIB—Hinckley loamy sand, 3 to 8 percent slopes

### Map Unit Setting

*National map unit symbol:* 2svm8
*Elevation:* 0 to 1,430 feet
*Mean annual precipitation:* 36 to 53 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

*Hinckley and similar soils:* 85 percent
*Estimates are based on observations, descriptions, and transects of the mapunit.*

### Description of Hinckley

#### Setting

*Landform:* Outwash deltas, outwash terraces, kames, kame terraces, moraines, eskers, outwash plains
*Landform position (two-dimensional):* Summit, shoulder, backslope, footslope
*Landform position (three-dimensional):* Nose slope, side slope, base slope, crest, riser, tread
*Down-slope shape:* Concave, convex, linear
*Across-slope shape:* Convex, linear, concave
*Parent material:* Sandy and gravelly glaciofluvial deposits derived from gneiss and/or granite and/or schist

#### Typical profile

*Oe - 0 to 1 inches:* moderately decomposed plant material
*A - 1 to 8 inches:* loamy sand
*Bw1 - 8 to 11 inches:* gravelly loamy sand
*Bw2 - 11 to 16 inches:* gravelly loamy sand
*BC - 16 to 19 inches:* very gravelly loamy sand
*C - 19 to 65 inches:* very gravelly sand

#### Properties and qualities

*Slope:* 3 to 8 percent
*Depth to restrictive feature:* More than 80 inches
*Drainage class:* Excessively drained
*Runoff class:* Very 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:* Very low (about 3.0 inches)

#### Interpretive groups

*Land capability classification (irrigated):* None specified
*Land capability classification (nonirrigated):* 3s

*Hydrologic Soil Group:* A
*Ecological site:* F144AY022MA - Dry Outwash
*Hydric soil rating:* No

# Soil Information for All Uses

## Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

## Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

### Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.




Map Scale: 1:797 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 10 20 40 60

Feet
0 35 70 140 210

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 Rating Polygons**
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Soil Rating Lines**
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**Soil Rating Points**
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

**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.

## Table—Hydrologic Soil Group

| Map unit symbol | Map unit name | Rating | Acres in AOI | Percent of AOI |
|---|---|---|---|---|
| DeB | Deerfield loamy fine sand, 3 to 8 percent slopes | A | 0.1 | 5.1% |
| HlB | Hinckley loamy sand, 3 to 8 percent slopes | A | 1.5 | 94.9% |
| **Totals for Area of Interest** | | | **1.5** | **100.0%** |

## Rating Options—Hydrologic Soil Group

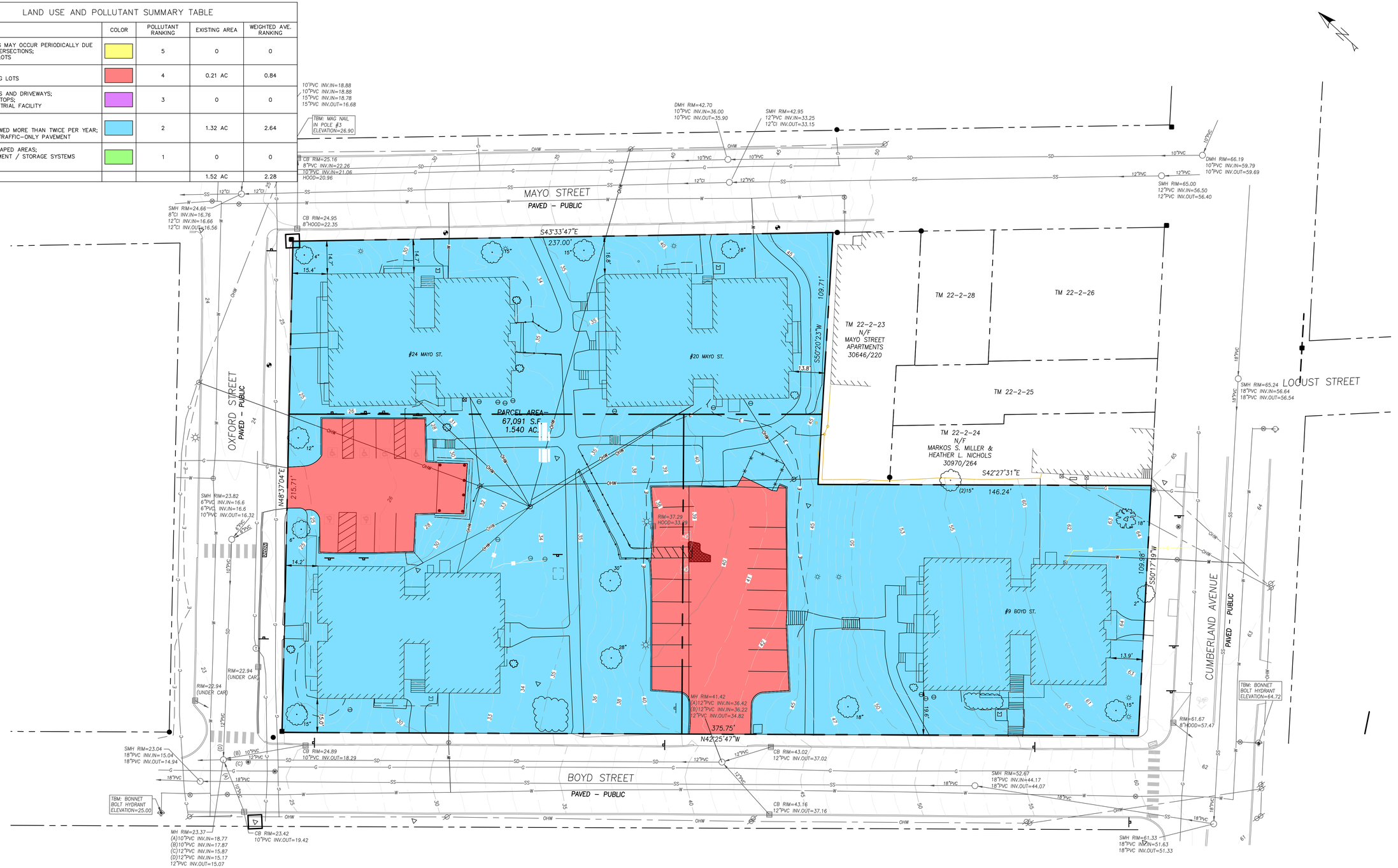
*Aggregation Method:* Dominant Condition

*Component Percent Cutoff: None Specified*

*Tie-break Rule:* Higher

## LAND USE AND POLLUTANT SUMMARY TABLE

| LAND USE | COLOR | POLLUTANT RANKING | EXISTING AREA | WEIGHTED AVE. RANKING |
|---|---|---|---|---|
| ROADS WHERE IDLING MAY OCCUR PERIODICALLY DUE TO TRAFFIC AND INTERSECTIONS; HIGH USE PARKING LOTS | | 5 | 0 | 0 |
| OTHER ROADS; MEDIUM USE PARKING LOTS | | 4 | 0.21 AC | 0.84 |
| OTHER PARKING LOTS AND DRIVEWAYS; FLAT ASPHALT ROOFTOPS; ROOFS ON AN INDUSTRIAL FACILITY | | 3 | 0 | 0 |
| OTHER ROOFTOPS; BIKEWAYS; GRASSED AREAS MOWED MORE THAN TWICE PER YEAR; WALKWAYS / FOOT TRAFFIC-ONLY PAVEMENT | | 2 | 1.32 AC | 2.64 |
| NON-GRASS LANDSCAPED AREAS; STORMWATER TREATMENT / STORAGE SYSTEMS (EXCEPT BUFFERS) | | 1 | 0 | 0 |
| TOTAL | | | 1.52 AC | 2.28 |




10' 0 10' 20

SCALE: 1"=20'

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| SW REVISIONS | MKT | 2/12/2025 |

DRAWING NAME: **PRE-DEVELOPMENT POLLUTANT RANKING PLAN**

PROJECT NAME: **COMB BLOCK PHASES 2 & 3**

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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(207) 775-2655

| | |
|---|---|
| FILE: | 1215_CIVIL_PH2-3 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

DRAWING NO.
**SW-3**

| LAND USE AND POLLUTANT SUMMARY TABLE | | | | |
|---|---|---|---|---|
| LAND USE | COLOR | POLLUTANT RANKING | EXISTING AREA | WEIGHTED AVE. RANKING |
| ROADS WHERE IDLING MAY OCCUR PERIODICALLY DUE TO TRAFFIC AND INTERSECTIONS; HIGH USE PARKING LOTS | | 5 | 0 | 0 |
| OTHER ROADS; MEDIUM USE PARKING LOTS | | 4 | 0.08 AC | 0.24 |
| OTHER PARKING LOTS AND DRIVEWAYS; FLAT ASPHALT ROOFTOPS; ROOFS ON AN INDUSTRIAL FACILITY | | 3 | 0.74 AC | 2.22 |
| OTHER ROOFTOPS; BIKEWAYS; GRASSED AREAS MOWED MORE THAN TWICE PER YEAR; WALKWAYS / FOOT TRAFFIC-ONLY PAVEMENT | | 2 | 0.57 AC | 1.14 |
| NON-GRASS LANDSCAPED AREAS; STORMWATER TREATMENT / STORAGE SYSTEMS (EXCEPT BUFFERS) | | 1 | 0.13 AC | 0.13 |
| TOTAL | | | 1.52 AC | 2.45 |




PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| SW REVISIONS | MKT 5/14/2025 |

DRAWING NAME: POST-DEVELOPMENT POLLUTANT RANKING PLAN

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
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| | |
|---|---|
| FILE: | 1215_CIVIL_PH2-3 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

DRAWING NO.
SW-4

A C O R N
ENGINEERING, INC.

# EROSION & SEDIMENTATION CONTROL REPORT

**Prepared For:**

**Mayo Housing, LP and Cumberland Housing, LP**
**970 Baxter Boulevard**
**Portland, ME 04103**

**Prepared By:**

**Acorn Engineering, Inc.**
**P.O. Box 3372**
**Portland, Maine 04104**




**April 2025**

## INTRODUCTION

Acorn Engineering, Inc. has been retained by Mayo Housing LP, and Cumberland Housing, LP entities of Portland Housing Authority and Portland Housing Development Corporation, to provide civil engineering services for the proposed work located at 90 Boyd Street, Portland, ME 04101. The project proposes to construct a 27-unit townhome building along Mayo Street as well as a 92-unit multi-family apartment building on the corner of Cumberland Avenue and Boyd Street. 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.

| | Plan Submission Requirement | Inspector Requirement | Inspection Report Submittal |
|---|---|---|---|
| Construction Activity > 1 Acres of Disturbance | Comprehensive | Third-Party Inspector | Weekly to Water Resources & Planning |
| Construction Activity < 1 Acres of Disturbance | Basic | Qualified Professional | Weekly or as specified |

The proposed project will disturb approximately 0.97 acres and as such is subject to a Comprehensive Erosion and Sedimentation Control Plan as defined in Section 12 of the City of Portland Technical Manual.

## PRE-CONSTRUCTION MEETING

For sites with a Comprehensive Erosion Control Plan, a pre-construction meeting is required. Once an approved Performance Guarantee, if required, is in hand and at least five (5) days prior to commencing Construction Activity, the applicant shall request a pre-construction meeting with the Enforcement Authority. At a minimum, attendance at the meeting is required by the Enforcement Authority and the applicant or their representative in charge of construction. If the representative in charge of construction is not the primary earthwork contractor, a representative of the earth work contractor must also attend the pre-construction meeting. Erosion and sediment controls should be installed for inspection during the pre-construction meeting and must be installed and inspected prior to the start of construction.

## 1.0 EXISTING CONDITIONS

The proposed project is located at 9 Boyd Street. An ALTA / NSPS Land Title Survey has been prepared by Owen Haskell, Inc. on December 22, 2023.

Abutting Uses:

- North RN-6 Zone Residential
- East RN-4/B-2b Zone Residential/Restaurant

- South B-5 Zone — Educational/Surface Parking
- West B-5 Zone — Open Space/Community Garden

The existing site is composed of grassed and 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 requirements set forth in the City of Portland Technical Manual – Section 7 – Soil Survey, the Class D (Medium Intensity) Soil Survey is adequate for the proposed project.

The area within and surrounding the project includes soil types listed in the table below.

| Soils Type | Hydrologic Soil Group |
|---|---|
| Deerfield Loamy Fine Sand | A |
| Hinckley Loamy Sand | A |

1.2 Existing Erosion Problems

There are no known erosion problems on the site.

1.3 Critical Areas

There are no critical areas within the project vicinity.

1.4 Protected Natural Resource

The client is not aware of the presence of any existing significant natural features located on the site. 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)

The proposed project is part of a 3-phase redevelopment project for the parcel. At the time of this application, Phase 1 has been approved, but construction has not yet begun construction.

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 Boyd Street, Oxford Street, Mayo Street and Cumberland Avenue 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.

2.1.14 Within 7 days of the cessation of Construction Activities in an area that will not be worked for more than 7 days, stabilize any exposed soil with mulch, or other non-erodible cover. Stabilize areas within 75 feet of a wetland or waterbody within 48 hours of the initial disturbance of the soil or prior to any storm event, whichever comes first.

2.2 Permanent Erosion Control Measures

If the Site or a portion of the Site will not be worked for more than one year or has been brought to final grade, then permanently stabilize the area within 7 days by planting vegetation, seeding, sod, or through the use of permanent mulch, or riprap, or road sub-base. If using vegetation for stabilization, select the proper vegetation for the light, moisture, and soil conditions; amend the Disturbed Area subsoils with topsoil, compost, or fertilizers; protect seeded areas with mulch or, if necessary, erosion control blankets; and schedule sodding, planting, and seeding so to avoid die-off from summer drought and fall frosts. Newly seeded or sodded areas must be protected from vehicle traffic, excessive pedestrian traffic, and concentrated runoff until the vegetation is well-established with 90% cover by healthy vegetation. If necessary, areas must be reworked and restabilized if germination is sparse, plant coverage is spotty, or topsoil erosion is evident. Permanent Stabilization Definitions are as follows:

2.2.1 **Seeded areas:** For seeded areas, permanent stabilization means a 90% cover of the Disturbed Area with mature, healthy plants with no evidence of washing or rilling of the topsoil.

2.2.2 **Sodded areas**: For sodded areas, permanent stabilization means the complete binding of the sod roots into the underlying soil with no slumping of the sod or die-off.

2.2.3 **Permanent mulch:** For mulched areas, permanent mulching means total coverage of the exposed area with an approved mulch material. Erosion control mix may be used as mulch for permanent stabilization according to the approved application rates and limitations.

2.2.4 **Riprap:** For areas stabilized with riprap, permanent stabilization means that slopes stabilized with riprap have an appropriate backing of a well-graded gravel or approved geotextile to prevent soil movement from behind the riprap. Stone must be sized appropriately. It is recommended that angular stone be used.

2.2.5 **Paved areas:** For paved areas, permanent stabilization means the placement of the compacted gravel subbase is completed, provided it is free of fine materials that may runoff with a rain event.

2.2.6 **Ditches, channels, and swales:** For open channels, permanent stabilization means the channel is stabilized with a 90% cover of healthy vegetation, with a well-graded riprap lining, turf reinforcement mat, or with another non- erosive lining such as concrete or asphalt pavement. There must be no evidence of slumping of the channel lining, undercutting of the channel banks, or down-cutting of the channel.

2.2.7 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.

2.2.8 All stormwater devices shall be installed, and tributary areas stabilized prior receiving stormwater.

2.2.9 Refer to the Maine Erosion and Sediment Control BMP manual for additional information.

2.2.10 Remove any temporary control measures, such as silt fence, within 30 days after permanent stabilization is attained. Remove any accumulated sediments and stabilize.

## 3.0 EROSION AND SEDIMENTATION CONTROL PLAN

3.1 The Erosion and Sedimentation Control BMPs, specifications and details are 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.**

Comprehensive Inspection and Maintenance Requirements:

Erosion and Sedimentation Controls must be inspected, as detailed below, to confirm that BMPs are in place and functioning. Corrective actions must be taken if erosion is occurring or there is a discharge of sediment or turbid water from the construction site.

**A.** For all sites with one acre or greater of disturbance, the applicant shall retain the services of a qualified professional third-party inspector to inspect the site weekly, for the duration of construction until final site stabilization is in place. For sites less than one acre of disturbance that are required to have a comprehensive erosion and sediment control plan, the applicant shall retain the services of a qualified professional.

**B.** 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.

**C.** All areas of disturbance, impervious areas, ESC BMPs, materials storage areas exposed to precipitation, and locations where vehicles enter or exit the Site shall be inspected at least once a week as well as before and within 24 hours after a storm event (rainfall) and prior to completing permanent stabilization measures.

**D.** For all sites with one acre or greater of disturbance, the inspector will submit weekly written reports to the Stormwater Coordinator(s) in the Water Resources Division of Public Works and the Development Review Coordinator(s) in Planning. 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 in the prior week. 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. Sites with less than 1 acre of disturbance may request a waiver to be reviewed and approved by Water Resources, for weekly inspection report submission, as allowed by Chapter 32- 48 of the Code of Ordinances.

**E.** If ESC BMPs need to be maintained, repaired, or enhanced, the work shall be initiated upon discovery of the problem but no later than the end of the next workday or prior to a precipitation event, whichever comes first. Immediate corrective actions are required to address active discharges of sediment to municipal streets or storm drains or to surface waters. If additional ESC BMPs or significant repair of ESC BMPs are necessary, implementation must be completed prior to any storm event (rainfall) and within 7 calendar All development constructed within the limits of the City of Portland shall have a hydrant within five hundred feet (500') of all structures. days of identification. All measures must be maintained in effective operating condition until areas are permanently stabilized.

**F.** An inspection log summarizing the inspections and any corrective actions must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of ESC BMPs, materials storage areas, and vehicle access points to the parcel. Inspection documentation must include maintenance needed, ESC BMPs that failed to operate as designed or proved inadequate for a particular location, and location(s) where additional ESC BMPs are needed. The inspection log must also document what corrective actions are needed and when corrective actions were completed. The inspection log shall be maintained for at least three years from the completion of permanent stabilization.

## 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. Install all other erosion control devices as necessary throughout the remainder of this schedule.
4. Commence earthwork operations, associated with the building construction.
5. Commence installation of utilities & drainage infrastructure.
6. Continue earthwork and grading to subgrade as necessary for construction.
7. Complete installation of drainage infrastructure, as well as other utility work.
8. Complete remaining earthwork operations.
9. Install sub-base and base gravels in paved areas.
10. Install paving, curbing and brickwork.
11. Loam, lime, fertilize, seed and mulch disturbed areas and complete all landscaping.
12. 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.
13. Touch up areas without a vigorous catch of grass with loam and seed.
14. Complete site signage and striping.
15. 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
- Good Housekeeping and Pollution Prevention 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<br>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.

## GOOD HOUSEKEEPING AND POLLUTION PREVENTION PLAN

Spill Prevention:

Controls must be used to prevent pollutants from construction and waste materials stored on-Site from entering 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.

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.

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 shall be included to minimize tracking of mud and sediment. If off-Site tracking occurs, public roads shall be swept immediately and no less than once a week and prior to significant storm events. Operations during dry months, that experience fugitive dust problems, shall wet down unpaved access roads once a week or more frequently as needed with a water additive to suppress fugitive sediment and dust.

Debris and other materials:

Minimize the exposure of construction debris, building and landscaping materials, trash, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials to precipitation and stormwater runoff. These materials must be prevented from becoming a pollutant source. Sediment generated by concrete or mortar mixing, brick cutting & saw cutting activities must be contained (e.g., sausage boom, straw bales, etc.) and cleaned up using dry methods (i.e., sweeping or vacuuming) to prevent it from entering drainage structures or water resources. These activities shall be done on vegetated areas whenever possible and away from drainage structures and water resources.

Excavation dewatering:

Excavation dewatering is the removal of water from trenches, foundations, coffer dams, ponds, and other areas within the construction area that retain water after

excavation. In most cases the collected water is heavily silted and hinders correct and safe construction practices. The collected water removed from the ponded area, either through gravity or pumping, must be spread through natural wooded buffers or otherwise treated to collect the maximum amount of sediment possible, like a coffer dam sedimentation or sediment filter bag. Avoid allowing the water to flow over Disturbed Areas of the Site. If the Maine DEP has approved equivalent measures, provide proof of approval. Note that discharge of excavation dewater fluids from the Site must be visually clear (no visible suspended or settleable solids). Any dewatering discharges from a site to the City right-of way or infrastructure are prohibited unless the City has provided approval of a Dewatering Plan and Application submitted by the Contractor. Discharges from the Site into the City's storm drain or sewer system must first obtain City approval through the Dewatering Program, as detailed in the Rules and Regulations for Use of the Sewer System.

Washout from concrete, stucco, paint, curing compounds, or other construction materials:

If washout/cleanout is to be completed on the Site, a designated area(s) shall be established and marked on the Erosion and Sedimentation Control Plan. This area shall be a minimum of 50 feet from all drainage structures, ditches, waterbodies, and resource areas, as well as property boundaries if possible. The area shall not have an outlet to discharge wastes or flows. No detergents shall be used or vehicles washed in this location. A leak-proof pit or container shall be established in the washout area(s), to which washings shall be directed. This area shall be used for washout containment and dewatering by evaporation only. The pit shall not allow infiltration to occur. To prevent clean water from entering the pit, the washout area shall be covered during precipitation events. Inspections of the pit shall be conducted daily to ensure no leaks are present and no discharge is occurring.

Non-stormwater discharges:

Except as allowed or exempted herein, no person shall create, initiate, originate or maintain a non-stormwater discharge to the storm drainage system. Such non-storm water discharges are prohibited, notwithstanding the fact that the City may have approved the connections, drains or conveyances by which a person discharges unallowed storm water discharges to the storm drain system.

Authorized non-stormwater discharges. Where allowed non-stormwater discharges exist, they must be identified, and steps shall be taken to ensure the implementation of appropriate pollution prevention measures for the non-stormwater component(s) of the discharge. Authorized non-stormwater discharges are:

Discharges from firefighting activity

Hydrant flushing if dechlorinated to 0.05 mg/l or less
Vehicle wash water if detergents are not used and washing is limited to the exterior of vehicles (engine, undercarriage, and transmission washing is prohibited)

Dust control runoff if it does not cause erosion

Routine external building washdown, not including surface paint removal, that does not involve detergents

Pavement wash water (where spills/leaks of toxic or hazardous materials have not occurred, unless all spilled material had been removed) if detergents are not used

Uncontaminated air conditioning or compressor condensate

Uncontaminated groundwater or spring water

Foundation or footer drain-water where flows are not contaminated

Uncontaminated excavation dewatering per item 5 Excavation Dewatering

Potable water including waterline flushings

Landscape irrigation

Unauthorized non-stormwater discharges.

Wastewater from the washout or cleanout of concrete, stucco, paint, form release oils, curing compounds, or other construction materials

Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance

Soaps, solvents, or detergents used in vehicle and equipment washing

Sediment laden discharges

Toxic or hazardous substances from a spill or other release

ACORN ENGINEERING, INC.

Chief Gautreau
City of Portland Fire Department
380 Congress St.
Portland, ME 04101

April 4, 2025

Subject: 70 East Oxford Street – Fire Department Checklist
Section L of Major Site Plan Application

On behalf of Cumberland Housing LP, Mayo Housing, LP and Portland Housing Development Corporation (PHDC) the design team is pleased to respond to the Portland Fire Department Site Review Checklist.

1. Name, address, telephone number of applicant:

   Portland Housing Development Corporation
   970 Baxter Boulevard
   Portland, ME 04103
   (207) 773-4753

2. Name address, telephone number of architect:

   Ryan Senatore Architecture
   500 Congress Street, Suite #2
   Portland, Maine 04101
   207-838-0927

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

Proposed

| Mayo Street Building | | |
|---|---|---|
| 1st Floor | 9,667 | sf |
| 2nd Floor | 8,997 | sf |
| 3rd Floor | 8,997 | sf |
| **Total** | 27,661 | **sf** |

| Cumberland Avenue Building | | |
|---|---|---|
| 1st Floor | 8,460 | sf |
| 2nd Floor | 11,945 | sf |
| 3rd Floor | 12,217 | sf |
| 4th Floor | 12,268 | sf |
| 5th Floor | 12,268 | sf |
| 6th Floor | 12,268 | sf |
| 7th Floor | 9,728 | sf |
| **Total** | 79,154 | **sf** |

5. Elevation of all structures

   The proposed Phase 2 7-story structure's height will be below the allowable 75 feet within the B2b zoning district. The Phase 3 3-story structure's height will be below the allowable 55 feet within the B1 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. There are two existing hydrants on the Northern side of the parcel. One is located west of the parcel on the corner of Boyd Street and East Oxford Street the other is located North of the parcel on the corner of Mayo Street and East Oxford Street. Additionally, there are three hydrants located on Cumberland Ave (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 proposed residential building on Cumberland Avenue will be serviced by a proposed 4" domestic water service connection as well as a 6" fire suppression service from the existing water main within Boyd Street.

   The proposed residential building on Mayo Street will be services by (3) proposed 1.5" domestic and (3) proposed 6" fire suppression services, two off of Mayo Street and one off of Oxford Street.

9. Access to all structures [min. 2 sides]

   Access to the structures are provided directly via Boyd Street and Cumberland Avenue for the Cumberland Avenue Building.

   Access to the structures are provided directly via Mayo Street and East Oxford Street for the Mayo Street Building.

**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:

- Boyd Street: 29.4 feet'
- East Oxford Street: 27.3'
- Cumberland Avenue: 36.7'
- Mayo Street: 31.6'

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 Boyd Street/East Oxford 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 Boyd Street or East Oxford 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 70 East Oxford 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.

# Calculation of Wastewater Flowrate for

# 70 East Oxford Street Redevelopment

On behalf of Cumberland Housing, LP, Mayo Housing, LP and Portland Housing Development Corporation (PHDC), we are pleased to submit the following request for CMP's ability to serve Phases 2 & 3 of the proposed development located at 70 East Oxford Street in Portland, Maine. The previously approved Phase 1 of the project included the subdivision of the existing 1.53-acre parcel into two separate parcels as well as the construction of a new 55-unit residential apartment building located on the west corner of the lot, abutting Oxford & Boyd Streets. Phase 2 and 3 of the development will include the construction of two (2) new buildings, one along Mayo Street and the other along Cumberland Avenue. The Mayo Street development will be a 27-unit townhome building with (19) 2-bedrooms and (8) 3-bedrooms. The Cumberland Avenue building will be a 92-unit multi-family building with (45) studios, (42) 1-bedroom, (5) 2-bedrooms.

**Phase 2 - Cumberland Avenue:**

It is our understanding that there is an existing 18" PVC sanitary sewer line that flows west along Boyd Street. The project proposes a new 6" sanitary service to tee into the sanitary sewer main. The proposed building will replace an existing building with (10) 2-bedroom units. Based upon Section 4 of the Maine Subsurface Wastewater Disposal Rules and architectural plans to date, the project anticipates the following design flows:

| **Estimate of Anticipated Daily Flows – Phase 2** | | | | |
|---|---|---|---|---|
| Development | Unit Type | Number of Units | Gallons per Day per Unit | Total Gallons per Day |
| **Existing Flow** | | | | |
| Multiple Family Dwelling Units | 2-bedroom | 10 | 180 GPD | 1,800 GPD |
| Total Gallons per Day (Existing) | | | | 1,800 GPD |
| **Proposed Flow** | | | | |
| Multiple Family Dwelling units | Studio | 45 | 120 GPD | 5,400 GPD |
| Multiple Family Dwelling units | 1-Bedroom | 42 | 120 GPD | 5,040 GPD |
| Multiple Family Dwelling | 2-Bedroom | 5 | 180 GPD | 900 GPD |
| Total Gallons per Day | | | | 11,340 GPD |
| **Net Change** | | | | **9,540 GPD** |
| *Values based on STATE OF MAINE: SUBSURFACE WASTEWTAER DISPOSAL RULES, most recent edition | | | | |

**Phase 3 - Mayo Street:**

It is our understanding that there is an existing 12" CI sanitary sewer line that flows west along Mayo Street. The project proposes a new 6" sanitary service to tee into the sanitary sewer main. The proposed building will replace (2) existing buildings with (10) 2-bedroom units. Based upon

Section 4 of the Maine Subsurface Wastewater Disposal Rules and architectural plans to date, the project anticipates the following design flows:

| Estimate of Anticipated Daily Flows – Phase 2 | | | | |
|---|---|---|---|---|
| Development | Unit Type | Number of Units | Gallons per Day per Unit | Total Gallons per Day |
| **Existing Flow** | | | | |
| Multiple Family Dwelling Units | 2-bedroom | 20 | 180 GPD | 3,600 GPD |
| Total Gallons per Day (Existing) | | | | 3,600 GPD |
| **Proposed Flow** | | | | |
| Multiple Family Dwelling units | 2-Bedroom | 19 | 180 GPD | 3,420 GPD |
| Multiple Family Dwelling | 3-Bedroom | 8 | 270 GPD | 2,160 GPD |
| Total Gallons per Day | | | | 5,580 GPD |
| **Net Change** | | | | **1,980 GPD** |
| *Values based on STATE OF MAINE: SUBSURFACE WASTEWTAER DISPOSAL RULES, most recent edition | | | | |

Phase 2 of the proposed project is anticipated to increase the net flow by approximately 9,540 gallons per day (GPD). Phase 3 of the proposed project is anticipated to increase the net flow by approximately 1,980 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.

# 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: 70 E Oxford Street, Portland, Maine 04103

Chart Block Lot Number: Chart 22, Block H1, Lot 1

Proposed Use: Affordable Housing
Previous Use: Affordable Housing
Existing Sanitary Flows: 2,100 GPD
Existing Process Flows: 0 GPD
Description and location of City sewer that is to receive the proposed building sewer lateral.

Mayo Street Development: Mayo Street (12" CI)

Cumberland Avenue Development: Boyd Street (18" PVC)

Site Category

| | |
|---|---|
| Commercial *(see part 4 below)* | ✔ |
| Industrial *(complete part 5 below)* | |
| Governmental | |
| Residential | ✔ |
| Other *(specify)* | ✔ |

***Clearly, indicate the proposed connections, on the submitted plans.***

## 2. Please, Submit Contact Information.

City Planner's Name: Eric Freeman Phone: 207-874-8719
Owner/Developer Name: Mayo Housing, LP / Cumberland Housing, LP - Sarah Tatarczuk
Owner/Developer Address: 970 Baxter Boulevard, Portland, Maine 04101
Phone: 207-221-8034 Fax: E-mail: statarczuk@porthouse.org
Engineering Consultant Name: Acorn Engineering - Peter F. Heil, PE
Engineering Consultant Address: 16 Middle Street, Portland, Maine, 04104 (Suite #302)
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: 11,520 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.***

# Lighting

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.

LITHONIA LIGHTING®

| Catalog Number | |
|---|---|
| Notes | |
| Type | |

## FEATURES & SPECIFICATIONS

**INTENDED USE** — The OLCFM provides years of maintenance-free general illumination for residential and commercial outdoor applications such as porches, covered walkways and store entrances.

**CONSTRUCTION** — Rugged cast-aluminum top-plate and outer-ring are protected by a thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

Polycarbonate LED lens/cover protects LEDs.

Fixture weight = 2.98 lbs.

**OPTICS** — 96 high-performance LEDs produces up to 1077 lumens and maintain 70% of light output at 50,000 hours of service.

(LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.)

White acrylic diffuser provides a soft white light at 4000K CCT

See Lighting Facts Labels for specific fixture performance.

**ELECTRICAL** — Fixture operates at 120 volts, 60 Hz.

Standard input = 16.6 watts

Operating temperature -40ºC to 40ºC.

Amps @ 120V = .131.

Surge protection = 2.5kV.

**INSTALLATION** — Mounts easily to existing junction box (by others).

**LISTINGS** — UL Listed to U.S. and Canadian safety standards for wet locations.

Designed for ceiling or wall mounting more than 4' above the ground.

Tested in accordance with IESNA LM-79 and LM-80 standards.

**WARRANTY** — 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application.

All values are design or typical values, measured under laboratory conditions at 25 °C.

Specifications subject to change without notice.



**Outdoor General Purpose**

# OLCFM

**OUTDOOR LED CAST FLUSH MOUNT**

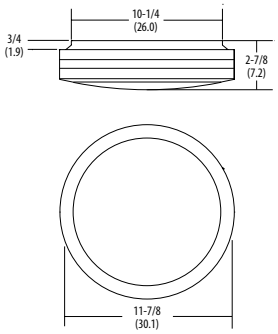
c UL us LISTED

LED

WET LOCATION™

5 YEAR warranty

All dimensions are inches (centimeters) unless otherwise indicated.




**ORDERING INFORMATION** All configurations of this product are considered "standard" and have short lead times.

**Example:** OLCFM 15 DDB

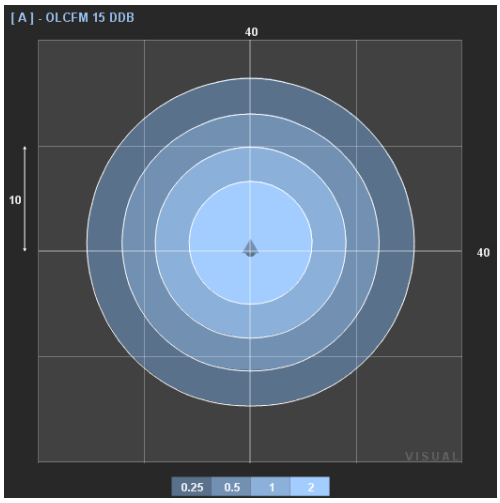
| OLCFM | | | | |
|---|---|---|---|---|
| **Series** | **Light Engine** | **Color Temperature (CCT)[1]** | **Voltage** | **Finish** |
| **OLCFM** | **15** | **(blank)** 4000K | **(blank)** 120V | DDB Dark bronze |

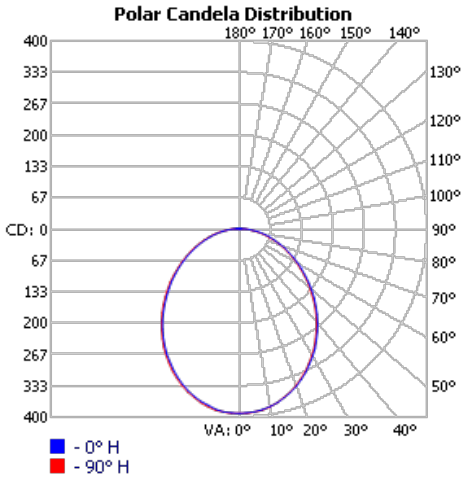
**Notes**

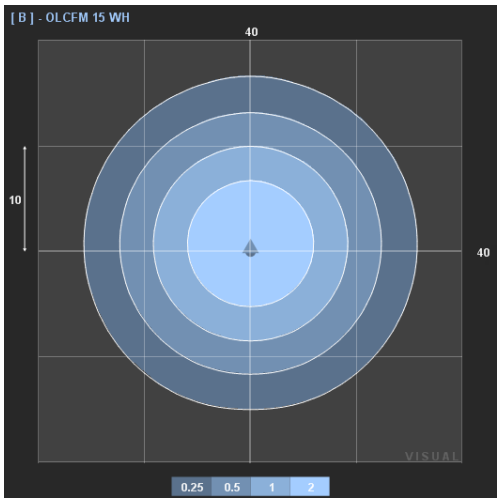
1 Nominal Correlated Color Temperature (CCT) per ANSI C78.377-2008.

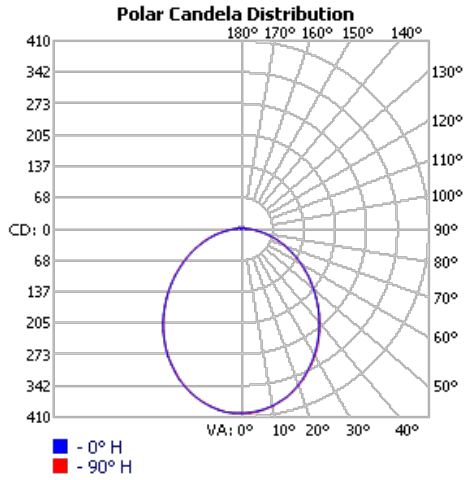
## PHOTOMETRIC DIAGRAMS

To see complete photometric reports or download .ies files for this product,visit www.Lithonia.com. Tested in accordance with IESNA LM- 79 and LM- 80 standards.



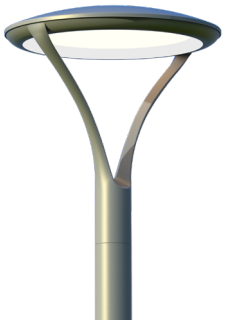





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# Radean Post Top
## LED Area Luminaire

Catalog Number

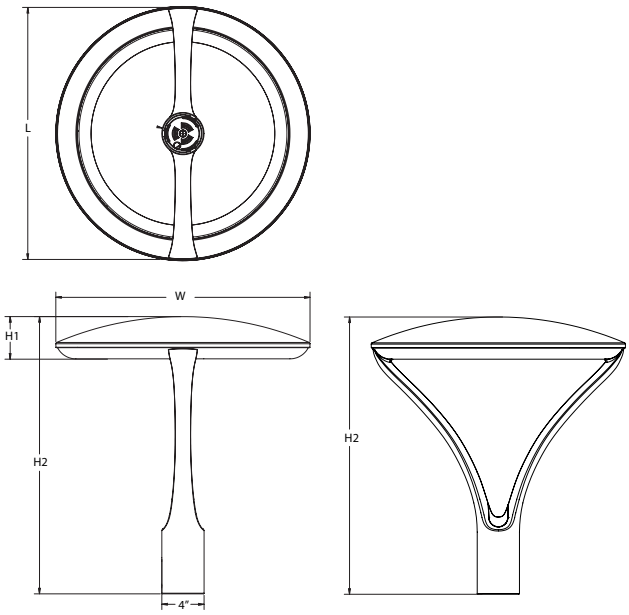
Notes

Type

*Hit the Tab key or mouse over the page to see all interactive elements.*

## Specifications

| | |
|---|---|
| **EPA:** | 1.02 ft² (0.105 m²) |
| **Length:** | 24" (61cm) |
| **Width:** | 24" (61cm) |
| **H1 Luminaire Height:** | 4" (10.16cm) |
| **H2 Luminaire Height:** | 26" (66.04cm) |
| **Weight:** | 38lbs (17.24Kg) |




## Introduction

The architecturally-inspired shape of the RADEAN™ post top area luminaire embodies the grace and strength of the RADEAN family. The twin copper-core cast aluminum arms support the slender superstructure, creating a beautiful sculpture by day transforming into a beacon of comfort by night. Triangular arms redirect reflection maintaining its visually quiet appearance. With sleek lines and simple silhouettes, these LED luminaires use specialized lighting and visual comfort to transform common areas like courtyards, outdoor retail locations, universities and corporate campuses into pedestrian-friendly nighttime environments.

## Ordering Information

**EXAMPLE:** RADPT LED P3 30K SYM MVOLT PT4 PE DNAXD

**RADPT LED**

| Series | Performance package | Color temperature | Distribution | Voltage | Mounting *(required)* |
|---|---|---|---|---|---|
| RADPT LED | P1 3,000 Lumens<br>P2 5,000 Lumens<br>P3 7,000 Lumens<br>P4 10,000 Lumens<br>P5 15,000 Lumens | 27K 2700K<br>30K 3000K<br>35K 3500K<br>40K 4000K<br>50K 5000K | SYM Symmetric type V<br>ASY Asymmetric type IV<br>PATH Pathway Type III | MVOLT[2] 277[2]<br>120[2] 347<br>208[2] 480<br>240[2] | PT4[3] Slips inside a 4" OD round metal pole<br>RADPT20 Slips over a 2 3/8" diameter tenon (4" tall tenon required)<br>RADPT25 Slips over a 2 7/8" diameter tenon (4" tall tenon required) |

| Control options | Other options | Finish *(required)* |
|---|---|---|
| **Shipped installed**<br>NLTAIR2 nLight AIR 2.0 enabled[4]<br>PE Button photocell[4]<br>FAO Field adjustable output[4]<br>DMG 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately)[5] | SF Single Fuse[2]<br>DF Double Fuse[2]<br>R90 Rotated optics[6]<br>**Shipped installed**<br>HS Houseside shield[7] | DDBXD Dark bronze<br>DBLXD Black<br>DNAXD Natural aluminum<br>DWHXD White<br>DDBTXD Textured dark bronze<br>DBLBXD Textured black<br>DNATXD Textured natural aluminum<br>DWHGXD Textured white |


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## Ordering Information

### Accessories

*Ordered and shipped separately.*

| | |
|---|---|
| RADHS | Houseside shield (shield is white) |
| RADFBC DDBXD U | Full base cover for 4" RSS pole (specify finish) |

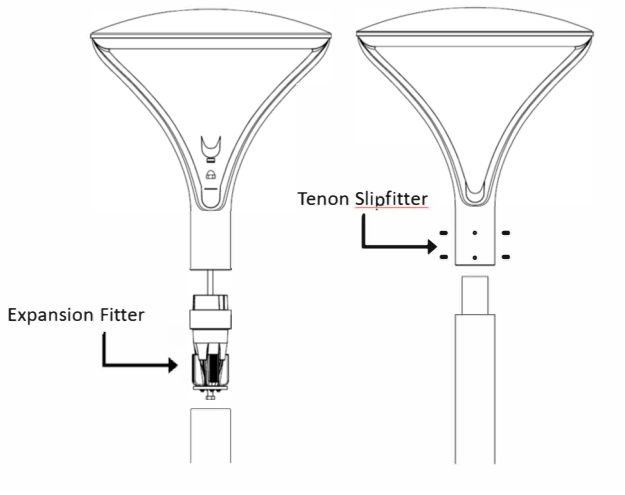
**NOTES**

1. 2700K and 3500K may require extended lead-times.
2. MVOLT driver operates on any line voltage from 120-277V (50/60 Hz). Single fuse (SF) requires 120, 277 or 347 voltage option. Double fuse (DF) requires 208, 240 or 480 voltage option.
3. Requires nominal 4" round straight metal pole.
4. NLTAIR2 not available with PE or FAO. Must link to external nLight Air network. Does not include occupancy sensor. For more information refer to rSBOR pole mount sensor.
5. DMG not available with NLTAIR2 or FAO.
6. For left rotation, select R90 and rotate luminaire 180° on pole.
7. Also available as a separate accessory; see Accessories information at left. HS not available with R90. Shield is field rotatable shield in 180° increments.

## Mounting

**PT4**

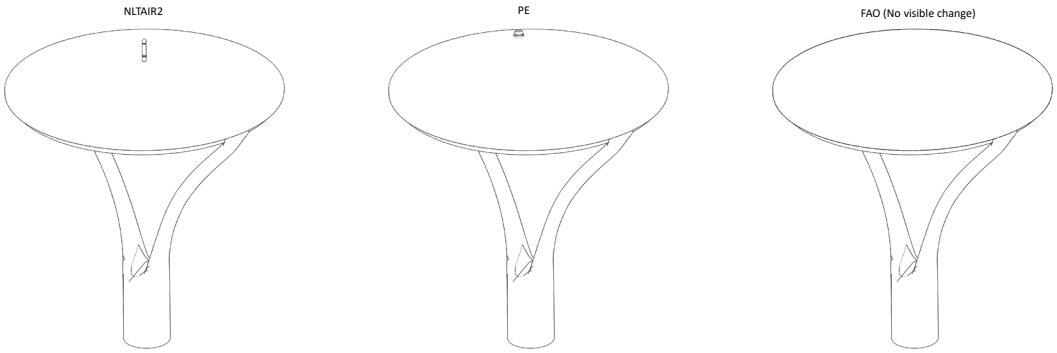
**RADPT20 or RADPT25**
RADPT20 and RADPT25 mounting require a 4" tall tenon (standard on Lithonia poles).




| Recommended Poles for use with RADEAN RADPT LED Luminaires. | | | |
|---|---|---|---|
| **Acuity Part Number** | **Description** | **For luminaires** | **Used with Mounting** |
| RSS 10 4B PT DDBXD | 10' Round Straight Steel - 4" O.D. - Open Top | RADPT LED | PT4 |
| RSS 12 4B PT DDBXD | 12' Round Straight Steel - 4" O.D. - Open Top | RADPT LED | PT4 |
| RSS 14 4B PT DDBXD | 14' Round Straight Steel - 4" O.D. - Open Top | RADPT LED | PT4 |
| RSS 16 4B PT DDBXD | 16' Round Straight Steel - 4" O.D. - Open Top | RADPT LED | PT4 |
| RSS 18 4B PT DDBXD | 18' Round Straight Steel - 4" O.D. - Open Top | RADPT LED | PT4 |
| RSS 20 4B PT DDBXD | 20' Round Straight Steel - 4" O.D. - Open Top | RADPT LED | PT4 |
| RSS 25 4B PT DDBXD | 25' Round Straight Steel - 4" O.D. - Open Top | RADPT LED | PT4 |
| | | | |
| RSS 10 4B T20 DDBXD | 10' Round Straight Steel - 4" O.D. - Tenon Top | RADPT LED | RADPT20 |
| RSS 12 4B T20 DDBXD | 12' Round Straight Steel - 4" O.D. - Tenon Top | RADPT LED | RADPT20 |
| RSS 14 4B T20 DDBXD | 14' Round Straight Steel - 4" O.D. - Tenon Top | RADPT LED | RADPT20 |
| RSS 16 4B T20 DDBXD | 16' Round Straight Steel - 4" O.D. - Tenon Top | RADPT LED | RADPT20 |
| RSS 18 4B T20 DDBXD | 18' Round Straight Steel - 4" O.D. - Tenon Top | RADPT LED | RADPT20 |
| RSS 20 4B T20 DDBXD | 20' Round Straight Steel - 4" O.D. - Tenon Top | RADPT LED | RADPT20 |
| RSS 25 4B T20 DDBXD | 25' Round Straight Steel - 4" O.D. - Tenon Top | RADPT LED | RADPT20 |

* Customer must verify pole loading per required design criteria and specified wind speed. Consult pole specification sheet for additional details.

## Control Options





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## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Contact factory for performance data on any configurations not shown here.

| Performance Package | Input Wattage | Distribution | 2700K | | | | | 3000K | | | | | 3500K | | | | | 4000K | | | | | 5000K | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW | Lumens | B | U | G | LPW |
| P1 | 25 | ASY | 2,924 | 2 | 1 | 2 | 115 | 3,022 | 2 | 2 | 2 | 119 | 3,095 | 2 | 2 | 2 | 122 | 3,168 | 2 | 2 | 2 | 125 | 3,168 | 2 | 2 | 2 | 125 |
| | | PATH | 2,529 | 2 | 1 | 2 | 100 | 2,613 | 2 | 2 | 2 | 103 | 2,676 | 2 | 2 | 2 | 105 | 2,739 | 2 | 2 | 2 | 108 | 2,739 | 2 | 2 | 2 | 108 |
| | | SYM | 3,086 | 2 | 1 | 1 | 121 | 3,189 | 2 | 1 | 1 | 126 | 3,266 | 2 | 1 | 1 | 129 | 3,344 | 2 | 1 | 1 | 132 | 3,344 | 2 | 1 | 1 | 132 |
| P2 | 38 | ASY | 4,521 | 3 | 2 | 3 | 119 | 4,672 | 3 | 2 | 3 | 123 | 4,785 | 3 | 2 | 3 | 126 | 4,898 | 3 | 2 | 3 | 129 | 4,898 | 3 | 2 | 3 | 129 |
| | | PATH | 3,909 | 2 | 2 | 2 | 103 | 4,040 | 2 | 2 | 2 | 106 | 4,137 | 2 | 2 | 2 | 109 | 4,235 | 3 | 2 | 3 | 111 | 4,235 | 3 | 2 | 3 | 111 |
| | | SYM | 4,772 | 2 | 2 | 1 | 126 | 4,931 | 3 | 2 | 1 | 130 | 5,050 | 3 | 2 | 1 | 133 | 5,169 | 3 | 2 | 1 | 136 | 5,169 | 3 | 2 | 1 | 136 |
| P3 | 54 | ASY | 6,387 | 3 | 2 | 3 | 119 | 6,600 | 3 | 2 | 3 | 123 | 6,760 | 3 | 2 | 3 | 126 | 6,919 | 3 | 2 | 3 | 129 | 6,919 | 3 | 2 | 3 | 129 |
| | | PATH | 5,523 | 3 | 2 | 3 | 103 | 5,707 | 3 | 2 | 3 | 106 | 5,845 | 3 | 2 | 3 | 109 | 5,983 | 3 | 2 | 3 | 112 | 5,983 | 3 | 2 | 3 | 112 |
| | | SYM | 6,741 | 3 | 2 | 2 | 126 | 6,966 | 3 | 2 | 2 | 130 | 7,135 | 3 | 2 | 2 | 133 | 7,303 | 3 | 2 | 2 | 136 | 7,303 | 3 | 2 | 2 | 136 |
| P4 | 86 | ASY | 10,150 | 4 | 2 | 4 | 118 | 10,489 | 4 | 2 | 4 | 122 | 10,742 | 4 | 2 | 4 | 125 | 10,996 | 4 | 2 | 4 | 128 | 10,996 | 4 | 2 | 4 | 128 |
| | | PATH | 8,777 | 3 | 2 | 3 | 102 | 9,070 | 3 | 2 | 3 | 106 | 9,289 | 3 | 2 | 3 | 108 | 9,509 | 3 | 2 | 3 | 111 | 9,509 | 3 | 2 | 3 | 111 |
| | | SYM | 10,713 | 3 | 2 | 2 | 125 | 11,071 | 3 | 2 | 2 | 129 | 11,338 | 3 | 2 | 2 | 132 | 11,606 | 3 | 2 | 2 | 135 | 11,606 | 3 | 2 | 2 | 135 |
| P5 | 123 | ASY | 14,250 | 4 | 2 | 4 | 116 | 14,724 | 4 | 2 | 4 | 120 | 15,081 | 4 | 3 | 4 | 123 | 15,437 | 4 | 3 | 4 | 126 | 15,437 | 4 | 3 | 4 | 126 |
| | | PATH | 12,322 | 4 | 2 | 4 | 101 | 12,733 | 4 | 3 | 4 | 104 | 13,041 | 4 | 3 | 4 | 106 | 13,349 | 4 | 3 | 4 | 109 | 13,349 | 4 | 3 | 4 | 109 |
| | | SYM | 15,040 | 4 | 2 | 3 | 123 | 15,541 | 4 | 2 | 3 | 127 | 15,917 | 4 | 2 | 3 | 130 | 16,293 | 4 | 2 | 3 | 133 | 16,293 | 4 | 2 | 3 | 133 |

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

| Ambient | | LAT Factor |
|---|---|---|
| 0°C | 32°F | 1.06 |
| 5°C | 41°F | 1.05 |
| 10°C | 50°F | 1.04 |
| 15°C | 59°F | 1.02 |
| 20°C | 68°F | 1.01 |
| **25°C** | **77°F** | **1.00** |
| 30°C | 86°F | 0.99 |
| 35°C | 95°F | 0.98 |
| 40°C | 104°F | 0.96 |

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the **RADPT LED** platform in a **25°C ambient**, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Projected LED Lumen Maintenance | | | | |
|---|---|---|---|---|
| | 0 | 25,000 | 50,000 | 100,000 |
| P1 | 1.00 | 0.96 | 0.91 | 0.82 |
| P2 | 1.00 | 0.96 | 0.91 | 0.82 |
| P3 | 1.00 | 0.96 | 0.91 | 0.82 |
| P4 | 1.00 | 0.96 | 0.91 | 0.82 |
| P5 | 1.00 | 0.95 | 0.89 | 0.78 |

### Electrical Load

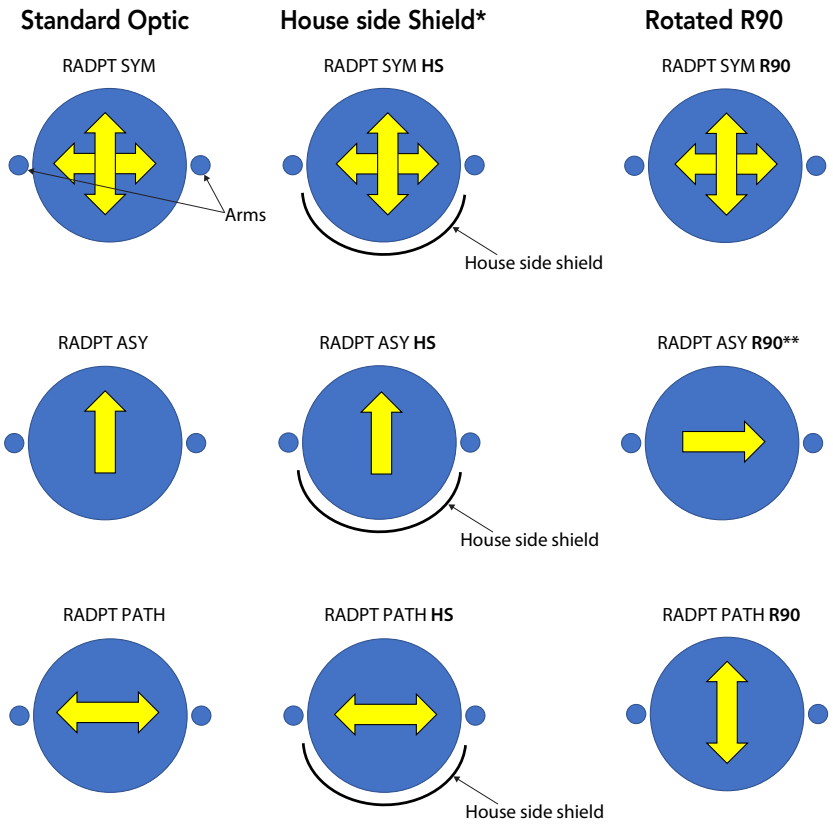
| Lumen Package | LED Drive Current | Voltage | Wattage | | Current (A) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | 120 | 208 | 240 | 277 | 347 | 480 |
| P1 | 500 | 42.8 | 21.4 | Input Current | 0.22 | 0.13 | 0.11 | 0.1 | 0.08 | 0.06 |
| | | | | System Watts | 26 | 26 | 26 | 27 | 25 | 26 |
| P2 | 770 | 43 | 33.1 | Input Current | 0.33 | 0.19 | 0.16 | 0.14 | 0.11 | 0.08 |
| | | | | System Watts | 39 | 39 | 39 | 39 | 38 | 38 |
| P3 | 1100 | 43.2 | 47.5 | Input Current | 0.46 | 0.26 | 0.23 | 0.2 | 0.16 | 0.12 |
| | | | | System Watts | 55 | 54 | 54 | 54 | 54 | 54 |
| P4 | 900 | 87.3 | 78.6 | Input Current | 0.73 | 0.42 | 0.36 | 0.32 | 0.25 | 0.18 |
| | | | | System Watts | 87 | 86 | 86 | 86 | 86 | 86 |
| P5 | 1250 | 88.2 | 110.2 | Input Current | 1 | 0.58 | 0.5 | 0.44 | 0.35 | 0.25 |
| | | | | System Watts | 120 | 119 | 119 | 119 | 120 | 120 |


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## Orientation Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RADPT LED homepage.

Isofootcandle plots are considered to be representative of available optical distributions.




*HS not available with R90
**For L90, use R90 and rotate luminaire 180° on pole

## FEATURES & SPECIFICATIONS

**INTENDED USE**
Pedestrian areas such as parks, campuses, pathways, courtyards and pedestrians malls.

**CONSTRUCTION**
Single-piece die-cast aluminum housing with nominal wall thickness of 0.125" on a 6mm thick acrylic waveguide is fully gasketd with a single piece tubular silicone gasket.

**FINISH**
Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum and white. Available in textured and non-textured finishes.

**OPTICS**
6MM thick acrylic waveguide with 360° flexible LED board. Available in 2700K, 3000K, 3500K, 4000K and 5000K (80CRI) CCT configurations.

**ELECTRICAL**
Light engine consists of 96 high-efficacy LEDs mounted to a flexible circuit board and aluminum heat sink, ensuring optimal thermal management and long life. Fixtures ship standard with 0-10v dimming driver (order option DMG for connection to exterior controls). Class 1 electronic driver has a power factor >90%, THD <20%, and with an expected life of 100,000 hours with <1% failure rate. Serviceable 10kV surge protection device meets a minimum Category C Low for operation (per ANSI/IEEE C62.41.2).

**INSTALLATION**
Standard post-top PT4 type mounting configuration fits into a 4" OD open pole top (round pole only). Alternate tenon (2-3/8" or 2-7/8") mounting also available and require 4" tall tenons.

**LISTINGS**
CSA certified to U.S. and Canadian standards. Luminaire is IP65 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color or less. U.S. Patent No. D925,088S

**GOVERNMENT PROCUREMENT**
BAA – Buy America(n) Act: Product qualifies as a domestic end product under the Buy American Act as implemented in the FAR and DFARS. Product also qualifies as manufactured in the United States under DOT Buy America regulations.
BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

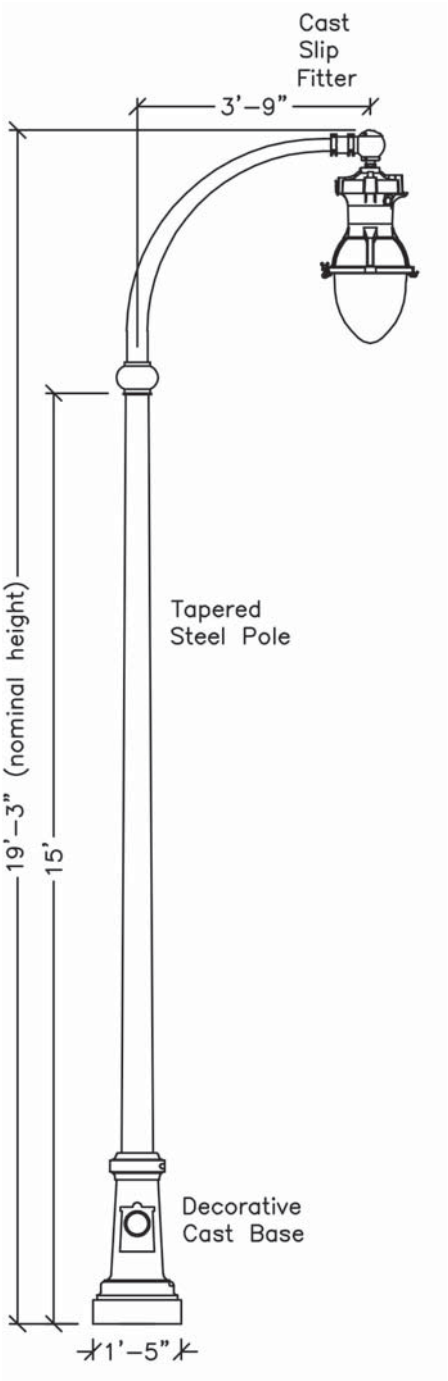
**WARRANTY**
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.


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PORTLAND | me

## Street & Sidewalk Lighting
## DECORATIVE LIGHT - PENINSULA




**LUMINAIRE**

Holophane Esplanade LED III
Model: ESL3 P20S 30K MVOLT TG4 QSM BK PR7E NL1X1
or Spring City Columbia Series
Model: ALMCLU-LE080/EVX/X2-30-CR3-GR14-LACLB-FED-CU
Pendant mount, cast aluminum housing with stainless steel hardware. Dropped refractor shall be thermal resistant borosilicate glass. Internal reflector and prismatic diffuser shall provide an IES Type IV distribution pattern. LED 3000K color temperature.

**BRACKET ARM**

Holophane OUC Roadway Arm
Model: OUC 45IN 1A TN BK
or Spring City Columbia Arm
Model: AARCLA-1S-51-53-TN2.38/7.00-CU
Aluminum crossarm with a post-top fitting for a 3 1/2“ by 8” tenon. Single Arm 45” Oriented 180 degrees.

**SLIP FITTER**

Holophane Boston Harbor Series
Model: BHDF QSM BK PR7E
2 3/8” O.D. with swivel cast fitter.

**LIGHTING POLE**

Holophane
Model: AORTS 15 59 E08 HDG BK
or Spring City Cambridge Series
Model: SSHSM-G11-7.00-15.00-TN3.50/8.00-CU
Smooth, tapered steel pole smooth shaft rated for a 90mph wind load with a 1.3 gust factor. Provide four hot-dipped galvanized steel L-type anchor bolts. Lighting pole shall be hot dip galvanized prior to powdercoat paint.

**DECORATIVE BASE**

Holophane Cambridge Series
Model: CM17CSB CA RC5.9 BK
or Spring City Cambridge Series
Model: DWBCMB-17-CU
Decorative clamshell cast aluminum base. Hardware shall be stainless steel.

**DIMENSIONS**

Overall Height = 19’ 3”
Pole Height = 15‘ 0”
Base Diameter = 17“ to 18”

**FINISH**

Black (standard)

**APPLICATION**

Stree/sidewalk lighting. Decorative fixture not needed on same side of street as existing cobrahead fixtures.
Spacing: 80’ - 100’ on center
Place in furnishing zone overhang towards street; where fixture conflicts with overhead utilities, may be placed on back of sidewalk.

| | | | |
|---|---|---|---|
| Date: **April, 2022** | **CITY OF PORTLAND, MAINE** TECHNICAL MANUAL | **MUNICIPAL STREET LIGHTING STANDARDS** SECTION 10 | Figure: X-7B |
| Revised Date: | **PENINSULA MEDIUM STREET** | | |



# WDGE1 LED
## Architectural Wall Sconce

Catalog Number

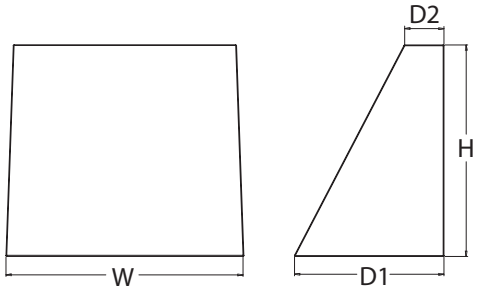
Notes

Type

*Hit the Tab key or mouse over the page to see all interactive elements.*

## Specifications

**Depth (D1):** 5.5"
**Depth (D2):** 1.5"
**Height:** 8"
**Width:** 9"
**Weight:** (without options) 9 lbs




## Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing true site-wide solution.

WDGE1 delivers up to 2,000 lumens with a soft, non-pixelated light source, creating a visually comfortable environment. The compact size of WDGE1, with its integrated emergency battery backup option, makes it an ideal over-the-door wall-mounted lighting solution.

design select Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

## WDGE LED Family Overview

| Luminaire | Optics | Standard EM, 0°C | Cold EM, -20°C | Sensor | Approximate Lumens (4000K, 80CRI) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | P0 | P1 | P2 | P3 | P4 | P5 | P6 |
| WDGE1 LED | Visual Comfort | 4W | | -- | 750 | 1,200 | 2,000 | -- | -- | -- | -- |
| WDGE2 LED | Visual Comfort | 10W | 18W | Standalone / nLight | -- | 1,200 | 2,000 | 3,000 | 4,500 | 6,000 | -- |
| WDGE2 LED | Precision Refractive | 10W | 18W | Standalone / nLight | 700 | 1,200 | 2,000 | 3,200 | 4,200 | -- | -- |
| WDGE3 LED | Precision Refractive | 15W | 18W | Standalone / nLight | 6,000 | 7,500 | 8,500 | 10,000 | 12,000 | -- | -- |
| WDGE4 LED | Precision Refractive | | | Standalone / nLight | -- | 12,000 | 16,000 | 18,000 | 20,000 | 22,000 | 25,000 |

## Ordering Information

**EXAMPLE:** WDGE1 LED P2 40K 80CRI VF MVOLT SRM PE DDBXD

| Series | Package | Color Temperature | CRI | Distribution | Voltage | Mounting |
|---|---|---|---|---|---|---|
| WDGE1 LED | P0<br>P1<br>P2 | 27K 2700K<br>30K 3000K<br>35K 3500K<br>40K 4000K<br>50K[1] 5000K | 80CRI<br>90CRI | VF Visual comfort forward throw<br>VW Visual comfort wide | MVOLT<br>347[2] | **Shipped included**<br>SRM Surface mounting bracket<br>ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)[3]<br>**Shipped separately**<br>AWS 3/8inch Architectural wall spacer[4]<br>PBBW Surface-mounted back box (top, left, right conduit entry) Use when there is no junction box available.[4] |

### Options

| | |
|---|---|
| E4WH | Emergency battery backup, Certified in CA Title 20 MAEDBS (4W, 0°C min)[5] |
| PE | Photocell, Button Type[6] |
| DS | Dual switching (comes with 2 drivers and 2 light engines; see page 3 for details)[7] |
| DMG | 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately) |
| BCE | Bottom conduit entry for back box (PBBW). Total of 4 entry points. |
| DSLE | Dual Switching (1 Driver, 2 Light Engines) |
| CCE | Coastal Construction[4] |

### Finish

| | |
|---|---|
| DDBXD | Dark bronze |
| DBLXD | Black |
| DNAXD | Natural aluminum |
| DWHXD | White |
| DSSXD | Sandstone |
| DDBTXD | Textured dark bronze |
| DBLBXD | Textured black |
| DNATXD | Textured natural aluminum |
| DWHGXD | Textured white |
| DSSTXD | Textured sandstone |


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## Accessories

*Ordered and shipped separately.*

| | |
|---|---|
| WDGEAWS DDBXD | WDGE 3/8inch Architectural Wall Spacer (specify finish) |
| WDGE1PBBW DDBXD U | WDGE1 surface-mounted back box (specify finish) |

**NOTES**

1 50K not available in 90CRI.
2 347V not available with E4WH, DS, DSLE or PE.
3 Not qualified for DLC. Not available with E4WH.
4 For PBBW and AWS with CCE option, require an RFA.
5 E4WH not available with PE or DS.
6 PE not available with DS.
7 DS is not available with P0.

# Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

| Performance Package | System Watts | Dist. Type | 27K (2700K, 80 CRI) | | | | | 30K (3000K, 80 CRI) | | | | | 35K (3500K, 80 CRI) | | | | | 40K (4000K, 80 CRI) | | | | | 50K (5000K, 80 CRI) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G |
| P0 | 7W | VF | 693 | 99 | 0 | 0 | 0 | 718 | 103 | 0 | 0 | 0 | 739 | 106 | 0 | 0 | 0 | 759 | 108 | 0 | 0 | 0 | 764 | 109 | 0 | 0 | 0 |
| | | VW | 694 | 99 | 0 | 0 | 0 | 720 | 103 | 0 | 0 | 0 | 740 | 106 | 0 | 0 | 0 | 760 | 109 | 0 | 0 | 0 | 766 | 109 | 0 | 0 | 0 |
| P1 | 10W | VF | 1,120 | 112 | 0 | 0 | 0 | 1,161 | 116 | 0 | 0 | 0 | 1,194 | 119 | 0 | 0 | 0 | 1,227 | 123 | 0 | 0 | 0 | 1,235 | 123 | 0 | 0 | 0 |
| | | VW | 1,122 | 112 | 0 | 0 | 0 | 1,163 | 116 | 0 | 0 | 0 | 1,196 | 120 | 0 | 0 | 0 | 1,229 | 123 | 0 | 0 | 0 | 1,237 | 124 | 0 | 0 | 0 |
| P2 | 15W | VF | 1,806 | 120 | 1 | 0 | 0 | 1,872 | 125 | 1 | 0 | 0 | 1,925 | 128 | 1 | 0 | 0 | 1,978 | 132 | 1 | 0 | 0 | 1,992 | 133 | 1 | 0 | 0 |
| | | VW | 1,809 | 120 | 1 | 0 | 0 | 1,876 | 125 | 1 | 0 | 0 | 1,929 | 128 | 1 | 0 | 0 | 1,982 | 132 | 1 | 0 | 0 | 1,996 | 133 | 1 | 0 | 0 |

## Electrical Load

| Performance Package | System Watts | Current (A) | | | | |
|---|---|---|---|---|---|---|
| | | 120V | 208V | 240V | 277V | 347V |
| P0 | 7W | 0.060 | 0.035 | 0.030 | 0.026 | -- |
| | 9W | -- | -- | -- | -- | 0.026 |
| P1 | 10W | 0.082 | 0.049 | 0.043 | 0.038 | -- |
| | 13W | -- | -- | -- | -- | 0.046 |
| P2 | 15W | 0.132 | 0.081 | 0.072 | 0.064 | -- |
| | 18W | -- | -- | -- | -- | 0.056 |

## Lumen Multiplier for 90CRI

| CCT | Multiplier |
|---|---|
| 27K | 0.845 |
| 30K | 0.867 |
| 35K | 0.845 |
| 40K | 0.885 |
| 50K | 0.898 |

## Lumen Output in Emergency Mode (4000K, 80 CRI)

| Option | Dist. Type | Lumens |
|---|---|---|
| E4WH | VF | 646 |
| | VW | 647 |

## Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

| Ambient | | Lumen Multiplier |
|---|---|---|
| 0°C | 32°F | 1.03 |
| 10°C | 50°F | 1.02 |
| 20°C | 68°F | 1.01 |
| 25°C | 77°F | 1.00 |
| 30°C | 86°F | 0.99 |
| 40°C | 104°F | 0.98 |

## Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours | 0 | 25,000 | 50,000 | 100,000 |
|---|---|---|---|---|
| Lumen Maintenance Factor | 1.0 | >0.96 | >0.95 | >0.91 |


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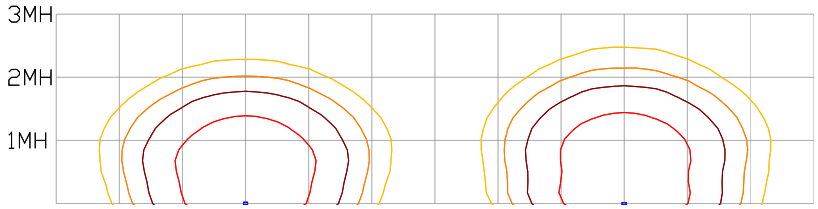
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND

- 0.25 fc
- 0.5 fc
- 1.0 fc
- 3.0 fc

MH = 8ft
Grid = 8ft x 8ft




WDGE1 LED P2 40K 80CRI VW



WDGE1 LED P2 40K 80CRI VF

## Emergency Egress Options

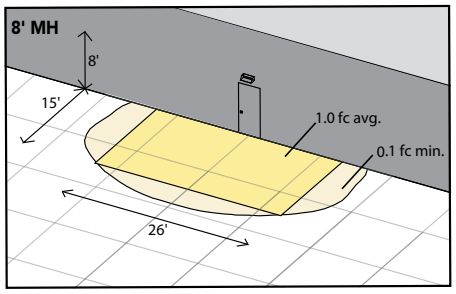
### Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9

The example below shows illuminance of 1 fc average and 0.1 fc minimum in emergency mode with E4WH and VF distribution.

Grid = 10ft x 10ft

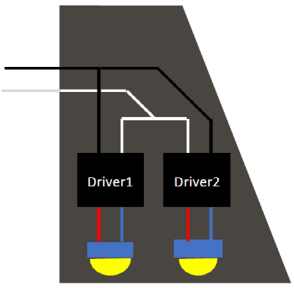



WDGE1 LED xx 40K 80CRI VF MVOLT E4WH

### Dual Switching (DS) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with two drivers and two light engines. These work completely independent to each other so that a failure of any individual component does not cause the whole luminaire to go dark.

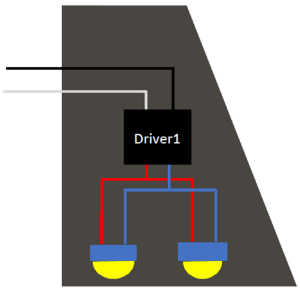
Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9




### Dual Switching Light Engine (DSLE) Option

The dual switching option offers operational redundancy that certain codes require. With this option the luminaire comes integrated with one driver and two light engines. These work completely independent to each other so that a failure of either light engine does not cause the whole luminaire to go dark.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9





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## Mounting, Options & Accessories



**E4WH – 4W Emergency Battery Backup**

D = 5.5"

H = 8"

W = 9"



**PBBW – Surface-Mounted Back Box**
**Use when there is no junction box available.**

D = 1.75"

H = 8"

W = 9"



**AWS – 3/8inch Architectural Wall Spacer**

D = 0.38"

H = 4.4"

W = 7.5"

## FEATURES & SPECIFICATIONS

**INTENDED USE**
Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

**CONSTRUCTION**
The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

**FINISH**
Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

**OPTICS**
Well crafted reflector optics allow the light engine to be recessed within the luminaire, providing visual comfort, superior distribution, uniformity, and spacing in wall-mount applications. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

**ELECTRICAL**
Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

**INSTALLATION**
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

**LISTINGS**
CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

**GOVERNMENT PROCUREMENT**
BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

**WARRANTY**
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.


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# WDGE2 LED

## Architectural Wall Sconce
## Precision Refractive Optic

Catalog Number

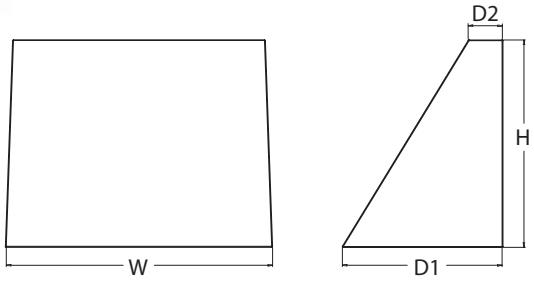
Notes

Type

*Hit the Tab key or mouse over the page to see all interactive elements.*

## Specifications

**Depth (D1):** 7"
**Depth (D2):** 1.5"
**Height:** 9"
**Width:** 11.5"
**Weight:** (without options) 13.5 lbs




## Introduction

The WDGE LED family is designed to meet specifier's every wall-mounted lighting need in a widely accepted shape that blends with any architecture. The clean rectilinear design comes in four sizes with lumen packages ranging from 1,200 to 25,000 lumens, providing a true site-wide solution. Embedded with nLight® AIR wireless controls, the WDGE family provides additional energy savings and code compliance.

WDGE2 with industry leading precision refractive optics provides great uniform distribution and optical control. When combined with multiple integrated emergency battery backup options, including an 18W cold temperature option, the WDGE2 becomes the ideal wall-mounted lighting solution for pedestrian scale applications in any environment.

design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect.
*See ordering tree for details

## WDGE LED Family Overview

| Luminaire | Optics | Standard EM, 0°C | Cold EM, -20°C | Sensor | Approximate Lumens (4000K, 80CRI) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | P0 | P1 | P2 | P3 | P4 | P5 | P6 |
| WDGE1 LED | Visual Comfort | 4W | | -- | 750 | 1,200 | 2,000 | -- | -- | -- | -- |
| WDGE2 LED | Visual Comfort | 10W | 18W | Standalone / nLight | -- | 1,200 | 2,000 | 3,000 | 4,500 | 6,000 | -- |
| WDGE2 LED | Precision Refractive | 10W | 18W | Standalone / nLight | 700 | 1,200 | 2,000 | 3,200 | 4,200 | -- | -- |
| WDGE3 LED | Precision Refractive | 15W | 18W | Standalone / nLight | -- | 7,500 | 8,500 | 10,000 | 12,000 | -- | -- |
| WDGE4 LED | Precision Refractive | | | Standalone / nLight | -- | 12,000 | 16,000 | 18,000 | 20,000 | 22,000 | 25,000 |

## Ordering Information

**EXAMPLE:** WDGE2 LED P3 40K 80CRI T3M MVOLT SRM DDBXD

**Series:** WDGE2 LED

**Package:**
- P0[1]
- P1[2]
- P2[2]
- P3[2]
- P4[2]

**Color Temperature:**
- 27K 2700K
- 30K 3000K
- 40K 4000K
- 50K 5000K
- AMB[3] Amber

**CRI:**
- 70CRI[4]
- 80CRI
- LW[3] Limited Wavelength

**Distribution:**
- T1S Type I Short
- T2M Type II Medium
- T3M Type III Medium
- T4M Type IV Medium
- TFTM Forward Throw Medium

**Voltage:**
- MVOLT
- 347[5]
- 480[5]

**Mounting**

**Shipped included**
- SRM Surface mounting bracket
- ICW Indirect Canopy/Ceiling Washer bracket (dry/damp locations only)[6]

**Shipped separately**
- AWS 3/8inch Architectural wall spacer[7]
- PBBW Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available[7]

**Options**

- E10WH Emergency battery backup, Certified in CA Title 20 MAEDBS (10W, 5°C min)
- E20WC Emergency battery backup, Certified in CA Title 20 MAEDBS (18W, -20°C min)
- PE Photocell, Button Type[8]
- DMG 0-10V dimming wires pulled outside fixture (for use with an external control, ordered separately)[9]
- BCE Bottom conduit entry for back box (PBBW). Total of 4 entry points.
- CCE Coastal Construction[7]

**Standalone Sensors/Controls**

- PIR Bi-level (100/35%) motion sensor for 8-15' mounting heights. Intended for use on switched circuits with external dusk to dawn switching.
- PIRH Bi-level (100/35%) motion sensor for 15-30' mounting heights. Intended for use on switched circuits with external dusk to dawn switching
- PIR1FC3V Bi-level (100/35%) motion sensor for 8-15' mounting heights with photocell pre-programmed for dusk to dawn operation.
- PIRH1FC3V Bi-level (100/35%) motion sensor for 15-30' mounting heights with photocell pre-programmed for dusk to dawn operation.

**Networked Sensors/Controls**

- NLTAIR2 PIR Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights.
- NLTAIR2 PIRH Embedded wireless controls by nLight with Passive Infrared Occ sensor and on/off photocell for 15-30' mounting heights.
- NLTAIREM2 PIR Embedded wireless controls by nLight with UL924 listed emegency operation, Passive Infrared Occ sensor and on/off photocell for 8-15' mounting heights
- NLTAIREM2 PIRH Embedded wireless controls by nLight with UL924 listed emegency operation, Passive Infrared Occ sensor and on/off photocell for 15-30' mounting heights.

See page 4 for out of box functionality

**Finish**

- DDBXD Dark bronze
- DBLXD Black
- DNAXD Natural aluminum
- DWHXD White
- DSSXD Sandstone
- DDBTXD Textured dark bronze
- DBLBXD Textured black
- DNATXD Textured natural aluminum
- DWHGXD Textured white
- DSSTXD Textured sandstone


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## Accessories

*Ordered and shipped separately.*

| | |
|---|---|
| WDGEAWS DDBXD U | WDGE 3/8inch Architectural Wall Spacer (specify finish) |
| WDGE2PBBW DDBXD U | WDGE2 surface-mounted back box (specify finish) |

**NOTES**

1 P0 option not available with sensors/controls.
2 P1-P4 not available with AMB and LW.
3 AMB and LW always go together.
4 70CRI only available with T3M and T4M.
5 347V and 480V not available with E10WH or E20WC.
6 Not qualified for DLC. Not available with emergency battery backup or sensors/controls.
7 For PBBW and AWS with CCE option, require an RFA.
8 PE not available in 480V or with sensors/controls.
9 DMG option not available with sensors/controls.

# Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

| Performance Package | System Watts | Dist. Type | 27K (2700K, 80 CRI) | | | | | 30K (3000K, 80 CRI) | | | | | 40K (4000K, 80 CRI) | | | | | 50K (5000K, 80 CRI) | | | | | Amber (Limited Wavelength) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G |
| P0 | 7W | T1S | 636 | 92 | 0 | 0 | 0 | 666 | 97 | 0 | 0 | 0 | 699 | 101 | 0 | 0 | 1 | 691 | 100 | 0 | 0 | 1 | 712 | 47 | 0 | 0 | 1 |
| | | T2M | 662 | 96 | 0 | 0 | 0 | 693 | 101 | 0 | 0 | 0 | 728 | 106 | 0 | 0 | 0 | 719 | 104 | 0 | 0 | 0 | 741 | 48 | 0 | 0 | 0 |
| | | T3M | 662 | 96 | 0 | 0 | 0 | 693 | 101 | 0 | 0 | 0 | 728 | 106 | 0 | 0 | 0 | 719 | 104 | 0 | 0 | 0 | 741 | 48 | 0 | 0 | 0 |
| | | T4M | 648 | 94 | 0 | 0 | 0 | 679 | 98 | 0 | 0 | 0 | 712 | 103 | 0 | 0 | 0 | 704 | 102 | 0 | 0 | 0 | 726 | 47 | 0 | 0 | 0 |
| | | TFTM | 652 | 95 | 0 | 0 | 0 | 683 | 99 | 0 | 0 | 0 | 717 | 104 | 0 | 0 | 0 | 708 | 103 | 0 | 0 | 0 | 730 | 48 | 0 | 0 | 1 |
| P1 | 11W | T1S | 1,105 | 99 | 0 | 0 | 1 | 1,157 | 104 | 0 | 0 | 1 | 1,215 | 109 | 0 | 0 | 1 | 1,200 | 107 | 0 | 0 | 1 | | | | | |
| | | T2M | 1,150 | 103 | 0 | 0 | 1 | 1,204 | 108 | 0 | 0 | 1 | 1,264 | 113 | 0 | 0 | 1 | 1,249 | 112 | 0 | 0 | 1 | | | | | |
| | | T3M | 1,150 | 103 | 0 | 0 | 1 | 1,205 | 108 | 0 | 0 | 1 | 1,265 | 113 | 0 | 0 | 1 | 1,250 | 112 | 0 | 0 | 1 | | | | | |
| | | T4M | 1,126 | 101 | 0 | 0 | 1 | 1,179 | 106 | 0 | 0 | 1 | 1,238 | 111 | 0 | 0 | 1 | 1,223 | 110 | 0 | 0 | 1 | | | | | |
| | | TFTM | 1,133 | 101 | 0 | 0 | 1 | 1,186 | 106 | 0 | 0 | 1 | 1,245 | 112 | 0 | 0 | 1 | 1,230 | 110 | 0 | 0 | 1 | | | | | |
| P2 | 19W | T1S | 1,801 | 95 | 1 | 0 | 1 | 1,886 | 99 | 1 | 0 | 1 | 1,981 | 104 | 1 | 0 | 1 | 1,957 | 103 | 1 | 0 | 1 | | | | | |
| | | T2M | 1,875 | 99 | 1 | 0 | 1 | 1,963 | 103 | 1 | 0 | 1 | 2,061 | 109 | 1 | 0 | 1 | 2,037 | 107 | 1 | 0 | 1 | | | | | |
| | | T3M | 1,876 | 99 | 1 | 0 | 1 | 1,964 | 103 | 1 | 0 | 1 | 2,062 | 109 | 1 | 0 | 1 | 2,038 | 107 | 1 | 0 | 1 | | | | | |
| | | T4M | 1,836 | 97 | 1 | 0 | 1 | 1,922 | 101 | 1 | 0 | 1 | 2,018 | 106 | 1 | 0 | 1 | 1,994 | 105 | 1 | 0 | 1 | | | | | |
| | | TFTM | 1,847 | 97 | 1 | 0 | 1 | 1,934 | 102 | 1 | 0 | 1 | 2,030 | 107 | 1 | 0 | 1 | 2,006 | 106 | 1 | 0 | 1 | | | | | |
| P3 | 32W | T1S | 2,809 | 87 | 1 | 0 | 1 | 2,942 | 92 | 1 | 0 | 1 | 3,089 | 96 | 1 | 0 | 1 | 3,052 | 95 | 1 | 0 | 1 | | | | | |
| | | T2M | 2,924 | 91 | 1 | 0 | 1 | 3,062 | 95 | 1 | 0 | 1 | 3,215 | 100 | 1 | 0 | 1 | 3,176 | 99 | 1 | 0 | 1 | | | | | |
| | | T3M | 2,925 | 91 | 1 | 0 | 1 | 3,063 | 95 | 1 | 0 | 1 | 3,216 | 100 | 1 | 0 | 1 | 3,177 | 99 | 1 | 0 | 1 | | | | | |
| | | T4M | 2,862 | 89 | 1 | 0 | 1 | 2,997 | 93 | 1 | 0 | 1 | 3,147 | 98 | 1 | 0 | 1 | 3,110 | 97 | 1 | 0 | 1 | | | | | |
| | | TFTM | 2,880 | 90 | 1 | 0 | 1 | 3,015 | 94 | 1 | 0 | 1 | 3,166 | 99 | 1 | 0 | 1 | 3,128 | 97 | 1 | 0 | 1 | | | | | |
| P4 | 47W | T1S | 3,729 | 80 | 1 | 0 | 1 | 3,904 | 84 | 1 | 0 | 1 | 4,099 | 88 | 1 | 0 | 1 | 4,051 | 87 | 1 | 0 | 1 | | | | | |
| | | T2M | 3,881 | 83 | 1 | 0 | 1 | 4,063 | 87 | 1 | 0 | 1 | 4,267 | 91 | 1 | 0 | 1 | 4,216 | 90 | 1 | 0 | 1 | | | | | |
| | | T3M | 3,882 | 83 | 1 | 0 | 1 | 4,065 | 87 | 1 | 0 | 1 | 4,268 | 91 | 1 | 0 | 1 | 4,217 | 90 | 1 | 0 | 1 | | | | | |
| | | T4M | 3,799 | 81 | 1 | 0 | 1 | 3,978 | 85 | 1 | 0 | 1 | 4,177 | 90 | 1 | 0 | 1 | 4,127 | 88 | 1 | 0 | 1 | | | | | |
| | | TFTM | 3,822 | 82 | 1 | 0 | 1 | 4,002 | 86 | 1 | 0 | 1 | 4,202 | 90 | 1 | 0 | 1 | 4,152 | 89 | 1 | 0 | 1 | | | | | |

| Performance Package | System Watts | Dist. Type | 27K (2700K, 70 CRI) | | | | | 30K (3000K, 70 CRI) | | | | | 40K (4000K, 70 CRI) | | | | | 50K (5000K, 70 CRI) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G | Lumens | LPW | B | U | G |
| P0 | 7W | T3M | 737 | 107 | 0 | 0 | 0 | 763 | 111 | 0 | 0 | 0 | 822 | 119 | 0 | 0 | 0 | 832 | 121 | 0 | 0 | 1 |
| | | T4M | 721 | 105 | 0 | 0 | 0 | 746 | 108 | 0 | 0 | 0 | 804 | 117 | 0 | 0 | 1 | 814 | 118 | 0 | 0 | 1 |
| P1 | 11W | T3M | 1,280 | 115 | 0 | 0 | 1 | 1,325 | 119 | 0 | 0 | 1 | 1,427 | 128 | 1 | 0 | 1 | 1,445 | 129 | 1 | 0 | 1 |
| | | T4M | 1,253 | 112 | 0 | 0 | 1 | 1,297 | 116 | 0 | 0 | 1 | 1,397 | 125 | 0 | 0 | 1 | 1,415 | 127 | 0 | 0 | 1 |
| P2 | 19W | T3M | 2,087 | 110 | 1 | 0 | 1 | 2,160 | 114 | 1 | 0 | 1 | 2,327 | 123 | 1 | 0 | 1 | 2,357 | 124 | 1 | 0 | 1 |
| | | T4M | 2,042 | 108 | 1 | 0 | 1 | 2,114 | 111 | 1 | 0 | 1 | 2,278 | 120 | 1 | 0 | 1 | 2,306 | 121 | 1 | 0 | 1 |
| P3 | 32W | T3M | 3,254 | 101 | 1 | 0 | 1 | 3,369 | 105 | 1 | 0 | 1 | 3,629 | 113 | 1 | 0 | 1 | 3,675 | 114 | 1 | 0 | 1 |
| | | T4M | 3,185 | 99 | 1 | 0 | 1 | 3,297 | 103 | 1 | 0 | 1 | 3,552 | 111 | 1 | 0 | 1 | 3,597 | 112 | 1 | 0 | 1 |
| P4 | 47W | T3M | 4,319 | 93 | 1 | 0 | 1 | 4,471 | 96 | 1 | 0 | 1 | 4,817 | 103 | 1 | 0 | 2 | 4,878 | 105 | 1 | 0 | 2 |
| | | T4M | 4,227 | 91 | 1 | 0 | 1 | 4,376 | 94 | 1 | 0 | 2 | 4,714 | 101 | 1 | 0 | 2 | 4,774 | 102 | 1 | 0 | 2 |


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## Electrical Load

| Performance Package | System Watts | Current (A) | | | | | |
|---|---|---|---|---|---|---|---|
| | | 120Vac | 208Vac | 240Vac | 277Vac | 347Vac | 480Vac |
| P0 | 7.0 | 0.061 | 0.042 | 0.04 | 0.039 | -- | -- |
| | 9.0 | -- | -- | -- | -- | 0.031 | 0.021 |
| P1 | 11.0 | 0.100 | 0.064 | 0.059 | 0.054 | -- | -- |
| | 14.1 | -- | -- | -- | -- | 0.046 | 0.031 |
| P2 | 19.0 | 0.168 | 0.106 | 0.095 | 0.083 | -- | -- |
| | 22.8 | -- | -- | -- | -- | 0.067 | 0.050 |
| P3 | 32.0 | 0.284 | 0.163 | 0.144 | 0.131 | -- | -- |
| | 37.1 | -- | -- | -- | -- | 0.107 | 0.079 |
| P4 | 47.0 | 0.412 | 0.234 | 0.207 | 0.185 | -- | -- |
| | 53.5 | -- | -- | -- | -- | 0.153 | 0.112 |

## Lumen Output in Emergency Mode (4000K, 80 CRI, T3M)

| Option | Lumens |
|---|---|
| E10WH | 1,358 |
| E20WC | 2,230 |

## Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

| Ambient | | Lumen Multiplier |
|---|---|---|
| 0°C | 32°F | 1.03 |
| 10°C | 50°F | 1.02 |
| 20°C | 68°F | 1.01 |
| 25°C | 77°F | 1.00 |
| 30°C | 86°F | 0.99 |
| 40°C | 104°F | 0.97 |

## Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

| Operating Hours | 0 | 25,000 | 50,000 | 100,000 |
|---|---|---|---|---|
| Lumen Maintenance Factor | 1.0 | >0.96 | >0.93 | >0.87 |

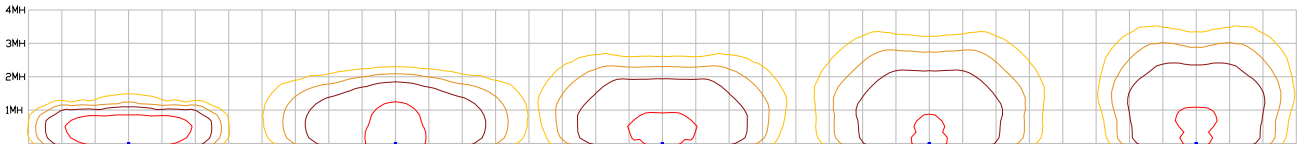
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit the Lithonia Lighting WDGE LED homepage. Tested in accordance with IESNA LM-79 and LM-80 standards.

LEGEND

0.25 fc
0.5 fc
1.0 fc
3.0 fc

MH = 10ft
Grid = 10ft x 10ft




"P3 40K 80CRI T1S" "P3 40K 80CRI T2M" "P3 40K 80CRI T3M" "P3 40K 80CRI T4M" "P3 40K 80CRI TFTM"

## Emergency Egress Options

### Emergency Battery Backup

The emergency battery backup is integral to the luminaire — no external housing required! This design provides reliable emergency operation while maintaining the aesthetics of the product. All emergency battery backup configurations include an independent secondary driver with an integral relay to immediately detect loss of normal power and automatically energize the luminaire. The emergency battery will power the luminaire for a minimum duration of 90 minutes (maximum duration of three hours) from the time normal power is lost and maintain a minimum of 60% of the light output at the end of 90minutes.

Applicable codes: NFPA 70/NEC – section 700.16, NFPA 101 Life Safety Code Section 7.9


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## Control / Sensor Options

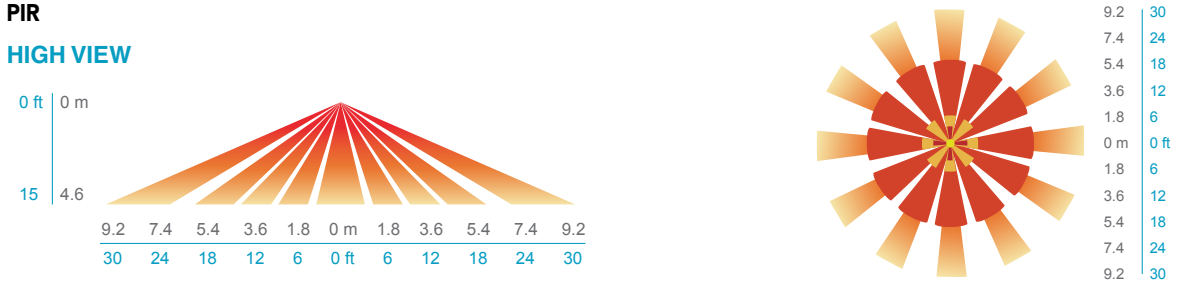
### Motion/Ambient Sensor (PIR_, PIRH_)

Motion/Ambeint sensor (Sensor Switch MSOD) is integrated into the the luminaire. The sensor provides both Motion and Daylight based dimming of the luminaire. For motion detection, the sensor utilizes 100% Digital Passive Infrared (PIR) technology that is tuned for walking size motion while preventing false tripping from the environment. The integrated photocell enables additional energy savings during daytime periods when there is sufficient daylight. Optimize sensor coverage by either selecting PIR or PIRH option. PIR option comes with a sensor lens that is optimized to provide maximum coverage for mounting heights between 8-15ft, while PIRH is optimized for 15-40ft mounting height.

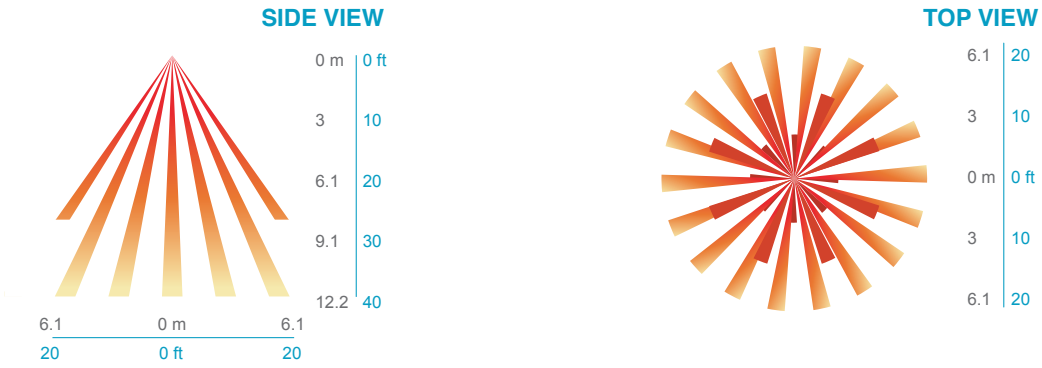
### Networked Control (NLTAIR2)

nLight® AIR is a wireless lighting controls platform that allows for seamless integration of both indoor and outdoor luminaires. Five-tier security architecture,  900 MHz wireless communication and app (CLAIRITY™ Pro) based configurability combined together make nLight® AIR a secure, reliable and easy to use platform.

**PIR**




**PIRH**




| Option | Dim Level | High Level (when triggered | Photocell Operation | Motion Time Delay | Ramp-down Time | Ramp-up Time |
|---|---|---|---|---|---|---|
| PIR or PIRH | Motion - 3V (37% of full output)<br>Photocell - 0V (turned off) | 10V (100% output) | Enabled @ 5fc | 5 min | 5 min | Motion - 3 sec<br>Photocell - 45 sec |
| PIR1FC3V, PIRH1FC3V | Motion - 3V (37% of full output)<br>Photocell - 0V (turned off) | 10V (100% output) | Enabled @ 1fc | 5 min | 5 min | Motion - 3 sec<br>Photocell - 45 sec |
| NLTAIR2 PIR, NLTAIR2 PIRH, NLTAIREM2 PIR, NLTAIREM2 PIRH (out of box) | Motion - 3V (37% of full output)<br>Photocell - 0V (turned off) | 10V (100% output) | Enabled @ 5fc | 7.5 min | 5 min | Motion - 3 sec<br>Photocell - 45 sec |

### UL 924 Response – nLight AIR Devices with EM Option

- NLTAIREM2 devices will remain at their high-end trim and ignore wireless lighting control commands, unless a normal-power-sensed (NPS) broadcast is received at least every 8 seconds.
- Using the CLAIRITY+ mobile app, NLTAIREM2 devices must be associated with a group that includes a normal power sensing device to receive NPS broadcasts.
- The non-emergency devices, NLTAIR2 PIR and NLTAIR2 PIRH, with version 3.4 or later firmware can be used for normal power sensing.


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## Mounting, Options & Accessories



**Motion/Ambient Sensor**

D = 7"
H = 9" (Standalone controls)
11" (nLight AIR controls, 2" antenna will be pointing down behind the sensor)
W = 11.5"



**PBBW – Surface-Mounted Back Box**
**Use when there is no junction box available.**

D = 1.75"
H = 9"
W = 11.5"



**AWS – 3/8inch Architectural Wall Spacer**

D = 0.38"
H = 4.4"
W = 7.5"

## FEATURES & SPECIFICATIONS

**INTENDED USE**
Common architectural look, with clean rectilinear shape, of the WDGE LED was designed to blend with any type of construction, whether it be tilt-up, frame or brick. Applications include commercial offices, warehouses, hospitals, schools, malls, restaurants, and other commercial buildings.

**CONSTRUCTION**
The single-piece die-cast aluminum housing integrates secondary heat sinks to optimize thermal transfer from the internal light engine heat sinks and promote long life. The driver is mounted in direct contact with the casting for a low operating temperature and long life. The die-cast door frame is fully gasketed with a one-piece solid silicone gasket to keep out moisture and dust, providing an IP66 rating for the luminaire.

**FINISH**
Exterior painted parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Standard Super Durable colors include dark bronze, black, natural aluminum, sandstone and white. Available in textured and non-textured finishes.

**OPTICS**
Individually formed acrylic lenses are engineered for superior application efficiency which maximizes the light in the areas where it is most needed. The WDGE LED has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

**ELECTRICAL**
Light engine consists of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L91/100,000 hours at 25°C). The electronic driver has a power factor of >90%, THD <20%. Luminaire comes with built in 6kV surge protection, which meets a minimum Category C low exposure (per ANSI/IEEE C62.41.2). Fixture ships standard with 0-10v dimmable driver.

**INSTALLATION**
A universal mounting plate with integral mounting support arms allows the fixture to hinge down for easy access while making wiring connections. The 3/8" Architectural Wall Spacer (AWS) can be used to create a floating appearance or to accommodate small imperfections in the wall surface. The ICW option can be used to mount the luminaire inverted for indirect lighting in dry and damp locations. Design can withstand up to a 1.5 G vibration load rating per ANSI C136.31.

**LISTINGS**
CSA certified to U.S. and Canadian standards. Luminaire is IP66 rated. PIR options are rated for wet location. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 2700K and 3000K color temperature only and SRM mounting only.

**GOVERNMENT PROCUREMENT**
BABA – Build America Buy America: Product qualifies as produced in the United States under the definitions of the Build America, Buy America Act.
Please refer to www.acuitybrands.com/buy-american for additional information.

**WARRANTY**
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:
www.acuitybrands.com/support/warranty/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.


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# Architectural Design Narrative

Please find attached the design narrative completed by Ryan Senatore Architecture.

April 2, 2025

Planning Department
City of Portland Maine
389 Congress Street
Portland, Maine 04101

**Re: COMB Block Apartments - Design Narrative**

The proposed buildings to be located on Mayo Street and Cumberland Avenue in Portland's East Bayside Neighborhood consist of residential apartment units. The building on Mayo Street is a 3 story structure and the building on Cumberland Avenue is a 6 story structure.

Prior to developing the building concept we spent time walking the surrounding streets, analyzing existing streetscapes, building massing, forms, materials and textures. This approach allowed us to develop a design concept that is grounded by the existing neighborhood context but reflects our contemporary time.

The neighborhood is comprised of a diverse palate of Architectural forms, and time periods of design and construction. The surrounding neighborhood blocks have a variety of Architectural forms and massing from two story to 6 story structures.

We designed the buildings using color, massing and texture to scale the buildings as reflected on the attached renderings. The Mayo Street building is scaled to work with the existing structures along Mayo Street. We have created a regular facade bay rhythm with recessed entries to break the length of the building down to that neighborhood scale. The Cumberland Avenue building utilizes darker siding end caps with a lighter siding in the middle along with projecting masses to scale the facades and create shadow lines to break the building mass down.

The Massing, Ventilation, and Wind impacts of the proposed design should not have an adverse affect on abutting structures due to the Site's openness and large amount of street frontages.

The the proposed design should not cast shadows on publicly accessible open space.

207-747-5159

senatorearchitecture.com

ryan@senatorearchitecture.com

500 Congress Street, Suite 2
Portland, Maine 04101

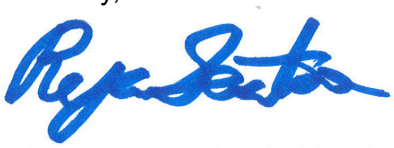
The building should not generate significant amounts of snow or ice accumulation on adjacent structures or public ways as it is a flat roof building and has a large open site area around the building.

View corridors will not be impacted by the proposed structure.

All Mechanical equipment will meet all applicable emissions standards and be located at the interior of the site away from abutting residential properties.

We look forward to discussing the project at the upcoming Planning Board workshop.

Sincerely,



Ryan Senatore, AIA LEED AP

Principal

207-747-5159

senatorearchitecture.com

ryan@senatorearchitecture.com

500 Congress Street, Suite 2
Portland, Maine 04101

# Utilities

Please see below for the proposed utility breakdown as part of the redevelopment of 70 East Oxford Street.

*Water:*

**Phase 2 – Cumberland Avenue:**

The project proposes to tap the existing main on Boyd Street with a new 4" domestic service and 6" fire suppression service.

**Phase 3 – Mayo Street:**

The project proposes to tap the main within Boyd Street to serve the building with (2) 1.5" domestic services and (2) 6" fire suppression services. One additional 1.5" domestic and 6" fire suppression service will be provided from the main within Boyd Street, for a total of 3 domestic and 3 fire suppression services.

A request for ability to serve the buildings has been forwarded to Portland Water District and is included with this section, and confirmation will be forwarded to the city upon receipt.

*Sewer:*

**Phase 2 – Cumberland Avenue:**

It is our understanding that there is an existing 18" PVC sanitary sewer line that flows west along Boyd Street. The project proposes a new 6" sanitary service to tee into the sanitary sewer main.

**Phase 3 – Mayo Street:**

It is our understanding that there is an existing 12" CI sanitary sewer line that flows west along Mayo Street. The project proposes a new 6" sanitary service to tee into the sanitary sewer main.

Ability to serve has been received for both phases from City of Portland Department of Public Works, Sewer Division. Letters from DPW have been attached to this section.

*Stormwater:*

The project proposes a new stormwater connection to the city storm drain system as part of the Phase 2 Cumberland Avenue building. Stormwater will be routed to a subsurface detention system which outlets to an outlet control structure which will throttle the flows as required by the City of Portland Technical Manual Section 5. The stormwater on the Phase 3 – Mayo Street parcel will be routed to the existing stormwater detention and treatment system installed as part of Phase 1 of the development, which ultimately flows to the city storm drain system. See Stormwater Management Report for more information. A request

for ability to serve has been forwarded to City of Portland DPW, Sewer Department, and confirmation will be forwarded to the city upon receipt.

*UGE/T/C:*

**Phase 2 – Cumberland Avenue:**

The project proposes to serve the Cumberland Avenue development with subsurface conduit from an existing utility pole along Boyd Street. Subsurface conduit will feed a proposed pad mount transformer located on the northwest corner of the building and ultimately enter the building on the northwest side and will be fed internally to each individual unit. In addition to serving the proposed building, existing overhead services to the building located at 171 Cumberland Avenue will need to be rerouted, as the existing service encroaches across the project property line.

**Phase 3 – Mayo Street:**

The project proposes to serve the Mayo Street development with subsurface conduit from the existing electrical pullbox within Oxford Street that will be installed as part of Phase 1 of the project, as was discussed during the Phase 1 design. The service will feed a proposed pad mount transformer located south of the building and ultimately enter the building on the south side and will be fed internally to each individual unit.

External metering is anticipated for the new buildings. External pedestal locations will be provided for telecommunication services. Ability to serve confirmations have been received by CMP, Spectrum, and Consolidated Communications and are attached to this section.

*Gas*:

**Phase 2 – Cumberland Avenue:**

The project proposes to serve the Cumberland Avenue development with a single service from the existing gas main within Cumberland Avenue. The service will enter the building on the southeast side and will be fed internally to each individual unit. The gas meter will be located on the southeast side of the building.

**Phase 3 – Mayo Street:**

The project proposes to serve the Mayo Street development with a single service from the existing gas main within Mayo Street. The service will enter the building on the southeast side and will be fed internally to each individual unit. The gas meter will be located on the southeast side of the building.

Unitil's ability to serve confirmation is attached to this section.

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.

Portland Water District
Attn: MEANS Department
212 Canco Road
Portland, Maine 04103

March 13, 2025

Subject: 70 East Oxford Street Development - Phase 2 and 3 Ability to Serve

To whom it may concern:

On behalf of Cumberland Housing, LP, Mayo Housing, LP and Portland Housing Development Corporation (PHDC), we are pleased to submit the following request for PWD's ability to serve at a proposed development located at 70 East Oxford Street in Portland, Maine. Phase 1 of the project included the subdivision of the existing 1.53-acre parcel into two separate parcels as well as the construction of a new 50-unit residential apartment building located on the west corner of the lot, abutting Oxford & Boyd Streets. Phase 2 and 3 of the development will include the construction of two (2) new buildings, one along Mayo Street and the other along Cumberland Avenue. The Mayo Street development will be a 27-unit townhome building while the Cumberland Avenue building will be a 92-unit multi-family for a total of 119 units for phase 2 and 3 of the project.

Based on preliminary information provided by our fire suppression designer, it is anticipated that the Mayo Street building will have a peak fire flow for the fire sprinkler system will be approximately 250gpm + 250gpm hose demand for the street hydrant. No standpipe system required (Building is less than 4-stories and the 3rd floor is less than 30 feet above the level of fire department access) and that the Cumberland Ave Building will have a peak fire flow will be the standpipe system 750gpm. The fire sprinkler system demand will be approximately 250gpm + 250gpm hose demand for the street hydrant.

On behalf of the client, we are requesting the following information:
1. PWD's proposed infrastructure improvements within the project vicinity.
2. Flow data for adjacent hydrants.
3. PWD's ability to serve Phase 2 and 3 of the project
4. Any project related offsite water main improvements.

I have attached an existing Boundary & Topographic Survey prepared by Owen Haskell, Inc. as well as a proposed preliminary master utility plan and fixture count data. Please do not hesitate to reach out for any questions or clarifications.

Sincerely,

Peter Heil, P.E.
Project Manager
Acorn Engineering, Inc.

ACORN Engineering, Inc. • www.acorn-engineering.com
207-775-2655 • PO Box 3372 • Portland • Maine • 04104

ACORN ENGINEERING, INC.

Portland Department of Public Works
Attn: Bradley Roland
212 Canco Road
Portland, Maine 04103

February 25, 2025

Subject: 70 East Oxford Street Development
70 East Oxford Street, Portland, ME
Re: Phase 2 and 3 Ability to Serve

Dear Mr. Roland:

On behalf of Cumberland Housing, LP, Mayo Housing, LP and Portland Housing Development Corporation (PHDC), we are pleased to submit the following request for CMP's ability to serve Phases 2 & 3 of the proposed development located at 70 East Oxford Street in Portland, Maine. The previously approved Phase 1 of the project included the subdivision of the existing 1.53-acre parcel into two separate parcels as well as the construction of a new 50-unit residential apartment building located on the west corner of the lot, abutting Oxford & Boyd Streets. Phase 2 and 3 of the development will include the construction of two (2) new buildings, one along Mayo Street and the other along Cumberland Avenue. The Mayo Street development will be a 27-unit townhome building with (19) 2-bedrooms and (8) 3-bedrooms. The Cumberland Avenue building will be a 92-unit multi-family building with (45) studios, (42) 1-bedroom, (5) 2-bedrooms.

**Phase 2 - Cumberland Avenue:**

It is our understanding that there is an existing 18" PVC sanitary sewer line that flows west along Boyd Street. The project proposes a new 6" sanitary service to tee into the sanitary sewer main. The proposed building will replace an existing building with (10) 2-bedroom units. Based upon Section 4 of the Maine Subsurface Wastewater Disposal Rules and architectural plans to date, the project anticipates the following design flows:

| Estimate of Anticipated Daily Flows – Phase 2 | | | | |
|---|---|---|---|---|
| Development | Unit Type | Number of Units | Gallons per Day per Unit | Total Gallons per Day |
| **Existing Flow** | | | | |
| Multiple Family Dwelling Units | 2-bedroom | 10 | 180 GPD | 1,800 GPD |
| Total Gallons per Day (Existing) | | | | 1,800 GPD |

| Proposed Flow | | | | |
|---|---|---|---|---|
| Multiple Family Dwelling units | Studio | 45 | 120 GPD | 5,400 GPD |
| Multiple Family Dwelling units | 1-Bedroom | 42 | 120 GPD | 5,040 GPD |
| Multiple Family Dwelling | 2-Bedroom | 5 | 180 GPD | 900 GPD |
| Total Gallons per Day | | | | 11,340 GPD |
| **Net Change** | | | | **9,540 GPD** |
| *Values based on STATE OF MAINE: SUBSURFACE WASTEWTAER DISPOSAL RULES, most recent edition | | | | |

**Phase 3 - Mayo Street:**

It is our understanding that there is an existing 12" CI sanitary sewer line that flows west along Mayo Street. The project proposes a new 6" sanitary service to tee into the sanitary sewer main. The proposed building will replace 2 existing buildings with (10) 2-bedroom units. Based upon Section 4 of the Maine Subsurface Wastewater Disposal Rules and architectural plans to date, the project anticipates the following design flows:

| Estimate of Anticipated Daily Flows – Phase 2 | | | | |
|---|---|---|---|---|
| Development | Unit Type | Number of Units | Gallons per Day per Unit | Total Gallons per Day |
| **Existing Flow** | | | | |
| Multiple Family Dwelling Units | 2-bedroom | 20 | 180 GPD | 3,600 GPD |
| Total Gallons per Day (Existing) | | | | 3,600 GPD |
| **Proposed Flow** | | | | |
| Multiple Family Dwelling units | 2-Bedroom | 19 | 180 GPD | 3,420 GPD |
| Multiple Family Dwelling | 3-Bedroom | 8 | 270 GPD | 2,160 GPD |
| Total Gallons per Day | | | | 5,580 GPD |

| Net Change | 1,980 GPD |
|---|---|
| *Values based on STATE OF MAINE: SUBSURFACE WASTEWTAER DISPOSAL RULES, most recent edition | |

Phase 2 of the proposed project is anticipated to increase the net flow by approximately 9,540 gallons per day (GPD). Phase 3 of the proposed project is anticipated to increase the net flow by approximately 1,980 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. Additionally, the number of bedrooms per unit may change later in the design process. We will provide any changes to the anticipated sewage demand to the Department.

On behalf of the client, we are requesting the following information:

1. Any additional utility information, such as utility mapping within Oxford Street, Boyd Street, Mayo Street, and Cumberland Avenue.
2. Any sewer service information for the existing buildings on the project parcel.
3. DPW's proposed infrastructure improvements within the project vicinity.
4. DPW's ability to serve the project.

See attached an Existing Conditions Survey prepared by Owen Haskell, Inc. as well as a proposed preliminary utility plan developed by our office to facilitate your review. Please do not hesitate to contact me or the office for any questions or clarifications.

Sincerely,

Mike Triglione, PE
Project Engineer
Acorn Engineering, Inc.

Mike Triglione
Acorn Engineering, Inc
Portland, Maine 04104

RE: 70 East Oxford Street Development - Phase 2 and 3
70 East Oxford Street, Portland, ME
Letter of Ability to Serve Request

Project Description:

The proposed developments consist of a multifamily building on the corner of Cumberland & Boyd Street, and a multifamily town-home style building along Mayo Street in Portland Maine.

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). Please email them at your earliest convenience. If you are returning an Easement Form, a 1190 or State Permit please be sure to send those documents to lineclerknewservice@cmpco.com, All W9's should be sent to gettingconnected@cmpco.com. All other forms including the EDET (load sheet) and technical information should be sent to me.**

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

Best regards,

Josh

Central Maine Power
An Avangrid company

**Joshua Mitchell**
Energy Service Specialist
Portland Service Area
207-200-0333
Joshua.Mitchell@cmpco.com

| | |
|---|---|
| **From:** | Patrick Morrison |
| **To:** | Mike Triglione |
| **Cc:** | Pete Heil |
| **Subject:** | RE: [EXTERNAL] Consolidated Ability to Serve - COMB Block Phase 2 & 3 |
| **Date:** | Wednesday, March 5, 2025 10:08:21 AM |

Good morning,

We have fiber (Fidium) and copper in the aera of Mayo and Oxford and Boyd St.
I have not heard of when Phase 1 was going to begin as we have aerial cables in the middle of property that currently feeds each of those buildings.

Thanks,

**Patrick Morrison** | Outside Plant Engineer – Portland, Maine
600 Sable Oaks Dr South Portland, ME
C: 207-745-9363
Patrick.Morrison@consolidated.com

---

**From:** Mike Triglione <mtriglione@acorn-engineering.com>
**Sent:** Tuesday, February 25, 2025 11:20 AM
**To:** Patrick Morrison <Patrick.Morrison@consolidated.com>
**Cc:** Pete Heil <pheil@acorn-engineering.com>
**Subject:** [EXTERNAL] Consolidated Ability to Serve - COMB Block Phase 2 & 3

[This email comes from outside of your organization. Please be cautious opening or clicking on any attachments or links.]

Hi Patrick,

Please see attached requesting Consolidated's ability to serve Phases 2 & 3 of the proposed development at 70 East Oxford Street in Portland. Also attached is a preliminary utility plan and existing conditions plan. Please let us know if you have any questions regarding the project. Thanks.

**Mike Triglione, P.E.**
**Project Engineer**
Licensed in Maine

Acorn Engineering, Inc
PO Box 3372
Portland, Maine 04104

Instagram | LinkedIn | Email | Website

B. 207.775.2655
C. 207.595.8448

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February 25, 2025

Mike Triglione, P.E., Acorn Engineering

RE: May Serve Letter by Charter Communications or an affiliated to provide service ("Spectrum")

70 East Oxford Street Redevelopment
70 East Oxford Street
Portland, ME 04101

Dear Mike:

Thank you for your interest in receiving Spectrum service. Your development of 70 East Oxford Street Redevelopment at the site of 70 East Oxford Street, Portland, ME 04101 ("Property") is within an area where Spectrum may lawfully provide video, internet and voice services.

However, this letter is not a commitment to provide service to the Property. Prior to any determination as to whether service can or will be provided to the Property, Spectrum will conduct a survey of the Property and will need the following information from you:

- Exact site address and legal description
- Is this an existing building or new construction?
- Site plans, blue prints, plat maps or any similar data
- The location of any existing utilities or easements
- [Other as required] _____

Please forward this information to me. Upon receipt, I will be assigned to you to work through the process. Ultimately, a mutually acceptable service agreement for the Property will be required and your cooperation in the process is appreciated.

Sincerely,

Steven Holmes
MDU Account Manager-Spectrum Community Solutions
444 Perry Road
Bangor, ME 04401
(207) 631-1618, steven.holmes@charter.com

Unitil
ME GAS OPERATIONS

February26, 2025

Mike Triglione, P.E
Acorn Engineering, Inc
Portland, ME  04104

Re:  Ability to Serve for Phase 2 & 3 70 East Oxford St Portland

Dear Mike,

Thank you for your interest in using natural gas for the above referenced project.

This is to confirm that natural gas can be made available from our distribution system to serve your proposed project.

Any improvements to the existing distribution system that are necessary to provide this service, as well as the design of the gas system in the project itself, will be established as the overall design and scope of your project progresses.

All work necessary to provide service will be performed in accordance with the Maine Public Utilities Commission requirements.

If you have any further questions or require additional information, please contact me directly at (207) 541-2536 or email at morrisons@unitil.com.

Sincerely,

*Sara Morrison*
Sara Morrison
Business Development Representative
(T) 207-541-2536 (F) 207-541-2536

ME GAS OPERATIONS
376 Riverside Industrial Parkway
Portland, ME 04103-3586

T 207.541.2508 www.unitil.com

**Department of Public Works**
Mike Murray
Director

Date: April 22, 2025
Re: Wastewater Capacity Authorization
Address: 9 Boyd Street – Phase 2 of East Bayside Master Plan – Cumberland Avenue
Applicant: Cumberland Housing, LP, Mayo Housing, LP and Portland Housing Development Corporation (PHDC)
Planner: Eric Freeman

| **Estimate of Anticipated Wastewater Flows** | | | | |
|---|---|---|---|---|
| **Development** | **Unit Size** | **Number of Units** | **Gallons per Day per Unit** | **Total Gallons per Day** |
| **Existing Flow to Be Removed** | | | | |
| Multiple Family Dwelling Units | 2-Bedroom | 10 | 180 | -1800 |
| **Proposed flow** | | | | |
| Multiple Family Dwelling Units | Studio | 45 | 120 | 5400 |
| Multiple Family Dwelling Units | 1-Bedroom | 42 | 120 | 5040 |
| Multiple Family Dwelling Units | 2-Bedroom | 5 | 180 | 900 |
| **Net Change** | | | | **+ 9,540** |
| *Values based on STATE OF MAINE: SUBSURFACE WASTEWATER DISPOSAL RULES, most recent edition | | | | |

Comments:
The Department of Public Works, which includes the Water Resource Division, have reviewed and determined that the downstream sewers from the project address have the capacity to convey the estimated dry weather wastewater flows which will be generated from this development.

However, storm drainage and sanitary sewer flows in this project area drain to the City's combined sewer system. Lack of wet weather capacity results in frequent system wide combined sewer overflows. City wide mitigation of combined sewer overflows is required as part of the City's CSO consent decree administered by the EPA and Maine DEP.

Section 5.2.4 of the City's Technical Manual requires DPW Water Resources approval when rain water is being proposed to discharge into a sewer which conveys sanitary waste. Applicable projects proposing to make a stormwater connection into the City's combined sewer system shall:

1. Provide a minimum on-site stormwater detention volume equal to the greater of:
    a. 1" of rainfall times the TOTAL impervious area within the project's disturbance limits;
    b. The project's proposed increase in average daily sewer flow being added to the combined sewer system.
2. Control stormwater discharge rates into the City's combined sewer system to a maximum flow rate of 0.1 CFS until the on-site detention system reaches its design capacity.

You are also reminded that new connections into the combined sewer system shall be equipped with backflow prevention in accordance with Section 2.6.10 of the City's Technical Manual.

If the City can be of further assistance, please contact me at 207-874-8840 or brad@portlandmaine.gov

Sincerely,



Bradley A. Roland, P.E.,
Senior Project Engineer

**Department of Public Works**
Mike Murray
Director

Date: April 22, 2025
Re: Wastewater Capacity Authorization
Address: 70 East Oxford Street – Phase 3 of East Bayside Master Plan – Mayo Street
Applicant: Cumberland Housing, LP, Mayo Housing, LP and Portland Housing Development Corporation (PHDC)
Planner: Eric Freeman

| **Estimate of Anticipated Wastewater Flows** | | | | |
|---|---|---|---|---|
| **Development** | **Unit Size** | **Number of Units** | **Gallons per Day per Unit** | **Total Gallons per Day** |
| **Existing Flow to Be Removed** | | | | |
| Multiple Family Dwelling Units | 2-Bedroom | 20 | 180 | -3600 |
| **Proposed flow** | | | | |
| Multiple Family Dwelling Units | 2-Bedroom | 19 | 180 | 3420 |
| Multiple Family Dwelling Units | 3-Bedroom | 8 | 270 | 2160 |
| **Net Change** | | | | **+ 1,980** |
| *Values based on STATE OF MAINE: SUBSURFACE WASTEWATER DISPOSAL RULES, most recent edition | | | | |

Comments:
The Department of Public Works, which includes the Water Resource Division, have reviewed and determined that the downstream sewers from the project address have the capacity to convey the estimated dry weather wastewater flows which will be generated from this development.

However, storm drainage and sanitary sewer flows in this project area drain to the City's combined sewer system. Lack of wet weather capacity results in frequent system wide combined sewer overflows. City wide mitigation of combined sewer overflows is required as part of the City's CSO consent decree administered by the EPA and Maine DEP.

Section 5.2.4 of the City's Technical Manual requires DPW Water Resources approval when rain water is being proposed to discharge into a sewer which conveys sanitary waste. Applicable

projects proposing to make a stormwater connection into the City's combined sewer system shall:

1. Provide a minimum on-site stormwater detention volume equal to the greater of:
    a. 1" of rainfall times the TOTAL impervious area within the project's disturbance limits;
    b. The project's proposed increase in average daily sewer flow being added to the combined sewer system.
2. Control stormwater discharge rates into the City's combined sewer system to a maximum flow rate of 0.1 CFS until the on-site detention system reaches its design capacity.

You are also reminded that new connections into the combined sewer system shall be equipped with backflow prevention in accordance with Section 2.6.10 of the City's Technical Manual.

If the City can be of further assistance, please contact me at 207-874-8840 or brad@portlandmaine.gov

Sincerely,



Bradley A. Roland, P.E.,
Senior Project Engineer

# Construction Management Plan

**Project Address:** 70 East Oxford Street, Portland, ME

**Project Description:**

The project is a part of a three-phase development plan for a 1.53 acre parcel of land located at 70 East Oxford Street. Phase 1 included a division of land to split the parcel into two separate lots, a 0.56 acre parcel (Lot 1) and a 0.97 acre parcel (Lot 2), as well as the construction of a 55-unit multifamily building on Lot 1. Phase 2 and 3 of the project proposes to further subdivide the parcel and construct a 92-unit multi-family apartment building on the corner of Cumberland Avenue and Boyd Street on a 0.55 acre parcel, as well as a 27-unit townhome building along Mayo Street on a 0.42 acre parcel. The Phase 2 building at the corner of Cumberland and Oxford will be a 92-unit multifamily consisting of (45) studios, (42) 1-bedroom, and (5) 2-bedroom units. This building will also contain amenities for residents and space for building management on the ground floor. The Phase 3 building along Mayo Street will be a 27-unit building with (19) 2-bedroom and (8) 3-bedroom units. The project also includes associated utility, parking and landscaping improvements.

**Project Team Summary:**

| | |
|---|---|
| Owner: | Mayo Housing, LP / Cumberland Housing, LP/Portland Housing Development Corporation (PHDC) |
| General Contractor: | TBD |
| Civil Engineer: | Acorn Engineering, Inc. |
| Architect: | Ryan Senatore Architecture |
| Structural Engineer: | Structural Integrity |
| Landscape Architect: | Dry Landscape Architecture |

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 will be the responsibility of the contractor/owner to obtain a City of Portland Blasting Permit.

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 Boyd Street, Oxford Street, Mayo Street and Cumberland Avenue 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:

Sarah Tatarczuk
Portland Housing Authority
(207) 221-8034

GC and Subcontractor information will be posted along Oxford Street and Cumberland Avenue 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: | 2026 |
| Project End Date: | 2029 |

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, it will be the responsibility of the contractor/owner to obtain a City of Portland Blasting Permit.

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 Boyd Street (sanitary) and Oxford Street (storm).

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 Boyd and Oxford Streets. 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 Boyd and Oxford Streets 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 Boyd and Oxford Streets 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. 4,500 CY. Earthwork subcontractor(s) pit to project site.
    - Hot Mix Asphalt – Approx. 100 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.

# Solid Waste Disposal

**Phase 2 – Cumberland Ave Building:** The proposed multi-family apartment building and townhouse building will utilize new solid waste roll out containers located in the interior trash room on the west side of the proposed building, which will roll into the proposed stamped concrete driveway. A private hauler will be contracted for removal services.

**Phase 3 – Mayo Street Building:** The proposed multi-family apartment building and townhouse building will utilize new solid waste roll out containers located in an interior trash room on the west side of the proposed building, directly adjacent to East Oxford Street as well as an additional trash room on the east side of the building, directly adjacent to Mayo Street. A private hauler will be contracted for removal services.

# Parking Analysis

Per Land Use ReCode Section 18-A Off Street Parking Table Maximums. The project does not require any parking onsite and the maximum allowed parking onsite is calculated below.

Residential: 1 space per 2 dwelling units (142 units) = 248 Parking Spaces

Total Maximum Parking Spaces allowed = 248 Spaces

Per Land Use ReCode Section 18-A Off Street Parking Table, the require bicycle parking space for residential units are 1 space per every 2 dwelling units, which results in 60 bike spaces required for the project. Please refer to C-10, C-11, & C-12 for the locations of the bike racks, including internal bike room and external bike racks to meet the demand.

# Low-Impact Design

The Site has been designed to meet the City's Low-Impact Design requirements. See attached the City's worksheet, showing 82 out of 80 required points for the development.

## City of Portland ME: Low-Impact Design Requirements

| | |
|---|---|
| Owner / applicant name: | Portland Housing Development Corporation |
| Representative name: | Sarah Tatarczuk |
| Project address: | 9 Boyd Street |
| Project CBL: | 22 H001001 |
| Application ID (if known): | PL-003283-2025 |

| | Maximum Points | How to Apply | Points Awarded | LID Standard / Approach |
|---|---|---|---|---|
| **CORE METHODS: Wetlands, Streams, & Drainage** | | | | |
| Protect natural drainage paths | Required | | | |
| Shoreland Zoning | Required | | | |
| Meeting DEP and ACOE standards for stream crossings | Required | | | |
| Protect wetlands | 12 | Select one option | 12 | Select a site that does not have wetlands or vernal pools = 12pts |
| | | | | Project maintains a 50' set-back / no-disturb buffer to all wetlands = 10pts |
| | | | | Project maintains a 25' set-back / no-disturb buffer to all wetlands = 7pts |
| | | | | Project does not place structures in wetlands and avoids wetlands impacts from construction and stormwater discharges = 5pts |
| | | | | Project replicates impacted wetlands elsewhere on site or within watershed = 3pt |
| | | | | Project pays wetlands impact fee = 0pts |
| Permanently protect stream (intermittent and perennial) and riparian buffers *(exclusive of approved stream crossings; must include a no-disturb zone with markers installed and deed restriction recorded at registry of deeds)* | 12 | Select one option | 12 | Select a site with no streams = 12pts |
| | | | | Permanently protect all 100ft shoreline buffers = 10pts |
| | | | | Permanently protect all 75ft shoreline buffers = 7pts |
| | | | | Permanently protect all 50ft shoreline buffers (intermittent streams) = 6pts |
| | | | | Permanently protect all 50ft shoreline buffers (required minimum for perennial streams) = 5pts |
| | | | | Permanently protect all 25ft shoreline buffers (required minimum for intermittent streams) = 5pts |
| Stream crossings | 12 | Select one option | 12 | Select a site with no streams = 12pts |
| | | | | Avoid any stream crossings = 10pts |
| | | | | All stream crossings use a bridge or open bottom culvert structure sized at 1.2 times the bank full width of the stream = 10pts |
| | | | | All stream crossings use Maine Stream Smart Principles to preserve natural pre-development drainage pathways = 6pts |
| **CORE METHODS: Natural Areas & Habitat** | | | | |
| Preserve threatened or endangered species habitat | Required (Beginning with Habitat Maps at a minimum) | | | |
| Protect 30% of trees over 10" DBH | Required (Tree survey required) | | | |
| Protect intact, contiguous forests and native trees over 10" DBH | 8 | Select one option | | All development and land disturbance outside of existing wooded/forested areas (no site clearing in prior 10 years) = 8pts |
| | | | | Protect 50% of trees over 10" DBH = 6pts |
| | | | | Protect 40% of trees over 10" DBH = 4pt |

| | | | | |
|---|---|---|---|---|
| **CORE METHODS: Soils & Slopes** | | | | |
| USDA Web Soil Survey | Required (provide details how soil limitations will be mitigated) | | | |
| Avoid steep slope disturbance | 5 | Select one option | | Selecting a site without slopes 15% or greater = 5pts |
| | | | | Maintain >20' undisturbed vegetated buffer to all slopes 15% or greater = 3pts |
| | | | | Maintain 10-20' undisturbed vegetated buffer to all slopes 15% or greater = 2pts |
| | | | | Maintain 1-10' undisturbed vegetated buffer to all slopes 15% or greater = 1pt |
| | | | 0 | Disturbance of any slope 15% or greater = 0pts |
| Protect soils | 5 | Select one option | 5 | Redevelopment sites = 5pts |
| | | | | Detailed, site-specific soil survey; preparation of a Soil Management and Protection Plan; protect highly permeable soils = 5pts |
| Limit site disturbance and earthwork | 8 | Select one option | 8 | Redevelopment limits disturbance to existing footprint = 8pts |
| | | | | New development disturbs less than 50% of existing undeveloped site area = 8pts |
| | | | | New development disturbs less than 75% of existing undeveloped site area = 6pts |
| | | | | New development disturbs greater than 75% of existing undeveloped site area = 0pts |
| Soil preparation & minimizing compaction | 6 | Select all options that apply | 3 | Till soils to a depth of at least 10" prior to revegetation = 3pts |
| | | | | Organic matter amendments as needed based on soil tests = 3pts |
| **CORE METHODS: Landscaping** | | | | |
| Low-Impact Landscaping | 6 | Select all options that apply | | Redevelopment sites reduce lawn area by 50%, provided no increase in impervious area (lawn becomes landscaping) = 2pt |
| | | | | New development results in >50% non-impervious developed area is landscaping = 2pt |
| | | | 2 | Use only native vegetation for landscaped areas = 2pts |
| | | | 2 | Using only locally-sourced landscape materials = 2pt |
| **CORE METHODS: Impervious Area & SW Management** | | | | |
| Meeting City's stormwater management standards | Required | | | |
| Reduce impervious and increase permeable surfaces | 10 | Select all options that apply, up to a maximum of 10 points | | 50% or more of proposed hard surfaces are permeable (porous pavers, permeable concrete, porous asphalt) = 6pts |
| | | | 4 | Minimize parking impervious area by using only the minimum required number of parking spaces, the minimum required parking lot dimensions, maximizing compact spaces and utilizing low-turnover standard parking space width reductions = 4pt |
| | | | | 25% or more of proposed hard surfaces are permeable (porous pavers, permeable concrete, porous asphalt) = 3pts |
| | | | 2 | Minimize roadway impervious area by developing roadways and driveways at the minimum width and using minimum number of curb cuts = 2pt |
| | | | 2 | Reducing the number of driveways by using a shared driveway design = 2pt |
| | | | | Providing transportation alternatives (such as bike share, car share, or similar) = 2pt |
| Use GI / natural stormwater treatment systems | 12 | Select all options that apply | 6 | Treatment requirements and conveyance achieved through vegetated systems = 6pts |
| | | | 3 | No more than 1-acre of drainage per treatment system = 3pts |
| | | | 3 | Increase time of concentration on site (1" 25 year storm event) = 3pts |
| Limit / eliminate salt use | 4 | Select one option | | Detailed winter maintenance agreement, with annual reporting requirement, limiting chloride use (required in UIS watersheds) = 4pts |

| Bonus Points | | | | |
|---|---|---|---|---|
| Bonus points are offered for strategies that may go above and beyond typical approaches; may offer particularly innovative site design or engineering ; or may help achieve the larger goal of low-impact development on a regional scale. | 10 | | | Utilizing structured parking = 10pts |
| | 10 | | | Utilizing a green roof for at least 50% of a newly developed or redeveloped building roof = 10pts |
| | 10 | | | Restoration of previously disturbed natural resources (minimum 500 square feet of restoration) = 10pts |
| | 10 | | | BMPs designed for known water quality impairment within watershed = 10pts |
| | 10 | | | Connecting to City sewer from a site >200 ft from existing City infrastructure = 10pts |
| | 6 | | | Detention of 1.5 times the required volume = 6pts |
| | 6 | | | Treatment for 1.5 times the required water quality volume = 6pts |
| | 6 | | 6 | Innovative LID site design and/or stormwater improvement - 6pts |
| | 10 | | | Establishing a Traffic Demand Management plan for projects under 50,000ft = 10pts |
| | **Total Possible Points** **178** | | **Total Points Awarded** **82** | **Minimum points required for approval of LID strategies and techniques** **80** |

ACORN ENGINEERING, INC.

Planning Division
City of Portland, Maine
389 Congress Street, 4th Floor
Portland, ME 04101

May 5, 2025

Subject: 9 Boyd St – Phase 2/3 Neighborhood Meeting

I, Michael Triglione, hereby certify that a neighborhood meeting was held on April 30, 2025 at 58 Boyd Street at 5:00 pm.

I also certify that on April 15, 2025, 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,

Michael Triglione, P.E.
Associate Project Manager
Acorn Engineering, Inc.

Included with this certification are:

1. Copy of the invitation sent
2. Sign-in sheet
3. Meeting minutes

# Neighborhood Meeting for the 70 E Oxford St Redevelopment Project

April 18, 2025

Dear Neighbor:

Portland Housing Authority and Portland Housing Development Corporation have submitted a Major Site Plan Development Application to the City of Portland for the redevelopment 70 E Oxford.

Please join us for a Neighborhood Meeting to discuss our redevelopment plans for new affordable housing and resident services, including the construction of a new 7-story building with 92 residential units along Cumberland Ave., a 3-story building with 27 units along Mayo St. and site improvements.

| | |
|---|---|
| **Meeting Date:** | **Wednesday, April 30, 2025** |
| **Meeting Time:** | **5:00 PM** |
| **Meeting Location:** | **Solterra Community Room** |
| | **58 Boyd St, Portland, ME 04101** |

Interpreters available. If you have any questions, please call Sarah Tatarczuk at 207-221-8034.

Sincerely,

Sarah Tatarczuk
Development Officer
PHA and PHDC

*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. 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.*

Sign-in sheet: **COMB Block Phase 2/3 – Neighborhood Meeting**
April 30, 2025
5:00 PM

| Name | Address | email | Phone |
|---|---|---|---|
| Carl Welch | 81 E. Oxford st. | — | (207) 3912923 |
| Melanie Bruce | 58 Boyd St | — | (802) 281-8301 |
| Guy T. Mpoyi | 80 Lydia Ln #271 South Portland 04106 | | 206-355-3146 |
| Belinda Ray | 65 E. Oxford St | belindasray@gmail.com | 207 671 4000 |
| | | | |
| | | | |
| | | | |
| | | | |

Sign-in sheet: **COMB Block Phase 2/3 – Neighborhood Meeting**
April 30, 2025
5:00 PM

| Name | Address | email | Phone |
|---|---|---|---|
| Arricka Noe | 23 Mayo St. | ARRICKA@GMAIL.com | |
| | | | |
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# 9 Boyd Street Redevelopment – Phase 2 & 3

**Neighborhood Meeting Minutes**
April 30, 2025 / 5:00 pm
58 Boyd St, Portland, ME

Project Team Attendees:

Sarah Tatarczuk (ST): Portland Housing Authority

Justin Barker (JB): Portland Housing Authority

Cora Lanclos (CL): Portland Housing Authority

Reid Tozier (RT): Ryan Senatore Architecture

Braden Drypolcher (BD): Dry Landscape Architecture

Peter Heil (PH): Acorn Engineering

***Meeting started at approximately 5:00 pm.***

Presentation:

**Sarah Tatarczuk**:
- Introduction to PHA development team & design team
- Overview of project/PHA mission

**Peter Heil**:
- Explanation of site plan process, neighborhood meeting, sign-in sheet. Project is expected to be at a final hearing with Portland Planning Board 5/27/25.

**Braden Drypolcher**:
- Overview of phasing, project open space and campus, pedestrian site access.

**Reid Tozier**:
- Overview of Phase 2 building layout:
    - Street view from Cumberland Ave
    - First floor layout, unit mix
- Overview of Phase 3 building layout:

- Street view from Mayo street, stepping down with the street grades, townhomes to feel like 3 separate buildings, unit mix

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**: Where will residents park? Also, brick sidewalks on the steep hill can be dangerous in winter.

**PH:** No parking is proposed on site. Parking will be within Neighborhood. Project proposes concrete sidewalks along steep sections down Boyd and Oxford Streets.

**Neighbor**: What is the demolition schedule for the existing buildings? Will all 4 existing buildings be demolished at once? Concerns about noise.

**ST:** Schedule is currently to be determined due to funding. All buildings will be demolished at once. Timeline can be shared through project website when it is determined, combblockmaine.com.

**Neighbor:** Appreciate stepping building down to 3 stories on Mayo Street. Concerns about parking. Previous residents had cars. Has a parking inventory been performed?

**PH:** No new parking study has been performed. New city land use code sets parking maximums, and eliminates minimums. Site has been designed to prioritize new affordable housing units.

**JB:** Parking was considered, but any meaningful parking on the parcel would significantly reduce unit counts for buildings.

**CL:** Conversations with City have been had to consider adjusting street parking designations (resident stickers or 2 hr maximums as potential options) to prevent commuters from parking in neighborhood.

**Neighbor**: What is the affordable criteria for new buildings? Will there be any market rate units?

**JB:** Cumberland Ave buildings will be mix of 30% AMI to market rate. Cannot say exact count now as it is evolving as project develops.

**ST:** Mayo St building to be 30% to 60% AMI.

**Neighbor**: Will there be secure bike storage in buildings?

**PH:** Yes, bike rooms in buildings and exterior bike racks located throughout site.

**Neighbor**: What is the timeline for the full buildout?

**JB:** Full site buildout by 2029, optimistically.

**Neighbor**: Public notifications during construction would be appreciated.

**ST:** Notifications can be posted on project website.

**Neighbor**: Concerns about radon gas.

**JB:** Buildings are tested after construction. Passive system is installed in case radon is discovered after construction.

**Neighbor**: Can unit mix affordability be posted on website?
**ST:** It can be, once the information is finalized.

***Meeting concluded at approximately 5:30 pm.***

The abovementioned material was 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,

Mike Triglione, PE
Associate Project Manager, Acorn Engineering, Inc.
mtriglione@acorn-engineering.com

ACORN ENGINEERING, INC.

Eric Freeman – City Planner
City of Portland
Planning & Urban Development Department
389 Congress Street, 4th Floor
Portland, ME 04101

May 14, 2025

Subject: Comment Response Letter – PL-003283-2025
9 Boyd Street Redevelopment – COMB Block Phase 2 & 3, Portland Maine

Eric,

On behalf of Portland Housing Authority, we are pleased to respond to the comments from City Staff pertaining to the COMB Block Phase 2 & 3 Major Site Plan Application. Comments addressed in this letter were forwarded to the project team on 5/5/25 in a Site Plan Review Worksheet and Design Review from the City Planning Department. Additionally, comments were forwarded to the project team on 4/29/25 from the city Zoning Administrator.

Please find responses to the comments received thus far below. Below responses provide additional information and clarify documents request as outlined in the Staff memos. Any items not specifically addressed in this comment response letter are understood to have met the required City standards.

**SITE PLAN REVIEW COMMENTS**

**Comment** – *Impact on Surrounding Street Systems: C-10 – Replace ramps at Oxford & Mayo intersection in concrete.*

**Response** – Plans have been revised to show ramps at Oxford & Mayo intersection in concrete.

**Comment** – *Impact on Surrounding Street Systems: Cumberland Ave is under Moratorium until 8/18/28. A moratorium repair will be required. The applicant shall get permission from the Department of Public Works prior to any work within the street Right of Way.*

**Response** – Understood. The gas service that was proposed to be within Cumberland Avenue has been moved to Mayo Street to avoid impacts on Cumberland Ave. The only pavement impacts within Cumberland Avenue will be along the proposed curb line for installation of curbing, which we would request DPW allow without a moratorium repair.

**Comment** – *Impact on Surrounding Street Systems: Square off pavement repair in Boyd Street.*

**Response** – Pavement repair has been revised per comment and is shown on plan sheet C-03.

**Comment** – *Impact on Surrounding Street Systems: C-22 – Square off pavement repair in Oxford Street.*

**Response** – Pavement repair has been revised per comment and is shown on plan sheet C-04.

**Comment –** *Impact on Surrounding Street Systems: C-31 – Provide additional spot grades on the Boyd Street Curb Cut. Is the pedestrian path slope ADA compliant?*

**Response** – Additional spot shots have been added and notes to ensure a 1.5% cross slope is maintained through the driveway apron. Running slope of the sidewalk matches the existing running slope of the roadway in this location, which is approximately 8.8%.

**Comment –** *Impact on Surrounding Street Systems: Plantings and landscaping should not extend into City ROW along Cumberland Avenue.*

**Response** – The applicant is willing to enter into a licensing agreement with the City of Portland Department of Public Works (DPW) for the proposed streetscape plantings within the public right-of-way along Cumberland Avenue. The proposed design maintains the required pedestrian clear zone and is consistent with the City's standards for sidewalk and accessibility. These improvements are intended to support the City of Portland's goals for urban greening, placemaking, and enhanced pedestrian experience.

**Comment –** *Access and Circulation: Given the increase in pedestrian activity in the area, we request the applicant perform an assessment of providing a crosswalk across Cumberland Avenue at Boyd Street. There is concern that pedestrians will not walk to Franklin Street or to the east side of Locust Street to cross Cumberland Avenue.*

**Response** – Attached to this submission is an exhibit showing 3 potential crosswalk locations at the corner of Boyd St and Cumberland Ave. Each option provides conflicts with existing utilities (fire hydrant, catch basin), or the existing driveway opposite the project on Cumberland Ave.

**Comment** – *Access and Circulation: Provide detail of the materiality of walkways within the site.*

**Response** – Walkways within the site will be composed of reinforced concrete sidewalk. A detail is provided on sheet C-40.

**Comment** – *Water Quality, Stormwater Management and Erosion Control: Please provide a narrative summarizing how impervious surface has been minimized (parking and driveway minimum dimensions, transportation alternatives provided, etc.).*

**Response** – The project has minimized impervious area by providing no surface parking on site for the proposed buildings. The driveway width for the Phase 2 driveway has been minimized to be as narrow as possible while providing adequate turning movements for the design vehicle. Significant portions of each site are pervious covers (grass, landscaping, stormwater BMP) that will be used for active and passive recreation.

**Comment** – *Water Quality, Stormwater Management and Erosion Control: Please provide a narrative detailing what is innovative about the proposed site design and stormwater improvements proposed.*

**Response** – The site has been designed to minimize impervious area and allowing for significant green area for active and passive recreation in an urban area of Portland. This green area will reduce thermal impacts and increase time of concentration to the Site's and the City's drainage conveyance systems. The multiple stormwater BMPs on site will also reduce pollutant loading and minimize downstream channel erosion. Paved walkways and driveway on the site are largely directed towards stabilized, vegetated areas to on-site treatment devices. Less than one acre of developed area is directed towards each BMP. Native and non-invasive plants will be utilized in landscaped areas.

**Comment** – *Water Quality, Stormwater Management and Erosion Control: The applicant has requested 6 points under the category "Treatment Requirements and Conveyance Achieved Through Vegetated Systems." While the treatment for the Phase 2 site work is addressed through a vegetated soil filter system, the Phase 3 treatment relies on a subsurface vault system. Given that only a portion of the overall treatment is achieved through vegetated means, we recommend that 3 points be awarded for this category.*

**Response** – The applicant requests the 6 points for the Vegetated Underdrained Soil Filter, which is a vegetated system providing treatment for a portion of the project, as the standard is met as stated in the LID spreadsheet.

**Comment** – *View Corridors: Staff request that the applicant provide perspective views of the COMB block to better visualize built-out site and the potential visual impact of rooftop utilities.*

**Response** – The applicant has submitted the requested perspective views as part of this comment response.

**ZONING COMMENTS**

The below comments were forwarded to the design team on 4/29/2025 from Ann Machado, the City's Zoning Administrator. These responses were also forwarded to Eric Freeman and Ann Machado via email on 5/7/25, and are reiterated here:

**Comment –** *Has the applicant reached out to Charles Wordell for the E911 addresses for the two new buildings?*

**Response** – We have started the conversation, and Mr. Wordell and the Fire Department are finalizing addressing.

**Comment –** *Phase II Building: The build to zone in the B2b is 0 to 10'. The build to percentage is 100%. How is the southwest corner of the building meeting the 100% build to percentage for Both Boyd St and Cumberland Ave in the B2b zone?*

**Response** – The entry and associated bench/wall provide public open space bounded by a building façade parallel to the frontage, and allowed per the definition: ***Build-to percentage:*** *The percentage of the building façade that must be located within a build-to zone. Façade articulation meeting the standards of this Code, such as window or wall recesses and projections, are included as art of the required build-to percentage even when they are recessed beyond the build-to zone. Plazas, outdoor*

*dining, and other public open space features that are bounded by a building façade parallel to the frontage are counted as meeting the build-to percentage. Build-to percentage is calculated as a ratio of the total building length of a principal structure, not street frontage.*

**Comment** – *Phase II Building: Maximum height. Must be measured from the average grade. Grade, average is defined as: The average of elevation measurements at consistent intervals of no less than three and no more than ten feet around the entire perimeter of a structure. Measurements shall be taken at the foundation of the structure where it meets the grade after construction. What is the average grade of this building? What is the consistent interval between 3 and 10' that is being used? Show how the average grade is calculated. It must be shown on the elevations. The maximum height in the B2b zone is 75' and 55' in the B-1 zone. Is this being met?*

**Response** – Average grade for this building is 52.60'. The interval being used is 10'. The calculation for the average grade has been added to the elevation drawings. This is meeting the standard with a height of 75' in the B2b zone and 65' in the B1 zone. The project is eligible for a 10' height bonus per Section 17.2.2.D of the Land Use Code.

**Comment** – *Phase III Building: The build to zone is 0 to 5' in the B-1 zone. The build to percentage is 100%. The trash room on Mayo St at the east end is 6.5' not 5'.*

**Response** – Per the Build-to zone percentage, façade articulations meeting the standards, including wall recesses, are included in the build-to percentage even when they are recessed beyond the build-to zone. Additionally, a bike rack has been located in this space along the building frontage, which is an open space feature meeting the standard.

**Comment** – *Phase III Building: Maximum height. Must be measured from the average grade. Grade, average defined as: The average of elevation measurements at consistent intervals of no less than three and no more than ten feet around the entire perimeter of a structure. Measurements shall be taken at the foundation of the structure where it meets the grade after construction. What is the average grade for this building? What is the consistent interval between 3 an 10' that is being used? Show how the average grade is calculated. It must be shown on the elevations. The maximum height is 55' in the B-1 zone. Is this being met?*

**Response** – The average grade is 33.22' The interval being used is 10'. The calculations have been added to the elevations. The maximum proposed height from average grade is 43.38'.

**DESIGN REVIEW COMMENTS**

Design Review comments were forwarded to the design team, dated April 30, 2025. These comments largely focused on architectural features of the proposed buildings. Ryan Senatore Architecture has prepared updated plans in response to the comments and have prepared letters summarizing responses for Phase II and Phase III separately, and have been attached to this submission.

Please let us know if you have any additional questions or comments.

Sincerely,



Peter Heil, P.E.
Senior Project Manager
Acorn Engineering, Inc.

RYAN SENATORE **ARCHITECTURE**

May 7, 2025

Sean King
Urban Designer
Planning Department
City of Portland Maine
389 Congress Street
Portland, Maine 04101

**Re: COMB Block Apartments - Phase 2**
**(Cumberland and Boyd) - Design Narrative**

Dear Sean,

Thank you for the review comments, please see the attached drawing package reflecting revisions in response to the Design Review comments within the memo dated 4/30/25.

Below is a description of the revisions made:

III. c - We have revised the signage above the commercial tenant space to be on top of the entry canopy so it is more prominent. We have also extended the exterior canopy band around the corner to lead toward the outdoor gathering space.

III. d - We have added notations to the elevations that the glazing shall have a VT of 0.7 or greater at the ground level windows and doors.

III. d - We have enlarged the storefront windows at the first floor office and lobby areas.

III. e - The facade areas along the Boyd Street elevation have been updated to reflect the proposed landscape plantings, we feel that this will screen provide texture to the masonry wall along the street and break up that facade at the pedestrian level.

III. g - We have added proposed facade material specifications and graphics to the elevation sheets.

207-747-5159

senatorearchitecture.com

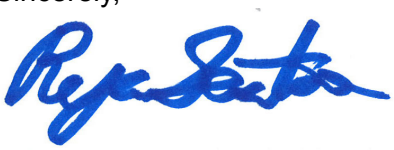
ryan@senatorearchitecture.com

500 Congress Street, Suite 2
Portland, Maine 04101

III. g.1 - We have added proposed rooftop mechanical units to the elevations and renderings, as you can see from the renderings from street level the units are not visible due to their setback from roof edge.

We look forward to discussing the project at the upcoming Planning Board meeting.

Sincerely,



Ryan Senatore, AIA LEED AP

Principal

207-747-5159

senatorearchitecture.com

ryan@senatorearchitecture.com

500 Congress Street, Suite 2
Portland, Maine 04101

RYAN SENATORE **ARCHITECTURE**

May 7, 2025

Sean King
Urban Designer
Planning Department
City of Portland Maine
389 Congress Street
Portland, Maine 04101

**Re: COMB Block Apartments - Phase 3**
**(Mayo) - Design Narrative**

Dear Sean,

Thank you for the review comments, please see the attached drawing package reflecting revisions in response to the Design Review comments within the memo dated 4/30/25.

Below is a description of the revisions made:

III. d - We have added notations to the elevations that the glazing shall have a VT of 0.7 or greater at the ground level windows and doors.

III. g - We have added proposed facade material specifications and graphics to the elevation sheets.

III. g.1 - The mechanical systems for the building are contained within the apartment units, they are PTAC type units below the windows with louvers so no rooftop mechanical units are proposed.

We look forward to discussing the project at the upcoming Planning Board meeting.

Sincerely,



Ryan Senatore, AIA LEED AP

Principal

207-747-5159

senatorearchitecture.com

ryan@senatorearchitecture.com

500 Congress Street, Suite 2
Portland, Maine 04101

# Public Comment - 9 Boyd Street: Underwhelming Housing Opportunity

1 message

**George Rheault** <george.rheault@gmail.com> Fri, May 23, 2025 at 12:30 PM
Reply-To: george.rheault@gmail.com
To: Planning Board <planningboard@portlandmaine.gov>, Kevin Kraft <kkraft@portlandmaine.gov>, Matthew Grooms <mgrooms@portlandmaine.gov>, jmy <jmy@portlandmaine.gov>

While it is encouraging that approvals for the 2nd and 3rd phases of the COMB Block are being sought, it is unfortunate that making the most of an amazing generational housing and urban planning opportunity is being missed here.

Parking
1. The land available at the COMB Block is ideal for building underground parking facilities. Due to the steep sloping topography of Boyd Street, it would be possible to BURY a fair amount of parking ensuring that the "ugly" parts of the structured parking would remain out of view of the streetscape. But parking like this built into a hillside is not cheap and the ONLY way it could be achieved by a cost-constrained housing authority utilizing LIHTC financing is to have partnered with a private entity. A joint venture would have enabled a parking podium to have been financed by a private partner and the PHA housing units isolated as the responsibility of the PHA.

The fact this is not being done will hurt other development opportunities in this vicinity. Neighbors and other Portland citizens will object to further density due to parking and traffic concerns which could have been addressed area-wide by including SOME PARKING underground at the COMB Block.

Screening of Rooftop Mechanicals
2. What provision is being made here for this?

Smoking Patio
3. While most new subsidized housing endeavors to be a "smoke-free" property, the reality is many tenants are smokers. A special on-premises area should be reserved for this kind of noxious activity so that tenants do not have to resort to obstructing public sidewalks and open spaces immediately adjacent to the COMB Block property with their banned smoking behaviors.

Tenant Storage
4. What kind of provision is being made available for tenant storage when their belongings cannot fit into their units? Tenants should not have to resort to hallways or common space to store personal belongings. Reasonable storage should be built into the project from the beginning.

# COMB BLOCK REDEVELOPMENT PHASES 2 & 3

## MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
## PORTLAND, MAINE

## LEGEND

### EXISTING

REFER TO THE EXISTING CONDITIONS PLAN FOR ADDITIONAL INFORMATION

### PROPOSED

| | |
|---|---|
| | UNDERDRAIN |
| | GREEN SPACE |
| | UTILITY PAVEMENT CUTS |
| | STRIPING |
| | SEDIMENTATION BARRIER |
| | EDGE OF EX. PAVEMENT |
| | CURB |
| | SIGN |
| | LAMP OR LIGHT POLE |
| | UTILITY POLE |
| | GUY WIRE |
| | WATER VALVE |
| | FIRE HYDRANT |
| | SEWER MANHOLE |
| | CATCH BASIN |
| | DRAIN MANHOLE |
| UE — UE | UNDERGROUND ELECTRIC LINE |
| W — W | UNDERGROUND WATER LINE |
| 64 | MINOR CONTOURS (1 FT) |
| 65 | MAJOR CONTOURS (5 FT) |
| G — G | GAS LINE |
| SD — SD | STORM DRAIN LINE |
| S — S | SEWER LINE |
| | EXISTING/PROPOSED BUILDING |
| OHE/T/C | 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

### ELECTRIC

CENTRAL MAINE POWER COMPANY (CMP)
162 CANCO ROAD
PORTLAND, MAINE 04103
CONTACT: JOSHUA MITCHELL
(207) 828–2882

### TELEPHONE

CONSOLIDATED COMMUNICATIONS
5 DAVIS FARM ROAD
PORTLAND, MAINE 04103
CONTACT: PATRICK MORRISON
(207) 745–9363

### WATER

PORTLAND WATER DISTRICT
225 DOUGLASS STREET
PO BOX 3553
PORTLAND, MAINE 04104
CONTACT: KATHRYN RODRIGUEZ, MEANS DEPARTMENT
(207) 774–5961

### CABLE

SPECTRUM CABLE
118 JOHNSON ROAD
PORTLAND, MAINE, 04102
CONTACT: STEVEN HOLMES
(207) 631–1618

### NATURAL GAS

UNITIL SERVICE CORP
1075 FOREST AVENUE
PORTLAND, ME 04103
CONTACT: SCOTT CARPENTER
(207) 541–2536

## PROJECT TEAM

### DEVELOPER

PORTLAND HOUSING AUTHORITY
970 BAXTER BOULEVARD
PORTLAND MAINE, 04103
CONTACT: SARAH TATARCZUK
(207) 221–8034

PORTLAND HOUSING DEVELOPMENT CORP.
14 BAXTER BOULEVARD
PORTLAND, ME 04101
CONTACT: JAY WATERMAN
(207) 221–8009

### SURVEYOR

OWEN HASKELL, INC
390 U.S. ROUTE 1,
FALMOUTH, MAINE, 04105
CONTACT: ELLEN BREWER PLS
(207) 774–0424

### LANDSCAPE ARCHITECT

DRY LANDSCAPE ARCHITECTURE
BIDDEFORD, MAINE
CONTACT: BRADEN DRYPOLCHER, RLA
(603) 496–8020

### ENVIRONMENTAL PROFESSIONAL

SEVEE & MAHER ENGINEERS
4 BLANCHARD ROAD
CUMBERLAND, ME 04021
CONTACT: JAMIE MADORE
(207) 829–5016

### ARCHITECT

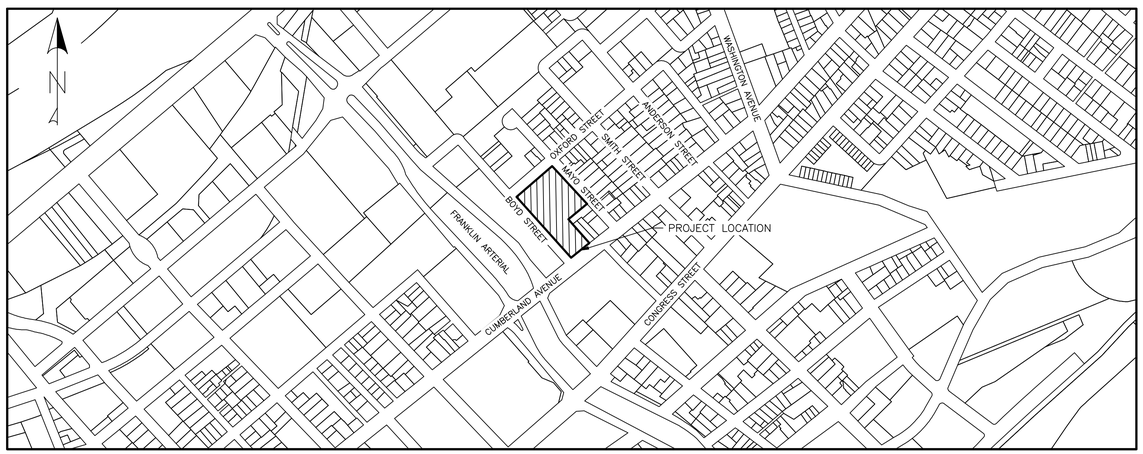
RYAN SENATORE ARCHITECTURE
500 CONGRESS STREET, SUITE #2
PORTLAND, ME, 04101
CONTACT: RYAN SENATORE, RA
(207) 838–0927

### CIVIL ENGINEER

ACORN ENGINEERING, INC.
16 MIDDLE STREET, SUITE #302
PORTLAND, MAINE 04104
CONTACT: PETER HEIL, P.E.
(207) 775–2655

### GEOTECHNICAL ENGINEER

SUMMIT GEOENGINEERING SERVICES
210 MAINE AVE
FARMINGDALE, MAINE 04344
CONTACT: BILL PETERLEIN, P.E.
(207) 576–3313




VICINITY MAP
SCALE: 1:100

## 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 |
| OHW | OVERHEAD WIRE |
| 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 |

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH | 4/7/2025 |
| COMMENT RESPONSE | PFH | 5/14/2025 |

DRAWING NAME: COVER SHEET & LEGEND
PROJECT NAME: COMB BLOCK PHASES 2 & 3
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

THESE PLANS SHALL NOT BE ADOPTED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

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FILE: 1215_DETAILS_PH2
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

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 FOR PORTLAND HOUSING AUTHORITY, LAST REVISED 1/23/24

8. SUBSURFACE DATA HAVE BEEN OBTAINED BY SUMMIT GEOENGINEERING SERVICES, INC. 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. CONTRACTOR TO DETERMINE SOIL CLASSIFICATION INDEPENDENTLY FOR TRENCH, SHORING, AND OTHER SIMILAR CONSTRUCTION MEANS AND METHODS APPLICATIONS.

11. 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.

12. 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.

13. THE CONTRACTOR SHALL PROVIDE A GPS MODEL OF THE PROPERTY TO PROVIDE TO ACORN ENGINEERING.

14. THE CONTRACTOR SHALL SURVEY ROCK SURFACE PRIOR TO EXCAVATION AND DEVELOP VOLUME CALCULATIONS TO SHARE WITH THE ENGINEER, ACORN ENGINEERING INC. (ACORN), IF ANY.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PRESERVATION OF ALL TREES AND SHRUBS ON THE PROJECT WHICH ARE NOT TO BE REMOVED.

16. 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.

17. WHERE FEASIBLE, ACORN HAS SPECIFIED PRODUCTS THAT ARE BABA COMPLIANT; HOWEVER, IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONFIRM COMPLIANCE AND PRODUCT CERTIFICATIONS. IN CASES WHERE BABA COMPLIANCE IS NOT MET OR CERTIFIED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INCORPORATING THE NON–COMPLIANT PRODUCTS INTO A WAIVER REQUEST OR AS PART OF THE ALLOWABLE EXEMPTION ALLOWANCE IN COORDINATION WITH THE DEVELOPER. ALTERNATIVELY, THE CONTRACTOR MAY SUBMIT AN ALTERNATIVE BABA–COMPLIANT PRODUCT TO THE ENGINEER FOR CONSIDERATION AS AN APPROVED ALTERNATIVE.

## 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 PORTLAND HOUSING AUTHORITY/ PORTLAND HOUSING DEVELOPMENT CORPERATION 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 MAJOR SITE PLAN & SUBDIVISION APPLICATION FROM THE CITY OF PORTLAND, MAINE DEP STORMWATER LAW PERMIT (UNDER CITY OF PORTLAND DELEGATED AUTHORITY), AND MAINE DEP CONSTRUCTION GENERAL PERMIT.

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% 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 PORTLAND WATER DISTRICT, 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.

25. PROJECT ARCHITECT WILL ENSURE THAT ALL HVAC SYSTEMS WILL MEET APPLICABLE STATE AND FEDERAL EMISSIONS REQUIREMENTS.

## 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. A PHASE II – ENVIRONMENTAL SITE ASSESSMENT FOR 9 BOYD STREET, 20 MAY STREET, 24 MAYO STREET AND 25 BOYD STREET, PORTLAND, MAINE HAS BEEN COMPLETED BY SEVEE & MAHER ENGINEERS FOR PORTLAND HOUSING DEVELOPMENT CORPORATION DATED MARCH 2024.

5. A ENVIRONMENTAL MEDIA MANAGEMENT PLAN FOR 9 BOYD STREET, 20 MAY STREET, 24 MAYO STREET AND 25 BOYD STREET, PORTLAND, MAINE HAS BEEN COMPLETED BY SEVEE & MAHER ENGINEERS FOR PORTLAND HOUSING DEVELOPMENT CORPORATION DATED MARCH 2024.

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH | 4/7/2025 |
| COMMENT RESPONSE | PFH | 5/14/2025 |

DRAWING NAME: GENERAL NOTES
PROJECT NAME: COMB BLOCK PHASES 2 & 3
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
ENGINEERING — SURVEYING — PLANNING
ACORN ENGINEERING, INC.
70 CENTRAL STREET, SACO, ME 04104
PO BOX 724 (207) 775–2655

THESE PLANS AND NOTES ARE, AND SHALL REMAIN THE PROPERTY OF ACORN ENGINEERING, INC. AND ARE NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT WITHOUT THE EXPRESSED WRITTEN PERMISSION OF ACORN ENGINEERING, INC. ANY UNAUTHORIZED USE OF THESE PLANS AND NOTES WITHOUT SUCH PERMISSION SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

FILE: 1215_DETAILS_PH2
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-02

| SPACE AND BULK STANDARDS | | | | |
|---|---|---|---|---|
| RESIDENTIAL ZONING DISTRICT | B-1 | B-2B | PR. PHASE 2 | PR. PHASE 3 |
| LOT AREA (MIN.) | N/A | N/A | 0.55 AC | 0.42 AC |
| STREET FRONTAGE (MIN.) | 20 FT | N/A | 310' | 312.99' |
| GROSS FLOOR AREA* (MAX.) | 5,000 SF | N/A | N/A | N/A |
| BUILD-TO ZONE | 0-5 FT | 0-10 FT | 3.2'/5.2' MAX | 5.0 FT MAX |
| BUILD-TO PERCENTAGE (MIN.) | 100% | 100% | 100% | 100% |
| BLANK WALL AREA (MAX.) | 20 FT | 20 FT | >20 FT | >20 FT |
| REAR SETBACK (MIN.) | NONE** | NONE** | 22.5' | 17.79' |
| SIDE SETBACK, INTERIOR (MIN.) | NONE*** | NONE*** | 20.13' | 29.02' |
| STRUCTURE HEIGHT (MAX.)***** | 55 FT | 75 FT | 53.3 FT | 33.2 FT |
| LANDSCAPED OPEN SPACE RATIO (MIN.) | N/A | N/A | – | – |
| *NONRESIDENTIAL USES ON THE GROUND FLOOR ONLY, UNLESS OTHERWISE PERMITTED OR RESTRICTED | | | | |
| **EXCEPT 10FT. IF ABUTTING A LOT IN A RESIDENTIAL ZONE | | | | |
| ***EXCEPT 5FT. IF ABUTTING A LOT IN A RESIDENTIAL ZONE | | | | |
| ****ELIGIBLE PROJECTS OVER TEN UNITS IN SIZE IN WHICH OVER 75% OF UNITS ARE LOW-INCOME OR WORKFORCE UNITS, MAXIMUM HEIGHTS AS PERMITTED SHALL BE INCREASED BY 10 FEET. | | | | |

* EXCEPT THAT A SIDE SETBACK IN THE R-6 ZONE MAY BE REDUCED TO ZERO, PROVIDED THAT THE CUMULATIVE SIDE YARDS ARE NOT LESS THAN 10FT. A PERMANENT MAINTENANCE EASEMENT A MINIMUM OF 5 FT. IN WIDTH SHALL BE PROVIDED ON THE PARCEL ADJACENT TO THE LOT LINE WITH THE REDUCED SETBACK.

** ALTERATIONS TO SINGLE-FAMILY, TWO-FAMILY, AND MULTI-FAMILY DWELLINGS IN EXISTENCE AS OF 6/15/15 SHALL NOT RESULT IN THE CREATION OF ANY ADDITIONAL DWELLING UNIT OF LESS THAN 600 SQUARE FEET OF FLOOR AREA, EXCLUSIVE OF COMMON HALLWAYS AND STORAGE IN BASEMENT AND ATTIC; AND SHALL NOT RESULT IN ANY EXISTING DWELLING UNIT BEING REDUCED IN SIZE LESS THAN 1,000 SQUARE FEET OF FLOOR AREA, EXCLUSIVE OF COMMON AREAS AND STORAGE IN BASEMENT AND ATTIC.

PLAN REFERENCES:

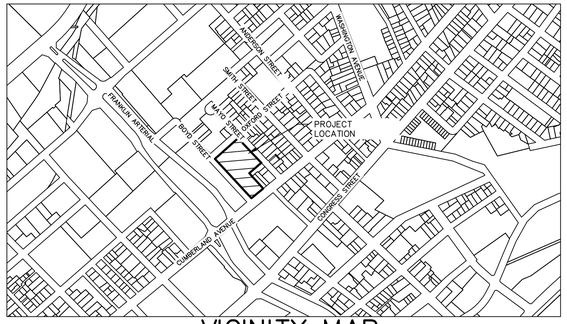
1. PARCEL BOUNDARY AND EXISTING CONDITIONS PER "ALTA/NSPS LAND TITLE SURVEY, 20 & 24 MAYO STREET AND 9 & 25 BOYD STREET, PORTLAND, CUMBERLAND COUNTY, MAINE" PREPARED FOR PORTLAND HOUSING AUTHORITY BY OWEN HASKELL, INC. DATED JANUARY 23, 2024.

## SURVEY GENERAL NOTES

1. OWNER OF RECORD: PORTLAND HOUSING AUTHORITY
   14 BAXTER BOULEVARD, PORTLAND, MAINE
   CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 3129 PAGE 374
   TAX MAP 22 BLOCK H LOT 1
2. BEARINGS ARE BASED ON MAINE STATE PLANE COORDINATE SYSTEM MAINE WEST NAD83 CITY CONTROL POINTS T102-78-101 AND L751-8-3007 HELD.
3. BENCHMARK: MONUMENT T102-77-1 AT NORTHWEST CORNER OF ANDERSON STREET AND EAST LANCASTER STREET, ELEVATION 19.57 CITY DATUM.

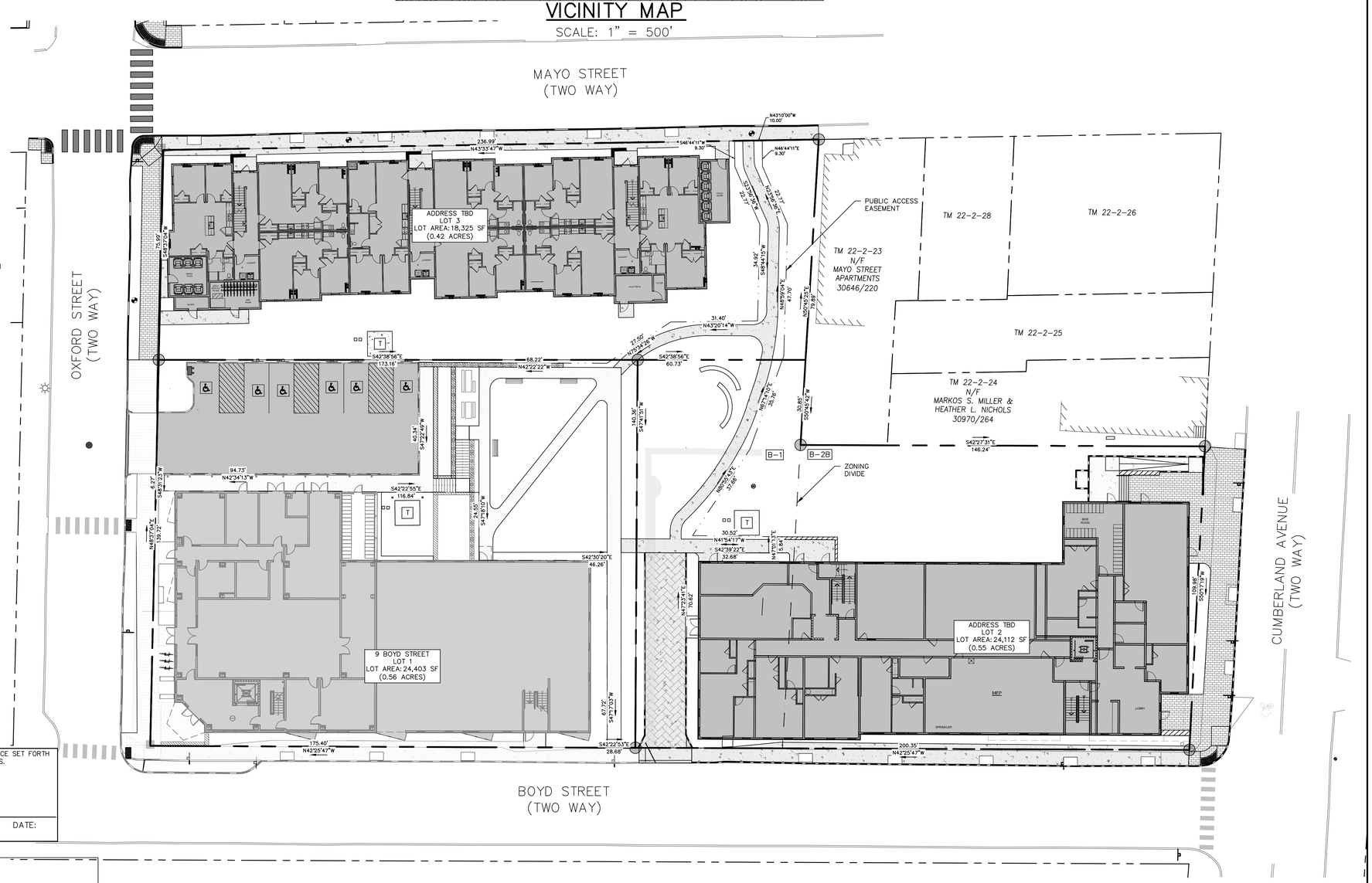
## GENERAL NOTES:

1. FOR INFORMATION REGARDING THE PROPOSED SITE, UTILITIES, AND GRADING, REFER TO THE SITE PLAN, C-10, C-20, C-30, PREPARED BY ACORN ENGINEERING, LAST REVISED 3/13/2025.
2. AS OF 3/24/2025, THE SITE IS BOUNDED BY THE R6 ZONE.
3. EXISTING PROPERTY LINES OBTAINED FROM THE PLAN TITLED "ALTA / NSPS LAND TITLE SURVEY" PREPARED BY OWEN HASKELL, INC. DATED 12/22/2023 AND LAST REVISED 1/23/2024.
4. LOCUS PARCELS DO NOT FALL IN A SPECIAL FLOOD HAZARD AREA PER FEMA FLOOD INSURANCE RATE MAP COMMUNITY-PANEL NUMBER 2300510692F, INDEX DATED 6/20/2024.
5. THIS SHEET IS THE DIVISION OF LAND PLAN FOR THE CREATION OF UP TO ONE HUNDRED SEVENTY FOUR (174) DWELLING UNITS ON THE SUBJECT PROPERTY.
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).




## VICINITY MAP

SCALE: 1" = 500'




## DEVELOPER:

COMB BLOCK PHASE ONE, LP
CUMBERLAND HOUSING, LP
MAYO HOUSING, LP
CONTACT: SARAH TATARCZUK
PORTLAND, MAINE 04103
(207) 221-0834

PORTLAND HOUSING
DEVELOPMENT CORPORATION
CONTACT: JAY WATERMAN
PORTLAND, MAINE 04101
(207) 221-8009

## CIVIL ENGINEER:

ACORN ENGINEERING, INC.
PORTLAND, MAINE
CONTACT: PETER F HEIL, P.E.
(207) 775-2655

## SURVEYOR:

OWEN HASKELL, INC.
FALMOUTH, MAINE
CONTACT: ELLEN C. BREWER, P.L.S.
(207) 774-0424

## LEGEND

- PR. PAVEMENT
- EX. PAVEMENT
- CURB
- BUILDING
- CONCRETE/BRICK
- PR. PROPERTY LINE
- EX. PROPERTY LINE
- EXISTING MONUMENTS
- NEW PROPERTY PIN

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.

STATE OF MAINE, CUMBERLAND, ss
REGISTRY OF DEEDS

RECEIVED _____

AT____hr. ___min. ___m AND RECORDED

IN PLAN BOOK _____, PAGE

APPROVED: PORTLAND PLANNING AUTHORITY
STAFF: DATE:

10' 0 10' 20
SCALE: 1"=20'

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT 4/7/2025 |

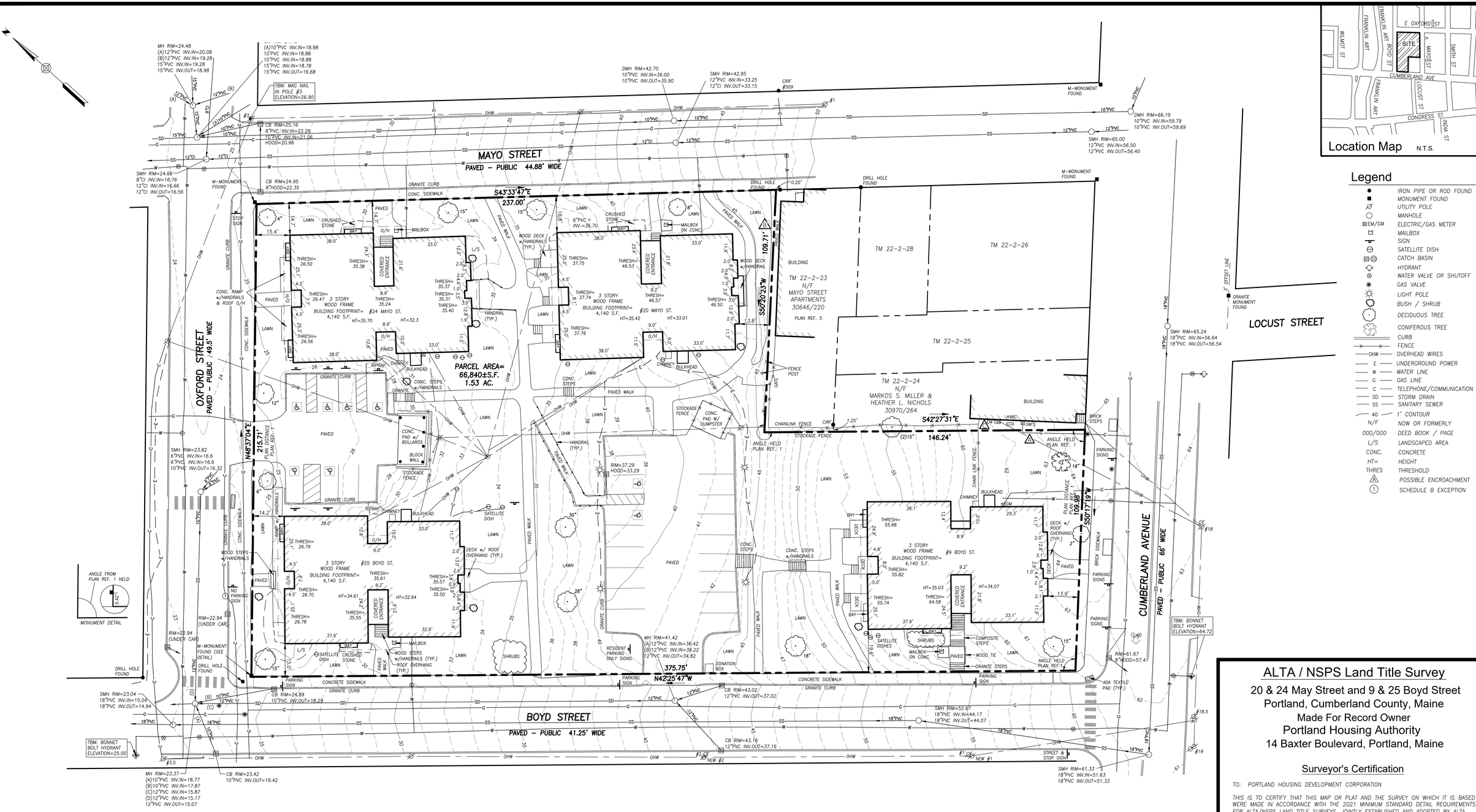
DRAWING NAME: SUBDIVISION PLAT
PROJECT NAME: COMB BLOCK PHASES 2 & 3
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR UNAUTHORIZED, ARE USE AT SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

| | |
|---|---|
| FILE | 1215_CIVIL_PH2-3 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

DRAWING NO.
PLAT




## Legend

- IRON PIPE OR ROD FOUND
- MONUMENT FOUND
- UTILITY POLE
- MANHOLE
- EM/GM ELECTRIC/GAS METER
- MAILBOX
- SIGN
- SATELLITE DISH
- CATCH BASIN
- HYDRANT
- WATER VALVE OR SHUTOFF
- GAS VALVE
- LIGHT POLE
- BUSH / SHRUB
- DECIDUOUS TREE
- CONIFEROUS TREE
- CURB
- FENCE
- OHW — OVERHEAD WIRES
- E — UNDERGROUND POWER
- W — WATER LINE
- G — GAS LINE
- C — TELEPHONE/COMMUNICATION
- SD — STORM DRAIN
- SS — SANITARY SEWER
- 40 — 1' CONTOUR
- N/F — NOW OR FORMERLY
- 000/000 — DEED BOOK / PAGE
- L/S — LANDSCAPED AREA
- CONC. — CONCRETE
- HT= — HEIGHT
- THRES — THRESHOLD
- A — POSSIBLE ENCROACHMENT
- 1 — SCHEDULE B EXCEPTION

## Zoning Information

NONE PROVIDED

## Possible Encroachments

- A — GAS LINE/ OVERHEAD UTILITIES TO ABUTTER
- B — PAVED WALK ONTO LOCUS
- C — FENCE ONTO ABUTTER

SCALE : 1" = 20'

0' 10' 20' 40'

## 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.

## 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.

## Plan References

1. "PLAN OF PROPERTY, TOPOGRAPHIC & UTILITIES PORTLAND HOUSING AUTHORITY PORTLAND, CUMBERLAND, MAINE H.I. & E.C. JORDAN SURVEYORS AUGUST 1969 H.A.A. PROJECT ME 3-5 PLAN NO. 42"

2. "RECORDING PLAT ON OXFORD STREET & BOYD STREET, PORTLAND, MAINE MAD FOR BAYSIDE ANCHOR APARTMENTS, LP" DATED OCTOBER 8, 2015 BY OWEN HASKELL, INC.

3. "BOUNDARY & TOPOGRAPHIC SURVEY AT BOYD STREET, PORTLAND MAINE MADE FOR MITCHELL & ASSOCIATES" DATED DECEMBER 10, 2014 BY OWEN HASKELL, INC.

4. CITY OF PORTLAND ENGINEERING PLANS FOR BOYD, OXFORD AND MAYO STREET.

5. "BOUNDARY SURVEY OF LAND AT 8-10 MAYO STREET, PORTLAND, MAINE AND 12 MAYO STREET, PORTLAND, MAINE" DATED 03-03-20 BY LIVINGSTON-HUGHES.

## General Notes

1. OWNER OF RECORD: PORTLAND HOUSING AUTHORITY
   14 BAXTER BOULEVARD, PORTLAND, MAINE
   CUMBERLAND COUNTY REGISTRY OF DEEDS BOOK 3129 PAGE 374
   TAX MAP 22 BLOCK H LOT 1

2. BEARINGS ARE BASED ON MAINE STATE PLANE COORDINATE SYSTEM MAINE WEST NAD83 CITY CONTROL POINTS T102-78-101 AND L751-8-3007 HELD.

3. BENCHMARK: MONUMENT T102-77-1 AT NORTHWEST CORNER OF ANDERSON STREET AND EAST LANCASTER STREET, ELEVATION 19.57 CITY DATUM.

4. THERE ARE 17 REGULAR SPACES AND 8 HANDICAP SPACES, FOR A TOTAL OF 25 PARKING SPACES.

5. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, BUILDING ADDITIONS, OR RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS WAS OBSERVED.

6. NO PROPOSED CHANGES IN STREET LINES IS KNOWN BY THIS SURVEYOR.

# ALTA / NSPS Land Title Survey

20 & 24 May Street and 9 & 25 Boyd Street
Portland, Cumberland County, Maine
Made For Record Owner
Portland Housing Authority
14 Baxter Boulevard, Portland, Maine

## Surveyor's Certification

TO: PORTLAND HOUSING DEVELOPMENT CORPORATION

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), 7(A), 7(B)(1), 7(C), 8, 9, 11A, 11B, 13, 16 AND 17 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON DECEMBER 19, 2023.

ELLEN C. BREWER
PROFESSIONAL LAND SURVEYOR NO. 2367

DATE OF PLAT OR MAP: DECEMBER 22, 2023
DATE OF LAST REVISION: JANUARY 23, 2024

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. | 2023-306 P |
| CHECKED BY: RRL | SCALE: 1" = 20' | DRWG. NO. | 1 |

MAYO STREET
PAVED – PUBLIC

PHASE 3
PR. 27 UNIT APARTMENT BUILDING
FOOTPRINT: 9,460 SF
PARCEL AREA: 0.42 AC

OXFORD STREET
PAVED – PUBLIC

TM 22-2-23
N/F
MAYO STREET
APARTMENTS
30646/220

TM 22-2-28

TM 22-2-26

TM 22-2-25

PUBLIC ACCESS EASEMENT FOR MID-BLOCK CROSSING AND PUBLICLY ACESSIBLE OPEN SPACE

TM 22-2-24
N/F
MARKOS S. MILLER &
HEATHER L. NICHOLS
30970/264

LOCUST STREET

EX. OHW TO BE RELOCATED, CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES & ABUTTER

B-1

B-2B

PHASE 1 – PREVIOUSLY PERMITTED
PR. 55 UNIT APARTMENT BUILDING
FOOTPRINT: 11,120 SF
PARCEL AREA: 0.56 AC

PHASE 2
PR. 92 UNIT APARTMENT BUILDING
FOOTPRINT: 12,050 SF
PARCEL AREA: 0.55 AC

MEP

CUMBERLAND AVENUE
PAVED – PUBLIC

BOYD STREET
PAVED – PUBLIC

SEE SHEETS C-11 AND C-12 FOR FURTHER SITE INFORMATION FOR PHASES 2 & 3

10' 0 10' 20
SCALE: 1"=20'

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| CSS | MKT | 3/28/2025 |
| MAJOR SITE PLAN SUBMISSION | MKT | 4/2/2025 |
| COMMENT RESPONSE | PFH | 9/14/2025 |

DRAWING NAME: **OVERALL SITE PLAN**

PROJECT NAME: **COMB BLOCK PHASES 2 & 3**

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101


ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655



THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR UNAUTHORIZED, ARE AT USE SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.


FILE: 1215_CIVIL_PH2-3
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-10

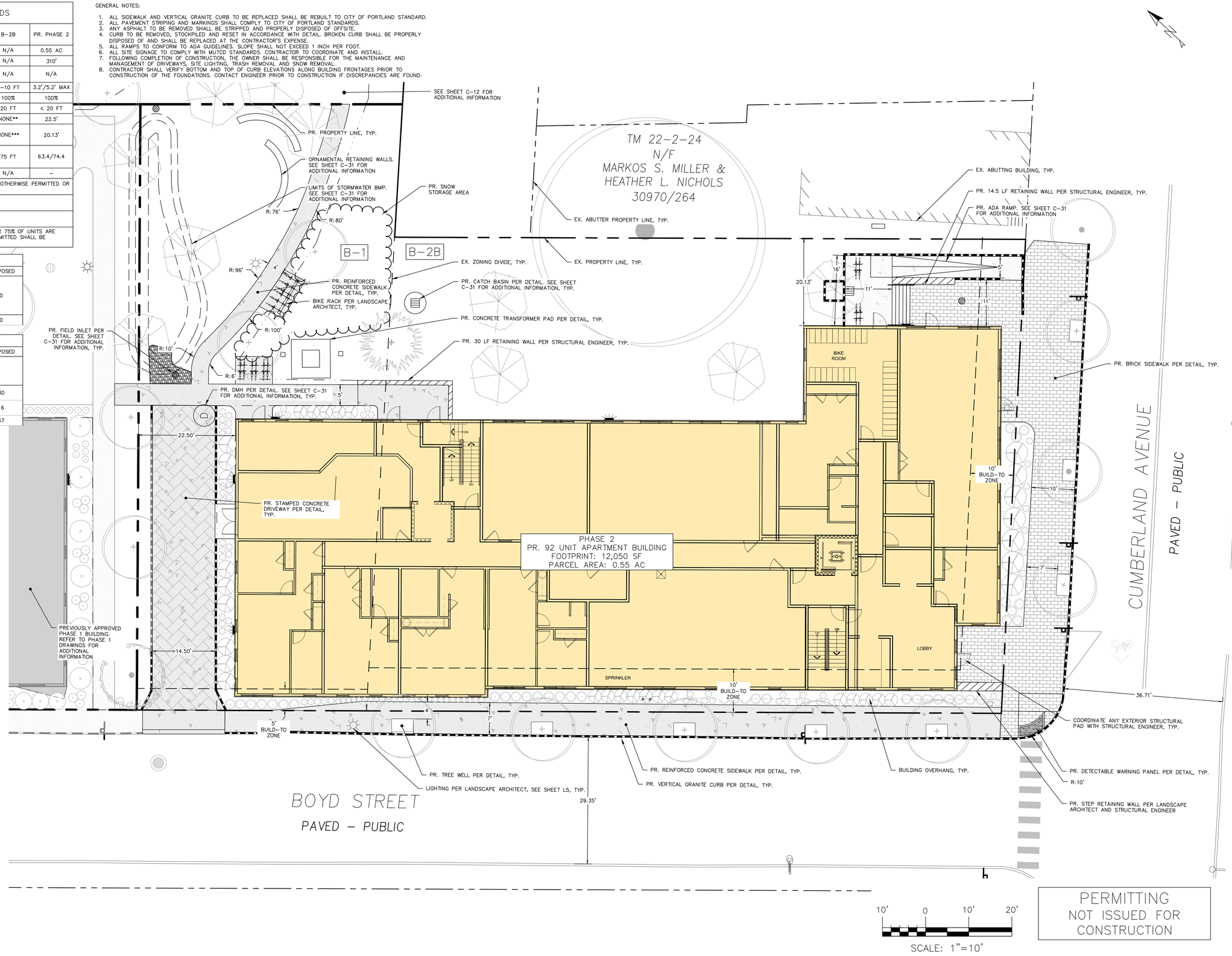
| SPACE AND BULK STANDARDS | | | |
|---|---|---|---|
| RESIDENTIAL ZONING DISTRICT | B-1 | B-2B | PR. PHASE 2 |
| LOT AREA (MIN.) | N/A | N/A | 0.55 AC |
| STREET FRONTAGE (MIN.) | 20 FT | N/A | 310' |
| GROSS FLOOR AREA* (MAX.) | 5,000 SF | N/A | N/A |
| BUILD-TO ZONE | 0-5 FT | 0-10 FT | 3.2'/5.2' MAX |
| BUILD-TO PERCENTAGE (MIN.) | 100% | 100% | 100% |
| BLANK WALL AREA (MAX.) | 20 FT | 20 FT | < 20 FT |
| REAR SETBACK (MIN.) | NONE** | NONE** | 22.5' |
| SIDE SETBACK, INTERIOR (MIN.) | NONE*** | NONE*** | 20.13' |
| STRUCTURE HEIGHT (MAX.)***** | 55 FT | 75 FT | 63.4/74.4 |
| LANDSCAPED OPEN SPACE RATIO (MIN.) | N/A | N/A | - |
| *NONRESIDENTIAL USES ON THE GROUND FLOOR ONLY, UNLESS OTHERWISE PERMITTED OR RESTRICTED | | | |
| **EXCEPT 10FT. IF ABUTTING A LOT IN A RESIDENTIAL ZONE | | | |
| ***EXCEPT 5FT. IF ABUTTING A LOT IN A RESIDENTIAL ZONE | | | |
| ****ELIGIBLE PROJECTS OVER TEN UNITS IN SIZE IN WHICH OVER 75% OF UNITS ARE LOW-INCOME OR WORKFORCE UNITS, MAXIMUM HEIGHTS AS PERMITTED SHALL BE INCREASED BY 10 FEET. | | | |

| PARKING SUMMARY | | |
|---|---|---|
| | MAX | PROPOSED |
| RESIDENTIAL | 2 SPACES PER DWELLING UNIT (92 UNITS) = 184 PARKING SPACES | 0 |
| TOTAL SPACES | 184 SPACES | 0 |

| BICYCLE PARKING SUMMARY | | |
|---|---|---|
| | MIN | PROPOSED |
| RESIDENTIAL | 1 SPACES PER 2 DWELLING UNITS (92 UNITS) = 46 SPACES | |
| INTERIOR | | 30 |
| EXTERIOR | | 16 |
| TOTAL SPACES | 46 SPACES | 47 |

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.




10' 0 10' 20'

SCALE: 1"=10'

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT | 4/7/2025 |
| COMMENT RESPONSE | PFH | 5/14/2025 |

DRAWING NAME: SITE PLAN - PHASE 2

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

FILE: 1215_CIVIL_PH2-3
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-11

GENERAL NOTES:

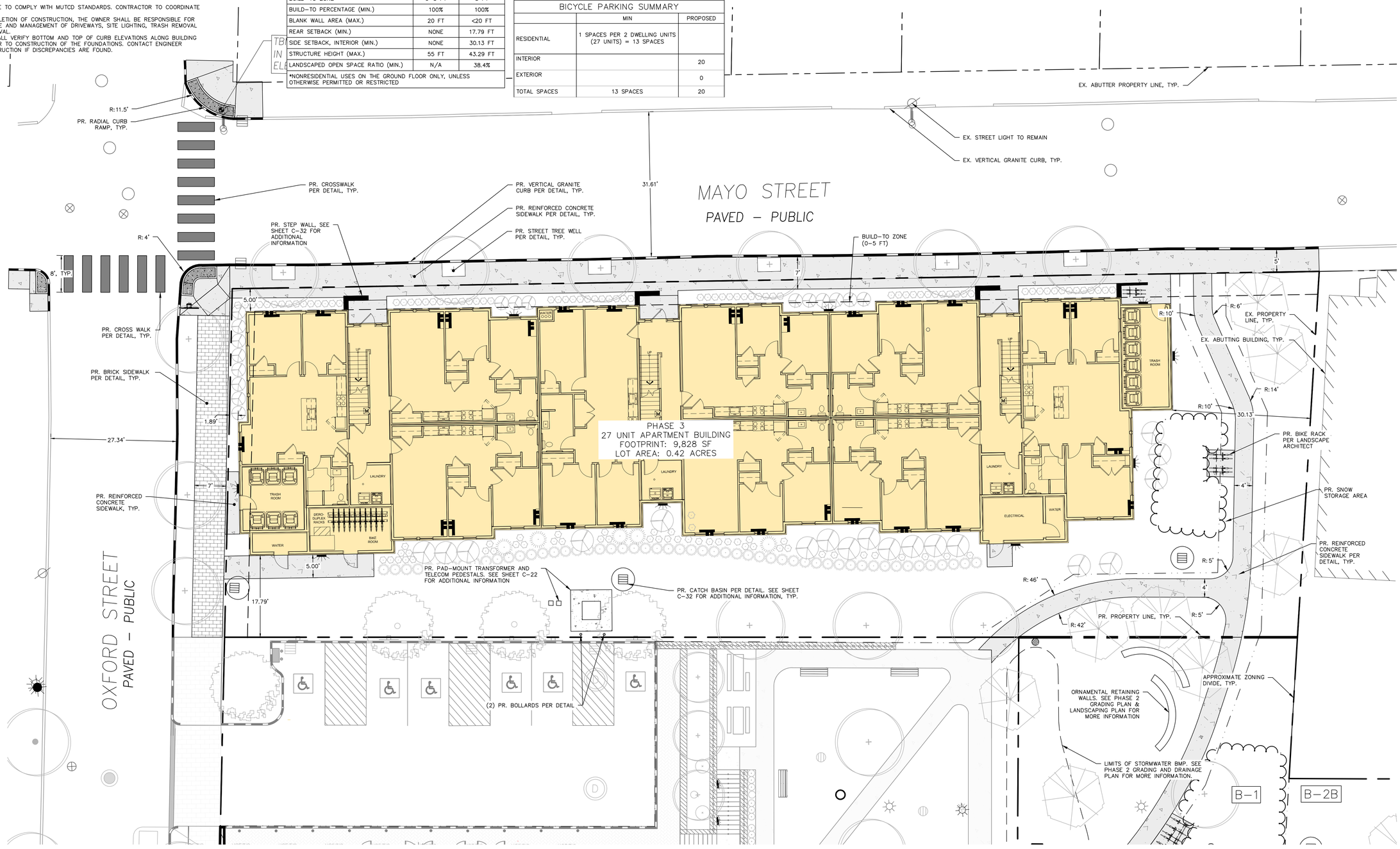
1. ALL SIDEWALK AND VERTICAL GRANITE CURB TO BE REPLACED SHALL BE REBUILT TO CITY OF PORTLAND STANDARD.
2. ALL PAVEMENT STRIPING AND MARKINGS SHALL COMPLY TO CITY OF PORTLAND STANDARDS.
3. ANY ASPHALT TO BE REMOVED SHALL BE STRIPPED AND PROPERLY DISPOSED OF OFFSITE.
4. CURB TO BE REMOVED, STOCKPILED 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.

| SPACE AND BULK STANDARDS | | |
|---|---|---|
| RESIDENTIAL ZONING DISTRICT | B-1 | PROPOSED BUILDING |
| LOT AREA (MIN.) | N/A | 0.42 AC |
| STREET FRONTAGE (MIN.) | 20 FT | 312.99 FT |
| GROSS FLOOR AREA* (MAX.) | 5,000 SF | N/A |
| BUILD-TO ZONE | 0-5 FT | 5 FT |
| BUILD-TO PERCENTAGE (MIN.) | 100% | 100% |
| BLANK WALL AREA (MAX.) | 20 FT | <20 FT |
| REAR SETBACK (MIN.) | NONE | 17.79 FT |
| SIDE SETBACK, INTERIOR (MIN.) | NONE | 30.13 FT |
| STRUCTURE HEIGHT (MAX.) | 55 FT | 43.29 FT |
| LANDSCAPED OPEN SPACE RATIO (MIN.) | N/A | 38.4% |

*NONRESIDENTIAL USES ON THE GROUND FLOOR ONLY, UNLESS OTHERWISE PERMITTED OR RESTRICTED

| PARKING SUMMARY | | |
|---|---|---|
| | MAX | PROPOSED |
| RESIDENTIAL | 2 SPACES PER DWELLING UNIT (27 UNITS) = 27 PARKING SPACES | 0 |
| TOTAL SPACES | 27 SPACES | 0 |

| BICYCLE PARKING SUMMARY | | |
|---|---|---|
| | MIN | PROPOSED |
| RESIDENTIAL | 1 SPACES PER 2 DWELLING UNITS (27 UNITS) = 13 SPACES | |
| INTERIOR | | 20 |
| EXTERIOR | | 0 |
| TOTAL SPACES | 13 SPACES | 20 |




PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT | 4/17/2025 |
| COMMENT RESPONSE | PFH | 5/14/2025 |

DRAWING NAME: SITE PLAN – PHASE 3

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS MADE TO THIS PLAN WITHOUT WRITTEN AUTHORIZED FROM ACORN ENGINEERING, INC. SHALL BE DONE AT SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

| | |
|---|---|
| FILE | 1215_CIVIL_PH2-3 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
5/14/25

DRAWING NO.
C-12

MAYO STREET APARTMENTS
30646/220

TM 22-2-25

TM 22-2-24
N/F
MARKOS S. MILLER &
HEATHER L. NICHOLS
30970/264

ELECTRICAL
WATER
MEP
SPRINKLER
LOBBY

6" OVERFLOW DRAIN
RIM: 38.50'

TOP OF WATER QUALITY VOLUME=38.50'

UDSF 1
FILTER ELEV: 37.00'

6" OVERFLOW DRAIN
RIM: 38.50'

RIPRAP, TYP.

38.92'

38.95'

39.25'

6" SD
L: 16.3'
S: 0.005 FT/FT

DMH
RIM: 39.10'
(3) INV IN: 34.75'
INV OUT: 34.65'

ADS SC-800 SUBSURFACE DETENTION SYSTEM

BC: 39.43'
TC: 40.01'

INSPECTION PORT, TYP. OF 4

12" SD
L: 6.3'
S: 0.005 FT/FT

OUTLET CONTROL STRUCTURE, SEE DETAIL FOR MORE INFORMATION
INV IN: 33.97'
INV OUT: 33.97'

1.5% CROSS SLOPE PEDESTRIAN PATH THROUGH DRIVEWAY APRON

40.61'

TIP DOWN: 39.76'

TOP OF LIP: 39.68'
BOTTOM OF LIP: 39.60'

12" SD
L: 15'
S: 0.005 FT/FT

CONNECT TO EX. DOGHOUSE MH
UTILIZE EX. INV IN: 33.88'
EX. INV IN: 33.88'
EX. INV OUT: 33.78'

TOP OF LIP: 40.53'
BOTTOM OF LIP: 40.45'

EX. DMH
RIM: 41.42'
EX. 12" PVC INV. IN: 36.42'
EX. 12" PVC INV. IN: 36.22'
PR. 4" PVC INV. IN: 34.92'
EX. 12" PVC INV. OUT: 34.82'

2.5H:1V SLOPE, TYP.

CLEANOUT PER DETAIL
INV: 39.14'

CB 4
RIM: 45.75'
12" INV IN: 41.75'
12" INV OUT: 41.65'

12" SD
L: 92'
S: 0.12 FT/FT

S42°27'31"E
146.24'

5'x5' STORMTREE BMP WITH ATTACHED CATCH BASIN
CB INV: 61.80'
6" INV IN: 58.45'

OUTLET PIPE
INV OUT: 52.80'

TW: 49.25'
BW: 39.25'

12" SD
L: 55'
S: 0.13 FT/FT

39.26'

FFE: 39.30'

ROOF DRAIN OUTLET

39.45'

TIP DOWN: 39.59'

FFE: 39.76'

39.72'

TIP DOWN: 39.67'

40.50'

BC: 39.82'
TC: 40.40'

SUBSURFACE DETENTION FOOTPRINT

4" FD INV OUT: 34.96'
INSTALL BACKFLOW PREVENTER AT JUNCTION

TIP DOWN: 41.45'

TOP OF LIP: 41.37'
BOTTOM OF LIP: 41.29'

MAINTAIN EX. CB
RIM: 43.02'

BC: 45.68'
TC: 46.26'

TW: 50.00'
BW: 39.30'

4" FD PER DETAIL
L: 268 FT
S: 0.0025 FT/FT

4" FD TO STEP DOWN WITH FOUNDATION, TYP.

4" FD PER DETAIL
L: 268 FT
S: 0.0025 FT/FT

BC: 49.56'
TC: 50.14'

BC: 52.63'
TC: 53.21'

BC: 55.64'
TC: 56.22'

BC: 59.06'
TC: 59.64'

TW: 65.00'
BW: 59.80'

TW: 65.00'
BW: 61.00'

PROVIDE 4" LIP AT ALL THRESHOLDS PER DETAIL

FFE: 62.00'

61.95'

61.80'

SD
L: 28'
S: 0.06 FT/FT

SAN. ROOM

FFE: 62.00'

STAIRS WITH HANDRAIL
(5) 6.5" RISERS
TS: 64.68'
BS: 61.97'

FFE: 64.75'

6" STEP UP TO FLOOR ELEVATION 64.75'

BOTTOM OF RAMP: 62.15'

TW: 64.70'
BW: 63.31'

TW: 64.70'
BW: 62.70'

FIELD DRAIN
RIM: 64.05'
6" INV OUT: 59.95'

TOP OF RAMP: 64.15'

TIPDOWN: 64.15'

TIP DOWN: 64.60'

4" FD (HIGH SPOT)
INV: 64.00'

64.65'

TIPDOWN: 60.37'

TIPDOWN: 61.29'

TIPDOWN:
61.52'

MATCH EX:
BC: 63.93'
TC: 64.48'

BC: 63.75'
TC: 64.33'

BC: 63.09'
TC: 63.67'

63.82'

63.50'

BC: 62.56'
TC: 63.14'

63.30'

62.75'

BC: 62.01'
TC: 62.59'

MAINTAIN EX. CB
RIM: 61.67'

BC: 61.60'
TC: 62.18'

TBM: BONNET BOLT HYDRANT
ELEVATION:
64.72'

200.35'
N42°25'47"W

150.00'
S50°17'19"W

BOYD STREET
PAVED – PUBLIC

CUMBERLAND AVENUE
PAVED – PUBLIC

12"PVC
18"PVC
OHW
SS
W
G

10' 0 10' 20
SCALE: 1"=20'

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT | 4/7/2025 |
| COMMENT RESPONSE | PFH | 5/14/2025 |

DRAWING NAME: GRADING & DRAINAGE PLAN – PHASE 2

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR UNAUTHORIZED, SHALL BE AT USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2855

FILE1215_CIVIL_PH2-3
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-31

MAYO STREET
PAVED – PUBLIC

OXFORD STREET
PAVED – PUBLIC

MATCH EX.
TC/BC APPROX
BC: 24.65'
TC: 25.23'

MATCH EX.
TC/BC APPROX
BC: 24.65'
TC: 25.52'

FLUSH CURBING ALONG DETECTABLE WARNING PANEL, MATCH EXISTING ROADWAY GRADES TYP.

TIPDOWN: 24.61'
TIPDOWN: 24.77'
TIPDOWN: 24.78'
TIPDOWN: 23.48'
TIPDOWN: 24.00'
TIPDOWN: 24.52'

MATCH EX.
TC/BC APPROX
BC: 23.50'
TC: 24.08'

MAINTAIN EX. CB
RIM: 24.95'
BC: 24.83'
TC: 25.41'

MATCH EX.
TC/BC APPROX
BC: 23.98'
TC: 24.56'

BC: 24.46'
TC: 25.04'
BC: 24.38'
TC: 24.96'
BC: 24.24'
TC: 24.82'
BC: 24.12'
TC: 24.70'

CB-3
RIM: 24.70'
12" INV OUT: 20.64'

BC: 23.99'
TC: 24.57'

EX. BC: 23.92'
PR. TC: 24.50'

STEP WALL, TYP.
TREE BOX
PR. VERTICAL GRANITE CURB, 7" REVEAL, TYP.
GRADE BREAK LINE, TYP.

BC: 29.42'
TC: 30.00'
BC: 34.42'
TC: 35.00'
BC: 37.42'
TC: 38.00'
BC: 41.42'
TC: 42.00'
BC: 27.65'
TC: 44.49'

MATCH EX CURB AT PL
BC: 48.58'
MATCH EX. TC.

BUILDING A
FIRST FLOOR
FFE: 28.55'

BUILDING B
FIRST FLOOR
FFE: 34.37'

BUILDING C
FIRST FLOOR
FFE: 41.54'

BUILDING C
TRASH ROOM
FFE: 44.71'

TRASH ROOM
FFE: 25.00'

WATER ROOM
FFE: 25.00'

BIKE ROOM
FFE: 25.00'

ELECTRICAL/WATER
ROOM FFE: 39.10'

6" SDR-35 PVC
L: 7.7'
S: 0.005 FT/FT

CB 2
RIM: 25.50'
(2) 12"INV IN: 20.24'
6" INV IN: 20.24'
12" INV OUT: 20.14'

12" SDR-35 PVC
L: 117'
S: 0.135 FT/FT

SD
L: 79.2'
S: 0.005 FT/FT

COORDINATE ROOF DRAIN CONNECTION WITH MEP

CB 1
RIM: 41.00'
12" INV OUT: 36.00'

EX. 12" SDR-35 PVC INV AT PL: 20.08

ADS SC-800 SUBSURFACE DETENTION SYSTEM INSTALLED AS PART OF PHASE 1

UDSF INSTALLED AS PART OF PHASE 2, SEE SHEET C-31 FOR ADDITIONAL INFORMATION

PUBLIC ACCESS EASEMENT FOR M
ACCESSIBLE OPEN SPACE

TM 22-2-23
N/F
MAYO STREET
APARTMENTS
30646/220

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

10' 0 10' 20
SCALE: 1"=10'

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT | 4/7/2025 |
| COMMENT RESPONSE | PFH | 5/14/2025 |

DRAWING NAME: GRADING PLAN – PHASE 3

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

| | |
|---|---|
| FILE | 1215_CIVIL_PH2-3 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-32

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 AND FAIRPOINT 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.

UDSF INSTALLED AS PART OF PHASE 2, SEE SHEET C-31 FOR ADDITIONAL INFORMATION

TM 22-2-24
N/F
MARKOS S. MILLER &
HEATHER L. NICHOLS
30970/264

TELECOM PEDESTALS

PAD MOUNT TRANSFORMER ON CONCRETE PAD PER DETAIL

POTENTIAL ELECTRIC METER BANK LOCATION

EX. OHW TO BE RELOCATED, CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES & ABUTTER

BIKE ROOM

MEP

LOBBY

EX. CATCH BASIN TO REMAIN, INSTALL INLET PROTECTION PER DETAIL, TYP.

STORMWATER BMP, SEE SHEET C-30 FOR ADDITIONAL INFORMATION

6" SANITARY SEWER OUTLET INV: 35.51'

4" & 6" GATE VALVES

SPRINKLER

EX. FIRE HYDRANT TO REMAIN, TYP. (OF 2)

EX. WATER VALVE TO REMAIN, TYP.

EX. GAS MAIN TO REMAIN, TYP.

EX. CATCH BASIN TO REMAIN, INSTALL INLET PROTECTION PER DETAIL, TYP.

EX. STORM WATER MAIN TO REMAIN, TYP.

BRACE & PROTECT EXISTING GAS MAIN

6"x18" TEE INTO EXISTING 18" PVC SEWER MAIN INV: 35.26'

4'x6' ELECTRICAL PULL BOX PER DETAIL

PHASE 1 DMH

UNDERGROUND ELECTRIC & TELECOM DUCT BANK PER DETAIL

BACKFLOW PREVENTER AT BUILDING OUTLET

6" SDR 35 PVC
L: 25.2'
S: 0.01 FT/FT

RISE ON EXISTING UTILITY POLE FOR 3-PHASE POWER & TELECOMMUNICATIONS

EX. CATCH BASIN TO REMAIN, INSTALL INLET PROTECTION PER DETAIL, TYP.

POTENTIAL GAS METER LOCATION WITH BOLLARDS

GAS SERVICE

EX. GAS MAIN TO REMAIN, TYP.

UTILITY SAWCUT PER DETAIL, TYP.

EX. 18" PVC SEWER MAIN TO REMAIN, TYP.

EX. WATER MAIN TO REMAIN, TYP.

WATER SERVICES TO PASS OVER SS MAIN. SS INV: 42.70' TOP OF WATER INV: 45.20'

4" DOMESTIC WATER SERVICE & 6" FIRE SUPPRESSION WATER SERVICE

EX. UTILITY POLE TO REMAIN, TYP.

EX. OVERHEAD WIRE TO REMAIN, TYP.

6"x6" TAPPING SLEEVE AND 6" GATE VALVE

6"x4" TAPPING SLEEVE AND 4" GATE VALVE

EX. 18" PVC SEWER MAIN TO REMAIN, TYP.

BOYD STREET
PAVED – PUBLIC

CUMBERLAND AVENUE
PAVED – PUBLIC

10' 0 10' 20'
SCALE: 1"=10'

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT | 4/3/2025 |
| COMMENT RESPONSE | PFH | 5/14/2025 |

DRAWING NAME: UTILITY PLAN – PHASE 2

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

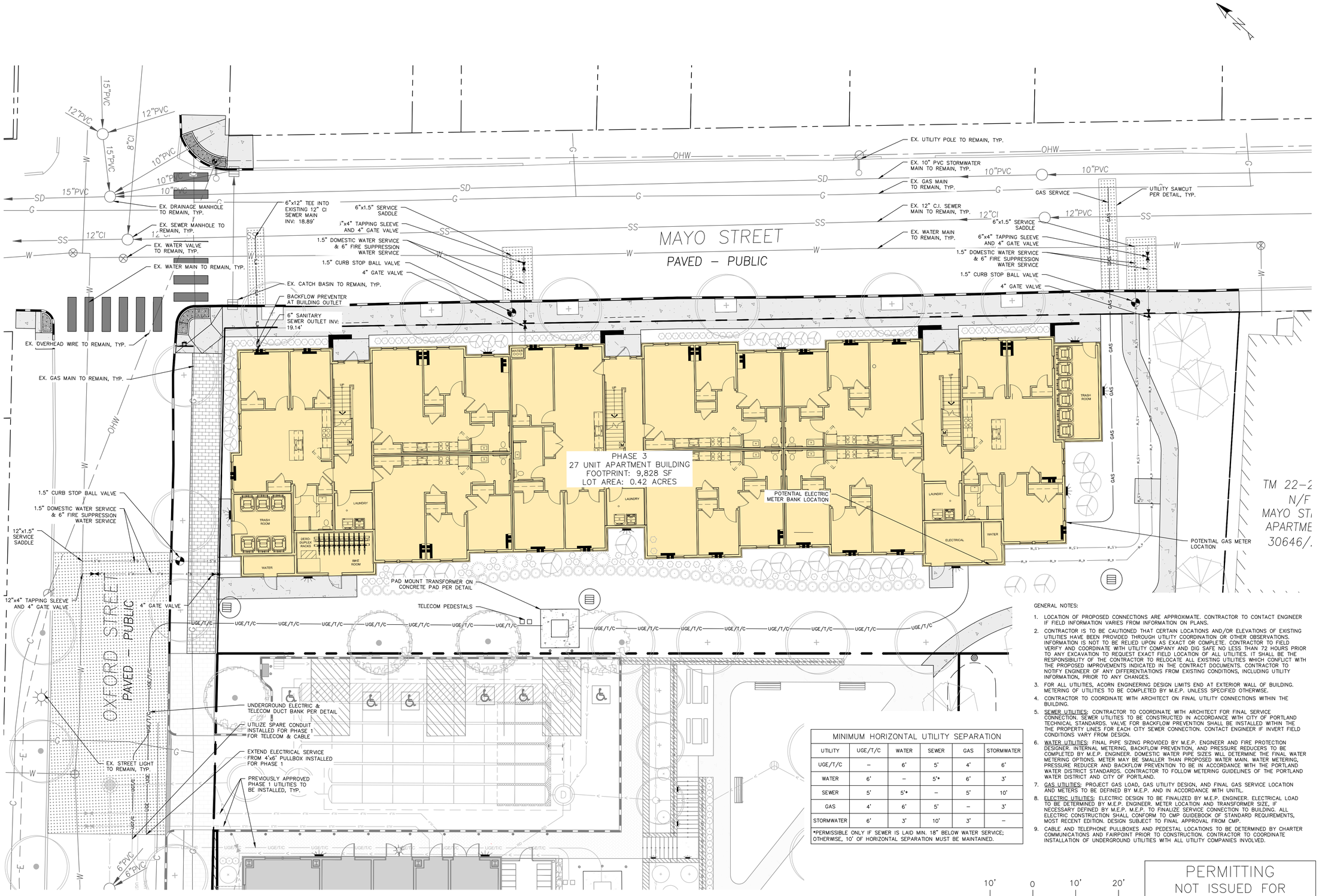
ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2605

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| | |
|---|---|
| FILE: | 1215_CIVIL_PH2-3 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-21




| 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.

GENERAL NOTES:

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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 ACCORD 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 AND FAIRPOINT PRIOR TO CONSTRUCTION. CONTRACTOR TO COORDINATE INSTALLATION OF UNDERGROUND UTILITIES WITH ALL UTILITY COMPANIES INVOLVED.

10' 0 10' 20'

SCALE: 1"=10'

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT 4/17/2025 |
| COMMENT RESPONSE | DPH 5/14/2025 |

DRAWING NAME: UTILITY PLAN – PHASE 3

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

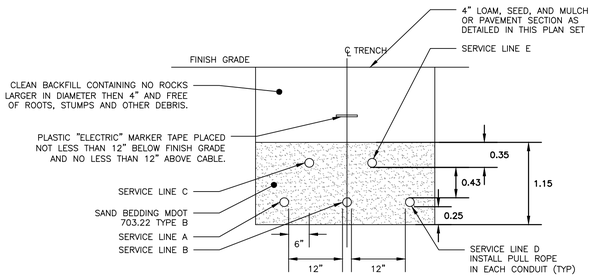
ACORN ENGINEERING, INC.
ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

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FILE: 1215_CIVIL_PH2-3
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-22



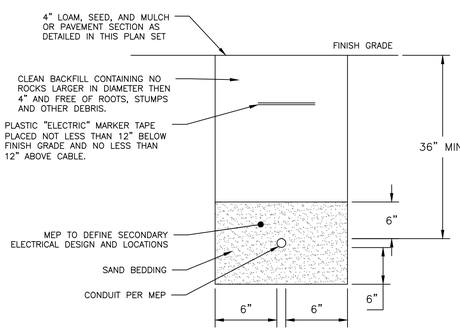

| CONDUIT TYPE | | | | |
|---|---|---|---|---|
| SERVICE | CONDUIT SIZE | GRASS AND PAVED AREAS | UTILITY | REMARKS |
| A | 5" | SCHEDULE 40 PVC ELECTRICAL GRADE | PRIMARY POWER | SEE NOTE 1 |
| B | 5" | SCHEDULE 40 PVC ELECTRICAL GRADE | PRIMARY POWER | SEE NOTE 1 |
| C | 4" | SCHEDULE 40 PVC | COMMUNICATION | – |
| D | 5" | SCHEDULE 40 PVC ELECTRICAL GRADE | SPARE | SEE NOTE 1 |
| E | 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.

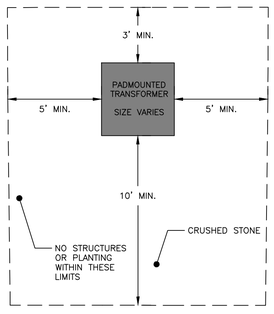
## UTILITY TRENCH – PRIMARY AND SECONDARY POWER, TELEPHONE, AND CABLE

NOT TO SCALE




## SECONDARY ELECTRICAL TRENCH

NOT TO SCALE

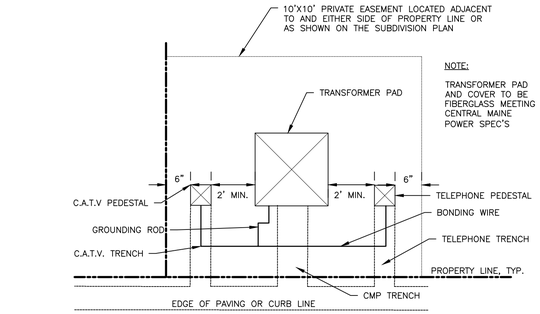



NOTES:

1. WHERE DANGER OF PLOW 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

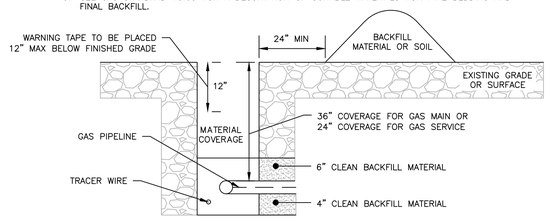



## TYPICAL TRANSFORMER DETAIL

NOT TO SCALE

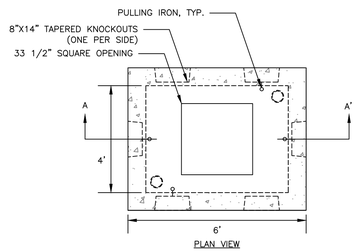
NOTES:

1. INSTALL MAINS WITH A MINIMUM OF 36" OF COVER AND SERVICES WITH A MINIMUM OF 24" OF COVER. EXCEPTIONS MAY BE MADE WITHIN SLATE AND FEDERAL CODES WITH THE PRIOR APPROVAL OF THE OPERATIONS CENTER MANAGER. INSTALL PLASTIC PIPE WITH SLACK SO EXTERNAL LOADING OR THERMAL CONTRACTION WILL NOT PLACE UNNECESSARY STRESS ON THE PIPE OR JOINTS. IN CASES WHERE A STOPPER FITTING OF OTHER NEW MATERIAL IS ADDED TO AN OLDER MAIN SUCH THAT THE MAIN HAS LESS THAN 24" OF COVE, THE CONTRACTOR SHOULD PROVIDE PERMANENT PROTECTION SUCH AS CONCRETE. WHENEVER A MAIN WILL BE INSTALLED WITH LESS THAN 24" OF COVER, NOTIFY THE OPERATIONS CENTER MANAGER OR THE DESIGNEE SO THEY CAN REQUEST APPROVAL FROM THE DEPARTMENT OF PUBLIC UTILITIES.
2. PROCEDURE – SEE FIGURE BELOW
   - 2.1. REMOVE ALL EXCESS WATER FROM THE TRENCH WITH PUMPS OR EQUIVALENT
   - 2.2. PLACE A LAYER OF SAND 4" DEEP IN TRENCH BOTTOM BEFORE LAYING THE PIPE IN THE TRENCH. THE OPERATIONS CENTER MANAGER OR COMPANY FIELD REPRESENTATIVE MAY ALLOW USE OF CLEAN FILL MATERIAL INSTEAD OF SAND PROVIDED IT IS CLEAN AND FREE OF ANY OBJECTS THAT MAY IMPINGE ON THE PIPE.
   - 2.3. FOR PLASTIC PIPE, INSTALL NUMBER 12 AWG SOLID COPPER WIRE (TRACER WIRE) WITH YELLOW INSULATION JACKET ALONG THE LENGTH OF THE SERVICE. THIS WIRE IS USED TO LOCATE THE PIPE. DO NOT PHYSICALLY ATTACH THE WIRE OR ALLOW THE WIRE TO TOUCH THE PLASTIC PIPE. KEEP THE TRACER WIRE AT LEAST 4" AWAY FROM THE PLASTIC PIPE. IF THE INSTALLATION IS TRENCHLESS, THE TRACER WIRE MAY BE LESS THEN 4" AWAY FROM THE PLASTIC PIPE.
   - 2.4. PLACE A MINIMUM OF 6" OF SAND OVER THE PIPE. THE OPERATIONS CENTER MANAGER OR COMPANY FIELD REPRESENTATIVE MAY ALLOW USE OF CLEAN FILL MATERIAL INSTEAD OF SAND PROVIDED IT IS CLEAN AND FREE OF ANY OBJECTS THAT MAY IMPINGE ON THE PIPE.
   - 2.5. PLACE WARNING TAPE IN THE TRENCH NOT MORE THAN 12" BELOW FINISHED GRADE. THE STANDARD WARNING TAPE IS YELLOW, NON-DETECTABLE TAPE, 6" WIDE.
   - 2.6. FILL THE REST OF THE TRENCH WITH CLEAN FILL MATERIAL, USING THE SPOIL WHERE SUITABLE AND ACCEPTABLE. IF THE ORIGINAL SPOIL MATERIAL IS NOT SUITABLE FOR USE AS A SUB-GRADE MATERIAL WHEN RESTORING ROAD SURFACES, USE MATERIAL REQUIRED BY STATE OR LOCAL AGENCIES. REMOVE ALL EXCESS SPOIL IN THE ACCEPTED MANNER.
   - 2.7. PROPERLY COMPACT THE TRENCH TO INSURE THE TRENCH WILL NOT SETTLE.
3. SEE GAS STANDARD 10.03 FOR A DESCRIPTION OF SUITABLE MATERIALS FOR PIPE BEDDING AND FINAL BACKFILL.




## NATURAL GAS MAIN/SERVICE TRENCH DETAIL

NOT TO SCALE

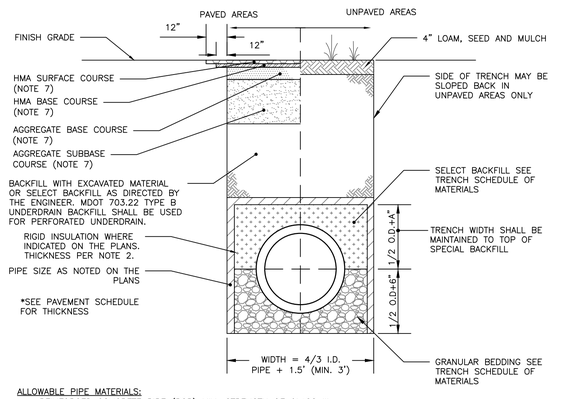



NOTES:

1. JUNCTION BOX TO COMPLY WITH NATIONAL ELECTRICAL SAFETY CODE SECTION 323A.
2. BOX TO BE DESIGNED TO WITHSTAND H20 WHEEL LOADING WITH 6" OVERBURDEN.
3. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
4. BOX TO BE INSTALLED WITH CMP'S TYPE 'B' CASTING (CMP S/C62-1780, 62-1785, & 62-1880).
5. JUNCTION BOX AND SLAB TO BE SET ON MIN 6" COMPACTED 3/4" CRUSHED STONE.

## CMP JUNCTION BOX (PULL BOX)

NOT TO SCALE




ALLOWABLE PIPE MATERIALS:

- REINFORCED CONCRETE PIPE (RCP) MIN. STRENGTH OF CLASS III
- PVC RING TYPE SEWER (SDR 35) OR EQUIVALENT, MIN PS-46 RATING
- PVC RING TYPE SEWER PIPE MEETING ASTM F 789
- DUCTILE IRON PIPE (DIP)
- ADS N-12 HP TRIPLE-WALL MIN PS-46 RATING
- ADS SANITITE HP MIN. PS-46

## STORM DRAIN AND SEWER TYPICAL TRENCH SECTION PROPERTY

NOT TO SCALE

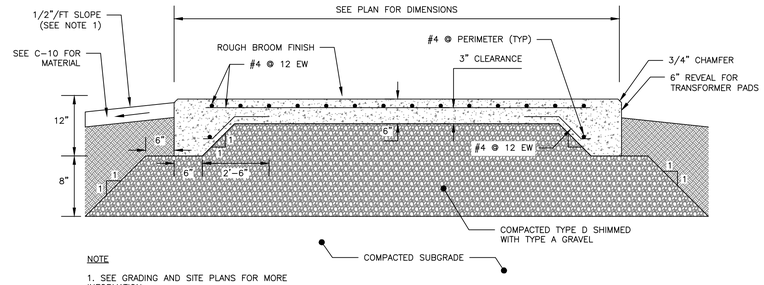
| SCHEDULE OF MATERIALS | | |
|---|---|---|
| TYPE OF PIPE | GRANULAR BEDDING | SELECT BACKFILL |
| CMP DUCTILE IRON RCP | MDOT 703.22 TYPE B UD BACKFILL | MDOT 703.22 TYPE B UD BACKFILL |
| PVC/HDPE | MDOT 703.22 TYPE C 3/4" CRUSHED STONE | MDOT 703.22 TYPE B UD BACKFILL |
| CMP | MDOT 703.22 TYPE C 3/4" CRUSHED STONE | MDOT 703.22 TYPE C 3/4" CRUSHED STONE |

NOTES:

1. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. STORM DRAIN COVER BETWEEN 2' AND 3' SHALL INCLUDE 4" OF RIGID INSULATION. COVER BETWEEN 3' AND 4' SHALL INCLUDE 2' RIGID INSULATION. OTHER UTILITIES: ADD 2" OF RIGID INSULATION FOR EACH FOOT ABOVE MINIMUM DEPTH.
3. INSTALL WARNING TAPE DIRECTLY ABOVE UTILITIES AT THE TOP OF SUBGRADE.
4. MINIMUM COVER
   - 4.1. 2'-0" – STORM DRAIN
   - 4.2. 5'-0" – SEWER
5. NO TREES SHALL BE PLANTED WITHIN 5' OF A SEWER PIPE OR SERVICE
6. THIS DETAIL SHALL BE APPLIED ONLY TO DRAINAGE PIPE TRENCHES OUTSIDE OF THE CITY OF BIDDEFORD ROW.
7. THICKNESS AS NOTED BY SURFACE DETAILS
8. ALL PROPOSED TREES PLANTED WITHIN 10' OF A STORM OR SEWER PIPE SHALL BE PLANTED AT A DEPTH NO GREATER THAN 3' DEEP. PERMEABLE LANDSCAPE FABRIC SHALL CREATE A ROOT BARRIER AROUND THE PIPES. CONTRACTOR SHALL COORDINATE WITH THE LANDSCAPE DRAWINGS.

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.
5. CONCRETE TO BE 4,500 PSI REINFORCED PORTLAND CEMENT CONCRETE.




NOTE

1. SEE GRADING AND SITE PLANS FOR MORE INFORMATION

## SECTION

## TRANSFORMER PAD DETAIL

NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH 4/7/2025 |
| COMMENT RESPONSE | PFH 5/14/2025 |

DRAWING NAME: UTILITY DETAILS – 1

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

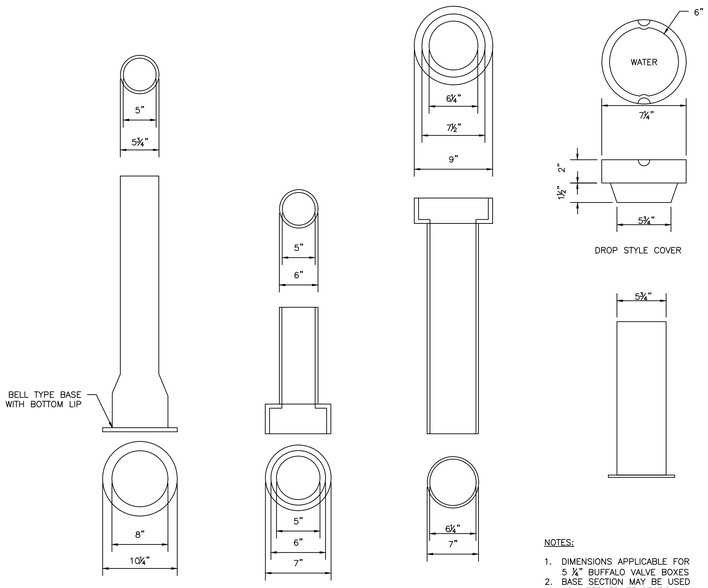
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70 FORE RIVER PARKWAY, SUITE 104
PO BOX 3339, PORTLAND, MAINE 04104
(207) 775-2655

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JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS




DRAWING NO.
C-42



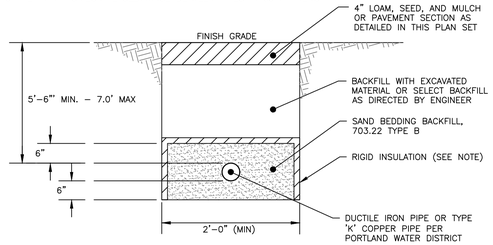

NOTES:

1. DIMENSIONS APPLICABLE FOR 5 ¼" BUFFALO VALVE BOXES
2. BASE SECTION MAY BE USED AS INTERMEDIATE SECTION

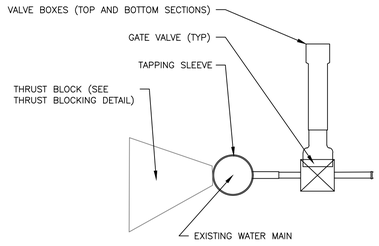
## VALVE BOX & COVER
NOT TO SCALE

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.

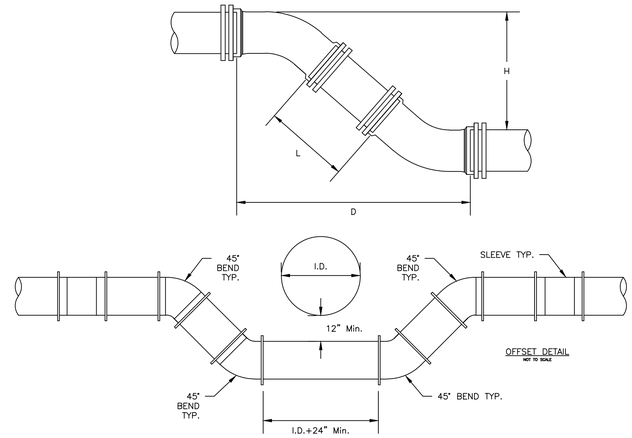



## WATER SERVICE TRENCH SECTION DETAIL
NOT TO SCALE




SIDE VIEW

## TAPPING SLEEVE AND VALVE
NOT TO SCALE

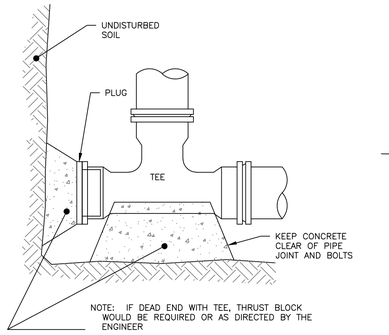



NOTE:

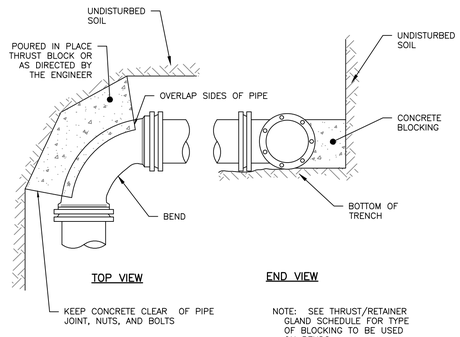
DIMENSIONS APPLICABLE FOR SIGMA COMPACT BENDS. FOR TYLER COMPACT BENDS, ADD 1/2" TO "D" DIMENSION AND SUBTRACT 1/2" FROM "L" DIMENSION. FOR OTHER FITTINGS REFER TO MANUFACTURER'S RECOMMENDATIONS.

## TYPICAL MAIN OFFSET
NOT TO SCALE

| | 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" |

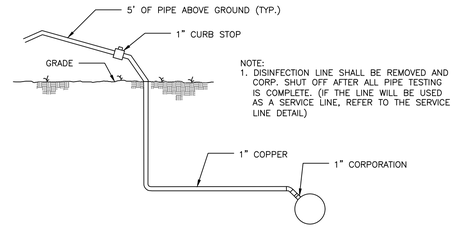



END SECTION




REGULAR BEND

## THRUST BLOCKING
NOT TO SCALE




## DISINFECTION LINE DETAIL
NOT TO SCALE

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|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH 4/7/2025 |
| COMMENT RESPONSE | PFH 5/14/2025 |

DRAWING NAME: UTILITY DETAILS – 2

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

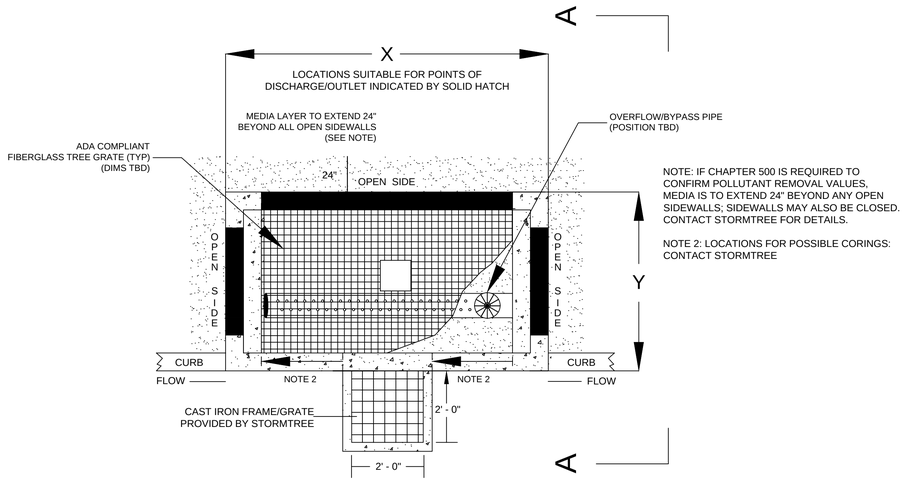
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ACORN ENGINEERING, INC.
PO BOX 327 FREEPORT, MAINE 04104
(207) 775-2655

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JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
5/14/25

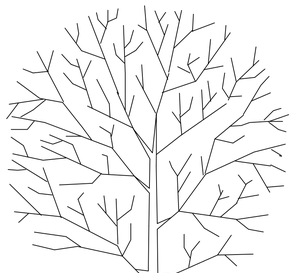
DRAWING NO.
C-43



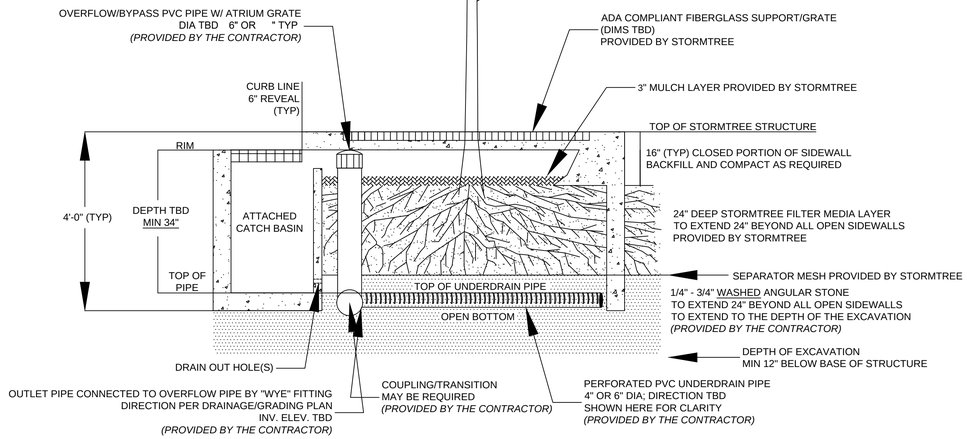

NOTE: IF CHAPTER 500 IS REQUIRED TO CONFIRM POLLUTANT REMOVAL VALUES, MEDIA IS TO EXTEND 24" BEYOND ANY OPEN SIDEWALLS; SIDEWALLS MAY ALSO BE CLOSED. CONTACT STORMTREE FOR DETAILS.

NOTE 2: LOCATIONS FOR POSSIBLE CORINGS: CONTACT STORMTREE

## PLAN VIEW
**NOT TO SCALE**



DECIDUOUS TREE PROVIDED BY OR APPROVED BY STORMTREE




## SECTION A-A
**NOT TO SCALE**

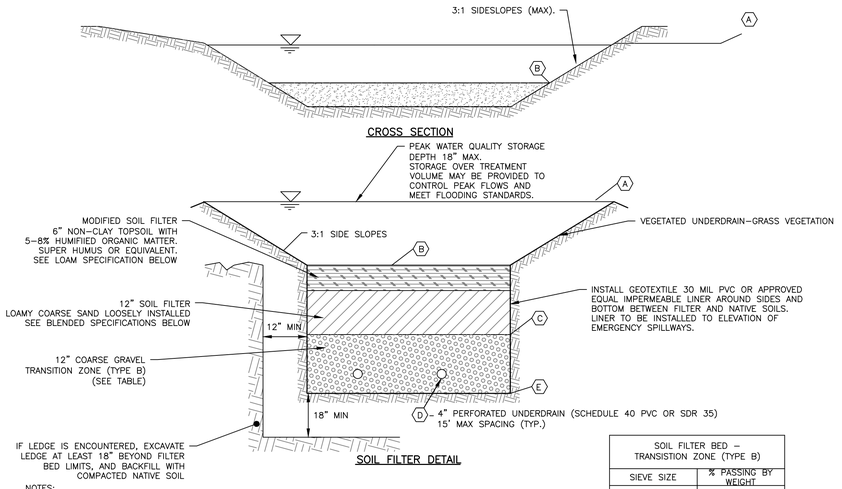
STORMTREE, CATCH BASIN SERIES DETAIL
NOT TO SCALE

CONSTRUCTION OBSERVATION:

CONSTRUCTION OBSERVATION SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY ACORN ENGINEERING. THE CONTRACTOR OR OWNERS REPRESENTATIVE SHALL NOTIFY ACORN ENGINEERING A MINIMUM 48 HOURS OR 2 BUSINESS DAYS WHICH EVER IS GREATER PRIOR TO ANY OF THE PHASES OF CONSTRUCTION LISTED BELOW SO THAT THE FOLLOWING SITE VISITS MAY BE SCHEDULED.

VEGETATED UNDERDRAINED SOIL FILTER & BIORETENTION CELLS:

1. ONE SITE VISIT AFTER PRELIMINARY GRADING OF THE SOIL FILTER/BIORETENTION CELL GRADES.
2. ONE SITE VISIT DURING THE INSTALLATION OF THE IMPERVIOUS LINER
3. ONE SITE VISIT AFTER THE UNDER DRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED.
4. ONE SITE VISIT DURING THE CONSTRUCTION OF THE SOIL FILTER LAYER.
5. ONE SITE VISIT DURING THE CONSTRUCTION OF THE TOPSOIL LAYER.
6. ONE SITE VISIT DURING OUTLET CONTROL STRUCTURE INSTALLATION.
7. ONE SITE VISIT AFTER SLOPES AND BANKS HAVE BEEN REVEGETATED AND STABILIZED.
8. ONE SITE VISIT DURING FLOODING OF THE FILTER OR BIORETENTION CELL, IF REQUIRED.




SOIL FILTER DETAIL

NOTES:

1. THE SIDESLOPES SHALL BE STABILIZED WITH A MIN. OF 4" LOAM, EROSION CONTROL BLANKETS SC150BN BY NORTH AMERICAN GREEN OR APPROVED EQUAL AND A CONSERVATION SEED MIX. THE BOTTOM OF THE VEGETATED UNDERDRAIN SHALL BE STABILIZED WITH EROSION CONTROL BLANKETS SC150BN BY NORTH AMERICAN GREEN OR APPROVED EQUAL AND A CONSERVATION SEED MIX
2. LIGHT COMPACTION SOIL FILTER AND PIPE BEDDING MATERIAL. (90 TO 92% STANDARD PROCTOR). TESTING SHALL BE PERFORMED BY A QUALIFIED MATERIAL TESTING FIRM.
3. THE SOIL FILTER MEDIA SHALL NOT BE CONSTRUCTED UNTIL THE AREA DRAINING TO THE BASIN HAS BEEN PERMANENTLY STABILIZED.
4. THE SEDIMENT FOREBAY SHALL BE CONSTRUCTED PRIOR TO CONSTRUCTION OF THE SOIL FILTER AND INSPECTED AND MAINTAINED DURING CONSTRUCTION. MAINTENANCE SHALL INCLUDE REMOVAL OF ANY ACCUMULATED SEDIMENT.
5. MINIMUM UNDERDRAIN SLOPE 0.0025 FT/FT TOWARDS THE OUTLET.
6. TESTING: SIEVE ANALYSIS INCLUDING HYDROMETER TESTING FOR CLAY CONTENT FOR EACH LAYER SHALL BE PERFORMED BY A QUALIFIED SOIL TESTING LABORATORY AND SUBMITTED TO THE PROJECT ENGINEER FOR APPROVAL 2 WEEKS PRIOR TO CONSTRUCTION. ALL TESTING AND SUBMITTALS SHALL BE IN ACCORDANCE WITH THE MAINE DEP – TECHNICAL DESIGN MANUAL SECTION 7.2.5 TESTING AND SUBMITTALS.

| SCHEDULE | |
|---|---|
| ITEM | VUSF 1 |
| (A) OVERFLOW GRATES | 38.50' |
| (B) TOP OF SOIL FILTER | 37.00' |
| (C) TOP OF GRAVEL | 35.50' |
| (D) UNDERDRAIN INVERT | 34.83' |
| (E) BOTTOM OF STONE | 34.50' |

| 6" SOIL FILTER BED – LOAM TOPSOIL SPECIFICATION | |
|---|---|
| SIEVE SIZE | % PASSING BY WEIGHT |
| #4 | 75–95 |
| #10 | 60–90 |
| #40 | 35–85 |
| #200 | 20–70 |
| 1. CLAY FRACTION <2% PASSING THE #200 SIEVE. 2. LOAM SHALL BE LOOSE AND FRIABLE AND SHALL BE FREE FROM ADMIXTURE OF SUBSOIL, REFUSE, LARGE STONES, CLODS OR ROOTS OR RHIZOMES OR "WITCH GRASS" OR OTHER UNDESIRABLE GRASSES. | |

| SOIL FILTER BED – SUPERHUMUS OR EQUIV. SPECIFICATION | |
|---|---|
| SIEVE SIZE | % PASSING BY WEIGHT |
| 1" | 100 |
| #200 | 0–5 |
| MINIMAL CLAY CONTENT, NO MORE THAN 2% PASSING #200 SIEVE | |

| SOIL FILTER BED – TRANSISTION ZONE (TYPE B) | |
|---|---|
| SIEVE SIZE | % PASSING BY WEIGHT |
| 1" | 90–100 |
| 1/2" | 75–100 |
| #4 | 50–100 |
| #20 | 15–80 |
| #50 | 0–15 |
| #200 | 0–5 |

| SOIL FILTER BED – LOAMY COARSE SAND SPECIFICATION | |
|---|---|
| SIEVE SIZE | % PASSING BY WEIGHT |
| #10 | 85–100 |
| #20 | 70–100 |
| #60 | 15–40 |
| #200 | 8–15 |
| 1. CLAY FRACTION <2% PASSING THE #200 SIEVE. | |

## VEGETATED UNDERDRAINED SOIL FILTER DETAIL
NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH 4/2/2025 |
| COMMENT RESPONSE | PFH 5/14/2025 |

DRAWING NAME: STORMWATER BMP DETAILS
PROJECT NAME: COMB BLOCK PHASES 2 & 3
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

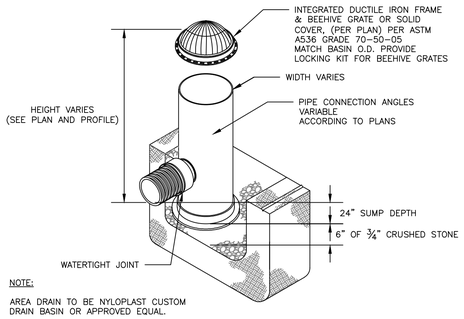
THESE PLANS SHALL NOT BE MODIFIED WITHOUT WRITTEN AUTHORIZATION FROM ACORN ENGINEERING, INC. ANY MODIFICATIONS MADE TO THESE PLANS WITHOUT WRITTEN AUTHORIZATION FROM ACORN ENGINEERING, INC. SHALL RELIEVE ACORN ENGINEERING, INC. OF ALL RESPONSIBILITY FOR THE MODIFIED PLANS AND SHALL VEST ALL RESPONSIBILITY ON THE PERSON MODIFYING THE PLANS. IF ANY OF THE UNAUTHORIZED MODIFICATIONS ARE CONSIDERED TO BE APPROPRIATE BY THE ENGINEER OF RECORD, THE ENGINEER OF RECORD MAY REQUIRE THAT THE PLANS BE RESEALED AND RE-SIGNED BY THE ENGINEER OF RECORD. IF THE ENGINEER OF RECORD DOES NOT AUTHORIZE THE MODIFICATIONS OR IF THE ENGINEER OF RECORD IS NOT NOTIFIED OF THE MODIFICATIONS, THE ENGINEER OF RECORD SHALL NOT BE LIABLE FOR ANY USE OF THE PLANS OR ANY CONSEQUENCES ARISING FROM THE USE OF THE PLANS. THE USER OF THE MODIFIED PLANS SHALL HOLD HARMLESS AND INDEMNIFY THE ENGINEER OF RECORD FOR ANY AND ALL LIABILITY, DAMAGES, CLAIMS, AND COSTS, INCLUDING ATTORNEY'S FEES AND DEFENSE COSTS, ARISING FROM OR IN CONNECTION WITH THE UNAUTHORIZED MODIFICATIONS OR USE OF THE PLANS. THE USER SHALL BE SOLELY RESPONSIBLE FOR ANY AND ALL CLAIMS ARISING FROM THE MODIFICATIONS OR USE OF THE PLANS.

ACORN ENGINEERING, INC.
PO BOX 2071, POWELL, MAINE 04104
(207) 775-2655

FILE 1215_DETAILS_PH2
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
5/14/25

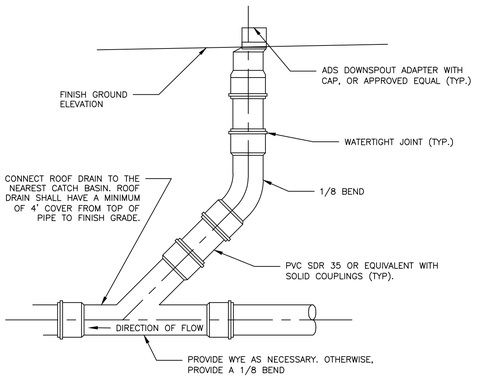
DRAWING NO.
C-46



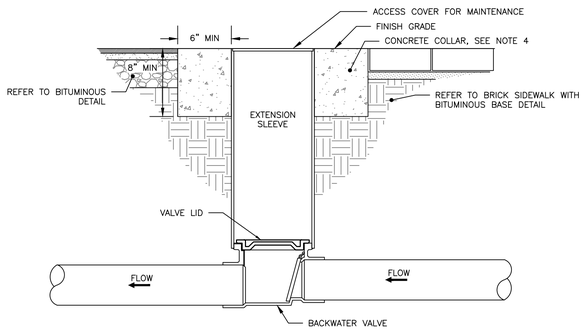

NOTE:

AREA DRAIN TO BE NYLOPLAST CUSTOM DRAIN BASIN OR APPROVED EQUAL.

## DRAIN BASIN DETAIL
NOT TO SCALE




## ROOF DRAIN DETAIL
NOT TO SCALE



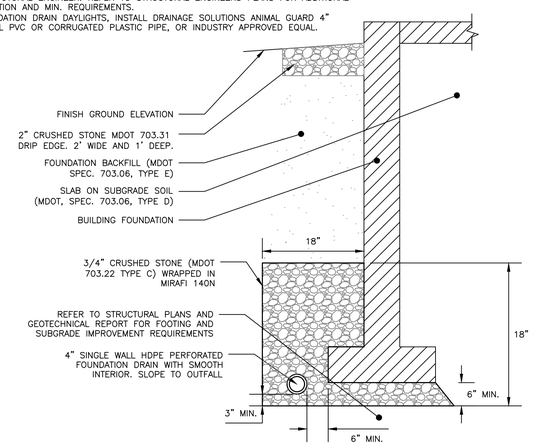

NOTES:

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 AS OUTLINED IN SECTION 2 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.

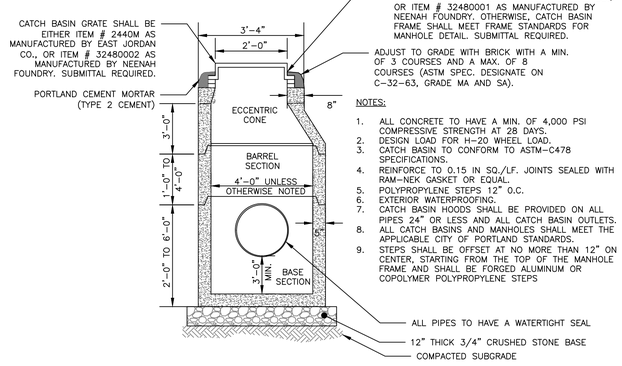
## BACKFLOW VALVE ASSEMBLY
NOT TO SCALE

NOTES:

1. 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




## PRECAST CATCH BASIN/ DRAINAGE MANHOLE
NOT TO SCALE

NOTES:

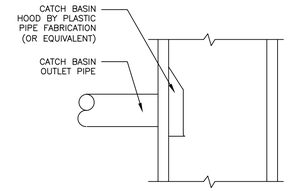
1. ALL CONCRETE TO HAVE A MIN. OF 4,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. DESIGN LOAD FOR H-20 WHEEL LOAD.
3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
4. REINFORCE TO 0.15 IN SQ./LF. JOINTS SEALED WITH RAM-NEK GASKET OR EQUAL.
5. POLYPROPYLENE STEPS 12" O.C.
6. EXTERIOR WATERPROOFING.
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

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 SOLD 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:

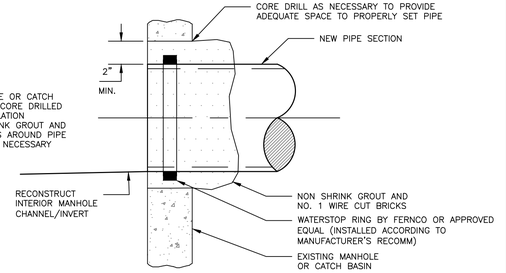
1. INSTALL HOOD ON ALL OUTLETS 24" OR LESS.
2. PREFERRED STYLE DESIGNED TO ELIMINATE CEMENTING OF THE TRAP.
3. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR INSTALLATION REQUIREMENTS.




## CATCH BASIN HOOD DETAIL
NOT TO SCALE

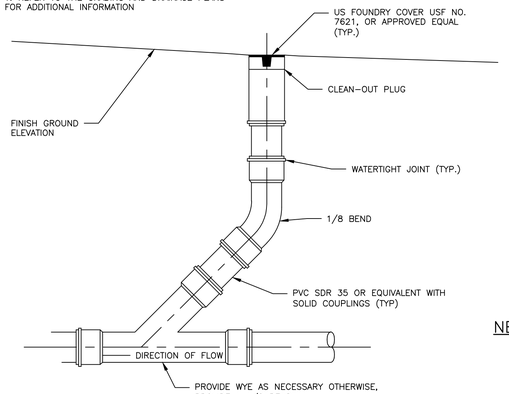
NOTE:

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

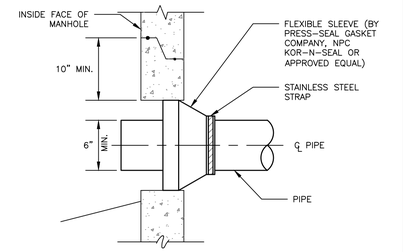



## NEW PIPE TO EXISTING STRUCTURE CONNECTION DETAIL
NOT TO SCALE

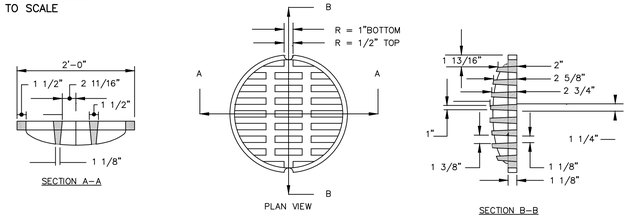
DESIGN NOTES:
1. REFER TO THE GRADING AND DRAINAGE PLANS FOR ADDITIONAL INFORMATION




## CLEANOUT DETAIL
NOT TO SCALE



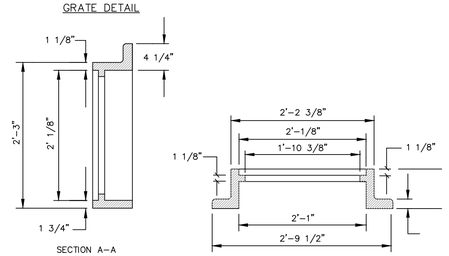

## NEW PIPE TO NEW STRUCTURE CONNECTION DETAIL
NOT TO SCALE




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




FRAME DETAIL

## CATCH BASIN FRAME & GRATE
NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

ISSUED FOR | BY | DATE
MAJOR SITE PLAN SUBMISSION | PFH | 4/7/2025
COMMENT RESPONSE | PFH | 5/14/2025

DRAWING NAME: DRAINAGE DETAILS - 1
PROJECT NAME: COMB BLOCK PHASES 2 & 3
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

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PO BOX 4593, PORTLAND, MAINE 04104
(207) 775-2655

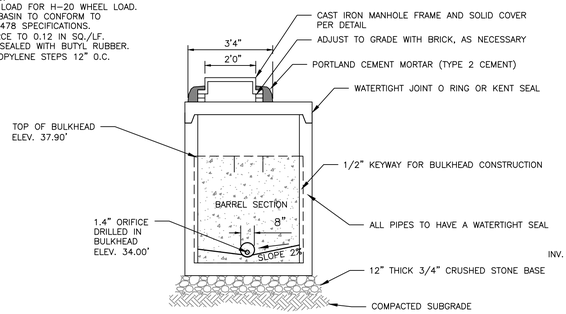
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SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
12/24/25

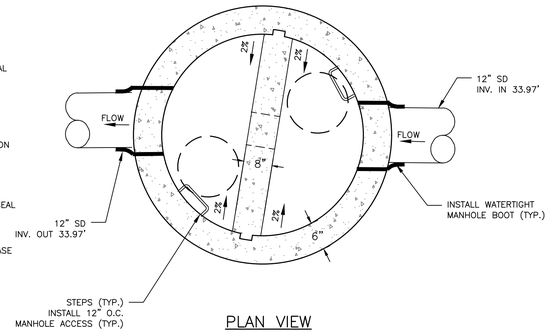
DRAWING NO.
C-44

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 0.12 IN SQ./LF.
5. JOINTS SEALED WITH BUTYL RUBBER.
6. POLYPROPYLENE STEPS 12" O.C.



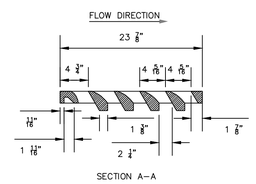

SIDE PROFILE



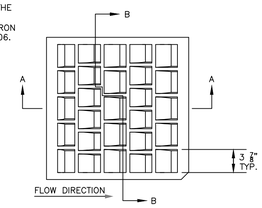

PLAN VIEW

## OUTLET CONTROL STRUCTURE
NOT TO SCALE

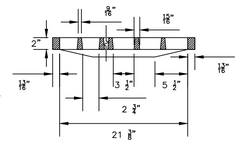
NOTES:
1. TYPE "A" FRAMES ARE TO HAVE 3 FLANGES.
2. TYPE "B" FRAMES ARE TO HAVE 4 FLANGES.
3. THE WORD "GUTTER" IS TO BE MOLDED INTO THE BACK FLANGE – TYPE "B" ONLY.
4. FRAMES AND GRATES ARE TO BE GRAY CAST IRON OR DUCTILE IRON CONFORMING TO AASHTO M306.
5. DIMENSIONS ARE NOMINAL.



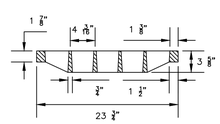

SECTION A–A



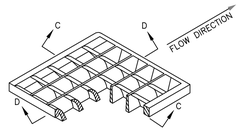

PLAN VIEW



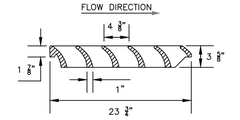

SECTION B–B




SECTION C–C

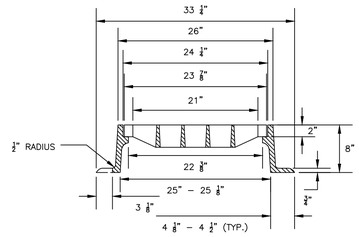



ISOMETRIC VIEW

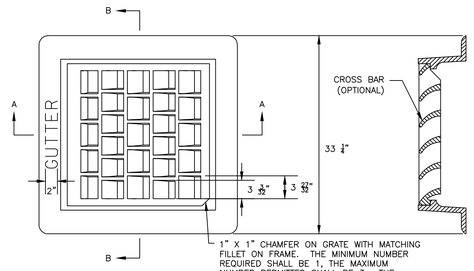



SECTION D–D

GRATE DETAIL




SECTION A–A

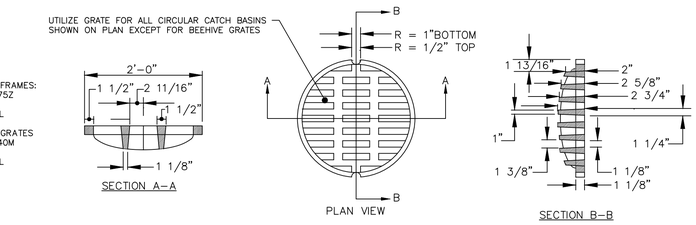



PLAN VIEW

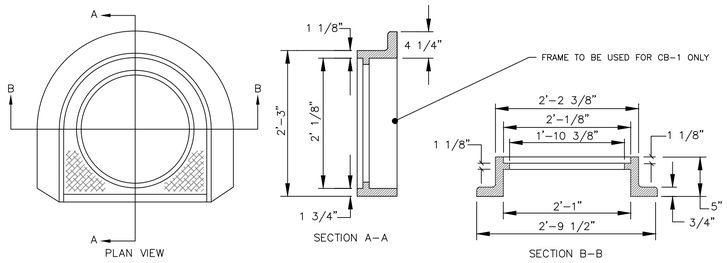
SECTION B–B

FRAME DETAIL

## CATCH BASIN FRAME & GRATE – SQUARE
NOT TO SCALE




GRATE DETAIL




FRAME DETAIL

## CIRCULAR CATCH BASIN FRAME & GRATE
NOT TO SCALE

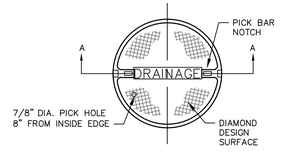
NOTES:

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:

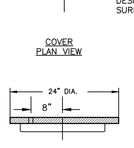
5.1. EAST JORDAN = 1690Z
5.2. NEENAH = R-1496
5.3. OR APPROVED EQUAL

6. APPROVED MANHOLE COVERS

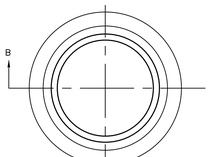
6.1. EAST JORDAN = 2160A
6.2. NEENAH = R-1496
6.3. OR APPROVED EQUAL



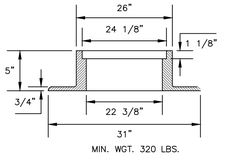

COVER
PLAN VIEW




SECTION A – A
COVER




FRAME
PLAN VIEW




SECTION B – B
FRAME

## CAST IRON MANHOLE COVER AND FRAME
NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH 4/2/2025 |
| COMMENT RESPONSE | PFH 5/14/2025 |

DRAWING NAME: DRAINAGE DETAILS – 2

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

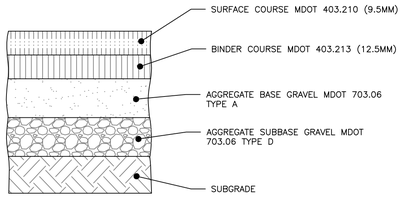
ACORN ENGINEERING, INC.
PO BOX 3257, PORTLAND, MAINE 04104
(207) 775-2655

FILE: 1215_DETAILS_PH2
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

PETER F. HEIL 15318 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

DRAWING NO.
C-45

ACORN ENGINEERING, INC. THESE PLANS SHALL NOT BE MODIFIED, WITHOUT WRITTEN PERMISSION OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND BE REMEDIED TO ACORN ENGINEERING, INC.

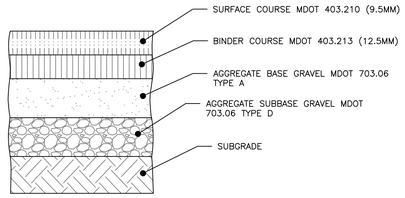



NOTES:

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

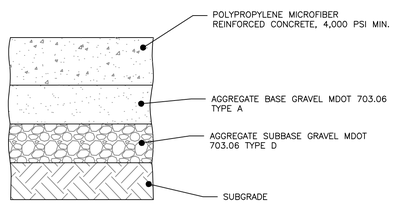



NOTES:

1. COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557
2. SURFACE AND AGGREGATE MATERIALS SHALL MEET THE CITY OF 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 |

## CITY OF PORTLAND LOCAL STREET (OXFORD, MAYO, & BOYD STREET) BITUMINOUS PAVEMENT PROFILE
NOT TO SCALE

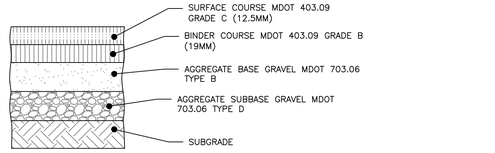



NOTES:

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.
3. STAMPING PATTERN PER OWNER AND LANDSCAPE ARCHITECT.

| THICKNESS OF LAYERS | |
|---|---|
| STANDARD | LAYERS |
| 6" | STAMPED POLYPROPYLENE MICROFIBER REINFORCED CONCRETE, 4,000 PSI MIN. |
| 3" | AGGREGATE BASE GRAVEL, MDOT 703.06 TYPE A |
| 12" | AGGREGATE BASE GRAVEL MDOT 703.06 TYPE D |

## STAMPED CONCRETE DRIVEWAY PROFILE
NOT TO SCALE

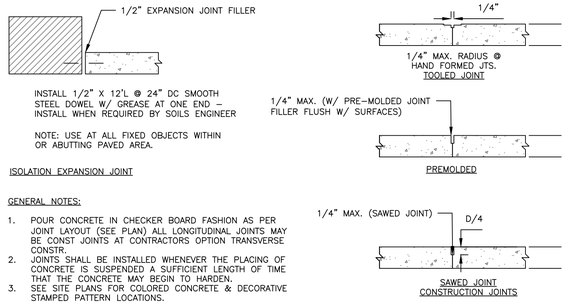



NOTES:

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 |
| 2" | SURFACE COURSE MDOT 403.09 GRADE C (12.5mm) |
| 3" | BINDER COURSE MDOT 403.09 GRADE B (19mm) |
| 3" | AGGREGATE BASE GRAVEL MDOT 703.06 TYPE B |
| 18" | AGGREGATE SUBBASE GRAVEL MDOT 703.06 TYPE D |

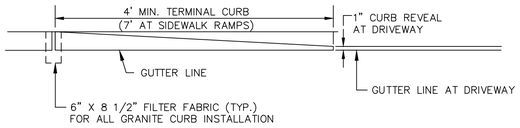
## CITY OF PORTLAND ARTERIAL (CUMBERLAND AVENUE) BITUMINOUS PAVEMENT PROFILE
NOT TO SCALE



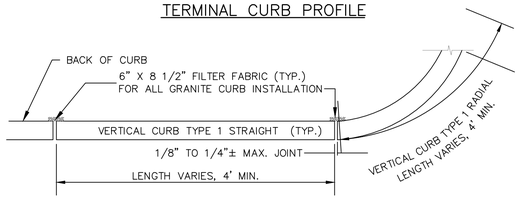

GENERAL NOTES:

1. POUR CONCRETE IN CHECKER BOARD FASHION AS PER JOINT LAYOUT (SEE PLAN) ALL LONGITUDINAL JOINTS MAY BE CONST JOINTS AT CONTRACTORS OPTION TRANSVERSE CONSTR.
2. JOINTS SHALL BE INSTALLED WHENEVER THE PLACING OF CONCRETE IS SUSPENDED A SUFFICIENT LENGTH OF TIME THAT THE CONCRETE MAY BEGIN TO HARDEN.
3. SEE SITE PLANS FOR COLORED CONCRETE & DECORATIVE STAMPED PATTERN LOCATIONS.

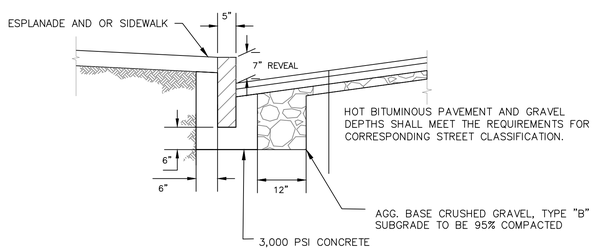
## CONTROL JOINTS & DETAILS
NOT TO SCALE




## TERMINAL CURB PROFILE




## VERTICAL GRANITE CURB PLAN VIEW

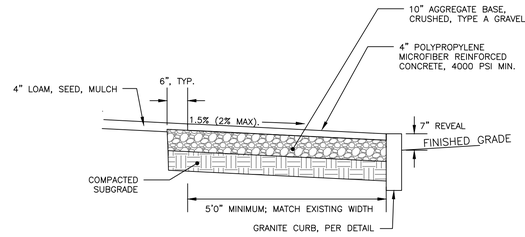



## VERTICAL GRANITE CURB CROSS SECTION

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

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. IF THE CONTRACTOR ELECTS TO USE WELDED WIRE FABRIC, THE FABRIC SHALL BE PLACED 2 INCHES ABOVE THE CRUSHED GRAVEL, AND 2 INCHES FROM ALL FINISHED EDGES, EXPANSION JOINTS AND CURBS. ALL FABRIC JOINTS SHALL BE OVERLAPPED A MINIMUM OF 1 FOOT AND BE PROPERLY TIED. IF THE CONTRACTOR ELECTS TO USE REBAR, ONLY 4-GAUGE WILL BE ACCEPTABLE. IF THE CONTRACTOR ELECTS TO USE A PRE-MIXED FIBER MESH, A SPECIFICATION SHEET MUST BE SUBMITTED AND PRE-APPROVED BY THE ENGINEER PRIOR TO ITS APPLICATION.
3. 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.
4. 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.
5. 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.
6. ANY MATCHING INTO EXISTING SIDEWALKS SHALL BE DONE SO WITH A CLEAN VERTICAL FACE CONNECTION.
7. 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 ¼ INCH RADIUS EDGING TOOL.
8. 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.
9. GENERAL CONTRACTOR TO COLLECT DELIVERY SLIPS AND TRANSFER TO THE OWNER.
10. REFER TO CITY OF PORTLAND CONCRETE SPECIFICATIONS SECTION 608 FOR MORE INFORMATION.



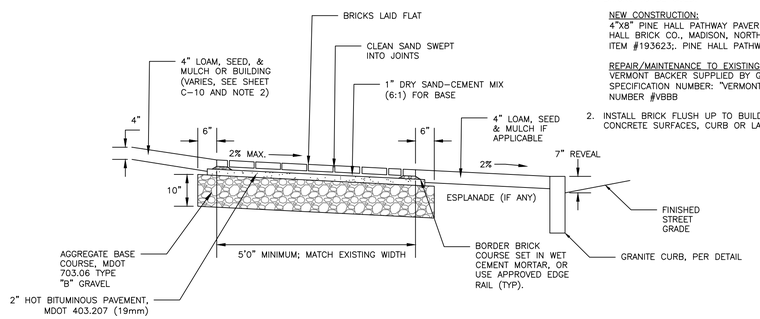

## REINFORCED CONCRETE SIDEWALK
NOTES:

1. BRICKS TO BE USED:

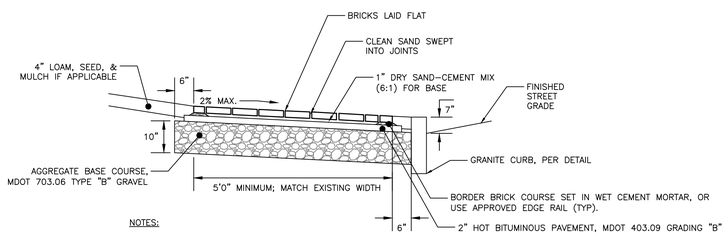
   NEW CONSTRUCTION:
   4"X8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO.; MADISON, NORTH CAROLINA. LACHANCE ITEM #193623;. PINE HALL PATHWAY PAVER BRICK.

   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 WITH ESPLANADE
NOT TO SCALE




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.

2. INSTALL BRICK FLUSH UP TO BUILDING, PAVEMENT, STAIRS, CONCRETE SURFACES, CURB OR LANDSCAPED AREAS.

## BRICK SIDEWALK WITH BITUMINOUS BASE DETAIL
NOT TO SCALE

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH 4/2/2025 |
| COMMENT RESPONSE | PFH 5/14/2025 |

DRAWING NAME: SITE DETAILS - 1

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

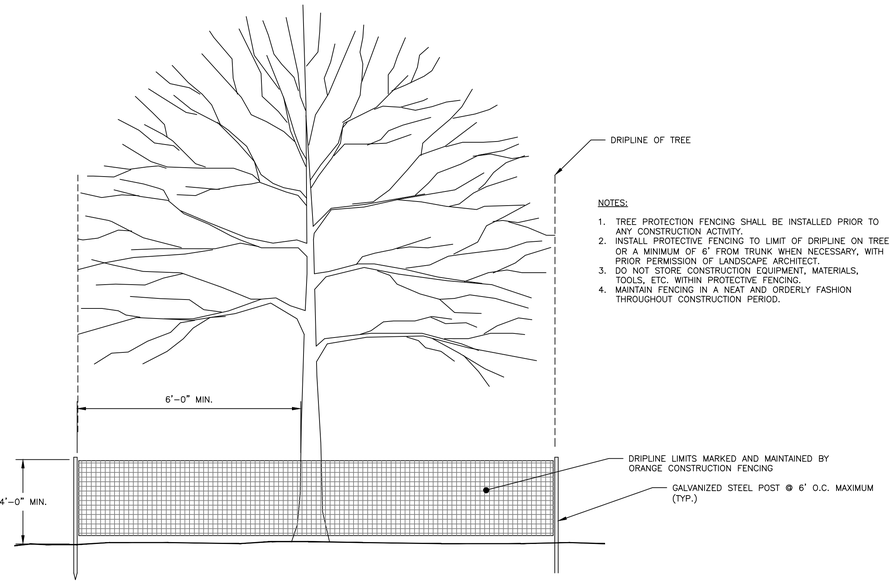
ACORN ENGINEERING, INC.
ENGINEERING, INC.
P.O. BOX 3257, PORTLAND, MAINE 04104
(207) 775-2655

THESE PLANS SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY MODIFICATIONS MADE TO THESE PLANS WITHOUT THE WRITTEN PERMISSION OF ACORN ENGINEERING, INC. SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

| | |
|---|---|
| FILE: | 1215_DETAILS_PH2 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

STATE OF MAINE — PETER F. HEIL — 15318 — LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-40



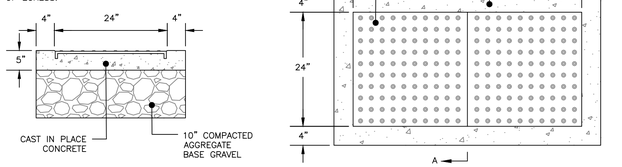

NOTES:

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

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.

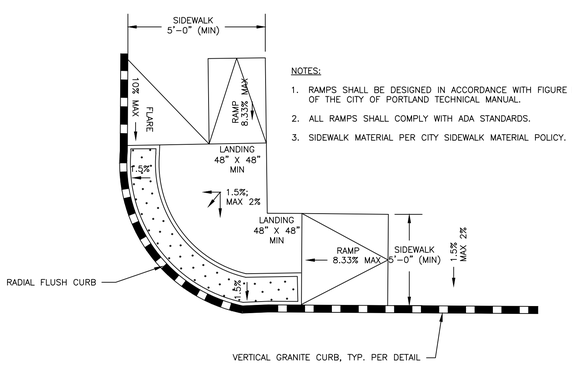



SECTION A–A




PLAN VIEW

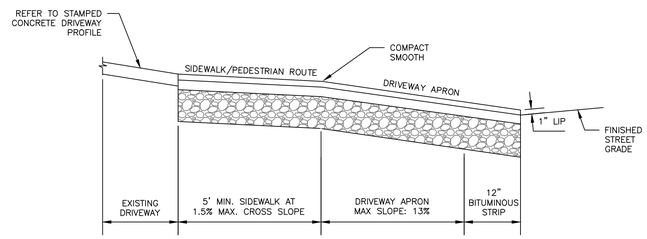
## SIDEWALK RAMP DETECTABLE WARNING PANEL
NOT TO SCALE



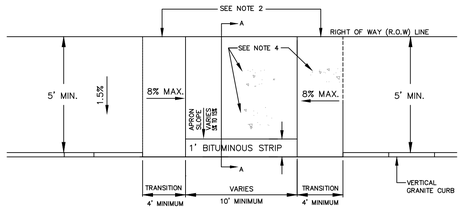

NOTES:

1. RAMPS SHALL BE DESIGNED IN ACCORDANCE WITH FIGURE I–06 OF THE CITY OF PORTLAND TECHNICAL MANUAL.
2. ALL RAMPS SHALL COMPLY WITH ADA STANDARDS.
3. SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY.

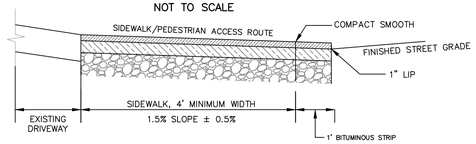
## COMBINED PERPENDICULAR RAMP LAYOUT AT INTERSECTION
NOT TO SCALE



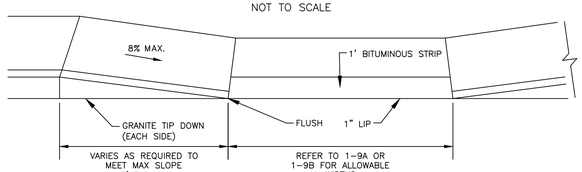

## DRIVEWAY APRON SECTION
NOT TO SCALE




## DRIVEWAY APRON AT CONSTRAINED SIDEWALK LAYOUT
NOT TO SCALE




## SECTION A–A
NOT TO SCALE




NOTES:

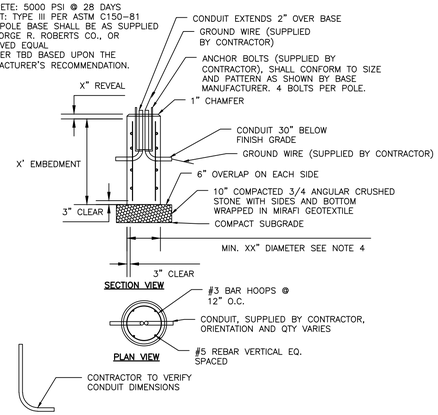
1. MATCH EXISTING GRADE AT R.O.W LINE. WHERE REQUIRED TO MEET A.D.A. AND DRIVEWAY APRON SLOPE REQUIREMENTS, A CONSTRUCTION EASEMENT MAY BE REQUIRED.
2. SIDEWALK TRANSITION SLOPE SHALL NOT EXCEED 8.33% RAMP LENGTH SHALL ACCOMMODATE THIS CONSTRAINT UP TO 15 FOOT RAMP LENGTH OR AS OTHERWISE REQUIRED BY ADA STANDARDS.
3. MOUNTABLE CURB (SEE DETAIL 1–15) OR INCREASE IF BITUMINOUS LIP IS PREFERRED TO MAINTAIN SIDEWALK GRADE THROUGH APRON
4. ALL MATERIALS IN ROW TO COMPLY WITH CITY'S SIDEWALK & DRIVEWAY MATERIAL POLICY. BRICK IN DRIVEWAY APRONS, WHERE APPLICABLE, SHALL BE ORIENTED IN THE SAME WAS AS THE ADJACENT BRICK SIDEWALK.

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.

| SCHEDULE | | |
|---|---|---|
| HEIGHT OF POLE | MIN DIAMETER | MIN EMBEDMENT |
| <20' | 1.5' | 5' |
| 20'–40' | 2' | 6' |
| >40' | 3' | 8' |

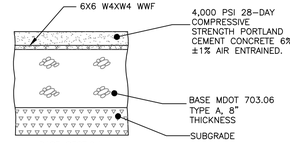
| REVEALS | |
|---|---|
| APPLICATIONS | REVEAL |
| STREET/SIDEWALK | 4" |
| OTHER PED HARDSCAPE | FLUSH |
| PEDESTRIAN LAWN/MULCH | 4" |
| PARKING AREAS (OPEN TRAFFIC) | 18–24" |



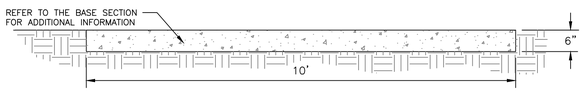

## LIGHT POLE BASE
NOT TO SCALE

NOTES:

1. THE CONCRETE PAD SHALL BE 10'X3.25'X6" IN SIZE.
2. COMPACT SUBGRADE TO 95% MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D–1557.
3. FINISH WITH A STIFF, COARSE, FIBER BROOM.



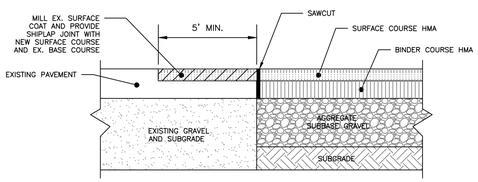

BASE SECTION




## CONCRETE PAD DETAIL
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

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH 4/7/2025 |
| COMMENT RESPONSE | PFH 5/14/2025 |

DRAWING NAME: SITE DETAILS – 2

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
PO BOX 370, LYMAN, MAINE 04104
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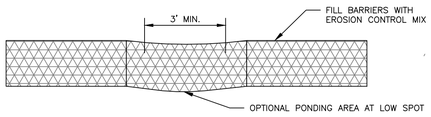
FILE 1215_DETAILS_PH2
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

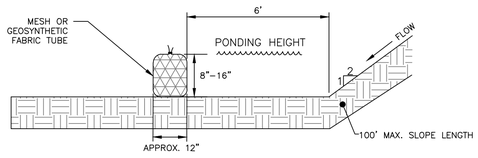
DRAWING NO.
C-41

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.

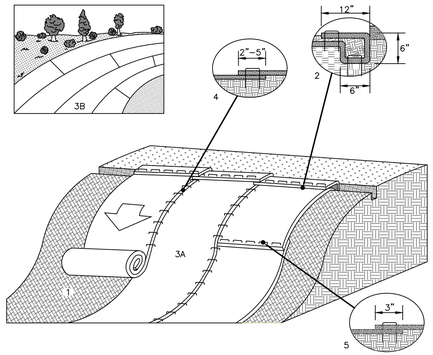



FRONT VIEW




SIDE VIEW

## FILTER SOCK DETAIL
NOT TO SCALE

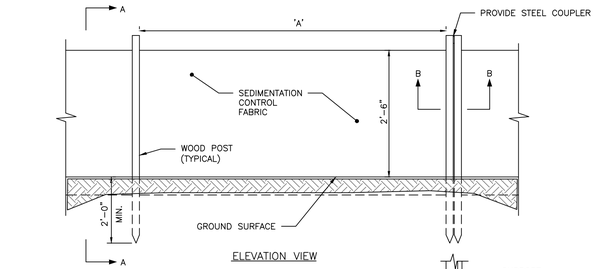



## EROSION CONTROL BLANKET SLOPE INSTALLATION
NOT TO SCALE

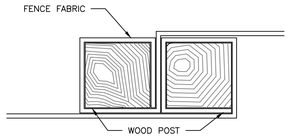
SLOPE
INSTALLATION DETAIL

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.

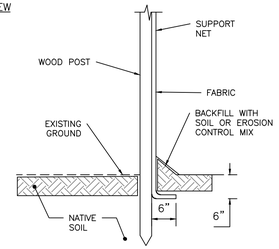
NOTE:
IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE ECB.




ELEVATION VIEW



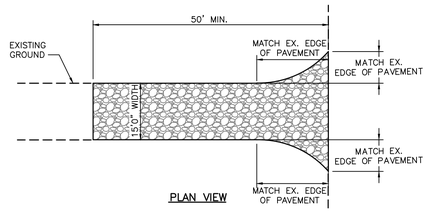

SECTION B–B



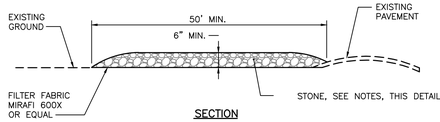

SECTION A–A

| SILT FENCE REINFORCEMENT | MAX. SPACING "A" |
|---|---|
| NONE | 6' |
| WIRE REINFORCEMENT 14 GAUGE, 6" MESH | 10' |

## SILTATION FENCE DETAIL
NOT TO SCALE




PLAN VIEW




SECTION

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

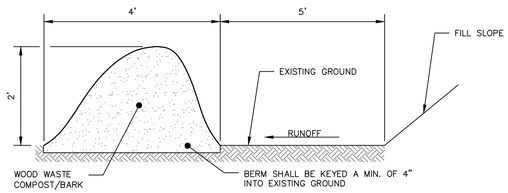
## STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

NOTES:

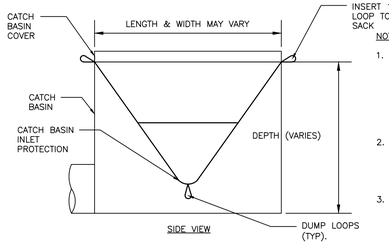
1. THE EROSION CONTROL MIX SHALL CONFORM TO THE FOLLOWING STANDARDS AND IN ACCORDANCE WITH THE MAINE DOT CHAPTER 700, SECTION 717.04(D):

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 |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | PFH | 4/7/2025 |

DRAWING NAME: EROSION & SEDIMENTATION CONTROL DETAILS
PROJECT NAME: COMB BLOCK PHASES 2 & 3
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
P.O. BOX 327, EAST LYME, CT 06333
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(207) 775–2655

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FILE: 1215_DETAILS_PH2
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

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 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.

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 STEEPER 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 **BOYD STREET, OXFORD STREET, MAYO STREET AND CUMBERLAND AVENUE** 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.

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.

1.1.7 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.

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, 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.

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 THE 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 AND SHALL BE LIMED, AND MULCHED.
EROSION CONTROL BLANKETS OR MATS SHALL BE PLACED OVER THE MULCH IN AREAS NOTED IN PARAGRAPH 4.2 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, 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:

4.1 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.

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, MULCHING 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 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.

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 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 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.

5.0 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.

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 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. PRIORITIZE THE DOWNHILL SIDE TO CONTAIN RUNOFF WITHIN THE SITE WHILE PROVIDING AN ENGINEERED OUTLET WITH SILTATION BARRIER TO THE MUNICIPAL STORMWATER SYSTEM WITHIN BOYD STREET, MAYO STREET, OXFORD STREET AND CUMBERLAND AVENUE.
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 SEEDING PLAN

7.1 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.

7.2 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.

LIMESTONE SHALL BE APPLIED TO THE SITE AT A RATE OF 138 POUNDS PER 1,000 SQUARE FEET.

7.3 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 |

7.4 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.

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.

PERMITTING
NOT ISSUED FOR
CONSTRUCTION

ISSUED FOR | BY | DATE
MAJOR SITE PLAN SUBMISSION | PFH | 4/7/2025

DRAWING NAME: EROSION & SEDIMENTATION CONTROL NOTES
PROJECT NAME: COMB BLOCK PHASES 2 & 3
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.

THE PLANS AND DESIGNS SHOWN AND DESCRIBED HEREIN ARE THE PROPERTY OF ACORN ENGINEERING, INC. AND SHALL NOT BE USED IN WHOLE OR IN PART FOR ANY PROJECT OTHER THAN THE ONE FOR WHICH THEY WERE PREPARED AND DEVELOPED UNLESS AUTHORIZED IN WRITING BY ACORN ENGINEERING, INC. ANY REUSE WITHOUT SUCH AUTHORIZATION SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

ACORN ENGINEERING, INC.
PO BOX 3294 SCARBOROUGH, MAINE 04104
(207) 775–2655

FILE: 1215_DETAILS_PH2
JN: 1215
SCALE: AS NOTED
DESIGNED BY: PFH
DRAWN BY: MKT
CHECKED BY: WHS

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-48

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.
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THE FOLLOWING:
    - 12.1. REQUEST AND REVIEW RELEVANT DOCUMENTS THAT SUMMARIZE FINDINGS FROM INITIAL ENVIRONMENTAL DUE DILIGENCE ACTIVITIES COMPLETED AT THE SITE.
    - 12.2. DETERMINE WHAT, IF ANY, RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs) IDENTIFIED SUBSEQUENT TO ENVIRONMENTAL DUE DILIGENCE ACTIVITIES MAY AFFECT THE CONTRACTOR'S WORK.
    - 12.3. DETERMINE IF THE SITE IS/HAS BEEN IDENTIFIED AS A STATE &/OR FEDERAL HAZARDOUS SUBSTANCE SITE, OR SIMILARLY REGULATED SITE. IF SO, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMMUNICATE AND COORDINATE WITH AN ENVIRONMENTAL PROFESSIONAL (EP) TO UNDERSTAND WHAT CONTAMINANTS &/OR HAZARDS HAVE BEEN IDENTIFIED FOR THE SITE AND HOW THEIR RESPECTIVE IMPACTS MAY AFFECT THE CONTRACTOR'S WORK. THE EP SHALL BE EMPLOYED BY THE CLIENT. SHOULD THE CLIENT REQUIRE ACORN'S EP SERVICES IT SHALL BE REQUESTED IN WRITING.
    - 12.4. COMMUNICATE AND COORDINATE WITH AN EP TO REQUEST, REVIEW AND ADHERE TO RELEVANT DOCUMENTS PREPARED FOR THE SITE DESCRIBING BEST MANAGEMENT PRACTICES FOR IMPACTED OR POTENTIALLY IMPACTED MEDIA THAT MAY BE ENCOUNTERED AS PART OF THE CONTRACTOR'S WORK INCLUDING BUT NOT LIMITED TO THE SOIL MANAGEMENT PLAN & EMMP.
    - 12.5. ENSURE THE APPROPRIATE STATE &/OR FEDERAL REGULATORY AGENCY(IES) HAVE BEEN NOTIFIED OF THE CONTRACTOR'S PLANNED WORK ACTIVITIES.

TM 22-2-25

TM 22-2-24
N/F
MARKOS S. MILLER &
HEATHER L. NICHOLS
30970/264

PHASE 1 CONCRETE SIDEWALK, TYP.
PHASE 1 FIELD INLET
PHASE 1 LIGHT POLE
PHASE 1 CATCH BASIN TO BE REMOVED
EX. ABUTTER PROPERTY LINE, TYP.
EX. ABUTTING BUILDING, TYP.
EX. PROPERTY LINE, TYP.
CONSTRUCTION FENCE PER DETAIL, TYP.
STOCKPILE AND STAGING AREA. TYP. ACTUAL STOCKPILE AND STAGING PER RESPECTIVE CONTRACTORS MEANS AND METHODS
STABILIZED CONSTRUCTION ENTRANCE PER DETAIL
SEDIMENT BARRIER PER DETAIL, TYP.
RESET EX. "15 MIN PARKING" AND "NO PARKING" SIGN
EX. OHW TO BE RELOCATED, CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES & ABUTTER
REMOVE AND REPLACE EX. BRICK SIDEWALK AND VERTICAL GRANITE CURB, TYP.
PROTECT EX. STREET TREE PER DETAIL
RESET EX. HANDICAP AND "15 MIN PARKING" SIGN
RESET EX. HANDICAP AND "NO PARKING" SIGN
EX. CATCH BASIN TO REMAIN, INSTALL INLET PROTECTION PER DETAIL, TYP.
RESET EX. PORTLAND TRAILS PEDESTAL
EX. BIKE LANE STRIPING
EX. CENTER LINE STRIPING
EX. FIRE HYDRANT TO REMAIN, TYP. (OF 2)
EX. WATER VALVE TO REMAIN, TYP.
PHASE 1 CONCRETE SIDEWALK, TYP.
PHASE 1 VERTICAL GRANITE CURB, TYP.
EX. CATCH BASIN TO REMAIN, INSTALL INLET PROTECTION PER DETAIL, TYP.
EX. STORM WATER MAIN TO REMAIN, TYP.
REMOVE PAVEMENT ALONG CURBLINE TO INSTALL NEW CURB, TYP.
REMOVE AND REPLACE EX. CONCRETE SIDEWALK AND VERTICAL GRANITE CURB PER SITE & GRADING PLAN, TYP.
EX. GAS MAIN TO REMAIN, TYP.
EX. GAS MAIN TO REMAIN, TYP.
PHASE 1 DMH
UTILITY SAWCUT PER DETAIL, TYP.
EX. 18" PVC SEWER MAIN TO REMAIN, TYP.
EX. 18" PVC SEWER MAIN TO REMAIN, TYP.
EX. WATER MAIN TO REMAIN, TYP.
EX. UTILITY POLE TO REMAIN, TYP.
EX. DETECTABLE WARNING PLATE TO BE REMOVED
EX. BLOCK CROSSWALK TO REMAIN
EX. VERTICAL GRANITE CURB TO REMAIN, TYP.
EX. OVERHEAD WIRE TO REMAIN, TYP.
EX. CATCH BASIN TO REMAIN, INSTALL INLET PROTECTION PER DETAIL, TYP.

BOYD STREET
PAVED - PUBLIC

CUMBERLAND AVENUE
PAVED - PUBLIC

18"PVC

10' 0 10' 20
SCALE: 1"=20'

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY DATE |
|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT 4/7/2025 |
| COMMENT RESPONSE | PFH 5/14/2025 |

DRAWING NAME: CONSTRUCTION MANAGEMENT PLAN - PHASE 2
PROJECT NAME: COMB BLOCK PHASES 2 & 3
CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

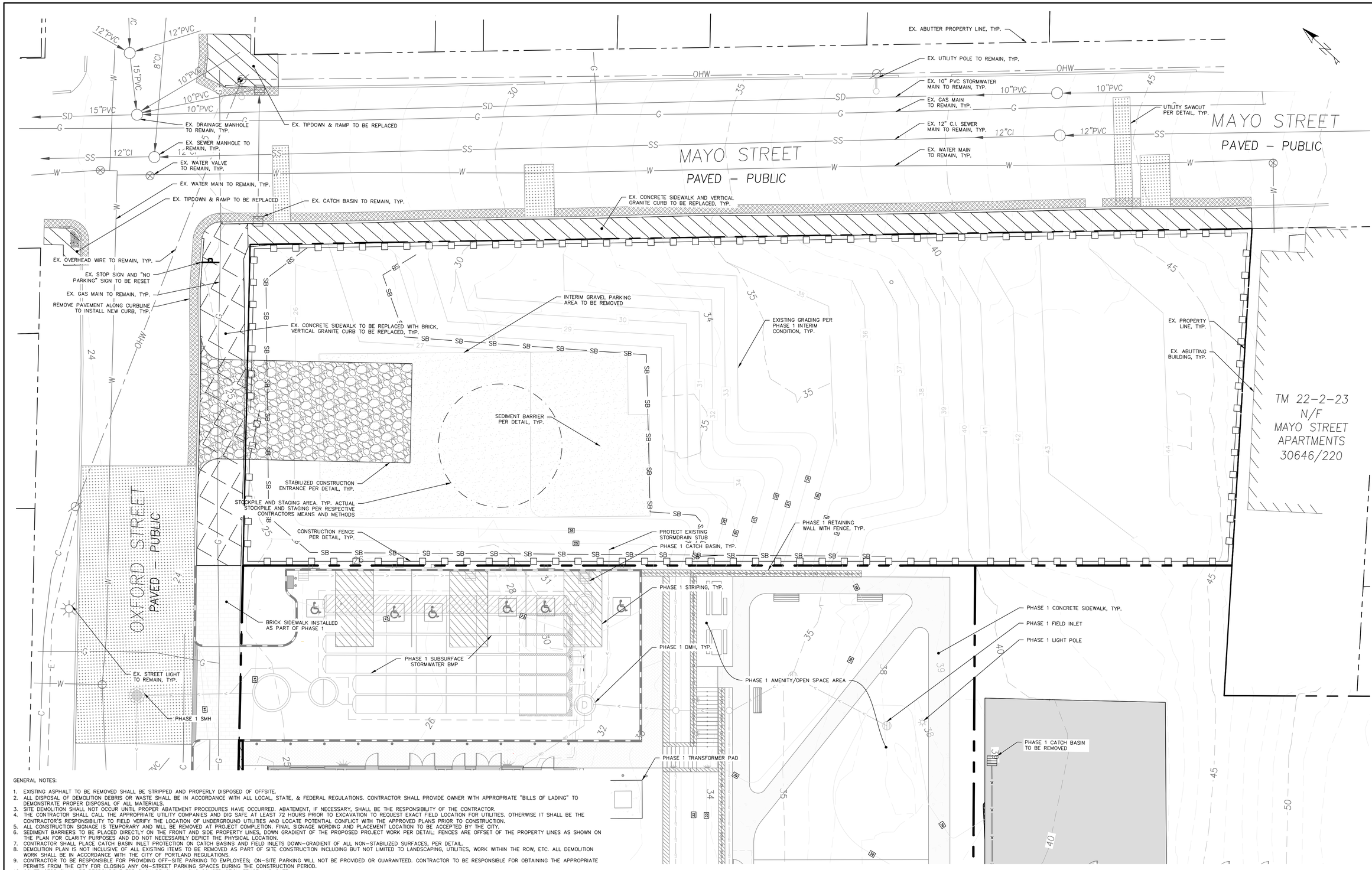
ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. IF ANY ALTERATIONS, AUTHORIZED OR UNAUTHORIZED, ARE MADE BY ANY PARTY, SUCH PARTY DOES SO AT THEIR SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

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| FILE | 1215_CIVIL_PH2-3 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

STATE OF MAINE
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER

DRAWING NO.
C-03




GENERAL NOTES:

1. EXISTING ASPHALT TO BE REMOVED SHALL BE STRIPPED AND PROPERLY DISPOSED OF OFFSITE.
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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.
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THE FOLLOWING:
    - 12.1. REQUEST AND REVIEW RELEVANT DOCUMENTS THAT SUMMARIZE FINDINGS FROM INITIAL ENVIRONMENTAL DUE DILIGENCE ACTIVITIES COMPLETED AT THE SITE.
    - 12.2. DETERMINE WHAT, IF ANY, RECOGNIZED ENVIRONMENTAL CONDITIONS (RECs) IDENTIFIED SUBSEQUENT TO ENVIRONMENTAL DUE DILIGENCE ACTIVITIES MAY AFFECT THE CONTRACTOR'S WORK.
    - 12.3. DETERMINE IF THE SITE IS/HAS BEEN IDENTIFIED AS A STATE &/OR FEDERAL HAZARDOUS SUBSTANCE SITE, OR SIMILARLY REGULATED SITE. IF SO, IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO COMMUNICATE AND COORDINATE WITH AN ENVIRONMENTAL PROFESSIONAL (EP) TO UNDERSTAND WHAT CONTAMINANTS &/OR HAZARDS HAVE BEEN IDENTIFIED FOR THE SITE AND HOW THEIR RESPECTIVE IMPACTS MAY AFFECT THE CONTRACTOR'S WORK. THE EP SHALL BE EMPLOYED BY THE CLIENT. SHOULD THE CLIENT REQUIRE ACORN'S EP SERVICES IT SHALL BE REQUESTED IN WRITING.
    - 12.4. COMMUNICATE AND COORDINATE WITH AN EP TO REQUEST, REVIEW AND ADHERE TO RELEVANT DOCUMENTS PREPARED FOR THE SITE DESCRIBING BEST MANAGEMENT PRACTICES FOR IMPACTED OR POTENTIALLY IMPACTED MEDIA THAT MAY BE ENCOUNTERED AS PART OF THE CONTRACTOR'S WORK INCLUDING BUT NOT LIMITED TO THE SOIL MANAGEMENT PLAN & EMMP.
    - 12.5. ENSURE THE APPROPRIATE STATE &/OR FEDERAL REGULATORY AGENCY(IES) HAVE BEEN NOTIFIED OF THE CONTRACTOR'S PLANNED WORK ACTIVITIES.

10' 0 10' 20

SCALE: 1"=10'

PERMITTING
NOT ISSUED FOR CONSTRUCTION

| ISSUED FOR | BY | DATE |
|---|---|---|
| MAJOR SITE PLAN SUBMISSION | MKT | 4/7/2025 |
| COMMENT RESPONSE | PFH | 5/14/2025 |

DRAWING NAME: CONSTRUCTION MANAGEMENT PLAN – PHASE 3

PROJECT NAME: COMB BLOCK PHASES 2 & 3

CLIENT: MAYO HOUSING, LP AND CUMBERLAND HOUSING, LP
970 BAXTER BOULEVARD, PORTLAND, MAINE 04101

ACORN ENGINEERING, INC.
ACORN ENGINEERING, INC.
PO BOX 3372, PORTLAND MAINE 04104
(207) 775-2655

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. IF ANY ALTERATIONS, AUTHORIZED OR UNAUTHORIZED, ARE MADE TO THESE PLANS, THE PERSON MAKING THE CHANGES ASSUMES ALL RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.

| | |
|---|---|
| FILE | 1215_CIVIL_PH2-3 |
| JN: | 1215 |
| SCALE: | AS NOTED |
| DESIGNED BY: | PFH |
| DRAWN BY: | MKT |
| CHECKED BY: | WHS |

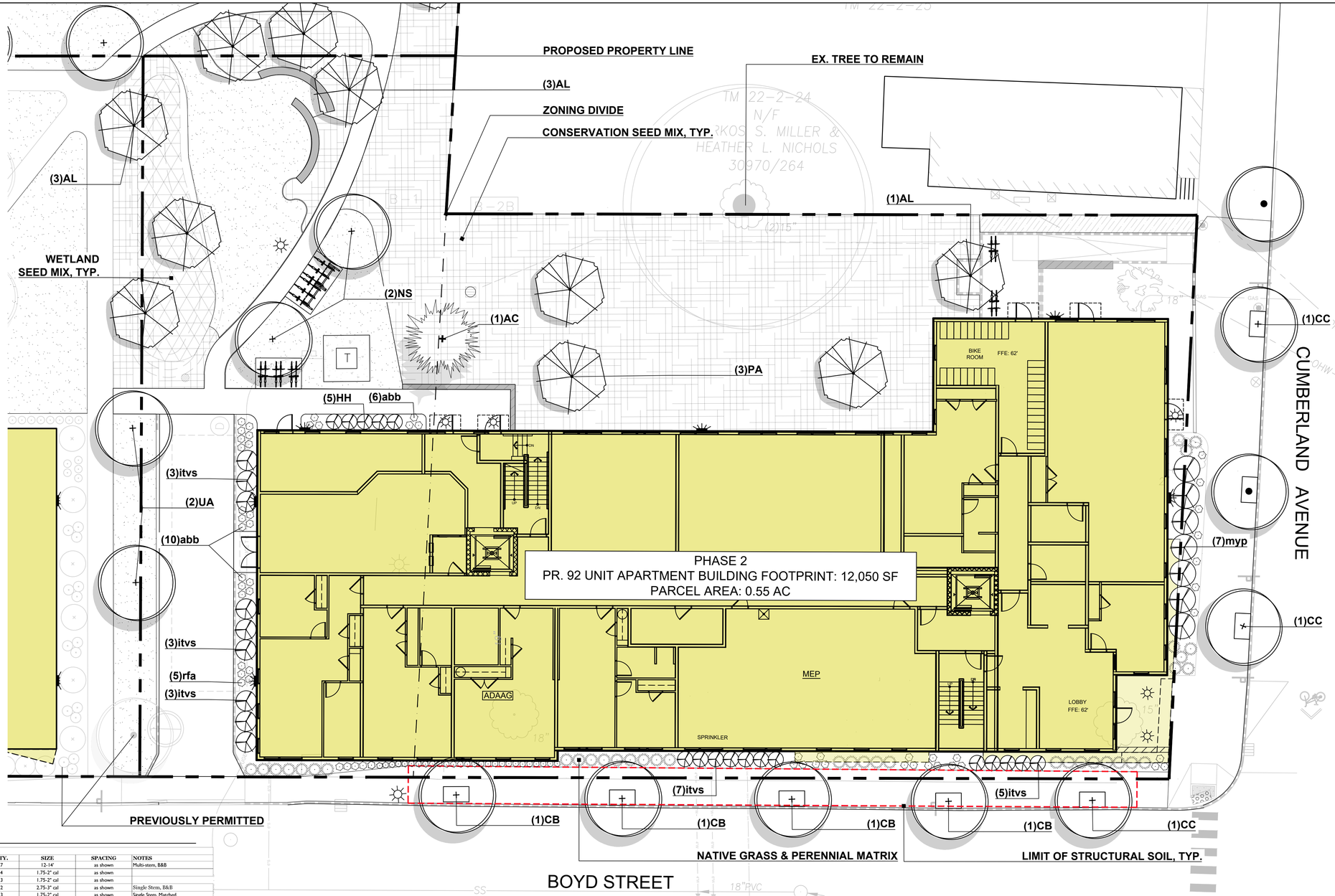
PETER F. HEIL
15318
LICENSED PROFESSIONAL ENGINEER
STATE OF MAINE

DRAWING NO.
C-04

## PLANTING NOTES

1. LANDSCAPE ARCHITECT TO APPROVE PLANT MATERIAL PRIOR TO DELIVERY TO SITE.
2. PLANT MATERIAL PROVIDED BY THE CONTRACTOR IS TO CONFORM TO THE HIGHEST STANDARD AS ADOPTED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. ANSI . PLANT MATERIAL IS TO BE HEALTHY SPECIMENS, FREE FROM DISEASE OR DAMAGE.
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4. SUBSTITUTIONS OF PLANT SPECIES SHALL BE A PLANT OF E UIVALENT OVERALL FORM, HEIGHT AND BRANCHING HABIT, FLOWER, LEAF, FRUIT, COLOR, TIME OF BLOOM CLIMATIC LOCATION AS APPROVED BY LANDSCAPE ARCHITECT.
5. LOCATE AND VERIFY EXISTING PROPOSED UTILITY LINE LOCATIONS PRIOR TO STAKING AND REPORT CONFLICTS TO LANDSCAPE ARCHITECT.
6. PLANTING DEMOLITION DEBRIS, GARBAGE, LUMPS OF CONCRETE, STEEL AND OTHER MATERIALS DELETERIOUS TO PLANT'S HEALTH AS DETERMINED BY LANDSCAPE ARCHITECT SHALL BE REMOVED FROM PLANTING AREAS.
7. THE CONTRACTOR IS TO VERIFY SITE LAYOUT GRADES INFORM THE LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR CHANGES IN LAYOUT AND OR GRADING PRIOR TO CONSTRUCTION. NO PLANTING IS TO BE INSTALLED BEFORE ACCEPTANCE OF ROUGH GRADING.

   ALL PROPOSED TREE LOCATIONS SHALL BE STAKED OR LAID OUT IN THEIR APPROXIMATE LOCATION BY THE CONTRACTOR. THE CONTRACTOR SHALL AD UST THE LOCATIONS AS RE UESTED BY THE LANDSCAPE ARCHITECT TO ACCOUNT FOR SUBSURFACE UTILITIES AND OTHER FIELD CONDITIONS. FINAL LOCATIONS OF PLANTS MUST BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO PLANTING.
9. INSTALL PLANTS WITH ROOT FLARES FLUSH WITH FINISHED GRADE. IMMEDIATELY REPLANT PLANTS THAT SETTLE OUT OF PLUMB OR BELOW FINISHED GRADE. PLANT AND STAKES ARE TO BE SET PLUMB UNLESS OTHERWISE NOTED. PLANT UNDER FULL TIME SUPERVISION OF CERTIFIED ARBORIST, NURSERYMAN, OR LICENSED LANDSCAPE ARCHITECT. PROVIDE WRITTEN VERIFICATION OF CERTIFICATION AND OR LICENSE FOR LANDSCAPE ARCHITECT'S APPROVAL.
10. WATER PLANTS THOROUGHLY AFTER INSTALLATION, A MINIMUM OF TWICE WITHIN THE FIRST 24 HOURS.
11. CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN PLANT MATERIALS INCLUDING SOD SEED AREAS IN A HEALTHY STATE DURING CONSTRUCTION AND DURING RE UIRED WARRANTY PERIODS. ANY DAMAGE TO PLANT MATERIAL DUE TO NEGLECT BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT THE CONTRACTOR'S EXPENSE.
12. REPAIR DAMAGE DUE TO LANDSCAPE INSTALLATION OPERATIONS INSIDE AND OUTSIDE OF LIMIT OF WORK.
13. SOAK ALL PERENNIALS FOR 24 HOURS PRIOR TO INSTALLATION.
14. A LIST OF PLANTS INCLUDING BOTANICAL NAMES, SI ES, AND SPACING ARE SHOWN ON THE DRAWINGS. UANTITIES ARE PROVIDED FOR CONTRACTOR'S CONVENIENCE AND ARE TO BE VERIFIED. IN THE EVENT THAT UANTITIES OR OMISSIONS OCCUR THE PLAN DRAWINGS ARE TO BE FOLLOWED.
15. IRRIGATION: A TEMPORARY UNDERGROUND DRIP AND SPRINKLER IRRIGATION SYSTEM IS TO BE PROVIDED FOR ALL PLANT MATERIAL AND SOD OR SEEDED AREAS.
16. DISTURBED SITE AREAS ARE TO BE DRESSED WITH 6" MIN. OF AMENDED TOPSOIL FOR LAWNS AND 12" MIN. FOR PLANT BEDS. TOPSOIL FOR SEEDED AND OR SEEDED AREAS IS TO BE TWO PARTS SHARP SAND, ONE PART LOAM AND ONE PART ORGANIC COMPOST.
17. PLANT BEDS ARE TO BE MULCHED TO A DEPTH OF 2" MIN. WITH NATURAL BARK MULCH WITH BARK SI ES NO LARGER THAN 3". PERENNIAL PLANT BEDS ARE TO BE MULCHED WITH BARK SI ES NO MORE THAN 1". TREES IN LAWN AREAS ARE TO HAVE MULCH RINGS OF 5' DIA.
1 . TREES AD ACENT TO PEDESTRIAN ROUTES AND WITHIN PARKING ISLANDS ARE TO BE LIMBED TO 6' ABOVE GRADE.
19. IRRIGATION DESIGN BY OTHERS




## PLANTING SCHEDULE PHASE 2

| CODE | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | SPACING | NOTES |
|---|---|---|---|---|---|---|
| **DECIDUOUS TREES** | | | | | | |
| AL | *Amelanchoir Laevis* | Allegheny Serviceberry | 7 | 12-14' | as shown | Multi-stem, B&B |
| CB | *Carpinus betulus 'Frans Fontaine'* | Hornbeam 'Frans Fontaine' | 4 | 1.75-2" cal | as shown | |
| CC | *Cercis canadensis* | Eastern Redbud | 3 | 1.75-2" cal | as shown | |
| NS | *Nyssa sylvatica* | Tupelo Tree | 2 | 2.75-3" cal | as shown | Single Stem, B&B |
| PA | *Prunus 'Accolade'* | Prunus accolade | 3 | 1.75-2" cal | as shown | Single Stem, Matched |
| UA | *Ulmus 'Accolade'* | Accolade Elm | 2 | 2.75-3" cal | as shown | Single Stem, Matched |
| **EVERGREEN TREES** | | | | | | |
| AC | *Abies concolor* | White Fir | 1 | 8-10' | as shown | B&B |
| **DECIDUOUS SHRUBS** | | | | | | |
| hh | *Hypericum 'Hidcote'* | St. John's Wort | 12 | 24"-36" ht. | 36" O.C. | |
| myp | *Myrica pensylvanica* | Northern Bayberry | 1 | 24"-30" ht. | 60" O.C. | |
| itvs | *Itea virginica* | Virginia Sweetspire | 21 | 30"-36" ht. | 60" O.C. | |
| **PERENNIAL** | | | | | | |
| smh | *Amsonia hubrichtii* | Thread-leafed Bluestar | tbd | tbd | 36" O.C. | |
| abb | *Gillenia trifoliata* | Bowman's Root | tbd | tbd | 18" O.C. | |
| grc | *Geranium x 'Rozanne'* | Rozanne Cranesbill | tbd | tbd | 24" O.C. | |
| hec | *Heuchera 'Caramel'* | Caramel Coral Bells | tbd | tbd | 18" O.C. | |
| rfs | *Rudbeckia fulgida 'American Gold Rush'* | Gold Rush Black-Eyed Susan | tbd | tbd | 24" O.C. | |
| smm | *Salvia 'May Night'* | May Night Salvia | tbd | tbd | 24" O.C. | |
| **GRASSES, VINES & GROUND COVERS** | | | | | | |
| ag | *Allium gladiator* | Ornamental Onion | tbd | Bulb | 12" O.C. | |
| pvs | *Panicum virgatum 'Shenandoah'* | Shenandoah Switchgrass | tbd | #2 | 24" O.C. | |
| ss | *Schizachyrum scoparium* | Little Bluestem | tbd | #2 | 24" O.C. | |

## PLANT & SEED MIX LEGEND

| SYMBOL | TYPE | SYMBOL | TYPE |
|---|---|---|---|
| | LAWN MIX | SA | DECIDUOUS TREE |
| | NEW ENGLAND CONSERVATION WILDLIFE MIX CONTROL MIX, TALL GRASS TYP. NEW ENGLAND WETLAND PLANTS NEWP.COM CATALOG SEED-MIXES WILDLIFE | | PERENNIALS, GRASSES SHRUBS |
| | NEW ENGLAND WILDFLOWER SEED MIX, TALL GRASS, SHRUBS TYP. NEW ENGLAND WETLAND PLANTS NEWP.COM CATALOG SEED-MIXES WILDLIFE | | CONIFEROUS TREE |
| | NEW ENGLAND WETLAND SEED MIX, NEW ENGLAND WETLAND PLANTS NEWP.COM CATALOG SEED-MIXES WILDLIFE | | EXISTING TREE |

## SITE SOIL NOTES

1. CONTRACTOR SHALL COORDINATE WITH OWNER'S REPRESENTATIVE FOR LOCATION OF STOCKPILE AREAS FOR STRIPPED TOPSOIL AND PLANTING SOIL PRODUCTS. CONTRACTOR SHALL ENSURE AREA IS PROTECTED AND CONTAMINATION OR DISTURBANCE OF STORED PRODUCTS IS NOT ALLOWED.
2. CONTRACTOR SHALL ENSURE SUBGRADE IS SCARIFIED PRIOR TO INSTALLING PLANTING SOIL AND BLEND WITH INITIAL LIFT OR PLACEMENT OF PROPOSED PLANTING SOIL.
3. COORDINATE PLACEMENT OF PLANTING SOIL WITH OTHER WORK, ESPECIALLY UTILITIES. PLACEMENT SHOULD OCCUR AFTER INSTALLATION OF ALL HARDSCAPE IMPROVEMENTS, IRRIGATION SYSTEM, UTILITIES, ETC. AND BEFORE INSTALLATION OF PLANTS.

NOTE: This drawing is PERMITTING ONLY. It is NOT intended for use as a construction document.

Prepared For:
PHA
Portland Housing Authority
970 BAXTER BOULEVARD,
PORTLAND, MAINE 04101

Prepared By:
DryLA
Dry Landscape Architecture, L.L.C.
31 miller ave.
biddeford, me 04005

Date:
APRIL 4, 2025

Issued For:
PLANNING BOARD WORKSHOP

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Title:
CUMBERLAND AVENUE PLANTING PLAN

# 70 EAST OXFORD STREET
REDEVELOPMENT
Portland ME 04103

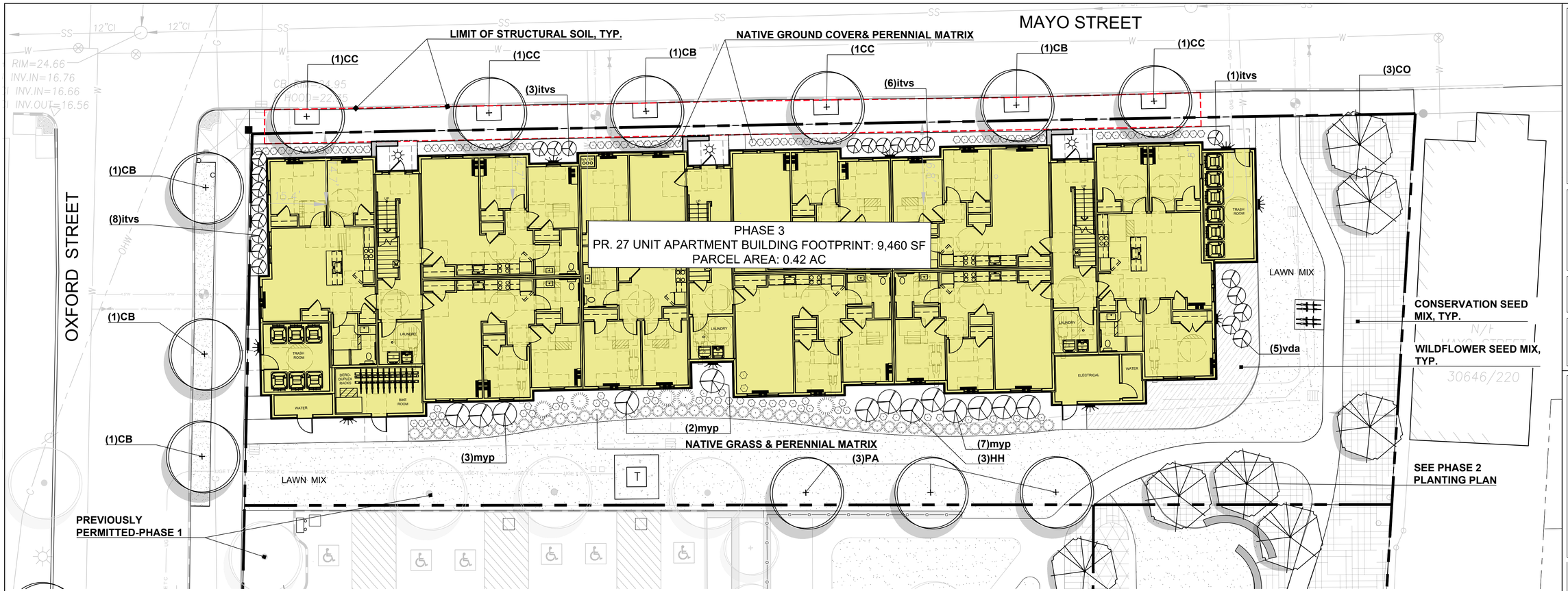
Revisions:

North:

Sheet No.:
L2

Scale: 1" = 10'-0"
0 10 20

C:\Users\bzoyd\OneDrive\DRY LA\Projects\COMB Phase 2 3\CAD\EDXL BASE COMB 24.06.17- Workshop Comment Response Rev.1-SUB SET - Standard\Phase 2&3 COMB -25.04.04.sch Set Plot Style: 4.4.24.ctb




## PLANTING SCHEDULE PHASE 3

| CODE | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | SPACING | NOTES |
|---|---|---|---|---|---|---|
| **DECIDUOUS TREES** | | | | | | |
| CC | *Cercis canadensis* | Eatern Redbud | 4 | 1.75-2" cal | as shown | Single Stem, Matched |
| CB | *Carpinus betulus 'Frans Fontaine'* | Hornbeam 'Frans Fontaine' | 5 | 1.75-2" cal | as shown | |
| CO | *Cotinus obovatus* | American Smoke Tree | 3 | 12-14' | as shown | Multi-stem, B&B |
| PA | *Prunus 'Accolade'* | Prunus accolade | 3 | 1.75-2" cal | as shown | Single Stem, Matched |
| **DECIDUOUS SHRUBS** | | | | | | |
| CODE | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | SPACING | NOTES |
| hh | *Hypericum 'Hidcote'* | St. John's Wort | 3 | 24"-36" ht. | 36" O.C. | |
| myp | *Myrica pensylvanica* | Northern Bayberry | 17 | 24"-30" ht. | 60" O.C. | |
| vds | *Viburnum dentatum* | Arrowwood Viburnum | 5 | 24" ht. | As shown | |
| itvs | *Itea virginica* | Virginia Sweetspire | 18 | 24" ht. | 60" O.C. | |
| **PERENNIAL** | | | | | | |
| CODE | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | SPACING | NOTES |
| amh | *Amsonia hubrichtii* | Thread-leafed Bluestar | tbd | tbd | 18" O.C. | |
| abb | *Gillenia trifoliata* | Bowman's Root | tbd | tbd | 18" O.C. | |
| dep | *Dennistaedtia punctilobula* | Hay Scented Fern | tbd | tbd | 24" O.C. | |
| epc | *Echinacea purpurea* | Purple Coneflower | tbd | tbd | 24" O.C. | |
| grc | *Geranium x 'Rozanne'* | Rozanne Cranesbill | tbd | tbd | 24" O.C. | |
| hxc | *Heuchera 'Caramel'* | Caramel Coral Bells | tbd | tbd | 24" O.C. | |
| rfs | *Rudbeckia fulgida 'American Gold Rush'* | Gold Rush Black-Eyed Susan | tbd | tbd | 24" O.C. | |
| smm | *Salvia 'May Night'* | May Night Salvia | tbd | tbd | 24" O.C. | |
| **GRASSES, VINES & GROUND COVERS** | | | | | | |
| CODE | BOTANICAL NAME | COMMON NAME | QTY. | SIZE | SPACING | NOTES |
| AG | *Allium gladiator* | Ornamental Onion | tbd | Bulb | 12" O.C. | |
| PVS | *Panicum virgatum 'Shenandoah'* | Shenandoah Switchgrass | tbd | #2 | 24" O.C. | |
| SS | *Schizachyrum scoparium* | Little Bluestem | tbd | #3 | 24" O.C. | |

## PLANTING NOTES

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19. IRRIGATION DESIGN BY OTHERS

## PLANT & SEED MIX LEGEND

| SYMBOL | TYPE | SYMBOL | TYPE |
|---|---|---|---|
| | LAWN MIX | SA | DECIDUOUS TREE |
| | NEW ENGLAND CONSERVATION WILDLIFE MIX CONTROL MIX. TALL GRASS TYP. NEW ENGLAND WETLAND PLANTS NEWP.COM CATALOG SEED-MIXES WILDLIFE | | PERENNIALS, GRASSES SHRUBS |
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NOTE: This drawing is PERMITTING ONLY. It is NOT intended for use as a construction document.

Prepared For:
PHA
Portland Housing Authority
970 BAXTER BOULEVARD,
PORTLAND, MAINE 04101

Prepared By:
DryLA
Dry Landscape Architecture, L.L.C.
31 miller ave.
biddeford, me 04005

Date:
APRIL 4, 2025

Issued For:
PLANNING BOARD WORKSHOP

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Title:
MAYO STREET
PLANTING PLAN

70 EAST
OXFORD STREET
REDEVELOPMENT
Portland ME 04103

Revisions:

North:

Sheet No.:
L4

Scale: 1" = 10'-0"
0 10 20

C:\Users\bdyp\Dropbox\Drive\DRY-LA\Projects\COMB Phase 2-3\CAD\00's -BASE COMB 24.06.17- Workshop Comment Response Rev.- ISUB SET - Standard\Phase 2&3 COMB_25.04.04.dwg, 4/4/2025 3:48:18 PM, bdyp




| PHASE 1 OPEN SPACE SUMMARY– LOT SIZE 24,403 SF | | | PHASE 2 OPEN SPACE SUMMARY– LOT SIZE 18,295 SF | | | PHASE 3 MAYO STREET OPEN SPACE SUMMARY– LOT SIZE 23,958 SF | | |
|---|---|---|---|---|---|---|---|---|
| | B1 OVERLAY | COLOR | | B–2B OVERLAY | COLOR | | B1 OVERLAY | COLOR |
| LANDSCAPED OPEN SPACE | 19.4% | | LANDSCAPED OPEN SPACE | 35.1% | | LANDSCAPED OPEN SPACE | 29.5% | |
| HARDSCAPED OPEN SPACE | 13.5% | | HARDSCAPED OPEN SPACE | 9.5% | | HARDSCAPED OPEN SPACE | 5.75% | |
| TOTAL OPEN SPACE | 32.9% | | TOTAL OPEN SPACE | 44.6% | | TOTAL OPEN SPACE | 35.25% | |

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Title:
OPEN SPACE EXHIBIT

# 70 EAST OXFORD STREET
REDEVELOPMENT
Portland ME 04103

Revisions:

06.17.2024 Update Unit Count

North:

Sheet No.:
EXA

Scale: 1" = 20'-0"

0 10 20 40

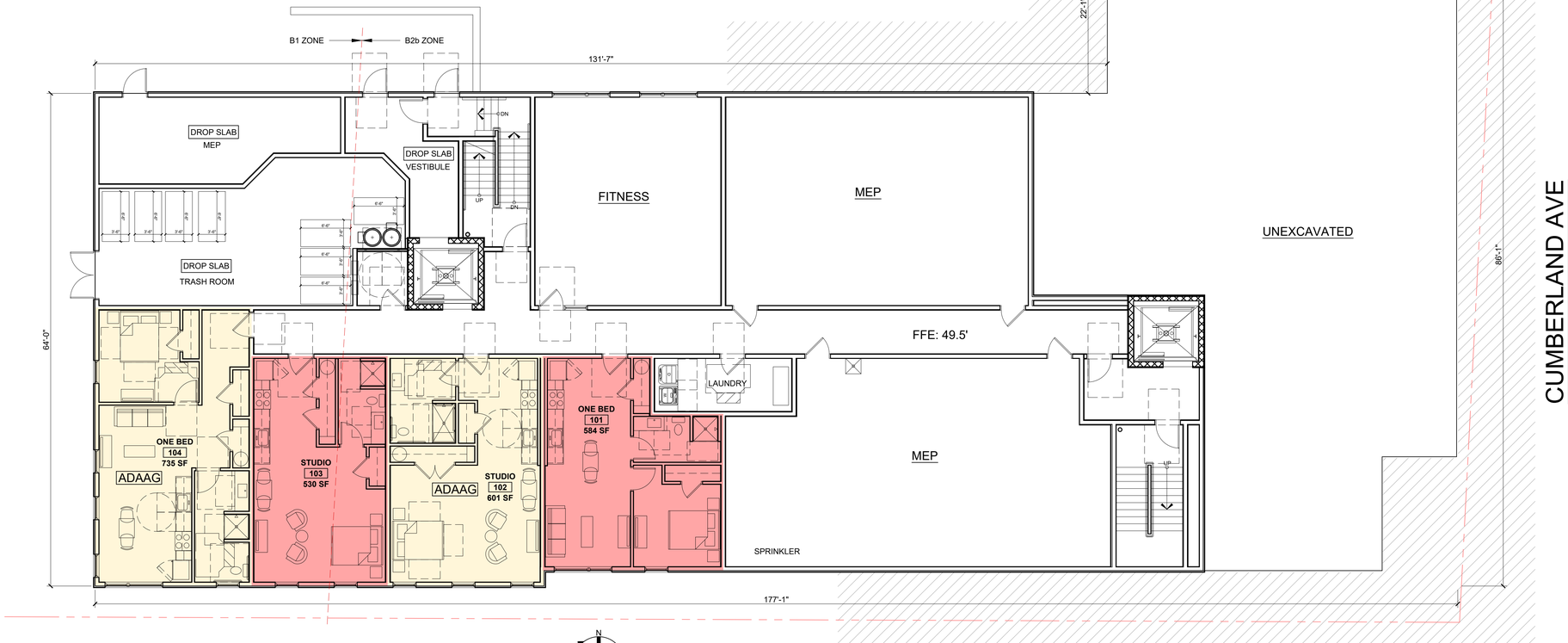
NOTE: This drawing is PERMITTING ONLY. It is NOT intended for use as a construction document.

C:\Users\tonyn\OneDrive\DRY LA Projects\COMB Phase 2-3\CAD\DD\L-BASE COMB 24.06.17- Workshop Comment Response Rev.1-SUB SET - Standard Phase 2&3
COMB - 25.04.14 sub Set.dwg 10:19:36 4/4/2025

1ST FLOOR

FLOOR PLATE
8,460 SF

4 UNITS
2X STUDIO
2X ONE BED




1 7 STORY - FIRST FLOOR PLAN
1/8" = 1'-0"

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# CUMBERLAND - BOYD

COMB BLOCK
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RSA
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C: 207-650-6414
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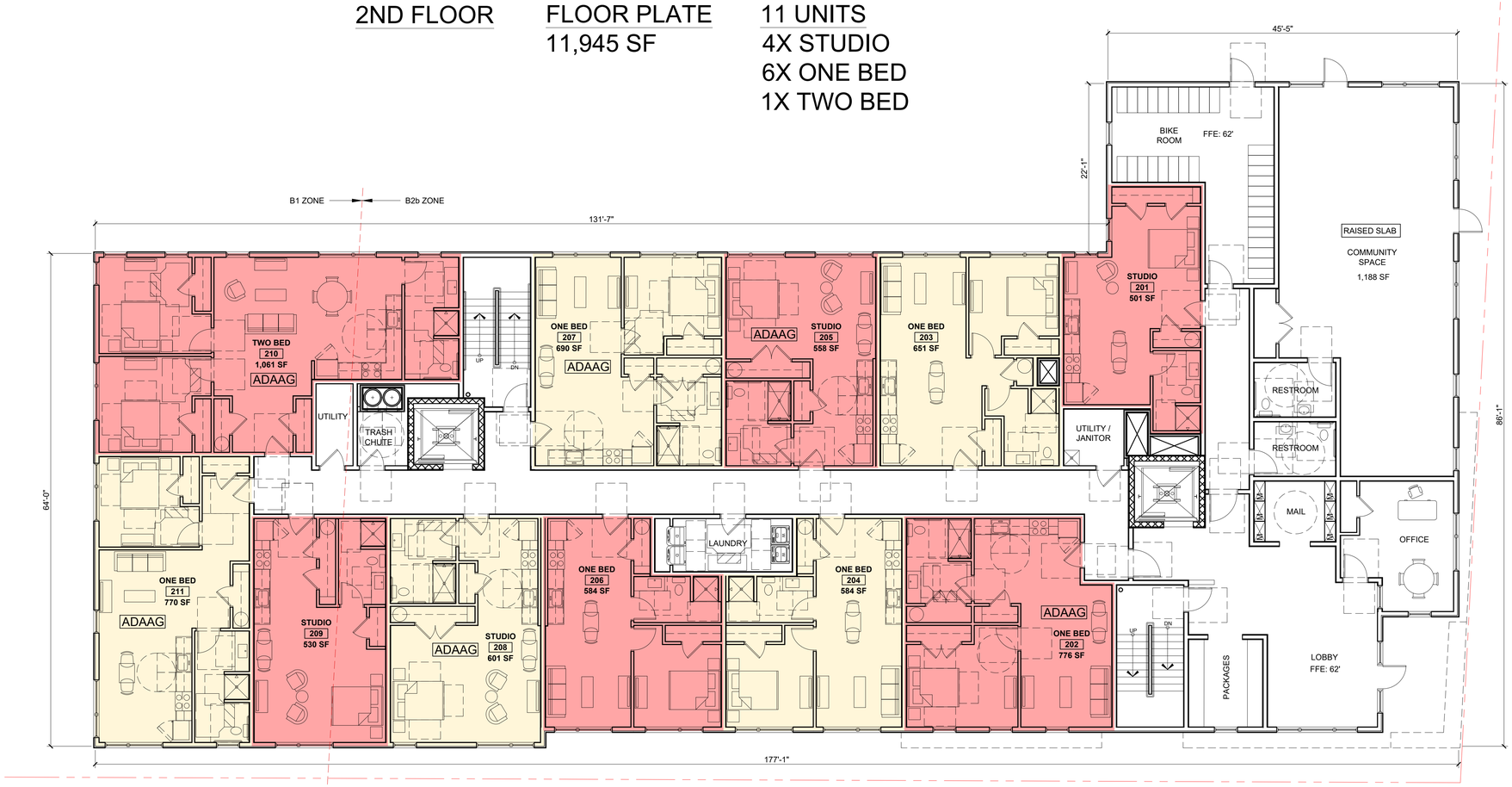
SHEET TITLE:
7 STORY - FIRST FLOOR PLAN

A1

2ND FLOOR

FLOOR PLATE
11,945 SF

11 UNITS
4X STUDIO
6X ONE BED
1X TWO BED




1 7 STORY - SECOND FLOOR PLAN
1/8" = 1'-0"

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SHEET TITLE:
7 STORY - SECOND FLOOR PLAN

A2

3RD FLOOR

FLOOR PLATE
12,217 SF

16 UNITS
8X STUDIO
7X ONE BED
1X TWO BED




1 7 STORY - THIRD FLOOR PLAN
1/8" = 1'-0"

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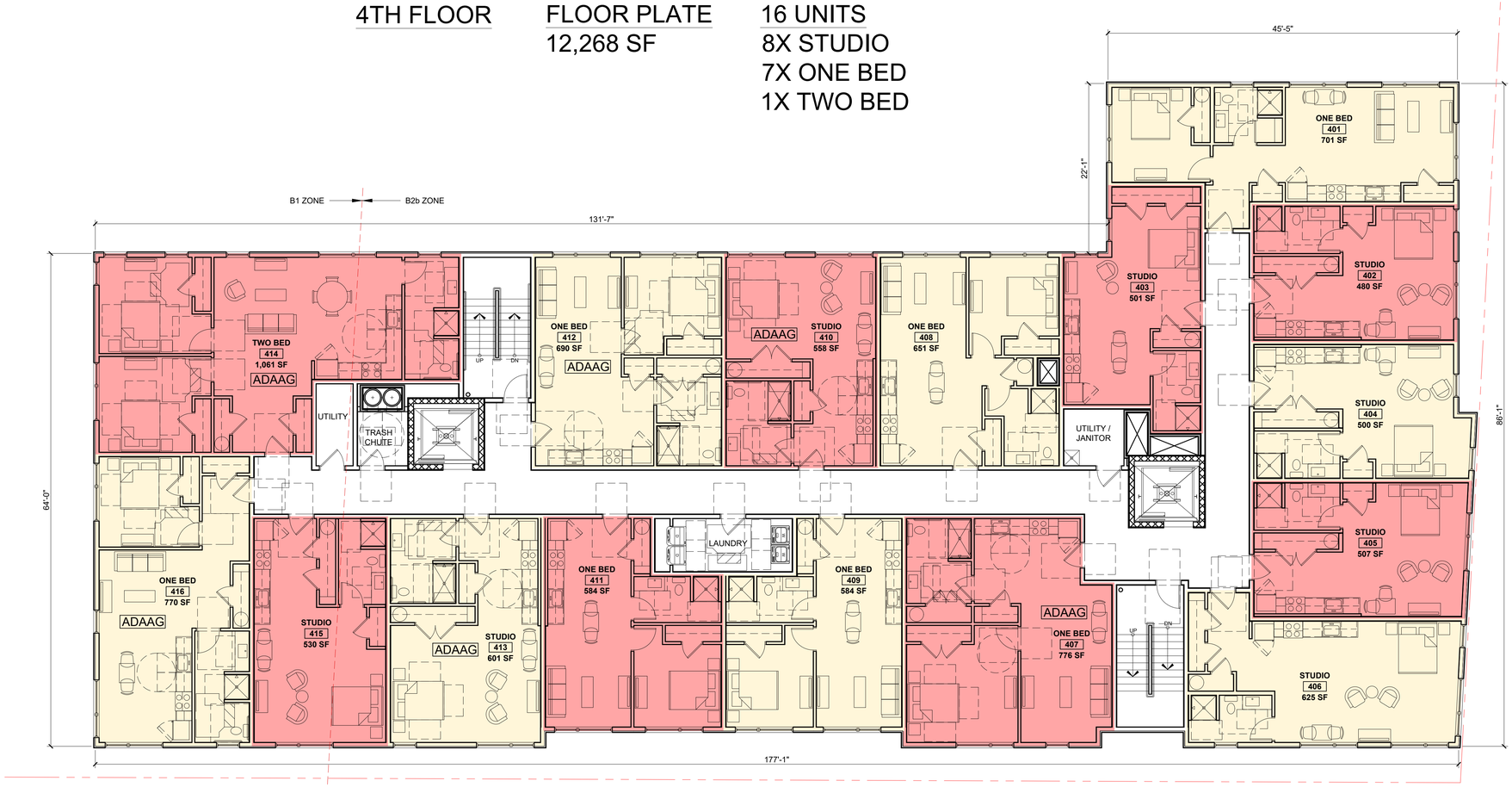
SHEET TITLE:
7 STORY - THIRD FLOOR PLAN

A3

4TH FLOOR

FLOOR PLATE
12,268 SF

16 UNITS
8X STUDIO
7X ONE BED
1X TWO BED




1 7 STORY - FOURTH FLOOR PLAN
1/8" = 1'-0"

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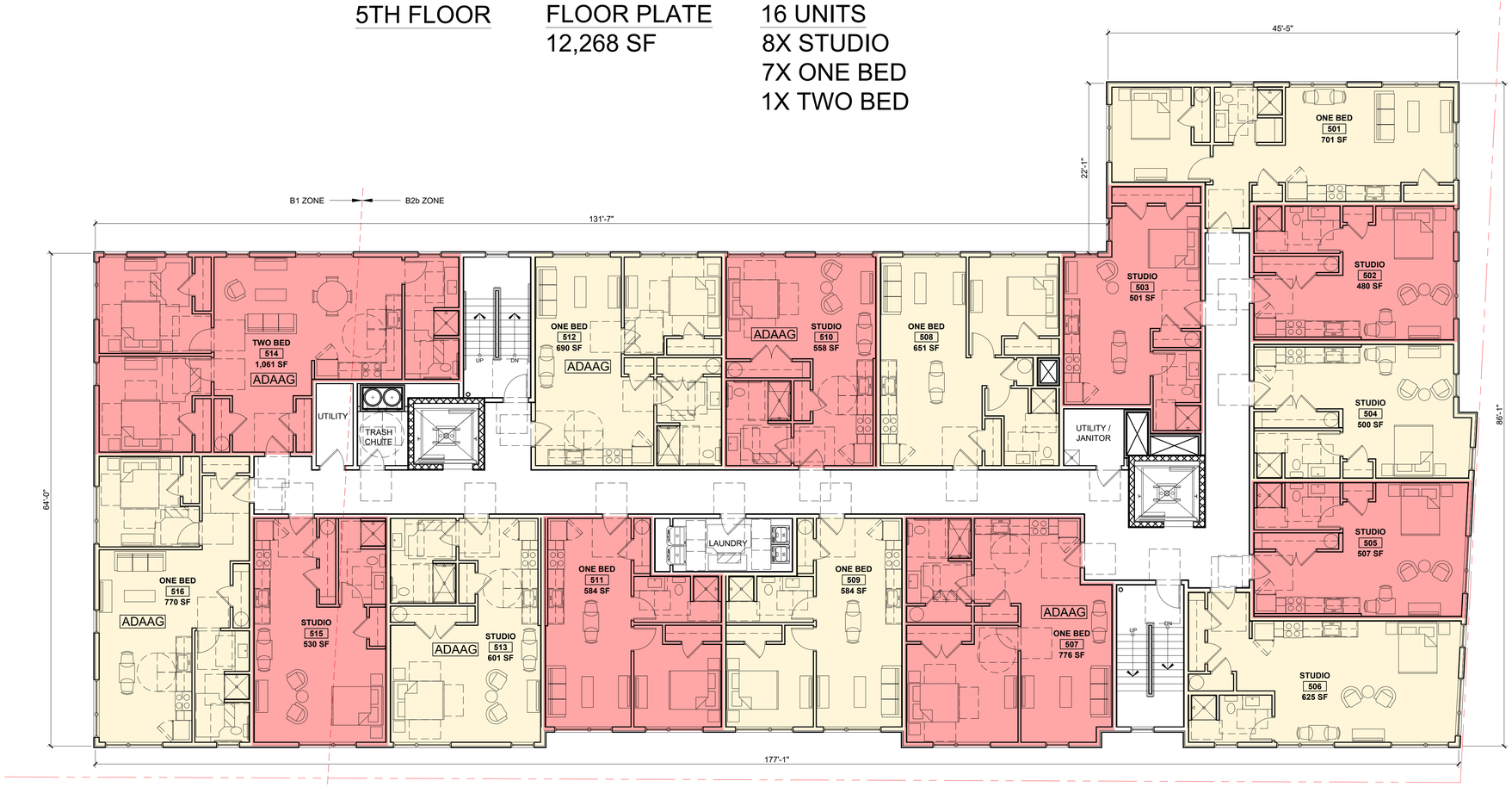
SHEET TITLE:
7 STORY - FOURTH FLOOR PLAN

A4

5TH FLOOR

FLOOR PLATE
12,268 SF

16 UNITS
8X STUDIO
7X ONE BED
1X TWO BED




7 STORY BUILDING

BOYD STREET

CUMBERLAND AVE

N
TRUE NORTH

0 4' 8' 16' 32'

1 7 STORY - FIFTH FLOOR PLAN
1/8" = 1'-0"

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SHEET TITLE:
7 STORY - FIFTH FLOOR PLAN

A5

6TH FLOOR

FLOOR PLATE
12,268 SF

16 UNITS
8X STUDIO
7X ONE BED
1X TWO BED




1 7 STORY - SIXTH FLOOR PLAN
1/8" = 1'-0"

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SHEET TITLE:
7 STORY - SIXTH FLOOR PLAN

A6

7TH FLOOR

FLOOR PLATE
9,728 SF

13 UNITS
7X STUDIO
6X ONE BED




1 7 STORY - SEVENTH FLOOR PLAN
1/8" = 1'-0"

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SHEET TITLE:
7 STORY - SEVENTH FLOOR PLAN

A7

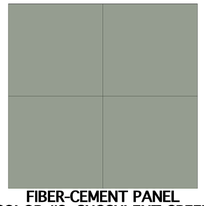
# MATERIALS BOARD



FIBER-CEMENT PANEL
COLOR #1: RICH ESPRESSO



FIBER-CEMENT LAP
COLOR #2: ARCTIC WHITE



FIBER-CEMENT PANEL
COLOR #3: SUCCULENT GREEN



BRICK - COLOR #4
BLACK DIAMOND VELOUR



WINDOWS / DOORS
COLOR #5: SLATE GRAY

NOTE: THE GLAZING SHALL HAVE A VT OF 0.7 OR GREATER AT THE GROUND LEVEL WINDOWS AND DOORS




1 SOUTH ELEVATION
1/8" = 1'-0"

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| SCALE: | AS NOTED |

SHEET TITLE:
SOUTH ELEVATION

B1

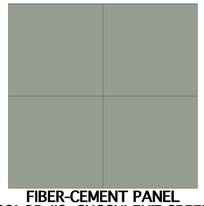
# MATERIALS BOARD



FIBER-CEMENT PANEL
COLOR #1: RICH ESPRESSO



FIBER-CEMENT LAP
COLOR #2: ARCTIC WHITE



FIBER-CEMENT PANEL
COLOR #3: SUCCULENT GREEN



BRICK - COLOR #4
BLACK DIAMOND VELOUR



WINDOWS / DOORS
COLOR #5: SLATE GRAY

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1 EAST ELEVATION
1/8" = 1'-0"

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| SCALE: | AS NOTED |

SHEET TITLE:
EAST
ELEVATION

B2

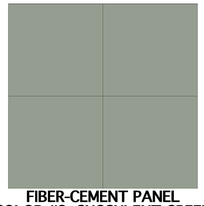
# MATERIALS BOARD



FIBER-CEMENT PANEL
COLOR #1: RICH ESPRESSO



FIBER-CEMENT LAP
COLOR #2: ARCTIC WHITE



FIBER-CEMENT PANEL
COLOR #3: SUCCULENT GREEN



BRICK - COLOR #4
BLACK DIAMOND VELOUR



WINDOWS / DOORS
COLOR #5: SLATE GRAY

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1 NORTH ELEVATION A
1/8" = 1'-0"

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SHEET TITLE:
NORTH
ELEVATION A

B3

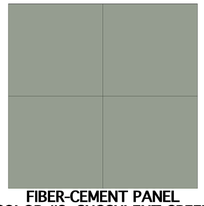
# MATERIALS BOARD



FIBER-CEMENT PANEL
COLOR #1: RICH ESPRESSO



FIBER-CEMENT LAP
COLOR #2: ARCTIC WHITE



FIBER-CEMENT PANEL
COLOR #3: SUCCULENT GREEN



BRICK - COLOR #4
BLACK DIAMOND VELOUR



WINDOWS / DOORS
COLOR #5: SLATE GRAY

NOTE: THE GLAZING SHALL HAVE A VT OF 0.7 OR GREATER AT THE GROUND LEVEL WINDOWS AND DOORS




1 NORTH ELEVATION B
1/8" = 1'-0"

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SHEET TITLE:
NORTH
ELEVATION B

B4

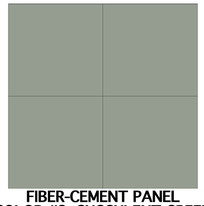
# MATERIALS BOARD



FIBER-CEMENT PANEL
COLOR #1: RICH ESPRESSO



FIBER-CEMENT LAP
COLOR #2: ARCTIC WHITE



FIBER-CEMENT PANEL
COLOR #3: SUCCULENT GREEN



BRICK - COLOR #4
BLACK DIAMOND VELOUR



WINDOWS / DOORS
COLOR #5: SLATE GRAY

NOTE: THE GLAZING SHALL HAVE A VT OF 0.7 OR GREATER AT THE GROUND LEVEL WINDOWS AND DOORS




1 WEST ELEVATION
1/8" = 1'-0"

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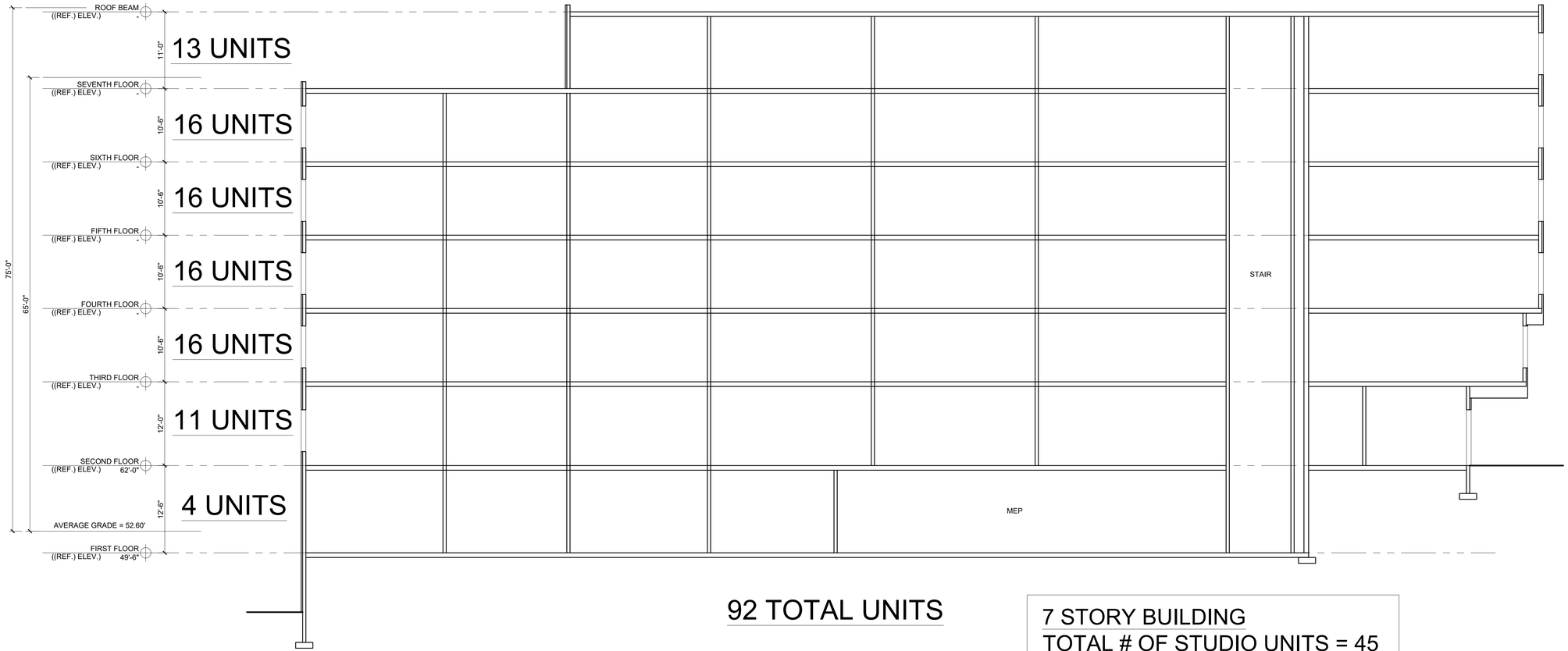
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SHEET TITLE:
WEST ELEVATION

B5




92 TOTAL UNITS

7 STORY BUILDING
TOTAL # OF STUDIO UNITS = 45
TOTAL # OF 1 BED UNITS = 42
TOTAL # OF 2 BED UNITS = 5

1 SECTION 1
1/8" = 1'-0"

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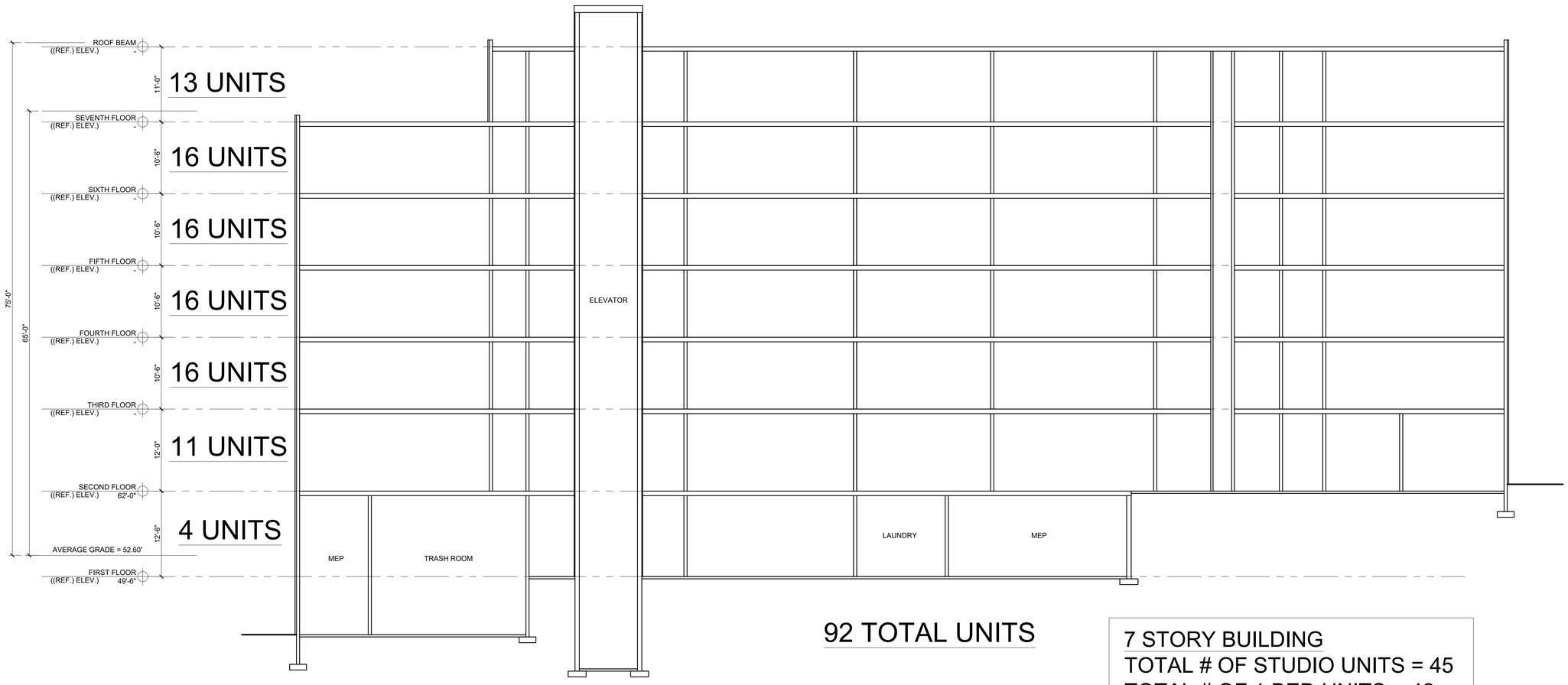
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SHEET TITLE:
SECTION 1

C1




92 TOTAL UNITS

7 STORY BUILDING
TOTAL # OF STUDIO UNITS = 45
TOTAL # OF 1 BED UNITS = 42
TOTAL # OF 2 BED UNITS = 5

1 SECTION 2
1/8" = 1'-0"

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SHEET TITLE:
SECTION 2

C2



1 IMAGE 1
NTS

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SHEET TITLE:
SU IMAGE 1

D1




1 IMAGE 2
NTS

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SHEET TITLE:
SU IMAGE 2

D2



1 IMAGE 3
NTS

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SHEET TITLE:
SU IMAGE 3

D3



1 IMAGE 4
NTS

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SHEET TITLE:
SU IMAGE 4

D4



1 IMAGE 5
NTS

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SHEET TITLE:
SU IMAGE 5

D5




1 IMAGE 6
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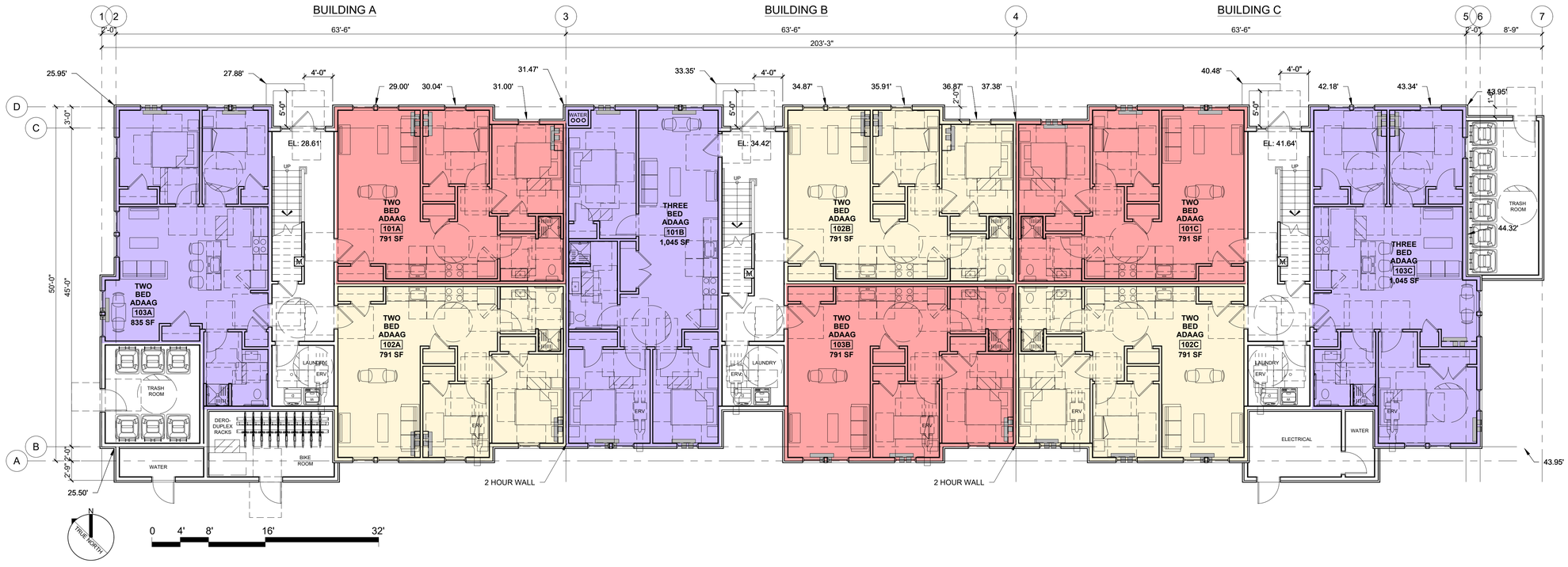
SHEET TITLE:
SU IMAGE 6

D6

# 1st FLOOR

FLOOR PLATE
9,667 SF

9 UNITS (ALL ADAAG / A)
7x TWO BED UNITS
2x THREE BED UNITS




1 FIRST FLOOR PLAN
1/8" = 1'-0"

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27 UNIT APARTMENT BUILDING
COMB BLOCK - MAYO STREET
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| PROJECT No. | 2454 |
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| SCALE: | AS NOTED |

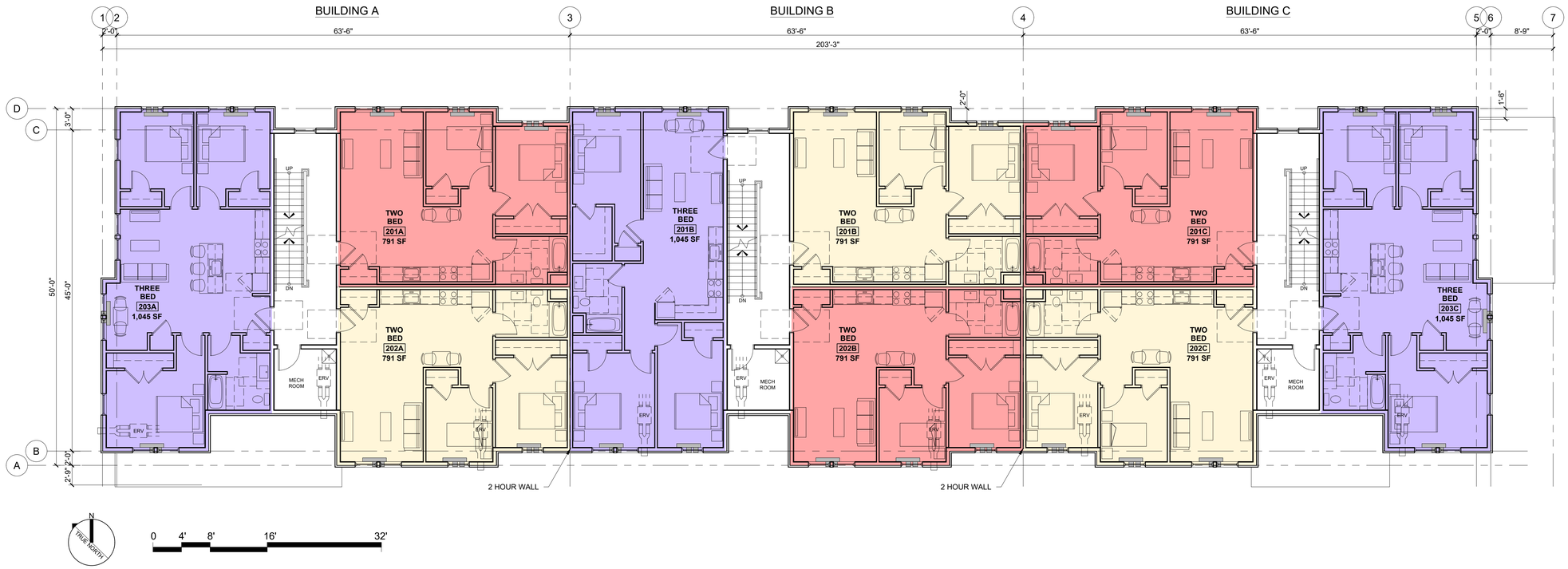
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FIRST FLOOR PLAN

A1-1

# 2nd FLOOR

FLOOR PLATE
8,997 SF

9 UNITS (ALL Type B)
6x TWO BED UNITS
3x THREE BED UNITS




1 SECOND FLOOR PLAN
1/8" = 1'-0"

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27 UNIT APARTMENT BUILDING
COMB BLOCK - MAYO STREET
PORTLAND, MAINE

RYAN SENATORE
**ARCHITECTURE**
500 CONGRESS STREET, SUITE 2
PORTLAND, MAINE 04101
O: 207-747-5159
C: 207-650-6414
senatorearchitecture.com

CONSULTANTS:

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| DATE: | |
| PROJECT No. | 2454 |
| DRAWN BY: | RRT |
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| SCALE: | AS NOTED |

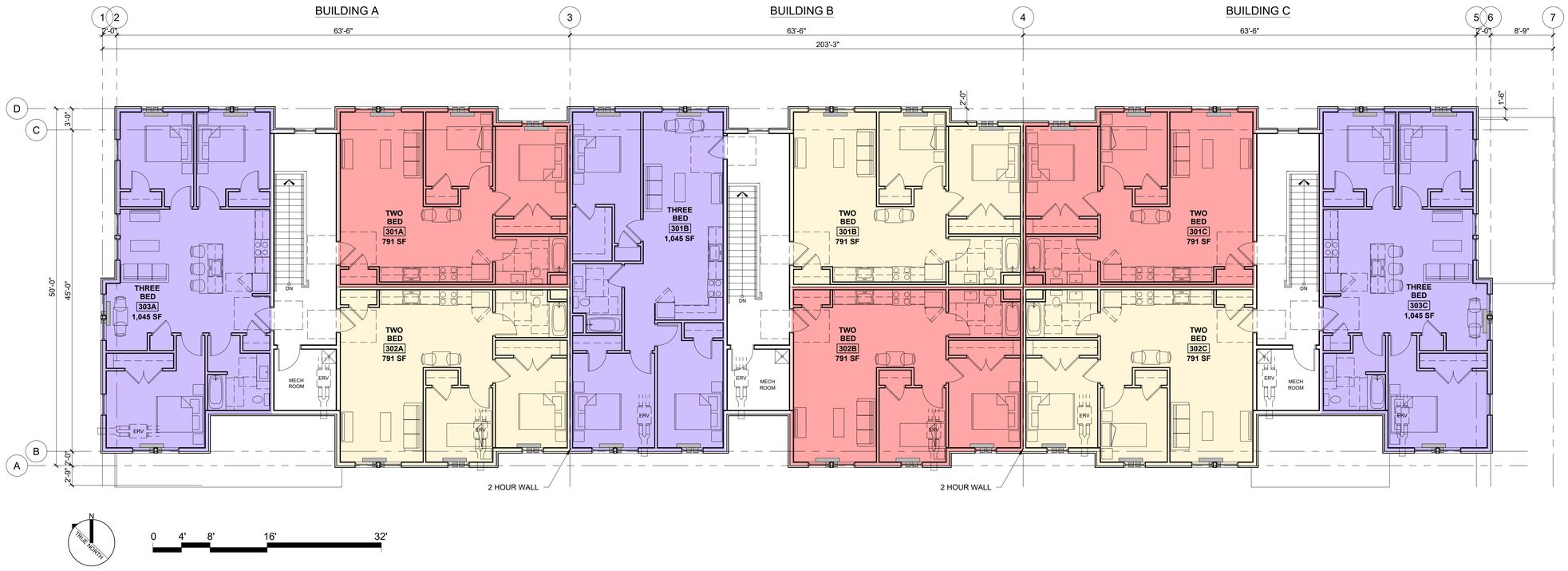
SHEET TITLE:
SECOND FLOOR PLAN

A1-2

# 3rd FLOOR

FLOOR PLATE
8,997 SF

9 UNITS (ALL Type B)
6x TWO BED UNITS
3x THREE BED UNITS







1 THIRD FLOOR PLAN
1/8" = 1'-0"

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PORTLAND, MAINE

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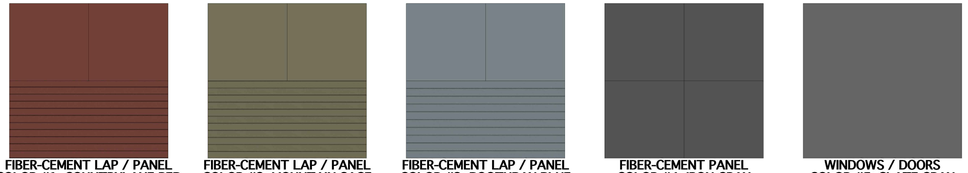
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| DATE: | |
| PROJECT No. | 2454 |
| DRAWN BY: | RRT |
| CHECKED BY: | RJS |
| SCALE: | AS NOTED |

SHEET TITLE:
THIRD FLOOR PLAN

A1-3

# MATERIALS BOARD



FIBER-CEMENT LAP / PANEL
COLOR #1: COUNTRYLANE RED

FIBER-CEMENT LAP / PANEL
COLOR #2: MOUNTAIN SAGE

FIBER-CEMENT LAP / PANEL
COLOR #3: BOOTHBAY BLUE

FIBER-CEMENT PANEL
COLOR #4: IRON GRAY

WINDOWS / DOORS
COLOR #5: SLATE GRAY

NOTE: WINDOW TRANSPARENCY TO MEET .7 OR GREATER AT GROUND LEVEL




2 WEST ELEVATION
1/8" = 1'-0"

NOTE: WINDOW TRANSPARENCY TO MEET .7 OR GREATER AT GROUND LEVEL




1 NORTH ELEVATION
1/8" = 1'-0"

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# 27 UNIT APARTMENT BUILDING

COMB BLOCK - MAYO STREET
PORTLAND, MAINE

RYAN SENATORE
**ARCHITECTURE**
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PORTLAND, MAINE 04101
O: 207-747-5159
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CONSULTANTS:

REVISIONS:

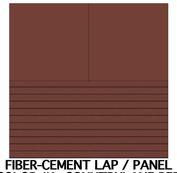
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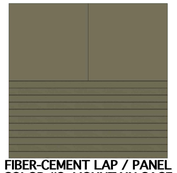
SHEET TITLE:
ELEVATIONS

A2-0

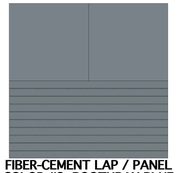
# MATERIALS BOARD



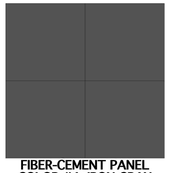
FIBER-CEMENT LAP / PANEL
COLOR #1: COUNTRYLANE RED



FIBER-CEMENT LAP / PANEL
COLOR #2: MOUNTAIN SAGE



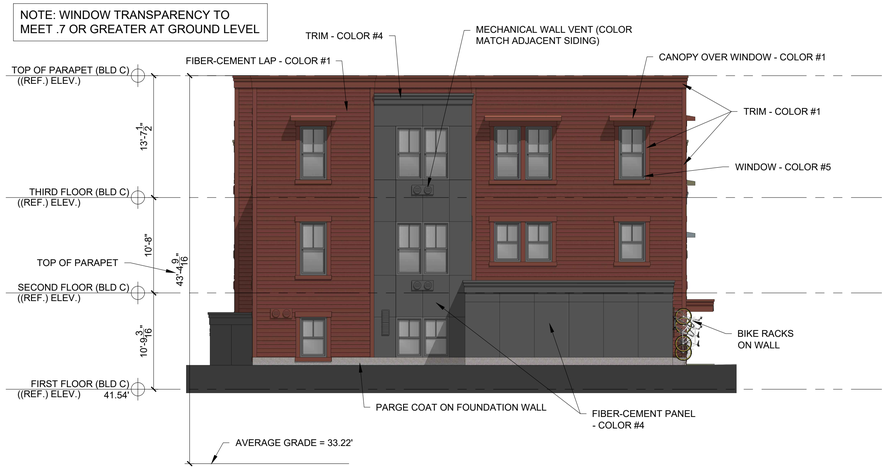
FIBER-CEMENT LAP / PANEL
COLOR #3: BOOTHBAY BLUE



FIBER-CEMENT PANEL
COLOR #4: IRON GRAY



WINDOWS / DOORS
COLOR #5: SLATE GRAY




2 EAST ELEVATION
1/8" = 1'-0"




1 SOUTH ELEVATION
1/8" = 1'-0"

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# 27 UNIT APARTMENT BUILDING

COMB BLOCK - MAYO STREET
PORTLAND, MAINE

RYAN SENATORE
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CONSULTANTS:

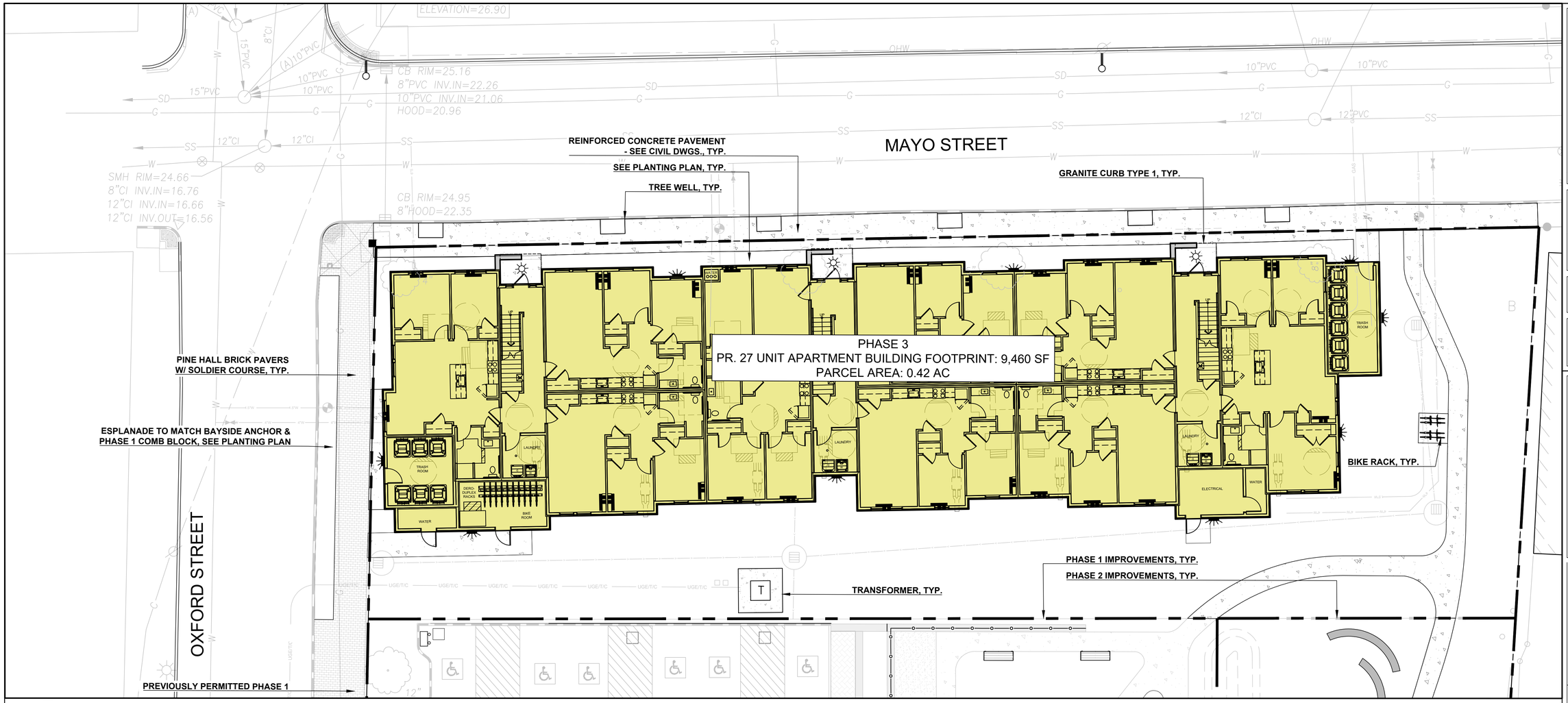
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| CHECKED BY: | RJS |
| SCALE: | AS NOTED |

SHEET TITLE:
ELEVATIONS

A2-1




## LAYOUT NOTES

1. ANY DISCREPANCIES BETWEEN DRAWINGS, DETAILS, NOTES AND SPECIFICATIONS SHALL BE IMMEDIATELY REPORTED TO THE LANDSCAPE ARCHITECT FOR FURTHER DIRECTION AND RESOLUTION BEFORE ADDITIONAL WORK PROCEEDS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES ON THE GROUND. ANY DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE LANDSCAPE ARCHITECT FOR DIRECTION AND RESOLUTION PRIOR TO ANY FURTHER WORK.
3. CONTRACTOR SHALL FIELD VERIFY LOCATION AND DEPTH OF ALL EXISTING UTILITIES WITH THE APPROPRIATE UTILITY COMPANIES PRIOR TO EXCAVATION OF OR INSTALLATION OF ANY PART OF THIS WORK. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
4. CONTRACTOR SHALL NOTIFY DIG SAFE (1-888-344-7233) PRIOR TO EXCAVATION.
5. CONTRACTOR SHALL AVOID ALL AREAS NOT REQUIRING GRADING. CONTRACTOR SHALL NOT DISTURB THESE AREAS AND SHALL PRESERVE EXISTING VEGETATION.
6. CONTRACTOR SHALL LOAM AND SEED ALL GRADED AND DISTURBED AREAS NOT OTHERWISE IMPROVED.
7. ALL WORK ASSOCIATED WITH THE PROPOSED WATER SERVICE MUST ADHERE TO PORTLAND WATER DISTRICT STANDARDS. ALL WORK ASSOCIATED WITH THE PROPOSED SANITARY SEWER LINE MUST ADHERE TO THE CITY OF PORTLAND DEPARTMENT OF WATER RESOURCE DIVISION.
8. THE CONTRACTOR SHALL BE HELD SOLELY RESPONSIBLE FOR UNDERTAKING THE WORK IN A SAFE AND EFFICIENT MANNER, IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL SAFETY REGULATIONS. ALL WORK AREAS SHALL BE DELINEATED CLEARLY AND FENCED AS APPROPRIATE TO PREVENT UNAUTHORIZED ACCESS. THE SITE SHALL BE LEFT IN A SAFE, ORDERLY AND TIDY MANNER AT THE END OF EACH WORK DAY.
9. THE CONTRACTOR SHALL PROVIDE ALL MATERIALS AND PERFORM ALL WORK NECESSARY TO REGULATE TRAFFIC IN THE AREA OF THE SITE, AND SHALL BE RESPONSIBLE FOR MAINTAINING ACCESS TO AND FROM PUBLIC AND PRIVATE PROPERTIES AND RIGHTS OF WAY DURING CONSTRUCTION.
10. PROVIDE EXPANSION JOINTS
11. REQUEST INSPECTION OF FIELD STAKING BY LANDSCAPE ARCHITECT A MINIMUM OF 24 HOURS IN ADVANCE OF PERFORMING ANY WORK UNLESS INDICATED OTHERWISE.

## GENERAL NOTES

1. THE PLANTING DESIGN IS BASED ON CIVIL ENGINEERING DRAWINGS PRODUCED BY ACORN ENGINEERING. EXISTING BUILDINGS, GRADING, EASEMENTS AND UTILITIES ARE BASED ON SURVEY INFORMATION PROVIDED BY THE OWNER.
2. VERIFY ALL CONDITIONS AT PROJECT SITE AND NOTIFY LANDSCAPE ARCHITECT OF DIMENSIONAL ERRORS, OMISSIONS OR DISCREPANCIES BEFORE BEGINNING WORK.
3. THE LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE UTILITIES OR STRUCTURES NOT SHOWN ON THE DRAWINGS. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING OVER OR NEAR EXISTING GAS MAINS AND ELECTRICAL LINES. CONTRACTOR IS TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES, ABOVE AND BELOW GRADE, PRIOR TO EXCAVATION OR TRENCHING. CALL DIG SAFE AT 1-(800) 452-4699. NOTIFY LANDSCAPE ARCHITECT OF ANY DISCREPANCIES OR CONFLICTS. DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE OWNER.
4. ARCHITECTURAL ELEMENTS ARE SHOWN ON LANDSCAPE PLANS FOR REFERENCE ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR ACTUAL ARCHITECTURAL INFORMATION. NOTIFY OWNER OR OWNER'S REPRESENTATIVE & LANDSCAPE ARCHITECT OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
5. THE LANDSCAPE ARCHITECT IS NOT RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR FOR SAFETY PRECAUTIONS OR PROBLEMS UTILIZED IN CONNECTION WITH THE WORK, AND HE WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

NOTE: This drawing is PERMITTING ONLY. It is NOT intended for use as a construction document.

Prepared For:
PHA
Portland Housing Authority
970 BAXTER BOULEVARD,
PORTLAND, MAINE 04101

Prepared By:
DryLA
Dry Landscape Architecture, L.L.C.
31 miller ave.
biddeford, me 04005

Date:
APRIL 4, 2025

Issued For:
PLANNING BOARD WORKSHOP

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Title:
MAYO STREET
MATERIAL PLAN

70 EAST
OXFORD STREET
REDEVELOPMENT
Portland ME 04103

Revisions:

North:

Sheet No.:
L3

Scale: 1" = 10'-0"
0 5 10 20

C:\Users\tcryn\OneDrive\DRY LA\Projects\COMB Phase 2-3\CAD\DDL_BASE COMB 24.06.11- Workshop Comment Response Rev-1_SUB SET - Standard\Phase 2&3 COMB_25.04.04-bb3.dwg 8:56:14 AM 4/4/2025



1 IMAGE 1
NTS

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# CUMBERLAND - BOYD

COMB BLOCK
PORTLAND, MAINE

RYAN SENATORE
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PORTLAND, MAINE 04101
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C: 207-650-6414
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CONSULTANTS:

REVISIONS:

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| DATE: | |
| PROJECT No. | 2463 |
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| SCALE: | AS NOTED |

SHEET TITLE:
SU IMAGE 1

D1




1 IMAGE 2
NTS

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D2



1 IMAGE 3
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SU IMAGE 3

D3



1 IMAGE 4
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SU IMAGE 4

D4



1 IMAGE 5
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SHEET TITLE:
SU IMAGE 5

D5




1 IMAGE 6
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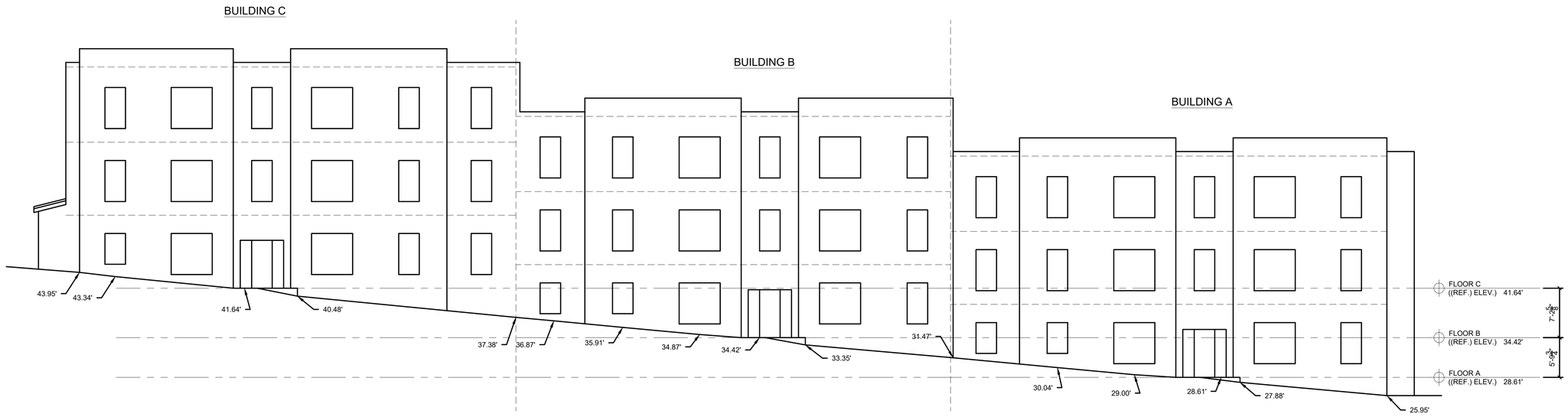
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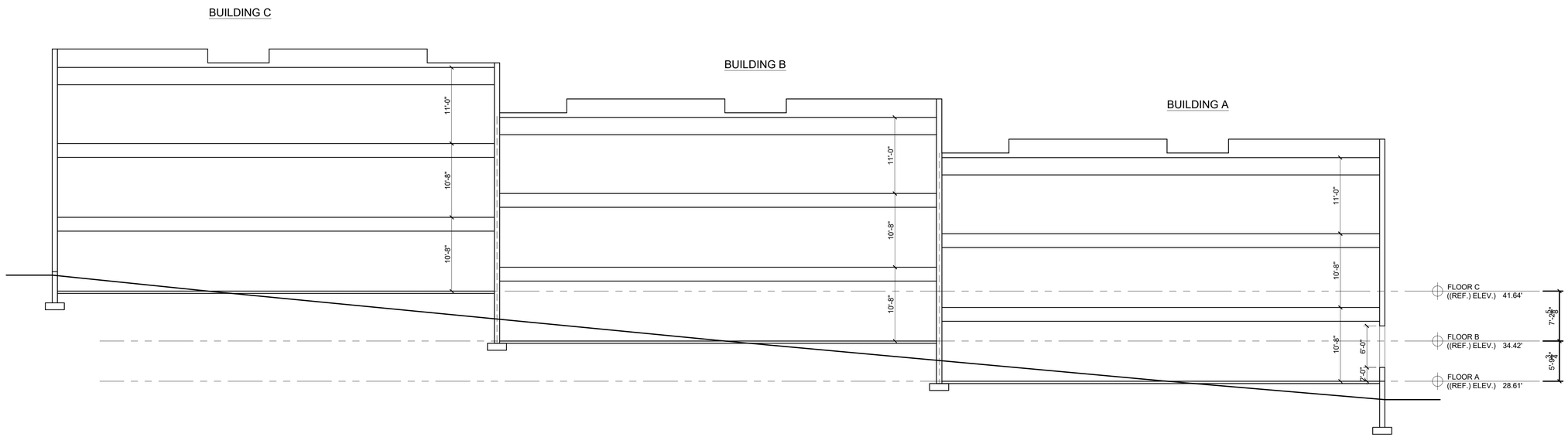
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| CHECKED BY: | RJS |
| SCALE: | AS NOTED |

SHEET TITLE:
SU IMAGE 6

D6




1 SECTION
1/8" = 1'-0"

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# 27 UNIT APARTMENT BUILDING

COMB BLOCK - MAYO STREET
PORTLAND, MAINE

RYAN SENATORE
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PORTLAND, MAINE 04101
O: 207-747-5159
C: 207-650-6414
senatorearchitecture.com

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REVISIONS:

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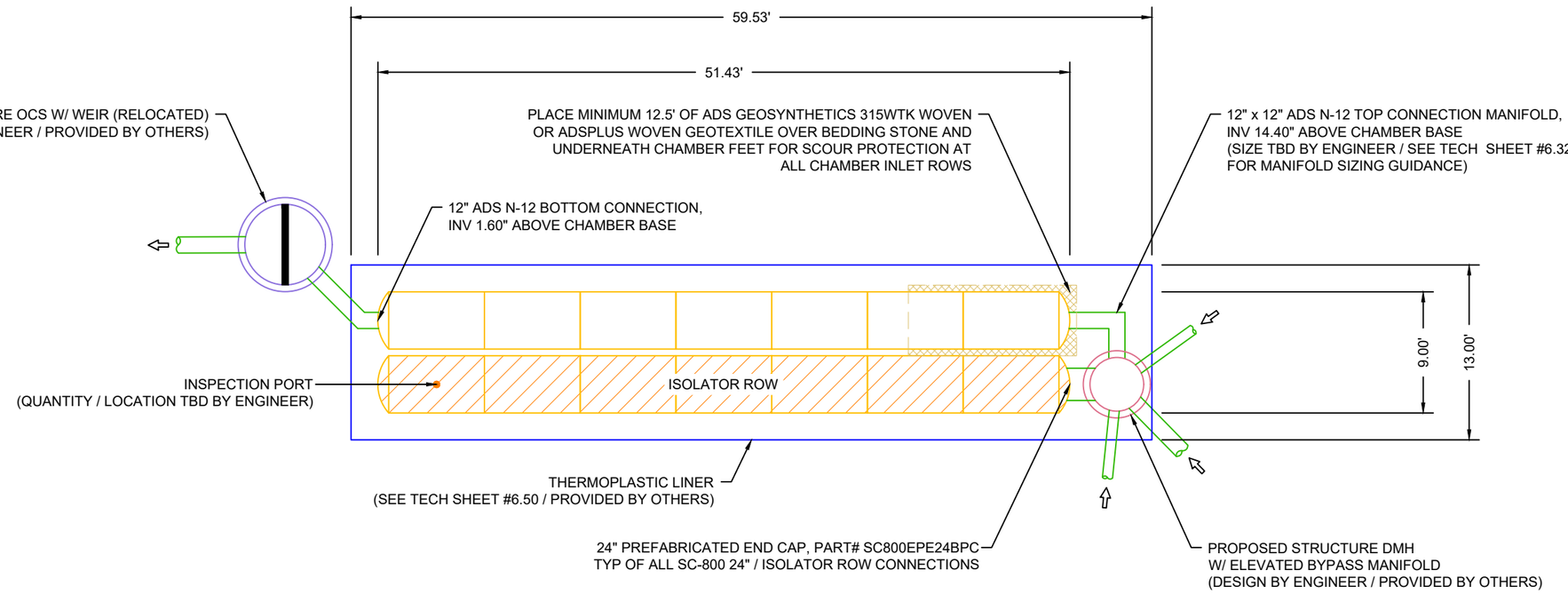
A3-0

## CONCEPTUAL LAYOUT

(14) STORMTECH SC-800 CHAMBERS
(4) STORMTECH SC-800 END CAPS
INSTALLED WITH 6" COVER STONE, 6" BASE STONE, 40% STONE VOID
**INSTALLED SYSTEM VOLUME: 1350 CF ABOVE ELEVATION 34.00 (1594 CF TOTAL)**
AREA OF SYSTEM: 774 **FT²**
PERIMETER OF SYSTEM: 145 **FT**

## PROPOSED ELEVATIONS

| | |
|---|---|
| MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED): | 44.62 |
| MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC): | 38.37 |
| MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC): | 37.87 |
| MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT): | 37,87 |
| MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT): | 37.87 |
| TOP OF STONE: | 37.12 |
| TOP OF CHAMBER: | 36.62 |
| 12" TOP CONNECTION INVERT: | 35.07 |
| 24" BOTTOM (ISOLATOR ROW) CONNECTION INVERT: | 34.06 |
| 12" BOTTOM CONNECTION INVERT: | 34.00 |
| BOTTOM OF CHAMBER: | 33.87 |
| BOTTOM OF STONE: | 33.37 |




COMB BLOCK PHASES 2 &3
PORTLAND, ME

DATE: 04/01/2025 | DRAWN: AC | CHECKED: ---
PROJECT #: -

| REV | DRW | CHK | DESCRIPTION |
|---|---|---|---|

StormTech
Detention • Retention • Water Quality
70 INWOOD ROAD, SUITE 3 | ROCKY HILL | CT | 06067
860-529-8188 | 888-892-2694 | WWW.STORMTECH.COM

ADS
ADVANCED DRAINAGE SYSTEMS, INC.
4640 TRUEMAN BLVD
HILLIARD, OH 43026
1-800-733-7473

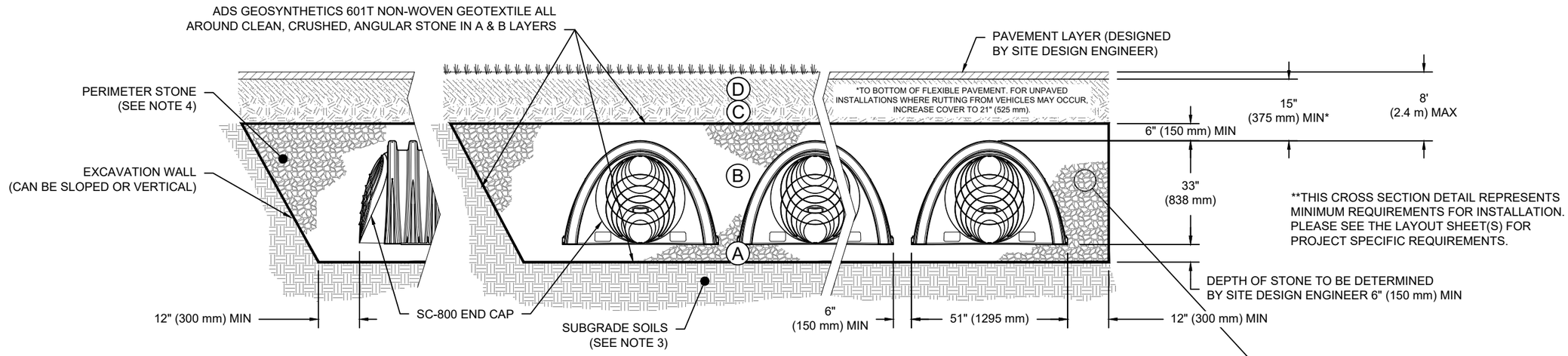
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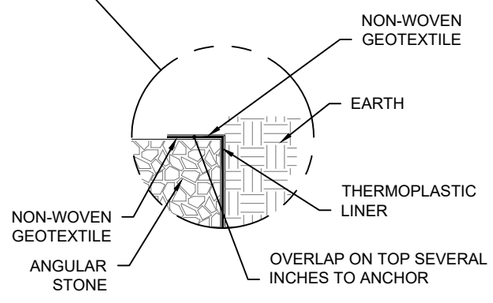
THIS DRAWING HAS BEEN PREPARED BASED ON INFORMATION PROVIDED TO ADS UNDER THE DIRECTION OF THE SITE DESIGN ENGINEER OR OTHER PROJECT REPRESENTATIVE. THE SITE DESIGN ENGINEER SHALL REVIEW THIS DRAWING PRIOR TO CONSTRUCTION. IT IS THE ULTIMATE RESPONSIBILITY OF THE SITE DESIGN ENGINEER TO ENSURE THAT THE PRODUCT(S) DEPICTED AND ALL ASSOCIATED DETAILS MEET ALL APPLICABLE LAWS, REGULATIONS, AND PROJECT REQUIREMENTS.

# ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

| MATERIAL LOCATION | | DESCRIPTION | AASHTO MATERIAL CLASSIFICATIONS | COMPACTION / DENSITY REQUIREMENT |
|---|---|---|---|---|
| D | **FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER. | ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS. | N/A | PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS. |
| C | **INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 15" (375 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER. | GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE.<br><br>MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | AASHTO M145[1]<br>A-1, A-2-4, A-3<br><br>OR<br><br>AASHTO M43[1]<br>3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10 | BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN). |
| B | **EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE. | CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5] | AASHTO M43[1]<br>3, 357, 4, 467, 5, 56, 57 | NO COMPACTION REQUIRED. |
| A | **FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER. | CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE[5] | AASHTO M43[1]<br>3, 357, 4, 467, 5, 56, 57 | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE.[2,3] |

PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
5. WHERE RECYCLED CONCRETE AGGREGATE IS USED IN LAYERS 'A' OR 'B' THE MATERIAL SHOULD ALSO MEET THE ACCEPTABILITY CRITERIA OUTLINED IN TECHNICAL NOTE 6.20 "RECYCLED CONCRETE STRUCTURAL BACKFILL".




THERMOPLASTIC LINER DETAIL

## NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-800 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. 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 AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%. 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.

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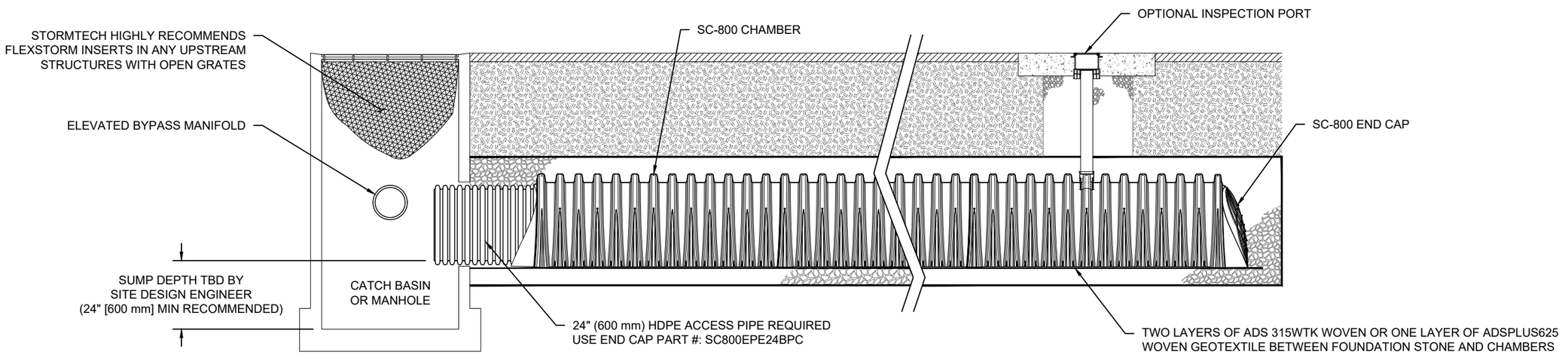
| REV | DESCRIPTION | CHK | DRW |
|---|---|---|---|

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SHEET
3 OF 5




**SC-800 ISOLATOR ROW DETAIL**
NTS

## INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW 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 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 ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW 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 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

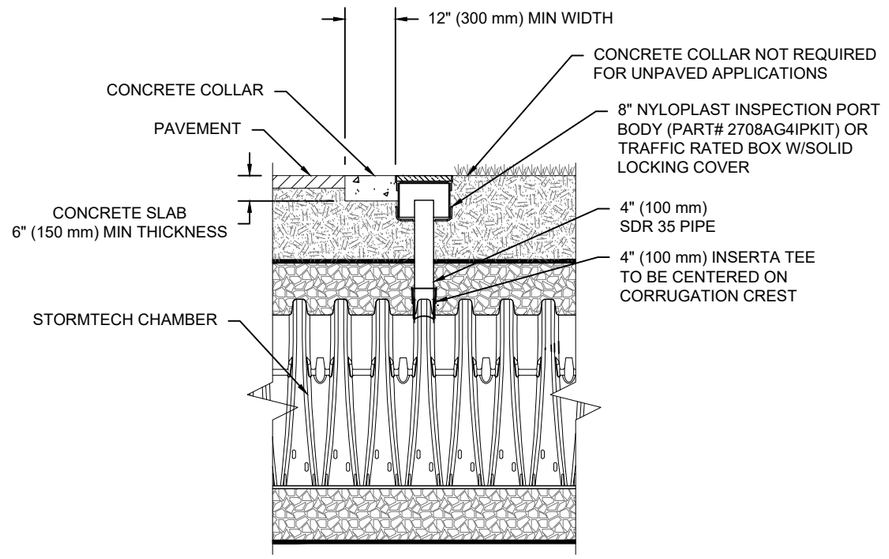
STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

## 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.




NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

**4" PVC INSPECTION PORT DETAIL**
**(SC SERIES CHAMBER)**
NTS

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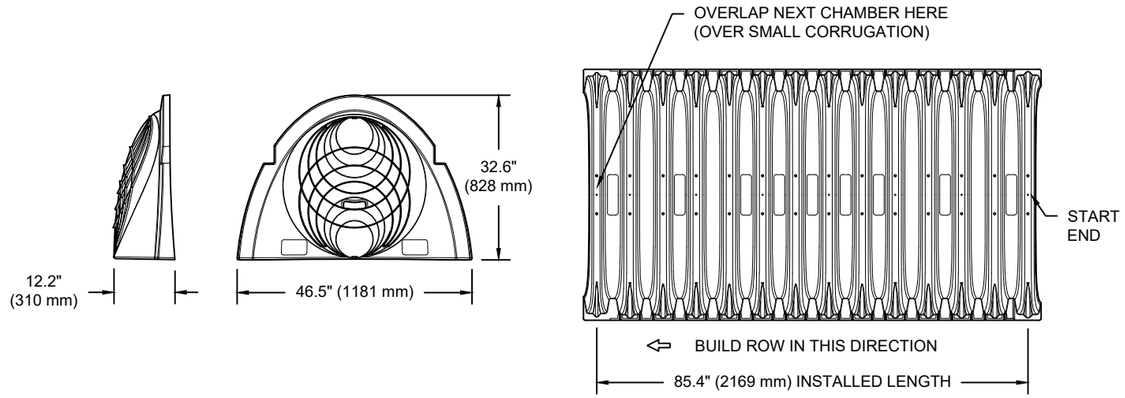
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# SC-800 TECHNICAL SPECIFICATION

NTS



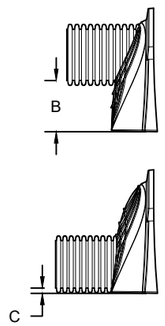

**NOMINAL CHAMBER SPECIFICATIONS**

| | | |
|---|---|---|
| SIZE (W X H X INSTALLED LENGTH) | 51.0" X 33.0" X 85.4" | (1295 mm X 838 mm X 2169 mm) |
| CHAMBER STORAGE | 50.6 CUBIC FEET | (1.43 m³) |
| MINIMUM INSTALLED STORAGE* | 81.0 CUBIC FEET | (2.29 m³) |
| WEIGHT | 81.8 lbs. | (37.1 kg) |

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS

PRE-CORED HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-CORED HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"

| PART # | STUB | B | C |
|---|---|---|---|
| SC800EPE06TPC | 6" (150 mm) | 21.4" (544 mm) | --- |
| SC800EPE06BPC | | --- | 0.9" (23 mm) |
| SC800EPE08TPC | 8" (200 mm) | 19.2" (488 mm) | --- |
| SC800EPE08BPC | | --- | 1.0" (25 mm) |
| SC800EPE10TPC | 10" (250 mm) | 17.0" (432 mm) | --- |
| SC800EPE10BPC | | --- | 1.2" (30 mm) |
| SC800EPE12TPC | 12" (300 mm) | 14.4" (366 mm) | --- |
| SC800EPE12BPC | | --- | 1.6" (41 mm) |
| SC800EPE15TPC | 15" (375 mm) | 11.3" (287 mm) | --- |
| SC800EPE15BPC | | --- | 1.7" (43 mm) |
| SC800EPE18TPC | 18" (450 mm) | 8.0" (203 mm) | --- |
| SC800EPE18BPC | | --- | 2.0" (51 mm) |
| SC800EPE24BPC | 24" (600 mm) | --- | 2.3" (58 mm) |
| SC800EPE | NONE | SOLID END CAP | |




NOTE: ALL DIMENSIONS ARE NOMINAL

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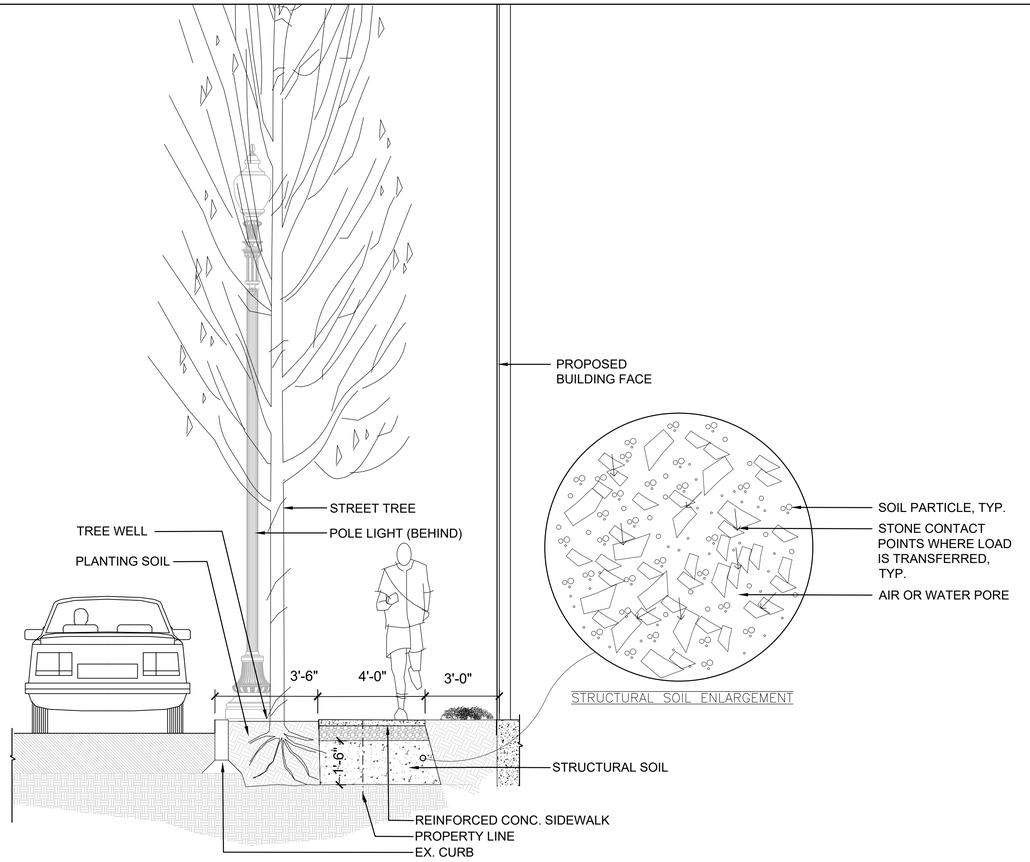

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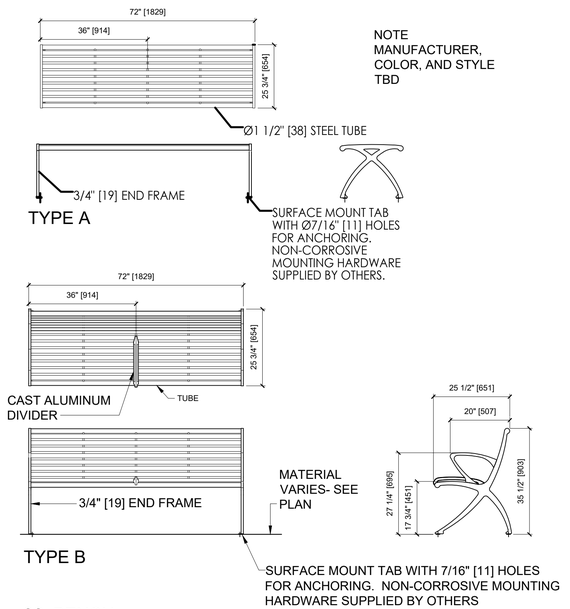
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5 OF 5



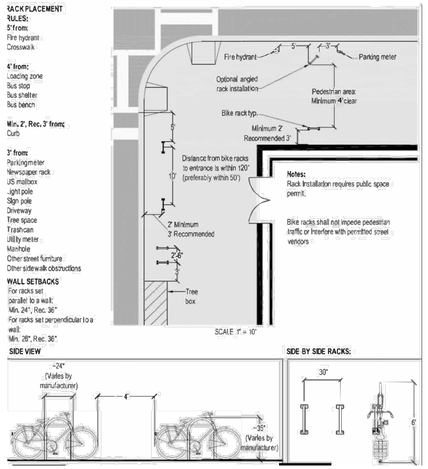

## 01 SIDEWALK SECTION - BOYD STREET

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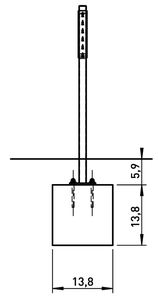

## 02 BENCH

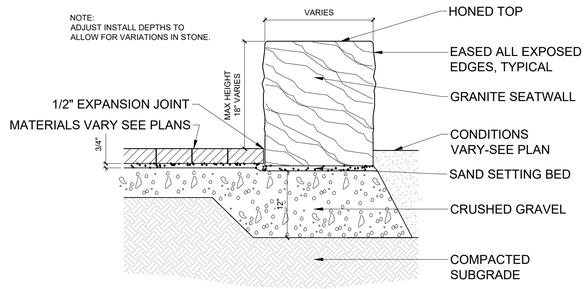
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## 03 BIKE RACK & BIKE PARKING PLACEMENT GUIDE

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## 04 MONOLITHIC GRANITE BLOCK

SCALE: N.T.S.

Prepared For:
PHA
Portland Housing Authority
970 BAXTER BOULEVARD,
PORTLAND, MAINE 04101

Prepared By:
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Date:
APRIL 4, 2025

Issued For:
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REDEVELOPMENT
Portland ME 04103

Revisions:

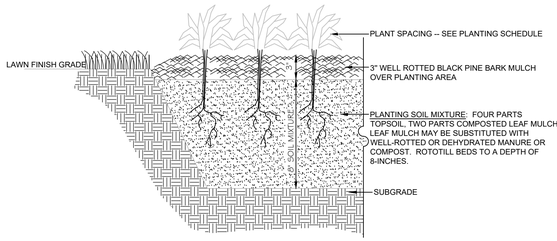
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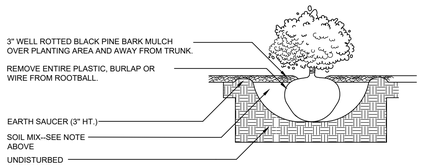
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## 01 PLANTING BED AND MULCH DETAIL

SCALE: N.T.S.




PLANT INSTALLATION NOTES:
DIG HOLE AT LEAST 2 TIMES THE WIDTH OF ROOT BALL AND AS DEEP AS THE ROOT BALL (NO DEEPER). SET ROOT BALL CENTERED, WITH TOP AT GROUND LEVEL OR SLIGHTLY HIGHER. CORRECT HOLE DEPTH AS NEEDED.

FOR DECIDUOUS AND NEEDLED EVERGREEN TREES AND SHRUBS: 1 FULL WHEELBARROW EXISTING SOIL, 3 SHOVEL WELL ROTTED MANURE, OR OTHER COMPOSTED ORGANIC MATERIAL.

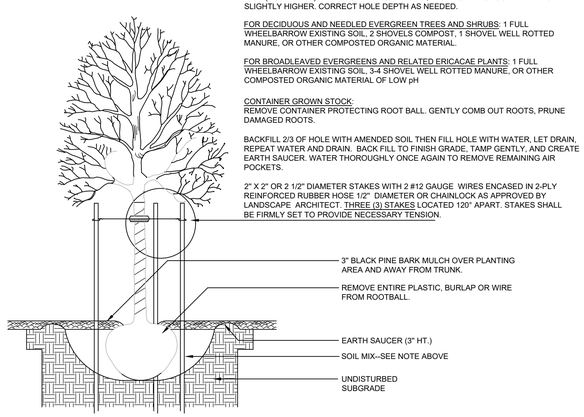
FOR BROADLEAVED EVERGREENS AND RELATED ERICACAE PLANTS: 1 FULL WHEELBARROW EXISTING SOIL, 3-4 SHOVELS COMPOST, 1 SHOVEL WELL ROTTED MANURE, OR OTHER COMPOSTED ORGANIC MATERIAL OF LOW pH

CONTAINER GROWN STOCK:
REMOVE CONTAINER PROTECTING ROOT BALL. GENTLY COMB OUT ROOTS, PRUNE DAMAGED ROOTS.

BACKFILL 2/3 OF HOLE WITH AMENDED SOIL THEN FILL HOLE WITH WATER, LET DRAIN, REPEAT WATER AND DRAIN. BACK FILL TO FINISH GRADE, TAMP GENTLY, AND CREATE EARTH SAUCER. WATER THOROUGHLY ONCE AGAIN TO REMOVE REMAINING AIR POCKETS.

## 02 SHRUB INSTALLATION

SCALE: N.T.S.




PLANT INSTALLATION NOTES:
DIG HOLE AT LEAST 2 TIMES THE WIDTH OF ROOT BALL AND AS DEEP AS THE ROOT BALL (NO DEEPER). SET ROOT BALL CENTERED, WITH TOP AT GROUND LEVEL OR SLIGHTLY HIGHER. CORRECT HOLE DEPTH AS NEEDED.

FOR DECIDUOUS AND NEEDLED EVERGREEN TREES AND SHRUBS: 1 FULL WHEELBARROW EXISTING SOIL, 2 SHOVELS COMPOST, 1 SHOVEL WELL ROTTED MANURE, OR OTHER COMPOSTED ORGANIC MATERIAL.

FOR BROADLEAVED EVERGREENS AND RELATED ERICACAE PLANTS: 1 FULL WHEELBARROW EXISTING SOIL, 3-4 SHOVEL WELL ROTTED MANURE, OR OTHER COMPOSTED ORGANIC MATERIAL OF LOW pH

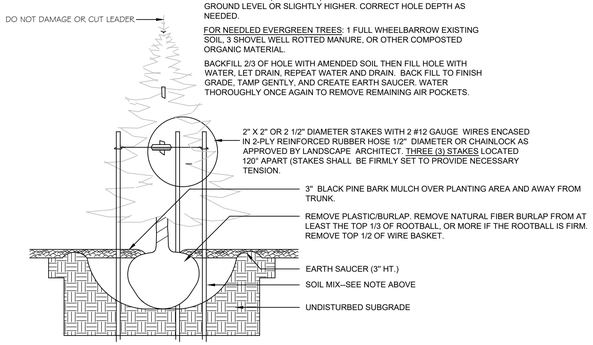
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BACKFILL 2/3 OF HOLE WITH AMENDED SOIL THEN FILL HOLE WITH WATER, LET DRAIN, REPEAT WATER AND DRAIN. BACK FILL TO FINISH GRADE, TAMP GENTLY, AND CREATE EARTH SAUCER. WATER THOROUGHLY ONCE AGAIN TO REMOVE REMAINING AIR POCKETS.

2" X 2" OR 2 1/2" DIAMETER STAKES WITH 2 #12 GAUGE WIRES ENCASED IN 2-PLY REINFORCED RUBBER HOSE 1/2" DIAMETER OR CHAINLOCK AS APPROVED BY LANDSCAPE ARCHITECT. THREE (3) STAKES LOCATED 120° APART. STAKES SHALL BE FIRMLY SET TO PROVIDE NECESSARY TENSION.

## 03 DECIDUOUS TREE DETAIL

SCALE: N.T.S.



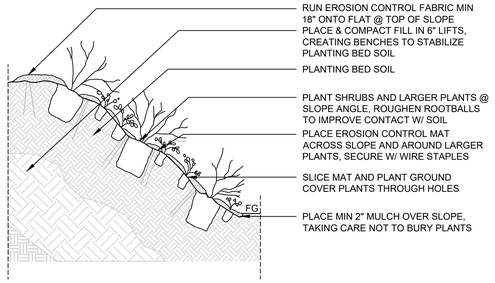

PLANT INSTALLATION NOTES:
DIG HOLE AT LEAST 2 TIMES THE WIDTH OF ROOT BALL AND AS DEEP AS THE ROOT BALL (NO DEEPER). SET ROOT BALL CENTERED, WITH TOP AT GROUND LEVEL OR SLIGHTLY HIGHER. CORRECT HOLE DEPTH AS NEEDED.

FOR NEEDLED EVERGREEN TREES: 1 FULL WHEELBARROW EXISTING SOIL, 3 SHOVEL WELL ROTTED MANURE, OR OTHER COMPOSTED ORGANIC MATERIAL.

BACKFILL 2/3 OF HOLE WITH AMENDED SOIL THEN FILL HOLE WITH WATER, LET DRAIN, REPEAT WATER AND DRAIN. BACK FILL TO FINISH GRADE, TAMP GENTLY, AND CREATE EARTH SAUCER. WATER THOROUGHLY ONCE AGAIN TO REMOVE REMAINING AIR POCKETS.

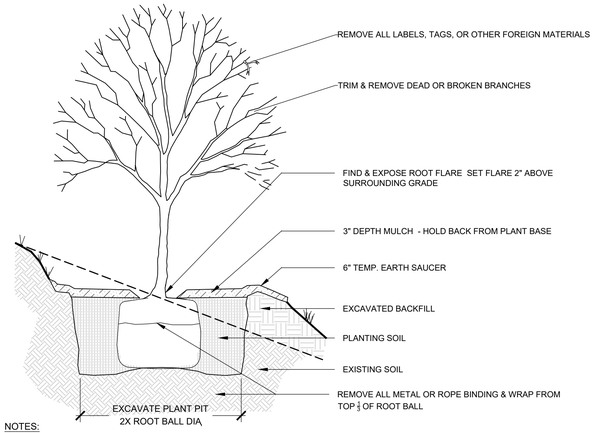
## 04 CONIFEROUS TREE DETAIL

SCALE: N.T.S.




## 05 SLOPE PLANTING DEATIL

SCALE: N.T.S.

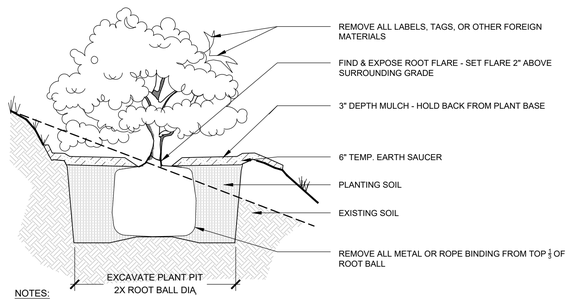



NOTES:

1. TREE TO BE SET PLUMB.
2. SECURE TREE AS MAY BE REQUIRED ACCORDING TO TREE SIZE, LOCATION, & WIND/WEATHER CONDITIONS.
3. IF USING ROOTBALL STABILIZATION, FOLLOW MANUFACTURER'S RECOMMENDATIONS.

## 06 TREE PLANTING ON SLOPE

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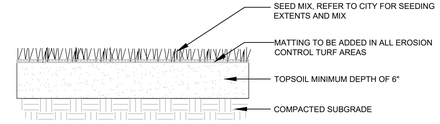



NOTES:

1. SHRUB TO BE SET PLUMB.
2. SECURE SHRUB AS MAY BE REQUIRED ACCORDING TO SIZE, LOCATION, & WIND/WEATHER CONDITIONS.
3. IF USING ROOTBALL STABILIZATION, FOLLOW MANUFACTURER'S RECOMMENDATIONS.

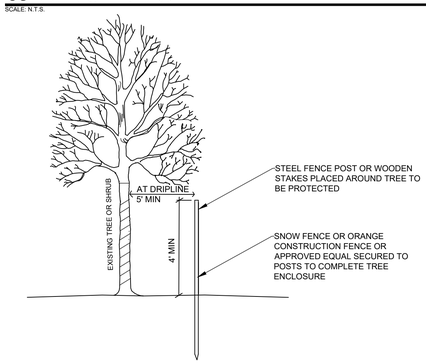
## 07 SHRUB PLANTING ON SLOPE

SCALE: N.T.S.



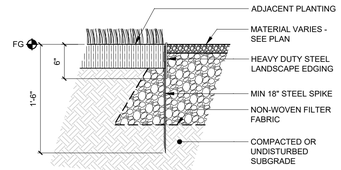

## 08 LAWN SEED MIX

SCALE: N.T.S.



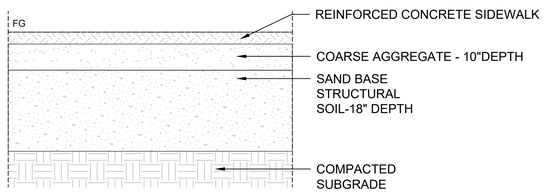

## 09 TREE PROTECTION

SCALE: N.T.S.




## 10 METAL EDGING

SCALE: N.T.S.




## 10 STRUCTURAL SOIL

SCALE: N.T.S.

NOTE: This drawing is PERMITTING ONLY. It is NOT intended for use as a construction document.

Prepared For:
**PHA**
Portland Housing Authority
970 BAXTER BOULEVARD,
PORTLAND, MAINE 04101

Prepared By:
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Dry Landscape Architecture, L.L.C.
31 miller ave.
biddeford, me 04005

Date:
APRIL 4, 2025

Issued For:
PLANNING BOARD WORKSHOP

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Title:
DETAILS

# 70 EAST OXFORD STREET
REDEVELOPMENT
Portland ME 04103

Revisions:

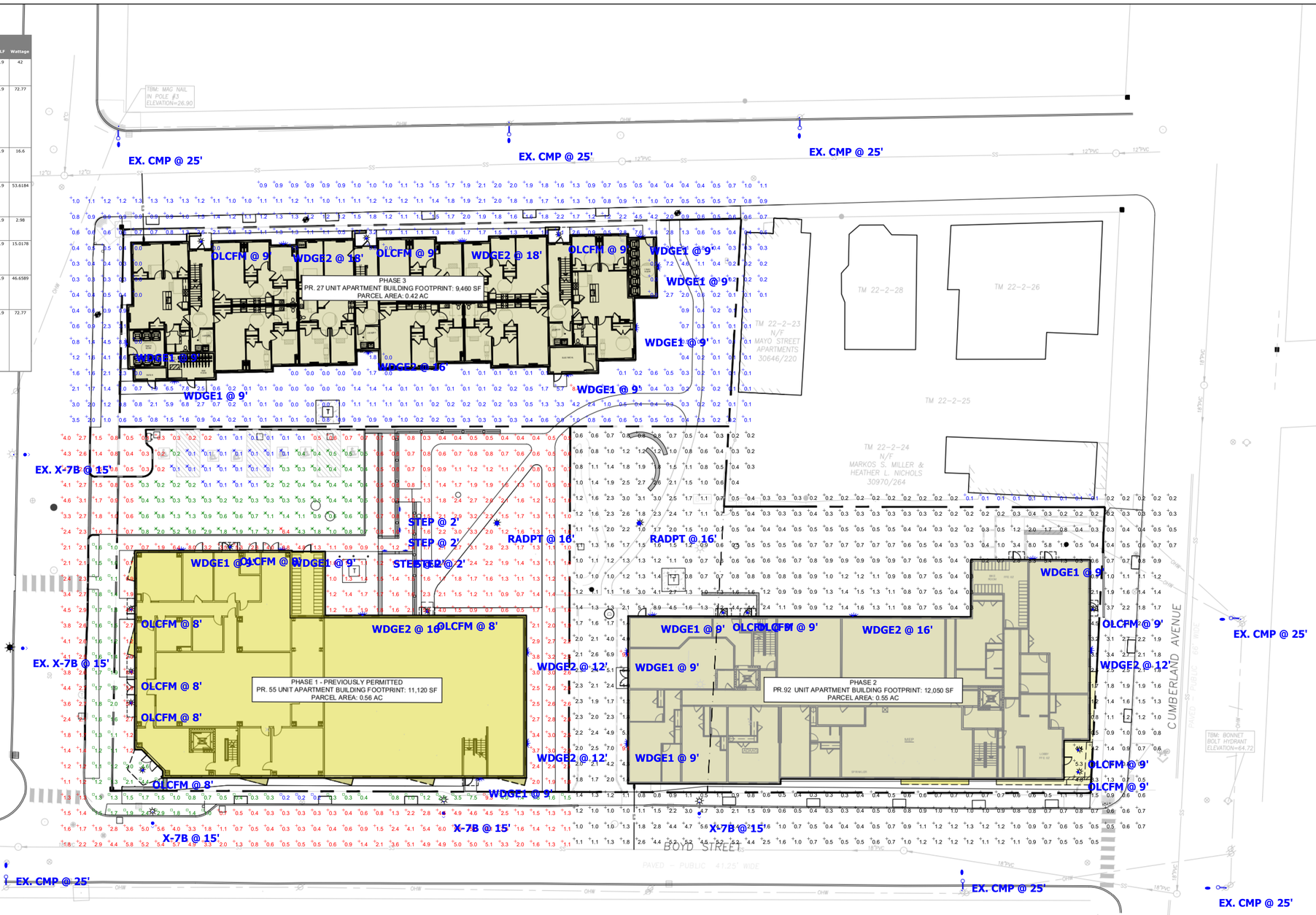
North:

Sheet No.:
L7

Scale:
AS NOTED

C:\Users\tonyn\OneDrive\DRY-LA\Projects\COMB Phase 2-3\CAD\DDL BASE COMB 24.06.17- Workshop Comment Response Rev-1-SUB SET - Standard\DETAILS COMB-2&3 24.04.01.dwg, 4/7/2025

| Schedule | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Symbol | Label | Image | QTY | Catalog Number | Description | Lumens per Lamp | LLF | Wattage |
| | EX. CMP | | 7 | RSWS-B-HT-3ME-5L-30K7-UL-xx-N CONFIGURED FROM RSWS-B-HT-3ME-7L-40K7-UL-GY-N | CONFIGURED FROM RSW Small Luminaire, Type III Medium Distribution, 7L Lumen Package, 4000K, 70CRI | 5000 | 0.9 | 42 |
| | EX. X-7B | | 2 | ESL3 P20S 30K XXXXX TG2 | Esplanade style housings Standard housing, 3000 series CCT Auto-sensing voltage, Type IV, Medium, (Standard) or Type III, Short, (Uplight) | 11106 | 0.9 | 72.77 |
| | OLCFM | | 14 | OLCFM 15 DOB | GENERAL PURPOSE LED CAST FLUSH MOUNT WITH DARK BRONZE FINISH | 1042 | 0.9 | 16.6 |
| | RADPT | | 2 | RADPT P3 30K ASY | RADEAN Post-Top with P3 3000K Asymmetric distribution | 6600 | 0.9 | 53.6184 |
| | STEP | | 0 | HSL11 RD L LED 30K MVOLT | Suface mount step light | 61 | 0.9 | 2.98 |
| | WDGE1 | | 13 | WDGE1 LED P2 30K 80CRI VW | WDGE1 LED WITH P2 - PERFORMANCE PACKAGE, 3000K, 80CRI, VISUAL COMFORT WIDE OPTIC | 1876 | 0.9 | 15.0178 |
| | WDGE2 | | 8 | WDGE2 LED P4 30K 80CRI T4M | WDGE2 LED WITH P4 - PERFORMANCE PACKAGE, 3000K, 80CRI, TYPE 4 MEDIUM OPTIC | 3978 | 0.9 | 46.6589 |
| | X-7B | | 3 | ESL3 P20S 30K XXXXX TG2 | Esplanade style housings Standard housing, 3000 series CCT Auto-sensing voltage, Type IV, Medium, (Standard) or Type III, Short, (Uplight) | 11106 | 0.9 | 72.77 |




## Statistics

| Description | Symbol | Avg | Max | Min | Max/Min | Avg/Min |
|---|---|---|---|---|---|---|
| Phase 1, Extents | + | 1.7 fc | 9.3 fc | 0.1 fc | 93.0:1 | 17.0:1 |
| Phase 1, Parking Lot | X | 0.8 fc | 6.4 fc | 0.1 fc | 64.0:1 | 8.0:1 |
| Phase 1, Sidewalk | □ | 1.7 fc | 9.3 fc | 0.2 fc | 46.5:1 | 8.5:1 |
| Phase 2, Extents | + | 1.4 fc | 9.1 fc | 0.1 fc | 91.0:1 | 14.0:1 |
| Phase 3, Extents | + | 1.1 fc | 8.4 fc | 0.0 fc | N/A | N/A |

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PHA
Portland Housing Authority

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Date:
APRIL 4, 2025

Issued For:
PLANNING BOARD WORKSHOP

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Title:
LIGHTING PLAN

COMB
REDEVELOPMENT
Portland ME 04103

Revisions:

North:

Sheet No.:
L5

Scale: 1" = 20'-0"
0 10 20 40

C:\Users\bridge\OneDrive\DRY LA\Projects\COMB Phase 2-3\CAD\DNL-BASE COMB 24.08.17- Workshop Comment Response Rev 1-SAB SET - Standard\Phase 2&3 COMB_25.03.31.dwg Mar 31, 2025 - 4:17:20pm

# COMB BLOCK - CUMBERLAND

## SUN STUDY

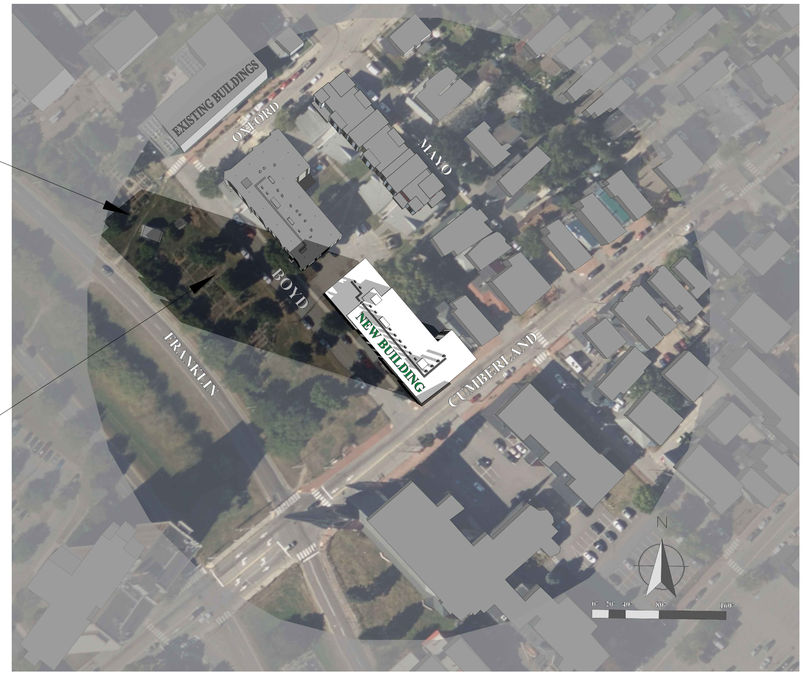
DATE: MARCH 21
SUNRISE = 6:42 AM / SUNSET = 6:55 PM

MAY 22, 2025

SHADOW

MARCH 21 / 7:30 AM

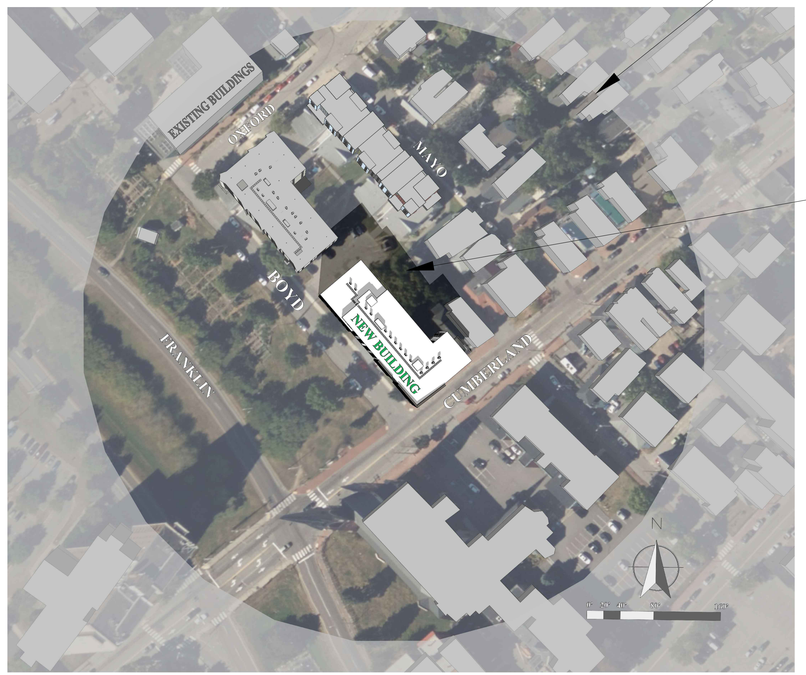
PUBLIC AREA IN SHADE




CIRCUMFERENCE OF SHADOW EXTENTS = 75'
BUILDING HEIGHT (75' X 4.26) = 320' MAX SHADOW AREA

SHADOW

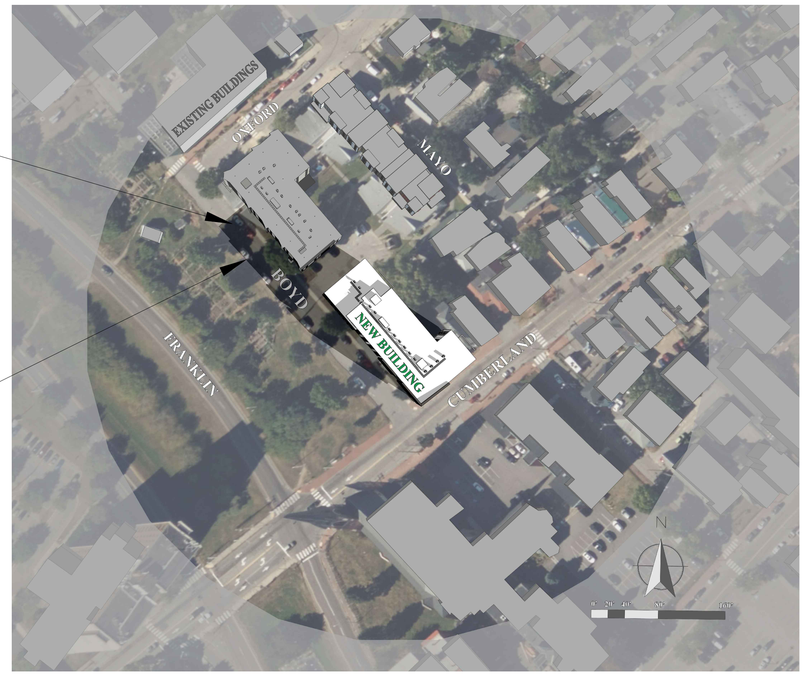
MARCH 21 / 12:00 PM




SHADOW

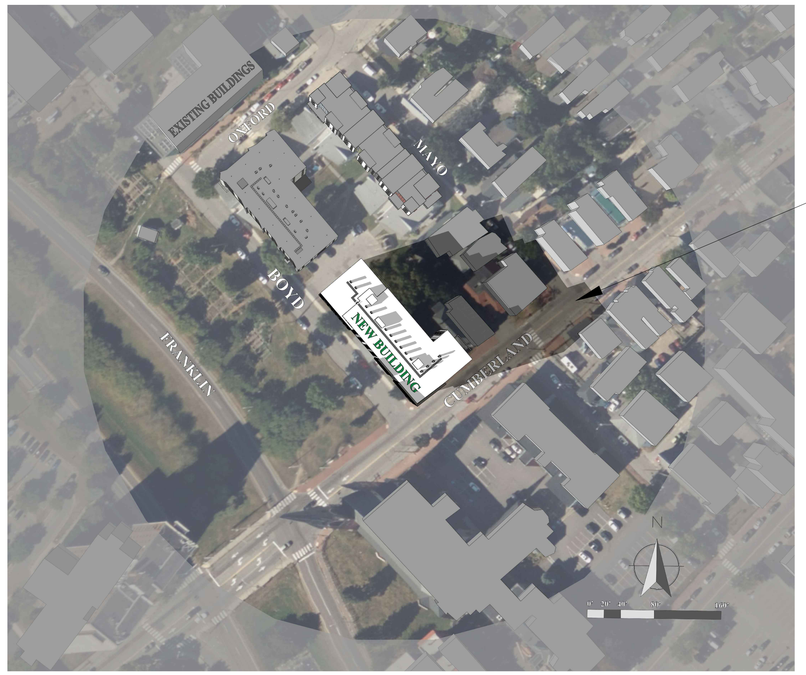
MARCH 21 / 8:42 AM

END OF PUBLIC AREA IN SHADE




SHADOW

MARCH 21 / 4:00 PM




RYAN SENATORE **ARCHITECTURE**

# COMB BLOCK - CUMBERLAND

## SUN STUDY

DATE: JUNE 21
SUNRISE = 5:00 AM / SUNSET = 8:26 PM

MAY 22, 2025

SHADOW

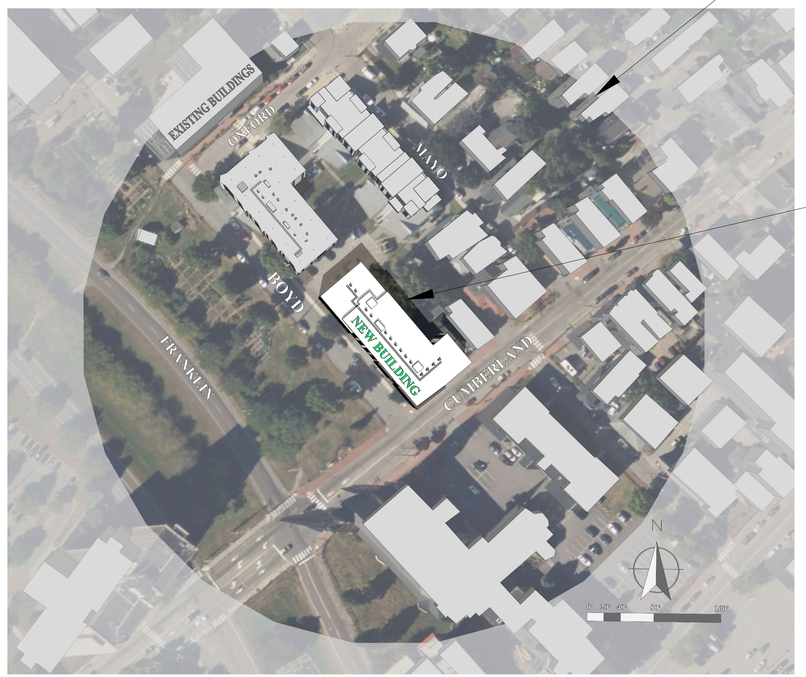



JUNE 21 / 6:00 AM

PUBLIC AREA IN SHADE

CIRCUMFERENCE OF SHADOW EXTENTS = 75' BUILDING HEIGHT (75' X 4.26) = 320' MAX SHADOW AREA

SHADOW




JUNE 21 / 12:00 PM

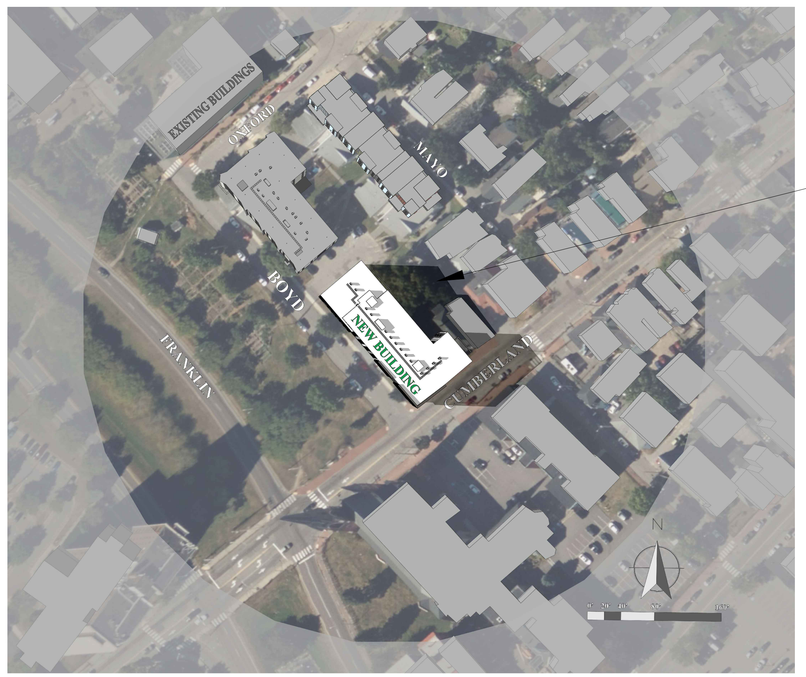
SHADOW




JUNE 21 / 8:40 AM

END OF PUBLIC AREA IN SHADE

SHADOW




JUNE 21 / 4:00 PM

RYAN SENATORE **ARCHITECTURE**

# COMB BLOCK - CUMBERLAND

## SUN STUDY

DATE: AUGUST 6
SUNRISE = 5:36 AM / SUNSET = 7:57 PM

MAY 22, 2025

SHADOW

AUGUST 6 / 6:30 AM

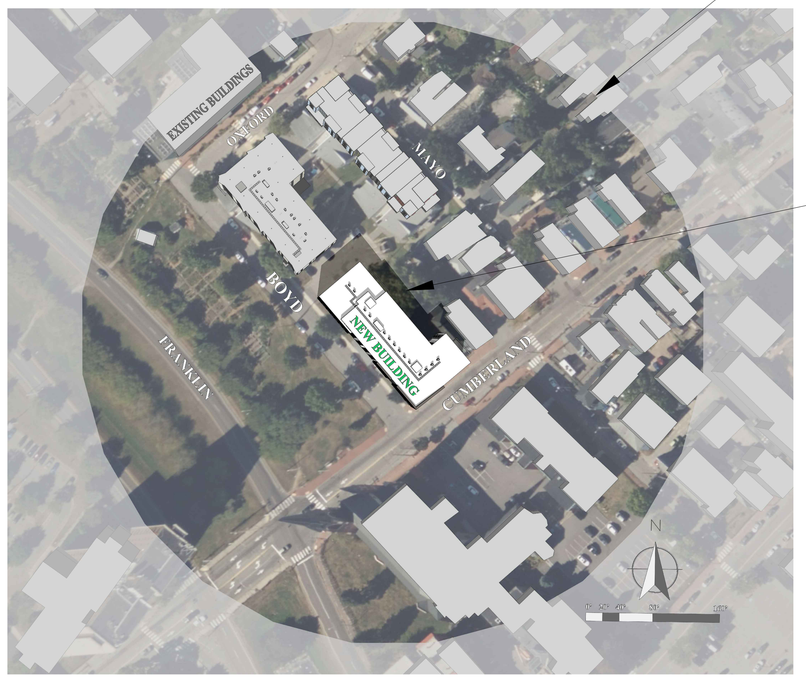
PUBLIC AREA IN SHADE




CIRCUMFERENCE OF SHADOW EXTENTS = 75'
BUILDING HEIGHT (75' X 4.26) = 320' MAX SHADOW AREA

SHADOW

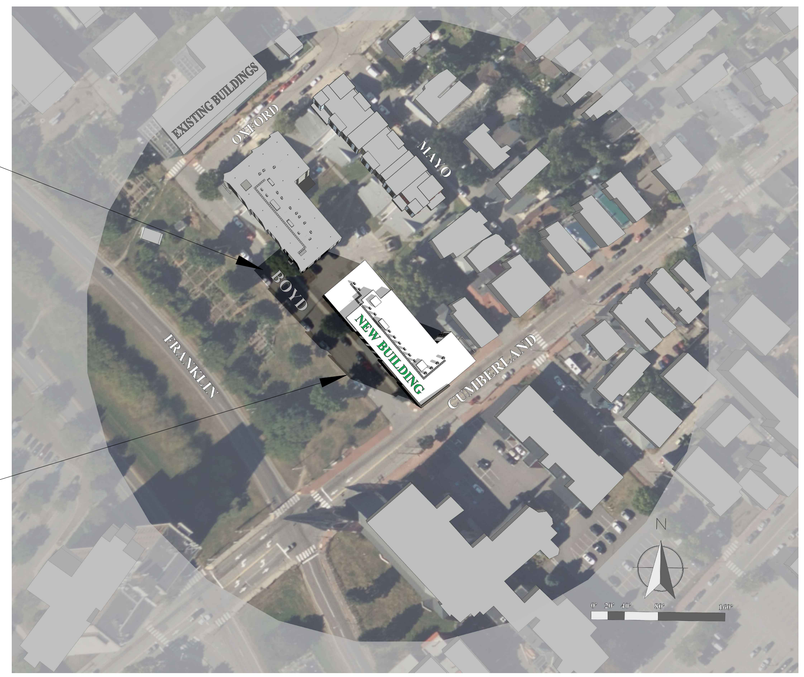
AUGUST 6 / 12:00 PM




SHADOW

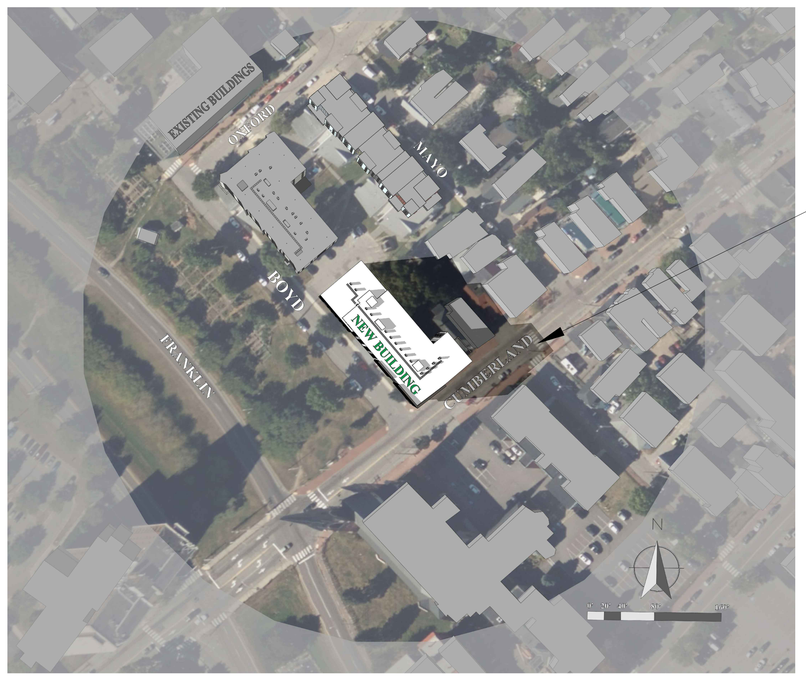
AUGUST 6 / 8:45 AM

END OF PUBLIC AREA IN SHADE




SHADOW

AUGUST 6 / 4:00 PM




RYAN SENATORE **ARCHITECTURE**

# COMB BLOCK - CUMBERLAND

## SUN STUDY

DATE: DECEMBER 21
SUNRISE = 7:12 AM / SUNSET = 4:07 PM

MAY 22, 2025

SHADOW




DECEMBER 21 / 8:30 AM

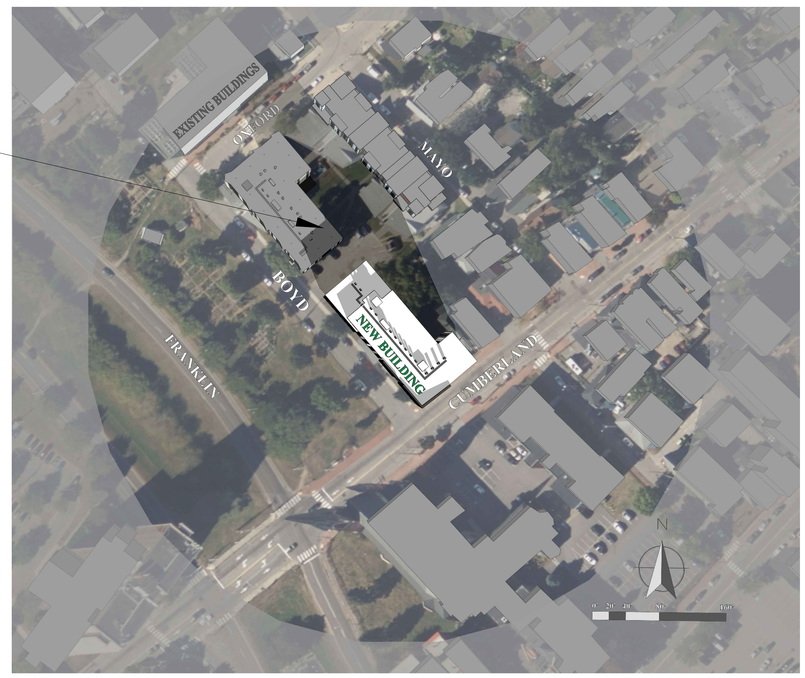
CIRCUMFERENCE OF SHADOW EXTENTS = 75'
BUILDING HEIGHT (75' X 4.26) = 320' MAX SHADOW AREA

SHADOW




DECEMBER 21 / 12:00 PM

SHADOW




DECEMBER 21 / 10:00 AM

SHADOW




DECEMBER 21 / 2:30 PM

RYAN SENATORE **ARCHITECTURE**

**Planning Board Memo**
**Planning & Urban Development Department**

| | |
|---|---|
| To: | Chair Brandon Mazer & Members of the Planning Board |
| From: | Taylor Colbeth |
| Date: | May 23, 2025 |
| Re: | 385 Congress Street – Live Nation Music Venue |
| Project ID: | PL-003197-2024 |
| CBL: | 027 D003 |
| Meeting Date: | May 27, 2025 |

| | |
|---|---|
| Applicant | Portland Music Holdings, LLC |
| Applicant Representative: | Sebago Technics |

## I. INTRODUCTION

Portland Music Holdings, LLC, a partnership between Portland Performance Ventures, LLC, and Live Nation Entertainment, submitted a Major Site Plan application to facilitate the construction of an approximately 54-foot-tall, approximately 65,340-square-foot, 3,310-seat music venue on Lot 3 of the 385 Congress Street Subdivision, within the B-3 Downtown Business zone. This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code Site Plan Standards, Section 13.6.

The May 27, 2025 Planning Board Workshop will focus primarily on the transportation-related aspects of the proposed project. The meeting will be held in a hybrid format, with public comment accepted in person, virtually, and in writing.

The Planning and Urban Development Department mailed 125 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the May 15, 2025 and May 16, 2025 editions of the Portland Press Herald.

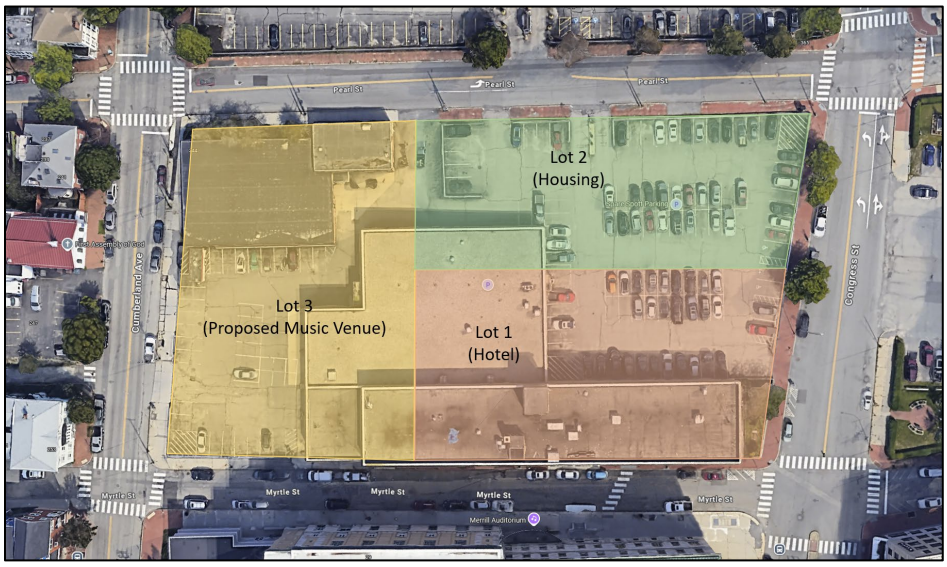



*Figure 1. An aerial view of the 385 Congress Street subdivision*

## II. PRIOR PLANNING BOARD REVIEW

The Planning Board held an initial workshop open to the public on March 25, 2025. The meeting was conducted in a hybrid format, allowing for both in-person and virtual public comment. Written public comments were also submitted and shared with the Planning Board.

Key themes that emerged from public comment included concerns about right, title, and interest, Live Nation's involvement and national business trends, and potential impacts on the local arts community. Many members of the public raised concerns about parking, transportation, and the potential traffic impacts associated with the new music venue as well as concerns about its location near Merrill Auditorium, compliance with the City's signage regulations, and its relationship to the previously approved Master Development Plan (MDP). Others expressed support for the proposal, emphasizing the potential benefits of a new venue in an underutilized downtown area. They cited increased activity, potential economic benefits to surrounding businesses, and alignment with the city's sustainability goals, given the venue's walkability and access to multiple public transit routes.

In response to concerns about the proposed venue's compliance with Section 6.8.14, which prohibits entertainment businesses in the B-3 zone from being located within 100 feet of another such business (measured along or across public ways from the main entrance of each), the applicant submitted a diagram (Attachment 24) showing that the proposed building's main entrance is outside the 100-foot radius from the main entrance of Merrill Auditorium on Myrtle Street. The secondary entrance at Merrill Auditorium, which serves the Merrill Rehearsal Hall, is not considered the building's main entrance or for guests entering the facility. It is used for staff, backstage access, and deliveries. The term "main entrance or entrances" in the Land Use Code refers to buildings with multiple main entrances intended for visitors entering and exiting a facility, such as the Cross Insurance Arena, which has three main entrances at different locations on the block. All of these entrances are intended for public access to the facility.

- **Conclusion:** The proposed project complies with the zoning regulations regarding the required distance between entertainment businesses and conforms with the standards of Section 6.8.14. Attachment 24 confirms that the proposed building's main entrance is located beyond the 100-foot radius from the main entrance of Merrill Auditorium on Myrtle Street.

In response to public questions regarding right, title, and interest, and in response to the Board's request for clarification, the applicant has provided documentation outlining the structure of the LLC (Attachment I.2). This documentation clarifies the ownership structure and demonstrates that the applicant has sufficient right, title, and interest to meet the requirements of the Site Plan Ordinance.

- **Conclusion:** The applicant has submitted materials that adequately demonstrate sufficient Right, Title, and Interest in the property, meeting the requirements of the Site Plan Ordinance.

In response to concerns about the proposed venue's compliance with signage regulations, staff is still awaiting additional details on the proposed signage, which will be reviewed during the building permit process. However, marquee, blade, and illuminated signs are permitted within the B-3 Downtown Business zone.

- **Conclusion:** Compliance with the City's signage regulations is reviewed during the building permit process. However, the proposed project is located in the B-3 Downtown Business zone,

which falls within the Downtown Sign District as specified in Table 19-B of the Land Use Code. According to Table 19-E, the Downtown Sign District permits a range of illuminated sign types, including external (direct or halo-lit), internal (cabinet or individual letters/logo), neon, and single- or two-color LED illuminated signs. Electronic message signs are prohibited. Permitted sign types are further detailed in Table 19-F. Notably, marquee signs, such as the one proposed for this project, are allowed in the Downtown Sign District.

In response to questions regarding the proposed venue's alignment with the previously approved Master Development Plan (MDP), it is important to clarify the role and limitations of an MDP within the City's development review framework. An MDP is an optional planning tool available to applicants seeking conceptual approval for a large-scale development that may be implemented in two or more phases, often over an extended period beyond the standard timeframes allowed for site plan approvals. Each subsequent site plan submitted under an approved MDP must generally conform to the parameters outlined in the MDP. MDP approval establishes the overall development framework and provides "pending proceeding" status to the project. This status allows the development to remain subject to the zoning and site plan regulations in effect at the time of the MDP approval, for as long as the plan remains valid. However, MDP approval does not constitute final authorization for construction, it simply sets the stage for more streamlined site plan approvals for individual phases of the project. Unlike a Contract Zone, which creates a specific zoning overlay and set of regulations that is tied to the land itself, an MDP or site plan approval grants rights to build a specific project as described in the approved plan. These approvals do not prohibit future developers seeking to build on the same land from submitting entirely new site plans. If a new developer proposes a new project and is not attempting to benefit from the MDP approval it would be subject to a new review under the zoning and site plan regulations in effect at the time of the new submission.

- **Conclusion:** Amending the originally approved MDP is not required. A new developer who intends to proceed independently of the original MDP is not bound by the prior approval; instead, they must submit a new site plan that will be reviewed under the zoning and site-plan regulations in effect at the time of submission. The proposed music venue is being reviewed independently of the previously approved MDP and is subject to the current zoning and site plan regulations.



*Figure 2. Street view of existing conditions of the site as seen from Cumberland Avenue and Myrtle Street*

13.6.1 TRANSPORTATION STANDARDS

13.6.1.A Impact on Surrounding Streets

The proposed project involves the redevelopment of a lot currently occupied by two single-story commercial buildings used for vehicle storage and a public surface parking lot. The site is primarily covered by impervious surfaces. The project site is located on a block bounded by Myrtle Street, Cumberland Avenue, Pearl Street, and Congress Street. The Site itself is bounded by Myrtle Street, a 27-foot-wide one-way street with on-street parking on both sides; Cumberland Avenue, a 39-foot-wide two-way street with on-street parking along portions of both sides; and Pearl Street, a 32-foot-wide two-way street with no on-street parking on either side. An existing traffic light currently exists at the intersection of Cumberland Avenue and Pearl Street. A stop sign currently controls traffic on Myrtle Street at its intersection with Cumberland Avenue. Crosswalks exist at both the Cumberland Avenue and Pearl Street intersection and the Myrtle Avenue and Cumberland Avenue intersection.




*Figure 3. Existing street conditions along property frontages*

Based on the application materials provided, the project will include two on-site, off-street dedicated parking areas for buses and tractor-trailers that will be utilized during events. No internal vehicular circulation is proposed on-site, and no on-site parking will be provided for patrons. The bus parking area will be accessed from Myrtle Street, by a drive approximately 160-feet south of the intersection with Cumberland Avenue and the tractor-trailer parking area will be accessed from Pearl Street, at a point approximately 135-feet south of the intersection with Cumberland Avenue.

Because no on-site, off-street parking for personal vehicles is proposed as part of this project, congestion on surrounding streets will likely be from patrons locating parking in the vicinity of the subject property. The majority of these trips, however, are likely to occur after the evening peak hour under the assumption that events will begin at 8:00 PM and doors open at 7:00 PM. The applicant provided a map of available off-street parking facilities, including garages and lots, identifying the number of total spaces within 4/10 of a mile by a direct route to the site. These parking facilities were identified in the *March 2025 City of Portland Parking Division Annual Parking Survey.* From the identified facilities in the survey, five lots/garages were project to be the primary parking destinations for patrons of the proposed music hall. These facilities were selected by the applicant based on distance to the venue, current hours of operation, and parking capacity as shown in Table 1.

Table 1

| Parking Facility | # of Spaces | Hour of Operation | Walking Distance from Site |
|---|---|---|---|
| Top of the Old Port Surface Lot | 540 | Open 24hrs | 0.1 Miles |
| Temple Street Parking Garage* | 620 | Closes 12AM | 0.2 Miles |
| Cumberland County Parking Garage | 328 | Open 24hrs | 0.3 Miles |
| Custom House Parking Garage* | 761 | Closes 12AM | 0.4 Miles |
| One City Center Parking Garage | 600 | Open 24hrs | 0.4 Miles |

*Preliminary parking agreements between event operator and parking facility.

The projected distribution of vehicles to each of these locations with the corresponding number of entering trips in the PM Peak Hour of the adjacent street (5:00 – 6:00 PM) is shown in Table 2. Also listed is the total number of vehicles entering during the assumed arrival period for an event and an illustration of the percentage of the overall capacity for each facility the entering trips represent. The project-generated trips were assigned to the roadway network based on the distributions to the parking facilities listed. The resulting overall trip assignments for the PM peak hour period the day of a maximum capacity event, are shown in Attachment X. A summary of total trips in the vicinity of the site during the PM peak hour of the adjacent street is shown in Figure 7, Attachment X. By not providing direct on-site parking, vehicle trips are expected to be distributed throughout the street network, rather than concentrated at a single access point for entering and exiting the facility.

Table 2

| Parking Facility | # of Spaces | Trip Distribution | PM Peak Hour Trips (5 – 6 PM) | Total Entering Trips (Day of Event) | Music Hall Portion of Facility's Capacity (Day of Event) |
|---|---|---|---|---|---|
| Top of the Old Port Surface Lot | 540 | 15% | 50 | 216 | 40% |
| Temple Street Parking Garage* | 620 | 30% | 100 | 432 | 70% |
| Cumberland County Parking Garage | 328 | 10% | 34 | 143 | 44% |
| Custom House Parking Garage* | 761 | 30% | 100 | 432 | 57% |
| One City Center Parking Garage | 600 | 15% | 50 | 216 | 36% |
| **TOTAL** | **2849** | **100%** | **334** | **1439** | |

*Preliminary parking agreements between event operator and parking facility.

To minimize impacts on the surrounding street network, the applicant is proposing traffic management and enforcement, sponsored by the proponent, during active venue times to help mitigate localized impacts along Myrtle Street, Cumberland Avenue, and Pearl Street. Additionally, active areawide traffic management, coordination, and enforcement would occur during times when both the venue and Merrill Auditorium are active to manage traffic, ensure pedestrian safety, and facilitate emergency vehicle access.

The Portland Police Department has provided a memorandum (Attachment S4) outlining its role in supporting major events throughout the city to ensure public safety and facilitate smooth operations. The Department assists with pedestrian crossings to ensure safe access for attendees before and after Hearts of Pine soccer matches, which have drawn roughly 6,000 attendees to matches, manages traffic control for events drawing up to 6,500 attendees at Thompson's Point concerts, provides pedestrian crossing assistance and security at Sea Dogs games, and delivers event security at Merrill Auditorium and Mariners hockey games at the Cross Insurance Arena to maintain a safe and orderly environment.

The Department, routinely coordinates with event organizers to tailor their support to each event's needs.

13.6.1.B Access & Circulation

The project site is located in a central part of Portland's downtown. Existing public sidewalks surround the block and provide safe pedestrian access around the proposed development. The applicant is proposing to reconstruct the existing sidewalks along the project's frontages and expand pedestrian areas by extending the sidewalk, particularly along the building's primary frontage on Myrtle Street. The sidewalk near the venue's main entrance is proposed to be 14 feet to maximize effective width of the sidewalk to accommodate the venues patrons and pedestrian through traffic. As part of the project, two existing curb cuts along Cumberland Avenue will be removed and replaced with a public sidewalk, and no new curb cuts are proposed along that frontage. Additionally, the project includes curb extensions at the intersections of Myrtle Street and Cumberland Avenue, and Pearl Street and Cumberland Avenue. These curb extensions will shorten crossing distances for pedestrians and improve their visibility to drivers, enhancing overall pedestrian safety. The applicant is proposing separated ADA curb ramps at both proposed bump outs. The applicant had looked at the potential of changing the curb ramp at the intersection of Cumberland Avenue and Myrtle Street to an apex style (combines curb ramp) but determined it would pose issues with an existing utility pole and would cause grading accessibility issues.

Portions of the new sidewalk will be constructed on private property, and as such, the City and applicant will enter into a public access easement or license agreement to allow for public use. The applicant will be responsible for clearing snow from the sidewalk and main entrance surrounding the venue. In the event that on-site snow storage capacity is exceeded, the applicant has indicated that excess snow will be removed and disposed of off-site.

The main entrance to the venue will be located at the corner of Myrtle Street and Cumberland Avenue. Staff is seeking additional information regarding anticipated queuing capacity for patrons along the adjacent sidewalks, as well as details about the venue's patron queuing management plan. For context, existing venues located in an urban context such as the State Theater manage queues on the public sidewalk along Congress Street, with lines extending around the corner onto the public sidewalk on High Street. Similarly, staff is requesting a diagram illustrating the expected queuing areas, anticipated timing of patron arrival, and confirmation that sufficient sidewalk space will remain to accommodate both patron queuing and uninterrupted pedestrian through-traffic along Cumberland Avenue.

The applicant's original submission proposed relocating existing utilities and utility poles below grade as part of the project's construction. However, subsequent revisions indicate that the utility poles would remain in place. Given the anticipated increase in pedestrian activity on the surrounding sidewalk network, particularly along Cumberland Avenue, it is essential to provide a clear, unobstructed pedestrian path to ensure safe and convenient access to the site and venue as well as minimizing obstructions. To support pedestrian mobility and minimize sidewalk obstructions, utilities should be relocated underground as originally proposed during the block's reconstruction. The applicant should continue working with staff and Central Maine Power (CMP) to develop a plan for underground utility installation along Cumberland Avenue. Staff is seeking the Board's input regarding the placement of utilities and the adequacy of sidewalk width along Cumberland Avenue.




*Figure 4. Existing street conditions with utility poles along Cumberland Avenue*

*Vehicle Access & Circulation on-site*

In terms of vehicular access to the site, a curb cut of approximately 48 feet in width is proposed on Pearl Street to provide access to a dedicated on-site, off-street loading area for tractor-trailers. An additional 34-foot-wide curb cut on Myrtle Street will serve as dedicated on-site, off-street parking area designed to accommodate up to four tour buses. The applicant has submitted vehicle turning exhibits (Attachment V) to demonstrate turning movements for the proposed driveway on Pearl Street; Proposed driveway on Myrtle Street; Myrtle Street & Cumberland Avenue Intersection; Pearl Street at Cumberland Avenue Intersection; Pearl Street at Congress Street Intersection. In addition, to providing on-site tour bus parking, the applicant has also indicated a willingness to enter into an agreement with Merrill Auditorium to allow use of its bus parking area, accessible from Myrtle Street, on days when the proposed venue is not hosting a performance and has had discussion with leadership who manage Merrill operations. At this time, no formal documentation of such an agreement has been submitted but there is mutual interest in formalizing this arrangement. The applicant will be responsible for coordinating with Merrill Auditorium to finalize an agreement and must provide the Planning Authority with a copy once it is executed.

All loading and delivery activities for venue production are proposed to occur internal to the building, accessed from Myrtle and Pearl Street. The proposed development includes a trailer loading dock and trash room accessible from the Pearl Street entrance. Off-site parking would be coordinated by the applicant if additional space is needed for buses or trailers that exceeds the number of spots available in the loading area.

It is anticipated that some patrons will utilize rideshare services to access the site, with pick-up and drop-off activity expected to occur primarily along Cumberland Avenue and Myrtle Street. At this time, the applicant has not identified a designated area to direct ride share services to. Staff has recommended that the applicant consider establishing a designated rideshare zone along Cumberland Avenue or Pearl Street to accommodate this activity and minimize impacts on Myrtle Street, while also ensuring the curb space dedicated to ride share services is maximized effectively when not in use during events, either for parking or loading. Staff is seeking the Board's input on the appropriate location and approach for managing rideshare pick-up and drop-off operations serving the site.

13.6.1.C Public Transit Access

Section 13.6.1.C.1 mandates that commercial and institutional developments with a gross floor area of 20,000 square feet or greater must include a transit shelter. This requirement applies when the development is proposed along an existing public transit route on a principal or minor arterial roadway and the closest existing transit shelter is more than ¼ mile away, measured along the public right-of-way. The required shelter should be located adjacent to or within the public right-of-way along the development's frontage, or at a nearby high-volume transit stop that currently lacks a shelter. The project exceeds 20,000 square feet and is located along an existing public transit route on Cumberland Avenue. The nearest transit shelter on this route is approximately 0.19 miles from the subject property, along Congress Street between Temple and Elm Street. Additionally, METRO Pulse at Elm Street is located approximately 0.2 miles from the subject property. Therefore, the project is not required to install a transit shelter.

As the project does not include any on-site, off-street parking and is expected to generate increased public transit use, the applicant is encouraged to coordinate with METRO to identify any existing bus stops within a ¼ mile of the site that may benefit from the installation or upgrade of shelters as a TDM strategy to enhance public transit ridership.

13.6.1.D Parking

The site is located in Portland's B-3 Downtown Business zone and benefits from excellent access to public transit, pedestrian, and bicycle access. As outlined in Table 5-D of the Land Use Code, the intent of this zone is "*to maintain and enhance the role of the downtown as the business and commercial center of the region, and to enhance and promote the orderly expansion of retail and service businesses downtown, and satisfying the related needs of the city's resident, working, and visitor populations. The B-3 zone supports an active, walkable pedestrian environment through the encouragement of intensive mixed-use activities, enhancement and maintenance of public and private open space, and the enlivenment and increased attractiveness of the street environment. The zone reinforces the role of downtown as a meeting place for community residents and visitors alike from all walks of life and all socio- economic groups by prioritizing access via multiple modes of transportation and enhancing and protecting the pedestrian environment.*"

Per Section 18.1.2 of the Land Use Code, off-street vehicle parking is not required. Table 18-A sets the maximum number of off-street parking spaces allowed for each designated use. For theaters and performance halls, the maximum is one space per 300 square feet. The project will not provide for any on-site, off-street parking spaces, which complies with both Section 18.1.2 and the standards of Table 18-A. The project will implement a Transportation Demand Management (TDM) plan to encourage employees and patrons to use alternative modes of transportation and reduce the reliance on single-occupancy vehicles.

The applicant has submitted a parking memorandum (Attachment BB) analyzing available parking in the vicinity of the proposed project. According to this analysis, approximately 8,600 parking spaces in garages or lots remain open until at least midnight. Additionally, the memorandum identifies parking garages and surface lots within a 0.4-mile radius of the proposed venue, totaling 2,849 spaces that are either open until midnight or offer flexible public parking after business hours to accommodate evening events at other venues (see Table 3). These figures do not include on-street metered parking or private facilities such as hotel lots.

Table 3

| *Parking Facility* | *# of Spaces* | *Hour of Operation* | *Walking Distance from Site* |
|---|---|---|---|
| **Top of the Old Port Surface Lot** | 540 | Open 24hrs | 0.1 Miles |
| **Temple Street Parking Garage*** | 620 | Closes 12AM | 0.2 Miles |
| **Cumberland County Parking Garage** | 328 | Open 24hrs | 0.3 Miles |
| **Custom House Parking Garage*** | 761 | Closes 12AM | 0.4 Miles |
| **One City Center Parking Garage** | 600 | Open 24hrs | 0.4 Miles |

**Preliminary parking agreements between event operator and parking facility.*

Within the garages and surface lots identified within a 0.4-mile radius, the applicant has secured preliminary parking agreements with both the Temple Street Parking Garage and the Custom House Parking Garage. These agreements indicate that, in addition to the existing public and private garages, lots, and on-street parking in the area, the applicant would provide approximately 1,380 dedicated parking spaces for patrons of the proposed venue. The agreements would include a 50% discount off the current full daily rate, extended evening hours from 11:00 PM to 12:00 AM on event nights, and potential Sunday operations. Staff is seeking Board input on whether additional details regarding these agreements should be submitted.

Furthermore, the City of Portland Parking Division conducted parking lot counts in May 2025 on a Thursday, Friday, and Saturday. Each lot was counted at least twice and, in some cases, up to four times, during the three-day period. The results showed an average utilization rate of only 19% for garages and lots within a ¼-mile radius of the venue (Table 4), and 18% for those located between ¼ and ½ mile from the venue (Table 5). These findings indicate that approximately 80% of parking capacity in the area remains available, suggesting sufficient existing parking to accommodate a new venue.

Table 4

| **Summary: 0 to 1/4 Mile Occupancy (5:30 PM-8:00 PM)** | | |
|---|---|---|
| **Available Spaces** | **Capacity** | **% Utilized** |
| 2715 | 3380 | 19.66% |

Table 5

| Summary: 1/4 to 1/2 Mile Occupancy (5:30 PM-8:00 PM) | | |
|---|---|---|
| Available Spaces | Capacity | % Utilized |
| 2412 | 2969 | 18.75% |

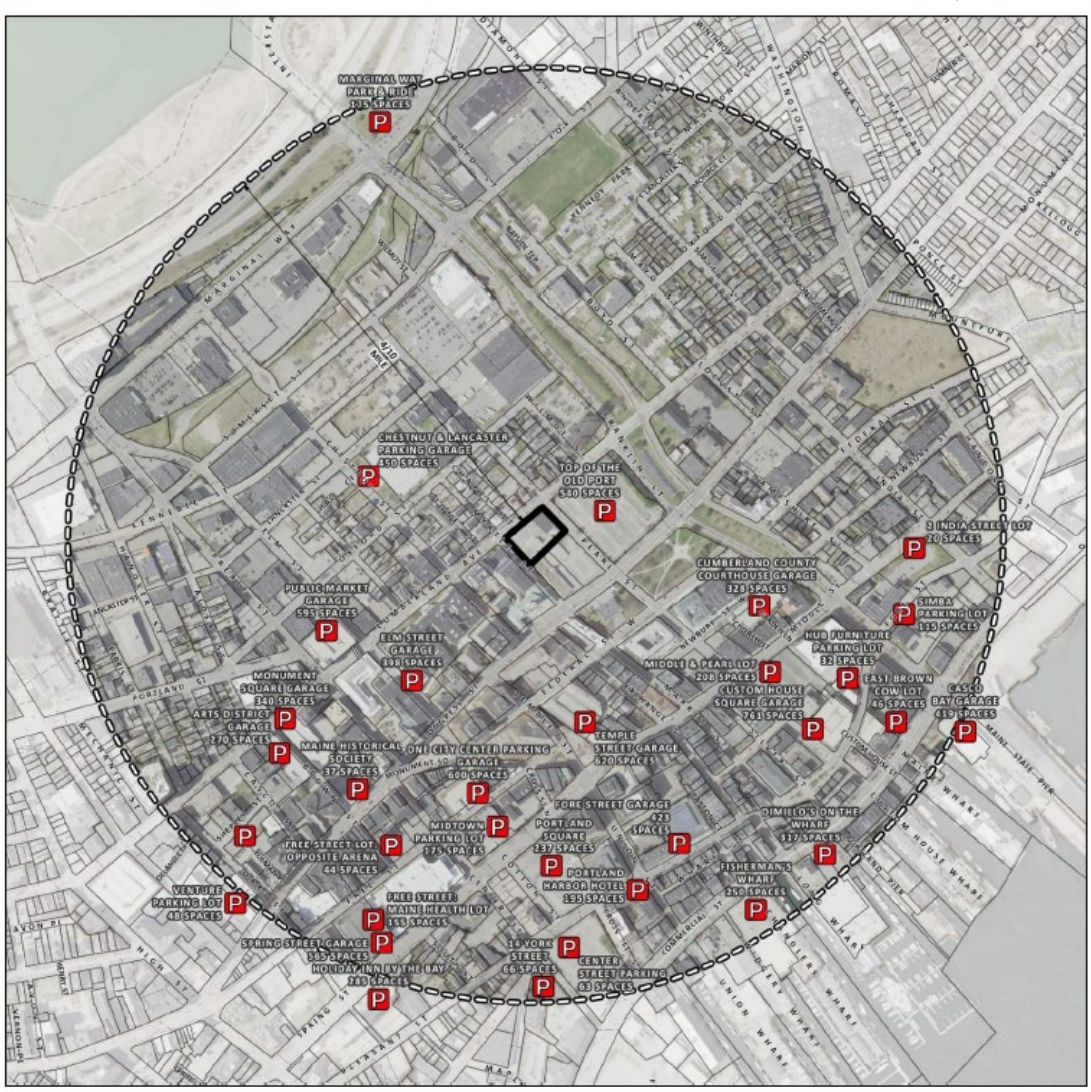



*Figure 5. Parking Facilities within 0.4 mile of the Portland Music Hall Site*

*On-street parking & neighborhood impact*

During the course of project review, concerns have been raised about the potential for event attendees to use on-street parking, particularly in ways that could affect residential parking availability in the nearby Bayside neighborhood. While parking will be available in nearby garages and surface lots, there

is no guarantee that all patrons who choose to drive to the venue will utilize those options. Some may instead opt to park on surrounding streets in accordance with existing parking regulations.

The Bayside neighborhood falls within Residential Parking Zone 7. Residents with a valid Zone 7 permit are exempt from hourly parking limits within the zone, allowing them to park for extended periods without needing to move their vehicles. In contrast, non-residents must comply with posted time restrictions.
To help preserve residential access and reduce the likelihood of patron parking in the neighborhood, the City could consider implementing extended hourly on-street parking regulations in the area. Staff is seeking input from the Board on whether extending on-street time restrictions until 8:00 p.m. would be supported as a regulatory measure to manage parking demand and protect neighborhood parking availability in Zone 7, Zone 3, and the Old Port Zone.




*Figure 6. Residential Park Zones. Source: City of Portland Parking Division*

As part of this application, the applicant is proposing changes to on-street parking for streets immediately abutting the project site. In coordination with City staff, the proposal includes removing seven existing spaces on Myrtle Street and adding four spaces on Cumberland Avenue and three spaces on Pearl Street. Additionally, the applicant is in the process of finalizing the proposed layout for Pearl Street, which may result in the addition of four on-street parking spaces near Congress Street. This would bring the total number of new on-street spaces on Pearl Street to seven, where none currently exist. Overall, these changes would result in a net increase in the number of on-street parking spaces on the surrounding block.

*Bus Access*
The site and surrounding area are well-served by public transit. Several METRO bus routes, including the Husky Line, and Routes 1, 5, 7, 9A, and 9B, operate along Congress Street, with nearby stops at 255

Cumberland Avenue, Portland City Hall, and Franklin Towers. Additionally, Route 8 operates along Cumberland Avenue. There is also Biddeford Saco Old Orchard Transit route 60 operating approximately 340-feet from the site. Along Congress Street, several bus routes operate, resulting in high-frequency service approximately every 10 minutes on weekdays from 6 a.m. to 7 p.m., with frequency dropping to about every 20 minutes thereafter.

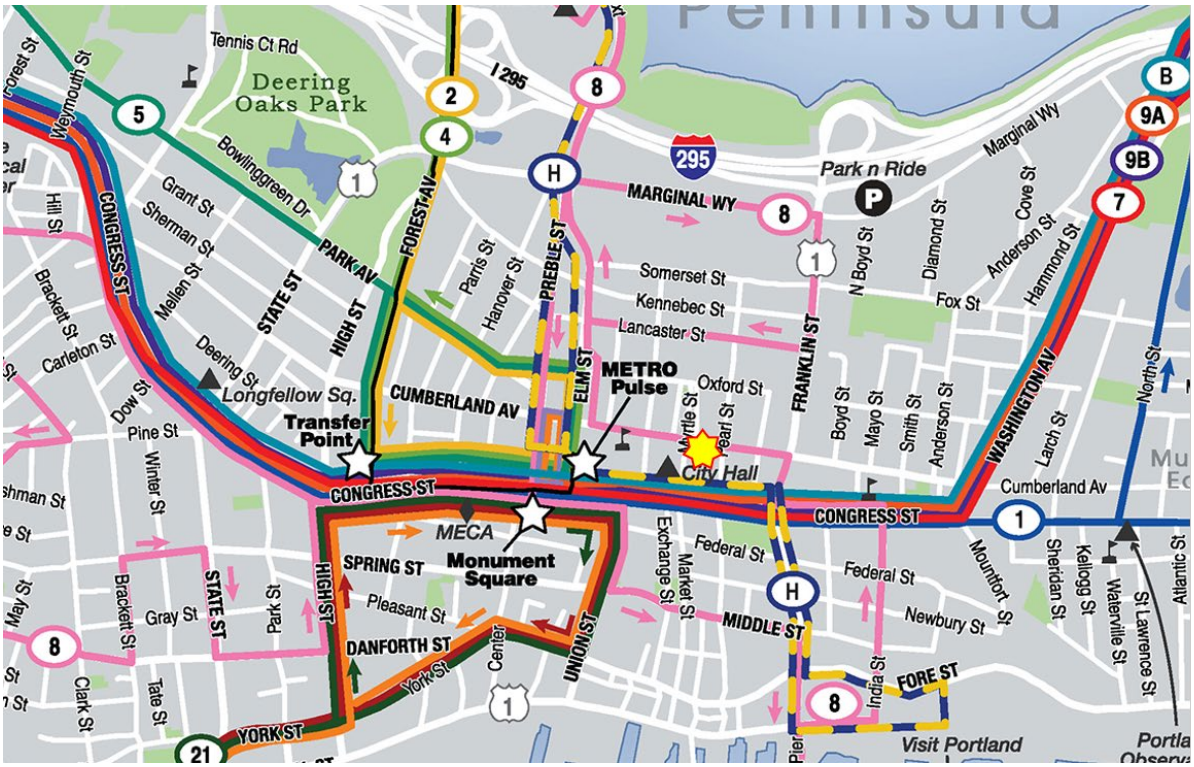


*Figure 7. Existing METRO routes within the project vicinity*

*Bicycle Parking*

Table 18-A also establishes the minimum number of bicycle parking spaces required on-site. For theaters and performance halls, over 10,000 square feet of floor area, 1 bicycle space per 2,500 of floor area is required. The applicant is required to provide 26 bicycle spaces and they are proposing 13 bicycle racks, for a total of 26 bicycle parking spaces, which meets the requirements of Table 18-A.

13.6.1.E Transportation Demand Management (TDM)

While parking is not required for the project, all commercial, institutional, or mixed-use developments of 50,000 square feet or more are required to design a Transportation Demand Management (TDM) plan. Additionally, all commercial or institutional uses designed to accommodate 100 or more employees are required to implement a TDM. The applicant has submitted the required TDM plan based on the standards outlined in the City of Portland Technical Manual – Section 17.3. Within the TDM plan the applicant indicates that the music hall will designate a full-time employee as their TDM coordinator. This employee would be responsible for actively promoting and educating on alternative forms of transportation for both employees and event attendees. The coordinator will also be responsible for both monitoring and updating the TDM plan as necessary and completing the City's annual TDM Reporting Form.

TDM Targets: Because of the discussed Downtown location of the venue and no proposed on-site parking, TDM targets and related strategies would focus on modal split and occupancy of vehicles of commuting staff. Trip generation for the music hall, detailed in the trip generation estimation submitted with the project site plan review application, was estimated using the expected number of employees and attendees during a full capacity event as provided by the proposed music hall operators. The total vehicular trip volumes were established based upon the assumed number of employees and attendees, a car modal split of 82%, and an occupancy rate of 2.3 persons per vehicle for event attendees and 1.0 persons per vehicle for employees. A reduction of 10% in the use of personal vehicles would be targeted or a modal split of 72% if compared to the estimated 82%.

The following TDM measures are being proposed by the applicant as part of this Project:

- Designate a Transportation Coordinator to oversee all transportation related operational matters.
- A transportation survey prior to the implementation and on an annual basis for the employees of the music venue.
- Sidewalk improvements on all sidewalks surrounding the property, including widening sidewalks at the main entrance.
- Providing bicycle parking in several areas surrounding the site.
- Promotion and coordination of ridesharing between employees through email and bulletin campaigns and providing information on the GOMAINE program.
- Discounted METRO passes for employees.
- Consider contributing to METRO to support potential future expansion of evening bus service.
- Providing detailed information on options for transportation to the area for event attendees.

Since the March 25 Planning Board Workshop, the applicant has met with City Staff and METRO to discuss potential options and strategies for extended bus service later into the evening. In coordination with METRO, staff have identified potential transit routes that would benefit from extended service, including Routes 9A, 9B, and 8. An extension of one or more of these services would benefit not only Portland Music Hall, but Downtown workers and other local venues as well. More coordination is required between staff, METRO, and the applicant to better understand the contribution that would be required to extend services into the evening hours.

## III. TRAFFIC MOVEMENT PERMIT (TMP) REQUIREMENTS

In Maine, a Traffic Movement Permit (TMP) is required for any project that generates 100 or more passenger car equivalents (PCE) at peak hour. The purpose of the permit is to ensure that Projects that may result in increases in Vehicle Trips do no cause unacceptable decreases in the safety, access, or Level of Service (LOS) for other motorists, pedestrians or bicycle riders. MaineDOT TMP rule is intended to emphasize transportation-efficient Development and ensure that transit, bicycle, and pedestrian facilities are accommodated, as well as foster implementation of on-going, effective Transportation Demand Management (TDM) programs.

The proposed project is expected to generate an estimated 1,439 vehicle round trips during a peak-capacity event, including approximately 1,234 attendee trips and 205 employee trips. As a result, a TMP is required. The City of Portland has been delegated review authority and will serve as the official reviewing body for this TMP.

The peak hour is defined as "the hour of the day during which traffic volume at an intersection or on a roadway segment is higher than during any other hour of the day." For the proposed project, the PM peak hour is expected to occur between 11:00 PM and 12:00 AM, during which an estimated 1,140 passenger car equivalents would be generated. The AM peak hour, occurring between 5:00 AM and 6:00 AM, is projected to generate approximately 31 trips. Trip generation estimates were distributed by hour based on operational data from a typical event schedule. Most events are expected to follow a consistent schedule, with an assumed show start time of 8:00 PM.

It is assumed that most patron traffic would exit the venue immediately upon release, with 10% during both the hour preceding and succeeding the event ending. Most non-production staff employees (75%) will exit between 11:00 PM and 12:00 AM, with a portion (10%) existing after midnight. The production staff (15%) would leave around 2:00 AM.

Since no parking is to be provided on site, the above-estimated trips would naturally be destined for parking areas in the general area of the site. Since events occur in the evening hours it is expected that an adequate parking supply in public or private parking lots/garages as well as on-street parking would be available and divert traffic throughout the downtown area and not necessarily travelling directly to the site as would be represented for a typical traffic generator that would have self-contained parking.

A TMP scoping meeting between Staff and the Applicant was held on May 13, 2025. Following the meeting, City Staff provided the following post-meeting direction to the applicant for their Section 7 Traffic Study:

1. To ensure the trip assignment assumptions in the study are valid, the applicant shall provide parking facility occupancy data that accounts for current and future demand.
2. The traffic counts at the intersections identified shall be conducted at the time of a Merrill Auditorium event. This information will help to provide an understanding of overlapping impacts particularly given the Music Hall's later event start time (7pm vs. 8pm). The counts shall be conducted between 4 and 8pm. The applicant shall coordinate the count data with the city before proceeding.
3. Staff have provided a list of approved projects and projects under review for the applicant consideration. Not all the provided projects may impact the study area intersections, so the applicant shall make that determination with documentation.

See Attachment S2 for full traffic scoping meeting notes.

## IV. NEXT STEPS

Staff is seeking input from the Planning Board regarding the proposed project's compliance with the Transportation Standards. The Board is also encouraged to provide feedback on any other aspects of the proposal they would like staff or the applicant to address. This input will help guide revisions to the project before it is brought back for a public hearing.

## ATTACHMENTS

### Public Comment

PC1. Public Comment from 3-25 Workshop

PC2. Abby Fuller (Rec'd 3-27-2025)
PC3. Aleksandra Tugbiyele (Rec'd 4-01-2025)
PC4. Andres Llorenta (Rec'd 3-28-2025)
PC5. Angie (Rec'd 3-25-2025 past 12pm)
PC6. Ashley Beaupre (Rec'd 3-25-2025 past 12pm)
PC7. Bessie Sandberg (Rec'd 3-25-2025)
PC8. Brain Rayback (Rec'd 5-1-2025)
PC9. Cam Jones (Rec'd 4-25-2025)
PC10. Caroline Hadilaksono (Rec'd 5-5-2025)
PC11. Clare Hannan and Steve Von Vogt (Rec'd 3-25-2025)
PC12. Courtney Jane (Rec'd 3-25-2025)
PC13. Dan Bernard (Rec'd 3-25-2025)
PC14. Emily Harris (Rec'd 3-25-2025 past 12pm)
PC15. Erica Mercier (Rec'd 3-25-2025)
PC16. Hana Zoe Rosenfield (Rec'd 3-25-2025)
PC17. Hannah Watson (Rec'd 3-25-2025)
PC18. Jackie Schrader (Rec'd 3-25-2025 past 12pm)
PC19. Jamie Willey (Rec'd 3-25-2025)
PC20. Jay York (Rec'd 4-01-2025)
PC21. Jeannie Doherty (Rec'd 3-25-2025)
PC22. Jen Whitley (Rec'd 3-25-2025 past 12pm)
PC23. Jennifer Jackson (Rec'd 3-25-2025 past 12pm)
PC24. Jesse Hoefer (Rec'd 3-25-2025)
PC25. Jessica Hoffmann (Rec'd 4-24-2025)
PC26. Jonathan Cohen (Rec'd 3-25-2025)
PC27. Justin Jacques (Rec'd 3-25-2025)
PC28. Kate Istomina (Rec'd 3-25-2025 past 12pm)
PC29. Kate Kilbansky (Rec'd 3-25-2025)
PC30. Lia Horton (Rec'd 3-25-2025 past 12pm)
PC31. Lous Christen (Rec'd 3-25-2025 past 12pm)
PC32. Maire Lenihan (Rec'd 3-25-2025)
PC33. Myles Kelley (Rec'd 3-25-2025 past 12pm)
PC34. Myles Smith (Rec'd 3-25-2025)
PC35. Nathan Katsiaficas (Rec'd 4-25-2025)
PC36. Nicholas Reevy (Rec'd 3-25-2025)
PC37. Rebecca Turkewitz (Rec'd 3-25-2025)
PC38. Rhiannon Bill (Rec'd 3-25-2025)
PC39. Ricky Lorenzo (Rec'd 3-25-2025 past 12pm)
PC40. Ryan Curless (Rec'd 4-25-2025)
PC41. Sharon Scott-Chandler (Rec'd 4-03-2025)
PC42. Solie Thorncraft (Rec'd 3-25-2025 past 12pm)
PC43. Tara McDonough (Rec'd 3-25-2025 past 12pm)
PC44. Tom Stenquist (Rec'd 3-25-2025)
PC45. Zach Hurwitz (Rec'd 3-26-2025)
PC46. Zachary Rohman (Rec'd 3-25-2025 past 12pm)
PC47. George Rheault (Rec'd 5-23-2025)

**Report Attachments**

S1. 2nd Round Staff Comments
S2. First Design Review Memo
S3. TMP Scoping Meeting Notes
S4. Portland Police Traffic Unit Memo

**Applicants Submittal**

A cover letter
B Site Plan Checklist_(12-4-2024)
C RTI
D Evidence of Approvals
E Zoning Analysis Table
F Site Plan Standards Assessment
G Existing-Proposed Easements
H Waiver Table - Exception
I Financial Capability
I.2 LNE letter to Portland Planning and Urban Development
J Technical Capability
K Construction Management Plan
L Transportation
L.1 Temporary Traffic Control Plan
M Environmental
N Public Infrastructure-Community Safety
O Site Design
P Building Elevations
Q Building Massing Images
R Floor Plans
S Shadow Study Analysis
T Stormwater Report - LOT 3 2024-12-20
U Stormwater Report - LOT 3 2025-04
V Vehicle Turning Exhibits
W View Corridor
X 2025-04-21 Portland Music Hall TMP Application Sections 1-6
Y Comment Response - Design Review 25-03-18
Z Comment Response Letter 25-04-09
AA Neighborhood Meeting Notes 2025-01-27
BB Portland Music Hall Parking Memorandum 2025-04-23
CC.1 Pearl Street Parking_Exhibit B-01
CC.2 Pearl Street Parking_Exhibit A-01

**Plans**

1 COVER SHEET
2 GENERAL NOTES LEGEND AND ABBREVIATIONS
3 DEMOLITION PLAN
4 OVERALL SITE PLAN
5 SITE PLAN - STREET LEVEL
6 OVERALL GRADING PLAN

7 GRADING PLAN - STREET LEVEL
7 UTILITY PLAN
8 PEARL STREET PLAN AND PROFILE
9 UTILITY SCHEDULES
10 LANDSCAPE PLAN
11 EROSION CONTROL NOTES
12 DETAILS1
13 DETAILS2
14 DETAILS3
15 DETAILS4
16 Building Elevations
16 DETAILS5
17 DETAILS6
18 EXISTING CONDITIONS-1of2
18 Floor Plans
19 EXISTING CONDITIONS-2of2
19 Photometrics
20 SUBDIVISION PLAN
21 OVERALL SITE PLAN W HOTEL EXHIBIT
22 OVERALL SITE PLAN W HOTEL- sidewalk
23 Rendering
23a Rendering Pearl Street
24 ENTERTAINMENT OVERLAY ZONE EXHIBIT

***Site Plan Worksheet | PL-003179-2024 | 385 Congress Street***
*Submission #2: April 9, 2025*
*City Comments #2 Sent: May 23, 2025*
*Planner: Taylor Colbeth (tcolbeth@portlandmaine.gov)*

*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 (DPW), Water Resources, Zoning, and Third-Party Consulting Engineers (Stormwater + Traffic).*

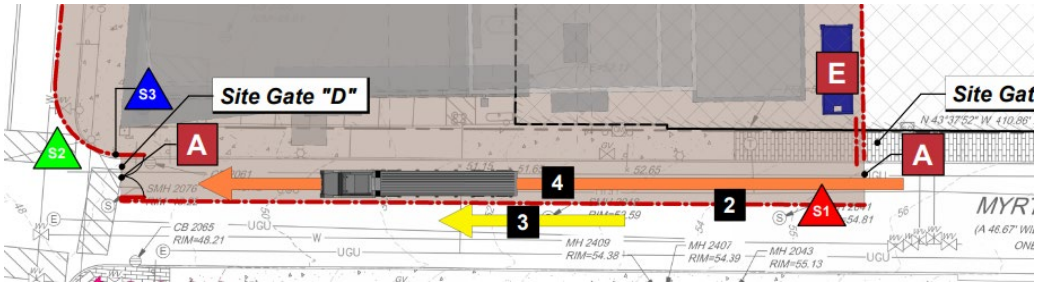
*Please submit a written response to the comments below and upload the response, revised submissions, and new material to Project Dox (make sure all submissions maintain the same file naming format to allow for versioning). Once uploaded, please send an email to tcolbeth@portlandmaine.gov notifying the 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.*

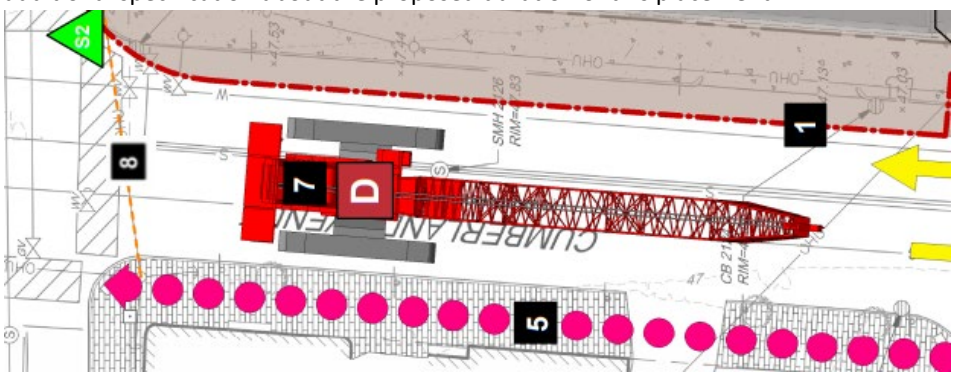
*Green signifies the standard is being met; red signifies the standard is not being met; and blue indicates the standard is not applicable.*

General Comments

- Construction Management Plan
  - The applicant has indicated that there will be minimal contractor parking on site during the project and on-street parking will not be available for construction workers. The coordination of, and transportation to, off-site parking areas will be the responsibility of Consigli and the subcontractors. Staff are requesting additional information on the coordination of contractor parking.
  - The applicant is proposing utilizing Myrtle Street which will have to be coordinated with DPW. Additional details on how long the closure is proposed and a cross-sectional view that includes dimensions would be helpful.




  - Staff have raised concerns on the proposed crane placement and duration. Staff are requesting additional specification about the proposed duration of this placement.



## Site Plan Review Standards (Sec. 13.6)

### Transportation Standards (Sec. 13.6.1)

| *Standard* | *Discussion* | *Finding* |
|---|---|---|
| *Impact on Surrounding Street Systems* | **Overview:** The proposed project involves the construction of a 3,310-capacity music venue on Lot 3 of the 385 Congress Street Subdivision. Lot 3 was previously part of the 385 Congress MDP and was proposed to be a mixed-use building with 179 residential units and a 6,900 square-foot commercial space. A traffic Movement Permit (TMP) was previously issued for the MDP on February 24, 2023. Lot 3 has since been removed from the MDP, therefore a new TMP application is required for the proposed development.<br><br>The applicant has since submitted Sections 1-6 of a new TMP application. A traffic scoping meeting was held on May 13, 2025, with the City's third-party traffic engineer. Based on the submitted TMP application, a peak (maximum capacity) event is estimated to generate 1,439 vehicular round trips. This was estimated using a vehicular occupancy rate of 2.2 persons per vehicle. Th peak hour for the proposed venue is anticipated to be between 11:00PM and 12:00AM; during this time, the peak hour vehicular trip estimation is 1,140 trips. Because the development is not proposing parking, it is also anticipated that there will be pedestrian traffic and transit use. Based on the Section 1-6 TMP application, the music venue is estimated to generate 71 one-way transit trips and 570 one-way walk/bike trips.<br><br>The applicant has also provided information on bus and trailer parking in the designated loading areas to mitigate hazard and congestion along Myrtle and Pearl Streets. The applicant has indicated that the proposed loading areas will be managed by on-site personnel with temporary traffic control measures as necessary to stop or shift traffic while a vehicle is actively entering/exiting the loading area.<br><br>**Updates Requested**<br>• During the traffic scoping meeting, the applicant gave background on the previously approved TMP and an overview of the estimates for the new TMP application. Tom Errico, the City's third-party traffic engineer, has provided the applicant with post-meeting direction and a list of projects that have been approved and are under review for the applicant's consideration. Please see traffic scoping meeting notes for more information.<br>• The applicant has proposed an additional four on-street parking spaces along Cumberland Avenue. Has the applicant considered making two-three of these spaces loading spaces for ride share pick-up/drop-off? This would help to direct rideshare vehicles to Cumberland Avenue, keeping traffic away from Myrtle Street. | More Information Required |
| *Access and Circulation* | **Overview:** The applicant is proposing the existing curb cuts along Cumberland Avenue be removed. Additionally, the applicant is proposing two near curb cuts to facilitate the bus parking, accessible from Myrtle Street, and trailer parking, accessible from Pearl Street. Paints of access and egress have been proposed in areas to avoid conflicts with turning movements and traffic flow. Staff did have concerns regarding access to the bus and trailer loading along | More Information Required |

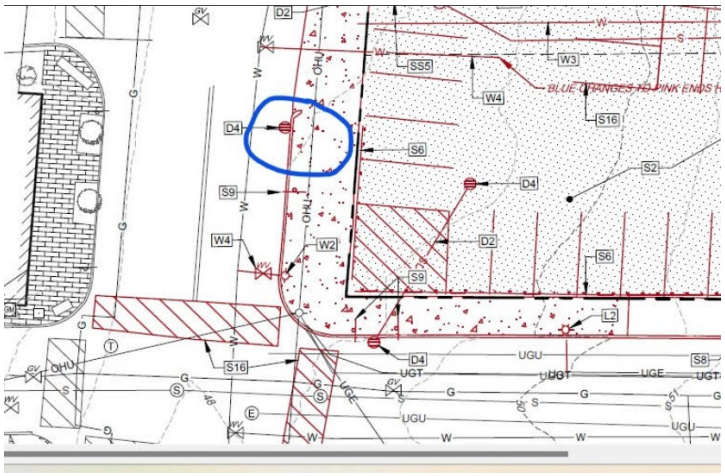
| | | |
|---|---|---|
| | Myrtle and Pearl Streets and the safety of the sidewalks in those areas. The applicant has since indicated that music venue staff would be present to implement temporary traffic control measures as necessary to ensure vehicular and pedestrian safety.<br><br>The applicant is also proposing the reconstruction of sidewalks and curbs along all property frontages. The improved sidewalks is anticipated to result in improved pedestrian circulation along Cumberland Avenue, where pedestrian queuing will occur for events. Additionally, the applicant is proposing a sidewalk easement on Myrtle Street to grant public pedestrian access in, on, and over the easement area. | |
| | **Updates Requested**<br>• The applicant was previously proposing to underground utilities along all property frontages. As part of the second submission, the applicant is now proposing to keep overhead utilities along Cumberland Avenue. Staff are concerned about the impact this will have on pedestrian activity and patron queuing along this corridor. Staff have since been in contact with CMP, who have indicated undergrounding is an option along this frontage. The applicant should continue to work with City staff and CMP to propose underground utilities along Cumberland Avenue. | |
| *Public Transit Access* | **Overview:** The proposed development is located along an existing transit route and is located approximately 0.2 miles from the existing METRO PULSE at Elm Street, therefore a transit shelter is not required. | Met |
| | **Updates Requested**<br>• None | |
| Parking | **Overview:** The applicant is proposing an off-street parking area that can accommodate up to four buses on Myrtle Street and an off-street parking area that can accommodate up to two tractor-trailer trucks on Pearl Street. Additionally, the applicant is proposing a loading zone along Myrtle Street to facilitate the maneuver required to back buses into the designated parking area. The applicant has indicated that this area will not be used for parking, but rather staging for the buses coming in. There is no on-site pedestrian vehicular parking proposed. The applicant is proposing removing seven existing on-street parking spaces along Myrtle Street, supplemented by four new on-street parking spaces along Cumberland Avenue and three spaces on Pearl Street, resulting in a net gain of on-street parking spaces. This is in compliance with Table 18-A of the City's *Land Use Code*, which establishes a parking maximum of 1 space per 300 square-feet of floor area for theaters and performance halls.<br><br>Per Table 18-A of the City's *Land Use Code*, the applicant is required to provide 1 bicycle parking space per 2,500 square foot of floor area (26 bicycle spaces for the proposed project). The applicant is proposing to satisfy this condition with 13 bike racks along Myrtle Street and Cumberland Avenue, for a total of 26 bicycle parking spaces.<br><br>There are no snow storage areas proposed on site. Venue staff will be responsible for clearing snow from sidewalks in accordance with the City of Portland ordinance. | Met |

| | | |
|---|---|---|
| | **Updates Requested:**<br>• None | |
| *Transportation Demand Management* | **Overview:** The applicant has submitted a TDM Plan that complies with the transportation studies and plans as contained in the *Technical Manual*. The applicant has indicated that a full-time employee will be designated as their TDM coordinator. Because there is no parking proposed as part of this project, TDM targets and related strategies would focus on modal split and occupancy of vehicles of commuting staff.<br>**Updates Requested**<br>• The applicant is still in coordination with City staff and METRO to explore bus service options to and from the site, as well as potential improvements or partnerships to encourage patrons use public transit. | More Information Required |
| Environmental Quality Standards (Sec. 13.6.2) | | |
| ***Standard*** | ***Discussion*** | ***Finding*** |
| *Preservation of Significant Natural Features* | **Overview:** The proposed project area is a previously developed, urban parcel with surface parking spaces and minimal vegetation or pervious areas. The applicant has submitted the low impact development scoring worksheet as part of their second submission, with a total of 82 points awarded.<br>**Updates Requested**<br>• The LID scoring tool claims points for using locally-sourced, native vegetation. However, of the species listed on the landscape plan, only one proposed species is native to Maine and three are non-native. For these points to be claimed, all proposed landscape plants must be locally-sourced and native to Maine. Please revise the LID scoring tool or the landscape plan accordingly. If the applicant wishes to meet this standard by updating the landscape plan, please also add a note to the landscape plan that all plants must be locally-sourced. | More Information Required |
| *Site Landscaping and Buffers* | **Overview:** The applicant has provided a landscape plan that proposes five street trees along Cumberland Ave and two along Pearl Street, for a total of seven street trees. Per Standard 13.6.2.B.5, one street tree is required for every 25-35 feet of street frontage. The proposed development has frontage along Myrtle Street, Cumberland Avenue, and Pearl Street and is required to provide 4, 7, and 5 trees, respectively, for a total of 16 street trees.<br>**Updates Requested**<br>• Per Section 4.1.3 of the City's *Technical Manual*, the application will be required to make a contribution to the City's tree fund for the nine trees they are unable to provide on-site, for a total of $3,600 ($400 per street tree. | More Information Required |
| *Water Quality, Stormwater Management and Erosion Control* | **Overview:** Based on consultation with City staff, the applicant is proposing the site's runoff be directed to the existing combined sewer in Pearl Street in anticipation of a future City project to separate the combined sewer in this street. The proposed design does not increase runoff in the City's combined sewer in the Pearl Street system in the 1-inch 24-hour rainfall event associated with the City's SCO control plans.<br><br>The applicant does not propose any stormwater infiltration or other practices that would be expected to pose a risk of groundwater contamination either during or post-construction. | More Information Required |

| | | |
|---|---|---|
| | **Updates Requested**<br>• This project requires a basic ESC plan in accordance with section 12 of the technical manual. A separated, dedicated ESC plan should be provided in accordance with the City's technical standards. | |
| Public Infrastructure and Community Safety Standards (Sec. 13.6.3) | | |
| ***Standard*** | ***Discussion*** | ***Finding*** |
| *Consistency with City Master Plans* | **Overview:** The proposed project is in line with the City's goals of fostering a vibrant city. This infill development would encourage pedestrian activity along Myrtle Street and Cumberland Avenue in an area that is well served by public transportation, with Greater Portland METO running several routes within close proximity to the subject property, and is easily walkable to the rest of Downtown Portland. There are no specific City Master Plans for this location.<br>**Updates Requested**<br>• None | Met |
| *Public Safety and Fire Prevention* | **Overview:** The project has been designed following public safety principles for Crime Prevention through Environmental Design and has been designed to provide adequate emergency vehicle access to the site as outlined in the *Technical Manual*.<br>**Updates Requested**<br>• None | Met |
| *Public Utilities* | **Overview:** The applicant is now proposing to underground electric along all property frontages, except for along Cumberland Avenue- a revision that came from a conversation with CMP. The underground electric will be serviced from CMP's recently installed manhole in Pearl Street.<br><br>The proposed development is not anticipated to overburden sanitary sewers and storm drains, water lines, or other public infrastructure and utilities. The Portland Water District has been consults related to service to the proposed development. The applicant has indicated that a formal request for capacity will be provided once it is received.<br>**Updates Requested**<br>• Staff have requested additional coordination with CMP regarding the underground electric along Cumberland Avenue. The applicant shall provide staff an update on any additional coordination.<br>• The City's GIS mapping indicates that the City CB (demarcated on the plans as #2393) located on Cumberland Avenue directly across the street from CB-5 currently connects to the existing CB that is being replaced by CB-5. See snip below. This will need to be field verified, but the applicant should plan to connect the storm drain lateral from CB 2393 to CB-5. | More Information Required |




- DPW would like further rationale for the proposed installation of CB-2. The proposed connection point is an existing 10" sewer line. We would like to avoid this connection unless there is a compelling reason to install it. Is there a history of roadway ponding at this location?
- The applicant is proposing to demolish an existing City catch basin on Cumberland Avenue near the NE corner of the Myrtle/Cumberland intersection. Please verify doing this will not result in a drainage issue at this location.



| Site Design Standards (Sec. 13.6.4) | | |
|---|---|---|
| ***Standard*** | ***Discussion*** | ***Finding*** |
| *Massing, Ventilation, Wind, and Heat Impacts* | **Overview:** The proposed development would be 54.5-feet in height, which complies with the permitted height in the zone. HVAC equipment is proposed to be on the roof of the building. The applicant has indicated that screening walls are included in the design along portions of Myrtle and Pearl Street and at the intersection of Cumberland Avenue and Pearl Street. The applicant has also indicated that the mechanical units located near the Myrtle Street and Pearl Street facades would be locate behind screening walls.<br>**Updates Requested**<br>• None | Met |
| *Shadow* | **Overview:** The proposed development is not anticipated to have adverse shadow impacts. Based on the reduced building height, shadow impacts are anticipated to be less than those of the previously approved Lot 3 plans for the | Met |

| | | |
|---|---|---|
| | MDP. The applicant has submitted shadow studies which include the Lot 1 and 2 buildings for consistency with previous studies.<br>**Updates Requested**<br>• None | |
| *Snow and Ice Loading* | **Overview:** The proposed development was designed with a flat roof to prevent snow and ice from falling onto adjacent properties or public ways. The applicant has indicated that the owner will comply with City ordinance requirements for snow removal from public sidewalks and along the site frontage.<br>**Updates Requested**<br>• None | Met |
| *View Corridors* | **Overview:** The proposed project is not located within a proposed view corridor and this standard is, therefore, not applicable.<br>**Updates Requested**<br>• None | Not Applicable |
| *Historic Resources* | **Overview:** The proposed project is not located within a designated historic district nor has any known historic or archeological resources. The subject property is located adjacent to a historically significant building – City Hall. The proposed development will be generally compatible with the major character-defining elements of the district in the immediate vicinity of the subject property. The applicant has proposed a design and materials that complements the surrounding modern and historic buildings.<br>**Updates Requested**<br>• None | Met |
| *Exterior Lighting* | **Overview:** Decorative lighting is proposed to be installed along the Cumberland Avenue, Myrtle Street, and Pearl Street frontages. The applicant has submitted a photometric plan for the proposed lighting.<br>**Updates Requested**<br>• None | Met |
| *Noise and Vibration* | **Overview:** The HVAC units are proposed to be installed on the building rooftop to mitigate radiation of noise off site. All other heating, ventilation, emergency generations, and similar equipment will meet applicable state and federal emission requirements and be located away from abutting residential properties.<br><br>Because the proposed development is a music venue, the building has been designed for optimal acoustics during performances and will ensure that sound is contained within the building. A report on acoustics, vibration, and sound modeling has been provided by Metropolitan Acoustics.<br>**Updates Requested**<br>• None | Met |
| *Signage and Wayfinding* | **Overview:** The site is fully occupied by the building footprint and entrances to the venue are clearly defined by architectural design, canopies, and lighting. No on-site wayfinding signage is proposed. The proposed development will have minimal signage identify the address of the building for deliveries and patrons.<br>**Updates Requested**<br>• None | Met |
| *Design Standards* | **Overview:** The applicant's architect met with City staff on May 8 to discuss future submissions. Conversations centered primarily around the entrance at | |

| | | |
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| | the corner of Cumberland Avenue and Myrtle Street and the façade along Pearl Street. The applicant team will be revising the design to open up the entrance area on Cumberland Avenue by extending windows. Additionally, the applicant is proposing a mural on Pearl Street to break up the blank façade. | More Information Required |
| | **Updates Requested**<br>• The City is awaiting a formal resubmission of design materials. | |

**Design Review**
**Planning and Urban Development Department**

| | |
|---|---|
| **Subject:** | 385 Congress Street (address subject to change) – Major Site Plan Review |
| **Zone:** | B3 |
| **Date of Review:** | February 21, 2025<br>Design Review |
| **Reviewer(s):** | Sean King (Urban Designer), Taylor Colbeth (Planner), Kevin Kraft (Deputy Director), Evan Schueckler (Historic Preservation Manager) |
| **Project ID:** | PL-003179-2024 |

## I. INTRODUCTION

The proposed music venue at 385 Congress Street (address subject to change) is reviewed according to the B-3 design standards from the City of Portland *Design Manual,* ***Land Use Code Section 14.6.4.I Design standards.***

## II. DESIGN REVIEW COMMENTS: red text denotes standards not met and require resubmission.

*§(b)(1)a.1. Relationship of pedestrian environment:*

- *§(b)(1)a.1.i. General: The exterior design of portions of buildings within the first thirty-five (35) feet of height shall enhance the character, attractiveness, comfort, security, and usability of the street level pedestrian environment. Factors to be considered include the design, placement, character and quality of the following: Storefronts and building facades, Building entrances, Blank facades; and Special features*

  Staff comment: Staff finds that the selection of exterior façade materials, placement of entrances along Myrtle Street, the inclusion of projecting awnings and marquee, and arrangement of storefront windows at the corner conveys the function and significance of the building. Primary entrances are located on Myrtle Street and provide appropriate activation at the corner.

  Storefront windows, architectural lighting and pattern of fenestration is highlighted at the corner to create a visible destination for pedestrians. Staff recommends an expansion of the storefront windows along the Cumberland Avenue façade to provide greater visibility into the ground floor use. Additionally, staff requests that the Applicant explore additional fenestration above the aluminum storefront / curtainwall along Cumberland Avenue for a more symmetrical arrangement. See Figure 1.

  In addition, Staff recommends additional fenestration along Myrtle and Pearl Street to reduce larger expanses of blank facades facing the street, see figure 2 and 3.




Figure 1: Staff diagram to illustrate design standard recommendations at North Elevation




Figure 3: Staff diagram to illustrate design standard recommendations at East Elevation

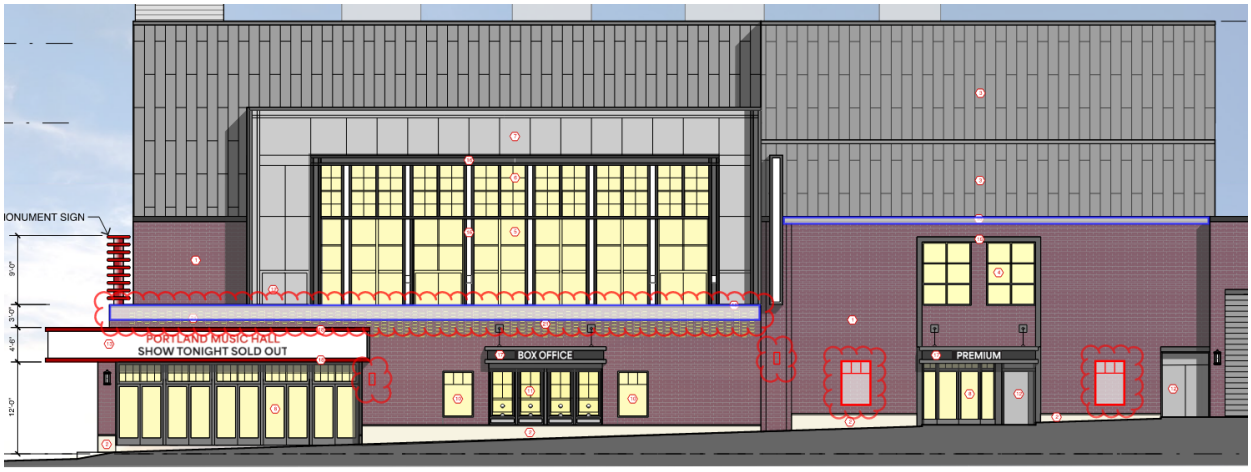



Figure 4: Staff diagram to illustrate design standard recommendations at West Elevation

- *§(b)(1)d. Sidewalk areas and open space: The design of publicly accessible sidewalk areas and open space shall complement the general pattern of the downtown pedestrian environment, conform to special City of Portland streetscape programs described in the Technical Manual, and enhance the attractiveness, comfort, security, and usability of the pedestrian environment. Factors to be considered include the design, placement, character, durability, and quality of the following:*

    1. *Sidewalk, crosswalk, and street paving materials; Landscaping, planters, irrigation, and tree guards and grates; Lighting; Pedestrian amenities such as benches and other seating, trash receptacles, kiosks, bus shelters, artwork, directional and informational signage, fountains, and other special features; and Sidewalk vendors and sidewalk cafes.*

    Staff comment: The proposed development includes an expanded brick sidewalk along Myrtle Street and bulb-out curb extensions to accommodate higher pedestrian volumes, which Staff finds appropriate. Additional pedestrian amenities include municipal light poles (Downtown Combo Figure X-5F from City's technical manual section 8), bicycle racks, trees and shrub vegetation within the public right-of-way. Staff requests that the Applicant resubmit plans with granite curb treewells per the City's technical manual section 4, Figure 4-4C. Additionally, Staff request that the Applicant revise the submission to clearly label the location of proposed bicycle racks along Cumberland Avenue.

- *§(b)(1)e. Relationship to existing development:*
    1. *General: Proposed development shall respect, enhance, and be integrated with the existing character of the general pattern of development in the downtown, surrounding building environment and streetscape, as described and illustrated in the Downtown Urban Design Guidelines (Appendix 1). Factors to be considered include the relationship to the following existing patterns: Street walls and building setbacks; Open space; Building form, scale and massing; Façade proportion and composition; Pedestrian circulation and building entrances; Parking*

    Staff comment: The proposed building location generally follows the property line and maintains a consistent street wall found throughout Portland's downtown. The built context of the surrounding area contains a variety of building types, architectural styles and mix of uses that vary in height and pattern of development. Numerous locally designated historical landmarks are within 2-blocks of the proposed development, including Portland City Hall, Masonic Temple, First Parish Church, Central Fire Station, US Courthouse and Portland High School that exhibit a variety of architectural ornamentation, materiality and form specific to the period during which these structures where built.

    The applicant proposes exterior materials that include face brick, precast concrete columns and foundation, painted steel channels, and an aluminum frame with spandrel glass or metal panels. Additionally, the base of the building will feature aluminum storefront/curtainwall windows, while the upper portions will be distinguished by a standing seam metal panel.

    Staff finds these materials appropriate for the site's urban location and intended use. Brick and concrete are widely used throughout Portland, particularly in the Downtown and Old Port neighborhoods, while metal paneling is a common feature on many buildings, including

the adjacent Merrill Auditorium. The large windows are well-framed and aligned with vertical columns, and the inclusion of projecting awnings and marquee at the main entry, ticket box office, and premium seating entrances provides additional articulation and visual interest.

Staff recommends that the applicant enhance the distinction between the brick base of the building and the standing seam metal panel on the upper portion. This can be achieved by incorporating a brick or concrete band detail or the use of another architectural feature to create a clear visual separation between the building's lower and upper levels. See Figure 4 as an example of a successful break between the base of the building and the upper portions.




Figure 4: Example of clear delineation between base and upper portions. MGM Boston (source photo from Google Maps)

In addition, Staff recommends that the applicant eliminate the perforated brick parapet along the Myrtle Street frontage and instead continue the brick façade with a cornice detail. This would create a more prominent and cohesive edge that integrates seamlessly into the

overall building design. The perforated design introduces an element that disrupts the building's cohesive architectural expression. See Figure 5 for an example of a successful parapet integrated into the building's overall façade.




*Figure 5: Example of solid brick parapet with decorative cornice. MGM Boston (source photo from Google Maps)*

***2.*** *Standards for increasing setback beyond street build-to line: A proposed development may exceed maximum setbacks as required in Section 14-220(c) only where the applicant demonstrates to the Planning Board that the introduction of increased building setbacks at the street level:*

Staff comment: i. The increased setback beyond the street build-to line along Myrtle Street provides a wider publicly accessible sidewalk to accommodate for greater volume of pedestrians that Staff finds appropriate.

ii. The increased setback beyond the street build-to line along Myrtle Street aligns with the approved mix-use building location on Lot 1 to reinforce the prevailing street wall that Staff finds appropriate.

iii. No existing publicly accessible open spaces are within proximity to the proposed development. Staff finds the expanded sidewalk along Myrtle Street does not create an excessive amount of open space.

iv. The increased setback beyond the street build-to line along Myrtle Street provides programmed building use to activate the pedestrian experience along the west elevation along with architectural detailing at the corner of the building at Myrtle and Cumberland Avenue that Staff finds appropriate.

v. Staff requests that the applicant indicate all mechanical equipment with all elevations along the street facing facades. The Myrtle Street – west elevation indicates rooftop appurtenances as corrugated metal panels. Rooftop appurtenances shall be screened and located away from building edges.

- *§(b)(1)g. Wind impacts:* The location, massing, orientation and architectural design of a new building or a building addition shall be such that no significant adverse wind impacts are created.

  Staff comment: Staff finds that the proposed building scale and height will not create significant adverse wind impacts.

- *§(b)(1)h. Setbacks for existing structures: The location and design of proposed structures shall not create a detrimental impact on the structural integrity or the safety of adjacent structures or the occupants thereof;*

  Staff comment: The applicant is requested to describe the potential party wall condition at the adjacent hotel on Lot 1 at 385 Congress Street.

- *Applicable guidelines in Appendix 1:*
  *VIII. View Corridors, Visual Landmarks, and Gateways - Standard: "The placement and massing of proposed development shall not substantially obstruct public views to landmarks and natural features from those locations identified on the View Corridor Protection Plan."*

  Staff comment: The proposed building does not substantially obstruct public views along Cumberland Avenue to visual landmarks

# 385 Congress Street Music Hall - Traffic Movement Permit Scoping Meeting Notes

External Inbox S3



**Tom Errico** 10:14 AM (5 hours ago)

to Derek, Griffin, Chris, Dan, TGoldenfarb@ramcompaniesusa.com, John, RyanVangel@LiveNation.com, Jeremiah, bhyman, Kevin, Matt, Andrew, me

Subject: Traffic Movement Permit Scoping Meeting
Date: May 13, 2025
Attendees:

- Bruce Hyman
- Jeremiah Bartlett
- Taylor Colbeth
- Matt Grooms
- Kevin Kraft
- Andrew Graminski
- Tom Errico
- Derek Caldwell
- Griffin Steinman
- Chris Taylor
- Dan Riley
- Todd Goldenfarb
- John Huff
- Ryan Vangel

1. Dan discussed the project details and the prior TMP for the 385 Congress MDP. Specifically, what triggers implementation of improvements at the Cumberland/Pearl and Congress/Pearl. Tom will investigate with MaineDOT how to amend the old TMP considering this project.
2. Griffin presented the project and TMP Application and the following comments were noted:
    - Mode share for the project was discussed and noted that using the information from the City's Impact study was not appropriate given the land use. It was noted that there was an Economic Study prepared for the project and that may provide some insight into mode share. Live Nation will investigate data they may have. It was noted that Thompson's Point, which collects information as part of their TDM Plan, may have some data that would be relevant. The city will investigate providing that information.
    - It was requested that data be provided that supports the vehicle occupancy assumption in the study.
    - The TMP Application references a study conducted at the MGM venue in Boston and that report shall be provided.
    - It was unclear why trips (10%) were leaving the venue between midnight and 1am. It was noted that this doesn't represent patrons leaving the venue but leaving parking sources – in which some may stay in town after concerts.
    - It was noted that the study should include expected pick-up/drop-off curb side activity. A curb-side management plan shall be provided in the study.
    - The applicant noted that they have identified likely garage locations with the Temple Street and Custom's House garages to have agreements that offer discounts, etc. It was noted that the garages identified have sufficient capacity given conversation with John Peverada and general observations. Kevin noted that demand at garages in conjunction with residential projects and their agreements may create supply concerns. See below for post-meeting direction.
    - The assignment of trips seems reasonable.
    - The study shall conduct a safety evaluation at the Chestnut/Cumberland intersection and the Federal Street segment from Pearl Street to the garage entrance.
    - The study area for evaluating traffic mobility is to include the following intersections: Congress/Myrtle, Congress/Pearl, Cumberland/Myrtle, Cumberland/Pearl, Pearl/Top of the Port Parking Lot Driveway.
    - It was noted that new traffic counts are required. There was discussion regarding conducting the counts at a time when Merrill Auditorium has an event. See below for post-meeting direction.
    - A multi-modal analysis shall be performed and includes a ¼ mile radius of the site and include a review of pedestrian movements between the site and the Temple Street and Custom's House garages. Dan asked if there are any bike facility changes proposed on Cumberland and Congress and Bruce noted that nothing is planned at this time.
    - A transit deficiency evaluation shall be performed that assesses routings, schedule, service hours, etc. Dan noted that the applicant has been in conversation with Metro.
    - The study shall include a bus/truck management plan for entry and exit movements at the site.

Post Meeting Direction

1. To ensure the trip assignment assumptions in the study are valid, the applicant shall provide parking facility occupancy data that accounts for current and future demand.
2. The traffic counts at the intersections noted above shall be conducted at the time of a Merrill Auditorium event. This information will help to provide an understanding of overlapping impacts particularly given the Music Hall's later event start time (7pm vs. 8pm). The counts shall be conducted between 4 and 8pm. The applicant shall coordinate the count data with the city before proceeding.
3. The following list of developments should be included (Not all these projects may impact the study area intersections, so the applicant shall make that determination with documentation). The applicant can access project-relevant information using the City's Citizen Self-Service Portal by searching either the address or the application number.

Approved Projects:

- 25 Casco Street/48 Brown Street - Major Site Plan - Approved - PL-002468-2023
- 165 Washington Ave - Major Site Plan - Approved - PL-003143-2024
- 465 Congress Street - Minor Site Plan - Approved - PL-003084-2024
- 197 Oxford Street - Phased Major Site Plan - Approved - PL-002885-2024
- 9 Boyd Street - Major Site Plan - Approved - PL-002845-2024

- 482 Congress Street - Major Site Plan - Approved - PL-002949-2024
- 331 Cumberland Ave - Major Site Plan - Approved - PL-002938-2024
- 70 Thames Street - Major Site Plan - Approved - PL-002437-2023
- 58 Fore Street - Major Site Plan - Approved - PL-002202-2022
- 477 Congress Street - Minor Site Plan - Approved - PL-003040-2024
- 89 Elm Street - Major Site Plan - Approved - PL-002403-2023
- 315 Cumberland Ave - MDP - Approved - PL-002315-2022
- 76 Congress Street - Major Site Plan - Approved - PL-002341-2023
- 385 Congress Street – MDP – Phases not associated with this project

Projects Under Review:

- 315 Cumberland Ave - West Bayside MDP Amendment - Under Review - PL-003223-2025
- 61 Preble Street - Major Site Plan - Under Review - PL-003222-2025
- 203 Fore Street - Major Site Plan - Under Review - PL-002892-2024
- 9 Boyd Street - Major Site Plan - Under Review - PL-003283-2025

Please feel free to 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
TYLin
12 Northbrook Drive
Building A, Suite One
Falmouth, ME 04105, United States
TYLin.com

**Portland Police Traffic Unit**
Ben Noyes
*Traffic Sergeant*

To: Kevin Kraft, Director of Planning & Urban Development
From: Sgt Ben Noyes, Portland Police Traffic Division
Date: May 14, 2025
Subject: Police Department Support for Major Events

Dear Mr. Kraft,

This memo outlines the Police Department's role in supporting major events in Portland, to ensure public safety and smooth operations:

- **Hearts of Pine Soccer**: We provide assistance with pedestrian crossings before and after games to ensure safe access for attendees as well as event security.
- **Thompson's Point Concerts**: Our team manages traffic control before and after events for upwards of 6500 attendees and provides security to maintain order.
- **Sea Dogs Baseball Games**: We offer pedestrian crossing assistance and security to ensure safe and efficient crowd movement as families arrive at and depart from Hadlock Field.
- **Merrill Auditorium Events**: We provide security to safeguard attendees and maintain a safe environment.
- **Mariners Hockey Games**: Our department ensures security to support a safe experience for all attendees.

We routinely coordinate with event organizers to tailor our support to each event's needs. Please contact me if you need further details or wish to discuss additional planning.

Sgt Ben Noyes,
Portland Police Department
Traffic Sergeant

**109 Middle Street, Portland, Maine 04101 | o: 207.874.8554 | Benn@portlandmaine.gov**

SEBAGO TECHNICS

A

December 19, 2024

Mr. Matt Grooms
City of Portland
Office of Planning and Urban Development
Congress Street
Portland, ME 04101

**Major Site Plan Application – Portland Music Hall**
**Lot 3, 385 Congress Street Subdivision (244 Cumberland Avenue)**

Dear Matt:

On behalf of Portland Music Holdings, LLC (Applicant), we are pleased to submit the enclosed Major Site Plan application for a proposed entertainment venue at Lot 3 of the 385 Congress Street Subdivision. A Master Plan of Development (MDP) was approved by the Planning Board on August 9, 2022 for the overall master planned site bounded by Congress Street, Myrtle Street, Cumberland Avenue, and Pearl Street. This attached application involves the development of Lot 3, land currently identified on the City's parcel mapping as Tax Map 27 Lot D003, with a street address of 244 Cumberland Avenue.

The Applicant is a partnership between Portland Performance Ventures, LLC and Live Nation Entertainment, Inc. Portland Performance Ventures is led by Howard Goldenfarb & Todd Goldenfarb. The applicant will self-finance the project. Live Nation Entertainment is a publicly traded company with FYE 2023 revenue of $32 billion. Annual reports for the company are publicly available.

The Applicant has entered into a purchase and sale agreement to acquire Lot 3, an approximately 38,441 sf area of land between Myrtle and Pearl Streets on Cumberland Avenue, for the development of an entertainment venue. The subject site is fully developed with a surface parking lot and is used as a private parking facility. A portion of the site is occupied by the former Press Herald printing building. In February 2022, the Planning Board approved a Major Site Plan for a Hotel on Lot 1 of the subdivision, abutting the project site to the east. The current landowner of the project site and the abutting Lot 2 is 385 Congress Street, LLC.

The massing of the proposed project is consistent with the approved MDP for the site to create a cohesive design, scale, and massing with both the approved hotel project and the anticipated future residential condominiums to the east as they are envisioned in the MDP. The entertainment venue is proposed to be 3- story structure. The overall building height is reduced compared to the 13 stories envisioned in the MDP.

The proposed development program includes a multi-level, 3,310 capacity entertainment venue. The ground level (Level 1) will be comprised of the lobby, box office, bars, restrooms, loose seating or standing room, stage, and loading dock. Level 2 includes premium seating, an indoor and outdoor lounge area, bars, kitchen, dressing rooms, administrative offices, and restrooms. Level 3 includes fixed seating, bar, and restrooms.

**Parking**

The development has been designed with two (2) tractor trailer loading docks and space for up to four (4) tour buses enclosed within the building. No on-site passenger parking is required for this project and no on-site parking is proposed.

The 65,340 square foot (SF) venue triggers the need for a Transportation Demand Management Plan (TDM). A proposed TDM is provided with the application materials.

**Traffic**

A Traffic Movement Permit was issued for the Master Development Plan on February 24, 2023. The conditions of the TMP outlined certain traffic improvements to be constructed at various milestones in the phased build-out of the MDP.

Included in the application is a memorandum requesting language revisions to the TMP conditions reflecting a revised sequence of construction; anticipating that the proposed project may be constructed as the first phase of construction, rather than the third phase envisioned in the MDP. There is no request to alter or reduce the offsite improvements required by the TMP, simply to clarify the improvements that are to be constructed as part of the Lot 3 project phase.

**Stormwater Management**

Stormwater drainage from Lot 3 will be directed to the existing combined sewer in Pearl Street in anticipation of a future City project to separate the combined sewer in this street. This approach is consistent with the Stormwater Management Plan presented in the MDP and in the site plan for the abutting Lot 1 Hotel site plan approval.

The project is the redevelopment of a fully developed site, creating less than one acre of impervious area such that an MDEP Chapter 500 Stormwater permit is not required.

The redevelopment project, upon completion, will result in less than 5,000 sf of non-rooftop impervious area on the site. As such, the City's Stormwater Standards for redevelopment do not require stormwater quality treatment meeting the MDEP General Standards.

The project proposes a subsurface detention system below the tractor trailer parking to detain runoff meeting the flooding standards. The proposed system will direct the separated site drainage intersection of Pearl Street and Cumberland to facilitate the City's future combined sewer separation efforts. The proposed system will detain and reduce flows from the site to the maximum extent practicable during a smaller 1" rain event to advance the City's Combined Sewer Overflow (CSO) objectives for this area of the City. This approach is consistent with the Stormwater management approach approved in the MDP and the Lot 1 Hotel site plan approval and as required by the City in its sewer capacity review findings for those developments.

**Utilities**

The remaining building utility services will be taken from the site's frontage.

- Sanitary sewer service is proposed to be connected to the existing sewer in Myrtle Street.
- Domestic and Fire protection water will be taken from Pearl Street.

- Gas service will be provided from the existing main in Cumberland Avenue.
- Electrical service will be provided from a Central Main Power (CMP) manhole installed in Pearl Street in 2021.
- Telecommunications will be taken from existing manholes in Pearl Street.

**Building Design**

The building will be constructed utilizing a mixture of modern and traditional materials. The massing of the building relates to the surrounding neighborhood where the height of the brick cornice and façade elements are scaled to relate to the residences across Cumberland Avenue. The main entrance occurs on Myrtle Street down the street from Merrill Auditorium entrance. The use of brick and metal panel relate to the surrounding buildings. The marquee, signage and open terrace define the building as an entertainment venue.

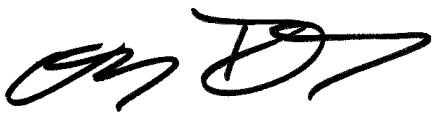
The proposed streetscape design along Cumberland Avenue incorporates street trees and perennial plantings in mulched beds parallel to the curb line. The proposed streetscape design along Pearl Street incorporates street trees, perennial plantings, and structural soils. Structural soils are proposed here to allow for the brick paver sidewalk to be constructed over the plant root systems. The streetscape planting design and proposed materials present a cohesive design for the space that aligns with the City of Portland's overall urban landscape objectives.

**Conclusion**

Thank you for your continued time and attention to this project. We look forward to continuing the design and review of the project with staff and the Planning Board.

Sincerely,

SEBAGO TECHNICS, INC.



Christopher P. Taylor, PE
Project Manager

CPT/RLG
Enc.

AA

# Record

**Project:** Portland Music Hall
244 Cumberland Ave, Portland, Maine
Neighborhood Meeting

**Date/Time of Meeting**: Tuesday, January 27, 2025 6:00 p.m. to 7:30 p.m.

**Location:** Press Hotel, Composing Room,
119 Exchange Street, Portland, Maine

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Development team members that were in attendance at the meeting.

| Name | Organization | Email |
|---|---|---|
| Todd Goldenfarb | Mile Marker Investments | tgoldenfarb@ramcompaniesusa.com |
| Howard Goldenfarb | RAM Companies | hg@ramcompaniesusa.com |
| Don Law | Live Nation New England | donaldlaw@livenation.com |
| Christopher Taylor | Sebago Technics | ctaylor@sebagotechnics.com |
| Daniel Riley | Sebago Technics | driley@sebagotechnics.com |
| Matt Tonello | Consigli | mtonello@consigli.com |

The meeting sign-in sheet for members of the public is enclosed.

Members of the development team were introduced, and an overview of the proposed project was provided.

Below is a list of documents that were shown and presented at the neighborhood meeting.

- Overall Site Plan (Sheet C-100) for Portland Music Hall, dated 12/19/2024, prepared by Sebago Technics.
- Building Floor Plans (4 Sheets) for Portland Music Hall, dated 12/18/2024, prepared by D'AIQ Architects.
- Building Elevations (2 Sheets) for Portland Music Hall, dated 12/18/2024, prepared by D'AIQ Architects.
- Rendered image of the proposed Portland Music Hall, view from Cumberland Ave and Myrtle Street intersection.

Below is a list of the questions and concerns raised by members of the public during the meeting:

1. Could you speak a bit programmatically about what's going on on the Pearl Street side of the building? I think you have an opportunity to activate some of the windows on the Pearl Street side. I would encourage you to work to not make it as alley-ish as it is currently proposed.
2. Have any of you tried to park in Portland on a Saturday night? If you've got a show at your new venue, there's a show at Merrill Auditorium, and there's a show at the Civic Center, how will the city handle the parking and traffic chaos?
3. My concern is parking. Will you have parking at this venue?
4. Yesterday we had a concert that was sold out at Merrill Auditorium. The line wrapped around the city block. We had individuals reach out to us and say that they tried to get into a parking lot for over 25 minutes and ended up turning away even though they had already purchased a ticket to the concert. Given the current congestion, how will adding another 3,000-seat venue without a parking option impact the area?
5. What market research did you do to show that this venue will expand the music show market and won't take away from existing venues? Will the room be available to rent from outside promoters?
6. What research have you done to prove that we need a venue of 3,000 in between the existing venues? What research have you done to prove that this is actually going to benefit the city in a good way?
7. Why does Live Nation want to come to Portland and build a 3,500-seat venue when there are already several venues with similar capacities? What's going to be going on inside the restaurants and concessions within the building?
8. What do you think it will do to the noise level in the neighborhood? It gets noisy in the summertime with the windows open.
9. Is it true that Live Nation is currently involved in a lawsuit with the Department of Justice, and did you take that into account when deciding to partner with them?
10. I'd love to hear you talk about Live Nation's mission and values statement and how it aligns with our community vision. What are Live Nation's values outside of financial contributions?
11. When you go to do your programming and scheduling, will you be mindful of what's happening at other local venues? Will you work with the community to figure out potential conflicts in programming?
12. Thank you for reaching out to the neighborhood association. That goes a long way to build goodwill. Can you commit to using union labor at this facility?
13. I've lived in Portland for 50 years, and I've been a block of this land for the last 35 years. I would welcome this being here in this neighborhood and in Portland. I hope you maintain a good relationship with the community. I see what happens every time Merrill has an event, we have cars, sure enough, we have cars parked illegally on the streets all the time, and probably the old port is filled up. But if you have working relationships with the parking lots around, I don't see this as a big deal. Many people coming out of here are either going to dissipate. Go out to dinner or they're going to go right to the car that's not a big effect on our neighborhood.

14. There have been a lot of restaurant closures recently. How is offering a $20 starting wage not going to pull workers from other industries, forcing more closures in town? Where are these workers going to live given the lack of affordable housing?
15. I'd like to ask you if you would make a commitment to us for two things. One, is a parking study on a Saturday night when there's something going on at the three big events, three big venues like yours, the Merrill's, and the Civic Center. And then also an independent traffic flow study to see what the traffic will be like with all these venues going.
16. What is green about this building?
17. Have you discussed communication with other music venues (other than Merrill Auditorium) on the peninsula? Will you have meetings with other music venues, from small to large?
18. Have you done a market study for Portland and the Portland community? Can you clarify your programming and how it will impact local arts organizations?
19. Can you point to another market with a similar population where this has been a success? Can you provide a success story of a similar project?
20. Could talk about actually the building, because that's what we're going to live with for a very long time. Could you talk about what the heights of the building are, it looks like there's a penthouse or an elevator, what height that is, what plans do you have for rooftop performances and cleaning? Will there be screening of the rooftop mechanical equipment? Many famous concerts or music venues did include housing as part of their program, Carnegie Hall and Radio City Music Hall. This is the dense part of town. Our comprehensive plan pushes for density and height in this area. You have a fairly low-height building. Did you consider raising the building's height to include housing?
21. Can you talk about your value creation and value retention for the local economy, especially during the off-season? How many Events will you have? Have you done an economic impact study?
22. My understanding is this is the first of the two meetings that the city requires. Or are there more? You're also going to have historic preservation with the proximity to City Hall.
23. Could use the Bayside Neighborhood Association as a conduit to respond to some of these questions?
24. Are you surprised by the response? Can you point your finger at another market in that 60,000 to 70,000 person population, where this, anecdotally, has been a success for you guys?
25. What would you say to those concerned about Live Nation getting a strong foothold in the community and potentially impacting local venues?
26. Why wasn't one person in this room, in the arts organization world approached, before this meeting? And why weren't we invited?
27. What is the target audience for this venue?

# SIGN IN SHEET

## PORTLAND MUSIC HALL – 244 CUMBERLAND AVENUE

## NEIGHBORHOOD MEETEING

## JANUARY 27, 2025; 6 PM AT PRESS HOTEL, 119 EXCHANGE ST, PORTLAND, ME

| MEMBER OF PUBLIC IN ATTENDANCE NAME | EMAIL ADDRESS |
|---|---|
| DAN RILEY SEBAGO TECHNICS | DRILEY@SEBAGOTECHNICS |
| MATTHEW TONELLO CONSIGLI | mtonello@consigli.com |
| SALLY WILLIAMS | gardenlite@gmail.com |
| Justin Curtsinger | ——— |
| Tom BLACKBURN | TBLACKBURN1948@GMAIL.COM |
| Wendy Drexler | wdrexler@gmail.com |
| Jim Brady | jameshbrady@gmail.com |
| McCRAE HATHAWAY | McCrae@StateTheatrePortland.com |
| Dinah Minot | Creative Portland |

# SIGN IN SHEET

## PORTLAND MUSIC HALL – 244 CUMBERLAND AVENUE

## NEIGHBORHOOD MEETEING

## JANUARY 27, 2025; 6 PM AT PRESS HOTEL, 119 EXCHANGE ST, PORTLAND, ME

| NAME | ADDRESS |
|---|---|
| ALLEN FRANK | 243 CUMBERLAND AVE PORTLAND, ME 04103 |
| Alison Frazee | Greater Portland Landmarks, 511 Congress |
| IAN JACOB | 59 STATE ST |
| Meg Shorette | 836 Washington Ave |
| Josh Schlesinger | 7 Carter Brook Dr. Scarborough |
| Thomas Sepulveres | 43 MYRTLE ST PORTLAND |
| Carolyn Nihan (Portland Symphony) | 85 Exchange Street, Portland |
| Allison Page (Portland Symphony) | 85 Exchange Street Portland. |
| LAUREN WAYNE STATE THEATRE | 365 STEVENS AVE. |

# SIGN IN SHEET

## PORTLAND MUSIC HALL – 244 CUMBERLAND AVENUE

## NEIGHBORHOOD MEETEING

## JANUARY 27, 2025; 6 PM AT PRESS HOTEL, 119 EXCHANGE ST, PORTLAND, ME

| NAME | ORGANIZATION | ADDRESS |
|---|---|---|
| Robert Sylvain | Bayside Neighborhood Assoc | 167 Falmouth St. 04th |
| Julia May | Hampdens Point | 27 Hampdens Point Road. |
| Tim Sweeney | State Theatre | 35 Summit St Portland |
| Cecil Gardner | Maine Tourism / Local Promoter | 166 Forest Street |
| Derek Lombardi | Maine Craft Distilling | 51 Inverness St. Portland |
| Emily Isaacson | Classical Upris | |
| Anastasia Costos | Top of the Old Port | 119 Pearl St Portland |
| Aimee M Petrin | Portland Ovations | 120 Exchange St. |
| Emily Reed | One Longfellow Sq | 181 State St |
| Maile Butler | OVATIONS | 9 Brown St. |

# SIGN IN SHEET

## PORTLAND MUSIC HALL – 244 CUMBERLAND AVENUE

## NEIGHBORHOOD MEETEING

## JANUARY 27, 2025; 6 PM AT PRESS HOTEL, 119 EXCHANGE ST, PORTLAND, ME

| NAME | ORGANIZATION | ADDRESS |
|---|---|---|
| Annie Leahy | Mechanics' Hall | 519 Congress Street. |
| Eric Thayer | Portland Ovations | 120 Exchange St |
| Alice Kornhauser | PCMF | 88 Bedford St |
| Corey Schmidtgall | neighbor | 21 Chestnut St. |
| Jay York | neighbor | 58 Wilmot St. & 146 Pearl St. |
| | | |
| | | |
| | | |
| | | |

## Planning & Urban Development Department

# MAJOR AND MINOR SITE PLAN DOCUMENT CHECKLIST

**Please submit each document as a separate PDF file.**
**Please confirm by electronically checking the boxes in the left-hand column.**

## General Application Documents

| Indicate Below | Required of All Applications |
|---|---|
| ☑ | **Project Description**<br>• Cover letter with detailed project description |
| ☑ | **Completed Checklist** (this document) |
| ☑ | **Evidence of Right, Title, and Interest**<br>• Deeds, leases, or purchase and sale agreements |
| ☑ | **Financial Capacity**<br>• Letter or evidence from a financial institution or third-party verifying financial capacity to undertake the project. |
| ☑ | **Technical Capacity**<br>• Evidence of technical capability of applicant and consultants – resume and/or examples of past projects. |
| ☑ | **Site Plan Standards**<br>• Summary of project compliance with site plan standards of the land use code. |
| ☑ | **Zoning Assessment**<br>• Summary of compliance with use and dimensional standards of the land use code. |

| Indicate Below | | Only if Applicable |
|---|---|---|
| Yes | N/A | |
| ☑ | ☐ | **Waiver Requests**<br>• Written request for waiver describing request and compliance with applicable waiver standards. |
| ☑ | ☐ | **Summary of Existing or Proposed Easements or Covenants**<br>• Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way. |
| ☐ | ☑ | **Evidence of State or Federal Approvals**<br>• Permits or letters of non-jurisdiction |

## Additional Documents

| Indicate Below | | Only if Applicable |
|---|---|---|
| Yes | N/A | |
| ☑ | ☐ | **Construction Management Plan**, including traffic control plan.<br>• Provide construction management narrative in accordance with the City's Construction Management Template. |
| ☑ | ☐ | **Traffic Study and/or other Transportation Plans**<br>• Detailed in Sec. 2 of the Technical Manual |
| ☑ | ☐ | **Significant Natural Features Narrative** |

| | | |
|---|---|---|
| | | • Identify significant natural features, wildlife habitats, fisheries habitats, or archaeological sites as detailed Ch. 14, Article 13, located on or near the project site, and describe protection methods during and after construction. |
| ☑ | ☐ | **Stormwater Management Report**<br>• Detailed in Sec. 14 of the Technical Manual |
| ☑ | ☐ | **City Master Plan Narrative**<br>• Detail project's consistency with City adopted Master Plans. |
| ☑ | ☐ | **Evidence of Utility Capacity**<br>• Provide letter from all utility providers demonstrating capacity to service the project. |
| ☑ | ☐ | **Solid Waste Narrative**<br>• Detail the amount of solid waste and recyclable material anticipated to be generated by the development, and information on how waste will be collected and removed. |
| ☑ | ☐ | **Life/Safety Code Analysis Narrative**<br>• Detail how the project complies with NFPA 1 and other Fire Department technical standards. |
| ☑ | ☐ | **Design Narrative**<br>• Detail how the project complies with any applicable design standards contained within the Land Use Code or City of Portland Design Manual. |
| ☑ | ☐ | **HVAC and Manufacturing Equipment Verification**<br>• Provide verification from manufacturer that equipment meets applicable state and federal emissions requirements. |
| ☐ | ☑ | **Low Impact Development (LID) Analysis**<br>• Provide a narrative detailing how the subdivision complies with the low impact development requirements listed in Section 3 of the Technical Manual, along with a completed LID scorecard. |

## MAJOR AND MINOR SITE PLAN DRAWINGS CHECKLIST

**Please upload the following drawings with the listed details into ProjectDox as separate PDFs. All drawings must be submitted in a 24 x 36 inch sheet size.**

### Boundary Survey (Stamped by a Licensed Surveyor in accordance with Sec. 14 of the Technical Manual)

### Site Plan(s) (Stamped by a Maine Licensed Professional Engineer)

| Indicate Below | |
|---|---|
| | **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, including firm that produced plans. |
| ☑ | North arrow |
| ☑ | Date of preparation and revision history block. |
| ☑ | Tax parcel (chart, block, and lot) number |

| Indicate Below | | |
|---|---|---|
| Yes | N/A | **Existing Conditions Plan** |
| ☑ | ☐ | 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 locations of test pits and borings |
| ☑ | ☐ | Zoning boundary lines, including overlays |
| ☑ | ☐ | Location of all existing easements and rights-of-way. |
| Indicate Below<br>Yes | N/A | **Proposed Site Plan** |
| ☑ | ☐ | 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 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 |
| Indicate Below<br>Yes | N/A | **Utility Plan** |
| ☑ | ☐ | 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 the site |
| Indicate Below<br>Yes | N/A | **Grading and Drainage Plan** |
| ☑ | ☐ | Proposed grades |
| ☑ | ☐ | Proposed stormwater management measures meeting Technical Manual standards |
| ☐ | ☑ | Any proposed alteration of a watercourse or wetlands |
| ☑ | ☐ | Any groundwater protection measures |
| ☐ | ☑ | Proposed buffers and preservation measures for wetlands or significant natural features |
| Indicate Below<br>Yes | N/A | **Landscape Plan** |
| ☐ | ☑ | Existing vegetation to be preserved and preservation measures |

| | | |
|---|---|---|
| ☑ | ☐ | Proposed landscaping, screening, and street trees, including caliper widths for trees |
| ☑ | ☐ | Planting schedule, including street trees detailing species, quantity of plantings, and size at planting. |
| Indicate Below<br>Yes | N/A | **Architectural Plans and Renderings** |
| ☑ | ☐ | Exterior building elevations, color renderings, illustrations of all sides. |
| ☐ | ☑ | Axonometric and street-level views for structures greater than three stories in height. |
| ☑ | ☐ | Context drawings |
| ☑ | ☐ | Floor plans |
| Indicate Below<br>Yes | N/A | **Construction Management Plan** |
| ☑ | ☐ | Specifics on traffic control, sidewalk sheds, and pedestrian rerouting |
| ☑ | ☐ | Construction management plan and narrative based upon site plan in accordance with the City's construction management template. |
| Indicate Below<br>Yes | N/A | **Other** |
| ☑ | ☐ | Details and cross-sections |

BB

SEBAGO TECHNICS

MEMORANDUM

| | | | |
|---|---|---|---|
| From: | Daniel Riley, Sebago Technics | Date: | April 23, 2025 |
| To: | Portland Planning Board | Project: | 19371-05 |
| Subject: | Parking Availability<br>Portland Music Venue | | |

**Introduction**

This memorandum has been prepared to summarize parking availability in the vicinity of the proposed Portland Music Hall at 244 Cumberland Avenue, a 3,300-seat capacity, 63,390 sf music hall. The Major Site Plan application was submitted on December 19, 2024, following the City Council's unanimous adoption of the City's Land Use ReCode in November 2024.

The ReCode revised Section 18 of the Land Use ordinance eliminating minimum parking requirements for all projects and uses City-wide; and instead, adds parking maximums for projects that choose to construct off street parking.

The venue operator understands that providing convenient and reliable parking and advertising transportation alternatives for patrons to the venue is a key component of the guest experience and to that end has researched parking facilities in the vicinity of the project, discussed parking supply with the City's Parking Director, and reached an agreement with two (2) nearby parking garages to provide extended operating hours and discounted event rates to support the venue.

The off-street parking plan is an integral part of the business planning for the venue, but, as noted above, is not a requirement under the Land Use Ordinance. This information is summarized here due to the interest related to parking voiced at the recent workshop. In addition, this information will be used in the analysis for the Traffic Movement Permit, as we will need to understand where vehicles will be parking and thus, where attendees will then be walking to the venue. The availability of existing parking facilities also informs the need to provide alternative forms of transportation to the venue. Our research has shown that there is ample capacity in existing parking facilities in the evenings, as explained in more detail below.

This memorandum summarizes the land use code requirements, parking supply based on sources published by the City of Portland and the agreements reached by the applicant with nearby private parking garages.

**Parking – No Code Requirements**

Over a period of approximately seven years, the City undertook a deliberative process to overhaul the Land Use Code. One of the primary areas of focus in both phases of the ReCode process was parking. The result being that the Code now contains no minimum requirements for off-street parking for any uses in the City and instead lists maximum parking requirements.

There are no parking minimums in Table 18-A of the Code for any uses, including but not limited to airports, multi-family housing, convention halls, offices, government uses, hospitals, transportation facilities, parks, places of assembly, schools, recreation centers, restaurants, retail, and sports complexes; all which, individually and combined, would place a greater burden on public facilities than the proposed venue.

For further context, ReCode Phase One, enacted by the Council in 2020, added a number of exceptions to the off-street parking requirements as a first step toward the elimination of parking minimums. One of the exceptions listed was for projects located within ¼ mile of fixed route transit service, such as 244 Cumberland Avenue. Thus, projects located at 244 Cumberland Avenue have not been required to provide any off-street parking since 2020.

**Parking Demand Estimates**

As part of the project's Traffic Movement Permit application, conservative estimates of the anticipated traffic demand have been made, taking into account the traffic generated by both venue patrons and employees, the different modes of transportation used to access the venue, and vehicle occupancy estimates. These same traffic estimates can be used to estimate parking demand under average and peak occupancy.

Typically, attendees of a live entertainment event arrive by a variety of means, including personal vehicles, rideshare, and walking (especially out-of-town visitors staying at nearby hotels). In 2018, the City of Portland published its 2018 Impact Fee Study which included a city-wide transportation study in support of Portland's Transportation Impact Fee program. That study concluded that in Portland, approximately 82% of visitors (nonresidential trips) arrive via private vehicles. We expect that since 2018, the ride-share component has likely increased as it has in most communities.

FHWA guidance for estimating event traffic indicates that each vehicle will bring on average between 2.2-2.8 patrons, depending on local conditions. 2.5 patrons per vehicle is a common assumption.

In our applications, we have assumed the low end of that range (2.2 patrons per vehicle) for traffic planning and permitting purposes. However, based on the project's urban setting and venue operator's experience, the vehicle occupancy may rise to the mid/top end of the range over time.

The venue operator anticipates staffing of 175 employees at a typical event, with up to 250 staff at peak demand. The City's 2018 Impact fee study indicates average vehicle occupancies of 1.69 passengers per vehicle for non-residential purpose trips in the city. For our traffic permitting we have been conservative, assuming 1 person per vehicle for employees.

Based on this information, the parking demand for the venue is expected to range from 1,000-1,300 for typical events and up to 1,440 under conservative assumptions for peak capacity events with peak staffing.

**Parking Supply**

To evaluate the parking supply in the vicinity of the venue, we have reviewed the City of Portland Parking Division's Annual Survey of Downtown Parking Garages, March 2025.

This survey includes a map and detailed lists of parking garages and lots showing the number of spaces, rates, and hours of operation. To evaluate the parking supply near the music hall, the garages and data have been plotted and evaluated.

Figure 1 below represents the surveyed parking facilities within a 4/10th mile radius of the venue. These facilities were filtered based on operating hours to include only those facilities that are currently open to at least midnight , or advertise flexible public parking after business hours or have identified as being open for night events at other venues.

The results indicate:

- There are approximately 8,600 parking spaces in garages or lots that remain open, or have the potential to remain open to accommodate the Portland Music Hall events.
- This does not reflect on street/metered parking spaces, or spaces in other private facilities such as hotels, where patrons may park and walk or use a ride share service to reach the venue.




**Figure 1. Parking Facilities within 4/10 Mile of the Portland Music Hall Site**

Six of the closest public parking facilities to the facility provide approximately 3,269 spaces.

| *Parking Facility* | *# of Spaces* | *Hour of Operation* | *Walking Distance from Site* |
|---|---|---|---|
| **Top of the Old Port Surface Lot** | 540 | Open 24hrs | 0.1 Miles |
| **Temple Street Parking Garage*** | 620 | Closes 12 AM | 0.2 Miles |
| **Chestnut Street** | 150 | Open 24 Hours | 0.1 Miles |
| **Cumberland County Parking Garage** | 328 | Open 24hrs | 0.3 Miles |
| **Custom House Parking Garage*** | 761 | Closes 12 AM | 0.4 Miles |
| **One City Center Parking Garage** | 600 | Open 24hrs | 0.4 Miles |
| **Arts District Garage** | 270 | Open 24 hrs | 0.3 Miles |
| **Total** | 3,269 | | |

**Garages with parking agreements between event operator and parking facility.*

**Table 1. Proximate Parking Facilities**

The venue's average parking demand is expected to equate to 30%-36% of this capacity and approximately 44% at peak events. These estimates assume that all of the venue's employees and patrons park only at these facilities and are not already parked elsewhere in the area such as hotel parking.

We have met with John Peverada, the City's long-time Parking Director, to confirm the City's understanding of parking availability. Mr. Peverada has stated that he believes the utilization rates in the following garages will absorb the increased parking demand after 4:30 pm and on weekends.

- Cumberland County Courthouse Garage
- Temple Street
- Chestnut Street
- Public Market, Elm Street
- One City Center and
- Custom House garages

**Parking Agreements**

In order to address its business needs, the applicant has entered into an agreement with the owner of the Temple Street and Custom House Parking Garages, representing 1,381 spaces.

The garage owner has confirmed that typical evening vacancies in their garages provide sufficient capacity to serve the venue and public. This includes year-round nights with simultaneous events at a variety of venues in the area including the Merril Auditorium.

The owner's agreement with the Temple and Custom House Garages includes:

- **Discounted Event Rate**: The operator will institute a new nighttime event rate for the two garages. The rate will be a 50 percent discount from the current full daily rate and will benefit visitors attending events at the Portland Music Hall and at other venues such as Cross Insurance Arena, Merrill Auditorium, the State Theater, etc.
- **Extended Evening Hours:** Hours of operation will be extended from 11 pm to 12 midnight on show nights.
- **Added Sunday hours**: The Operator will conduct a review of garage operating days with an aim to opening on Sundays.

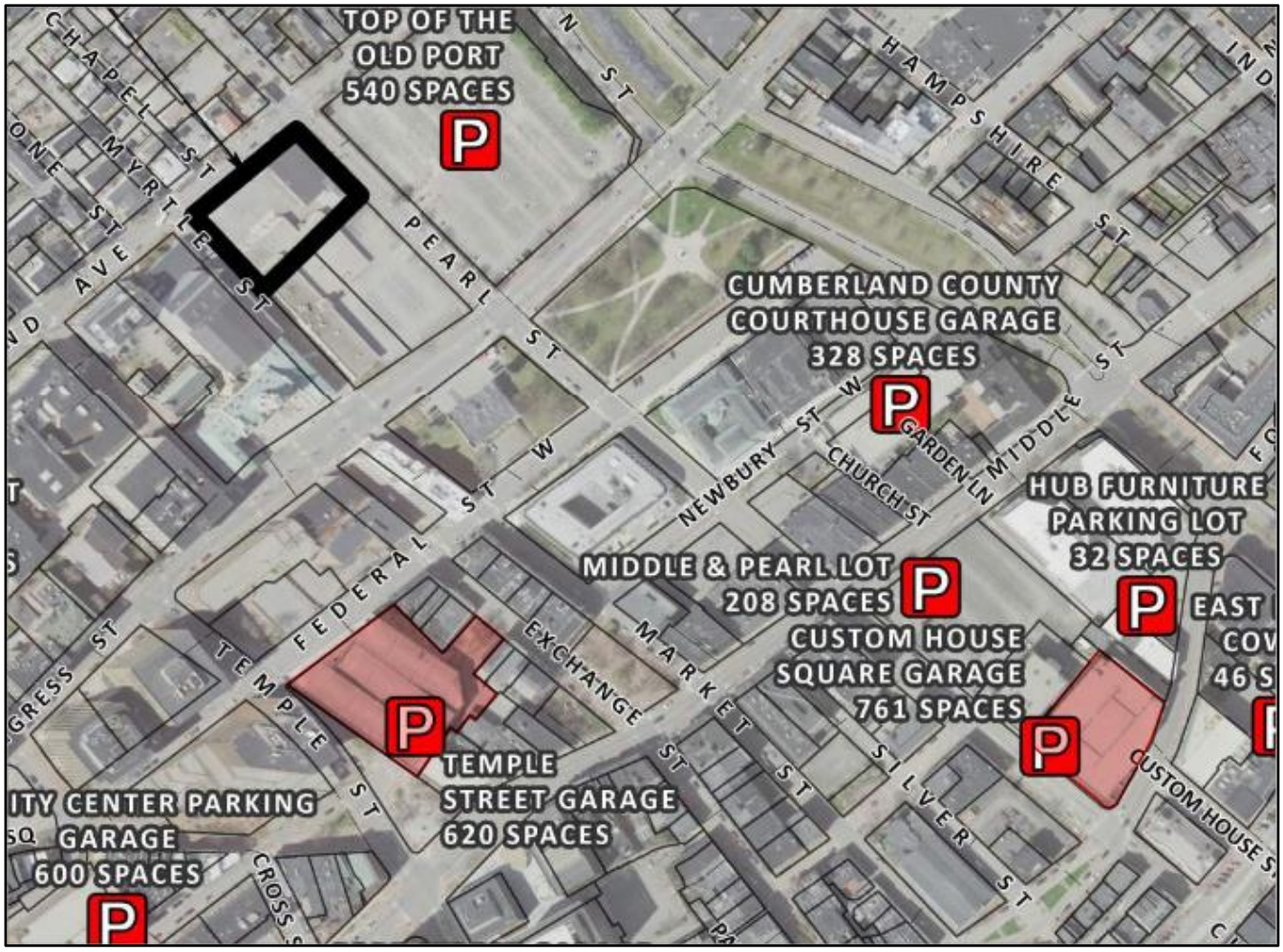



**Figure 2. Parking Locations Under Agreement**

**Live Nation's Fan Journey Progam**

Live Nation operates successful venues across the country and understands that any fan's experience includes the ability to easily access their venues using public transportation, ride shares, and parking facilities. As part of its ongoing operations at all of its venues, live Nation's "Fan Journey" program engages ticket holders with a cadence of messages at intervals leading up to showtimes.

- The Venue will provide multiple updates to fans in advance of show to help them navigate arriving to the venue.
    - Ticket purchasers will also receive a Know Before You Go email before each show which will contain information on where to park and rideshare details.
    - The venue's social media channels will also provide updates for fans ahead of each show.

Examples are presented below.

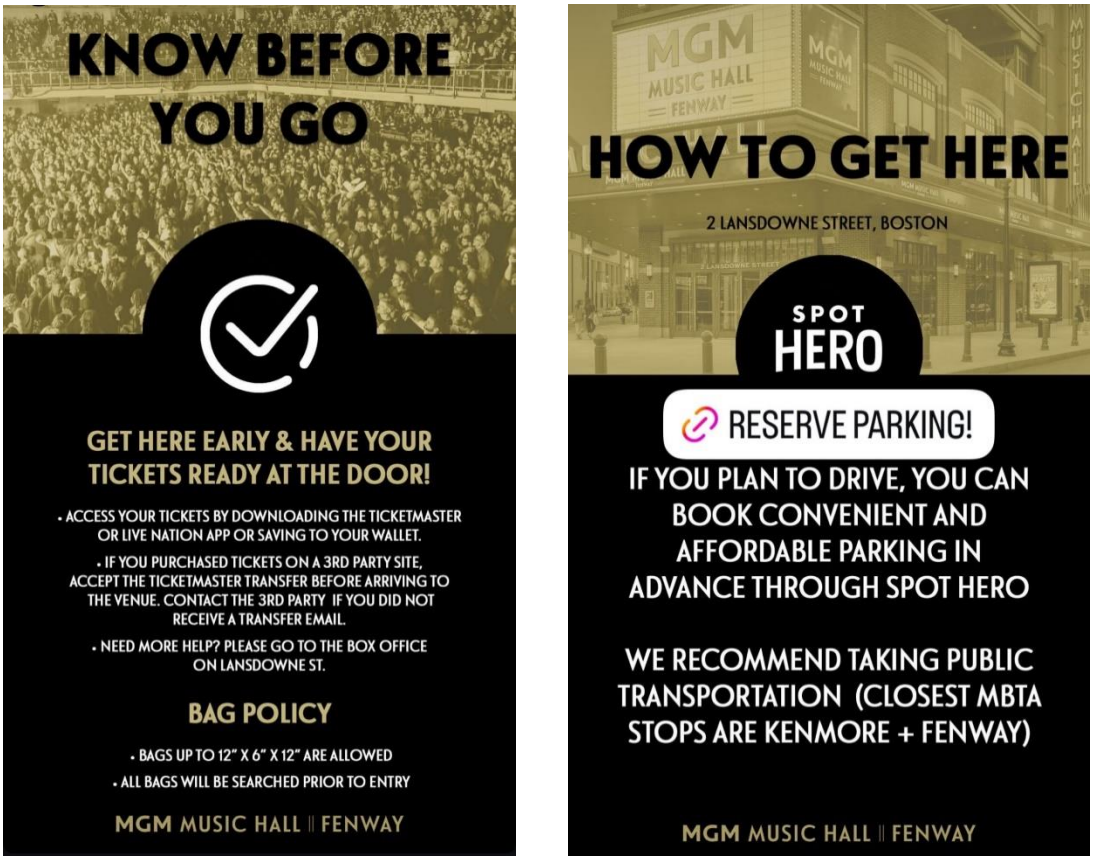



**Figure 3: Fan Journey Messaging**

**Right, Title, Interest**

The applicant Portland Music Holdings, LLC, has a purchase and sales agreement with 385 Congress Street, LLC, the owner of Lot 3.

Portland Music Holdings, LLC is a partnership between Portland Performance Ventures, LLC/Mile Marker Investments, LLC (Howard Goldenfarb, Todd Goldenfarb, Andrew Barowsky) and Live Nation New England, Inc. (NYSE:LYV). Donald Law is the Chairman of Live New England.

Please see the attached purchase and sales agreement for use as proof of right, title, interest.

Docusign Envelope ID: 139AC459-E8C5-425F-B570-98EE16D1AB58



# ASSIGNMENT OF PURCHASE AND SALE AGREEMENT

THIS ASSIGNMENT OF PURCHASE AND SALE AGREEMENT (this "Assignment"), is made as of this 13th day of December, 2024 (the "Effective Date"), by and between MILE MARKER INVESTMENTS LLC, a Delaware limited liability company, with a mailing address of 200 US Route One, Suite 200, Scarborough, ME 04074 ("Assignor"), and PORTLAND MUSIC HOLDINGS, LLC, a Delaware limited liability company, with a mailing address of c/o Live Nation Worldwide, Inc., 325 N. Maple Drive, Beverly Hills, CA 90210 ("Assignee"). Assignor and Assignee are sometimes referred herein, collectively, as the "Parties". All initially capitalized terms used herein which are not otherwise defined herein shall have the meanings ascribed to them in the Purchase Agreement (as defined below).

## RECITALS:

A. Assigner, as "Buyer", and 385 CONGRESS LLC, a Maine limited liability company, as "Seller", entered into that certain Purchase and Sale Agreement with an effective date of June 26, 2024 (the "Purchase Agreement") for the sale of that certain real property located on Cumberland Avenue, Portland, Maine (the "Property"), as more particularly described in the Purchase Agreement. A true and complete copy of the Purchase Agreement is attached hereto as Exhibit "A".

B. The Parties desire to enter into this Assignment to, among other things, assign the Assignor's rights, title and interests in and to the Purchase Agreement to Assignee and to evidence Assignee's assumption of Assignor's obligations under the Purchase Agreement.

## ASSIGNMENT:

NOW, THEREFORE, for value received, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Recitals. The Recitals stated above are true and correct and incorporated into this Assignment with this reference.

2. Assignment of Purchase Agreement. Assignor hereby assigns its right, title and interest in and to the Purchase Agreement, the Property and all sums paid or deposited into escrow or to Seller by Assignor in connection with the Purchase Agreement.

3. Assumption of Purchase Agreement. Assignee hereby assumes and agrees to perform and observe all agreements, covenants and obligations to be performed and observed by Assignor under the Purchase Agreement, effective as of the Effective Date.

4. Indemnification. Assignee agrees to indemnify, defend and hold harmless Assignor from and against all claims against Assignor under the Purchase Agreement by Seller, except to the extent arising from or caused by the negligence or willful misconduct of Assignor or breach of the Purchase Agreement by Assignor (whereby such breach is the result of Assignor acting without or otherwise contravening the consent or approval of Assignee's affiliate, Live Nation Worldwide, Inc.). Assignor agrees to indemnify, defend and hold harmless Assignee from and against all claims against Assignee under the Purchase Agreement by Seller arising from the negligence or

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willful misconduct of Assignor or breach of the Purchase Agreement by Assignor (whereby such breach is the result of Assignor acting without or otherwise contravening the consent or approval of Assignee's affiliate, Live Nation Worldwide, Inc.), except to the extent arising from or caused by the negligence or willful misconduct of Assignee or breach of the Purchase Agreement by Assignee.

5. Representations and Warranties. Assignor hereby represents and warrants to Assignee that: (a) Assignor has full power and authority to assign the Purchase Agreement to Assignee, (b) the Purchase Agreement is in full force and effect and has not been modified or amended in any manner whatsoever, (c) Assignor has neither sent nor received any notices of default under the Purchase Agreement, and (d) there are no sums due and owing by Assignor under the Purchase Agreement as of the Effective Date.

6. Counterparts. This Assignment may be executed in counterparts and/or by use of counterpart signature pages, which counterparts and counterpart signature pages may be delivered by electronic means, including by electronic mail of .pdf file or DocuSign, and counterpart and counterpart signature pages so delivered shall be deemed to be originals for all purposes.

7. Binding Effect. This Assignment shall be binding upon and inure to the benefit of Assignor, Assignee and their respective successors and assigns.

IN WITNESS WHEREOF, intending to be legally bound, Assignor and Assignee have caused this Assignment of Purchase and Sale Agreement to be executed under seal by their respective duly authorized representatives as of the Effective Date.

Assignor:
MILE MARKER INVESTMENTS LLC

DocuSigned by:
By: _____
6031C1FA3B7C4DF...
Name: Howard A. Goldenfarb
Title: Manager

Assignee:
PORTLAND MUSIC HOLDINGS, LLC

DocuSigned by:
By: _____
A14BED27654B5...
Name: Jordan Zachary
Title: Co-President, US Concerts

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**Exhibit "A"**

**Purchase Agreement**

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**EFFECTIVE DATE:** June 26, 2024

# PURCHASE AND SALE AGREEMENT

AGREEMENT made and entered into by and between **385 CONGRESS LLC**, a Maine limited liability company ("Seller") and **MILE MARKER INVESTMENTS, LLC,** a Delaware limited liability company, and/or assigns ("Buyer").

WITNESSETH AS FOLLOWS:

1. PURCHASE AND SALE. Seller agrees to sell and Buyer agrees to buy, on the terms and conditions hereinafter set forth, that certain parcel of land located on Cumberland Avenue, Portland, Cumberland County, Maine, comprised of approximately 38,441 square feet, shown as Lot 3 ("Lot 3") on that certain Subdivision Plan of 385 Congress Street prepared by Sebago Technics dated December 2, 2022, revised through January 11, 2023, approved by the City of Portland Planning Board on January 24, 2023, signed on February 1, 2023, and recorded at the Cumberland County Registry of Deeds in Plan Book 223, Page 32 (the "Subdivision Plan"), and identified as "Phase 2" in that certain Master Development Plan for 385 Congress Street approved by the City of Portland Planning Board on August 9, 2022 (the "Master Development Plan"), together with all rights, privileges, and easements appurtenant to said parcel, including without limitation, all air rights, rights-of-way or other interests in, on, under or to the public streets abutting or adjoining said parcel, and any and all real property and rights directly associated with said parcel, and only said parcel, as set forth in the Master Development Plan, said parcel being a portion of the property conveyed to Seller by deed from Metro Media Properties LLC dated October 20, 2017 and recorded at said Registry of Deeds in Book 34401, Page 214 (the "Premises").

2. PURCHASE PRICE. Subject to any adjustments and prorations hereinafter described, Buyer agrees to pay for the Premises the sum of [redacted] Dollars [redacted] (the "Purchase Price"), payable as follows:

(a) Option Payments. Commencing on the Effective Date and continuing monthly thereafter (on the same day of the month as the Effective Date) until the expiration of the Approvals Period (as defined below) or earlier termination of this Agreement, Buyer shall pay to Seller the sum of [redacted], which payment shall not be refundable except in the event of a Seller default as expressly provided in this Agreement or in the event of a taking (in accordance with Section 8 below), but shall be credited against the Purchase Price at Closing (the "Option Payments").

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(b) At Closing. The balance of the Purchase Price, as adjusted for the Option Payments and the Demolition Deposit (if previously paid), pro-rations (prepared by Seller and reviewed by Buyer at least two (2) business days prior to Closing) and any other payments referenced herein, shall be paid to Seller at the closing by wired funds (in accordance with wiring instructions provided to Buyer in writing within a reasonable time prior to the time of Closing).

3. TITLE.

(a) Seller shall convey the Premises to Buyer at the Closing in fee simple, free and clear of Monetary Encumbrances (as defined below) and mortgages, and otherwise subject to all matters of record and Permitted Encumbrances (as defined below).

(b) Buyer will have until the expiration of the Approvals Period (as defined below) to examine title to the Premises, obtain a title commitment and survey with respect to the Premises, and to advise Seller in writing of any title or survey objections. Notwithstanding the foregoing, including the expiration of the Approvals Period, Buyer may update the effective date of its title examination and/or survey and give notice to Seller of objections to matters first appearing subsequent to the effective date of its previous title examination or survey, as the case may be. The encumbrances of record disclosed by Buyer's title examination or survey which are not objected to by Buyer, as well as: (i) all applicable land use/zoning laws, ordinances and regulations, including the Master Development Plan, as may be amended in accordance with Section 5 below, (ii) any public utilities serving the Premises, (iii) real estate taxes on the Premises that are not then due and payable as of the Closing, (iv) a limited restrictive covenant, to be imposed on the Premises by Seller at Closing, prohibiting the development of any apartment, condominium or cooperative residential units on the Premises which limited restrictive covenant shall be substantively identical to the limited restrictive covenant encumbering Lot 1 set forth in that certain Deed from Seller to Fathom Congress, LLC dated February 17, 2023 and recorded at the Cumberland County Registry of Deeds in Book 39992, Page 249 (the "Fathom Deed"), and (v) a building set-back covenant for the benefit of Lot 1 stating that no building shall be constructed or located on Lot 3 closer than twenty-three and eight hundredths (23.08) feet from the boundary line between Lot 3 and Lot 1 above elevation eighty (80) feet (NGVD 1929 datum), and a building set-back covenant for the benefit of Lot 2 stating that no building shall be constructed or located on Lot 3 closer than twenty-two (22) feet from the boundary line between Lot 3 and Lot 2 above elevation eighty (80) feet (NGVD 1929 datum), both as depicted on **Exhibit A** attached hereto, are together referred to as the "Permitted Exceptions," which definition may include additional items pursuant to subparagraph (c) below. Buyer acknowledges that the Premises currently are subject to that certain restrictive covenant set forth in the Fathom Deed prohibiting on the Premises the development, construction and operation of any hotel, inn, or other hospitality facilities providing over night or extended stay lodging accommodations.

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(c) Seller will have ten (10) business days after receipt of Buyer's notice ("Seller Cure Period") to advise Buyer in writing of the objections Seller agrees to cure, with Seller having no obligation to cure any such objections; however, Seller agrees that Seller will remove all monetary encumbrances, other than mechanics' liens arising from Buyer's due diligence and liens for taxes not yet due and payable (collectively, "Monetary Encumbrances") at or prior to Closing. If Seller fails to respond to any objection within the Seller Cure Period, then Seller will be deemed to have declined to cure any of the objections in Buyer's notice, other than Monetary Encumbrances. If Seller declines to cure any objection, then Buyer may elect either (i) to terminate this Agreement by written notice to Seller, in which event all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement, or (ii) to accept title subject to such objections (other than Monetary Encumbrances), which objections shall be deemed waived and the matters objected to also shall become "Permitted Exceptions" hereunder. If Seller expressly agrees in writing to cure a title or survey objection (or is obligated to) and fails to do so, Seller acknowledges that Buyer will have relied on Seller's agreement to do so and the failure will be a default by Seller if not cured within the cure period provided in this Agreement. In that event, (a) Buyer may declare Seller in default and pursue the remedies in Section 12 of this Agreement, (b) Buyer may attempt to cure the objection on Seller's behalf, in which event the Purchase Price will be reduced by the amount equal to the actual reasonable cost and expense incurred by Buyer in curing the defect or objection, (c) Buyer may accept title to the Premises subject to the objection, or (d) any combination of clauses (b) and (c). If Buyer elects to attempt to cure any objection pursuant to clause (b), Buyer may extend the Closing for a period not to exceed sixty (60) days. If Buyer is not successful in curing the objection, then Buyer may exercise its options under either clauses (a) or (c). Seller covenants and agrees that, during the pendency of this Agreement, Seller will not (i) materially change or alter the physical condition of the Premises except for the Demolition Work (as defined below), (ii) grant, create, consent to, or modify any encumbrance benefitting or burdening the Premises, including liens, mortgages, attachments, covenants, restrictions, easements, leases or otherwise, except in connection with amending the Master Development Plan in accordance with Section 5 below, provided, however, that Seller may modify the Middlesex Saving Bank mortgage encumbering the Premises or modify the UPP Lease (as defined below) so long as such modifications do not impair Seller's ability to have such encumbrances released from the Premises at Closing, or (iii) unless expressly provided in this Agreement, pursue or consent to any rezoning of the Premises.

4. DELIVERY OF DOCUMENTS / DUE DILIGENCE.

(a) Seller agrees to provide Buyer for Buyer's review and inspection within five (5) business days of the Effective Date digital copies of any of the following documents relating to the Premises in Seller's possession or under Seller's control: (i) title insurance policies; (ii) surveys; (iii) site plans; (iv) the Master Development Plan and all approvals and amendments thereof; (v) environmental studies or reports; (vi) geotechnical studies; (vii) traffic studies; (viii)

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parking studies; (ix) the UPP Lease (as defined below); (x) and any non-recorded agreements or instruments impacting the Premises that survive Closing.

(b) Seller hereby grants Buyer and its agents the right, upon reasonable prior notice of at least 24 hours, to enter upon or in any part of the Premises at all reasonable times and from time to time prior to the Closing in order to inspect the Premises, conduct surveys, percolation tests, soil tests, feasibility studies, zoning analysis, traffic pattern studies, sound and lighting studies, investigation of availability, location and accessibility of utilities, engineering and environmental testing, and such other investigatory studies as may be necessary or appropriate, or required by planning authorities, or lenders, for determining the adequacy of the Premises for Buyer's intended development. Specifically, Buyer may conduct tests related to surface, subsurface, topographic, geotechnical, and environmental conditions of the Premises, including a Phase I Environmental Site Assessment and any Phase II Environmental Site Assessments or other studies or analyses as may be required based upon the Phase I Environmental Site Assessment (expressly including boring, drilling sampling, and other subsurface exploration as Buyer may reasonably deem appropriate). Prior to such entry onto the Premises, Buyer shall furnish Seller with a certificate of commercial general liability insurance maintained by the contractor or consultant entering the Premises (which may be part of an umbrella policy) with combined limit single insurance coverage of at least One Million and 00/100 Dollars ($1,000,000.00) and naming Seller as an additional insured. Seller shall have the right to have a representative present for all of Buyer's on-site activities. Buyer will promptly restore any area of the Premises disturbed by Buyer to as near its original condition as reasonably possible. Except for the negligence or willful acts or omissions of Seller or Seller's agents, contractors or employees, Buyer will indemnify, defend and hold Seller harmless against any claims, expense, cause of action, penalty, fine, or damages incurred by Seller as a result of persons or firms entering the Premises on Buyer's behalf to complete the inspection of the Premises, including mechanics liens and reasonable attorneys' and paralegals' fees.

(c) Buyer shall have the right to contact and communicate directly with representatives of the tenant under the UPP Lease and any governmental officials regarding the Premises and/or Buyer's intended development thereof as Buyer may deem appropriate.

(d) Buyer's obligation to close under this Agreement is conditioned on Buyer's determination in its sole discretion that the Premises are satisfactory for the use and development intended by Buyer, including that such development is economically feasible. Buyer has the right to terminate this Agreement on written notice to Seller given at any time and for any reason prior to the expiration of the Approvals Period, in which event the all rights and obligations of the parties under this Agreement will be of no further force or effect, except for obligations that are expressly stated to survive the termination of this Agreement. Buyer's inspection of the Premises and review of documents, records and other items inspected or reviewed by Buyer in connection with its due diligence, shall not be deemed a waiver of any of the

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representations and warranties made by Seller hereunder, unless such items or due diligence gave rise to actual knowledge of Buyer of an inaccuracy contained within Seller's representations and warranties, in which case Buyer shall be deemed to have waived a claim for misrepresentation or breach of warranty against Seller with respect to such fact.

5. APPROVALS AND MASTER DEVELOPMENT PLAN AMENDMENT.

(a) Notwithstanding any other provisions of this Agreement to the contrary, Buyer shall be entitled to apply for and obtain all necessary federal, state and local governmental land-use permits, licenses and approvals of any type or nature required, including historic preservation review, as may be necessary for the development on the Premises of a performing arts, music and live entertainment venue (the "Project"), including without limiting the generality of the foregoing, all necessary site plan, and other governmental land-use permits, licenses, and approvals, of any type and from any necessary public or governmental authority or other party, for Buyer's development of the Project at the Premises (excluding building permits and other construction related permits and approvals and operating permits and licenses) (collectively, the "Approvals"). Buyer shall endeavor to apply for Level III Site Plan approval for the Project from the City of Portland ("Site Plan Application") prior to or concurrently with Seller's submission of the MP Amendment Application (as defined below).

(b) If for any reason whatsoever all Approvals have not been obtained on a final, non-appealable basis (subject only to such terms and conditions as may be approved by Buyer, in its sole discretion) on or before the expiration of thirteen (13) months from the Effective Date (the "Approvals Period") (as the same may be extended as provided below), then Buyer may, in its sole discretion, terminate this Agreement by giving Seller written notice thereof, in which event this Agreement shall terminate and the parties shall have no further obligations of any nature whatsoever hereunder except those that expressly survive termination. If Buyer fails to give Seller a notice of termination on or before the expiration of the Approvals Period, then Buyer shall be deemed to have waived this condition and Buyer's right to terminate this Agreement for failure to satisfy this condition. Buyer shall have the right to extend the Approvals Period for up to six (6) periods of one (1) month each, provided the Buyer is diligently pursuing the Approvals in good faith. Buyer shall notify the Seller of its exercise of each such one (1) month extension by written notice to Seller provided on or before the expiration of the Approvals Period, each of which exercise notice must include payment of an extension fee in the amount of [redacted] which extension fee payments shall be deemed Option Payments and shall not be refundable except in the event of a Seller default hereunder or in the event of a taking (in accordance with Section 8 below), but shall be credited against the Purchase Price at Closing.

(c) Buyer shall have the right to apply for and pursue the Approvals on a stand-alone basis, separate from the [redacted] and [redacted]

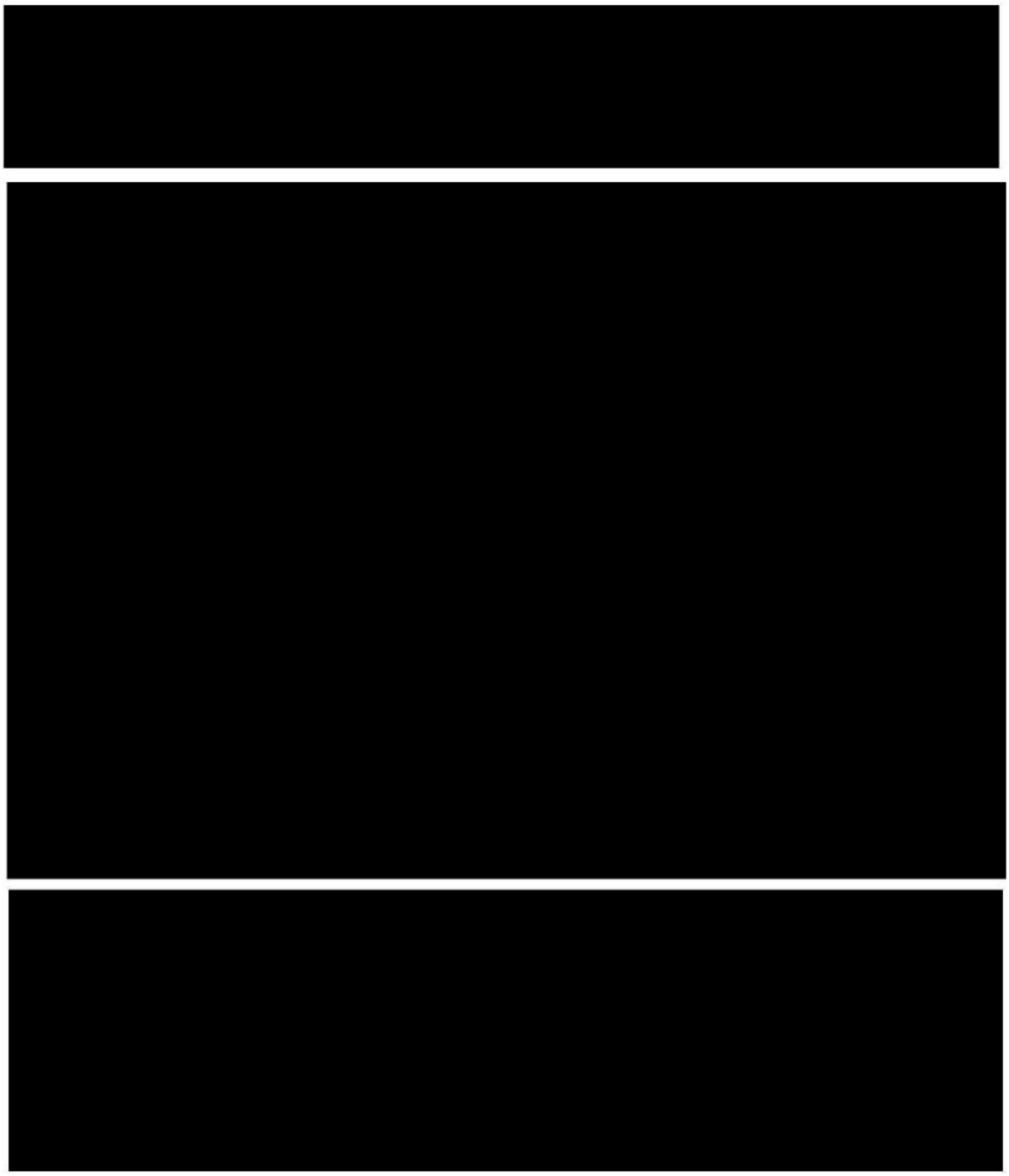
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[redacted] so long as such Approvals do not materially adversely interfere with the existing Master Development Plan and [redacted]

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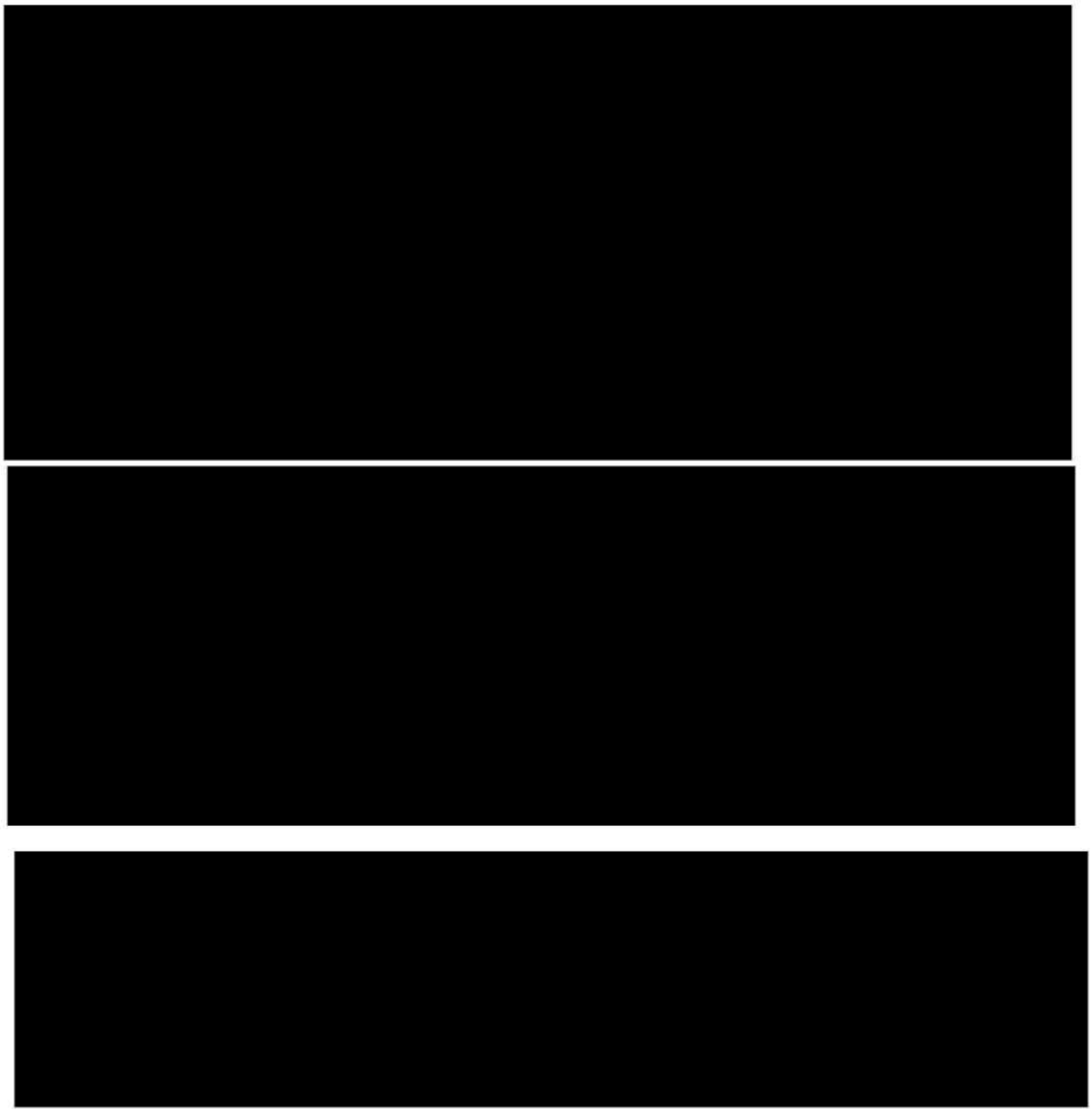
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6. DEMOLITION. Seller shall, at its expense, either prior to Closing as provided below or following Closing (at Buyer's election), perform the "Demolition Work" as it pertains to the Premises, as Demolition Work is defined in that certain Demolition Agreement by and between Seller and Fathom Congress LLC dated February 17, 2023, a copy of which is attached hereto as **Exhibit B** (the "Demolition Agreement"); provided, however, that the Demolition

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Work also shall include for the benefit of Buyer the removal of the garage building located on the Premises near Pearl Street and removal of asphalt and concrete paving from the Premises. Upon completion of the Demolition Work, and provided that the Closing has occurred, Buyer shall assume and be responsible for the rental cost of all rented construction fencing located on the Premises.

In the event that Buyer desires the Demolition Work be completed prior to Closing, Buyer shall provide written notice thereof (the "Demolition Notice") to Seller no later than one hundred fifty (150) days prior to Closing, and thereupon completion of the Demolition Work shall become a condition to Closing for the benefit of Buyer. As a condition of the obligation of Seller to perform the Demolition Work prior to Closing, Buyer shall pay to Seller a deposit of [redacted] (the "Demolition Deposit"), which funds shall be credited towards the Purchase Price at Closing, but which otherwise shall be held in trust by Seller, in a segregated escrow account, to be used and applied by Seller to pay the costs and expenses of the Demolition Work, as and when due. In the event that Seller does not timely receive the Demolition Deposit together with the Demolition Notice, Seller shall be relieved of an obligation to commence or complete the Demolition Work prior to Closing and such building demolition obligations shall not be a condition of Closing. The Demolition Deposit shall be refunded to Buyer in full in the event that the Closing does not occur as a result of any default by Seller hereunder. In the event that the Demolition Work is not completed prior to Closing, Seller shall have thirty (30) days to cure such default and complete the Demolition Work as specified herein and the Closing shall be extended up to thirty (30) days to accommodate the completion of the Demolition Work. In the event that the Demolition Work is not complete at the end of the 30-day cure period, and Seller has proceeded in good faith in pursuing the Demolition Work, then the parties shall proceed to Closing and a reasonable estimate of the cost of completing the Demolition Work shall be escrowed from the Purchase Price and held by Buyer, in a segregated escrow account, to be used and applied as follows: (i) in the event the Seller does not complete the Demolition Work within sixty (60) days of Closing, then to pay the costs and expenses of Buyer's arranging for and proceeding with completion of Demolition Work, as and when such costs become due, and (ii) the balance, after payment of all such costs of substitute performance, to be paid to Seller, less any out-of-pocket delay damages incurred by Buyer as a result of Seller's failure to complete Demolition Work as of Closing. The provisions of this section shall survive Closing.

In the event that Seller does not timely receive the Demolition Notice prior to Closing, the Demolition Work shall be performed by Seller following Closing pursuant to the terms and conditions of the Demolition Agreement (including the expansion of the Demolition Work as provided above), including the time frames therefor, upon written notice from Buyer to Seller requesting that the Demolition Work be performed, except that if the Demolition Notice is provided to Seller later than the aforesaid 150 day period, but prior to Closing, notwithstanding anything to the contrary in the Demolition Agreement, Seller shall be obligated to complete the

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Demolition Work within the shorter of 150 days from receipt of the Demolition Notice or the time period set forth in the Demolition Agreement; to accommodate the performance of the Demolition Work following Closing, Buyer shall grant Seller a temporary license to enter the Premises to perform the Demolition Work.

The provisions of this Section 6 shall expressly survive Closing.

7. CLOSING. The closing (the "Closing") shall take place at the offices of Bernstein, Shur, Sawyer and Nelson, 100 Middle Street, Portland, Maine or at Buyer's election, the offices of Buyer's lender's attorney, thirty (30) days after the expiration of the Approvals Period or at such earlier date designated by Buyer upon five (5) days prior notice to Seller (the "Closing Date"), or if Buyer and Seller shall mutually agree in advance and in writing, at another time and place. Buyer's attorney or Buyer's lender's attorney shall act as closing agent, with control over receipt and delivery of closing documents and receipt and disbursement of closing funds pursuant to customary and reasonable escrowed closing practices. At the Closing, against payment of the Purchase Price, Seller shall execute and deliver to Buyer a Quitclaim Deed with Covenant to the Premises in accordance with the Short Form Deeds Act, 33 M.R.S.A. § 761 et seq. (the "Deed"), together with such documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Buyer's acquisition, development and financing of the Premises, including without limitation, a Maine State Real Estate Transfer Tax Declaration, a Nonresidential Real Property Road Disclosure Statement pursuant to 33 M.R.S. §193, a bring-down Certificate of Seller's representations and warranties, 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), a "Seller's Affidavit" regarding mechanics liens and persons in possession in form and substance reasonably acceptable to Buyer and Buyer's title insurance company, applicable Maine State REW forms, IRS Form W-9, the information required for Buyer to file IRS Form 1099-S, evidence of Seller's existence, authority to convey the Premises, and good standing in form and substance reasonably satisfactory to Buyer and Buyer's title insurance company, and any other usual and customary documents deemed reasonably necessary by Buyer or Buyer's title insurance company.

8. RISK OF LOSS, CONDEMNATION.

(a) All risk of loss to the improvements at the Premises prior to Closing shall be borne by Seller. Seller shall keep the Premises 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) If all or any material portion of the Premises, or any material portion of any land on which off-site access, parking, utility service or stormwater detention is located (and

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which is required for Buyer's contemplated the use and development of the Premises), is taken or condemned by any entity with the power of eminent domain prior to the date of the Closing, or if Buyer receives notice of a proposed taking prior to the date of the Closing, then Buyer will have the option of either (i) terminating this Agreement by giving written notice to Seller, in which event all previously paid Option Payments and the Demolition Deposit (if previously paid) will be immediately refunded to Buyer and this Agreement and all rights and obligations of the parties hereunder will be of no further force or effect, except for obligations that are expressly stated to survive the termination of this Agreement, or (ii) requiring Seller to convey the remaining portion of the Premises to Buyer pursuant to the terms and provisions of this Agreement and to transfer and assign to Buyer at the Closing all of Seller's right, title and interest in and to any award made or to be made for the Premises. Seller acknowledges and agrees that Buyer shall have the right to participate in all negotiations relating to such condemnation, including the amount of compensation to be paid for any portion or portions of the Premises to be condemned.

9. POSSESSION OF THE PREMISES. The Premises 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, including without limitation, the UPP Lease.

10. 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 a limited liability company 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) This Agreement constitutes the valid and binding obligation of Seller, enforceable against Seller in accordance with its respective terms, except to the extent that enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the rights of contracting parties generally;

(c) 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 Certificate of Formation and Limited Liability Company Agreement; (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;

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(d) 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;

(e) 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;

(f) There are no litigation, liens (other than for taxes and assessments not due and payable and the mortgage to Middlesex Savings Bank), judgments, violations, or proceedings pending, or to Seller's actual knowledge, threatened against or relating to the Premises, nor does Seller actually know of any governmental investigation relating to the Premises;

(g) Seller has received no written notice of any outstanding violation of any federal, state, county, or municipal laws, ordinances, orders, codes, rules, regulations, or requirements affecting all or any portion of the Premises;

(h) There is no pending or to the Seller's actual 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 Premises or any portion thereof, or which may adversely affect Seller's ability to perform its obligations under this Agreement, or which may affect the Premises or any portion thereof;

(i) Seller is not a "foreign person" within the meaning of § 1445 of the Internal Revenue Code;

(j) There are no leases, tenancy agreements, tenancies at will, parking space agreements or other contracts, agreements or occupancy arrangements to which Seller is a party in effect with respect to any portion of the Premises, except for that certain Commercial Lease (Net Lease) by and between Seller, as landlord, and Unified Parking Partners Maine and New Hampshire LLC, as tenant, dated February 17, 2023, and any derivative parking subleases and licenses (the "UPP Lease");

(k) There are no management, service, equipment, supply, maintenance or concession agreements to which Seller is a party with respect to or affecting all or any portion of the Premises that are not terminable by Seller by the Closing;

(l) To Seller's actual knowledge, no work has been performed or is in progress at, and no materials have been furnished to the Premises or any portion thereof which

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may give rise to mechanic's, materialmen's or other liens against the Premises or any portion thereof, except for any work performed for Buyer by Buyer's consultants;

(m) Seller has not used, operated or knowingly permitted the use of the Premises in any manner for the storage, use, treatment, manufacture or disposal of any Hazardous Materials (as defined below) other than in compliance with applicable law or regulation. The term "Hazardous Materials" means and refers to any "hazardous waste" or "hazardous substance," as such terms are set forth in, under or pursuant to the Environmental Laws and Regulations, oil or petroleum products or their derivatives, polychlorinated biphenyls, asbestos, radioactive materials or waste, and any other toxic, ignitable, reactive, corrosive, explosive, contaminating or polluting materials which are now or in the future subject to governmental regulation. "Environmental Laws and Regulations" means any federal, state or local laws now or hereafter in effect relating to pollution or protection of the environment or emissions, discharges, spills, releases or threatened releases of any Hazardous Substance into the environment (including without limitation indoor air, ambient air, surface water, ground water or land), including without limitation, the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 *et seq.*, as amended, the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601 *et seq.*, as amended, the Hazardous Materials Transportation Act, 49 U.S.C. §§ 1801 *et seq.*, as amended, the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*, as amended, the Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*, as amended, the Toxic Substance Control Act, 15 U.S.C. §§ 2601 *et seq.*, as amended, and any rules and regulations now or hereafter promulgated under any of such acts;

(n) There are no outstanding pending or to Seller's actual knowledge, threatened, claims, options, rights of first refusal, boundary disputes, or encumbrances against or encroachments by, any portion of the Premises, except as may appear in the public record;

(o) Neither Seller nor any of its affiliates, nor any of their respective partners, members, shareholders or other equity owners, and none of their respective employees, officers, directors, representatives or agents is, nor will they become, a person or entity with whom United States persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action and is not and will not engage in any dealings or transactions or be otherwise associated with such persons or entities; and

(p) Pursuant to 33 MRSA Section 193, the Premises abuts the following public streets: Pearl Street, Cumberland Avenue, and Myrtle Street, with current access to the Premises from Cumberland Avenue.

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Seller will take, or cause to be taken, all action necessary to cause its warranties and representations to remain true and correct, in all material respects, through the date of the Closing. Buyer's obligation to acquire the Premises is conditioned upon the above representations and warranties remaining true and correct, in all material respects, as of the date of the Closing. If any of the representations and warranties become untrue or misleading in any material respect prior to the Closing, Seller will give prompt written notice to Buyer; and in such event (i) if the change is due to the fault of Seller, and is not cured within forty-five (45) days of written notice thereof from Buyer, the event will constitute a default by Seller under this Agreement and Buyer will have the remedies set forth in Section 12 below, and (ii) if the change is not due to the fault of Seller, Buyer may either waive such condition, in writing, or terminate this Agreement, in which event all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement. All of the above representations and warranties will be reaffirmed by Seller as true and correct in all material respects as of the date of the Closing and will survive the Closing for a period of one (1) year. Buyer shall not have any claim against Seller for misrepresentation or breach of warranty with respect to any fact actually known to Buyer prior to Closing. Representations of Seller which are made to Seller's actual knowledge shall be deemed to be made to the actual knowledge of Joseph Dasco.

11. 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 a limited liability company 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) This Agreement constitutes the valid and binding obligation of Buyer, enforceable against Buyer in accordance with its respective terms, except to the extent that enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the rights of contracting parties generally;

(c) 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 Certificate of Formation; (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;

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(d) The person executing this Agreement on behalf of Buyer is duly authorized to do so and to bind Buyer to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(e) 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; and

(f) Neither Buyer nor any of its affiliates, nor any of their respective partners, members, shareholders or other equity owners, and none of their respective employees, officers, directors, representatives or agents is, nor will they become, a person or entity with whom United States persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action and is not and will not engage in any dealings or transactions or be otherwise associated with such persons or entities.

Buyer will take, or cause to be taken, all action necessary to cause its warranties and representations to remain true and correct, in all material respects, through the date of the Closing. Seller's obligation to sell the Premises is conditioned upon the above representations and warranties remaining true and correct, in all material respects, as of the date of the Closing. If any of the representations and warranties become untrue or misleading in any material respect prior to the Closing, Buyer will give prompt written notice to Seller; and in such event (i) if the change is due to the fault of Buyer, and is not cured within forty-five (45) days of written notice thereof from Seller, the event will constitute a default by Buyer under this Agreement and Seller will have the remedies set forth in Section 12 below, and (ii) if the change is not due to the fault of Buyer, Seller may either waive such condition, in writing, or terminate this Agreement and retain all previously paid Option Payments, in which event all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement. All of the above representations and warranties will be reaffirmed by Buyer as true and correct in all material respects as of the date of the Closing and will survive the Closing for a period of one (1) year.

12. DEFAULT AND REMEDIES.

(a) Seller Default. In the event that Seller defaults in the performance of its obligations hereunder or if any of Seller's representations and warranties set forth in this Agreement are untrue or misleading in any material respect due to Seller's fault, and such default or misrepresentation or breach of warranty is not cured by Seller within forty-five (45) days of

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written notice thereof from Buyer, then Buyer may elect at its option: (i) to terminate this Agreement by written notice to Seller, in which event all previously paid Option Payments and the Demolition Deposit (if previously paid) will be immediately refunded to Buyer and all rights and obligations of the parties under this Agreement will be of no further force or effect, except for obligations that are expressly stated to survive the termination of this Agreement, and except that Seller shall immediately reimburse Buyer for its reasonable, actual, out-of-pocket, third-party expenses incurred in connection with this Agreement and the transaction contemplated hereby including the Site Plan Application and Buyer's intended development of the Project (including reasonable attorney's fees) in an amount not to exceed [redacted] or (ii) to seek specific performance of this Agreement and if successful, shall be reimbursed by Seller for its out-of-pocket expenses, including court costs and reasonable attorneys' fees incurred in connection with such action.

(b) Buyer Default. In the event that Buyer defaults in its obligation to close hereunder, then Seller's sole and exclusive remedy for the default will be to terminate this Agreement by written notice to Buyer, in which event all previously paid Option Payments and the Demo Deposit (if paid) shall be retained by Seller, together [redacted] reimbursement as provided below when paid by Buyer, as full and complete liquidated damages for Buyer's default in lieu of any other legal or equitable remedy, and thereafter all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement. Buyer shall within ten (10) business days of presentation of invoices to Buyer for the reasonable, actual, out-of-pocket, third-party expenses incurred by Seller in connection with this Agreement and the transaction contemplated hereby including [redacted], reimburse Seller for such costs in an amount not to exceed [redacted] which obligation and payment by Buyer shall be an additional component of liquidated damages to Seller for Buyer's default. Seller and Buyer acknowledge and agree that Seller's damages due of Buyer's default hereunder are difficult or impossible to ascertain and that the amount of all previously paid Option Payments, the Demo Deposit, and expense reimbursement as provided above represent a reasonable estimate by both parties of Seller's damages.

13. BUYER'S CONDITIONS PRECEDENT. In addition to other conditions set forth in this Agreement, the obligation of Buyer to close is subject to the satisfaction at or before the Closing of all of the following conditions:

(a) All representations and warranties of Seller contained in this Agreement shall be true and correct in all material respects as of the Closing;

(b) Seller shall have materially and timely performed all of its obligations and commitments hereunder;

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(c) Seller shall have terminated the UPP Lease with respect to the Premises.

(d) Seller shall have completed the Demolition Work if timely notified by Buyer as provided above, otherwise there shall have been no material adverse change in the Premises, from the conclusion of the Approvals Period through the date of Closing that would cause the Premises to be unsuitable for Buyer's intended use and development.

In the event that at the time of Closing any of the foregoing conditions is not satisfied, Buyer shall have the option of terminating this Agreement by written notice to Seller, in which event all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement, provided however if such unsatisfied condition is due to the fault of Seller, and is not cured by Seller within forty-five (45) days of written notice from Buyer thereof, the event will constitute a default by Seller under this Agreement and Buyer will have the remedies set forth in Section 12 above. Buyer may, however, elect to close notwithstanding such unsatisfied conditions as may exist. It is acknowledged by the parties that the foregoing conditions and any other conditions on Buyer's obligation to close contained in this Agreement are not intended to condition Seller's obligations and are solely for Buyer's benefit.

14. OFF MARKET. So long as this Agreement remains in effect, Seller shall not list or offer the Premises for sale and shall not seek, accept, solicit or negotiate any third party offers, nor engage in any discussions concerning the sale or lease of the Premises or any portion thereof with potential third-party purchasers or tenants, other than in connection with the transaction contemplated by this Agreement.

15. BROKERAGE. Seller and Buyer respectively represent and warrant to each other that they have not had any dealings with any person or entity other than Malone Commercial Brokers, as agent for Seller ("Seller's Broker") and The Dunham Group, as agent for Buyer ("Buyer's Broker" and collectively with Seller's Broker, the "Brokers") which may entitle such person or entity to a fee or commission in connection with the transaction contemplated by this Agreement. Seller agrees to be responsible for the payment of all fees and commissions due to the Brokers with respect to this transaction. Seller and Buyer hereby agree to indemnify, defend, and hold the other harmless from and against any losses, costs or expenses (including reasonable attorney's fees) arising out of any and all liabilities, claims, demands, costs, expenses (including reasonable attorneys' fees and disbursements) and judgments relating to any fee, commission or other compensation asserted by any broker, finder or intermediary, other than the Brokers, in connection with this Agreement or the transaction contemplated hereby, arising out of Seller's or Buyer's (as applicable) acts.

16. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

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(a) Real estate taxes for the Premises will be prorated as of the Closing Date based upon the most recently available tax bills for the Premises and the proportionate land area of the Premises and Seller's Retained Land. If the amount of the real estate taxes is not known on the Closing Date, such taxes shall be prorated on the basis of taxes assessed for the preceding fiscal period, subject to reapportionment as soon as the new tax rate and valuation can be ascertained. In the event of any abatement of such taxes subsequent to the apportionment thereof, the amount of such abatement, less the reasonable cost of obtaining the same, shall be prorated as of the Closing Date. If any special assessment affects the Premises as of the Closing Date, all unpaid installments of the assessment (including those which will become due and payable after the Closing) will be paid by Seller. Seller will cooperate with Buyer and share the reasonable, out-of-pocket cost (if any) equally to obtain a separate tax parcel identification number for the Premises after the Closing if the Premises is not separately assessed. If the Premises is not separately assessed, (i) Seller will pay all real estate taxes on the tax parcel for the entire tax year of Closing, subject to Buyer's payment of its share of the tax bill, and (ii) Buyer's share shall be based on the relative acreage of the Premises and the remaining land included in the tax parcel, applied to the value of the land (excluding improvements) contained in the tax parcel.

(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 and all title examination fees and premiums for the policy insuring Buyer and its lender will be paid by Buyer.

(d) The recording fees for any title clearance items will be paid by Seller.

(e) A portion of the Purchase Price shall be withheld at Closing by Buyer if required by 36 M.R.S.A. § 5250-A unless Seller furnishes Buyer with an affidavit stating, under penalty of perjury, that Seller is a resident of Maine or that the transfer is otherwise exempt from withholding tax.

The obligations of Seller and Buyer in this Section 16 will survive the Closing.

17. MISCELLANEOUS.

(a) Time. Time is of the essence of this Agreement.

(b) Notices. Notices given pursuant to this Agreement will be effective only if in writing and delivered (i) by reputable overnight courier guaranteeing next business day delivery, (ii) if sent on a business day during the business hours of 9:00 a.m. until 5:00 p.m.,

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eastern time, via email, with either an acknowledgement of receipt or a copy to follow by reputable overnight courier guaranteeing next business day delivery, or (iii) by United States certified mail, return receipt requested. All notices will be directed to the other party at its address provided below or such other address as either party may designate by notice given in accordance with this Section. Notices will be effective (i) if by overnight courier, one (1) business day after deposit with all delivery charges prepaid, (ii) if by email, on the date of delivery, provided receipt is acknowledged or a copy of such notice is sent as required above, and (iii) in the case of certified mail, the earlier of the date receipt is acknowledged on the return receipt for such notice or five (5) business days after the date of posting by the United States Post Office. The notice addresses for Seller and Buyer are as follows:

TO SELLER: 385 Congress LLC
2730 Transit Road
West Seneca, New York 14224
Attn: Joseph Dasco
Tel: 413-244-9092
Email: joedasco@comcast.net

WITH A COPY TO: Bernstein Shur
PO Box 9729
100 Middle Street
Portland, ME 04104-5029
Attn: Tom Hanson, Esq.
Tel: (207) 228-7335
Email: thanson@bernsteinshur.com

TO BUYER: Mile Marker Investments, LLC
200 US Route One, Suite 200
Scarborough, ME 04074
Attn: Howard A. Goldenfarb, Manager
Tel: (207) 885-4200
Email: HG@ramcompaniesusa.com

WITH A COPY TO: Bernstein Shur
PO Box 9729
100 Middle Street
Portland, ME 04104-5029
Attn: William M. Welch, Esq.
Tel: (207) 228-7339
Email: wwelch@bernsteinshur.com

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and

Live Nation
325 N. Maple Drive
Beverly Hills, CA 90210
Attn: Fred Kim
Email: fredkim@livenation.com
(Notices to Live Nation must be delivered by email, in addition to any other notice delivery methods permitted hereunder)

(c) Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday, or any Federal or State of Maine holiday. If any period expires on a day which is not a business day or any event or condition is required by the terms of this Agreement to occur or be fulfilled on a day which is not a business day, such period shall expire or such event or condition shall occur or be fulfilled, as the case may be, on the next succeeding business day.

(d) 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 and obligations hereunder to its nominee or an entity formed by Buyer prior to Closing, including to a joint venture entity directly or indirectly owned by Buyer or its affiliate and Live Nation Worldwide, Inc. or its affiliate, but the originally-named Buyer shall remain liable jointly and severally with such assignee under this Agreement notwithstanding such assignment.

(e) 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, and therefore supersedes and replaces in its entirety that certain Letter of Intent/Offer to Purchase dated April 11, 2024, which shall be of no further force and effect. 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.

(f) Further Assurances. Whenever reasonably requested to do so by the other party, Seller and Buyer shall take such further actions and execute, acknowledge, and deliver any

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and all such further reasonable instruments as may be necessary in order to carry out the intent and purpose of this Agreement.

(g) Execution. This Agreement and any documents executed or initialed in connection herewith may be executed in multiple counterparts, which together shall be construed to be a single document. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

(h) Non-Disclosure. Each of Seller and Buyer agrees to keep all discussions and negotiations with the other, which shall include, without limitation, the existence and terms of this Agreement, and all information obtained by or provided to either Seller or Buyer regarding the Premises or the transaction contemplated by this Agreement, in strict confidence and shall not disclose the same except to Seller's or Buyer's respective attorneys, brokers, consultants, lenders, potential joint venture partners, investors, or professional advisors who are actively and directly participating in the transaction, each of whom will be informed by Seller or Buyer (as applicable) of the confidential nature of this transaction. At or after Closing, Buyer will have the right, at its sole discretion, to publicize the transaction (other than the specific economics thereof) in whatever manner it deems appropriate. Seller agrees that Seller will not, at any time, prepare, circulate or contribute to any press release concerning the transaction contemplated by this Agreement without Buyer's prior written consent (to be granted or withheld in Buyer's sole discretion). The provisions of this paragraph will survive the Closing or any termination of this Agreement. None of the foregoing shall be applicable to any information regarding the transaction contemplated by this Agreement that must or reasonably should be disclosed in connection with [redacted] the Site Plan Application, which information may become public.

(i) 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.

(j) 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.

*[Remainder of Page Intentionally Left Blank]*

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IN WITNESS WHEREOF, Seller and Buyer have caused this Agreement to be executed under seal by their respective duly authorized representatives as of the dates indicated below.

WITNESS:

Michelle Cole
Name: Michelle Cole

SELLER:

385 CONGRESS LLC

By: _____ / 6/26/24
Name: Gordon Reget
Title: Manager
Date

BUYER:

MILE MARKER INVESTMENTS, LLC

_____
Name:

By: _____ / _____
Howard A. Goldenfarb
Its Manager
Date:

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IN WITNESS WHEREOF, Seller and Buyer have caused this Agreement to be executed under seal by their respective duly authorized representatives as of the dates indicated below.

WITNESS:

_____
Name:

SELLER:

385 CONGRESS LLC

By: _____ / _____
Name: Date
Title:

BUYER:

MILE MARKER INVESTMENTS, LLC

_____
Name:

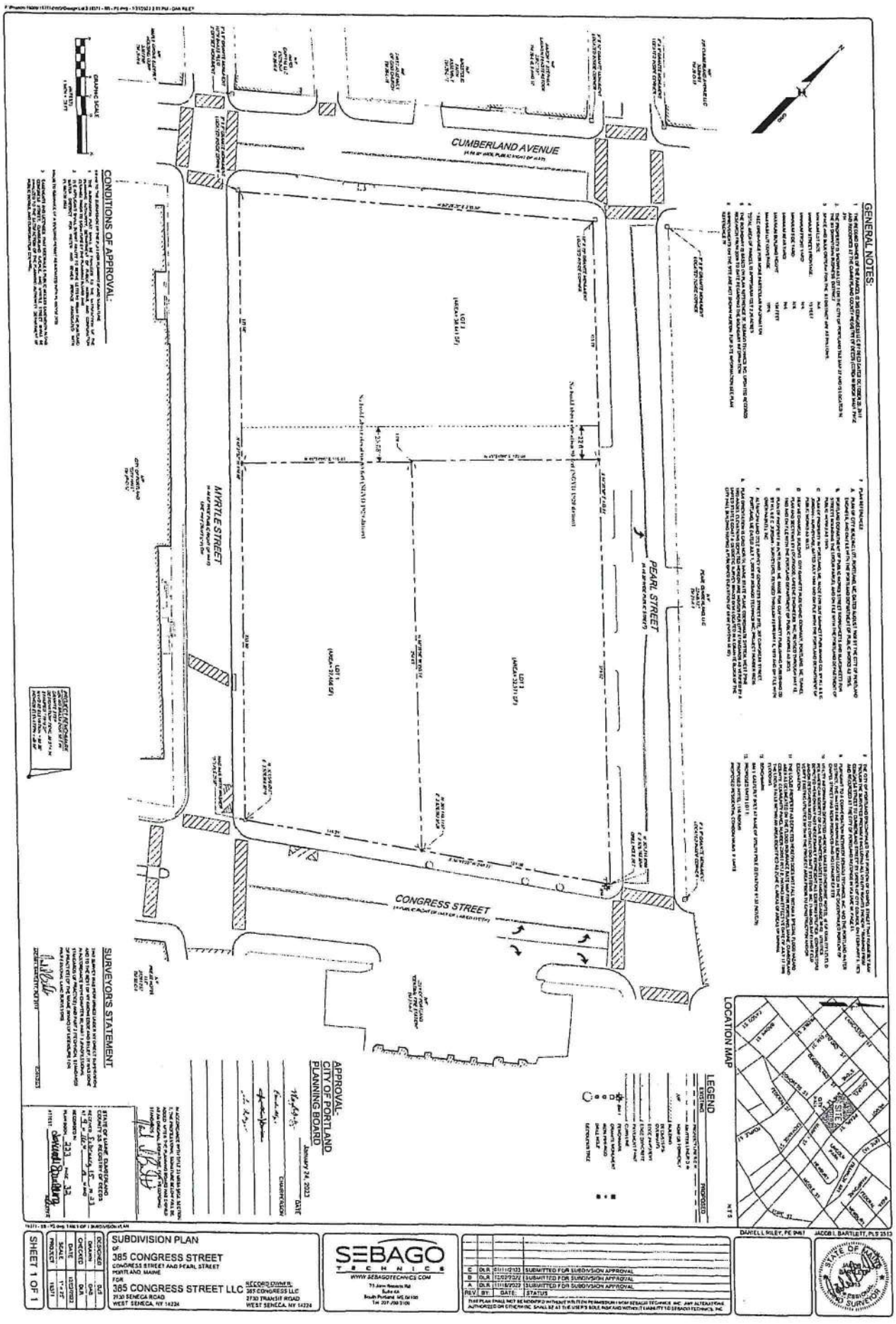
By: DocuSigned by: [signature] / 6/26/2024
6031C1FA3B7C4BF...
Howard A. Goldenfarb Date:
Its Manager

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# EXHIBIT A

Annotated Subdivision Plan
(see attached)

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**EXHIBIT B**

Demolition Agreement
(see attached)

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# DEMOLITION AGREEMENT

This Demolition Agreement (this "Agreement") made as of 17th day of February, 2023, is by and between **385 CONGRESS LLC**, a Maine limited liability company with a mailing address c/o 2730 Transit Road, West Seneca, New York 14224 ("385 Congress"), and **FATHOM CONGRESS, LLC**, a Delaware limited liability company with a mailing address of 80 Exchange Street, Suite 400, Portland, Maine 04101 ("Fathom");

WITNESSETH:

WHEREAS, as of the date hereof, 385 Congress is the owner of certain parcels of real estate known as Lot 2 and Lot 3 as shown on the plan entitled "Subdivision Plan of: 385 Congress Street" prepared by Sebago Technics dated December 2, 2022, revised through January 11, 2023, and approved by the City of Portland Planning Board on January 24, 2023, and recorded in the Cumberland County Registry of Deeds in Plan Book 223, Page 32 (the "Subdivision Plan"); and

WHEREAS, on or about the date hereof, 385 Congress has conveyed Lot 1 as shown on the Subdivision Plan to Fathom; and

WHEREAS, 385 Congress has agreed, in part for the benefit of Fathom, to perform the demolition of the existing building that is located on Lots 1, 2, and 3 (collectively, the "Property"), subject to the terms and conditions in this Agreement, which Agreement is intended to survive the closing of the conveyance of Lot 1 to Fathom.

NOW, THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration paid by Licensee, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

*1.* *Demolition Work.* 385 Congress shall, at its expense, commence the demolition and removal of the so-called "printing press building" from the Property within sixty (60) days after (i) receipt of notice from Fathom requesting the commencement of such demolition or (ii) delivery to Fathom of notice from 385 Congress that 385 Congress intends to commence demolition and removal of the so-called "printing press building" from the Property (the "Demolition Notice"), which demolition and removal work shall be performed in accordance with all of the following (the "Demolition Work"):

(a) The removal of the "printing press building," excluding (i) the foundation wall along Myrtle Street (which 385 Congress may leave as a retaining wall) and (ii), the foundation wall along Congress Street (which 385 Congress may leave as a retaining wall), provided,

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however, that if Fathom notifies 385 Congress in the Demolition Notice that Fathom elects to have the Congress Street foundation wall removed (which shall not include any portion of the tunnel structure), 385 Congress shall remove the Congress Street foundation wall as part of the Demolition Work;

(b) Proper handling, removal and disposal of any Hazardous Materials identified in the ESA and located within the building or its structure, or encountered in the building or its structure in the process of building demolition (but not the soils around or under the building structure) in accordance with applicable laws, rules and regulations;

(c) The Demolition Work shall include only the removal of all foundation walls, slab and related infrastructure (except the foundation wall along Myrtle Street and, unless otherwise elected by Fathom, the foundation wall along Congress Street), systems and other man-made materials associated with the buildings and improvements on the Property

(d) Utilities to be cut and capped in place or capped at the Property boundary, as reasonably determined by 385 Congress according to site conditions;

(e) Installation of construction fencing around the excavation created by the Demolition Work;

(f) Temporary bracing of any foundation walls that are excluded from Demolition Work (including through leaving slab in place as necessary); and

(g) Demolition Work shall not require any soils remediation by 385 Congress or any demolition or other work to the tunnel under Congress Street.

As a condition for the foregoing obligations of 385 Congress to undertake and complete the Demolition Work, Fathom has deposited with Pierce Atwood ("Escrow Agent") a deposit of [redacted] (the "Demolition Deposit"), which funds may be used by 385 Congress to pay for costs and expenses of the Demolition Work, as and when due, and shall be promptly released by Escrow Agent to 385 Congress upon presentation of invoices for Demolition Work. In the event that 385 Congress has not completed Demolition Work with one hundred and twenty (120) days following receipt of the Demolition Notice (the "Demolition Period"), 385 Congress shall have an additional thirty (30) days to cure such default and complete the Demolition Work as specified herein. In the event that the Demolition Work is not completed at the end of the 30-day cure period, 385 Congress shall be required to pay over to Fathom, to be held by Fathom in a segregated escrow account, a reasonable estimate of any additional amounts needed to complete the Demolition Work (in addition to the Demolition Deposit), which amounts, together with the Demolition Deposit shall be released to Fathom and applied as follows: (i) to pay the costs and expenses of Fathom's arranging for and proceeding with completion of Demolition Work, as and when such costs become due, and (ii) the balance, if any, after payment of all such costs of substitute performance, to be paid to 385 Congress, less any out-of-pocket delay damages incurred by Fathom as a result of 385 Congress's failure to complete Demolition Work by the expiration of the Demolition Period.

If Lot 1 is subject to any lease at the time of delivery of a Demolition Notice in accordance with this Agreement, Fathom shall terminate any such lease encumbering Lot 1 and shall render the

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portions of the "printing press building" located on Lot 1 vacant and unoccupied (a) on or before delivery of a Demolition Notice by Fathom to 385 Congress, or (b) as soon as possible following receipt of Demolition Notice from 385 Congress, but in no event later than thirty-five (35) days from receipt of said Demolition Notice; provided, however that the Demolition Period shall be extended by the number of days in excess of five (5) days following Fathom's receipt of Demolition Notice from 385 Congress that Lot 1 is not rendered vacant and unoccupied as required under this paragraph.

385 Congress covenants and agrees with Fathom that it shall not convey or transfer all or any portion of either Lot 2 or Lot 3 or both Lots, or otherwise encumber all or any portion of Lot 2 and Lot 3 if such encumbrance would result in any limitation or material impact on the ability of 385 Congress to undertake and complete the Demolition Work as contemplated hereunder, until 385 Congress shall have completed the Demolition Work on the Property, and any such conveyance, transfer or encumbrance in violation of the foregoing shall be void; provided, however that 385 Congress may grant a mortgage on either Lot 2 or Lot 3 or both Lots so long as any such mortgage grant is made expressly subject to this Agreement and the obligations of 385 Congress as the owner of Lots 2 and 3 hereunder. Upon the completion of the Demolition Work in accordance with the terms of this Agreement, the foregoing prohibition on the sale or transfer of Lot 2 or Lot 3 or both Lots automatically shall terminate and be of no further force and effect. Within five (5) business days written request of 385 Congress to Fathom, Fathom shall execute and deliver to 385 Congress in recordable form an acknowledgment of completion of the Demolition Work on Lot 1 and a release of the foregoing prohibition on conveyance. The foregoing covenant touches and concerns Lot 2 and Lot 3 and shall run with Lot 2 and Lot 3.

2. *Insurance; Release*. 385 Congress shall obtain and maintain commercial general liability coverage during the duration of the performance of the Demolition Work , with reputable and financially sound insurance companies licensed to provide insurance in Maine, in an amount of not less than Three Million Dollars ($3,000,000.00) combined single limit with deductibles of not more than Ten Thousand Dollars ($10,000.00) per occurrence. 385 Congress shall name Fathom as an additional insured on the commercial general liability insurance policy. 385 Congress shall provide Fathom with evidence of the aforementioned insurance coverage, in the form of insurance certificates or copies of the insurance policies if requested by Fathom, prior to 385 Congress's or its employees', agents' or contractors' entry upon Lot 1 to perform the Demolition Work. 385 Congress acknowledges and agrees that Fathom shall in no way be responsible for the security, safety or condition of Lot 1 (other than the termination of any leases encumbering Lot 1 and the vacating of the building as aforesaid), for the oversight of 385 Congress's employees, agents, or contractors operating in or around Lot 1 during the performance of the Demolition Work, all of which shall be at 385 Congress's sole risk.

3. *Subordination*. This Agreement automatically shall be subject and subordinate to the lien of any mortgage now affecting, or that may in the future affect, Lot 1 or any portion thereof, and to the lien of any extension, modification or refinancing of said mortgage (such existing or future mortgage, as the same may be extended, modified or refinanced, the "Mortgage"), on the condition that, in the event of a foreclosure or other action taken under the Mortgage by the holder thereof, this Agreement shall not be disturbed but shall continue in full force and effect until the Demolition Work on Lot 1 is complete and that 385 Congress shall not be named to the foreclosure proceedings unless required by law. The foregoing subordination shall be self-

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operative and no further instrument of subordination shall be required. 385 Congress shall, however, at the request of either Fathom or a mortgage holder promptly execute, acknowledge and deliver an agreement confirming such subordination on the form of subordination agreement customarily used by the mortgage holder.

4. *Release; Indemnity*. Without limitation of any other provision herein, Fathom or its employees, contractors, principals, officers, managers and agents (collectively, the "Fathom Parties") shall be not be liable for, and 385 Congress hereby releases the Fathom Parties from and against, any and all claims for injury or death to any person, or damage to or theft of property or damage to business (including without limitation consequential damages) sustained by 385 Congress or any person claiming by, through or under 385 Congress in connection with the Demolition Work or any part thereof, or due to the happening of any accident in or about the Property or any part thereof in connection with the Demolition Work, or due to any act or omission of 385 Congress or of any employee, contractor, agent, or visitor of 385 Congress. Except to the extent caused by the negligence, willful misconduct or violation of law by any of the Fathom Parties, 385 Congress shall indemnify, defend and hold harmless the Fathom Parties from and against any and all claims, causes of action, demands, penalties, fines, damages (but expressly excluding consequential or punitive damages), and costs, including without limitation reasonable attorneys' and paralegals' fees, incurred or suffered by Fathom or such other related parties related to or arising in connection with the Demolition Work and access to Lot in connection therewith.385 Congress hereby waives any immunity arising under workers' compensation laws with respect to the enforcement of the foregoing indemnity. The foregoing indemnity shall survive termination or expiration of this Agreement.

5. *License for Access to Lot 1*. Fathom hereby grants a license to 385 Congress, and its employees, agents and contractors, to enter upon Lot 1 for purposes of performing the Demolition Work, and only for the purpose of the Demolition Work. Upon the completion of the Demolition Work, the foregoing license automatically shall terminate.

6. *Contract Only*. This Agreement shall be deemed to create only the relationship of contractual counterparties, and shall not be deemed to create any other relationship, including, without limitation, grantor-grantee, landlord-tenant, principal-agent, master-servant, employer-employee or partner-joint venturer.

7. *Compliance with Law*. 385 Congress shall, at its sole cost and expense, materially comply, and shall cause all of its employees, agents and contractors to comply, with all applicable laws, rules, regulations, ordinances, orders or codes with respect to the Demolition Work and with respect to access to Lot 1 by 385 Congress, its employees, agents and contractors in connection therewith.

8. *Entire Agreement*. This Agreement constitutes the entire agreement between the parties hereto with respect to the specific subject matter of this Agreement and supersedes all prior written and oral agreements and understanding relating to the specific subject matter hereof.

9. *Modification*. This Agreement may not be modified or amended except by an instrument in writing signed by the parties hereto. No waiver or consent may be enforced unless such waiver or consent shall be in writing and signed by the party against whom enforcement thereof is sought.

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*10.* *Applicable Law*. This Agreement shall be governed by the laws of the State of Maine.

*11.* *Successors and Assigns*. This Agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective beneficiaries, representatives, administrators, successors and permitted assigns, the covenants and agreements set forth herein touch and concern the land and shall run with Lot 1, Lot 2 and Lot 3. This Agreement shall be recorded in the Registry of Deeds.

*12.* *Notices; Contact Information*. Any notice, demand or other communication that any party hereto may wish or is required to send to the other party hereto under or pursuant to the provisions of this Agreement shall be in writing and sent by certified mail, return receipt requested, Fedex or other reliable national overnight courier, or by email (provided that a copy of the emailed communication shall be sent by one of the other means above within One (1) business day of the emailed communication), addressed to the party for which such notice, demand or other communication is intended at such party's address as set forth below:

If to Licensor:

385 Congress LLC
Attn: Joseph Dasco
2730 Transit Road
West Seneca, New York 14224
413-244-9092
joedasco@comcast.net

With Copy to:

Bernstein Shur Sawyer & Nelson, PA
Attn. Tom Hanson, Esq.
100 Middle Street
P.O. Box 9729
Portland, ME 04104-5029
207-228-7335
thanson@bernsteinshur.com

If to Licensee:

Fathom Congress, LLC
Attn: Marieke Thormann
80 Exchange Street, Suite 400
Portland, Maine 04101
mthormann@fathomcompanies.com

With Copy to:

Pierce Atwood LLP
Attn. Rebecca Greenfield, Esq.

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254 Commercial Street
Portland, ME 04101
rgreenfield@pierceatwood.com

Any address, telephone number or email address may be changed by the applicable party by notice given to other party in the manner set forth above. Notices and communication shall be deemed received on the date shown on the return receipt or the courier confirmation of delivery or the email time stamp (provided that copy is sent by other means as provided above).

*13.* *Counterparts*. This Agreement may be signed in any number of identical counterparts, including without limitation electronic copy, with the same binding effect as if the signatures were on one instrument.

14. *Defined Terms.*

(a) "Hazardous Materials" as used herein shall mean any pollutants, contaminants or hazardous substances (as such terms are defined under CERCLA), pesticides (as such term is defined under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§ 136 et seq.), solid wastes and hazardous wastes (as such terms are defined under the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq.), chemicals, other hazardous, radioactive or toxic materials, oil, petroleum and petroleum products (and fractions thereof), asbestos and asbestos-containing materials, polychlorinated biphenels ("PCBs") or PCB-containing materials, or any other material (or article containing such material) listed or subject to regulation under any law, statute, rule, regulation, order, permit, or directive due to its potential, directly or indirectly, to harm the environment or the health of humans or other living beings.

(b) "ESA" as used herein shall mean

i. That certain Phase I Environmental Site Assessment prepared by St. Germain for Fathom Congress, LLC and Reger Dasco Properties for Commercial Property located at 385 Congress Street, Portland, Maine, dated November 29, 2022 (St. Germain File No.: 4635-0001);

ii. That certain letter regarding No Action Assurance Letter – Voluntary Response Action Program for 386 Congress Street, Portland, Maine, from the State of Maine, Department of Environmental Protection, dated March 30, 2022;

iii. That certain letter regarding Soil Vapor Testing Results prepared by St. Germain for Maine Department of Environmental Protection for 385 Congress Street, Portland, Maine, dated as of February 23, 2022;

iv. That certain Environmental Assessment Report prepared by MAI Environmental for Reger Holdings for 385 Congress Street, Portland, Maine, dated September 21, 2017; and

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v. That certain Phase I Environmental Site Assessment prepared by MAI Environmental for Reger Holdings, LLC for 385 Congress Street, Portland, Maine, dated July 2017.

[Signature Page Follows]

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IN WITNESS WHEREOF the parties hereto have caused this Agreement to be signed by their duly-authorized agents under seal as of the day and year first above written.

WITNESS:

Carol Ann Pagano

Name: Carol Ann Pagano

385 CONGRESS LLC

By: _____

Gordon Reger
Its duly-authorized Manager

STATE OF NEW YORK
COUNTY OF ERIE

On the 13th day of February, 2023, before me personally came Gordon Reger, to me known, who, being by me duly sworn, did depose and say that he resides in East Aurora, New York; that he is the Manager of 385 Congress LLC, the limited liability company described in and which executed the above instrument; and that he signed his name thereto by proper authority of said limited liability company.

Michelle Cole

Notary Public
Print Name: Michelle Cole
Commission Expiration Date: 3/9/2024

Michelle Cole
Notary Public State of New York
Qualified in Erie County
Lic.# 01CO6405363
My Commission Expires 03/09/2024



Demo Agmt

Docusign Envelope ID: 139AC459-E8C5-425F-B570-98EE16D1AB58

FATHOM CONGRESS, LLC

By: _____
James Brady, President

_____
Name:

STATE OF MAINE
COUNTY OF CUMBERLAND

February 17, 2023

Then personally appeared before me the above named James Brady, President of Fathom Congress, LLC, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said limited liability company.

_____
Attorney at Law/~~Notary Public~~
Printed Name: PETER H. KGN CAN

#15768832v3

CC1

# PEARL STREET PARKING EXHIBIT B
# BOTH SIDES OF STREET

LONGER CROSSWALK

MISALIGNED CROSSWALK

7.5' SIDEWALK

3 PARALLEL SPACES

RESTRIPE CENTERLINE WEST OF PARKING LOT ENTRANCE

PEARL STREET

8' SIDEWALK

LIMIT OF SIDEWALK CONSTRUCTION

5' WIDE LAND TAKING ALONG PEARL STREET TO ACCOMODATE PARKING ON BOTH SIDES

EXISTING CURBING TO REMAIN

APPROVED MASTERPLAN BUILDING

MISALIGNED TRAVEL LANES

LONGER CROSSWALK

EXISTING PARALLEL PARKING ON SOUTH SIDE OF PEARL STREET

MISALIGNED CROSSWALK

CUMBERLAND AVENUE

CONDO BUILDING
LOT 2

MUSIC HALL
LOT 3

HOTEL
LOT 1

CONGRESS STREET

DRIVEWAY

HOTEL OUTDOOR SEATING AREA

RF & SS

16" HIGH x 16" WIDE x 6' LONG GRANITE BENCH, TYP.

30" HIGH x 36" WIDE x 48"± LONG MOVEABLE PLANTERS, TYP.

16" HIGH x 16" WIDE x 8' LONG GRANITE BENCH, TYP.

PROPOSED ENTRANCE STAIRS 5' OVER PROPERTY LINE

CURB TIP-DOWN TOO CLOSE CREATING GRADING CONFLICTS

NARROW SIDEWALK

MYRTLE STREET

APPROXIMATE CENTER OF NEAREST MERRILL AUDITORIUM ENTRANCE

APPROXIMATE CENTER OF MERRILL AUDITORIUM ENTRANCE

## LEGEND:

PROPOSED BUILDING LOCATION

RELOCATED BUILDING TO ACCOMODATE STREET PARKING

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

CC2

# PEARL STREET PARKING EXHIBIT A
# ONE SIDE ONLY

7.5' SIDEWALK

POTENTIAL FOR 4 ADDIIONAL PARKING SPACES IF LEFT TURN LANE IN ELIMINATED

3 PARALLEL SPACES

8' SIDEWALK

LIMIT OF SIDEWALK CONSTRUCTION

EXISTING STRIPING TO REMAIN

EXISTING PARALLEL PARKING ON SOUTH SIDE OF PEARL STREET

PEARL STREET

CUMBERLAND AVENUE

CONGRESS STREET

MYRTLE STREET

**MUSIC HALL**
**LOT 3**

**CONDO BUILDING**
**LOT 2**

**HOTEL**
**LOT 1**

12'

12'

8'

10'-0"

APPROXIMATE CENTER OF NEAREST MERRILL AUDITORIUM ENTRANCE

APPROXIMATE CENTER OF MERRILL AUDITORIUM MAIN ENTRANCE

RF & SS

16" HIGH x 16" WIDE x 6' LONG GRANITE BENCH, TYP.

30" HIGH x 36" WIDE x 48"± LONG MOVEABLE PLANTERS, TYP.

16" HIGH x 16" WIDE x 8' LONG GRANITE BENCH, TYP.

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

D

**Evidence of State or Federal Approvals**

Not Applicable. No State or Federal approvals are required for this project at this time.

The project is a phase of development identified in the approved Master Plan of Development for 385 Congress Street approved by the Planning Board on August 9, 2020 (reference City of Portland Planning Department Project Number PL-001970-2022); and a subdivsion approval by the Planning Board on January 24, 2023 (reference City of Portland Planning Departmetn Project Number PL-2332-2023).

E

ZONING ANALYSIS Relevant Zone(s) B3

All Projects:

| | Required | Proposed |
|---|---|---|
| Lot Size | none | 38,441 sf |
| Area Per Dwelling Unit | none | N/A |
| Minimum Street Frontage | none | 155/230/177ft |
| Front Yard Minimum | none | N/A |
| Front Yard Maximum Build-to-zone | 0 - 5 ft | 0' (Cumberland and Pearl), Exception on Myrtle* |
| Rear Yard | none | 0' |
| Yard Right | none | N/A |
| Yard Left | none | N/A |
| Side Street Setback | none | - |
| Step Back | none | none |
| Maximum Lot Coverage | none | N/A |
| Minimum Lot Coverage | none | N/A |
| Maximum Height | 180'/250' | 54 ft 1 in |
| Open Space | none | none |
| Maximum Impervious Area | none | 100% |
| Pavement Setback | none | N/A |
| Floor Area Ratio | none | N/A |
| Off Street Parking Spaces | none | 0 |
| Loading Bays | none | 2 |
| Building Length % (min) | 60% | 98% |
| Build-to Percentage (min) | 100% | 100% |
| Other 3 | | |

* see exception table

AVERAGE GRADE OF
LOT 3 PARCEL: 50.6 +/-

LOT 3

LOT 2

LOT 1

STABILIED CONSTRUCTION ENTRANCE, SEE DETAIL

CATCH BASIN INLET
PROTECTION, TYP.

*PROJECT BENCHMARK*
*USC&G BRASS DISK SET IN GRANITE STEP*
*DESIGNATION: TIDAL 38 STA 84*
*STAMPED: "1919/38"*
*NAVD 88 ELEVATION = 68.95'*
*NGVD29 ELEVATION = 69.66'*

GRAPHIC SCALE
0 5 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY: | DATE: | STATUS: |
|---|---|---|---|
| A | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# OVERALL GRADING PLAN

OF:

# PORTLAND MUSIC HALL

244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
235 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
365 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET C-200

19371-05 OAG.dwg, TAB:C-200 OVERALL GRADING PLAN

F:\Projects\19000\19371-05\DWG\Design\19371-05 OAG.dwg - 4/2/2025 12:10 PM - DYLAN STUART

F

Site Plan Standards Assessment

The Proposed project has been designed in compliance with the site plan standards as outlined in 13.6 of the land use code. Please see the submittal materials for how each of the specific standards are met.

G

**Existing and Proposed Easements or Covenants**

**Existing Easements**

The First Ammended Subdivsion Plan attached to this application shows "Setback Covenants" created over portions of Lots 1, 2 and 3 in the deed conveying Lot 1 from 385 Congress, LLC to Fathom Congress, LLC and recorded in the Cumberland County Registry of Deeds in book 39992 pages 249-253. The Setback Covenants restrict construction of buildings, above elevation 80'. The language of the covenants taken from the above referenced deed are as follows:

Grantor and Grantee hereby further agree and covenant as follows (the "Setback Covenants"):

1. Grantor, its successors and assigns, covenants and agrees with Grantee, its successors and assigns, with respect to Lot 2, and for the benefit of Lot 1, that no building shall be constructed or located on Lot 2 closer than twenty-seven and one-half (27.5) feet from the boundary between Lot 2 and Lot 1 above elevation eighty (80) feet (NVGD 1929 datum).

2. Grantor, its successors and assigns, covenants and agrees with Grantee, its successors and assigns, with respect to Lot 3, and for the benefit of Lot 1 on the Subdivision Plan, that no building shall be constructed or located on Lot 3 closer than twenty-three and eight one hundredths (23.08) feet from the boundary between Lot 3 and Lot 1 above elevation eighty (80) feet (NVGD 1929 datum).

3. Grantee, its successors and assigns, covenants and agrees with Grantor, its successors and assigns, with respect to Lot 1, that:

   a. no building shall be constructed or located on Lot 1 closer than twenty-seven and one-half (27.5) feet from the boundary between Lot 1 and Lot 2 above elevation eighty (80) feet (NGVD 1929 datum); provided, however that notwithstanding the

foregoing any building constructed on Lot 1 may extend by up to six (6) feet for a total width of eighty (80) feet into the 27.5 foot set back area from Lot 2 referenced above up to elevation 100 feet (NGVD 1929 datum); and

b. no building shall be constructed or located in Lot 1 closer than twenty-six and ninety-two one hundredths (26.92) feet from the boundary between Lot 1 and Lot 3 above elevation eighty (80) feet (NGVD 1929 datum); provided, however, that notwithstanding the foregoing any building constructed in Lot 1 may extend by up to twelve (12) feet into the 26.92 foot set back area from Lot 3 referenced above up to elevation 100 feet (NGVD 1929 datum).

The foregoing Setback Covenants touch and concern Lot 1, Lot 2, and Lot 3 and shall run with the land comprising Lot 1, Lot 2 and Lot 3.

The Elevations depicted are NGVD29 per City Standards as verified by a United States Coast & Geodetic Survey brass disk located in a granite block of the City Hall building having a published elevation of 69.99' (NAVD88 68.95').

**Proposed Easements**

## Proposed Easements

The following items provide draft language for proposed easements shown on the Lot 3 Easement Plan anticipating that final language and easements will be coordinate and submitted to the City of Portland prior to Certificate of Occupancy based on the final construction of the Lot 3 Portland Music Hall Project

**Sidewalk Easement (Myrtle Street)**

The purpose of the easement granted herein by the Owner (Grantor) is to grant public pedestrian access in, on, and over the easement area which shall function as an ADA-compliant sidewalk for pedestrian, bicycle and similar non-motorized pedestrian uses subject, however, to such rules or ordinances that the Grantee may adopt from time to time in the interests of public safety. Notwithstanding the foregoing, wheelchair and emergency vehicles as well as snow removal equipment shall be permitted in accordance with applicable federal and/or state laws regulating accessibility for such devices, vehicles, or equipment. The City of Portland (Grantee) shall have the right, but not the obligation, to install, maintain, replace and repair the sidewalk for public use and enjoyment on and over Easement Area. Maintenance and repair responsibilities within the Easement Area shall belong solely to the Grantor, its successors and assigns. It shall be the responsibility of the Grantor to remove snow and ice from said Easement Area and to otherwise comply with all laws, rules, regulations, and ordinances governing the removal of snow and ice therefrom. Grantee shall have the right but not the obligation to repair or maintain the Easement Area when Grantee, in its sole discretion, deems such repairs or maintenance necessary to ensure public safety.

The Easement Area shall, as provided and permitted herein, be maintained as a sidewalk for the uses set forth and described herein and the Grantor shall not use or permit any use, condition, or state of disrepair that would be contrary to or otherwise inhibit such uses.

**EXCEPTION TABLE**

| Item | Standard:<br>Cite Ordinance or Technical Manual Standard | Cite Standard Language:<br>Cite specific language of applicable Ordinance or Technical Manual Standard | Exception Being Sought:<br>Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet. | Justification for Exception:<br>Address specific exception criteria, if applicable, and document reasons for the waiver request. |
|---|---|---|---|---|
| 1 | Land Use Ordinance Section 7.3 Table 7-C Build-to-zone | **Build-to Zone (BTZ).** The area on a lot, measured perpendicular to the front and/or corner side lot line, where all or a portion of the applicable façade of a structure must be located, measured as minimum and maximum range from the lot line. Placement of a building at a build-to zone must not violate corner clearance requirements.<br><br>Build-to Zone (BTZ) in this district is 0'-5' | **7.6.4 Setbacks B. Build-to zone exceptions 6.**<br>*Section 7.6.5.B.6. Where build-to zone requirements apply to a lot with multiple street frontages, the two streets with the highest traffic volume shall meet the established standard. In the case of a lot with two street frontages and a corner, buildings shall be sited at the street corner and both frontages shall meet the required build-to zone. In the case of a lot with three or more street frontages encompassing two or more corners, buildings shall be sited at the corners, and the two streets with the highest traffic volume shall meet the established standard. Build-to zone requirements shall not apply to any frontage beyond the two with the highest traffic volumes.*<br><br>The applicant requests to utilize this exception to the Build-to-zone distance that will allow for increased space between the building and street along Myrtle Street. | The proposed project has frontage on three streets. The two streets with the highest traffic are Cumberland Avenue and Pearl Street.<br><br>The building is located within the Build-to Zone on Cumberland Ave. and Pearl St. |
| | | | | |

**Financial Capability**

The Applicant (Portland Music Holdings, LLC) is a partnership between Portland Performance Ventures, LLC and Live Nation Entertainment, Inc. The Project will be self-financed.

Live Nation Entertainment is a publicly traded company with a market capitalization of $32 billion as of December 1, 2024. As a publicly traded company financial statements and annual reports are available online at https://investors.livenationentertainment.com/sec-filings/annual-reports.

Included in this section is a letter from Live Nation committing to fund the project.

Docusign Envelope ID: BBE9825C-2CD3-4CAB-B0C0-4A9F33093509

LIVE NATION®

Jordan Zachary
Global President, Venue Nation

JordanZachary@livenation.com
9348 Civic Center Drive, Beverly Hills CA 90210

April 10, 2025

**Taylor Colbeth**
City of Portland Office of Planning and Urban Development
389 Congress Street
Portland, ME 04101

Ms. Colbeth,

Reference is made to that certain proposed new live entertainment venue on a certain parcel of land comprising approximately 38,500 square feet located at 244 Cumberland Avenue in Portland, Maine (the "Venue") to be developed, owned, managed and operated by Portland Music Holdings, LLC ("PM Holdings"), an indirect controlled subsidiary of Live Nation Entertainment, Inc., a Delaware corporation ("LNE").

The financing for the Venue will be provided to PM Holdings by LNE. Live Nation Worldwide, Inc., a wholly owned U.S. operating subsidiary of LNE and controlling member of PM Holdings, provides business services to LNE and to PM Holdings and will distribute required funds to PM Holdings as set forth in the applicable development agreement and limited liability company agreement. LNE holds sufficient funds in its daily operation accounts to satisfy all required financing. Evidence of the liquidity and capital resources of LNE is available in LNE's Quarterly and Annual filings with the Securities and Exchange Commission, which filings include financial statements, and are available at https://investors.livenationentertainment.com/sec-filings.

If you have any questions or concerns regarding the above, please contact me at JordanZachary@livenation.com.

Sincerely,

Live Nation Entertainment, Inc.

DocuSigned by:
By: _____
A14BE0D2766E4B5...
Jordan Zachary
Its: Global President, Venue Nation

cc: Todd Goldenfarb
Ryan Vangel

## Technical Capability

The developer has compiled a highly qualified team for the proposed project.

The proposed music venue is to be developed by Portland Music Holdings, LLC. Please see the additional information included as part of this exhibit.

**Architect**
Architectural services for the proposed development are to be provided by D'Agostino Izzo Quirk Architects.

**D'Agostino Izzo Quirk Architects** (DAIQ) is a full-service architectural firm with over 30 years of experience. They have extensive experience in architecture, master-planning, construction detailing and project management with a focus on urban design and the making of public places. They integrate the aspirations of their clients with the public purpose of creating places for people that enhance the life of cities. DAIQ recently completed the MGM Music Hall, a 5,000 capacity theater adjacent to Fenway Park and part of the Lansdowne Entertainment District in Boston, MA. A majority of the consultants who worked on the MGM Music Hall will be participating in the Portland Music Hall development.

**Civil/Survey/Permitting**
Civil engineering, surveying, and permitting services are being provided by Sebago Technics.

**Sebago Technics, Inc.** (STI) is a multi-disciplined engineering firm with 40 years of experience, that offers a wide range of services specializing in land development, planning, permitting, and engineering design services. We maintain a staff of multi-disciplinary professionals to provide services in the areas of general civil engineering, road and utility infrastructure design, construction management, permitting, landscape architecture, soil science, wetlands science, land surveying, and environmental services.

Please see the attached resumes.

## Live Nation Entertainment

We believe that we are the largest live entertainment company in the world, connecting over 765 million fans across all of our concerts and ticketing platforms in 49 countries during 2023. We believe we are the largest producer of live music concerts in the world, based on total fans that attend Live Nation events as compared to events of other promoters, connecting over 145 million fans to more than 6,800 artists at over 50,000 events in 2023. Live Nation owns, operates, has exclusive booking rights for or has an equity interest for which we have a significant influence in 373 venues globally, including *House of Blues®* music venues and prestigious locations such as *The Fillmore®* in San Francisco, *Brooklyn Bowl®* in New York City, the Hollywood Palladium in Los Angeles, the Moody Center© arena in Austin, the Ziggo Dome in Amsterdam, 3Arena in Dublin, Royal Arena in Copenhagen and Spark Arena in Auckland. We believe we are one of the world's leading artist management companies based on the number of artists represented. Our artist management companies manage music artists and acts across all music genres.

We believe we are the world's leading live entertainment ticketing sales and marketing company, based on the number of tickets we sell. Ticketmaster provides ticket sales, ticket resale services and marketing and distribution globally through *www.ticketmaster.com* and *www.livenation.com* and our mobile apps, other websites and numerous retail outlets, distributing over 620 million tickets through our systems in 2023. Ticketmaster serves approximately 10,000 clients worldwide across multiple event categories, providing ticketing services for leading arenas, stadiums, festival and concert promoters, professional sports franchises and leagues, college sports teams, performing arts venues, museums and theaters.

We believe our global footprint is one of the world's largest music advertising networks for corporate brands and includes one of the world's leading ecommerce websites based on a comparison of gross sales of top internet retailers.

Our principal executive offices are located at 9348 Civic Center Drive, Beverly Hills, California 90210 (telephone: 310-867-7000). Our principal website is *www.livenationentertainment.com*. Live Nation is listed on the New York Stock Exchange, trading under the symbol "LYV."

# Portland Performance Partners (RAM / Mile Marker Investments) Representative Projects

**OFFICE**

Citicorp Park, South Portland, ME
100 Arboretum Drive, Newington, NH
121 Middle Street, Portland, ME
One Union Street, Portland, ME
415 Congress Street, Portland, ME
50 Monument Square, Portland, ME
57 Exchange Street, Portland, ME
36 Exchange Street, Portland, ME
53 Exchange Street, Portland, ME
97A Exchange Street, Portland, ME
Centervale Farm, Scarborough, ME
100 Research Drive, Wilmington, MA
Audubon Commerce Center, Wakefield, MA
Atlantic Place Commerce Center, South Portland, ME
24 City Center, Portland, ME
44 Exchange Street, Portland, ME
472 Forest Avenue, Portland, ME
468 Forest Avenue, Portland, ME
178 Middle Street, Portland, ME
45 Exchange Street, Portland, ME
49 Exchange Street, Portland, ME

**INDUSTRIAL**

234 Ballardvale St., Wilmington, MA
10 Industrial Drive, Chelmsford, MA
33 Upton Drive, Wilmington, MA
900 Middlesex Turnpike, Billerica, MA
267 Lowell Road, Hudson, NH
900 Middlesex Turnpike Building 6, Billerica, MA
3/5 Carlisle Road, Westford, MA
Saco Self Storage, Saco, ME
Southeast Salem Business Park, Salem, NH
Bartlett St. Commerce Center, Marlborough, MA
40 Industrial Way, Canton, MA
445 Simarano Drive, Marlborough, MA

**INDUSTRIAL, CONTD.**

Leominster Commerce Center, Leominster, MA

96 High Street, N. Billerica, MA
9475 NW 13th Street, Miami, FL
9800 NW 17th Street, Miami, FL
25 Industrial Way, Chelmsford, MA
North Andover Commerce Center, North Andover, MA
Portland Commerce Center, Portland, ME
734 Forest Street, Marlborough, MA
267 Boston Road, Billerica, MA
16 Elizabeth Drive, Chelmsford, MA

**RESIDENTIAL**
5815 N. Bay Road, Miami Beach, FL
5334 La Gorce Drive, Miami Beach, FL
5951 Alton Road, Miami Beach, FL
700 River, Austin, TX
RiverPlace, South Portland, ME
Foreside Common, Falmouth, ME
Wildwood on the Cape, Cape Elizabeth, ME
The Atlantic House on Scarborough Beach, Scarborough, ME

**RETAIL & HOSPITALITY**
The Maine Outlet, Kittery, ME
Freeport Village, Freeport, ME
The Yorkshire Outlet, Doncaster, England
Netto Outlets, Givat Brenner, Israel
Factory Outlets, Verviers, Belgium
The Longfellow, Portland, ME

# David C. Sliwinski,
Principal AIA



**Education**
Harvard University, Master of Architecture in Urban Design, 1995
University of Minnesota, Bachelor of Architecture, 1981

**Professional Registration**
Registered Architect in Massachusetts

**Honors & Awards**
- Los Angeles Conservancy Preservation Award 2018 – Rose Bowl, California Preservation Foundation Award 2018 – Rose Bowl
- Boston Preservation Alliance Award for Excellence Fenway Park
- Urban Land Institute & American Planning Association Award 1991 & ASLA Planning Award 1990 – Grand Central District Masterplan
- Regional Award, Royal Institute of Architects of Ireland 1990, IFSC

Mr. Sliwinski has over forty-two years of professional experience. Since joining D'AIQ in 1992, he has played a major role in the design of many of the firm's sports facilities, specialty retail, entertainment and master planning projects - these include the Rose Bowl, Fenway Theater & Park Expansion, various ballparks, and the Broadway District Masterplan at Yale University. David has experience working on several green projects including The Rose Bowl and Fenway Music Hall. He provides direct oversite of the project to implement it's goals and objectives. His relevant technical experience on the below projects is with the design and construction of large assembly building types from conception thru construction and close out.

**Fenway Park Expansion/Improvements and Fenway MGM Music Hall, Boston, MA. - LEED Gold**
Principal in Charge: Design and construction for new theater and expansion to Fenway Park: Project includes new 5,100 seat theater and expansion of Fenway Park with overlook bar area, new commissary/kitchens and 500-person function space. Oversaw design and construction of the 2008 and 2009 projects which included right and left field pavilion level expansion and upgrades, new day of game suites, right field party deck, bowl repairs and Jeano building Coke deck & terrace level with herb garden.

**Citizen Bank Park, Philadelphia, PA**
Principal in Charge: Masterplan, design and construction of renovations to the Citizen Bank Park Stadium: Project includes new premium seating areas and amenities, concourse and seating bowl improvements, and life safety and infrastructure upgrades.

**Rose Bowl, Pasadena, CA - CAL Green**
Principal: Master Plan for expansion and renovations to the Rose Bowl Stadium: Project include new Pavilion, premium seating areas, field level access and improvements. Upgrades to concourse concessions, restrooms and amenities. Additional improvements include new entry gates, entry plaza, perimeter fence, life safety and infrastructure upgrades.

**PNC Park, Pittsburg, PA**
Design Principal: Masterplan, design and construction of renovations to the PNC Park Stadium: Project includes new concourse food/beverage, seating/amenities. Future improvements include premium seating areas, specialty food/beverage, suite improvements and infrastructure upgrades.

**Oracle Park,** San Francisco, CA
**Clifton Heights Urban Renewal Study,** Cincinnati, Ohio
**Broadway District Masterplan, Yale University,** New Haven, CT
**New York Univ. Law School Library,** New York, NY
**Newton Country Day School,** Newton, MA
**The Block at Orange,** Los Angeles, CA
**Madrid Xanadu,** Madrid, Spain
**Custom House Docks Development,** Dublin, Ireland
**Assembly Row,** Somerville, MA
**Spitalfield Masterplan,** London, England
**Grand Central District Masterplan,** New York, NY

# CHRISTOPHER P. TAYLOR, PE

Project Manager



Mr. Taylor joined Sebago Technics in 2020 as a Senior Project Engineer. Mr. Taylor has over 10 years of experience in the civil engineering consulting and site development industry, including municipal engineering, site design, project management, and construction oversite. He has been involved with projects beginning at the planning phase through construction completion and has prepared construction contract documents and bidding oversight for several projects. He has coordinated projects administered by municipal officials in different departments including engineering, water resource protection, public works, planning, and parks and recreation departments.

Chris Taylor has been a managing projects since he joined the Sebago Team in 2020. Chris was promoted from Project Manager/Senior Project Engineer to full-time Project Manager in 2023. Chris is responsible for the overall development, budget, schedule, and approval of projects while maintaining strong relationships and communications with clients and regulators.

## EXPERIENCE

**Maine Community Bank – Westbrook, ME:** Lead engineer for the redevelopment of a bank in an existing strip mall. Prepared construction documents for the demolition of the existing development and construction of a bank with a covered drive through. Responsibilities included layout, grading, and utility design, and construction administration.

**Meetinghouse Hill Road and Utility Improvements – South Portland, ME:** Design engineer and construction administration for a project involving combined sewer separation, water line and storm drainage replacement, road and intersection reconstruction, and signalized intersection modifications. Responsibilities include roadway layout, grading, water and storm drain design, bidding assistance, and construction administration.

**Gorham Outpost – Gorham, ME:** Engineer of record for a mixed used development with multiple buildings consisting of restaurant, retail, and residential components.

**Portland Volvo – Scarborough, ME:** Design of a parking expansion for a car dealership. Design included porous pavement to treat stormwater within the parking area to maximize the parking lot expansion.

**Abbott Laboratories Expansion – South Portland, ME:** Engineer of record for a 18,000 s.f. building expansion and site amenities. Developed a balanced solution to provide emergency fire access to the back of the building while avoiding impacts to nearby wetlands of special significance.

**Comfort Inn – South Portland, ME:** Site design of a new lobby entrance to accommodate a drop off loop with porte-cochere and ADA compliant parking spaces and access route.

**Kennebec Water District Operation and Administration Facility – Waterville, ME:** Design and construction administration for a new operation facility. Responsibilities include grading, stormwater management, water and sewer service design, bidding assistance, and construction administration.

**Summit Terrance Condominiums – South Portland, ME:** Design engineer for a twenty-unit condominium development. Developed a cost-effective solution to improve existing drainage issues for abutting properties at the request of the city.

**Kettle Cove Road Reconstruction and Drainage Improvements – Cape Elizabeth, ME:** Design engineer for a road reconstruction project including full-depth road reconstruction and mill and overlay sections. Utility improvements include water main replacement, extending the storm drainage systems through the project site, and improvements to the storm drainage outfall on Crescent Beach.

## EDUCATION

University of New Hampshire
Durham, NH

B.S., Civil Engineering, 2011

## REGISTRATIONS

Professional Engineer: Maine, Connecticut, Massachusetts

## CERTIFICATIONS

Northeast Transportation Training Certification Program (NETTCP) – Concrete Inspector and HMA Paving Inspector

## MEMBERSHIPS

Tau Beta Pi - National Engineering Honor Society

SEBAGO TECHNICS

# THARYN S. NEIN-LARGE, RLA

## Maine Licensed Landscape Architect



Tharyn joined Sebago Technics in 2023 as a Landscape Architect. A graduate of the University of Massachusetts with a Master's Degree in Landscape Architecture, Tharyn has an impressive professional background spanning both Massachusetts and Maine. Proficient in 3D renderings, permitting processes, and construction oversight, he is a valuable asset to our multi-disciplinary team.

Tharyn is a licensed landscape architect in both Maine and Vermont, showcasing his commitment to maintaining the highest standards in his field. He is an active member of the Portland-South Portland Waterfront Alliance, further illustrating his dedication to community engagement and professional collaboration. Tharyn's passion for creating sustainable and aesthetically pleasing landscapes aligns seamlessly with Sebago Technics' vision.

## EXPERIENCE

*Prior to his employment at Sebago Technics, Tharyn's professional experience includes:*

**Minuteman Regional Vocational Technical High School, Lexington/Concord, MA:** Advanced conceptual site design and layout plans into construction documents. Performed Construction Administration.

**Attleboro High School – Attleboro, MA:** Worked with team to create conceptual site design and layout plans. Advance project construction documents.

**UNE IIPE-COM Building – Portland, ME:** Led conceptual site design and layout plans. Developed construction documents. Advanced project through permitting and on through to construction administration.

**Frank J. Wood Bridge – Topsham/Brunswick, ME: With TYLin Engineers.** Advanced design and construction documents of riverside parks on each side of the Androscoggin River for Maine DOT.

**NMMC (Northern Maine Medical Center) Assisted Living Facility – Fort Kent, ME:** Led conceptual site design and layout plans. Developed construction documents and facilitated construction administration.

**Tyler Technologies, Orono Campus – Orono. ME:** Developed conceptual Site design and layout plans. Advanced plans into construction documents. Facilitated construction administration for landscape design.

**Hannaford Cooperate Headquarters - Scarborough, ME:** Led conceptual site design and layout plans. Developed construction documents. Advanced project through permitting and construction administration.

**Harold Alfond Center for Cancer Care – (Augusta) Belgrade, ME:** Facilitated site design of hospital addition. Renovating existing and developing conceptual site and layout plans to match the existing design language. Advanced design into construction documents and construction administration.

**Sandwich Public Safety Complex – Sandwich MA:** Led conceptual site design and layout for a new 5 apparatus bay fire station with police station. Advanced project through Town permitting and on through to construction phase.

## EDUCATION

University of Massachusetts, Amherst
Master's Degree, Landscape Architecture, 2015

Graduate Certificate in
Cultural Landscape Management, 2015

A.S. in Turfgrass Management, 2001

University of Southern Maine, Portland
Bachelor of Arts, History, 1998

## REGISTRATIONS

Landscape Architect
ME: LAR5267; VT: 125.0133779

## CERTIFICATIONS

Waterfront Edge Design Guidelines
Professionals Course

## MEMBERSHIPS

Waterfront Alliance Portland & South Portland Maine - Portland, ME (2023)

Waterfront Edge Design Guidelines Associate (WEDG) - New York, NY (2022)

Town of Palmer Conservation Commission, Chair - Palmer, MA (2015-16)

SEBAGO TECHNICS

CONSIGLI
Est. 1905

# CONSTRUCTION MANAGEMENT PLAN 11/06/24
# PORTLAND MUSIC HALL
# PORTLAND, MAINE

## PROJECT DESCRIPTION

The following construction management plan, combined for the Portland Music Hall, has been prepared by Consigli Construction Co., inc who will be the construction manager for this project and will be responsible for the implementation and management of this plan.

The new ground up music facility located on Myrtle Street will focus on entertainment. The building will include a performance hall, as well as all the required support spaces.

While it is likely that small details of this plan will be updated over the course of construction, it is expected that the overall logistics, controls, and general requirements will remain the same. Modifications/updates to this plan will be submitted to the City for review and approval prior to beginning work affected by the changes.

## CONSTRUCTION MANAGEMENT PRINCIPALS AND INTENT

The intent of the construction management plan is to minimize impacts to neighboring properties and buildings, maintain safe pedestrian and vehicular access around the project site, and maintain a safe and secure construction site. Tantamount to this is maintaining open lines of communication between the Consigli Construction, Consultants, Portland Misic Holdings, the City, and the Public to ensure that any concerns/problems that may arise during the construction period can be adequately addressed.

## DEVELOPMENT REVIEW OF CONSTRUCTION MANAGEMENT PLAN

The construction management plan is intended to be a living document that will be continually maintained and updated by Consigli Construction as necessary to achieve the objectives of the plan and maintain safety/security. Continuous updates will allow Consigli Construction to be proactive in addressing concerns associated with the construction project.

## PERFORMANCE GUARANTEES, INSPECTION FEES, PRECON MTGS AND PERMITS

Prior to scheduling a preconstruction meeting for the projects or obtaining City-required permits, Portland Misic Holdings, and Consigli will meet the requirements in Section 14.11, “Post-Approval Procedures,” and Article 16, “Impact Fees,” of the City’s Land Use Code.

Anticipated permits for the project include the following:

- Street Opening, Street Occupancy, and Utility Connections: Construction activity in the public right-of-way will conform to the City's Rules and Regulations for Excavation Activity in the Public Right-Of-Way. Water connections will comply with the Portland Water District's written requirements, Natural gas connections will comply with Unitil's written requirements, and sewer/stormwater connections will comply with the City's written requirements.

- Blasting: Blasting is not anticipated on these projects. Should it be required, it will comply with Article 22, "Regulation of Explosives" in the City's Land Use Code and Section 3.7, "Standards for Blasting and Regulation of Explosives" in the City's Technical Manual.

- Building Permit: The project will require a building permit, which will conform to the applicable sections of the Maine Uniform Building and Energy Code (MUBEC) and the written requirements of the City's Permitting and Inspections Department.

**CONSTRUCTION ADMINISTRATION AND COMMUNICAITON**

Similar to the projects currently under construction on the campus, Portland Misic Holdings and Consigli will develop a communication plan for the projects to make sure that construction operations are performed in accordance with the City's requirements. Consigli will coordinate with abutters and users of adjacent buildings to keep them informed of their schedule, particularly for activities that may cause a significant disruption such as significant noise, vibrations, or dust. Consigli's construction management plan includes:

- Construction signage posted around the project site that includes the appropriate contact information for Consigli. These signs will be updated and moved, if necessary, as construction progresses.
- Provide the City with contact information for the appropriate Portland Misic Holdings personnel and Consigli personnel that can be contacted at any time if necessary.

**CONSTRUCTION SCHEDULE**

Construction for the project is anticipated to start in the Fall of 2025 and is anticipated to be substantially complete by the Summer of 2027.

Work hours and material deliveries will be in accordance with the City's requirements as listed in Section 17-18, "Construction Activities for Building Permit" and Section 25-129, "Noise, Dust and Debris" of the City's Code of Ordinances. Anticipated laydown area/material storage area is indicated on the construction management plan included in this application package.

**SECURITY AND PUBLIC SAFETY**

Prior to soil disturbance associated with the project, the site will be enclosed by a temporary chain-link and jersey barrier construction fence (see limits shown on the Logistics Plan). To

reduce traffic disruption, primary access will be via one way entrance from Myrtle Street into the jersey barrier off loading zone while construction traffic will exit onto Cumberland Ave through the project site (right turn only as much as possible). The temporary fence is only expected to be modified as needed to accommodate utility tie in work.

Gated access from each of these entrances will be provided, which will be locked outside of construction hours (a Knox box will be provided for off-hours emergency vehicle access). The site itself will follow applicable IBC and NFPA sections related to site safety and security. If requested, a fire safety and access plan can be developed by Consigli and submitted for review by the City prior to the start of the project.

**PERMITTING AND TRAFFIC CONTROL**

Construction activity in public streets will be limited to utility tie ins. This work will occur in accordance with Chapters 24, 25 and 32 of the City's Code of ordinances. Permits required for these connections will be obtained by the Consigli and the sitework subcontractor prior to starting the work.

Traffic Control Plan: Consigli and the sitework contractor will take care to minimize the impact to the flow of traffic on the adjacent streets. Where necessary, traffic will be controlled to protect the safety of contractors, pedestrians, and vehicles. The traffic controls include temporary signage and barriers where necessary, as well as flaggers if/when traffic is temporarily reduced to one lane during excavation, backfill and paving operations. ADA compliance for sidewalks will be maintained at all times.

**SITE MANAGEMENT AND CONTROLS**

Consigli will be responsible for maintaining jobsite safety at all times. This includes regular trash/debris removal, recycling of and cleaning/maintaining dumpsters, and the area around them. If necessary, Consigli will provide rodent control conforming to Chapter 22 of the City's Code of Ordinances. Furthermore, Consigli will ensure that applicable IBC and NFPA requirements for maintaining jobsite safety and security are met at all times.

Noise and Dust controls, including (where applicable) street sweeping, truck pads, and watering bare soils shall conform to the City's requirements as listed in Section 17-18, "Construction Activities for Building Permit" and section 25-129, "Noise, Dust and Debris" of the City's Code of Ordinances.

Snow removal within the project site will be the responsibility of Consigli in accordance with section 25-173 of the City's Code of Ordinances. Snow removal activities may occur outside of normal working hours to ensure that these requirements are met and safe means of travel are provided at all times.

**EROSION CONTROL AND TREE PROTECTION**
Prior to soil disturbance, Consigli will implement erosion control measures conforming to Maine Department of Environmental requirements. Details and placement of erosion control measures are generally shown on the drawings included with this application package.

**CONTRACTOR STAGING AND MATERIAL STORAGE**
Anticipated laydown area/material storage area is indicated on the construction management plan included in this application package. Deliveries will be coordinated by Consigli to minimize disturbance to abutters and traffic and spaced out as much as possible to avoid queuing of vehicles onto roadways.

**CONTRACTOR PARKING**
Minimal parking will be available on site for parking during the project and on-street parking will not be available for construction workers. Coordination of, and transportation to, off-site parking areas will be the responsibility of Consigli and the subcontractors.

**CONSTRUCTION DE-WATERING**
Construction dewatering may be necessary on the project, particularly during foundation excavation. It is anticipated that sumping and pumping will be adequate to control groundwater on the project.

## Logistics Items

- **A** Site Gates
- **B** Site Office Trailer
- **C** Temp. Restrooms
- **D** Crane Placement
- **E** Construction Dumpster

## Site Signage

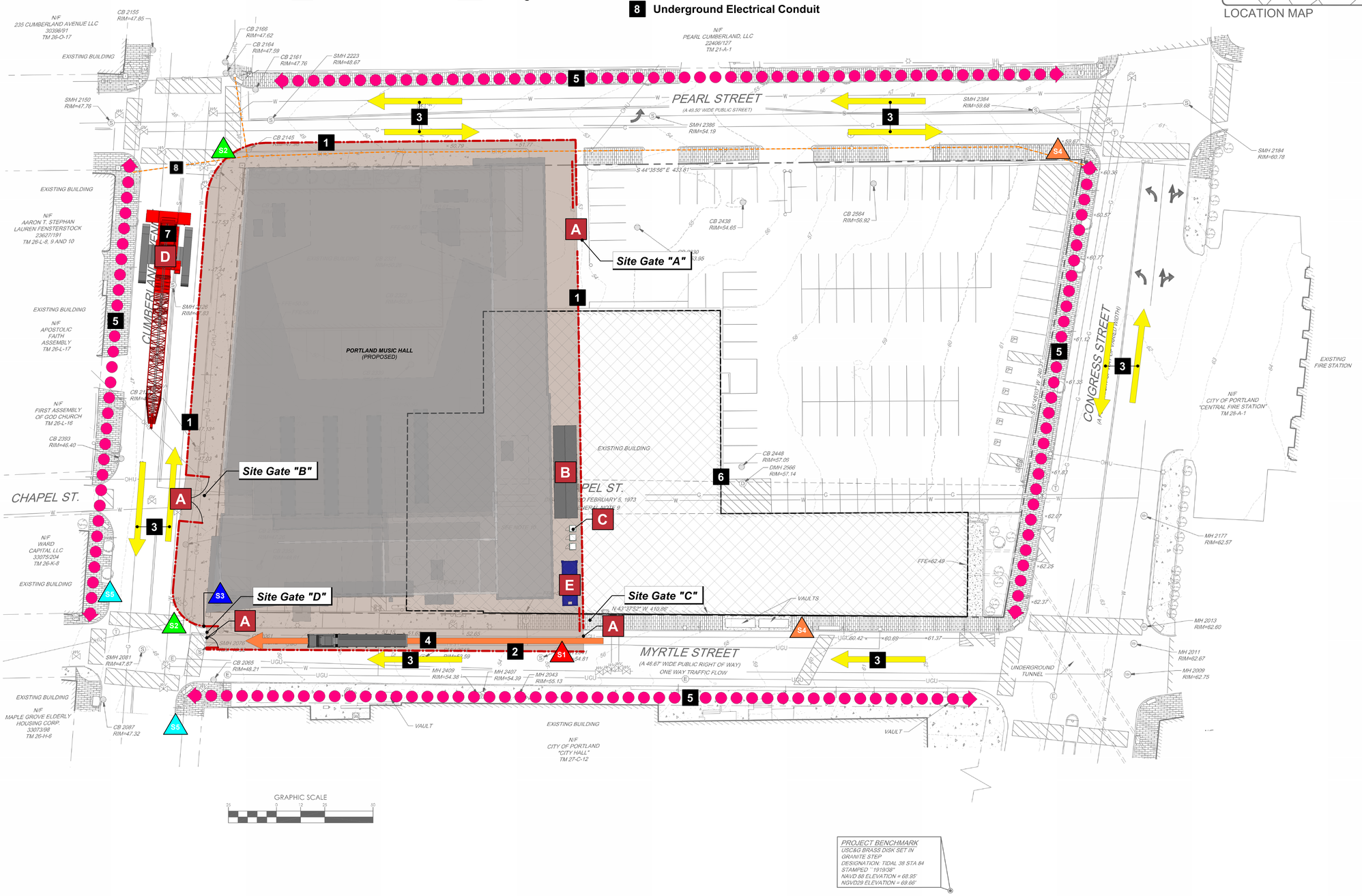
- **S1** Project Signage
- **S2** Sidewalk Closed
- **S3** Right Turn Only *For Construction Traffic Only*
- **S4** Pedestrian Detour
- **S5** Construction Vehicles Entering

## Keynotes

1. 6'-0" Chain-Link Fence w/ Scrim & Erosion Control *(typical)*
2. Jersey Barriers w/ Chain-Link Fence & Scrim
3. General Traffic Flow
4. Construction Loading Zone
5. Pedestrian Routing via Existing Sidewalks
6. Existing Building Removed, No Open Excavation
7. Cumberland Ave. Closures for Crane Placements *(as necessary)*
8. Underground Electrical Conduit




LOCATION MAP N.T.S.





CONSIGLI
Est. 1905

72 Sumner Street
Milford, MA 01757


# Portland Music Hall

385 Congress St

Keyplan:

| Issue No. | Issue Date | Description |
|---|---|---|
| | | |

# Construction Management Plan

Drawing Scale: As indicated

Job No. #3388

# 001

2/11/2024 3:23:42 PM

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Impact on Surrounding Street Systems 13-13.6.1 (A)

The proposed project involves the construction of a 65,340 square foot music venue with a capacity of 3,310 attendees on Lot 3 of the 385 Congress Street Subdivision. A Traffic Movement Permit for the 385 Congress Street Master Development Plan was issued on February 24, 2023. Enclosed within this current Lot 3 application is a memorandum documenting the trip generation comparison of the proposed program compared to the TMP allocated trips.

The current approved Master Plan and TMP Lot 3 buildout proposed to include a market rate condominium development with associated commercial space. The proposed Music Hall would replace the previously proposed 179 residential units and 6,900 square feet of commercial space. This revised Lot 3 program results in a decrease in the calculated AM Peak Hour trip generation and an increase in the PM Peak Hour. However, this increase is represented based on an assumed arrival schedule of venue employees and event attendees overlapping with the PM Peak Hour of the surrounding roadway network (between 4-6 PM). The previous analysis identified all generated trips to be destined to and from the site entrances. Since no parking is to be provided on site, the estimated trips would naturally be destined for parking areas in the general area of the site. Since events occur in the evening hours it is expected that an adequate parking supply in public or private parking lots/garages as well as on-street parking would be available and divert traffic throughout the downtown area. This would be similar to how traffic is presently generated (proportional to capacity) by other venues in the Downtown area which do not have dedicated off-street parking such as Merrill Auditorium, the State Theater, Portland House of Music or Aura.

Therefore, the analysis which focused on projected vehicle operations directly entering and exiting the site in the AM and PM Peak hours and resultant off-site mitigation required as part of the previously approved TMP would still be valid for this revised development program. The introduction of the music venue in place of previously identified residential units and commercial retail space would not be expected to result in alternative conclusions to those presented in the completed traffic studies during the critical hours.

The mitigation in the TMP related to Lot 3, referred to in the approval as *Phase 3 (Condo B)* includes the installation of a new traffic signal system at the intersection of Cumberland Avenue & Pearl Street to meet the City's Traffic Signal Policy and Guidance Manual and construction of ADA compliant curb ramps. With a new traffic signal in place, there would be the potential to implement phasing and timing strategies related to events. Proposed improvements also include reconstruction of all sidewalks adjacent to the site.

Impacts to Myrtle Street or Pearl Street resulting from a truck or bus entering/exiting the proposed loading areas will be managed by on-site personnel and with temporary traffic control measures as necessary. Any disruptions will occur only to stop or shift traffic while a vehicle is actively entering/exiting the loading area providing safe operations for both the travelling public and venue-related vehicles. The venue will arrange for off-site parking for all vehicles that will not fit inside the loading docks.

Access and Circulation 13-13.6.1 (B)

1. *In general*

a. The proposed project involves the re-development of a fully developed property currently used for parking. Access to the site will be primarily pedestrian. The existing curb cuts on Cumberland are to be removed. There will be two internal parking areas for buses and tractor-trailers that will be utilized during events. No other internal vehicular circulation will occur on site. The bus parking area will be accessed from Myrtle Street and the tractor-trailer parking area will be accessed from Pearl Street.

b. The proposed development site is comprised of a portion of a developed City block with sidewalks. The proposed project will result in improvements to the existing sidewalk and provide for better pedestrian circulation along Cumberland Avenue. The proposed development will maintain the existing public sidewalk that is located along Cumberland Avenue, Pearl Street, and Myrtle Street. The main entrance to the building will be at the corner of Cumberland Avenue and Myrtle Street.

c. All points of access and egress to the site have been located to avoid conflicts with existing turning movements and traffic flows.

2. *Loading and servicing*
   The proposed project has been designed to provide safe access for delivery vehicles servicing the site. Consistent with developments in similar settings in Portland, loading and service vehicle access is proposed internally to the building, accessed from Myrtle and Pearl Street.

   Loading and servicing access will not impede vehicle circulation, bicycle or pedestrian movement, or parking. Reference the plan set for loading area placement.

3. *Curb and sidewalks*
   The proposed project site has existing city sidewalks on its street frontages. These sidewalks will be improved as part of the project. All proposed public sidewalk improvements will be designed based on the standards of the City Technical Manual.

   All street curbing will consist of new or reset existing granite curb installed in accordance with the details found in the City Technical Manual.

Public Transit 13-13.6.1(C)

1. A transit shelter is not required.

   The site is located along an existing public transit route with a transit shelter located on Congress Street between Temple Street and Elm Street, less than ¼ mile from the site.

   The site is near to a number of public transit bus lines. The project is located on Cumberland Avenue with direct access to METRO Bus route 8. Congress Street has direct access to METRO Bus routes 1, 2, 4, 5, 7, 8, 9a & 9b and South Portland Bus Service routes 21, 24a & 24b. The nearest METRO Bus stop on Cumberland is located between Myrtle and Stone Street and on Congress Street at City Hall.

2. Not applicable

Off-Street Parking 13-13.6.1 (D)

1. *Vehicular Parking:* Not applicable. There is no parking requirement for the proposed project.

2. *Bicycle Parking:* Bicycle parking for the venue will be provided along Cumberland Avenue and Myrtle Street (13 racks). Please see the plan set for the proposed locations for bicycle parking.

3. *Snow Storage:* There are no snow storage areas on site for the proposed project. Sidewalks will be cleared of snow in accordance with the City of Portland ordinance.

# Transportation Demand Management Plan
# Portland Music Hall
# Lot 3, 385 Congress Street Subdivision (244 Cumberland Avenue)
# Portland, Maine

## Introduction

This Transportation Demand Management (TDM) is prepared for the proposed Portland Music Hall to be located at 244 Cumberland Avenue, which is being developed as Lot 3 of the 385 Congress Street Subdivision. Lot 3 is the northerly portion of the site bounded by Cumberland Avenue, Myrtle Street and Pearl Street. The Portland Music Hall is proposed to consist of a 65,340 square foot (SF) venue with a capacity for 3,310 guests.

This plan is based on the standards outlined in the City of Portland Technical Manual – Section 17.3 and other guidance provided on the City of Portland TDM & Parking Management website.

## Transportation Narrative

Two limited access driveways are provided for the site. First, there is a proposed drive on the easterly side of Myrtle Street that will be for authorized event related bus traffic only. The second driveway is located on the westerly side of Pearl Street serving a loading dock for tractor-trailers for event staging. If additional space is needed for event busses or trucks, off-site parking will be coordinated for any vehicle that does not fit inside the loading docks. No other vehicular parking is to be developed on the site.

The music hall's location, on the east side of the Downtown District and just north of the Old Port District, will promote public transit, ridesharing, walking, and biking as a significant mode of transportation for event staff and attendees. The site is within walking distance of numerous hotels, restaurants and other hospitality-based businesses that would cater to event attendees.

The site is also located near several public parking facilities including the Top of the Old Port Lot, Elm Street Garage, Cumberland County Parking Garage, and Temple Street Garage as well as on-street parking in the surrounding area. With no vehicular parking provided on-site, attendees and event staff who do arrive via personal vehicle would utilize these numerous options, similar as to how those visiting venues and businesses in the Downtown area do today. Since the venue will host events in the evening hours, it is expected that ample parking at these locations and others will be available.

The subject block and immediate area are well-served by public transit. Approximately two blocks to the southwest is the METRO PULSE at Elm Street (Downtown Transportation Center), the hub for METRO where bus routes, #2, #4, #5, and the Husky Line are serviced. METRO bus routes #1, #7, #8, #9A, #9B and the Biddeford Saco Old Orchard Beach (BSOOB) Transit 60 Green line can be accessed along Congress Street within one block of the site. The BSOOB Turnpike Zoom Express bus can also be accessed at Monument Square, approximately 1,000 feet from the site. The former South Portland Bus (now operated

by Metro) routes 21, 24A, and 24B can be accessed along Congress Street roughly two blocks southwest of the site.

### TDM Coordinator

The music hall will designate a full-time employee as their Transportation Demand Management (TDM) coordinator. This employee will be responsible for actively promoting and educating on alternative forms of transportation for both employees and event attendees. The coordinator will be responsible for both monitoring and updating the TDM Plan as necessary and completing the City's annual TDM Reporting Form.

### Employee Survey & Baseline TDM Data

The music hall's TDM Plan will include a transportation survey prior to implementation and on an annual basis for the employees of the musical hall. The survey will consist of questions to gain an understanding of travelers to the site commuting means and the effectiveness of the TDM strategies. The survey will include questions such as:

- Mode of transportation (car, bus, walking, taxi/rideshare, bicycle, etc.) for commute
- Participation in carpooling if commuting by car
- Variation in travel by season or day
- Vehicle ownership/vehicle availability for commute
- Parking location and cost
- Bus commute barriers
- Bicycle-walking barriers
- Incentive impacts

This survey will be conducted annually among employees and will be electronically tabulated. This information will be used to document baseline TDM data, with a focus on estimated modal split and typical vehicular occupancy to develop specific strategies and adjust the TDM plan as needed.

### TDM Targets

Because of the discussed Downtown location of the venue and no proposed on-site parking, TDM targets and related strategies would focus on modal split and occupancy of vehicles of commuting staff. Trip generation for the music hall, detailed in the trip generation estimation submitted with the project site plan review application, was estimated using the expected number of employees and attendees during a full capacity event as provided by the proposed music hall operators. The total vehicular trip volumes were established based upon the assumed number of employees and attendees, a car modal split of 82%, and an occupancy rate of 2.3 persons per vehicle for event attendees and 1.0 persons per vehicle for employees.

As discussed in the narrative section, because no on-site parking is provided, all personal vehicle trips to the site would be traveling to the surrounding area parking areas.

To set an appropriate reduction target, it is necessary to first complete the initial survey period and observe baseline employee commuting patterns to determine if the base assumptions are accurate. With this information, a reduction of 10% in the use of personal vehicles would be targeted, or a modal split of 72% if compared to the estimated 82%. The baseline modal split would be established through the initial TDM employee surveys. Typical occupancy can also be established through the survey and would be realized through increased carpooling of employees.

### Transportation Demand Management Strategies

TDM strategies will be aimed at both music hall employees and attendees to reduce individual vehicular trips to the area and promote a mix of transportation options. Employee strategies will seek to reduce employee vehicle trips to the surrounding area, especially during typical peak traffic hours.

Strategies may include:

- All sidewalks surrounding the site will be improved including areas of wider sidewalk around the venue entry points to manage large volumes of pedestrians and minimize overflow into adjacent streets. In combination with the other proposed developments within the 385 Congress Street subdivision, all new pedestrian facilities would be provided on the surrounding City block, including locations that presently lack accessible accommodations.

- Bicycle parking will be provided in several areas surrounding the site.

- The TDM Coordinator will actively promote and coordinate ridesharing among employees. This can be done through employee area bulletin boards and employee email lists. Employees who actively rideshare/carpool will be recognized for their efforts on newsletter announcements and/or bulletin board postings in the employee areas. The music hall operator will inform and encourage employees to utilize the GOMAINE program and its full complement of benefits.

- Information regarding the METRO transit services will be made available to employees. Employee orientation will include information related to discounted METRO passes which will be made available to employees.

- It is noted that several METRO routes end service potentially after the conclusion of an event. Consideration could be given for a contribution to METRO to support future expanded operations.

- For event attendees, the venue's website will provide detailed information on options for transportation to the area. This would include links to maps of available parking facilities, information on Transit Routes, and options for travelling from transportation facilities such as the Portland Transportation Center and Portland International Jetport.

## TDM Plan Monitoring

The TDM Plan will be monitored over time to determine its ongoing effectiveness. The TDM Coordinator will be responsible for this monitoring and making changes as necessary to better meet the TDM goals.

The coordinator will complete annually the City of Portland TDM Reporting Form based on received survey data and other observations containing the following information:

- Transportation mode used by employees (Mode share) obtained from TDM Surveys
- Summary and analysis of completed TDM Surveys
- Comparison to previous surveys (after initial survey)
- Proposed changes to TDM Plan

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CIVIL ENGINEERING ▪ SURVEYING ▪ LANDSCAPE ARCHITECTURE

# *Memorandum*

**19371-05**

**To:** Dan Riley, PE, CFM, Sebago Technics

Chris Taylor, PE, Sebago Technics

**From:** Derek Caldwell, PE, Sebago Technics

Griffin Steinman, EI, Sebago Technics

**Date:** December 18, 2024

**Subject:** Preliminary Trip Generation
Portland Music Hall
365 Congress Street, Portland

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The purpose of this memorandum is to summarize the estimated trip generation for the proposed Portland Music Hall at 365 Congress Street and evaluate any potential modifications that will be needed to the existing Traffic Movement Permit (TMP) for the overall 385 Congress Street project.

## Existing Traffic Movement Permit

The mixed-use 385 Congress Street project development was granted a Traffic Movement Permit (TMP) as part of the Master Development Plan approval dated February 24, 2023. This approval was for the following proposed buildout:

- Lot 1 – 156 Room Hotel and 9 Residential Units
- Lot 2 – 110 Residential Units and 4,000 square feet (SF) of ground floor retail
- Lot 3 – 179 Residential Units and 6,900 SF of ground floor retail

## Proposed Development

The subject project now proposes to develop Lot 3 as a 65,340 SF music venue with a 1,976 seated capacity and an extended floor space capacity of 3,310. This would fully supplant the 179 Residential Units, and 6,900 SF of commercial/retail space previously proposed as part of the approved Master Development Plan. The proposed development program for Lots 1 and 2 have not changed.

## Trip Generation

The revised trip generation in this memorandum utilizes the methodologies used for the previously completed the Traffic Movement Permit Application dated September 6, 2022, by Sebago Technics, Inc. (Sebago) as well as the follow up revised Section 7 Traffic Study dated December 15, 2022.

***Permitted Trip Generation***

Trip generation was originally completed utilizing the 11th Edition of the Institute of Transportation Engineers (ITE), *Trip Generation Manual.* Table 1 outlines the land use codes (LUCs), and independent variables used for the calculation. Residential and retail space for all 3 lots was combined for the purpose of trip generation calculations.

**Table 1 – Permitted Trip Generation Land Use Summary**

| *Use* | *Land Use Code* | *Independent Variable* | *Setting/Location* |
|---|---|---|---|
| **Residential** | 222 – Multifamily Housing (High-Rise) | 297 Dwelling Units | Dense Multi-Use Urban |
| **Hotel & Restaurant** | 310 – Hotel | 156 Rooms | Dense Multi-Use Urban |
| **Residential Retail** | 932 – High-Turnover (Sit-Down) Restaurant | 11,560 Square Feet | General Urban/Suburban |

The following tables detail the trip generation calculation for each of the above listed land use codes as utilized in the TMP and repeated here for reference.

**Table 2 – ITE Trip Generation**
**LUC 222 – Multifamily Housing (High-Rise)**
**297 Dwelling Units**

| *Time Period* | *Average Rate per Dwelling Unit* | *Trips* | *Entering** | *Exiting** |
|---|---|---|---|---|
| **AM Peak Hour of Adjacent Street (7 – 9 AM)** | 0.24 | 71 | 29 (41%) | 42 (59%) |
| **AM Peak Hour of Generator** | 0.26 | 77 | 8 (10%) | 69 (90%) |
| **PM Peak Hour of Adjacent Street (4 – 6 PM)** | 0.20 | 59 | 30 (50%) | 29 (50%) |
| **PM Peak Hour of Generator** | 0.15 | 45 | 30 (66%) | 15 (34%) |

**Distributions for LUC 222 as previously permitted. Distributions were updated by ITE 12/9/22.*



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**Table 3 – ITE Trip Generation**
**LUC 310 – Hotel**
**156 Rooms**

| *Time Period* | *Average Rate per Room* | *Trips* | *Entering* | *Exiting* |
|---|---|---|---|---|
| **AM Peak Hour of Adjacent Street (7 – 9 AM)** | 0.31 | 48 | 19 (39%) | 29 (61%) |
| **AM Peak Hour of Generator** | 0.33 | 51 | 26 (51%) | 25 (49%) |
| **PM Peak Hour of Adjacent Street (4 – 6 PM)** | 0.21 | 33 | 16 (44%) | 18 (56%) |
| **PM Peak Hour of Generator** | 0.34 | 53 | 16 (30%) | 37 (70%) |

**Table 4 – ITE Trip Generation**
**LUC 932 – High Turnover Sit-Down Restaurant**
**11,560 SF**

| *Time Period* | *Average Rate per 1,000 SF* | *Trips* | *Entering* | *Exiting* |
|---|---|---|---|---|
| **AM Peak Hour of Adjacent Street (7 – 9 AM) *** | - | - | - | - |
| **AM Peak Hour of Generator** | 13.68 | 158 | 90 (57%) | 68 (43%) |
| **PM Peak Hour of Adjacent Street (4 – 6 PM)** | 9.05 | 105 | 64 (61%) | 41 (39%) |
| **PM Peak Hour of Generator** | 16.35 | 189 | 96 (51%) | 93 (49%) |

**It was assumed that if the commercial space is programmed as a high-turnover sit-down restaurant(s) that they would be closed in the AM Peak Hour of Adjacent Street.*

The permitted total unadjusted trip generation for the development is shown in Table 5, found by summing the values shown in Table 2 through Table 4.

**Table 5 – Total Permitted ITE Trip Generation**

| *Time Period* | *LUC 222* | *LUC 310* | *LUC 932* | *Total* |
|---|---|---|---|---|
| **AM Peak Hour of Adjacent Street (7 – 9 AM)** | 71 | 48 | - | 119 |
| **AM Peak Hour of Generator** | 77 | 51 | 158 | 286 |
| **PM Peak Hour of Adjacent Street (4 – 6 PM)** | 59 | 33 | 105 | 197 |
| **PM Peak Hour of Generator** | 45 | 53 | 189 | 287 |

As demonstrated in Table 5, the trip generation summarized in the TMP was estimated to generate a total of 286 trips and 287 trips in the AM and PM peak hours of the generator, respectively.

***Proposed Trip Generation***

The revised development program modifying the development on Lot 3 is summarized in Table 6.



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**Table 6 – Revised Development Program Summary**

| Building | Multifamily Units | Hotel Rooms | Commercial Square Footage | Music Venue Square Footage |
|---|---|---|---|---|
| Myrtle Street Tower (Lot 1) | 9 | 156 | 660 | - |
| Pearl Street Tower (Lot 2) | 110 | - | 4,000 | - |
| Venue (Lot 3) | - | - | - | 65,340 |
| **TOTAL** | **119** | **156** | **4,660** | **65,340** |

The number of hotel rooms for the development has not changed, therefore the trip generation from the original TMP Application remains unchanged. Trip generation for the revised total of 119 multifamily dwelling units is shown in Table 7.

**Table 7 – ITE Trip Generation**
**LUC 222 – Multifamily Housing (High-Rise)**
**119 Dwelling Units**

| Time Period | Average Rate per Dwelling Unit | Trips | Entering* | Exiting* |
|---|---|---|---|---|
| AM Peak Hour of Adjacent Street (7 – 9 AM) | 0.24 | 29 | 7 (25%) | 22 (75%) |
| AM Peak Hour of Generator | 0.26 | 31 | 3 (10%) | 28 (90%) |
| PM Peak Hour of Adjacent Street (4 – 6 PM) | 0.20 | 24 | 17 (73%) | 7 (27%) |
| PM Peak Hour of Generator | 0.15 | 18 | 12 (66%) | 6 (34%) |

**Revised distributions from original TMP submission. Distributions were updated by ITE 12/9/22.*

Trip generation for the revised amount of retail (restaurant) space is shown in Table 8.

**Table 8 – ITE Trip Generation**
**LUC 932 – High Turnover Sit-Down Restaurant**
**4,660 SF**

| Time Period | Average Rate per 1,000 SF | Trips | Entering | Exiting |
|---|---|---|---|---|
| AM Peak Hour of Adjacent Street (7 – 9 AM) * | - | - | - | - |
| AM Peak Hour of Generator | 13.68 | 64 | 36 (57%) | 28 (43%) |
| PM Peak Hour of Adjacent Street (4 – 6 PM) | 9.05 | 42 | 26 (61%) | 16 (39%) |
| PM Peak Hour of Generator | 16.35 | 76 | 39 (51%) | 37 (49%) |

**It was assumed that if the commercial space is programmed as a high-turnover sit-down restaurant(s) that they would be closed in the AM Peak Hour of Adjacent Street.*

Music Venue

The 65,340 SF Portland Music Hall will have a maximum capacity of approximately 3,310 people between the ground, Mezzanine, and second level hosting a variety of events on a year-round basis. This capacity includes standing room only space beyond the seated capacity of 1,976. No parking is proposed on-site as part of the project.



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Typically, the ITE *Trip Generation Manual* would be utilized to estimate trip generation as detailed previously, but given a venue is not provided with a land use code, the proposed operational data for the venue is utilized instead. The following data was utilized to estimate trip generation for the venue portion of the revised development:

- Types and schedule of events
- Attendance of events (both employees and event attendees)
- Mode of transportation and vehicle occupancy

As previously stated, the peak capacity of the venue is 3,310. The venue operators expect that a total of 250 employees will work when an at capacity event occurs. It is expected that a more typical average event would represent approximately 70% capacity and have a slightly reduced staff level of 175 employees.

**Table 9 – Venue Event Utilization**

| *Event Type* | *Average Attendance* | *Number of Employees* |
|---|---|---|
| **Peak** | 3,310 | 250 |
| **Average** | 2,317 (70%) | 175 |

For evaluating traffic impact, the anticipated operations of a peak (maximum capacity) event were reviewed. Given the nature of the site, classified by the operator as a small market venue with a low percentage of people walking and biking to the event, it was assumed that most traffic to the venue would be vehicle trips.

To establish expected modal splits, assuming a majority of vehicle trips, the 2018 City of Portland *Impact Fee Study* was referenced. This study provided a modal trip breakdown for non-residential land uses within the of 82% vehicle, 2% transit, and 16% non-motorized (bike/pedestrian) one-way trips. This mode share rates were then applied to the event capacity of 3,310 attendees and 250 employees, to estimate the development person trips summarized in Table 10.

**Table 10 – Venue Mode of Travel One-Way Person Trips**

| *Mode* | *Mode Share* | *Attendee Trips* | *Employee Trips* |
|---|---|---|---|
| **Vehicle** | 82% | 2,714 | 205 |
| **Transit** | 2% | 66 | 5 |
| **Walk/Bike** | 16% | 530 | 40 |
| **Total** | **100%** | **3,310** | **250** |

As seen in Table 10, peak (maximum capacity) event is estimated to generate 2,714 person trips by attendees and 205 person trips by employees that would use vehicles to travel to/from the site and surrounding area. To determine the number of vehicular trips to the site, an occupancy rate of 2.3 persons per vehicle was assumed for attendee trips. This was observed by parking demand at a similar



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use sized site by the development team. A rate of 1.0 person per vehicle was utilized per employee trip. After applying these rates, Table 11 summarizes the number of vehicles generated to the venue by a peak event.

**Table 11 – Venue Event Vehicular Trips**

| *Attendee Trips* | *Employee Trips* | *Total Vehicles* |
|---|---|---|
| 1,180 | 205 | 1,385 |

As seen in Table 11, there are an estimated 1,385 one-way vehicular trips generated by the venue for a peak (maximum capacity) event. The proposed trip generation was distributed hourly based on the proposed operational data from a typical event schedule. Most event schedules are expected to follow the following timing notes, assuming a show start time of 7:30 PM:

- Production staff and stagehands (approximately 15% of the total employees) arrive in the morning for an approximate of 6:00 AM to 2:00 AM. The remaining event staff (85%) arrive between 5:00 PM and 7:00 PM.
- Doors open at 7:00 PM. Shows typically start at 7:30 PM and conclude around 11:00 PM.
- It was estimated that 10% of guest traffic would travel to the area two hours before door opening, 70% of traffic would arrive during the hour before door opening, and the remaining 20% would arrive after doors had opened.
- It was assumed that most guest traffic would exit the venue immediately upon release, with 10% during both the hour preceding and succeeding the event ending. Most non-production staff employees (75%) will exit between 11:00 PM and 12:00 AM, with a portion (10%) exiting after midnight. The production staff (15%) would leave around 2:00 AM.

Utilizing the above information, hourly trip generation for the venue is shown in Table 12.



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**Table 12 – Venue Hourly Trip Generation**

| Time Start | Time End | Employee Trips | | | | Guest Trips | | | | Total Trips |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Enter % | Enter | Exit % | Exiting | Enter % | Enter | Exit % | Exit | |
| 5:00 AM | 6:00 AM | 15% | 31 | 0% | 0 | 0% | 0 | 0% | 0 | 31 |
| 6:00 AM | 7:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 7:00 AM | 8:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 8:00 AM | 9:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 9:00 AM | 10:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 3:00 PM | 4:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 4:00 PM | 5:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| **5:00 PM** | **6:00 PM** | **42.5%** | **87** | **0%** | **0** | **10%** | **118** | **0%** | **0** | **205** |
| 6:00 PM | 7:00 PM | 42.5% | 87 | 0% | 0 | 70% | 826 | 0% | 0 | 913 |
| 7:00 PM | 8:00 PM | 0% | 0 | 0% | 0 | 20% | 236 | 0% | 0 | 236 |
| 8:00 PM | 9:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 9:00 PM | 10:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 10:00 PM | 11:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 10% | 118 | 118 |
| **11:00 PM** | **12:00 AM** | **0%** | **0** | **75%** | **153** | **0%** | **0** | **80%** | **944** | **1097** |
| 12:00 AM | 1:00 AM | 0% | 0 | 10% | 21 | 0% | 0 | 10% | 118 | 139 |
| 1:00 AM | 2:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 2:00 AM | 3:00 AM | 0% | 0 | 15% | 31 | 0% | 0 | 0% | 0 | 31 |
| | **TOTAL** | 100% | 205 | 100% | 205 | 100% | 1180 | 100% | 1180 | 2770 |

Based on the table above, estimated peak hour vehicular trip generation for the venue is summarized in Table 13.

**Table 13 – Venue Vehicular Trip Generation**

| Time Period | Trips | Entering | Exiting |
|---|---|---|---|
| **AM Peak Hour of Adjacent Street (7 – 9 AM)** | N/A* | N/A* | N/A* |
| **AM Peak Hour of Generator (5 – 6 AM)** | 31 | 31 | N/A* |
| **PM Peak Hour of Adjacent Street (4 – 6 PM)** | 205 | 205 | N/A* |
| **PM Peak Hour of Generator (11 PM – 12 AM)** | 1097 | N/A* | 1097 |

**Negligible trip generation*

The total revised estimated trip generation for the overall 385 Congress Street development, incorporating the above presented trip generation for the venue in place of the previously proposed Lot 3 uses in shown in Table 14. Note that because the estimated peak hour trip generation for the proposed venue will occur well after the typical PM Peak of the adjacent street (between 4 and 6 PM) as well as after the peak of trips estimated to be generated by the proposed residential and hotel use, the comparison of trips is limited to the peak hour of the adjacent street.



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**Table 14 – Total Revised Trip Generation**

| Time Period | Previous | Proposed | | | | | Change +/- |
|---|---|---|---|---|---|---|---|
| | Permitted | LUC 310 | LUC 222 | LUC 932 | Music Venue | Total | |
| AM Peak Hour of Adjacent Street | 119 | 48 | 29 | - | - | 77 | -42 |
| PM Peak Hour of Adjacent Street | 197 | 33 | 24 | 42 | 205 | 304 | +107 |

## Conclusion

As can be seen the revised development program presents a decrease in estimated trip generation in the AM Peak Hour and an increase of 107 trips in the typical PM Peak Hour of the Adjacent Street. Peak hourly trip generation of the venue is expected to occur at the conclusion of an event, typically late in the evening, when all attendees and a portion of staff would be leaving at the same time, compared to the arrival period for an event when arrival of staff and attendees would be distributed across the early evening hours leading up to an event start.

Based on the presented trip generation calculation it is our opinion that the proposed Music Hall would not require further revisions to the typical Traffic Impact Analysis, focused on capacity and queuing at area intersections, that was completed as part of the Traffic Movement Permit process for the overall 385 Congress Street development. That analysis focused on the typical AM and PM Peak Hours of the adjacent street, when traffic would be estimated to be highest for the development and the surrounding roadways. The introduction of the music venue in place of previously identified residential units and commercial retail space would not be expected to result in alternative conclusions to those presented in the completed traffic studies during the critical hours.

The required mitigation from the permit was primarily focused on improvements to the signalized intersections in the immediate vicinity of the site at Congress Street & Pearl Street, and Cumberland Avenue & Pearl Street. The need for mitigation at these intersections was identified by physical project impacts to these intersections and not any specific traffic capacity constraints.

Since no parking is to be provided on site, the above-estimated trips would naturally be destined for parking areas in the general area of the site. Since events occur in the evening hours it is expected that an adequate parking supply in public or private parking lots/garages as well as on-street parking would be available and divert traffic throughout the downtown area and not necessarily travelling directly to the site as would be represented for a typical traffic generator that would have self-contained parking.



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# Temporary Traffic Control Plan

for

Portland Music Hall

**Purpose:** The purpose of this plan is to detail temporary traffic control procedures for truck and bus arrival before an event.

**Truck Procedures (Pear Street):** Equipment and accessories will arrive before the event and are anticipated to arrive in one or several large trucks/tractor trailers. These trucks will utilize loading bay doors on the northeast side of the building with access on Pearl Street.

Prior to Truck Arrival: Venue staff to notify the parking lot attendant at the "Top of the Old Port" parking lot prior to truck arrival to allow for proper notice to their customers.

Upon Truck Arrival: Upon truck arrival, at least 4 venue staff members shall meet the truck as it arrives onto Pearl Street.

For a truck utilizing the north side loading bay, 3 certified flaggers will need to be positioned as follows and as shown in Temporary Traffic Control Exhibit 1:

- At the intersection of Cumberland Avenue and Pearl Street
- At the entrance to the "Top of the Old Port" parking lot.
- At the intersection of Congress Street and Pearl Street.

The remaining available staff members shall help with truck maneuvering and re-positioning/collection of cones placed prior to truck arrival. Flaggers shall hold traffic from utilizing Pearl Street. for the duration of the movement and until the arriving truck has safely executed the movement into the loading dock and is parked.

For a truck utilizing the south side loading bay, 2 certified flaggers will need to be positioned as follows and as shown in Temporary Traffic Control Exhibit 2:

- At the intersection of Cumberland Avenue and Pearl Street
- Halfway down Pearl Street. between the "Top of the Old Port" parking lot entrance and the loading bays

The remaining available staff members shall help with truck maneuvering and re-positioning/collection of cones placed prior to truck arrival. Flaggers shall hold traffic from utilizing Pearl Street. for the duration of the movement and until the arriving truck has safely executed the movement into the loading dock and is parked.

Upon Truck Departure: Upon truck departure, at least 4 venue staff members shall help the truck exit the facility. Trucks will typically exit towards Cumberland Avenue.

2 certified flaggers will need to be positioned as follows and as shown in Truck Turning Exhibit 2:

- At the intersection of Cumberland Avenue and Pearl Street
- Halfway down Pearl Street. between the “Top of the Old Port” parking lot entrance and the loading bays.

These flaggers shall hold traffic from utilizing Pearl Street. for the duration of the movement. Upon truck departure, all temporary signs and cones shall be collected and stored inside the venue for the next use, leaving Pearl Street. in its existing condition.

**Bus Procedures (Myrtle Street):** Performers will arrive via tour bus or passenger vehicle. These vehicles will utilize the driveway on the southwest side of the building with access on Myrtle Street.

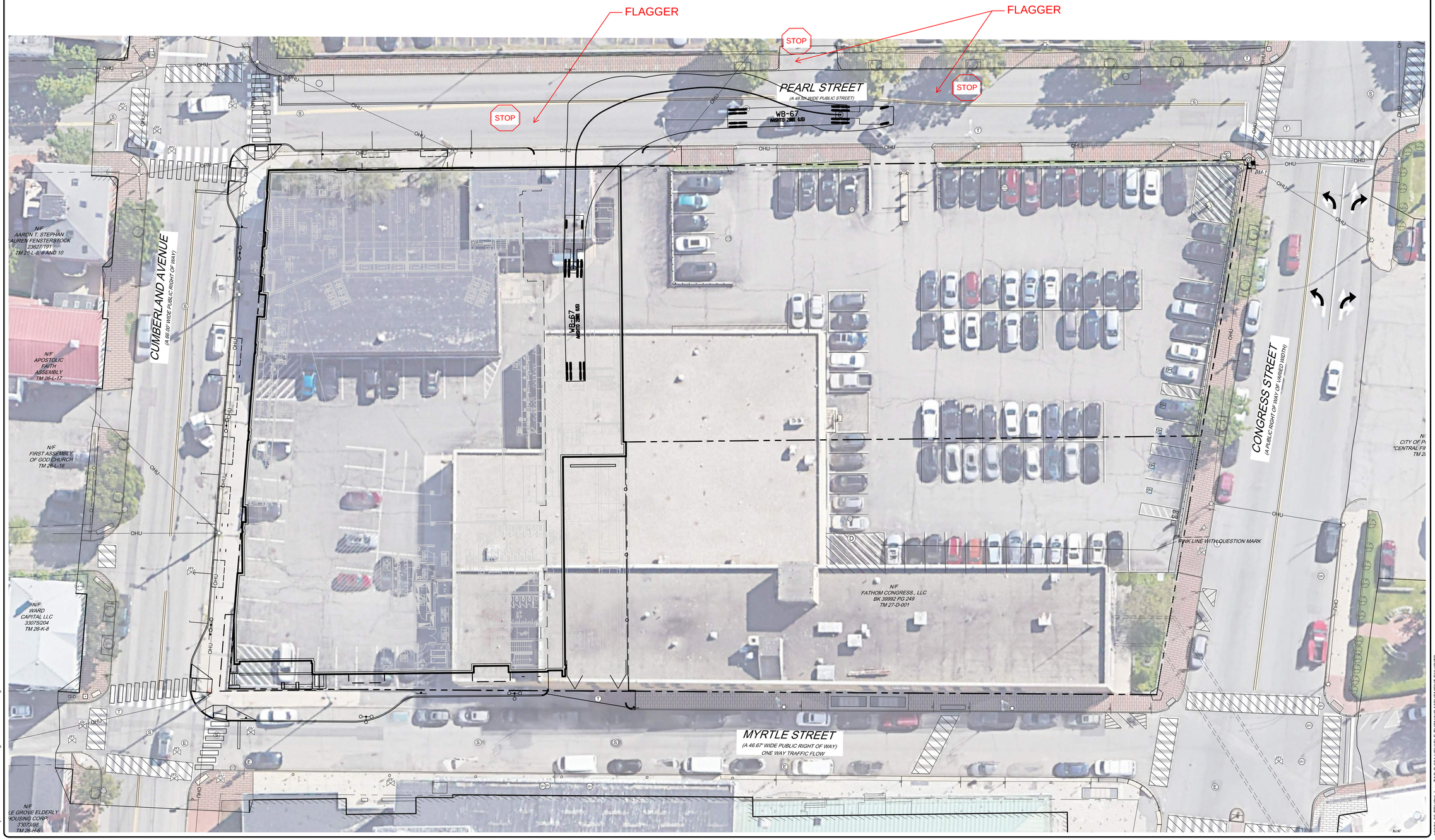
Prior to Bus Arrival: Venue staff will ensure that the load zone on Myrtle Street is clear of vehicles.

Upon Bus Arrival: The bus will temporarily pull into the loading zone to allow traffic to pass on Myrtle Street. Upon bus arrival, at least 2 venue staff members shall meet the bus as it arrives onto Myrtle Street. A certified flagger will need to be positioned on Myrtle Street and as shown in Temporary Traffic Control Exhibit 3:

The flagger shall hold traffic on Mrytle Street for the duration of the turning movement and until the bus has safely executed the turning movement and is parked. The other staff member shall help with bus maneuvering and direct pedestrians.

Upon Bus Departure: Upon bus departure, 1 venue staff member shall help the bus exit the facility. The staff member will check for vehicles in the loading zone, stop pedestrian traffic, and direct the bus driver when there is a break in the traffic.

# TEMPORARY TRAFFIC CONTROL
# TRUCK UTILIZING NORTH LOADING DOCK




F:\Projects\19000\19371-05\DWG\Design\19371-05 TRUCK.dwg, 5/12/2025 11:39 AM, AARON BADZIUCZ

19371-05 TRUCK.dwg, TAB:C-601 VEHICLE TURNING MOVEMENT EXHIBITS

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS PROVIDED BY OTHERS, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

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WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

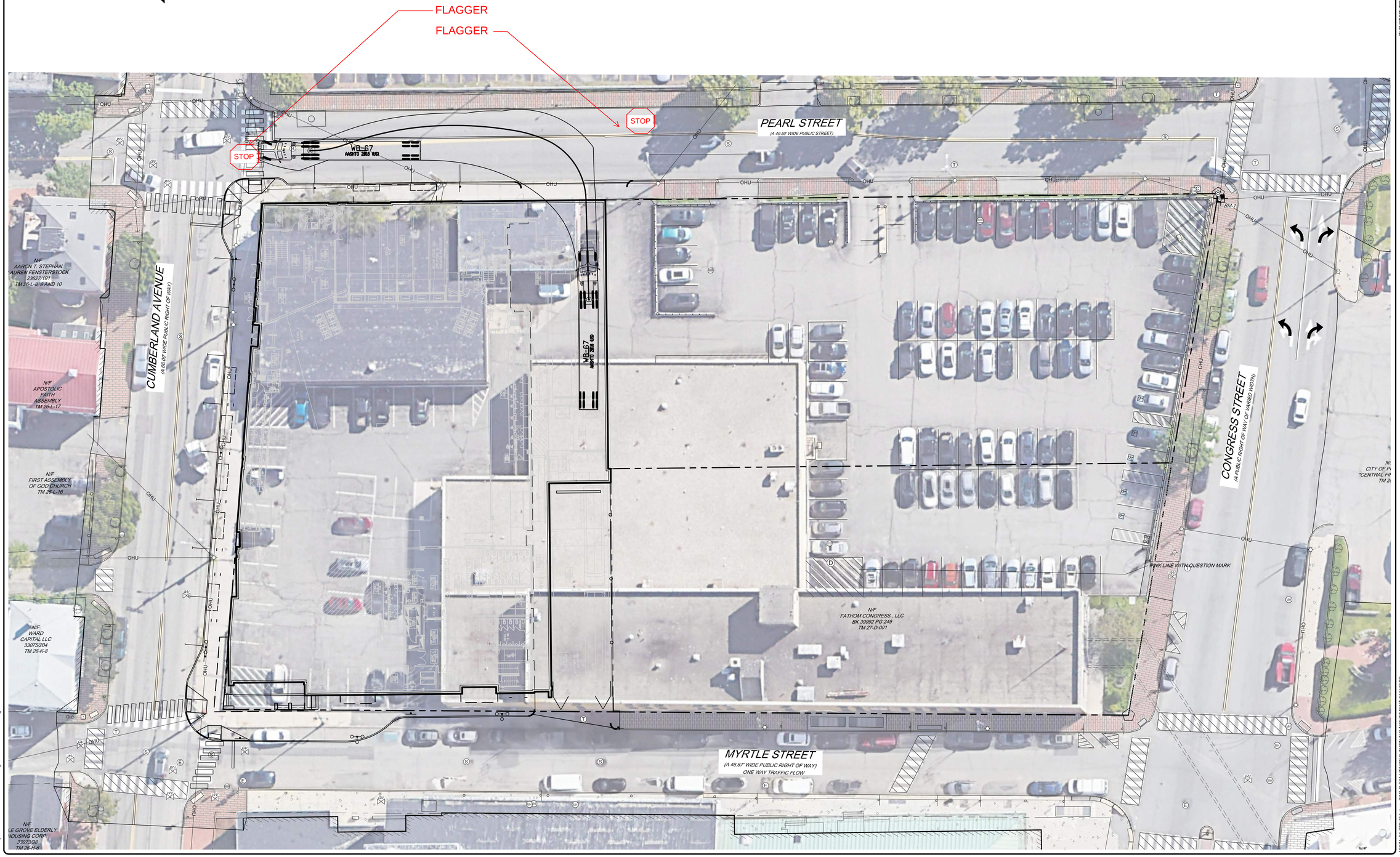
TEMPORARY TRAFFIC CONTROL EXHIBIT 1
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC

RECORD OWNER:
385 CONGRESS, LLC
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET C-601

# TEMPORARY TRAFFIC CONTROL
# TRUCK UTILIZING SOUTH LOADING DOCK




F:\Projects\19000\19371-05\DWG\Design\19371-05 TRUCK.dwg, 5/12/2025 11:40 AM, AARON BADZIUCZ

19371-05 TRUCK.dwg, TAB:C-601 VEHICLE TURNING MOVEMENT EXHIBITS

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| B | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |
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Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

TEMPORARY TRAFFIC CONTROL EXHIBIT 2
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC

RECORD OWNER:
385 CONGRESS, LLC
2750 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET C-601

TEMPORARY TRAFFIC CONTROL
BUS PARKING




NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| A | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. (SWI ALTERATIONS, AS AUTHORIZED BY OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# TEMPORARY TRAFFIC CONTROL EXHIBIT 3

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET C-601

F:\Projects\19000\19371-05\SIV\DWG\Design\19371-05 TRUCK.dwg - 5/20/2025 2:43 PM - CHRIS TAYLOR

19371-05 TRUCK.dwg - TAB:C-601 VEHICLE TURNING MOVEMENT EXHIBITS

## Preservation of Significant Natural Features 13-13.6.2(A)

The proposed project area is a previously developed, urban parcel. The project area comprises a portion of a city block that is bounded by Cumberland Avenue on the northwest, Myrtle Street on the southwest, Congress Street on the southeast, and Pearl Street on the northeast. The site is developed with a paved parking area and concrete sidewalks. Vegetation is limited to small amounts of landscaping. There are no natural waterways or wetlands on or within proximity of the project site.

Please see the plan set for the existing conditions plan.

Landscape Preservation 13-13.6.2 (B)

1. The proposed project site is a previously developed, urban parcel currently used for surface parking with no significant trees or landscaped areas on the site. There are no trees or landscaping proposed for preservation. The proposed project includes street trees along Cumberland Avenue and Pearl Street.

2. There are no trees 10 inches DBH or greater within the project setbacks requiring preservation. This provision of the Ordinance is not applicable to the site.

Please see the plan set for the proposed landscaping plan.

Site Landscaping and Buffers 13-13.6.2(C)

The proposed project has been designed to be in compliance with the applicable landscape and buffering requirements of the City Ordinance. The project is located in the B-3 zone where there is no required setback.

1. Landscaping. This provision of the ordinance does not apply at this site.

   A landscape plan has been provided within the plan set identifying the proposed planting at street level of street trees in tree planting areas. Landscaping has been provided as outlined in the City of Portland zoning requirements.

   Please see the Landscape plan.

2. Buffers.
   a. Loading and service areas, including trash service areas, are internal to the building behind doors. No site screening for these features is required or proposed.

      There are no ground mounted utility structures proposed. The building's mechanical systems are roof mounted and screened. Please refer to the building plans and elevations.

   b. The project does not abut a residential zone. This provision of the ordinance is not applicable.

3. Parking and vehicle display lot landscaping.
   Not applicable. There is no proposed surface parking associated with this project.

4. Street Trees. The proposed project involves the construction of an entertainment venue. As part of this development, the applicant is proposing tree planting areas along Cumberland Avenue and Pearl Street.

   As part of the approved MDP, it was determined that Street trees on Myrtle Street are not viable and not required.

   Please see the Landscape plan for additional information.

Water Quality, Stormwater Management, and Erosion Control 13-13.6.2(D)

1. The subject site is a portion of a fully developed city block. The proposed redevelopment plan has been designed to meet the applicable City standards for stormwater management to minimize to the extent practicable the rate of runoff from the lot.

   Based on consultation with City staff the drainage plan includes directing the proposed site's runoff to the existing combined sewer in Pearl Street in anticipation of a future City project to separate the combined sewer in this street. This reduces runoff entering the City's combined sewer in Myrtle Street. The proposed design does not increase runoff in the City's combined sewer in the Pearl Street system in the 1-inch 24-hour rainfall event associated with the City's CSO control plans. There are minimal increases in runoff in the Pearl Street combined sewer during the 2-, 10- and 25-year storm events. The increases do not exceed the capacity of the system at the study point. Please see the stormwater management plan.

2. The proposed project has been designed to be in compliance with the stormwater management standards of the City Technical Manual. Please see the stormwater management plan.

3. The proposed development does not propose any stormwater infiltration or other practices that would be expected to pose a risk of groundwater contamination either during or post-construction. Please see the plan set and the stormwater management plan.

## City of Portland ME: Low-Impact Design Requirements

| | |
|---|---|
| Owner / applicant name: | Portland Music Holdings, LLC |
| Representative name: | Sebago Technics, Inc./Chris Taylor P.E. |
| Project address: | 385 Congress Street, Lot 3 |
| Project CBL: | 027 D002001 |
| Application ID (if known): | PL-003179-2024 |

| | Maximum Points | How to Apply | Points Awarded | LID Standard / Approach |
|---|---|---|---|---|
| **CORE METHODS: Wetlands, Streams, & Drainage** | | | | |
| Protect natural drainage paths | Required | | | |
| Shoreland Zoning | Required | | | |
| Meeting DEP and ACOE standards for stream crossings | Required | | | |
| Protect wetlands | 12 | Select one option | 12 | Select a site that does not have wetlands or vernal pools = 12pts |
| | | | | Project maintains a 50' set-back / no-disturb buffer to all wetlands = 10pts |
| | | | | Project maintains a 25' set-back / no-disturb buffer to all wetlands = 7pts |
| | | | | Project does not place structures in wetlands and avoids wetlands impacts from construction and stormwater discharges = 5pts |
| | | | | Project replicates impacted wetlands elsewhere on site or within watershed = 3pt |
| | | | | Project pays wetlands impact fee = 0pts |
| Permanently protect stream (intermittent and perennial) and riparian buffers *(exclusive of approved stream crossings; must include a no-disturb zone with markers installed and deed restriction recorded at registry of deeds)* | 12 | Select one option | 12 | Select a site with no streams = 12pts |
| | | | | Permanently protect all 100ft shoreline buffers = 10pts |
| | | | | Permanently protect all 75ft shoreline buffers = 7pts |
| | | | | Permanently protect all 50ft shoreline buffers (intermittent streams) = 6pts |
| | | | | Permanently protect all 50ft shoreline buffers (required minimum for perennial streams) = 5pts |
| | | | | Permanently protect all 25ft shoreline buffers (required minimum for intermittent streams) = 5pts |
| Stream crossings | 12 | Select one option | 12 | Select a site with no streams = 12pts |
| | | | | Avoid any stream crossings = 10pts |
| | | | | All stream crossings use a bridge or open bottom culvert structure sized at 1.2 times the bank full width of the stream = 10pts |
| | | | | All stream crossings use Maine Stream Smart Principles to preserve natural pre-development drainage pathways = 6pts |
| **CORE METHODS: Natural Areas & Habitat** | | | | |
| Preserve threatened or endangered species habitat | Required (Beginning with Habitat Maps at a minimum) | | | |
| Protect 30% of trees over 10" DBH | Required (Tree survey required) | | | |
| Protect intact, contiguous forests and native trees over 10" DBH | 8 | Select one option | 8 | All development and land disturbance outside of existing wooded/forested areas (no site clearing in prior 10 years) = 8pts |
| | | | | Protect 50% of trees over 10" DBH = 6pts |
| | | | | Protect 40% of trees over 10" DBH = 4pt |

| | | | | |
|---|---|---|---|---|
| **CORE METHODS: Soils & Slopes** | | | | |
| USDA Web Soil Survey | Required (provide details how soil limitations will be mitigated) | | | |
| Avoid steep slope disturbance | 5 | Select one option | 5 | Selecting a site without slopes 15% or greater = 5pts |
| | | | | Maintain >20' undisturbed vegetated buffer to all slopes 15% or greater = 3pts |
| | | | | Maintain 10-20' undisturbed vegetated buffer to all slopes 15% or greater = 2pts |
| | | | | Maintain 1-10' undisturbed vegetated buffer to all slopes 15% or greater = 1pt |
| | | | | Disturbance of any slope 15% or greater = 0pts |
| Protect soils | 5 | Select one option | 5 | Redevelopment sites = 5pts |
| | | | | Detailed, site-specific soil survey; preparation of a Soil Management and Protection Plan; protect highly permeable soils = 5pts |
| Limit site disturbance and earthwork | 8 | Select one option | 8 | Redevelopment limits disturbance to existing footprint = 8pts |
| | | | | New development disturbs less than 50% of existing undeveloped site area = 8pts |
| | | | | New development disturbs less than 75% of existing undeveloped site area = 6pts |
| | | | | New development disturbs greater than 75% of existing undeveloped site area = 0pts |
| Soil preparation & minimizing compaction | 6 | Select all options that apply | 3 | Till soils to a depth of at least 10" prior to revegetation = 3pts |
| | | | 3 | Organic matter amendments as needed based on soil tests = 3pts |
| **CORE METHODS: Landscaping** | | | | |
| Low-Impact Landscaping | 6 | Select all options that apply | | Redevelopment sites reduce lawn area by 50%, provided no increase in impervious area (lawn becomes landscaping) = 2pt |
| | | | | New development results in >50% non-impervious developed area is landscaping = 2pt |
| | | | 2 | Use only native vegetation for landscaped areas = 2pts |
| | | | 2 | Using only locally-sourced landscape materials = 2pt |
| **CORE METHODS: Impervious Area & SW Management** | | | | |
| Meeting City's stormwater management standards | Required | | | |
| Reduce impervious and increase permeable surfaces | 10 | Select all options that apply, up to a maximum of 10 points | | 50% or more of proposed hard surfaces are permeable (porous pavers, permeable concrete, porous asphalt) = 6pts |
| | | | 4 | Minimize parking impervious area by using only the minimum required number of parking spaces, the minimum required parking lot dimensions, maximizing compact spaces and utilizing low-turnover standard parking space width reductions = 4pt |
| | | | | 25% or more of proposed hard surfaces are permeable (porous pavers, permeable concrete, porous asphalt) = 3pts |
| | | | | Minimize roadway impervious area by developing roadways and driveways at the minimum width and using minimum number of curb cuts = 2pt |
| | | | | Reducing the number of driveways by using a shared driveway design = 2pt |
| | | | | Providing transportation alternatives (such as bike share, car share, or similar) = 2pt |
| Use GI / natural stormwater treatment systems | 12 | Select all options that apply | | Treatment requirements and conveyance achieved through vegetated systems = 6pts |
| | | | 3 | No more than 1-acre of drainage per treatment system = 3pts |
| | | | 3 | Increase time of concentration on site (1" 25 year storm event) = 3pts |
| Limit / eliminate salt use | 4 | Select one option | | Detailed winter maintenance agreement, with annual reporting requirement, limiting chloride use (required in UIS watersheds) = 4pts |

| Bonus Points | | | | |
|---|---|---|---|---|
| Bonus points are offered for strategies that may go above and beyond typical approaches; may offer particularly innovative site design or engineering ; or may help achieve the larger goal of low-impact development on a regional scale. | 10 | | | Utilizing structured parking = 10pts |
| | 10 | | | Utilizing a green roof for at least 50% of a newly developed or redeveloped building roof = 10pts |
| | 10 | | | Restoration of previously disturbed natural resources (minimum 500 square feet of restoration) = 10pts |
| | 10 | | | BMPs designed for known water quality impairment within watershed = 10pts |
| | 10 | | | Connecting to City sewer from a site >200 ft from existing City infrastructure = 10pts |
| | 6 | | | Detention of 1.5 times the required volume = 6pts |
| | 6 | | | Treatment for 1.5 times the required water quality volume = 6pts |
| | 6 | | | Innovative LID site design and/or stormwater improvement - 6pts |
| | 10 | | | Establishing a Traffic Demand Management plan for projects under 50,000ft = 10pts |
| | **Total Possible Points** **178** | | **Total Points Awarded** **82** | **Minimum points required for approval of LID strategies and techniques** **80** |

N

Consistency with City Master Plans 13-13.6.3 (A)

1. The proposed project has been designed to be consistent with the City Master Plans. The proposed development has been reviewed as part of the Larger 385 Congress Street Master Plan of Devolvement (MDP) approved by the Planning Board on August 9, 2022. In its review the City found that the MDP was consistent with the Council approved masterplans by:
   - The proposed project is in line with the City's goal of fostering a vibrant city. The addition of the proposed entertainment venue will compliment the offerings of the existing theaters, providing variety to those who live in the greater Portland area as well as those who vacation in Portland.
   - Providing infill development within a transit-oriented location with pedestrian-oriented streets to make walking more inviting, and connection to bus routes, bike networks, and other mobility options easier to access to other parts of the city. Providing employment and job density that can support and drive transit ridership as well as walk to work opportunities (One Climate Future, 2021).

   The Comprehensive Plan, Portland's Plan 2030 goals and policies (state and local) relevant to the proposed plan were reviewed in the MDP. The plan aligns with these vision statements and goals by infilling an underdeveloped site primarily used for automobile parking located at the heart of Portland's walkable downtown. The proposed infill project potentially reduces the need for new construction in green field or outlying areas and dependency on single occupancy vehicles, which promotes more sustainable development practices.

2. There is no existing off premises public infrastructure that requires easements across the property. The proposed subdivision plan provides for an easement on the site to allow public sidewalks to extend to the building line.

Please see the plan set and the Master Plan for additional information regarding compliance the City Master Plans.

Public Safety and Fire Prevention 13-13.6.3 (B)

1. The proposed project has been designed following public safety principles for Crime Prevention through Environmental Design:

    a. The proposed building design provides natural surveillance that promotes visibility of public spaces and areas. The public entrance to the building is well-lit and visible along Cumberland Avenue, a minor arterial.

    b. The dumpsters and loading areas are enclosed within the building to control access to these areas.

    c. The site has been designed with the appropriate territorial reinforcements to promote a sense of ownership and responsibility. The site design includes varying materials on the public streets to provide visual identification of the fully public right of way and sidewalks.

2. The proposed project has been designed to provide adequate emergency vehicle access to the site as outlined in the Technical Manual.

Please see the plan set for the site plans, building plans and landscape plan detailing the site features related to his subject.

Availability and Adequacy of Public Utilities 13-13.6.3 ( C )

1. The development will not overburden sanitary sewers and storm drains, water lines, or other public infrastructure and utilities.

   The proposed project is part of a larger project with an approved Master Plan of Development (MDP). A Sewer capacity application for the entire development was included in the MDP review. A Sewer capacity application for the current project is included in the application.

   The Portland Water District has been consulted related to service to the proposed development. A formal request for capacity confirmation has been submitted to the District and will be provided when it is received. The site is located on a block with access to existing water mains in Pearl Street, Myrtle Street, and Cumberland. The development proposes upgrades to the existing main in Pearl Street.

   Included in the application is a Stormwater Management Plan detailing the proposed site drainage improvements and stormwater treatment proposed.

2. As part of the MDP design and planning, consultation was made with CMP regarding electrical service. Based on those discussions underground electrical service is proposed from CMP's recently installed manhole in Pearl Street, just east of Cumberland Avenue, and extended to the building transformers located on the west side of Pearl Street.

3. All proposed sanitary sewers, storm drains, water lines, or other utilities are designed and are to be constructed in accordance with the applicable provisions of the City Technical manual. Please see the utility plan and details.

4. The proposed development will be connected to the existing public sanitary system per City requirements. Please see the utility plan.

5. The proposed project has been designed to provide temporary storage for trash and recyclables within the building with contracted curbside disposal. There is no outdoor storage of trash or recyclables proposed. The applicant will contract with a licensed hauler to pick up waste after each event. Please refer to the building plans.

Please see the site and building plans for additional information.

# CITY OF PORTLAND WASTEWATER CAPACITY APPLICATION

Portland Dept. of Public Works -
Water Resources
212 Canco Road
Portland, Maine 04103

Date: 12/2/2024

Bradley Roland, P.E.
Water Resources Division
Department of Public Works
212 Canco Road
Portland, ME 04103

**1. Please, Submit Utility, Site, and Locus Plans.**

Site Address: 244 Cumberland Ave.

Chart Block Lot Number: 27/D/003

Proposed Use: Theater and Performance Hall
Previous Use: Parking, former Printing and Commercial
Existing Sanitary Flows: 0 (vacant) GPD
Existing Process Flows: N/A GPD
Description and location of City sewer that is to receive the proposed building sewer lateral.
Existing sewer main in Pearl Street at Cumberland Avenue

| Site Category | | |
|---|---|---|
| | Commercial *(see part 4 below)* | X |
| | Industrial *(complete part 5 below)* | |
| | Governmental | |
| | Residential | |
| | Other *(specify)* | |

***Clearly, indicate the proposed connections, on the submitted plans.***

**2. Please, Submit Contact Information.**

City Planner's Name: Matt Grooms Phone: (207) 874-8699
Owner/Developer Name: Portland Music Holdings, LLC
Owner/Developer Address: 200 US Route 1, Suite 200 Scarborough, ME
Phone: 207-617-3890 Fax: E-mail: tgoldenfarb@ramcompaniesusa.com
Engineering Consultant Name: Sebago Technics, Inc.
Engineering Consultant Address: 75 John Roberts Road, Suite 4A, South Portland, ME 04106
Phone: 207-200-2092 Fax: 207-856-2206 E-mail: ctaylor@sebagotechnics.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: 18,380 GPD
Peaking Factor/ Peak Times: 6 pm - 12 am (midnight)
Specify the source of design guidelines: *(i.e.* X *"Handbook of Subsurface Wastewater Disposal in Maine," "Plumbers and Pipe Fitters Calculation Manual," __ Portland Water District Records, __ Other (specify)*

***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: TBD

Size of External Grease Interceptor: 1,500 (Estimated)

Retention Time: TBD

Peaking Factor/ Peak Times: TBD

***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.***

SEBAGO TECHNICS
75 John Roberts Road, Suite 4A
South Portland, Maine 04106
**(207) 200-2100 FAX (207) 856-2206**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JOB | 19371-05 385 Congress, Lot 3 | | | | | | | | | | | | |
| SHEET NO. | 1 | OF | 1 | | | | | | | | | | |
| CALCULATED BY | DJS | DATE | 12/2/2024 | | | | | | | | | | |
| CHECKED BY | CPT | DATE | 12/2/2024 | | | | | | | | | | |
| FILE NAME | 19371-05 Wastewater Estimated daily flows | | | | | | | | | | | | |

## Sanitary Sewer Flows

**Design Flow:** **18,380** Averge Daily Flow (gpd)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Auditorium/Stadium** | | | | | | | | | | | | |
| | 3,300 | Seats | | x | 5 | gallons/day = | | | | | 16,500 | gpd | |
| | 140 | Employees | | x | 12 | gallons/day = | | | | | 1,680 | gpd | |
| | 10 | Employees (with showers) | | x | 20 | gallons/day = | | | | | 200 | gpd | |
| | | | | | | | | | | **Subtotal** | **18,380** | **gpd** | |

Sewer capacity flows are calculated in accordance with "Handbook of Subsurface Wastewater Disposal in Maine"

**Planning Submittal**

December 18, 2024

# FIRE PROTECTION AND LIFE SAFETY NARRATIVE

PREPARED FOR DAIQ

## PORTLAND MUSIC HALL

Portland, Maine

HOWE ENGINEERS

141 LONGWATER DRIVE, SUITE 110
NORWELL, MA 02061
781.878.3500

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# 1 DOCUMENT HISTORY

Schematic Design FPLS Narrative……December 18, 2024

# 2 PURPOSE

The purpose of this report is to document and provide the conceptual code compliance strategy, including the framework for the fire protection and life safety concept, for the proposed Portland Music Hall located in Portland, Maine. This document will also identify concepts that are not clearly addressed by the applicable building codes, which will require interpretation by the authorities having jurisdiction (AHJ).

# 3 PROJECT DESCRIPTION

The new Portland Music Hall is designed for approximately 5,300 occupant seats. The new building will include two (2) stories with a mezzanine and a footprint of approximately 37,000 square feet and a roof height of approximately 57 feet. The following fire protection and life safety features are included in the project among others:

| | |
|---|---|
| **Primary Occupancy:** | Assembly Group A-1 (Concert Hall) |
| **Construction Type:** | Type IIA (noncombustible, protected) |
| **Sprinkler:** | Yes, NFPA 13 Sprinkler System |
| **Standpipe:** | Yes, Hose valve connections at enclosed stairs and stage |
| **Fire Alarm:** | Yes, Voice Alarm Communication System |
| **Means of Egress:** | Conventional Egress Factors Utilized (0.20 for doors and 0.30 for stairs) |
| | Stairs > 44 inches : Capacity = 146.7 + [(Wn – 44) / 0.218] |
| | Wn = Nominal Width of Stair |

# 4 AREAS REQUIRING INTERPRETATION OR EQUIVALENCY

## *4.1 MEZZANINE*

The floor area of a mezzanine must be limited to 1/3 the open floor area of the room or space in which they are located per LSC Section 8.6.10 and IBC Section 505.2. The floor area of a mezzanine may be 1/2 the open floor area below per IBC Section 505.2.1 Exc 2. Note the applicable edition of NFPA 101 does not include a permitted area increase beyond 1/3 the open floor area below.

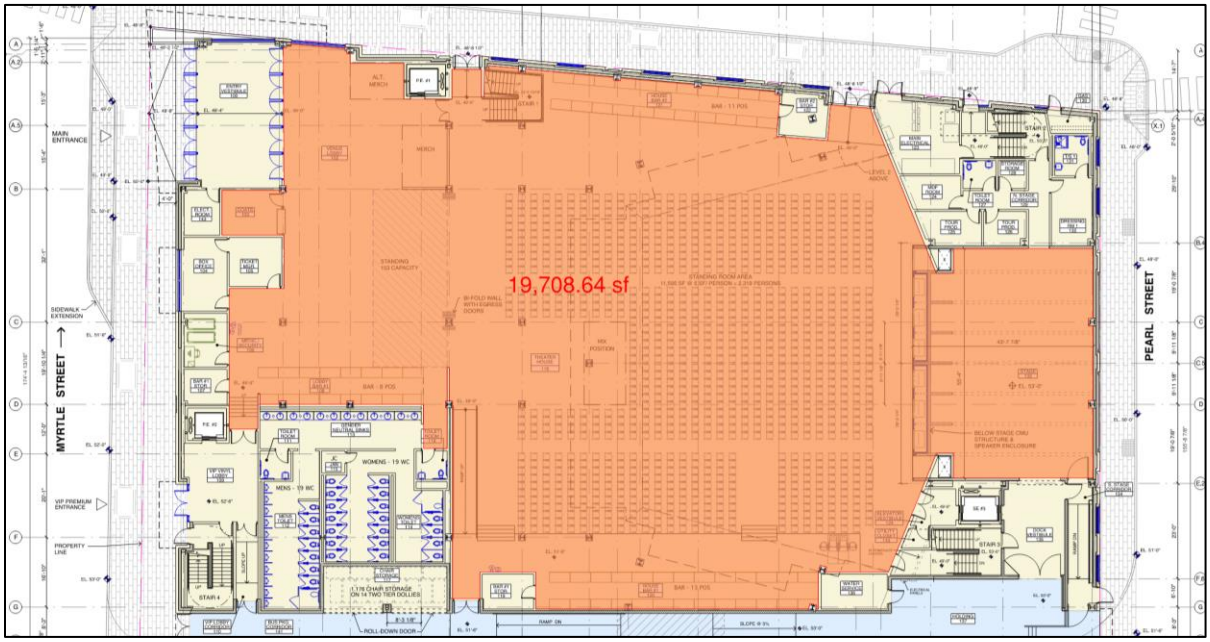
The Third (mezzanine) Level of the assembly seating is being considered a mezzanine to the Ground Level as it is open to the floor, albeit also open to Level 2. The Ground Level to Level 2 vertical opening is considered a compliant unprotected two-story opening in a building with an automatic sprinkler system in accordance with NFPA 101 Section 12.3.1(3) and IBC §712.1.9.

Enclosed spaces of a mezzanine are permitted provided the occupant load of the enclosed space does not exceed 10 (IBC Section 505.2.3 Exc 1 and NFPA 101 Section 8.6.10.3.1).

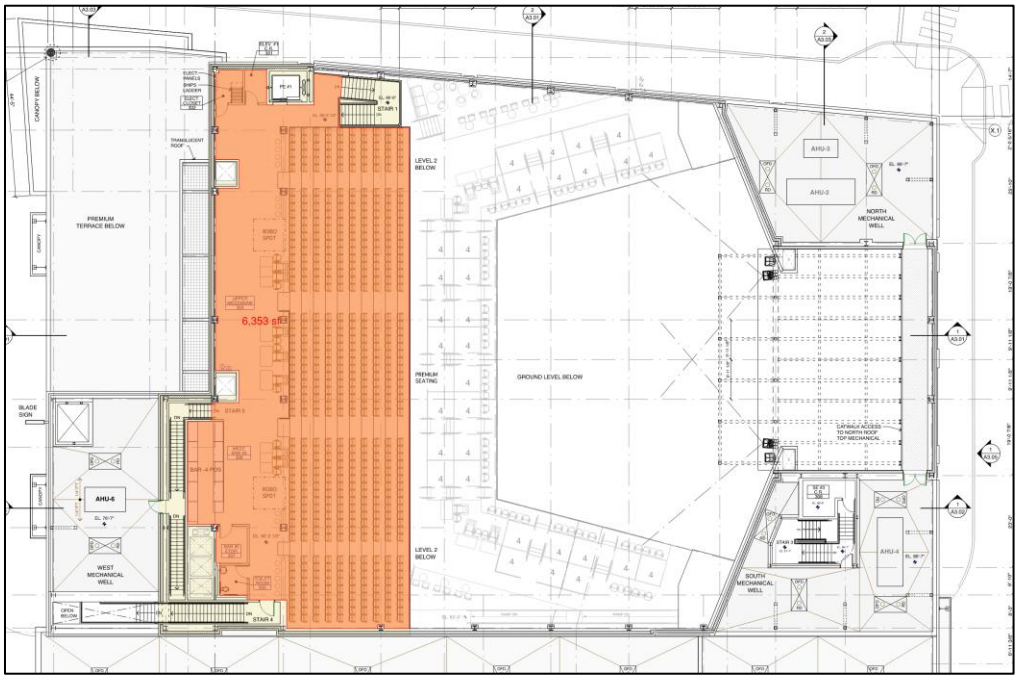
The mezzanine level has an occupiable area of 6,353 square feet and is open to the Ground Floor having an area of 19,708 square feet. Accordingly, the mezzanine is less than 1/3 the area of the ground floor.

Note that the Open Area considered on the Ground Floor includes the Lobby which has a foldable wall from the seating area that will only be utilized when there is not an audience present. The foldable wall is for security purposes during stage setup operations. The stage is also included in the Ground Floor area that is considered open to the mezzanine as occupants would be aware of any events on the stage. The measured mezzanine area also does not include stairs, elevator shafts, and non-occupiable shafts as these do no require egress on the mezzanine.

Accordingly, the Lobby is considered open for the purpose of the determining the allowable mezzanine area since the mezzanine will only be occupied when the operable partition is open during performances. The areas measured below shows the **open Ground Floor area**.



The image below shows the **occupiable area measured for the mezzanine**.




**This concept of open levels and operable partitions in determining the allowable mezzanine area is open to interpretation and must be presented to the Authority Having Jurisdiction for review and approval.**

## 5 APPLICABLE CODES AND STANDARDS

The following codes/standards are considered applicable for this project and are based on the currently proposed 2024 MUBEC. As the project progresses the design team will monitor the applicable codes for any relevant updates that may occur before permit submission.

- Maine Uniform Building and Energy Code (MUBEC), 2024 edition
  - 2021 International Building Code (IBC), with state amendments
  - 2021 International Mechanical Code (IMC), with state amendments
  - 2021 International Energy Conservation Code (IECC) with stretch code as adopted by the city
- 2021 Maine State Plumbing Code
  - 2021 Uniform Plumbing Code
- Accessibility
  - IBC Chapter 11 and 2017 ICC A117.1 (Accessible and Usable Buildings and Facilities)
  - 2010 Americans with Disabilities Act (ADA)

- Other Standards adopted by the Maine Fire Marshal office include:
  - NFPA 1, Fire Prevention Code, 2018 Edition, with Local and state amendments
  - NFPA 101, Life Safety Code, 2018 Edition, with local and state amendments (LSC)
  - NFPA 10, Standard for Portable Fire Extinguishers, 2018 Edition, with state amendments
  - NFPA 13, Installation of Sprinkler Systems, 2016 Edition, with state amendments
  - NFPA 14, Installation of Standpipe and Hose Systems, 2013 Edition, with state amendments
  - NFPA 20, Installation of Stationary Pumps for Fire Protection, 2013 Edition, with state amendments
  - NFPA 72, National Fire Alarm and Signaling Code, 2019 Edition, with state amendments

# 6 OCCUPANCY CLASSIFICATION

The Music Hall includes Assembly (Group A-1), Business (Group B), and Storage (Group S) uses, and is considered a Mixed-Use Occupancy. The building will comply with the requirements of Accessory Occupancies (IBC Section 508.2), Nonseparated/Mixed occupancy (IBC Section 508.3 and LSC Section 6.1.14.3) and Separated Occupancy (IBC Section 508.4). State amendments to the LSC regulate that IBC governs accessory occupancy requirements.

Separated Occupancies require a fire-resistance rating between occupancies aligned with IBC Table 508.4. The loading dock will be considered a separate occupancy per the IBC.

**Table 1: Separated Occupancy Ratings**

| OCCUPANCY | B / S-1 | S-2 |
|---|---|---|
| | SPRINKLERED | SPRINKLERED |
| A | 1 | 0 |
| B / S-1 | 0 | 1 |

The Remainder of the Music Hall will be classified as a Nonseparated/Mixed Occupancy with the primary occupancies being Group A-1 Assembly. Office, storage areas, and MEP areas making up less than 10% of the floor area are to be considered accessory space. (IBC Sections 508.2).

# 7 BUILDING CONSTRUCTION

## *7.1 BUILDING HEIGHT AND AREA ANALYSIS*

The Portland Music Hall is proposed to Type IIA construction. The following table outlines the allowable height and area based on the proposed construction type given the anticipated occupants.

**Table 2: Height and Area Building and Type IIA Sprinklered**

| TYPE IIA CONSTRUCTION ALLOWANCES | PERMITTED (IBC) | ACTUAL |
|---|---|---|
| **Height Above Grade** | | |
| All Occupancy involved: | 85 ft | 56.5 ft |
| **Stories Above Grade** | | |
| Group A-1 | 4 stories | |
| Group B | 6 stories | 2 Stories |
| Group S-1 | 5 stories | |
| Group S-2 | 6 stories | |
| **Floor Area (per story)** | | |
| Group A-1 | 46,500 $ft^2$ | |
| Group B | 112,500 $ft^2$ | 36,771 $ft^2$ |
| Group S-1 | 78,000 $ft^2$ | |
| Group S-2 | 117,000 $ft^2$ | |

## *7.2 MEZZANINE*

Mezzanine must be limited to 1/3 of the of the floor area per LSC Section 8.6.10 and IBC Section 505.2. Accordingly, the mezzanine is less than 1/3 the floor is open to and compliant with both IBC and LSC. The mezzanines shall also be protected by an automatic sprinkler system and provided with a minimum of two means of egress.

## *7.3 FIRE RESISTANCE RATINGS*

The fire resistance requirements for construction type can be found in IBC Table 601. The fire-resistance ratings for the Music Hall structural elements are as follows:

**Table 3: Fire Resistance Ratings of Structural Elements for Type IIA Construction IBC Table 601**

| BUILDING STRUCTURAL ELEMENT | FIRE RESISTANCE RATING FOR TYPE IIA |
|---|---|
| **Structural Frame**<br>Including columns, girders, and trusses | 1-hour |
| **Bearing Walls**<br>Exterior<br>Interior | <br>1-hour<br>1-hour |
| **Nonbearing Walls and Partitions**<br>Exterior<br>Interior | <br>0-hour<br>0-hour |
| **Floor Construction**<br>Including supporting beams and joists | <br>1-hour |
| **Roof Construction**<br>Including supporting beams and joists<br>Roof Construction 20 feet or more above the floor | <br>1-hour<br>0-hour |

### *7.4 SPECIAL FIRE SEPARATIONS REQUIRED*

Several referenced standards are applicable to this building that requires fire resistance rated separations for specific use areas. These required separations are provided below:

**Table 4: Incidental Use Separation Requirements**

| ROOM OR AREA | SEPARATION AND / OR PROTECTION |
|---|---|
| NFPA 20 – Fire Pump Room (if required) | 1-hr and automatic sprinklers |
| NFPA 70 – Transformer Rooms (over 112.5 kVA) | 1-hr and automatic sprinklers |
| Furnace rooms where any piece of equipment is over 400,000 BTU/hr. input | 1-hr, or automatic sprinklers[1] |
| Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower | 1-hr, or automatic sprinkler[1] |
| Laundry Rooms over 100 square feet | 1-hr, or automatic sprinkler[1] |
| Waste collection rooms over 100 square feet | 1-hr, or automatic sprinkler[1] |
| Rooms containing Lithium-Ion Batteries larger than 20kWh | 2-hr and automatic sprinklers |
| Note<br>1: Where Sprinkler protection is provided in lieu of a fire rating, the separation must still be capable of resisting the passages of smoke. | |

### *7.5 OPENING PROTECTIVES*

Openings in any fire-resistance rated assemblies within the building must be protected in accordance with IBC Table 716.1(2), Table 5 below.

**Table 5: Opening Protective Fire-Protection Ratings (IBC Table 716.5 & NFPA 221 Table 4.9.2)**

| TYPE OF ASSEMBLY | REQUIRED ASSEMBLY RATING (HOURS) | MINIMUM OPENING PROTECTION ASSEMBLY (HOURS) |
|---|---|---|
| **Fire walls and fire barriers having a fire resistance rating greater than one hour** | 2<br>1 ½ | 1 ½<br>1 ½ |
| **Fire barriers of 1-hour fire rated construction:**<br>Shaft and Exit Enclosures<br>Other Fire Barriers | <br>1<br>1 | <br>1<br>¾ |

### *7.6 PROTECTED VERTICAL OPENINGS*

Vertical openings through floors must be protected by fire-rated assemblies in accordance with IBC Section 713.2 & LSC Section 8.6. Vertical openings include exit stairs, elevator shafts, mechanical shafts, grease duct shafts, and electrical chases. As any shafts will connect 3 stories or less, a minimum 1-hour fire-resistance rating must be provided.

The Ground Level is open to Level 2 which is considered a compliant two-story unprotected opening per LSC §12.3.1(1) and IBC 712.1.9. Level 3 is considered a mezzanine and therefore does performance area does not constitute a three-story vertical opening.

### *7.7 INTERIOR WALL AND CEILING FINISHES*

Interior wall and ceiling finishes in the Music Hall are required to meet the requirements of LSC Chapter 10, Sections 12.3.3.2 & 38.3.3.2, and IBC Section 803.11 Refer to the tables on the following page for details. Interior finish applies to wall and ceiling finishes. Interior floor finish applies to floor coverings. Refer to Table 6 for the minimum finish requirements within sprinklered buildings for interior wall and ceiling finishes.

**Table 6: Interior Wall and Ceiling Finish Requirements by Occupancy**
Sprinklered Building (LSC 12.3.3, LSC 38.3.3, LSC 42.3.3.2, and IBC Table 803.11)

| USE GROUP / MATERIAL | INTERIOR EXIT STAIRWAYS, INTERIOR EXIT RAMPS AND EXIT PASSAGEWAYS | LOBBIES, CORRIDORS, ENCLOSURE FOR EXIT ACCESS STAIRWAYS AND EXIT ACCESS RAMPS | ROOMS AND ENCLOSED SPACES |
|---|---|---|---|
| A | A or B[1] | A or B[1] | A or B[1] |
| B | A or B[1] | A or B[1] | A, B, or C[1] |
| S | A, B, or C | A, B, or C | A, B, or C[1] |
| Textile Ceiling Coverings[4] | A[1 or 2] | A[1 or 2] | A[1 or 2] |

| | | | |
|---|---|---|---|
| Textile Wall Coverings[4] | A[3] | A[3] | A[3] |

Notes:

1. Tested and classified in accordance with ASTM E84 or UL 723.
2. Tested and classified in accordance with NFPA 286.
3. Tested and classified in accordance with NFPA 265 – Method B protocol.
4. Test preparation and mounting in accordance with ASTM E2404.

As noted in Table 6, depending on the classification and use of the material, interior wall and ceiling finish materials must be classified in accordance with ASTM E84 or UL 723, NFPA 286, or NFPA 265. Materials determined to be considered Class A when tested in accordance with NFPA 286 shall be equivalent to those testing in accordance with ASTM E84 or UL 723.

### *7.8 Interior Floor Finishes*

Interior floor finishes in the Music Hall are required to meet the requirements of LSC Section 10.2.7, and IBC Section 804. All floor covering material comply DOC FF-1 “pill test” (CPSC 16 CFR Part 1630) or ASTM D2859. Interior floor finishes in exit enclosures and exit access corridors and spaces not separated from them by walls complying with LSC Section 12.3.6 must be no less than Class II as determined by NFPA 253 (LSC Section 12.3.3.5).

Floor sleepers, bucks and nailing blocks shall not be constructed of combustible materials, unless the space between the fire-resistance-rated floor assembly and the flooring is either solidly filled with noncombustible materials or fireblocked in accordance with Section 718, and provided that such open spaces shall not extend under or through permanent partitions or walls.

Wood finish flooring is permitted to be attached directly to the embedded or fire-blocked wood sleepers and shall be permitted where cemented directly to the top surface of fire-resistance rated floor assemblies or directly to a wood subfloor attached to sleepers as described above.

## 8 Means of Egress System

### *8.1 Occupant Load*

The occupant load for each space within the Music Hall is determined using the occupant load factors listed in IBC Table 1004.5, and LSC Table 7.3.1.2 as shown in the table below.

**Table 7: Occupant Load Factors**

| OCCUPANT USE GROUP | OCCUPANT LOAD FACTOR |
|---|---|
| Fixed Assembly Seating | Actual Number of Fixed Seats |
| Waiting spaces<br>Spaces ≤ 10,000 ft$^2$<br>Spaces > 10,000 ft$^2$ | <br>5 square feet (net) per person<br>7 square feet (net) person |
| Standing spaces | 5 square feet (net) per person |
| Assembly, Concentrated<br>(Seating, chairs only) | 7 square feet (net) per person |
| Assembly, Unconcentrated<br>(Tables and Chairs) | 15 square feet (net) per person |
| Lighting and access catwalks | 100 square feet (gross) per person |
| Stages and platforms | 15 square feet (net) per person |
| Business | 150 square feet (gross) per person |
| Conference rooms | 15 square feet (net) per person |
| Commercial Kitchens | 100 square feet (gross) per person |
| Storage, Mechanical, Electrical | 300 square feet (gross) per person |
| Locker Room | 50 square feet (gross) per person |

Howe Engineers will be preparing Life Safety drawings to clearly depict the anticipated occupant loads of the building.

### *8.2 EXIT CAPACITIES*

The exits within the Music Hall have been designed using the exit capacity factors listed in IBC Section 1005, LSC Section 7.3.3.1, and LSC Section 12.2.3. The exit capacity criteria are outlined in Table 8 below:

**Table 8: Exit Capacity Factors**

| LOCATION | EXIT CAPACITY (INCHES PER PERSON) |
|---|---|
| Stairs, Stepped Aisles<br>Doors, Corridors, Level Surfaces | 0.30 inches/person<br>0.20 inches/person |

For stairs wider than 44 inches, the egress capacity may be calculated using the following equation:

$$\text{Capacity} = 146.7 + [(Wn - 44) / 0.218]$$

$$Wn = \text{Nominal Width of Stair}$$

It is noted that smoke protected seating provisions are not being utilized for this project as it would require the installation and ongoing maintenance of a smoke control system. By not utilizing the smoke protected seating provisions, the means of egress will comply with the:

- Conventional exit capacity factors.

- Standard travel distance requirements.
- Standard common path of travel requirements.

### *8.3 Exit Access Travel Distance*

MUBEC replaces IBC Table 1017.2 with NFPA 101 Table A7.6. The common path of travel, and travel distance for each of the occupancies will be in accordance with the requirements for a sprinklered building contained in LSC Table A.7.6. Refer to the Table below:

**Table 9: Exit Access Travel Distances and Common Path**

| Occupancy | Travel Distance | Maximum common Path of Travel |
|---|---|---|
| Assembly | 250 feet | 75 feet |
| Business | 300 feet | 100 feet |
| Low Hazard Storage | Not Limited | 100 feet |
| Ordinary Hazard Storage | 400 feet | 100 feet |

The common path of egress from any seat must be limited to 30 ft when serving more than 50 occupants. (IBC Section 1029.8)

### *8.4 Number of Exits*

The number of exits serving every space or story must comply with IBC Section 1006.3.3, and LSC Section 7.4. Table 10 outlines the requirements for number of exits per story, as based on occupant load.

**Table 10: Required Number of Exits (IBC Table 1006.3.3)**

| Occupant Load Per Story | Minimum Number of Exits or Access to Exits per Story |
|---|---|
| 1 - 500 | 2* |
| 501 – 1,000 | 3 |
| More than 1,000 | 4 |

**Unless otherwise permitted by IBC Section 1006.3.3 (refer to **Error! Reference source not found.**)*

In addition to such provisions, a minimum of two (2) exits, or exit access doorways must be provided from any space where the common path of travel limitation are exceeded or a Group A or B spaces exceeds 49 occupants or Group S occupancy exceeds 29 occupants.

Where two (2) exits, or exit access doors are required from a space, they must be place not less than 1/3 the overall diagonal distance of the area served. (IBC Section 1007.1.1 Exception 2 & LSC Section 7.5.1.3.3).

Where there are three (3) or more exits or exit access doors, at least two of the exits or exit access doors are required to meet the remoteness as defined above. The additional exits shall be located as remotely as possible (IBC Section 1007.1.2).

The main entrance to assembly occupancies must be able to accommodate 2/3 of the total occupant load, and no more than 50 percent of the occupants may egress through a single exit (LSC Section 7.3.1.1.2 & LSC Section 12.2.3.6.2).

### *8.5 Dead End Corridor Limits*

As outlined within IBC Section 1020.4, LSC Sections 12.2.5.1.3, 39.2.5.2, 42.2.5 and LSC Section 7.2.1.4.3.1 where more than one (1) exit or exit access doorway is required, exit access must be arranged such that there are no dead ends greater than:

- A Occupancies 20 feet
- B Occupancies 50 feet
- S Occupancies 50 feet

### *8.6 Exit Discharge*

Exit stair enclosures must discharge directly to the exterior or may be extended to the exterior via an exit passageway. All the exit stairs are designed to discharge directly to the exterior or be extended to such via an exit passageway.

### *8.7 Accessible Means of Egress*

The Music Hall must conform to the requirements of IBC Section 1009 and LSC Section 7.5.4, Accessible means of egress. All accessible areas shall be provided with a minimum of one accessible means of egress. Where more two or more means of egress are required from a space a minimum of two accessible means of egress must be provided (IBC Section 1009.1).

Assembly occupancy means of egress must comply with NFPA 101 §7.5 which requires at least two accessible means of egress be available unless a single means of egress is specifically permitted (NFPA 101 §12.2.5.1.1). As such, at least two accessible means of egress must be available on each story.

An accessible means of egress per the definition is an accessible route to an area of refuge, horizontal exit, or public way (NFPA 101 §3.3.178.1). An area of refuge in a sprinklered building may be a story with two rooms or spaces separated by smoke-resisting partitions (NFPA 101 §3.3.23).

Elevator landing shall be provided with a two-way communication system for communication between the elevator landing and fire command center or central point approved by the AHJ. Elevator landing shall also be provided with directions for use of the two-way communication system, in both audible and visible signals (LSC Section 7.2.12.1.1).

### *8.8 Exit Access Doorways and Openings*

- Dimensional Requirements (LSC Sections 7.2.1, 12/13.2.2.2, 38/39.2.2.2, 42.2.22, & IBC Section 1010.1.1):

| | |
|---|---|
| Minimum clear width | 32 inches |
| Maximum size of a leaf | 48 inches |
| Minimum height | 6 feet – 8 inches |

- Direction of swing (LSC Section 7.2.1.4.2):

  Doors serving a space with less than 50 persons are permitted to swing into the room. Spaces with more than one exit access door or 50 or more persons are required to have the exit access doors swing in the direction of travel towards the exit.

- Doors must be side-hinged swinging in all spaces except in storage or office space with an occupant load of 10 or less. (IBC Section 1010.1.2)

Doors serving a space with less than 50 persons are permitted to swing into the room. Spaces with 50 or more people are required to have the exit access doors swing in the direction of travel towards the exit.

Doors are not permitted to project more than 50 percent of the required clear width in an exit or exit access at any point during the swing when opening. In addition, doors, when fully open, are not permitted to project more than 7 inches into the required exit clear width (IBC Section 1010.1.6).

### *8.9 Panic Hardware*

In accordance with IBC Section 1010.2.9 and LSC Section 7.2.1.7, each door in a means of egress from the building having an occupant load of 50 or more people must not contain a lock or latch unless it is listed panic hardware. Electrical rooms with equipment rated 800 amperes or more, that contain overcurrent devices, switching devices or control devices and where the exit or exit access doors is less than 25 feet

from the equipment working space must be equipped with panic hardware or fire exit hardware. These doors must swing in the direction of egress travel.

- Panic hardware must be listed in accordance with UL 305; Fire exit hardware must be listed in accordance with UL 10C and UL 305.
- Panic hardware must be mounted at or between 34 inches and 48 inches in height above the finished floor. (IBC Section 1010.2.9.3)
- The door is required to unlatch when subjected to a force of not more than 15 pounds.
- The activation portion of the device is not permitted to extend less than one half the width of the door leaf.

### *8.10 EXIT STAIRWAYS*

The City of Portland LSC amendment 5 states the MUBEC governs stairs when a conflict occurs between MUBEC and LSC. LSC Sections 7.2.2, 12.2.2.3, 28.2.2.3.2 & IBC Section 1011:

1. The stair dimensions are as follows:
    a. Riser height (must be uniform entire stair length):
        i. 4 inches minimum
        ii. 7 inches maximum
    b. Treads:
        i. Minimum tread depth is 11 inches, measured horizontally between the vertical planes of the most forward projection of the treads above and below. Tread depths should not vary on any run of stairs.
    c. Minimum Stair Width based on total cumulative occupant load assigned to the stair (IBC Section 1011.2 & LSC Table 7.2.2.2.1.2(B))

| | |
|---|---|
| < 49 Occupants | 36 inches |
| 50 - 2,000 Occupants | 44 inches |
| ≥ 2,000 Occupants | 56 inches |

    d. Minimum Headroom clearance must be a minimum of 80 inches (IBC Section 1011.3)
2. Landings (IBC Section 1011.6):
    a. The depth of a landing will not be less than the width of the stair in the direction of travel in a straight run configuration but is not required to exceed 48 inches.
    b. The vertical distance between landings will not exceed 12 feet.
    c. Landings are required to have the minimum width so as not to reduce the width of the stair and will not be less than the width of the door. Doors when opening will not project

more than 50 percent of the width of the landing. When the door is fully open, it will not project more than 7 inches into the stair landing.

d. The minimum headroom clearance in a stair will be not less than 80 inches

3. Exit stair enclosures must not be used for any purpose other than as a mean of egress and a circulation path.

### *8.11 HANDRAILS*

Handrails are required to be provided as follows on flights of stairs, ramps with a rise greater than 6 inches, Stepped Aisle, and aisle ramps with a slope greater than 1 in 20 (IBC Sections 1011.11, 1012.8, 1014 & 1030.16):

1. Handrails on both sides of the stairs so that handrails can be accessed from any part of the stair within 30 inches of the required width. Where handrails are provided in the middle of aisle stairs, there must be an additional intermediate handrail located approximately 12 inches below the main handrail. The clear width between intermediate handrails shall be a minimum of 20 inches and maximum of 30 inches.
2. The same requirement applies to ramps with rise of greater than 6 inches.
3. Handrails are required to be installed between 34 and 38 inches above the stair surfaces.
4. The handrail must extend the full length of the stair or ramp.
5. Handrails will return to a wall, guard, or the walking surface or will be continuous to the handrail of an adjacent stair flight or ramp run. At stairways where handrails are not continuous between flights, the handrails will extend horizontally at least 12 inches beyond the top riser and continue to slope for the depth of one tread beyond the bottom riser. At ramps where handrails are not continuous between runs the handrail will extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom ramps.
6. Handrails with a circular cross section must have an outside diameter of at least 1.25 inches but not more than 2 inches. If the handrail is not circular, the perimeter dimension must be at least 4 inches but not greater than 6.25 inches with a maximum cross-section dimension of 2.25 inches.
    i. Handrails with a perimeter greater than 6.25 inches must provide a graspable finger recess area on both sides of the profile. The finger recess must begin within a distance of 0.75 inch measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth will continue for at least 3/8 inch to a level that is not less than 1.75 inches below

the tallest portion of the profile. The minimum width of the handrail above the recess will be 1.25 inches to a maximum 2.75 inches.

ii. Edges will have a minimum radius of 0.01 inch.

7. Handrails must be not less than 2 1/4 in. from the wall (LSC Section 7.2.2.4.5.5). IBC requires a minimum 1 ½ inches from the wall (IBC Section 1014.7).
8. The handrail is not permitted to project more than 4.5 inches into the required width of a stair or 3.5 inches at a ramp.

### *8.12 GUARDS*

Guards shall be designed and installed in accordance with IBC Section 1015 and LSC Sections 7.1.8, 7.2.5.5 & 7.2.2.4. Specific requirements are as follows:

1. Guards will be provided along the open side of walking surfaces, stairways, ramps and landings which are located more than 30 inches above the floor or grade.
2. Guards must form a protective barrier not less than 42 inches in height, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seat board.
    a. Guards may be 26 inches in height at the front of seating aisles where sight-lines to the event floor may otherwise be constrained (30 inches minimum is typically recommended) (NFPA 101 Section 12.2.11.1.1). Guards must be a minimum 36 inches in height at the foot of aisles and also maintain 42 inches between the top of the rail and the nosing of the nearest tread (NFPA 101 Section 12.2.11.1.2.2).
3. Open guards must contain balusters or ornamental patterns such that a four-inch diameter sphere cannot pass through any opening up to a height of 34 inches. From a height of 34 inches to 42 inches above the adjacent walking surfaces, a sphere 8 inches in diameter shall not pass.

    EXCEPTIONS

    a. The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere of six (6) inches in diameter cannot pass through the opening.
    b. In storage areas and at elevated walking surfaces for access to and use of electrical, mechanical, or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches cannot pass through any opening.

### *8.13 Stepped Aisle Construction*

Aisles with a slope exceeding one (1) unit vertical in eight (8) units horizontal (12.5-percent slope) must be provided with a series of risers and treads that extend across the full required width of the aisles. Such stepped aisles must be constructed as follows:

- Treads:
  - Tread depths must not be less than 11 inches.
  - A contrasting marking stripe must be provided on each tread at the nosing or leading edge such that the location of each tread is readily apparent when viewed in descent.
- Risers
  - Where the gradient of stepped aisles is the be the same as the gradient of adjoining seating areas, the riser height must not be less than 4 inches, and not more than 8 inches.
    - Riser heights not exceeding 9 inches are allowed where they are necessitated by the slope of the adjacent seating area to maintain sightlines.
  - The riser height must be uniform within each flight.
    - Riser height uniformity must be limited to the extent necessitated by changes in the gradient of the adjoining seating area to maintain sightlines.
    - Non-uniformity that exceed 3/16 inches between risers must be indicated with a distinctive marking stripe on each tread at the nosing or leading edge adjacent to the nonuniform riser.
- Stepped aisles shall be provided with handrails per IBC Section 1030.16 and LSC Section 12.2.5.6.9.

### *8.14 Aisle Width*

Aisles shall be sufficient in width to accommodate the occupant load served based on the egress capacity factors contained above per IBC Section 1030.9 and LSC Section 12.2.5.6.3. The following widths are proposed as the basis of the design:

- Stepped aisles serving more than 50 people must provide a minimum 48 inches in width where serving seating on both sides, IBC Section 1030.9.1.
  - Stepped aisles serving seating on both sides with less than 50 occupants shall be a minimum 36 inches

- Note: where 48-inch wide aisles that serve more than 50 occupants with seating on both sides, split around a vomitory into two (2) aisles, the minimum clear width of each aisle around the vomitory opening must not be less than 36 inches wide.

- Stepped aisles serving seating on only one side for more than five rows shall be minimum 36 inches.
  - Stepped aisles serving seating on only one side with five rows or less are allowed to be 23 inches wide.
- Stepped aisles handrails or guard and seating shall be no less than 23 inches in clear width, where the aisle is subdivided by a handrail.
- Level or ramped aisles serving seating on both sides shall be no less than 42 inches in width.
  - Aisles serving less than 50 seats shall be permitted to be 36 inches.
  - Aisles serving less than 15 seats and is not an accessible route shall be permitted to be 30 inches.
- Level or ramped aisles serving seating on only one side shall be provided with minimum of 36 inches.
- Portions of aisles, where egress is possible in either of two directions, must be uniform in minimum width or required capacity.

The clear width for aisles must be measured to walls, edges of seating, and tread edges. Note that handrails are permitted to project up to 4-1/2 inches into the required width of stepped aisles.

### *8.15 Aisle Accessway*

Sufficient clear width must be provided within each row to allow occupants to access the aisle. Such clear widths must comply with the following. The minimum allowable width of the aisle accessway is dependent on the provisions of LSC Section 12.2.5.5 and IBC Section 1030.13. The aisle accessway clear width must be measured as the clear horizontal distance from the back of the row ahead and the nearest projection of the row behind. Where chairs have automatic or self-rising seats, the measurement shall be made with seats in the raised position. Where any chair in the row does not have an automatic or self-rising seat, the measurements must be made with the seat in the down position.

## 9 Stages

Stages are to comply with IBC Section 410 and LSC Section 12.4.6. The Portland Music Hall Stage is to be 48 ½ feet in height and 2,430 square feet.

### *9.1 CONSTRUCTION*

Stages are to be constructed of materials of the same types of construction of the building in which the stage is located, the finish floor is permitted to be of wood (LSC Section 12.4.6.3). Opening through the stage must be equipped with tight fitting traps with approved safety locks, and the comply requirement in LSC Section 12.4.6.3.3. Stage stairs are permitted to be constructed of combustible materials per LSC Section 12.4.6.1.2.

Scenery and stage properties shall be noncombustible materials, limited-combustible materials, or fire-retardant-treated wood LSC Section 12.4.6.11. Combustible sets and scenery materials in compliance with IBC Section 410.2.6 and LSC Section 12.4.6.11.1. Foamed plastics are permitted to be used if they comply with LSC Section 12.4.6.11.2.

The stage shall be separated from dressing rooms, scene docks property rooms, workshops, storerooms and compartment contiguous to the stage and other parts of the building by 1-hour fire resistance rating. Dressing rooms, scene docks property rooms, workshops, storerooms and compartment contiguous to the stage shall be separated from each other by not less than 1-hour fire resistance rating. (IBC Section 410.4)

The stage must be provided with an emergency ventilation system in compliance with IBC Section 410.2.7 and LSC Section 12.4.6.5. A minimum of two labeled roof vents must automatically open by an approved heat-activated device with an aggregate opening of not less than 5 percent of the stage area. Roof vents -shall be located in the center of and above the highest part of the stage area and exhaust directed to the exterior of the building (LSC Section 12.4.6.5) The Roof Vents shall be designed to maintain the smoke level at not less than 6 feet above the highest level of assembly seating or above the top of the proscenium opening (LSC Section 12.4.6.5.2).

Catwalks, gridiron, fly galleries and pinrails are to be constructed in compliance with LSC Section 12.4.6.8-6 and IBC Section 410.2.2. Structural framing that is designed only for attachment of portable or fixed theater equipment, gridirons, and galleries and catwalks shall be constructed of material consistence of the building material construction type, they are not required to comply with the fire resistance rating (LSC Section 12.4.6.8.1 and IBC Section 410.2.2). Fly galleries and pinrails are permitted to be constructed of Fire-retardant-treated wood. Combustible materials are permitted to be used for floors of catwalks and galleries (LSC Section 12.4.6.8).

If the stage increases to over 50 feet in height additional requirements will apply. Stages are to be constructed of Construction Type I materials. Stages greater than 50 feet in height must be protected by a proscenium wall not less than a 2-hour fire resistance rated wall from the foundation to the roof per IBC Section 410.2.4. The Proscenium walls and curtains shall comply with IBC Section 410.2.4, 410.2.5, and LSC 12.4.6.6, 12.4.6.7. The stage shall be separated from dressing rooms, scene docks property rooms, workshops, storerooms and compartment appurtenant to the stage and other part of the building by 2-hours fire resistance rating.

### *9.2 MEANS OF EGRESS*

Where two or more exits or exit access doorways are required, a minimum of 1 exit or exit access doorway must be provided on each side of the stage (IBC Section 410.5.1). Stairways and ramp serving the stage or platform are not required to be enclosed (IBC Section 410.5.2 & LSC Section 12.2.2.3.1).

Doors that are to be used as a means of egress, loading/unloading, or that is anticipated to be opened during occupancy of the theater must have a vestibule to prevent air drafts. (IBC Section 410.2.3)

Technical production requirements area are subject different means of egress requirements per IBC Section 410.5.3. Each technical production area must be provided with one (1) means of egress. The common path of travel must not exceed 100 feet. Trave distance must not exceed 400 feet. The path of egress must maintain a clear width of 22 inches. The path of egress may include stairways, ramps, spirals stairways, catwalks, alternating tread devices and permanent ladders. Ladders used for egress may serve no more than 10 occupants. (LSC Sections 7.2.9 & 12.2.2.10.2)

Automatic sprinklers must be installed under the roof, gridiron and under all catwalks and galleries located above the stage (IBC Section 410.6).

Stages greater than 1,000 square feet shall be equipped with Class III wet standpipes, with 1 ½ inch hose connection on each side of the stage (IBC section 905.3.4). The stage shall also be equipped with sufficient length of 1 ½ inch hose to provide fire protection for the stage area with an approved adjustable fog nozzle and be mounted in a cabinet or rack.

## 10 FIRE PROTECTION SYSTEMS

The following is a summary of the Fire Protection and Life Safety features being provided in the building:

1. Site Fire Protection Features:
    a. Fire Department Vehicle Access is required to be provided in accordance with the Fire Code.
    b. Fire Department Connection will be located within 100 feet of an outside fire hydrant connected to a water main that meets the required fire flow for the building. The Fire Department Connection will be arranged so the fire department can supply the entire fire protection system.
    c. The project will be equipped with an Emergency Responder Radio Coverage System.
2. Construction Type:
    a. The building construction type is proposed to be Type IIA noncombustible construction, with building elements protected in accordance with IBC Table 601.
3. Automatic Sprinkler and Standpipe Systems:
    a. Automatic Sprinklers will be provided throughout designed in accordance with NFPA 13.
    b. Class I standpipes are minimally required since the building does contain floor levels more than 30 feet above the lowest level of fire department vehicle access.
    c. Class III standpipes are required on both sides of the stage.
4. Portable fire extinguishers:
    a. Portable fire extinguishers shall be provided throughout the building in accordance with NFPA 10.
5. Fire Alarm and Occupant Notification Systems:
    a. Fire Alarm system is required to be designed in accordance with NFPA 72.
    b. An electrically supervised UL listed fire alarm system will be provided throughout the project. In addition, this system shall be listed.
        i. This system will provide automatic notification to the fire department for the building.
        ii. An emergency voice communication system will be provided throughout the Music Hall and will comply with NFPA 72. This system shall be capable of delivering emergency voice messaging through the use of fire alarm listed speakers installed throughout every space. The Fire Alarm system will shut down house music and turn on house lights upon activation.
        iii. Smoke Detection will be provided in the following buildings spaces. Consideration should be given to detection methods that will not activate a false alarm based on the presents of haze or fog.

1. In elevator machine rooms, machinery spaces, control rooms, and control spaces, and in elevator lobbies.
2. At each fire alarm control terminal in accordance with NFPA 72.
3. Each public address system amplifier room, where utilized for occupant notification.

iv. Manual Fire Alarm Pull Stations are not required to be provided in the design of the public assembly and office spaces within the building. (IBC Sections 907.2.1, and 907.2.2) However, a minimum of one manual pull stations will be provided within the project.

6. Emergency power shall be provided to the following systems:
   a. Emergency lighting along the means of egress.
   b. Electric Fire pump and associated monitoring equipment (if necessary).
   c. Exit signs.
   d. Fire Alarm System and all associated equipment.
   e. Power operated locks (if provided).
7. The entire means of egress is provided with normal and emergency lighting combined with egress signage.
8. Smoke Control: A smoke control system is not required for the building as it has been designed utilizing conventional mean of egress factors and does not take into account provisions utilizing smoke protected seating.
9. Elevators:
   a. Two-way communication must be provided at public passenger elevator lobbies on each accessible building level located one (1) or more stories above or below the level of exit discharge. The systems must be designed in accordance with NFPA 72 for appropriate survivability requirements.

### *10.1 AUTOMATIC SPRINKLER PROTECTION*

An automatic sprinkler system will be installed throughout the building. The system will be designed in accordance with NFPA 13.

The fire protection design demands in the new building will be based on state and local codes, standards and ordinances; and owner's insurance requirements. The sprinkler/standpipe system will include the following:

- Wet pipe fire protection will be provided throughout the majority of the building. A dry pipe sprinkler system will serve the loading dock.
- Automatic sprinkler systems, standpipe systems, and hose systems will be supplied from site water mains.
- The fire department connections will be located within 100 feet of an outside fire hydrant connected to a water main that meets the required fire flow for the building.
- Hose valves for standpipe systems will be 2.5 inch in diameter with 1.5-inch reducers. Hose threads will match the thread requirements of the local fire department.
- Water flow switches and valve tamper switches will be provided for the sprinkler and standpipe system.

### *10.2 STANDPIPES*

Standpipes are required throughout the building when the highest story is greater than 30 feet above the lowest level of fire department access (IBC Section 905). As the highest story is more than 30 feet above grade, standpipe will be provided and designed in accordance with NFPA 14 "Standard for the Installation of Standpipe, Private Hydrant and Hose Systems". Standpipe hose outlets will be located:

- At each exit stair at each floor level throughout the building.
- In every exit passageway, at the entrance from the exit passage to other building area of the building
- Where required by the fire official for areas that are more than 200 feet from a hose connection.
- At the roof or the highest landing for stairways with access to the roof if the roof slope is less than 4 units vertical in 12 units horizontal.
- Stages greater than 1,000 square feet shall be equipped with Class III wet standpipes, with 1 ½ inch hose connection on each side of the stage. (IBC section 905.3.4)

### *10.3 FIRE ALARM*

A fire alarm system is required in the building in accordance with IBC Section 907 and LSC Section 9.6.1 and 12.3.4. The fire alarm system must also be provided with a voice communication system, as the

building is an assembly occupancy with more than 1,000 occupants. A listed point addressable fire alarm system will be designed and installed in accordance with NFPA 70 and NFPA 72. Listed visual strobes and audible speaker alarm equipment will be provided throughout the building. Where smoke detectors are required and open to the performance area, consideration should be given to detection methods that will not activate a false alarm based on the presents of haze or fog.

#### 10.3.1 Emergency Voice/Alarm Communication System

The operation of any fire detection, sprinkler waterflow device, or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for general evacuation. Speakers shall be provided throughout the building by paging zones. As a minimum paging zones shall be provided as follows:

- Elevator Groups
- Exit Stairways
- Each Floor throughout

The communication system shall also provide the capability for manual override and live voice messaging. The system shall be designed in accordance with NFPA 72. It should be confirmed with ownership if a positive alarm sequence is desired requiring discussion with the Portland Fire Department.

### *10.4 ELEVATOR PROVISIONS*

Smoke detection will be provided in the elevator lobby of the new passenger elevators. Activation of a smoke detector in the elevator lobby, the elevator machine room, or the elevator shaft will cause the elevator to return to the designated floor of origin. The elevator will return under normal and emergency power. Once the elevator car returns, the car will remain inoperable unless overridden by the Fire Department. Phase I and Phase II recall equipment prescribed by the ASME 17.1 (2013) will be provided for the elevators in the building. Two-way communication devices will be provided at elevator lobby areas above and below grade.

### *10.5 PORTABLE FIRE EXTINGUISHERS*

Portable fire extinguishers will be provided in locations throughout the building as required by NFPA 10. Basic requirements are as follows.

IBC Section 906.1 requires extinguishers:

- Not more than 75 feet of travel distance to a fire extinguisher.
- Portable Class BC in elevator machine rooms and kitchens (kitchens may require class K depending on contents and use)
- Extinguishers shall not exceed 40 lbs.

### *10.6 Fire Department Access*

Per the Fire Prevention Code, NFPA 1 §18.2.3.2, a fire department access road must be maintained / provided in a manner that allows for at least one (1) exterior door to be within 50 feet of the access road that can be opened from the outside. Two access roads are typically considered for buildings of this size as a single fire department access road could be impaired by vehicle congestion.

In addition:

- All points of the building must be within 450 feet of fire department access roads as the building is protected throughout by an automatic sprinkler system (NFPA 1 §18.2.3.2.2.1).
- The fire department access road must have an unobstructed width of not less than 20 feet, and an unobstructed vertical clearance of 13 feet 6 inches.
- The access road must be designed and maintained to support the turning radius and imposed loads of fire department apparatus and must be provided with an all-weather driving surface.
- Where necessary, dead ends are permitted provided they do not exceed 150 feet.

### *10.7 Emergency Responder Radio Coverage*

Per the IBC §918.1 and NFPA 1§11.10.2, all buildings must have approved radio coverage for emergency responders within the building. The emergency responder radio coverage must be in accordance with NPFA 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*, 2016 edition.

## 11 Accessibility

### *11.1 New Construction Accessibility Requirements- General*

The building will be designed to be fully accessible and meet IBC Chapter 11, ICC A117.1 as well as the 2010 Americans with Disabilities Act. Both the IBC and ADA require that all entrances and public spaces are accessible, and that all bathrooms be designed to be accessible.

The following accessibility features shall be provided in the new building:

- All bathrooms will be accessible. Where clustered bathrooms are provided at least 50% must comply with ADA.
- The elevators will be fully accessible.
- All entrances will be accessible.
- All exterior walkways will be accessible.
- Accessible seating will be dispersed vertically and horizontally in all spaces.

### *11.2 Accessible Seating Requirements*

In places of assembly with fixed seating, the minimum number of accessible spaces provided must be in accordance with the table below:

**TABLE 1109.2.2.1**
**ACCESSIBLE WHEELCHAIR SPACES**

| CAPACITY OF SEATING IN ASSEMBLY AREAS | MINIMUM REQUIRED NUMBER OF WHEELCHAIR SPACES |
|---|---|
| 4 to 25 | 1 |
| 26 to 50 | 2 |
| 51 to 100 | 4 |
| 101 to 300 | 5 |
| 301 to 500 | 6 |
| 501 to 5,000 | 6, plus 1 for each 150, or fraction thereof, between 501 through 5,000 |
| 5,001 and over | 36 plus 1 for each 200, or fraction thereof, over 5,000 |

When more than 150 seats are provided, the wheelchair seating locations must be provided in more than one (1) location and must be dispersed through the seating area. Accessible seating must be integral with the rest of the seating (i.e. shoulder to shoulder). ADA §221.2.3.1 and §221.2.3.2 require horizontal and vertical distribution of assembly seating where the number of seats exceeds 300.

In addition to wheelchair seating locations, 5% of all fixed seats must be a companion seat consisting of an aisle seat with no armrests on the aisle side (or with removable or folding armrests on the aisle side) (IBC §1109.2.5).

A permanently installed assistive listening system, or other supplementary wiring necessary to support a portable assistive listening system must be provided (IBC §1109.2.7). The minimum number of receivers to be provided must be equal to 55 plus 1 per 100 seats over 2,000 seats. One per four receivers must be hearing aid compatible. See the table below:

TABLE 1109.2.7.1
RECEIVERS FOR ASSISTIVE LISTENING SYSTEMS

| CAPACITY OF SEATING IN ASSEMBLY AREAS | MINIMUM REQUIRED NUMBER OF RECEIVERS | MINIMUM NUMBER OF RECEIVERS TO BE HEARING-AID COMPATIBLE |
|---|---|---|
| 50 or less | 2 | 2 |
| 51 to 200 | 2, plus 1 per 25 seats over 50 seats* | 2 |
| 201 to 500 | 2, plus 1 per 25 seats over 50 seats* | 1 per 4 receivers* |
| 501 to 1,000 | 20, plus 1 per 33 seats over 500 seats* | 1 per 4 receivers* |
| 1,001 to 2,000 | 35, plus 1 per 50 seats over 1,000 seats* | 1 per 4 receivers* |
| Over 2,000 | 55, plus 1 per 100 seats over 2,000 seats* | 1 per 4 receivers* |

**Note:** * = or fraction thereof

## 12 PLUMBING FIXTURES

The Maine Plumbing Code adopts the 2021 Uniform Plumbing Code. The following table outlines the plumbing fixture requirements for new construction. The factors that dictate the fixture counts for the building dependent on the intended use of each space. Occupants may travel up or down one (1) floor to use fixtures and fixtures must be within 500 feet of travel distance (UPC §422.4). Separate toilet facilities must be provided for each sex (Maine Amendment to UPC §422.2.

| Occupancy | Water closets | | Urinals* | Lavatories | | Drinking Fountain |
|---|---|---|---|---|---|---|
| | Female | Male | | Female | Male | |
| Assembly (Theater) | 1: 1-25<br>2: 26-50<br>3: 51-100<br>4: 101-200<br>6: 201-300<br>8: 301-400 | 1: 1-100<br>2: 101-200<br>3: 201-400 | 1: 1-200<br>2: 201-300<br>3: 301-400<br>4: 401-600 | 1: 1-100<br>2: 101-200<br>4: 201-300<br>5: 301-500<br>6: 501-750 | 1: 1-200<br>2: 201-400<br>3: 401-600<br>3: 601-750 | 1: 1-250<br>2: 251-500<br>3: 501-750 |
| | Over 400, add 1 for each additional 500 males or 125 females | | Over 600, add 1 for each additional 300 | Over 750, add 1 for each 250 males or 200 females | | Over 750, add 1 fixture for each additional 500 |

| Occupancy | Water closets | | Urinals* | Lavatories | | Drinking Fountain |
|---|---|---|---|---|---|---|
| | Female | Male | | Female | Male | |
| Business | 1: 1-15<br>2: 16-30<br>3: 31-50<br>4: 51-100<br>8: 101-200<br>11: 201-400 | 1: 1-50<br>2: 51-100<br>3: 101-200<br>4: 201-400 | 1: 1-100<br>2: 101-200<br>3: 201-400<br>4: 401-600 | 1: 1-50<br>2: 51-100<br>3: 101-150<br>4: 151-200<br>5: 201-300<br>6: 301-400 | 1: 1-75<br>2: 76-150<br>3: 151-200<br>4: 201-300<br>5: 301-400 | 1 per 150 |
| | Over 400, add 1 for each additional 500 males or 150 females | | Over 600, add 1 for each additional 300 | Over 400, add 1 for each additional 250 males or 200 females | | |
| Storage | 1: 1-100<br>2: 101-200<br>3: 201-400 | 1: 1-100<br>2: 101-200<br>3: 201-400 | - | 1: 1-200<br>2: 201-400<br>3: 401-750 | 1: 1-200<br>2: 201-400<br>3: 401-750 | 1: 1-250<br>2: 251-500<br>3: 501-750 |
| | Over 400, add 1 for each additional 500 males or 150 females | | | Over 750, add 1 for each 500 occupants | | Over 750, add 1 fixture for each additional 500 |

*For each urinal added in excess of the minimum required, one water closet is permitted to be deducted. The number of water closets must not be reduced to less than 2/3 the minimum required.

## 13 CONCLUSION

The building is to be constructed in accordance with the requirements of the applicable codes. During this process, the building will be designed to provide levels of safety at least equivalent to the provisions contained in the applicable codes. To achieve these levels of safety, the following primary features are provided:

1. The building construction type will be Type IIA protected noncombustible construction.
2. Complete automatic sprinkler protection will be provided throughout the enclosed spaces within the building.
3. A UL-listed fire alarm system equipped with voice communication will be provided throughout the building in accordance with MUBEC 907.2.1.
4. Egress will be provided as outlined in this report.
5. The new building will be designed to be fully accessible including the entrances and bathrooms. The building will be designed to be fully accessible per the requirements of ICC A117.1 and ADA.

If you have questions or comments, please contact me.

Sincerely,

**KEITH FLANDERS, P.E.**
Project Director (kflanders@howeengineers.com)

781 878 3500 x 219
www.howeengineers.com
141 Longwater Drive, Suite 110. Norwell, MA 02061

# 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: 12/2/2024

**1. Please, Submit Utility, Site, and Locus Plans.**

Site Address: 244 Cumberland Ave.

Chart Block Lot Number: 27/D/003

Proposed Use: Theater and Performance Hall
Previous Use: Parking, former Printing and Commercial
Existing Sanitary Flows: 0 (vacant) GPD
Existing Process Flows: N/A GPD
Description and location of City sewer that is to receive the proposed building sewer lateral.
Existing sewer main in Pearl Street at Cumberland Avenue

| Site Category | | |
|---|---|---|
| | Commercial *(see part 4 below)* | X |
| | Industrial *(complete part 5 below)* | |
| | Governmental | |
| | Residential | |
| | Other *(specify)* | |

***Clearly, indicate the proposed connections, on the submitted plans.***

**2. Please, Submit Contact Information.**

City Planner's Name: Matt Grooms Phone: (207) 874-8699
Owner/Developer Name: Portland Music Holdings, LLC
Owner/Developer Address: 200 US Route 1, Suite 200 Scarborough, ME
Phone: 207-617-3890 Fax: E-mail: tgoldenfarb@ramcompaniesusa.com
Engineering Consultant Name: Sebago Technics, Inc.
Engineering Consultant Address: 75 John Roberts Road, Suite 4A, South Portland, ME 04106
Phone: 207-200-2092 Fax: 207-856-2206 E-mail: ctaylor@sebagotechnics.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: 18,380 GPD
Peaking Factor/ Peak Times: 6 pm - 12 am (midnight)
Specify the source of design guidelines: *(i.e.* X *"Handbook of Subsurface Wastewater Disposal in Maine," "Plumbers and Pipe Fitters Calculation Manual," __ Portland Water District Records, __ Other (specify)*

***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: TBD

Size of External Grease Interceptor: 1,500 (Estimated)

Retention Time: TBD

Peaking Factor/ Peak Times: TBD

***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.***

SEBAGO TECHNICS
75 John Roberts Road, Suite 4A
South Portland, Maine 04106
**(207) 200-2100 FAX (207) 856-2206**

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JOB | 19371-05 385 Congress, Lot 3 | | | | | | | | | | | | |
| SHEET NO. | 1 | OF | 1 | | | | | | | | | | |
| CALCULATED BY | DJS | DATE | 12/2/2024 | | | | | | | | | | |
| CHECKED BY | CPT | DATE | 12/2/2024 | | | | | | | | | | |
| FILE NAME | 19371-05 Wastewater Estimated daily flows | | | | | | | | | | | | |

## Sanitary Sewer Flows

**Design Flow:** **18,380** Averge Daily Flow (gpd)

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Auditorium/Stadium** | | | | | | | | | | | | |
| | 3,300 | Seats | | x | 5 | gallons/day = | | | | | 16,500 | gpd | |
| | 140 | Employees | | x | 12 | gallons/day = | | | | | 1,680 | gpd | |
| | 10 | Employees (with showers) | | x | 20 | gallons/day = | | | | | 200 | gpd | |
| | | | | | | | | | | **Subtotal** | **18,380** | **gpd** | |

Sewer capacity flows are calculated in accordance with "Handbook of Subsurface Wastewater Disposal in Maine"

**Planning Submittal**

December 18, 2024

# FIRE PROTECTION AND LIFE SAFETY NARRATIVE

PREPARED FOR DAIQ

## PORTLAND MUSIC HALL

Portland, Maine

HOWE ENGINEERS

141 LONGWATER DRIVE, SUITE 110
NORWELL, MA 02061
781.878.3500

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# 1 DOCUMENT HISTORY

Schematic Design FPLS Narrative……December 18, 2024

# 2 PURPOSE

The purpose of this report is to document and provide the conceptual code compliance strategy, including the framework for the fire protection and life safety concept, for the proposed Portland Music Hall located in Portland, Maine. This document will also identify concepts that are not clearly addressed by the applicable building codes, which will require interpretation by the authorities having jurisdiction (AHJ).

# 3 PROJECT DESCRIPTION

The new Portland Music Hall is designed for approximately 5,300 occupant seats. The new building will include two (2) stories with a mezzanine and a footprint of approximately 37,000 square feet and a roof height of approximately 57 feet. The following fire protection and life safety features are included in the project among others:

| | |
|---|---|
| **Primary Occupancy:** | Assembly Group A-1 (Concert Hall) |
| **Construction Type:** | Type IIA (noncombustible, protected) |
| **Sprinkler:** | Yes, NFPA 13 Sprinkler System |
| **Standpipe:** | Yes, Hose valve connections at enclosed stairs and stage |
| **Fire Alarm:** | Yes, Voice Alarm Communication System |
| **Means of Egress:** | Conventional Egress Factors Utilized (0.20 for doors and 0.30 for stairs) |
| | Stairs > 44 inches : Capacity = 146.7 + [(Wn – 44) / 0.218] |
| | Wn = Nominal Width of Stair |

# 4 AREAS REQUIRING INTERPRETATION OR EQUIVALENCY

## *4.1 MEZZANINE*

The floor area of a mezzanine must be limited to 1/3 the open floor area of the room or space in which they are located per LSC Section 8.6.10 and IBC Section 505.2. The floor area of a mezzanine may be 1/2 the open floor area below per IBC Section 505.2.1 Exc 2. Note the applicable edition of NFPA 101 does not include a permitted area increase beyond 1/3 the open floor area below.

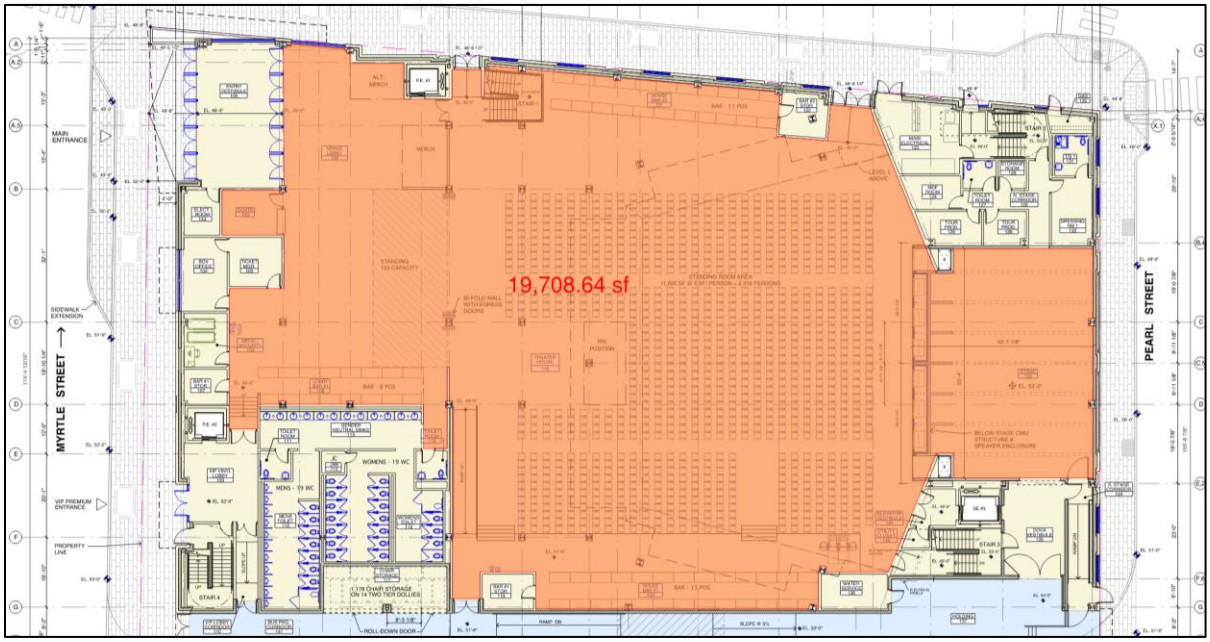
The Third (mezzanine) Level of the assembly seating is being considered a mezzanine to the Ground Level as it is open to the floor, albeit also open to Level 2. The Ground Level to Level 2 vertical opening is considered a compliant unprotected two-story opening in a building with an automatic sprinkler system in accordance with NFPA 101 Section 12.3.1(3) and IBC §712.1.9.

Enclosed spaces of a mezzanine are permitted provided the occupant load of the enclosed space does not exceed 10 (IBC Section 505.2.3 Exc 1 and NFPA 101 Section 8.6.10.3.1).

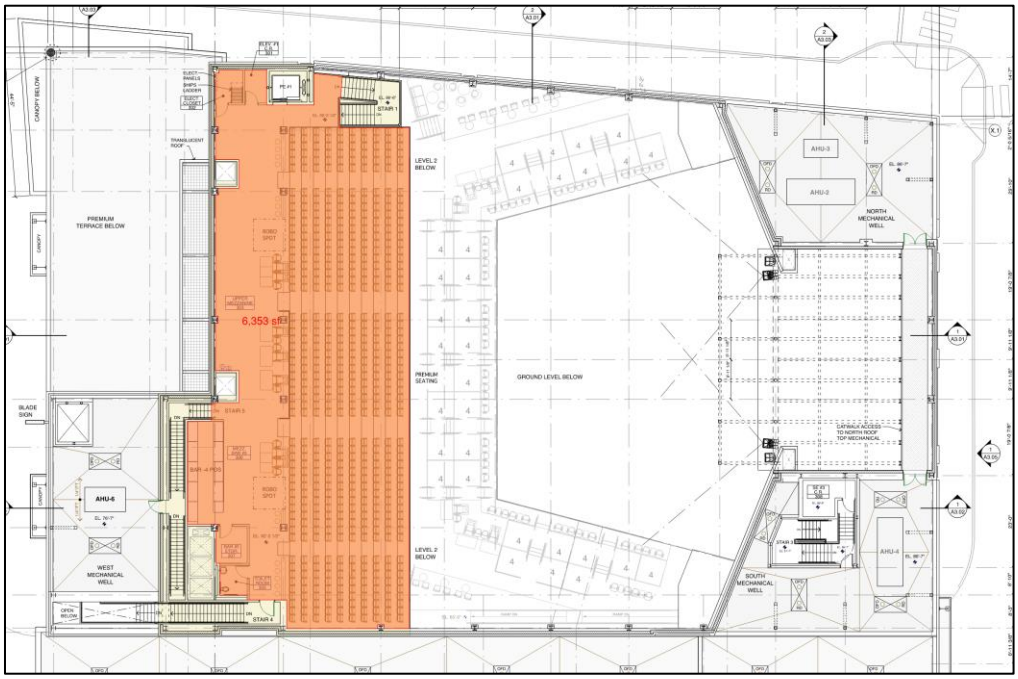
The mezzanine level has an occupiable area of 6,353 square feet and is open to the Ground Floor having an area of 19,708 square feet. Accordingly, the mezzanine is less than 1/3 the area of the ground floor.

Note that the Open Area considered on the Ground Floor includes the Lobby which has a foldable wall from the seating area that will only be utilized when there is not an audience present. The foldable wall is for security purposes during stage setup operations. The stage is also included in the Ground Floor area that is considered open to the mezzanine as occupants would be aware of any events on the stage. The measured mezzanine area also does not include stairs, elevator shafts, and non-occupiable shafts as these do no require egress on the mezzanine.

Accordingly, the Lobby is considered open for the purpose of the determining the allowable mezzanine area since the mezzanine will only be occupied when the operable partition is open during performances. The areas measured below shows the **open Ground Floor area**.



The image below shows the **occupiable area measured for the mezzanine**.




**This concept of open levels and operable partitions in determining the allowable mezzanine area is open to interpretation and must be presented to the Authority Having Jurisdiction for review and approval.**

## 5 APPLICABLE CODES AND STANDARDS

The following codes/standards are considered applicable for this project and are based on the currently proposed 2024 MUBEC. As the project progresses the design team will monitor the applicable codes for any relevant updates that may occur before permit submission.

- Maine Uniform Building and Energy Code (MUBEC), 2024 edition
  - 2021 International Building Code (IBC), with state amendments
  - 2021 International Mechanical Code (IMC), with state amendments
  - 2021 International Energy Conservation Code (IECC) with stretch code as adopted by the city
- 2021 Maine State Plumbing Code
  - 2021 Uniform Plumbing Code
- Accessibility
  - IBC Chapter 11 and 2017 ICC A117.1 (Accessible and Usable Buildings and Facilities)
  - 2010 Americans with Disabilities Act (ADA)

- Other Standards adopted by the Maine Fire Marshal office include:
  - NFPA 1, Fire Prevention Code, 2018 Edition, with Local and state amendments
  - NFPA 101, Life Safety Code, 2018 Edition, with local and state amendments (LSC)
  - NFPA 10, Standard for Portable Fire Extinguishers, 2018 Edition, with state amendments
  - NFPA 13, Installation of Sprinkler Systems, 2016 Edition, with state amendments
  - NFPA 14, Installation of Standpipe and Hose Systems, 2013 Edition, with state amendments
  - NFPA 20, Installation of Stationary Pumps for Fire Protection, 2013 Edition, with state amendments
  - NFPA 72, National Fire Alarm and Signaling Code, 2019 Edition, with state amendments

# 6 OCCUPANCY CLASSIFICATION

The Music Hall includes Assembly (Group A-1), Business (Group B), and Storage (Group S) uses, and is considered a Mixed-Use Occupancy. The building will comply with the requirements of Accessory Occupancies (IBC Section 508.2), Nonseparated/Mixed occupancy (IBC Section 508.3 and LSC Section 6.1.14.3) and Separated Occupancy (IBC Section 508.4). State amendments to the LSC regulate that IBC governs accessory occupancy requirements.

Separated Occupancies require a fire-resistance rating between occupancies aligned with IBC Table 508.4. The loading dock will be considered a separate occupancy per the IBC.

**Table 1: Separated Occupancy Ratings**

| OCCUPANCY | B / S-1 | S-2 |
|---|---|---|
| | SPRINKLERED | SPRINKLERED |
| A | 1 | 0 |
| B / S-1 | 0 | 1 |

The Remainder of the Music Hall will be classified as a Nonseparated/Mixed Occupancy with the primary occupancies being Group A-1 Assembly. Office, storage areas, and MEP areas making up less than 10% of the floor area are to be considered accessory space. (IBC Sections 508.2).

# 7 BUILDING CONSTRUCTION

## *7.1 BUILDING HEIGHT AND AREA ANALYSIS*

The Portland Music Hall is proposed to Type IIA construction. The following table outlines the allowable height and area based on the proposed construction type given the anticipated occupants.

**Table 2: Height and Area Building and Type IIA Sprinklered**

| TYPE IIA CONSTRUCTION ALLOWANCES | PERMITTED (IBC) | ACTUAL |
|---|---|---|
| **Height Above Grade** | | |
| All Occupancy involved: | 85 ft | 56.5 ft |
| **Stories Above Grade** | | |
| Group A-1 | 4 stories | |
| Group B | 6 stories | 2 Stories |
| Group S-1 | 5 stories | |
| Group S-2 | 6 stories | |
| **Floor Area (per story)** | | |
| Group A-1 | 46,500 $ft^2$ | |
| Group B | 112,500 $ft^2$ | 36,771 $ft^2$ |
| Group S-1 | 78,000 $ft^2$ | |
| Group S-2 | 117,000 $ft^2$ | |

## *7.2 MEZZANINE*

Mezzanine must be limited to 1/3 of the of the floor area per LSC Section 8.6.10 and IBC Section 505.2. Accordingly, the mezzanine is less than 1/3 the floor is open to and compliant with both IBC and LSC. The mezzanines shall also be protected by an automatic sprinkler system and provided with a minimum of two means of egress.

## *7.3 FIRE RESISTANCE RATINGS*

The fire resistance requirements for construction type can be found in IBC Table 601. The fire-resistance ratings for the Music Hall structural elements are as follows:

**Table 3: Fire Resistance Ratings of Structural Elements for Type IIA Construction IBC Table 601**

| BUILDING STRUCTURAL ELEMENT | FIRE RESISTANCE RATING FOR TYPE IIA |
|---|---|
| **Structural Frame**<br>Including columns, girders, and trusses | 1-hour |
| **Bearing Walls**<br>Exterior<br>Interior | <br>1-hour<br>1-hour |
| **Nonbearing Walls and Partitions**<br>Exterior<br>Interior | <br>0-hour<br>0-hour |
| **Floor Construction**<br>Including supporting beams and joists | <br>1-hour |
| **Roof Construction**<br>Including supporting beams and joists<br>Roof Construction 20 feet or more above the floor | <br>1-hour<br>0-hour |

### *7.4 SPECIAL FIRE SEPARATIONS REQUIRED*

Several referenced standards are applicable to this building that requires fire resistance rated separations for specific use areas. These required separations are provided below:

**Table 4: Incidental Use Separation Requirements**

| ROOM OR AREA | SEPARATION AND / OR PROTECTION |
|---|---|
| NFPA 20 – Fire Pump Room (if required) | 1-hr and automatic sprinklers |
| NFPA 70 – Transformer Rooms (over 112.5 kVA) | 1-hr and automatic sprinklers |
| Furnace rooms where any piece of equipment is over 400,000 BTU/hr. input | 1-hr, or automatic sprinklers[1] |
| Rooms with boilers where the largest piece of equipment is over 15 psi and 10 horsepower | 1-hr, or automatic sprinkler[1] |
| Laundry Rooms over 100 square feet | 1-hr, or automatic sprinkler[1] |
| Waste collection rooms over 100 square feet | 1-hr, or automatic sprinkler[1] |
| Rooms containing Lithium-Ion Batteries larger than 20kWh | 2-hr and automatic sprinklers |
| Note<br>1: Where Sprinkler protection is provided in lieu of a fire rating, the separation must still be capable of resisting the passages of smoke. | |

### *7.5 OPENING PROTECTIVES*

Openings in any fire-resistance rated assemblies within the building must be protected in accordance with IBC Table 716.1(2), Table 5 below.

**Table 5: Opening Protective Fire-Protection Ratings (IBC Table 716.5 & NFPA 221 Table 4.9.2)**

| Type of Assembly | Required Assembly Rating (hours) | Minimum Opening Protection Assembly (hours) |
|---|---|---|
| **Fire walls and fire barriers having a fire resistance rating greater than one hour** | 2<br>1 ½ | 1 ½<br>1 ½ |
| **Fire barriers of 1-hour fire rated construction:** | | |
| Shaft and Exit Enclosures | 1 | 1 |
| Other Fire Barriers | 1 | ¾ |

### *7.6 Protected Vertical Openings*

Vertical openings through floors must be protected by fire-rated assemblies in accordance with IBC Section 713.2 & LSC Section 8.6. Vertical openings include exit stairs, elevator shafts, mechanical shafts, grease duct shafts, and electrical chases. As any shafts will connect 3 stories or less, a minimum 1-hour fire-resistance rating must be provided.

The Ground Level is open to Level 2 which is considered a compliant two-story unprotected opening per LSC §12.3.1(1) and IBC 712.1.9. Level 3 is considered a mezzanine and therefore does performance area does not constitute a three-story vertical opening.

### *7.7 Interior Wall and Ceiling Finishes*

Interior wall and ceiling finishes in the Music Hall are required to meet the requirements of LSC Chapter 10, Sections 12.3.3.2 & 38.3.3.2, and IBC Section 803.11 Refer to the tables on the following page for details. Interior finish applies to wall and ceiling finishes. Interior floor finish applies to floor coverings. Refer to Table 6 for the minimum finish requirements within sprinklered buildings for interior wall and ceiling finishes.

**Table 6: Interior Wall and Ceiling Finish Requirements by Occupancy**

Sprinklered Building (LSC 12.3.3, LSC 38.3.3, LSC 42.3.3.2, and IBC Table 803.11)

| Use Group / Material | Interior exit stairways, interior exit ramps and exit passageways | Lobbies, Corridors, enclosure for exit access stairways and exit access ramps | Rooms and enclosed spaces |
|---|---|---|---|
| A | A or B[1] | A or B[1] | A or B[1] |
| B | A or B[1] | A or B[1] | A, B, or C[1] |
| S | A, B, or C | A, B, or C | A, B, or C[1] |
| Textile Ceiling Coverings[4] | A[1 or 2] | A[1 or 2] | A[1 or 2] |

| | | | |
|---|---|---|---|
| Textile Wall Coverings[4] | A[3] | A[3] | A[3] |

Notes:

1. Tested and classified in accordance with ASTM E84 or UL 723.
2. Tested and classified in accordance with NFPA 286.
3. Tested and classified in accordance with NFPA 265 – Method B protocol.
4. Test preparation and mounting in accordance with ASTM E2404.

As noted in Table 6, depending on the classification and use of the material, interior wall and ceiling finish materials must be classified in accordance with ASTM E84 or UL 723, NFPA 286, or NFPA 265. Materials determined to be considered Class A when tested in accordance with NFPA 286 shall be equivalent to those testing in accordance with ASTM E84 or UL 723.

### *7.8 Interior Floor Finishes*

Interior floor finishes in the Music Hall are required to meet the requirements of LSC Section 10.2.7, and IBC Section 804. All floor covering material comply DOC FF-1 “pill test” (CPSC 16 CFR Part 1630) or ASTM D2859. Interior floor finishes in exit enclosures and exit access corridors and spaces not separated from them by walls complying with LSC Section 12.3.6 must be no less than Class II as determined by NFPA 253 (LSC Section 12.3.3.5).

Floor sleepers, bucks and nailing blocks shall not be constructed of combustible materials, unless the space between the fire-resistance-rated floor assembly and the flooring is either solidly filled with noncombustible materials or fireblocked in accordance with Section 718, and provided that such open spaces shall not extend under or through permanent partitions or walls.

Wood finish flooring is permitted to be attached directly to the embedded or fire-blocked wood sleepers and shall be permitted where cemented directly to the top surface of fire-resistance rated floor assemblies or directly to a wood subfloor attached to sleepers as described above.

## 8 Means of Egress System

### *8.1 Occupant Load*

The occupant load for each space within the Music Hall is determined using the occupant load factors listed in IBC Table 1004.5, and LSC Table 7.3.1.2 as shown in the table below.

**Table 7: Occupant Load Factors**

| OCCUPANT USE GROUP | OCCUPANT LOAD FACTOR |
|---|---|
| Fixed Assembly Seating | Actual Number of Fixed Seats |
| Waiting spaces<br>Spaces ≤ 10,000 ft$^2$<br>Spaces > 10,000 ft$^2$ | <br>5 square feet (net) per person<br>7 square feet (net) person |
| Standing spaces | 5 square feet (net) per person |
| Assembly, Concentrated<br>(Seating, chairs only) | 7 square feet (net) per person |
| Assembly, Unconcentrated<br>(Tables and Chairs) | 15 square feet (net) per person |
| Lighting and access catwalks | 100 square feet (gross) per person |
| Stages and platforms | 15 square feet (net) per person |
| Business | 150 square feet (gross) per person |
| Conference rooms | 15 square feet (net) per person |
| Commercial Kitchens | 100 square feet (gross) per person |
| Storage, Mechanical, Electrical | 300 square feet (gross) per person |
| Locker Room | 50 square feet (gross) per person |

Howe Engineers will be preparing Life Safety drawings to clearly depict the anticipated occupant loads of the building.

### *8.2 EXIT CAPACITIES*

The exits within the Music Hall have been designed using the exit capacity factors listed in IBC Section 1005, LSC Section 7.3.3.1, and LSC Section 12.2.3. The exit capacity criteria are outlined in Table 8 below:

**Table 8: Exit Capacity Factors**

| LOCATION | EXIT CAPACITY (INCHES PER PERSON) |
|---|---|
| Stairs, Stepped Aisles<br>Doors, Corridors, Level Surfaces | 0.30 inches/person<br>0.20 inches/person |

For stairs wider than 44 inches, the egress capacity may be calculated using the following equation:

$$\text{Capacity} = 146.7 + [(Wn - 44) / 0.218]$$

$$Wn = \text{Nominal Width of Stair}$$

It is noted that smoke protected seating provisions are not being utilized for this project as it would require the installation and ongoing maintenance of a smoke control system. By not utilizing the smoke protected seating provisions, the means of egress will comply with the:

- Conventional exit capacity factors.

- Standard travel distance requirements.
- Standard common path of travel requirements.

### *8.3 Exit Access Travel Distance*

MUBEC replaces IBC Table 1017.2 with NFPA 101 Table A7.6. The common path of travel, and travel distance for each of the occupancies will be in accordance with the requirements for a sprinklered building contained in LSC Table A.7.6. Refer to the Table below:

**Table 9: Exit Access Travel Distances and Common Path**

| Occupancy | Travel Distance | Maximum common Path of Travel |
|---|---|---|
| Assembly | 250 feet | 75 feet |
| Business | 300 feet | 100 feet |
| Low Hazard Storage | Not Limited | 100 feet |
| Ordinary Hazard Storage | 400 feet | 100 feet |

The common path of egress from any seat must be limited to 30 ft when serving more than 50 occupants. (IBC Section 1029.8)

### *8.4 Number of Exits*

The number of exits serving every space or story must comply with IBC Section 1006.3.3, and LSC Section 7.4. Table 10 outlines the requirements for number of exits per story, as based on occupant load.

**Table 10: Required Number of Exits (IBC Table 1006.3.3)**

| Occupant Load Per Story | Minimum Number of Exits or Access to Exits per Story |
|---|---|
| 1 - 500 | 2* |
| 501 – 1,000 | 3 |
| More than 1,000 | 4 |

**Unless otherwise permitted by IBC Section 1006.3.3 (refer to **Error! Reference source not found.**)*

In addition to such provisions, a minimum of two (2) exits, or exit access doorways must be provided from any space where the common path of travel limitation are exceeded or a Group A or B spaces exceeds 49 occupants or Group S occupancy exceeds 29 occupants.

Where two (2) exits, or exit access doors are required from a space, they must be place not less than 1/3 the overall diagonal distance of the area served. (IBC Section 1007.1.1 Exception 2 & LSC Section 7.5.1.3.3).

Where there are three (3) or more exits or exit access doors, at least two of the exits or exit access doors are required to meet the remoteness as defined above. The additional exits shall be located as remotely as possible (IBC Section 1007.1.2).

The main entrance to assembly occupancies must be able to accommodate 2/3 of the total occupant load, and no more than 50 percent of the occupants may egress through a single exit (LSC Section 7.3.1.1.2 & LSC Section 12.2.3.6.2).

### *8.5 Dead End Corridor Limits*

As outlined within IBC Section 1020.4, LSC Sections 12.2.5.1.3, 39.2.5.2, 42.2.5 and LSC Section 7.2.1.4.3.1 where more than one (1) exit or exit access doorway is required, exit access must be arranged such that there are no dead ends greater than:

- A Occupancies 20 feet
- B Occupancies 50 feet
- S Occupancies 50 feet

### *8.6 Exit Discharge*

Exit stair enclosures must discharge directly to the exterior or may be extended to the exterior via an exit passageway. All the exit stairs are designed to discharge directly to the exterior or be extended to such via an exit passageway.

### *8.7 Accessible Means of Egress*

The Music Hall must conform to the requirements of IBC Section 1009 and LSC Section 7.5.4, Accessible means of egress. All accessible areas shall be provided with a minimum of one accessible means of egress. Where more two or more means of egress are required from a space a minimum of two accessible means of egress must be provided (IBC Section 1009.1).

Assembly occupancy means of egress must comply with NFPA 101 §7.5 which requires at least two accessible means of egress be available unless a single means of egress is specifically permitted (NFPA 101 §12.2.5.1.1). As such, at least two accessible means of egress must be available on each story.

An accessible means of egress per the definition is an accessible route to an area of refuge, horizontal exit, or public way (NFPA 101 §3.3.178.1). An area of refuge in a sprinklered building may be a story with two rooms or spaces separated by smoke-resisting partitions (NFPA 101 §3.3.23).

Elevator landing shall be provided with a two-way communication system for communication between the elevator landing and fire command center or central point approved by the AHJ. Elevator landing shall also be provided with directions for use of the two-way communication system, in both audible and visible signals (LSC Section 7.2.12.1.1).

### *8.8 Exit Access Doorways and Openings*

- Dimensional Requirements (LSC Sections 7.2.1, 12/13.2.2.2, 38/39.2.2.2, 42.2.22, & IBC Section 1010.1.1):

| | |
|---|---|
| Minimum clear width | 32 inches |
| Maximum size of a leaf | 48 inches |
| Minimum height | 6 feet – 8 inches |

- Direction of swing (LSC Section 7.2.1.4.2):

  Doors serving a space with less than 50 persons are permitted to swing into the room. Spaces with more than one exit access door or 50 or more persons are required to have the exit access doors swing in the direction of travel towards the exit.

- Doors must be side-hinged swinging in all spaces except in storage or office space with an occupant load of 10 or less. (IBC Section 1010.1.2)

Doors serving a space with less than 50 persons are permitted to swing into the room. Spaces with 50 or more people are required to have the exit access doors swing in the direction of travel towards the exit.

Doors are not permitted to project more than 50 percent of the required clear width in an exit or exit access at any point during the swing when opening. In addition, doors, when fully open, are not permitted to project more than 7 inches into the required exit clear width (IBC Section 1010.1.6).

### *8.9 Panic Hardware*

In accordance with IBC Section 1010.2.9 and LSC Section 7.2.1.7, each door in a means of egress from the building having an occupant load of 50 or more people must not contain a lock or latch unless it is listed panic hardware. Electrical rooms with equipment rated 800 amperes or more, that contain overcurrent devices, switching devices or control devices and where the exit or exit access doors is less than 25 feet

from the equipment working space must be equipped with panic hardware or fire exit hardware. These doors must swing in the direction of egress travel.

- Panic hardware must be listed in accordance with UL 305; Fire exit hardware must be listed in accordance with UL 10C and UL 305.
- Panic hardware must be mounted at or between 34 inches and 48 inches in height above the finished floor. (IBC Section 1010.2.9.3)
- The door is required to unlatch when subjected to a force of not more than 15 pounds.
- The activation portion of the device is not permitted to extend less than one half the width of the door leaf.

### *8.10 EXIT STAIRWAYS*

The City of Portland LSC amendment 5 states the MUBEC governs stairs when a conflict occurs between MUBEC and LSC. LSC Sections 7.2.2, 12.2.2.3, 28.2.2.3.2 & IBC Section 1011:

1. The stair dimensions are as follows:
    a. Riser height (must be uniform entire stair length):
        i. 4 inches minimum
        ii. 7 inches maximum
    b. Treads:
        i. Minimum tread depth is 11 inches, measured horizontally between the vertical planes of the most forward projection of the treads above and below. Tread depths should not vary on any run of stairs.
    c. Minimum Stair Width based on total cumulative occupant load assigned to the stair (IBC Section 1011.2 & LSC Table 7.2.2.2.1.2(B))

| | |
|---|---|
| < 49 Occupants | 36 inches |
| 50 - 2,000 Occupants | 44 inches |
| ≥ 2,000 Occupants | 56 inches |

    d. Minimum Headroom clearance must be a minimum of 80 inches (IBC Section 1011.3)
2. Landings (IBC Section 1011.6):
    a. The depth of a landing will not be less than the width of the stair in the direction of travel in a straight run configuration but is not required to exceed 48 inches.
    b. The vertical distance between landings will not exceed 12 feet.
    c. Landings are required to have the minimum width so as not to reduce the width of the stair and will not be less than the width of the door. Doors when opening will not project

more than 50 percent of the width of the landing. When the door is fully open, it will not project more than 7 inches into the stair landing.

d. The minimum headroom clearance in a stair will be not less than 80 inches

3. Exit stair enclosures must not be used for any purpose other than as a mean of egress and a circulation path.

### *8.11 HANDRAILS*

Handrails are required to be provided as follows on flights of stairs, ramps with a rise greater than 6 inches, Stepped Aisle, and aisle ramps with a slope greater than 1 in 20 (IBC Sections 1011.11, 1012.8, 1014 & 1030.16):

1. Handrails on both sides of the stairs so that handrails can be accessed from any part of the stair within 30 inches of the required width. Where handrails are provided in the middle of aisle stairs, there must be an additional intermediate handrail located approximately 12 inches below the main handrail. The clear width between intermediate handrails shall be a minimum of 20 inches and maximum of 30 inches.
2. The same requirement applies to ramps with rise of greater than 6 inches.
3. Handrails are required to be installed between 34 and 38 inches above the stair surfaces.
4. The handrail must extend the full length of the stair or ramp.
5. Handrails will return to a wall, guard, or the walking surface or will be continuous to the handrail of an adjacent stair flight or ramp run. At stairways where handrails are not continuous between flights, the handrails will extend horizontally at least 12 inches beyond the top riser and continue to slope for the depth of one tread beyond the bottom riser. At ramps where handrails are not continuous between runs the handrail will extend horizontally above the landing 12 inches (305 mm) minimum beyond the top and bottom ramps.
6. Handrails with a circular cross section must have an outside diameter of at least 1.25 inches but not more than 2 inches. If the handrail is not circular, the perimeter dimension must be at least 4 inches but not greater than 6.25 inches with a maximum cross-section dimension of 2.25 inches.
    i. Handrails with a perimeter greater than 6.25 inches must provide a graspable finger recess area on both sides of the profile. The finger recess must begin within a distance of 0.75 inch measured vertically from the tallest portion of the profile and achieve a depth of at least 5/16 inch within 7/8 inch below the widest portion of the profile. This required depth will continue for at least 3/8 inch to a level that is not less than 1.75 inches below

the tallest portion of the profile. The minimum width of the handrail above the recess will be 1.25 inches to a maximum 2.75 inches.

ii. Edges will have a minimum radius of 0.01 inch.

7. Handrails must be not less than 2 1/4 in. from the wall (LSC Section 7.2.2.4.5.5). IBC requires a minimum 1 ½ inches from the wall (IBC Section 1014.7).
8. The handrail is not permitted to project more than 4.5 inches into the required width of a stair or 3.5 inches at a ramp.

### *8.12 GUARDS*

Guards shall be designed and installed in accordance with IBC Section 1015 and LSC Sections 7.1.8, 7.2.5.5 & 7.2.2.4. Specific requirements are as follows:

1. Guards will be provided along the open side of walking surfaces, stairways, ramps and landings which are located more than 30 inches above the floor or grade.
2. Guards must form a protective barrier not less than 42 inches in height, measured vertically above the leading edge of the tread, adjacent walking surface or adjacent seat board.
    a. Guards may be 26 inches in height at the front of seating aisles where sight-lines to the event floor may otherwise be constrained (30 inches minimum is typically recommended) (NFPA 101 Section 12.2.11.1.1). Guards must be a minimum 36 inches in height at the foot of aisles and also maintain 42 inches between the top of the rail and the nosing of the nearest tread (NFPA 101 Section 12.2.11.1.2.2).
3. Open guards must contain balusters or ornamental patterns such that a four-inch diameter sphere cannot pass through any opening up to a height of 34 inches. From a height of 34 inches to 42 inches above the adjacent walking surfaces, a sphere 8 inches in diameter shall not pass.

    EXCEPTIONS

    a. The triangular openings formed by the riser, tread and bottom rail at the open side of a stairway shall be of a maximum size such that a sphere of six (6) inches in diameter cannot pass through the opening.
    b. In storage areas and at elevated walking surfaces for access to and use of electrical, mechanical, or plumbing systems or equipment, guards shall have balusters or be of solid materials such that a sphere with a diameter of 21 inches cannot pass through any opening.

### *8.13 Stepped Aisle Construction*

Aisles with a slope exceeding one (1) unit vertical in eight (8) units horizontal (12.5-percent slope) must be provided with a series of risers and treads that extend across the full required width of the aisles. Such stepped aisles must be constructed as follows:

- Treads:
  - Tread depths must not be less than 11 inches.
  - A contrasting marking stripe must be provided on each tread at the nosing or leading edge such that the location of each tread is readily apparent when viewed in descent.
- Risers
  - Where the gradient of stepped aisles is the be the same as the gradient of adjoining seating areas, the riser height must not be less than 4 inches, and not more than 8 inches.
    - Riser heights not exceeding 9 inches are allowed where they are necessitated by the slope of the adjacent seating area to maintain sightlines.
  - The riser height must be uniform within each flight.
    - Riser height uniformity must be limited to the extent necessitated by changes in the gradient of the adjoining seating area to maintain sightlines.
    - Non-uniformity that exceed 3/16 inches between risers must be indicated with a distinctive marking stripe on each tread at the nosing or leading edge adjacent to the nonuniform riser.
- Stepped aisles shall be provided with handrails per IBC Section 1030.16 and LSC Section 12.2.5.6.9.

### *8.14 Aisle Width*

Aisles shall be sufficient in width to accommodate the occupant load served based on the egress capacity factors contained above per IBC Section 1030.9 and LSC Section 12.2.5.6.3. The following widths are proposed as the basis of the design:

- Stepped aisles serving more than 50 people must provide a minimum 48 inches in width where serving seating on both sides, IBC Section 1030.9.1.
  - Stepped aisles serving seating on both sides with less than 50 occupants shall be a minimum 36 inches

  - Note: where 48-inch wide aisles that serve more than 50 occupants with seating on both sides, split around a vomitory into two (2) aisles, the minimum clear width of each aisle around the vomitory opening must not be less than 36 inches wide.
- Stepped aisles serving seating on only one side for more than five rows shall be minimum 36 inches.
  - Stepped aisles serving seating on only one side with five rows or less are allowed to be 23 inches wide.
- Stepped aisles handrails or guard and seating shall be no less than 23 inches in clear width, where the aisle is subdivided by a handrail.
- Level or ramped aisles serving seating on both sides shall be no less than 42 inches in width.
  - Aisles serving less than 50 seats shall be permitted to be 36 inches.
  - Aisles serving less than 15 seats and is not an accessible route shall be permitted to be 30 inches.
- Level or ramped aisles serving seating on only one side shall be provided with minimum of 36 inches.
- Portions of aisles, where egress is possible in either of two directions, must be uniform in minimum width or required capacity.

The clear width for aisles must be measured to walls, edges of seating, and tread edges. Note that handrails are permitted to project up to 4-1/2 inches into the required width of stepped aisles.

### *8.15 Aisle Accessway*

Sufficient clear width must be provided within each row to allow occupants to access the aisle. Such clear widths must comply with the following. The minimum allowable width of the aisle accessway is dependent on the provisions of LSC Section 12.2.5.5 and IBC Section 1030.13. The aisle accessway clear width must be measured as the clear horizontal distance from the back of the row ahead and the nearest projection of the row behind. Where chairs have automatic or self-rising seats, the measurement shall be made with seats in the raised position. Where any chair in the row does not have an automatic or self-rising seat, the measurements must be made with the seat in the down position.

## 9 Stages

Stages are to comply with IBC Section 410 and LSC Section 12.4.6. The Portland Music Hall Stage is to be 48 ½ feet in height and 2,430 square feet.

### *9.1 CONSTRUCTION*

Stages are to be constructed of materials of the same types of construction of the building in which the stage is located, the finish floor is permitted to be of wood (LSC Section 12.4.6.3). Opening through the stage must be equipped with tight fitting traps with approved safety locks, and the comply requirement in LSC Section 12.4.6.3.3. Stage stairs are permitted to be constructed of combustible materials per LSC Section 12.4.6.1.2.

Scenery and stage properties shall be noncombustible materials, limited-combustible materials, or fire-retardant-treated wood LSC Section 12.4.6.11. Combustible sets and scenery materials in compliance with IBC Section 410.2.6 and LSC Section 12.4.6.11.1. Foamed plastics are permitted to be used if they comply with LSC Section 12.4.6.11.2.

The stage shall be separated from dressing rooms, scene docks property rooms, workshops, storerooms and compartment contiguous to the stage and other parts of the building by 1-hour fire resistance rating. Dressing rooms, scene docks property rooms, workshops, storerooms and compartment contiguous to the stage shall be separated from each other by not less than 1-hour fire resistance rating. (IBC Section 410.4)

The stage must be provided with an emergency ventilation system in compliance with IBC Section 410.2.7 and LSC Section 12.4.6.5. A minimum of two labeled roof vents must automatically open by an approved heat-activated device with an aggregate opening of not less than 5 percent of the stage area. Roof vents -shall be located in the center of and above the highest part of the stage area and exhaust directed to the exterior of the building (LSC Section 12.4.6.5) The Roof Vents shall be designed to maintain the smoke level at not less than 6 feet above the highest level of assembly seating or above the top of the proscenium opening (LSC Section 12.4.6.5.2).

Catwalks, gridiron, fly galleries and pinrails are to be constructed in compliance with LSC Section 12.4.6.8-6 and IBC Section 410.2.2. Structural framing that is designed only for attachment of portable or fixed theater equipment, gridirons, and galleries and catwalks shall be constructed of material consistence of the building material construction type, they are not required to comply with the fire resistance rating (LSC Section 12.4.6.8.1 and IBC Section 410.2.2). Fly galleries and pinrails are permitted to be constructed of Fire-retardant-treated wood. Combustible materials are permitted to be used for floors of catwalks and galleries (LSC Section 12.4.6.8).

If the stage increases to over 50 feet in height additional requirements will apply. Stages are to be constructed of Construction Type I materials. Stages greater than 50 feet in height must be protected by a proscenium wall not less than a 2-hour fire resistance rated wall from the foundation to the roof per IBC Section 410.2.4. The Proscenium walls and curtains shall comply with IBC Section 410.2.4, 410.2.5, and LSC 12.4.6.6, 12.4.6.7. The stage shall be separated from dressing rooms, scene docks property rooms, workshops, storerooms and compartment appurtenant to the stage and other part of the building by 2-hours fire resistance rating.

### *9.2 MEANS OF EGRESS*

Where two or more exits or exit access doorways are required, a minimum of 1 exit or exit access doorway must be provided on each side of the stage (IBC Section 410.5.1). Stairways and ramp serving the stage or platform are not required to be enclosed (IBC Section 410.5.2 & LSC Section 12.2.2.3.1).

Doors that are to be used as a means of egress, loading/unloading, or that is anticipated to be opened during occupancy of the theater must have a vestibule to prevent air drafts. (IBC Section 410.2.3)

Technical production requirements area are subject different means of egress requirements per IBC Section 410.5.3. Each technical production area must be provided with one (1) means of egress. The common path of travel must not exceed 100 feet. Trave distance must not exceed 400 feet. The path of egress must maintain a clear width of 22 inches. The path of egress may include stairways, ramps, spirals stairways, catwalks, alternating tread devices and permanent ladders. Ladders used for egress may serve no more than 10 occupants. (LSC Sections 7.2.9 & 12.2.2.10.2)

Automatic sprinklers must be installed under the roof, gridiron and under all catwalks and galleries located above the stage (IBC Section 410.6).

Stages greater than 1,000 square feet shall be equipped with Class III wet standpipes, with 1 ½ inch hose connection on each side of the stage (IBC section 905.3.4). The stage shall also be equipped with sufficient length of 1 ½ inch hose to provide fire protection for the stage area with an approved adjustable fog nozzle and be mounted in a cabinet or rack.

## 10 FIRE PROTECTION SYSTEMS

The following is a summary of the Fire Protection and Life Safety features being provided in the building:

1. Site Fire Protection Features:
    a. Fire Department Vehicle Access is required to be provided in accordance with the Fire Code.
    b. Fire Department Connection will be located within 100 feet of an outside fire hydrant connected to a water main that meets the required fire flow for the building. The Fire Department Connection will be arranged so the fire department can supply the entire fire protection system.
    c. The project will be equipped with an Emergency Responder Radio Coverage System.
2. Construction Type:
    a. The building construction type is proposed to be Type IIA noncombustible construction, with building elements protected in accordance with IBC Table 601.
3. Automatic Sprinkler and Standpipe Systems:
    a. Automatic Sprinklers will be provided throughout designed in accordance with NFPA 13.
    b. Class I standpipes are minimally required since the building does contain floor levels more than 30 feet above the lowest level of fire department vehicle access.
    c. Class III standpipes are required on both sides of the stage.
4. Portable fire extinguishers:
    a. Portable fire extinguishers shall be provided throughout the building in accordance with NFPA 10.
5. Fire Alarm and Occupant Notification Systems:
    a. Fire Alarm system is required to be designed in accordance with NFPA 72.
    b. An electrically supervised UL listed fire alarm system will be provided throughout the project. In addition, this system shall be listed.
        i. This system will provide automatic notification to the fire department for the building.
        ii. An emergency voice communication system will be provided throughout the Music Hall and will comply with NFPA 72. This system shall be capable of delivering emergency voice messaging through the use of fire alarm listed speakers installed throughout every space. The Fire Alarm system will shut down house music and turn on house lights upon activation.
        iii. Smoke Detection will be provided in the following buildings spaces. Consideration should be given to detection methods that will not activate a false alarm based on the presents of haze or fog.

1. In elevator machine rooms, machinery spaces, control rooms, and control spaces, and in elevator lobbies.
2. At each fire alarm control terminal in accordance with NFPA 72.
3. Each public address system amplifier room, where utilized for occupant notification.

iv. Manual Fire Alarm Pull Stations are not required to be provided in the design of the public assembly and office spaces within the building. (IBC Sections 907.2.1, and 907.2.2) However, a minimum of one manual pull stations will be provided within the project.

6. Emergency power shall be provided to the following systems:
   a. Emergency lighting along the means of egress.
   b. Electric Fire pump and associated monitoring equipment (if necessary).
   c. Exit signs.
   d. Fire Alarm System and all associated equipment.
   e. Power operated locks (if provided).
7. The entire means of egress is provided with normal and emergency lighting combined with egress signage.
8. Smoke Control: A smoke control system is not required for the building as it has been designed utilizing conventional mean of egress factors and does not take into account provisions utilizing smoke protected seating.
9. Elevators:
   a. Two-way communication must be provided at public passenger elevator lobbies on each accessible building level located one (1) or more stories above or below the level of exit discharge. The systems must be designed in accordance with NFPA 72 for appropriate survivability requirements.

### *10.1 AUTOMATIC SPRINKLER PROTECTION*

An automatic sprinkler system will be installed throughout the building. The system will be designed in accordance with NFPA 13.

The fire protection design demands in the new building will be based on state and local codes, standards and ordinances; and owner's insurance requirements. The sprinkler/standpipe system will include the following:

- Wet pipe fire protection will be provided throughout the majority of the building. A dry pipe sprinkler system will serve the loading dock.
- Automatic sprinkler systems, standpipe systems, and hose systems will be supplied from site water mains.
- The fire department connections will be located within 100 feet of an outside fire hydrant connected to a water main that meets the required fire flow for the building.
- Hose valves for standpipe systems will be 2.5 inch in diameter with 1.5-inch reducers. Hose threads will match the thread requirements of the local fire department.
- Water flow switches and valve tamper switches will be provided for the sprinkler and standpipe system.

### *10.2 STANDPIPES*

Standpipes are required throughout the building when the highest story is greater than 30 feet above the lowest level of fire department access (IBC Section 905). As the highest story is more than 30 feet above grade, standpipe will be provided and designed in accordance with NFPA 14 "Standard for the Installation of Standpipe, Private Hydrant and Hose Systems". Standpipe hose outlets will be located:

- At each exit stair at each floor level throughout the building.
- In every exit passageway, at the entrance from the exit passage to other building area of the building
- Where required by the fire official for areas that are more than 200 feet from a hose connection.
- At the roof or the highest landing for stairways with access to the roof if the roof slope is less than 4 units vertical in 12 units horizontal.
- Stages greater than 1,000 square feet shall be equipped with Class III wet standpipes, with 1 ½ inch hose connection on each side of the stage. (IBC section 905.3.4)

### *10.3 FIRE ALARM*

A fire alarm system is required in the building in accordance with IBC Section 907 and LSC Section 9.6.1 and 12.3.4. The fire alarm system must also be provided with a voice communication system, as the

building is an assembly occupancy with more than 1,000 occupants. A listed point addressable fire alarm system will be designed and installed in accordance with NFPA 70 and NFPA 72. Listed visual strobes and audible speaker alarm equipment will be provided throughout the building. Where smoke detectors are required and open to the performance area, consideration should be given to detection methods that will not activate a false alarm based on the presents of haze or fog.

#### 10.3.1 Emergency Voice/Alarm Communication System

The operation of any fire detection, sprinkler waterflow device, or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for general evacuation. Speakers shall be provided throughout the building by paging zones. As a minimum paging zones shall be provided as follows:

- Elevator Groups
- Exit Stairways
- Each Floor throughout

The communication system shall also provide the capability for manual override and live voice messaging. The system shall be designed in accordance with NFPA 72. It should be confirmed with ownership if a positive alarm sequence is desired requiring discussion with the Portland Fire Department.

### *10.4 ELEVATOR PROVISIONS*

Smoke detection will be provided in the elevator lobby of the new passenger elevators. Activation of a smoke detector in the elevator lobby, the elevator machine room, or the elevator shaft will cause the elevator to return to the designated floor of origin. The elevator will return under normal and emergency power. Once the elevator car returns, the car will remain inoperable unless overridden by the Fire Department. Phase I and Phase II recall equipment prescribed by the ASME 17.1 (2013) will be provided for the elevators in the building. Two-way communication devices will be provided at elevator lobby areas above and below grade.

### *10.5 PORTABLE FIRE EXTINGUISHERS*

Portable fire extinguishers will be provided in locations throughout the building as required by NFPA 10. Basic requirements are as follows.

IBC Section 906.1 requires extinguishers:

- Not more than 75 feet of travel distance to a fire extinguisher.
- Portable Class BC in elevator machine rooms and kitchens (kitchens may require class K depending on contents and use)
- Extinguishers shall not exceed 40 lbs.

### *10.6 Fire Department Access*

Per the Fire Prevention Code, NFPA 1 §18.2.3.2, a fire department access road must be maintained / provided in a manner that allows for at least one (1) exterior door to be within 50 feet of the access road that can be opened from the outside. Two access roads are typically considered for buildings of this size as a single fire department access road could be impaired by vehicle congestion.

In addition:

- All points of the building must be within 450 feet of fire department access roads as the building is protected throughout by an automatic sprinkler system (NFPA 1 §18.2.3.2.2.1).
- The fire department access road must have an unobstructed width of not less than 20 feet, and an unobstructed vertical clearance of 13 feet 6 inches.
- The access road must be designed and maintained to support the turning radius and imposed loads of fire department apparatus and must be provided with an all-weather driving surface.
- Where necessary, dead ends are permitted provided they do not exceed 150 feet.

### *10.7 Emergency Responder Radio Coverage*

Per the IBC §918.1 and NFPA 1§11.10.2, all buildings must have approved radio coverage for emergency responders within the building. The emergency responder radio coverage must be in accordance with NPFA 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*, 2016 edition.

## 11 Accessibility

### *11.1 New Construction Accessibility Requirements- General*

The building will be designed to be fully accessible and meet IBC Chapter 11, ICC A117.1 as well as the 2010 Americans with Disabilities Act. Both the IBC and ADA require that all entrances and public spaces are accessible, and that all bathrooms be designed to be accessible.

The following accessibility features shall be provided in the new building:

- All bathrooms will be accessible. Where clustered bathrooms are provided at least 50% must comply with ADA.
- The elevators will be fully accessible.
- All entrances will be accessible.
- All exterior walkways will be accessible.
- Accessible seating will be dispersed vertically and horizontally in all spaces.

### *11.2 Accessible Seating Requirements*

In places of assembly with fixed seating, the minimum number of accessible spaces provided must be in accordance with the table below:

**TABLE 1109.2.2.1**
**ACCESSIBLE WHEELCHAIR SPACES**

| CAPACITY OF SEATING IN ASSEMBLY AREAS | MINIMUM REQUIRED NUMBER OF WHEELCHAIR SPACES |
|---|---|
| 4 to 25 | 1 |
| 26 to 50 | 2 |
| 51 to 100 | 4 |
| 101 to 300 | 5 |
| 301 to 500 | 6 |
| 501 to 5,000 | 6, plus 1 for each 150, or fraction thereof, between 501 through 5,000 |
| 5,001 and over | 36 plus 1 for each 200, or fraction thereof, over 5,000 |

When more than 150 seats are provided, the wheelchair seating locations must be provided in more than one (1) location and must be dispersed through the seating area. Accessible seating must be integral with the rest of the seating (i.e. shoulder to shoulder). ADA §221.2.3.1 and §221.2.3.2 require horizontal and vertical distribution of assembly seating where the number of seats exceeds 300.

In addition to wheelchair seating locations, 5% of all fixed seats must be a companion seat consisting of an aisle seat with no armrests on the aisle side (or with removable or folding armrests on the aisle side) (IBC §1109.2.5).

A permanently installed assistive listening system, or other supplementary wiring necessary to support a portable assistive listening system must be provided (IBC §1109.2.7). The minimum number of receivers to be provided must be equal to 55 plus 1 per 100 seats over 2,000 seats. One per four receivers must be hearing aid compatible. See the table below:

TABLE 1109.2.7.1
RECEIVERS FOR ASSISTIVE LISTENING SYSTEMS

| CAPACITY OF SEATING IN ASSEMBLY AREAS | MINIMUM REQUIRED NUMBER OF RECEIVERS | MINIMUM NUMBER OF RECEIVERS TO BE HEARING-AID COMPATIBLE |
|---|---|---|
| 50 or less | 2 | 2 |
| 51 to 200 | 2, plus 1 per 25 seats over 50 seats* | 2 |
| 201 to 500 | 2, plus 1 per 25 seats over 50 seats* | 1 per 4 receivers* |
| 501 to 1,000 | 20, plus 1 per 33 seats over 500 seats* | 1 per 4 receivers* |
| 1,001 to 2,000 | 35, plus 1 per 50 seats over 1,000 seats* | 1 per 4 receivers* |
| Over 2,000 | 55, plus 1 per 100 seats over 2,000 seats* | 1 per 4 receivers* |

**Note:** * = or fraction thereof

## 12 PLUMBING FIXTURES

The Maine Plumbing Code adopts the 2021 Uniform Plumbing Code. The following table outlines the plumbing fixture requirements for new construction. The factors that dictate the fixture counts for the building dependent on the intended use of each space. Occupants may travel up or down one (1) floor to use fixtures and fixtures must be within 500 feet of travel distance (UPC §422.4). Separate toilet facilities must be provided for each sex (Maine Amendment to UPC §422.2.

| Occupancy | Water closets | | Urinals* | Lavatories | | Drinking Fountain |
|---|---|---|---|---|---|---|
| | Female | Male | | Female | Male | |
| Assembly (Theater) | 1: 1-25<br>2: 26-50<br>3: 51-100<br>4: 101-200<br>6: 201-300<br>8: 301-400 | 1: 1-100<br>2: 101-200<br>3: 201-400 | 1: 1-200<br>2: 201-300<br>3: 301-400<br>4: 401-600 | 1: 1-100<br>2: 101-200<br>4: 201-300<br>5: 301-500<br>6: 501-750 | 1: 1-200<br>2: 201-400<br>3: 401-600<br>3: 601-750 | 1: 1-250<br>2: 251-500<br>3: 501-750 |
| | Over 400, add 1 for each additional 500 males or 125 females | | Over 600, add 1 for each additional 300 | Over 750, add 1 for each 250 males or 200 females | | Over 750, add 1 fixture for each additional 500 |

| Occupancy | Water closets | | Urinals* | Lavatories | | Drinking Fountain |
|---|---|---|---|---|---|---|
| | Female | Male | | Female | Male | |
| Business | 1: 1-15<br>2: 16-30<br>3: 31-50<br>4: 51-100<br>8: 101-200<br>11: 201-400 | 1: 1-50<br>2: 51-100<br>3: 101-200<br>4: 201-400 | 1: 1-100<br>2: 101-200<br>3: 201-400<br>4: 401-600 | 1: 1-50<br>2: 51-100<br>3: 101-150<br>4: 151-200<br>5: 201-300<br>6: 301-400 | 1: 1-75<br>2: 76-150<br>3: 151-200<br>4: 201-300<br>5: 301-400 | 1 per 150 |
| | Over 400, add 1 for each additional 500 males or 150 females | | Over 600, add 1 for each additional 300 | Over 400, add 1 for each additional 250 males or 200 females | | |
| Storage | 1: 1-100<br>2: 101-200<br>3: 201-400 | 1: 1-100<br>2: 101-200<br>3: 201-400 | - | 1: 1-200<br>2: 201-400<br>3: 401-750 | 1: 1-200<br>2: 201-400<br>3: 401-750 | 1: 1-250<br>2: 251-500<br>3: 501-750 |
| | Over 400, add 1 for each additional 500 males or 150 females | | | Over 750, add 1 for each 500 occupants | | Over 750, add 1 fixture for each additional 500 |

*For each urinal added in excess of the minimum required, one water closet is permitted to be deducted. The number of water closets must not be reduced to less than 2/3 the minimum required.

## 13 CONCLUSION

The building is to be constructed in accordance with the requirements of the applicable codes. During this process, the building will be designed to provide levels of safety at least equivalent to the provisions contained in the applicable codes. To achieve these levels of safety, the following primary features are provided:

1. The building construction type will be Type IIA protected noncombustible construction.
2. Complete automatic sprinkler protection will be provided throughout the enclosed spaces within the building.
3. A UL-listed fire alarm system equipped with voice communication will be provided throughout the building in accordance with MUBEC 907.2.1.
4. Egress will be provided as outlined in this report.
5. The new building will be designed to be fully accessible including the entrances and bathrooms. The building will be designed to be fully accessible per the requirements of ICC A117.1 and ADA.

If you have questions or comments, please contact me.

Sincerely,

**KEITH FLANDERS, P.E.**
Project Director (kflanders@howeengineers.com)

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Massing, Ventilations and Wind Impact 13-13.6.4 (A)

1. The bulk, location, or height of the proposed building shall not result in health or safety problems from a reduction in ventilation to abutting structures or changes to the existing wind climate that would result in unsafe wind conditions for users of the site and/or adjacent public spaces.
2. The bulk, location, or height of the proposed building will not result in any substantial diminution in the value or utility of neighboring structures.
3. The proposed development will locate all HVAC venting mechanisms to direct exhaust away from public spaces and residential properties adjacent to the site.

The proposed development of Lot 3 has changed since Master Plan approval. The building massing of the music hall is reduced from the approved Master Plan. The height of the building is lower, approximately 54.5-foot building height compared to the 13 stories envisioned in the master plan. The building height, setbacks, and lot coverage conform with the Zoning standards or have received setback waivers consistent with the Land Use Ordinance criteria and will not result in health or safety problems from reductions in ventilation to abutting structures or create unsafe wind conditions.

The proposed building is located on a site that is currently used for surface parking. The development is not expected to diminish the value of nearby structures.

HVAC equipment is proposed on the building rooftop or within the structure and is designed in accordance with applicable Land Use Ordinance requirements and applicable building codes.

Shadows 13-13.6.4 (B)

The proposed project is located in the B3 zone. The proposed building will not result in adverse impacts of shadows on publicly accessible open space.

A shadow study has been conducted for the proposed music hall. The proposed hotel and condominium buildings on lots 1 and 2 respectively are included in the shadow study for consistency with previous studies. The proposed development involves the construction of a building, less than 60 feet tall in a zone with allowable building heights of up to 250 feet.

The Master Development Plan (PL-001970-2022) provided an extensive discussion of shadows. The Master Development Plan proposed a structure on lot 3 that was 13 stories tall and over 140 feet tall.

Based on the reduced building height it is expected the shadow impacts will be less than those approved as part of the Master Development Plan. Please see the shadow study plans in the Master Development Plan shadow study (PL-001970-2022).

Please see the plan set for the shadow study analysis for the proosed music hall.

Snow and Ice Loading 13-13.6.4 (C)

The proposed project will not result in the accumulation of significant amounts of snow and ice from loading or falling offsite. The building is designed with a flat roof with architectural designs consistent with building code requirements, to prevent snow and ice from falling onto adjacent properties or public ways.

Snow removal will be a routine maintenance function. The owner will comply with City ordinance requirements for snow removal from the public sidewalks along the site frontage in the same manner as other properties in the City.

Please refer to building plans and elevations.

View Corridor 13-13.6.4 (D)

The massing, location, and height of the proposed development will not substantially obstruct a public view corridor identified in the Downtown Vision View Corridor Protection Plan. The proposed project area is not located within a protected view corridor.

The building form and street walls are consistent with the zoning ordinance. The proposed building is reduced in height compared to the MDP evaluation which is considered a 13-story building at this location.

Please see view studies included in the application documents for additional information.

Historic Resources 13-13.6.4 (E)

1. The proposed development is not located in a designated historic district.

2. The proposed development is located on the corner of Cumberland Avenue and Myrle Street which is adjacent to a historically significant building (City Hall). The proposed development will be generally compatible with the major character-defining elements of the district in the immediate vicinity of the proposed development. The proposed development site is located in an area of the City that, like much of Portland, is a mix of modern and historic structures. The surrounding area is a blend of modern and traditional architecture that is the hallmark of a vibrant City. The proposed design will be compatible with the surrounding area. The proposed development has been designed to work cohesively with the historic fabric of the surrounding area. Please see the Master Development Plan which includes supportive information regarding Neighborhood Context.

3. The proposed project area is a previously developed site with no known historic or archaeological resources.

Exterior Lighting 13-13.6.4 (F)

1. Site lighting. All proposed lighting will conform to the lighting standards of the Technical Manual.

2. Architectural and specialty lighting. Any proposed architectural or specialty lighting will conform to the lighting standards of the Technical Manual.

3. Street lighting. The proposed development site is on Cumberland Avenue, Myrtle Street, and Pearl Street, established city streets with existing lighting. Any street lighting proposed to replace or enhance the existing lighting will conform to the lighting standards of the Technical Manual.

Please see attached photometric plan for the project site, and fixture schedules. Decorative street lighting is proposed to be installed along the Cumberland Avenue, Pearl Street, and Myrtle Street frontages of the project site consistent with the Approved Master Plan of Development. The proposed street lights are STREET/PEDCOMBO (Figure X-5F in the Technical Manual) in Dark Green – Tiger Drlace RAL 6012.

# LIGHTING DESIGN NARRATIVE

# Lighting Systems Overview

## Introduction

This document details design concepts and ideas that have been used in previous Live Nation projects. It is not intended to replace or be a definitive direction in regard to design, as every location is unique. These are intended to be best-practice options to be implemented when possible.

## Fixture Mounting Types

Design intent and assumed facility conditions, mounting positions for lighting fixtures will consist of:

- **Overhead Lighting Unistrut, Pipe or Truss:** Overhead lighting Unistrut, suspended pipes, or truss structures, which provide support for lighting fixtures. Typically, these are prefabricated, commercially available units that are suspended from the facility structure. They may be individual lengths of pipe or truss, or they may be multi-unit assemblies that are suspended as a unit.
- **Facility Structure:** Mounting positions for lighting fixtures, which are directly integrated with facility support structure. This utilizes industrial mounting hardware such as beam clamps, flange clamps, Lindapter plates, etc., in order to mount the fixture to the structural component. The addition of secondary structure such as pipes or Unistrut channel may be utilized.
- **Lighting Cove:** Architectural details, which form a recess or niche in which lighting fixtures are mounted. Coves are of various sizes, depending upon the size and access requirements of the fixture. The addition of a secondary mounting structure within the cove may be required, based upon the specific requirements of the fixture being used.
- **Floor Mounted:** Lighting fixtures that are mounted to the facility floor. This is generally by means of a mounting plate of sufficient size to support the fixture. For initial installation, the plate is left loose to allow for repositioning of the fixture if needed. After initial installation and focus of the fixture, the mounting plate is typically fixed into position by means of fixing hardware such as drilled anchors.
- **Landscape Mounted:** Lighting fixtures that are mounted within soil, or in decorative planting areas. This is generally by means of mounting a junction box and spike to secure fixture in an accessible and reposition-able location. For heavier fixtures, or fixtures in areas with more dense foliage, concrete pads may be required to create a stable mounting condition. In these instances, power and data connections will be mounted nearby, above grade, in weathertight junction boxes.
- **Wall Mounted:** Lighting fixtures, which are mounted to standard architectural/electrical back boxes, which are integrated with facility walls (or other vertical surfaces or structures). These back boxes are standard electrical mounting boxes, which provide both point-of-connection for power and control and mounting support for the fixture.
- **Recessed Mounted:** Light fixtures, which are mounted within the ceiling structure and use the ceiling support structure as the primary support. These fixtures typically have a trim to aid with masking any rough-in integration and are wired from the back. Typically, these units will be treated as junction boxes and have conduit connected directly into unit back-boxes for system connection.

- **Ceiling Surface Mounted:** Lighting fixtures, which are mounted to standard architectural/electrical back boxes, which are integrated with facility ceilings (or other horizontal surfaces or structures). These back boxes are standard electrical mounting boxes, which provide both point of connection for power and control and mounting support for the fixture. The fixture itself may be mounted directly to the box (i.e. a "close mount ceiling fixture") suspended from the box (i.e. "pendant mounted fixture" or "stem mounted fixture").

## Fixture Types

The design intent is that the lighting fixture package will consist of the following general fixture types:

- **Theatrical Fixtures:** Lighting fixtures designed for flexible applications. This includes provision for adjustment of the fixture's point of aim, along with provision to allow for adjustment of the fixture's position. These fixtures will typically have optic systems optimized for control of the lighting field, including provision to shape or otherwise adjust the field to suit the specific application. These fixtures utilize LED sources, in either "color mixing" systems consisting of multiple colors of LED or "white light" systems consisting of white LEDs, in various color temperatures. Specialty moving-light-style fixtures require additional clearance to allow free movement and/or to be mounted in specialty enclosures with conditioned temperature and humidity controls. These fixtures will require control input from the distributed DMX-512 control network.
- **Architectural Lighting Fixtures (Standard):** Standard architectural fixtures used for area lighting. These fixtures are utilized for the illumination of architecture, scenery, and millwork, and are sourced from common architectural suppliers. These fixtures mount to standard architectural/electrical back boxes or junction boxes. The fixtures will typically be equipped with glare guards and other masking devices in order to minimize visual impact from direct view of the fixture face. These fixtures will typically require control input from the distributed control network in the form of 0-10v analog control, distributed DMX-512 control or line dimming.
- **Architectural Lighting Fixtures (Decorative)**: Architectural lighting fixtures that are selected for their appearance in addition to the desired performance and functional characteristics. These fixtures serve to provide additional theming to a given area and/or to provide an apparent source of light (when the primary source of light for the area is from another source). The specifications for this category of fixture may include custom mounting, non-standard finishes, non-standard glass, or other minor modifications to the fixture. These fixtures mount to standard architectural/electrical back boxes or junction boxes.

## Design Approach

The lighting design and layouts are never a single system but a combination of light sources and locations that are layered to create a complete picture. The following is a breakdown of the different systems and area that when put together create a complete lighting design approach:

- **General illumination** in guest areas throughout the venue is a combination of downlights and surface mount lights in finished ceilings, cylinders in non-finished ceilings. Where applicable, cylinders will be used with cable leads that allow for adjustment of the final height to be consistent based on existing field conditions. Spacing of fixtures is dependent of room application, ceiling heights and finish, but is as such to allow for a low level of illumination when the venue is in use, and shift to a higher level for non-operation times to allow for easy movement and cleaning. In areas such as the main General Admin floor, exiting lighting locations will be used with updated technology to allow for reduced maintenance with increased performance.
- **Stairs and elevated tiers** are to be treated as unique places in relation to the overall general illumination when possible. Downlight or cylinder should be over stairways or adjacent, to allow a minimal light level even during

show operation. “Step light” may be used in limited applications where existing locations allow for limited integration. Past history has shown that many performers will request step lights be turned off during performances so as to not be a distraction during shows. To that end, the control and function of the noted fixtures will be independently controlled from basic illumination within the space.

- **Bar tops and point of sale areas** are treated as unique zones that allow for even illumination across the surface where monetary exchange may happen. Areas around these may be themed out with decorative fixtures and highly themed elements for the noted location. A system of “front light” will be added that is intended to illuminate bottle tier labels while illumination from under bottles provides color and ambiance. A system of color-changing wash light will be used on the front side of the bars to tone surfaces and materials, while a white light strip will be on the internal under bar for operation light levels.
- **Restrooms** are a mixture of wall sconces, downlights and a perimeter wall wash systems over stalls. Typically, sconces will be used above sinks to add a decorative element to the space and provide general “face” light to guests. A series of continuous linear wall wash lights will be used over stalls to illuminate the walls behind the stall and give general illumination. Downlights will be used to fill in any ancillary areas that the perimeter areas do not impact and provide a location for emergency light sources if needed. All fixtures will be dimmable to allow for light levels to be reduced during operation and elevated for cleanup and maintenance.
- **Lobby and VIP spaces** are a mixture of bar illumination, general illumination, and any specialty lighting that connects with the overall theming for the area. Typically, a base level of illumination will be provided for overall function. This allows for the decorative fixtures to function as elements that relate to the creative vision rather than needing to be functional. This also means that any decorative fixtures may have additional lights that will illuminate the decorative fixture, typically in a color or texture. This added level gives another point to tone and define a room in relation to the space application.
- **Merchandise areas**, or areas designated for the potential application of sales, will have supplemental illumination with a series of adjustable track that will work in conjunction with the general illumination within the space.
- **Special application** and illumination that does not fall into any of the typical areas is a unique element. Curtains and drapery will also have a form of highlighting on them that creates depth and presence. If long runs of curtains along walls are used, then in many cases the spacing of the general lighting may be adjusted to allow for a “scalloped” wash, while maintaining a constant look for the lighting in the noted area.
- **Dressing room and back of house artist-accessible areas** will have two different systems. Dressing rooms will have a series of downlights or decorative surface mount fixtures that provide general illumination. A series of table and free-standing fixtures that are controlled by the artist will finish out the spaces. A controllable makeup mirror mounted in each room will give access to desired even light levels for artist makeup application.
- **Back-of-house spaces such as kitchens, offices and workspaces**, will take advantage of lay-in ceilings for 2x2 troffer or lensed downlights. Workspaces, such as equipment, janitorial, and utility rooms, will have wall or ceiling mounted LED strip lights provide a high level of illumination, while casting minimal shadows.

## Emergency Lighting

While general architectural lighting systems for this project are not designed to meet a code compliant emergency lighting requirement, the project electrical engineer is encouraged to utilize components of the lighting package to supplement the emergency lighting system. Two options would exist for this cross-utilization:

- Select circuits assigned to high-efficiency fixtures are assigned to dedicated emergency transfer switches or emergency rated dimming panels, which are then circuited to emergency back-up power sources (generators, battery banks, etc.) for immediate bypass of dimmed circuits, to allow lighting to come to full intensity in emergency situations. Bypass system must allow lighting system to be manually reset for normal operations if local codes require.
- Select individual fixtures are selected and specified with battery back-up modules. These fixtures would require dual control for both show lighting conditions and an emergency override/alarm condition.

Note that selection and specification of the emergency lighting system is the responsibility of the project Electrical Engineer. Controls for these fixtures will be coordinated during the final control system design phase.

## Central Lighting Control System

All publicly accessible areas of this project (including exterior lighting) and spaces that open directly onto performance areas will utilize a central lighting control system. This central lighting control system will consist of several different components that when interconnected with allow for control of all of the lighting in the building:

- **Lighting Equipment Rack:** This 19” equipment rack houses the central processer for the control system as well as network and DMX data distribution. This becomes the central nerve center of the lighting control system allowing for user control input, responsive controls and timed event information to adjust lighting levels.
- **Dimming and Switching Panels:** Located in various electrical rooms throughout the facility these electrical panels provide the line voltage switching and dimming as well as 0-10V analog control for lighting fixtures
- **Responsive Controls:** In areas where occupancy sensing or daylight harvesting is required these low voltage controls can input this information into the control processor. Depending on the state of the building we can choose to respond to these inputs or ignore them.
- **LCD Control Stations:** These network-connected touchscreen-based controls are wall mounted in key locations to allow for “master” controls as well as user programming of the lighting system.
- **Lighting Button Stations:** In locations that just require a smart light switch, these low-voltage, wall mount switches provide local lighting control similar to that of a conventional light switch. Using these local switches, we are able to determine open and closed states of bars and other spaces which alters how lighting is adjusted from the LCD control stations.
- **Local Lighting Controls:** In areas not covered by the central lighting control system it is the responsibility of the project electrical engineer to specify adequate local lighting controls to meet code requirements as well as operational requirements spelled out in the lighting design drawings.

Noise and Vibration 13-13.6.4 (G)

All heating, ventilation, and air conditioning equipment, air handling units, emergency generators, and similar equipment shall meet applicable state and federal emissions requirements and shall be located away from abutting residential properties. The B-3 Zone Noise Standard is 60 dB during the day and evening and 55 dB at night. The proposed project has been designed to be incompliance with the City ordinance.

The proposed music venue has not only been designed for optimal acoustics during performances but also to ensure sound is contained within the building. The HVAC, air handling units will be installed on the building rooftop, positioned to minimize the radiation of noise offsite.

The proposed project has been reviewed by the noise consultant Metropolitan Acoustics. Please see the attached the Rooftop Mechnaical Exterior Noise Report and the Music Sound Propagation Report for additional information.

# Music Hall – Portland, ME

## Music Sound Propagation Report

December 13, 2024




PREPARED FOR
Phillip Redpath
Design Manager
BLUEPRINT STUDIO | Live Nation

PREPARED BY
Maeve Cantwell
Associate Consultant

Felicia Doggett, INCE Bd. Cert.
President & CEO
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December 13, 2024

Phillip Redpath
Design Manager
BLUEPRINT STUDIO | Live Nation

Re: Music Hall – Portland, ME
Music Sound Propagation Report

Dear Phillip:

Metropolitan Acoustics has completed a Schematic Design level study for the Portland Music Hall, located in Portland, ME. This proposed music hall is part of a multiuse development which includes residential and hotel buildings to the south. Existing private residences are located across Cumberland Avenue to the north, and there is an apartment building across Myrtle Street to the west. This report addresses noise ordinance compliance for music sound propagation to the hotel and residential buildings. Exterior mechanical equipment sound to these buildings has been addressed in a separate report dated December 11, 2024.

The information in this report is intended to be used as a guide for architectural and engineering disciplines so appropriate acoustical performance can be achieved. These recommendations are based on a drawing set dated August 7, 2024 and our meeting with Live Nation on September 12, 2024.

For the readers' convenience, blue text indicates an external link. Please let us know if you have any questions regarding this information.

Best regards,

metropolitan acoustics, llc

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## ACOUSTIC TERMINOLOGY

*Sound Level*

Sound pressure levels (SPL) are commonly expressed on a logarithmic scale in decibels (dB). The human ear is most sensitive at mid-frequencies (speech) and less sensitive at high and low frequencies at typical listening levels. To account for this, sound pressure can be expressed in units of A-weighted decibels (dBA). A higher number corresponds to louder sound levels. For reference, a change of 3 decibels represents a just-noticeable difference, a change of 5-6 decibels is clearly noticeable, and a sound level that is 10 decibels higher is perceived to be twice as loud. A-weighted decibels are commonly used to describe environmental sound.

## APPLICABLE NOISE ORDINANCE AND DESIGN GOALS

*Portland Maine Noise Ordinance*

The Portland Maine noise ordinance is part of the City of Portland Land Use Code. The portion of the code that pertains to our scope and analysis can be found in Section 6.8.9 – Noise, which states the following. This development falls in the B-3 zone.

A. The maximum permissible sound level of any continuous, regular, or frequent source of sound produced by an activity shall be as shown in Table 6-G.

B. For any noise generated by a use in the B-5/B5b, B-6, B-7, I-L/I-Lb, I-M/I-Mb, and I-H zones, sound shall be measured at or within the boundaries of any residential zone. For any noise generated by a use in the B-1/B-1b, B-2/B-2b/B-2c, I-B, R-P, O-P, A-B, and IS-FBC zones, sound shall be measured at lot boundaries. For any noise generated by a use in the B-3/B-3b/B3c, sound shall be measured at lot boundaries or within publicly accessible pedestrian open space. For any noise generated by a use in the B-4 zone, sound shall be measured off premises at the source of complaint.

C. In addition to the sound level standards established in Table 6-G, all uses shall employ best practicable sound abatement techniques to prevent tonal sounds, or sound waves usually perceived as a hum or whine because their instantaneous sound pressure varies essentially as a simple sinusoidal function of time, and impulse sounds, or sound events characterized by brief excursions of sound pressure, each with a duration of less than one second. If such tonal and impulse sounds cannot be prevented, uses shall employ best practicable sound abatement techniques to minimize the impact of such sounds in residential zones.

| Table 6-G: NOISE STANDARDS | | |
|---|---|---|
| *Zone* | *Daytime/Evening (7am-9pm)* | *Night (9pm-7am)* |
| B-3/B-3b/B-3c | 60 dBA | 55 dBA |

*Design Goals*

This project is located in the B-3/B-3b/B3c zone and as such, the sound levels at the lot boundary of the music hall cannot exceed 60 dBA daytime and 55 dBA nighttime. Since the new residential and hotel building to the south will look down onto the roof of the music hall, we will assume that the lot line is infinitely high and will predict sound propagating vertically.

## SITE AND VENUE CONDITIONS

The Portland Music Hall will be located on a block bounded by Myrtle St, Cumberland Ave, and Pearl St. The entrance to the lobby is on Myrtle St with the stage and back of house areas on Pearl St. The audience area has three levels: main level of standing only, 2nd floor of box seats, and a 3rd floor of mezzanine seating. Of note is that the lobby can be opened to the music hall for audience overflow, and the sound level in this area is expected to be about 10 dB lower than the main music hall. Figure 1 below shows the site layout in relationship to the venue.




*Figure 1: Venue and site layout*

## ANALYSIS PROCEDURES

Sound sources of "live bands" and "EDM" music spectra were used in our analysis; the data for these spectra was based off of previous measurements Metropolitan Acoustics had collected for a Live Nation Performance venue, and are used as their standard spectra. The live band spectrum has overall levels of 108 dBA and the EDM spectrum has overall levels of 104 dBA. The sound level outside the venue was calculated based on the composite transmission loss values of the exterior wall and roof constructions, and recommendations for these assemblies were formulated to meet the design goal.

## Analysis Results and Recommendations

To meet the Portland Noise Ordinance requirement of 55 dBA after 9pm, and based on the materials shown for the façade elements on the SD drawings, we recommend the following wall assemblies.

*Face brick on lower areas up to 30 ft*

- 4" brick veneer with point connections
- 4" mineral wool insulation
- 8" concrete masonry units (CMU)
- 6" metal studs
- One (1) layer 5/8" gypsum wallboard (GWB)

*Versa-line and ACM metal panels on upper areas*

- Metal panel with point connections
- 4" mineral wool insulation
- 8" CMU
- 6" metal studs
- One (1) layer 5/8" GWB

*Glass doors at Lobby*

- ½" glass doors, gasketed
- 20' vestibule airspace
- ½" glass doors, gasketed

*Roof*

- Roofing material
- Rigid insulation
- 3.5" normal weight concrete
- 3" metal deck

Using these assemblies, the predicted sound pressure levels at the building lot boundaries are shown in Table 1 at each elevation, all of which meet the Portland Noise Ordinance requirement of 55 dBA. The lot boundaries were assumed to be the close edge of the sidewalks on the north, east, and west facades, and the end of the loading dock on the south façade.

Table 1. Predicted Sound Pressure Levels at Lot Boundaries with As Drawn Conditions
Music Hall – Portland, ME

| *Lot Boundary* | *Bands (108 dBA)* | *EDM (104 dBA)* |
|---|---|---|
| | *dBA* | *dBA* |
| North boundary (Cumberland Ave) | 40 | 44 |
| East boundary (Pearl St) | 42 | 45 |
| South boundary (50' above ground through metal panel wall) | 36 | 40 |
| South boundary (75' above ground through roof) | 43 | 41 |
| West boundary from Main Music Hall (Myrtle St) | 34 | 39 |
| West boundary from Lobby (Myrtle St) | 16 | 24 |

# Music Hall – Portland, ME

## Rooftop Mechanical Exterior Noise Report

December 11, 2024




PREPARED FOR
Phillip Redpath
Design Manager
BLUEPRINT STUDIO | Live Nation

PREPARED BY
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President & CEO

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December 11, 2024

Phillip Redpath
Design Manager
BLUEPRINT STUDIO | Live Nation

Re: Music Hall – Portland, ME
Rooftop Mechanical Exterior Noise Report

Dear Phillip:

Metropolitan Acoustics has completed an acoustic analysis of the rooftop mechanical equipment for the Portland Music Hall, located in Portland, ME. This proposed music hall is part of a multiuse development which includes residential and hotel buildings to the south. Existing private residences are located across Cumberland Avenue to the north, and there is an apartment building across Myrtle Street to the west. This report addresses noise ordinance compliance related to rooftop mechanical equipment to the hotel and residential buildings. Sound propagation from concerts inside the building to exterior areas was addressed in a report dated October 25, 2024.

The information in this report is intended to be used as a guide for architectural and engineering disciplines so appropriate acoustical performance can be achieved. These recommendations are based on a roof plan and sound data for the rooftop equipment received from DAIQ Architects on November 21, 2024.

For the readers' convenience, blue text indicates an external link to a product and the *blue italicized text* indicates an internal link to another section of this document. Please let us know if you have any questions regarding this information.

Best regards,

metropolitan acoustics, llc

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## ACOUSTIC TERMINOLOGY

*Sound Level*

Sound pressure levels (SPL) are commonly expressed on a logarithmic scale in decibels (dB). The human ear is most sensitive at mid-frequencies (speech) and less sensitive at high and low frequencies at typical listening levels. To account for this, sound pressure can be expressed in units of A-weighted decibels (dBA). A higher number corresponds to louder sound levels. For reference, a change of 3 decibels represents a just-noticeable difference, a change of 5-6 decibels is clearly noticeable, and a sound level that is 10 decibels higher is perceived to be twice as loud. A-weighted decibels are commonly used to describe environmental sound.

## APPLICABLE NOISE ORDINANCE AND DESIGN GOALS

*Portland Maine Noise Ordinance*

The Portland Maine noise ordinance is part of the City of Portland Land Use Code. The portion of the code that pertains to our scope and analysis can be found in Section 6.8.9 – Noise, which states the following. This development falls in the B-3 zone.

A. The maximum permissible sound level of any continuous, regular, or frequent source of sound produced by an activity shall be as shown in Table 6-G.

B. For any noise generated by a use in the B-5/B5b, B-6, B-7, I-L/I-Lb, I-M/I-Mb, and I-H zones, sound shall be measured at or within the boundaries of any residential zone. For any noise generated by a use in the B-1/B-1b, B-2/B-2b/B-2c, I-B, R-P, O-P, A-B, and IS-FBC zones, sound shall be measured at lot boundaries. For any noise generated by a use in the B-3/B-3b/B3c, sound shall be measured at lot boundaries or within publicly accessible pedestrian open space. For any noise generated by a use in the B-4 zone, sound shall be measured off premises at the source of complaint.

C. In addition to the sound level standards established in Table 6-G, all uses shall employ best practicable sound abatement techniques to prevent tonal sounds, or sound waves usually perceived as a hum or whine because their instantaneous sound pressure varies essentially as a simple sinusoidal function of time, and impulse sounds, or sound events characterized by brief excursions of sound pressure, each with a duration of less than one second. If such tonal and impulse sounds cannot be prevented, uses shall employ best practicable sound abatement techniques to minimize the impact of such sounds in residential zones.

| Table 6-G: NOISE STANDARDS | | |
|---|---|---|
| *Zone* | *Daytime/Evening (7am-9pm)* | *Night (9pm-7am)* |
| B-3/B-3b/B-3c | 60 dBA | 55 dBA |

*Design Goals*

This project is located in the B-3/B-3b/B3c zone and as such, the sound levels at the lot boundary of the music hall cannot exceed 60 dBA daytime and 55 dBA nighttime. Since the new residential and hotel building to the south will look down onto the roof of the music hall, we will assume that the lot line is infinitely high and will predict sound propagating vertically.

## SITE OVERVIEW

The Portland Music Hall will be located on a block bounded by Myrtle St, Cumberland Ave, and Pearl St. The south property line is adjacent to the new hotel and residential building. Figure 1 below shows the site layout in relationship to the venue.




*Figure 1: Venue and site layout*

## SYSTEM DESCRIPTION

Eight rooftop air-handling units are proposed for the roof of the music venue as shown in Figure 2 below. The basis of design for these units is Daikin Models DPSA090, DPSC30B, DPSC06B, DPSC16B, DPSCA070, and DPSC07B, which are packaged DX and gas heat air handling units. It is noted that the sound data for these units includes low sound condenser fans and compressor wraps.

The Basis of Design (BOD) unit information sound data and cut sheets were provided by DAIQ Architects on November 21, 2024; see *Appendix A* for BOD unit information and sound power data used in our analysis. The sound power levels for alternates to the BOD should be less than or equal to the sound power levels of the BOD selections to meet the predicted sound levels described in the following analyses. We recommend including this requirement in the design documents. If the sound power levels for alternates to the BOD are greater than the sound power levels of the BOD, additional mitigation may be required to achieve the background sound level goals of the project.

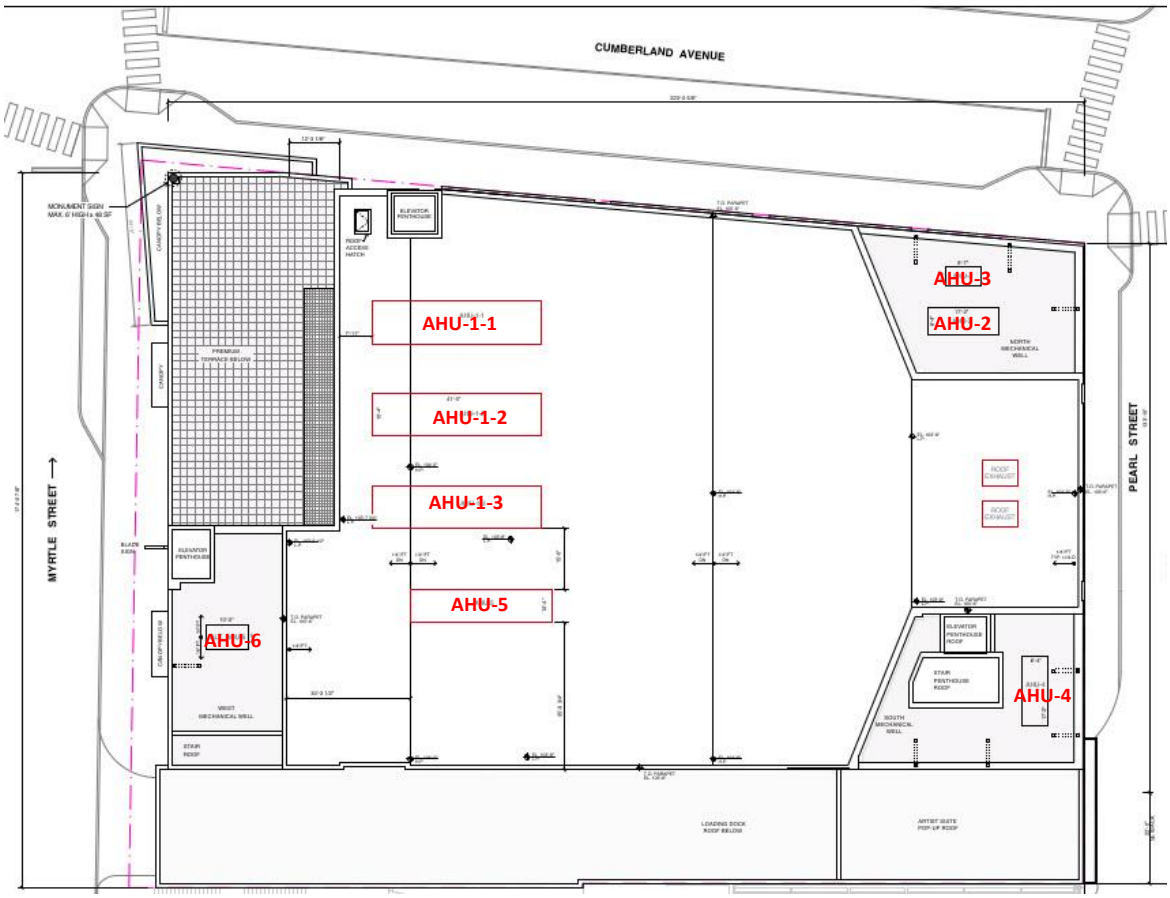



*Figure 2: Roof plan of music venue*

## Analysis Procedures and Results

To predict sound levels from rooftop AHUs, we used the radiated sound power data for each unit and calculated the propagated sound based on distance and shielding from the building to the lot boundaries at each side. The resultant sound levels from all units were added together at each lot boundary and compared to the Portland noise ordinance. The lot boundaries for Cumberland Ave, Pearl St, and Myrtle St are taken at 5' above ground level at the close edge of the sidewalks. The lot boundaries to the south are taken at the end of the loading dock 75' above the ground to account for the hotel and residential building residents looking down onto the roof.

The predicted sound pressure levels at the building lot boundaries are shown in Table 1.

Table 1. Predicted Sound Pressure Levels at Lot Boundaries with BOD AHUs
Music Hall – Portland, ME

| *Lot Boundary* | *Predicted Sound Pressure Level* |
|---|---|
| North boundary (Cumberland Ave) | 38 dBA |
| East boundary (Pearl St) | 37 dBA |
| South boundary (75' above ground) | 53 dBA |
| West boundary (Myrtle St) | 38 dBA |

As shown in Table 1, the predicted sound level at each of the boundaries meets the Portland noise ordinance requirement of 55 dBA.

## APPENDIX A – BOD UNIT INFORMATION

| BOD Rooftop Air Handling Units with Low Sound Condenser Fans and Compressor Wraps | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Tag* | *BOD Selection* | | *Fan System* | *Octave Band Sound Power Level (dB, Unweighted)* | | | | | | |
| | *Make/Model* | *CFM* | | *63 Hz* | *125 Hz* | *250 Hz* | *500 Hz* | *1000 Hz* | *2000 Hz* | *4000 Hz* |
| AHU-1-1, 1-2, 1-3 | Daikin DPSA090 | 30,000 | Radiated | 77 | 82 | 80 | 83 | 81 | 80 | 77 |
| AHU-2 | Daikin DPSC30B | 9,600 | Radiated | 80 | 74 | 76 | 76 | 78 | 76 | 76 |
| AHU-3 | Daikin DPSC06B | 2,200 | Radiated | 82 | 82 | 78 | 75 | 74 | 69 | 72 |
| AHU-4 | Daikin DPSC16B | 6,350 | Radiated | 80 | 74 | 76 | 76 | 76 | 75 | 75 |
| AHU-5 | Daikin DPSA070 | 25,000 | Radiated | 77 | 82 | 80 | 83 | 81 | 80 | 77 |
| AHU-6 | Daikin DPSC07B | 3,500 | Radiated | 85 | 85 | 81 | 78 | 76 | 71 | 68 |

Signage and Wayfinding 13-13.6.4 (H)

1. Signage location and scale will comply with the City Ordinances.
2. All on-site directional traffic signage will be sited in such a way as to not adversely affect visibility at intersections or offsite.

The proposed development will have minimal signage identifying the address of the building for deliveries and patrons. The entrances to the venue are clearly defined by architectural design, canopies, and lighting, consistent with other entertainment venues in the City.

No free-standing on-site directional signage is proposed that would adversely impact site visibility.

The site is fully occupied by the building footprint and on-site wayfinding signage is not required to guide users to and from the facility.

Zone Related Design Standards 13-13.6.4 (I)

1.a. Development in the B-3, B-5, B-5b, and B-7 zones and in the B-6 and EWPZ zones shall be designed to support the development of dense, mixed-use neighborhoods with attractive, safe, and convenient street-level pedestrian environments.

The building and site is designed to comply with the design standards of the City of Portland Design Manual Section (b) B-3 Downtown Business Zone and the Pedestrian Activities District (PAD).

The proposed project is part of a Master Development Plan (MDP) approved by the Planning Board on August 9, 2022. The proposed development of Lot 3 has changed since Master Plan approval reducing the height of the structure from 13 floors to three floors; however, the design remains in compliance with the requirements of the Design Manual. The following items discuss the site design with reference to applicable sections of the ordinance and design guidelines that were highlighted in the MDP review.

Additional information related to building design is shown on the architectural plans submitted with the application.

- *§(b)(1)(a)(1)(i)(2) of the Design Manual states that building entrances, including such factors as compatibility with the building's façade, prominence along the street, access to the street, and accessibility for physically handicapped or for those with special needs are factors that should be considered.*

The building entrance on Cumberland Avenue has been designed with differentiated materials, slightly recessed doors and a canopy above, extending from the building face. This entry is fully accessible. Please see this exhibit for proposed materials information.

- *§ (b)(1)(e)(1) of the Design Manual states that proposed development shall respect, enhance, and be integrated with the existing character of the general pattern of development in the downtown, surrounding building environment and streetscape, as described and illustrated in the Downtown Urban Design Guidelines (Appendix 1). Factors to be considered include the relationship to the following existing patterns:*

    - *Street walls and building setbacks:*

      The building design adheres to the B-3 zone requirements for maximum height of the street wall, overall building height, and step-back requirements.

    - *Open space:*

      The proposed development involves the construction of an entertainment venue and does not include additional public open space.

- *Building form, scale and massing:*

  The form, scale and massing of the building is consistent with the approved MDP for the site. The proposed building is fewer stories than approved in the master plan yet is consistent in form with the overall proposed development of the block.

- *Facade proportion and composition:*

  The building is a three story structure that is consistent with the surrounding area. The building has been designed utilizing a variety of materials that are consistent with structures along Cumberland Avenue and Myrtle Street.

  The massing of the building relates to the surrounding neighborhood where the height of the brick cornice at approximately 31', spacing of bays and façade elements are scaled to relate to the residences across Cumberland Avenue. The main entrance occurs on Myrtle Street and is distinguishable by a prominent marquee and is easily accessible. The entrance is down the street from the Merrill Auditorium entrance which enhances the relationship and strengthens the identity as an Entertainment District. The marquee, signage and open terrace define the building as an entertainment venue.

  The use of brick and metal panel relate to the surrounding buildings. The use of exposed steel and metal channels attempt to reflect Portland's industrtial / warehouse vernacular architecture. The introduction of display windows along Cumberland help to provide transparency and activate the street. There are no continuous blank walls at street level greater than 20'. The entrance is setback to allow for increased pedestrian movement and queuing. All roof top mechanical equipment is set back from the parapet or by enclosed by screen walls.

- *Pedestrian circulation and building entrances:*

  The site is framed by sidewalks along Cumberland Avenue, Mrytle Street, and Pearl Street. Access to the building is via an entrance on Cumberland Avenue and Myrtle Street. The entrance is differentiated from the façade and defined with varying architectural details and an entrance canopy

- *Parking:*

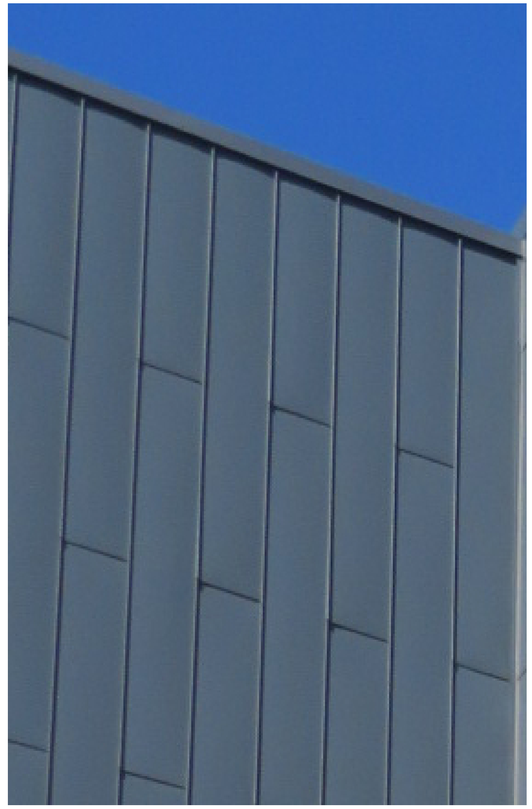
  The proposed development is not required to provide parking. Patrons of the establishment will either walk, bike, utilize mass transit, or park in an off-site parking area during an event.



WINDOW PATTERN



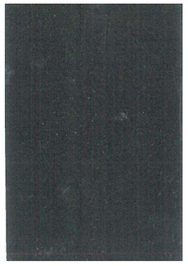
TRANSLUCENT GLAZING



METAL PANEL PATTERN




MARQUEE



METAL COLOR







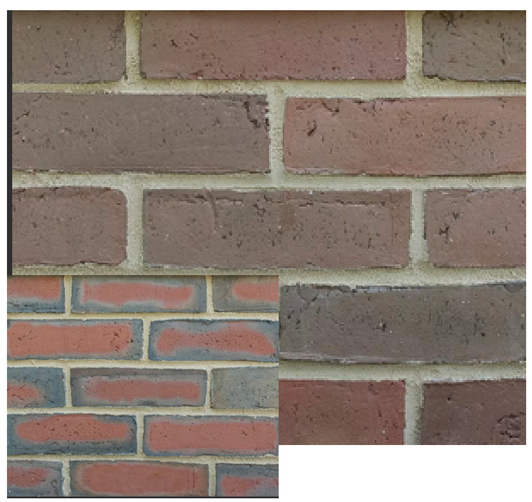
SIGNAGE




MINIMALLY ARTICULATED WINDOWS & FLAT METAL CANOPIES



PRECAST BASE



BRICK OPTIONS




BRICK BUILDINGS WITH PUNCHED WINDOWS AND DIVIDED LITES




ALUM. DISPLAY WINDOWS

# PORTLAND MUSIC HALL MATERIAL PALETTE

PORTLAND MUSIC HALL
PORTLAND , MAINE

DAIQ ARCHITECTS

SEAL:

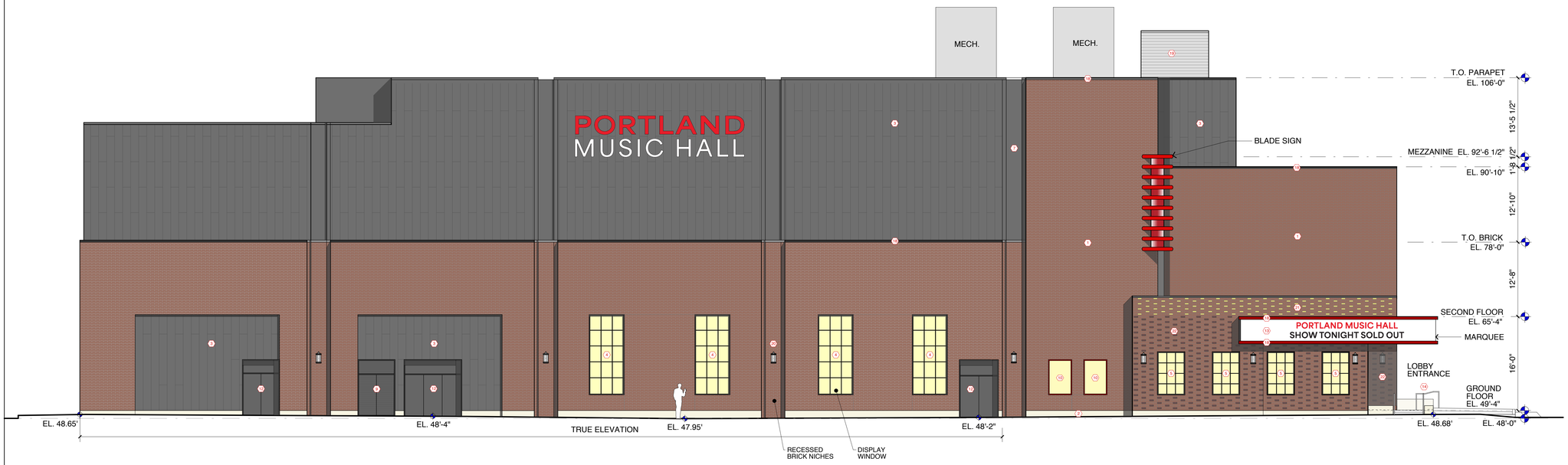
REVISIONS:

| | | |
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| | 12/18/24 | PLANNING SUB. |
| | 04/11/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**MATERIAL PALETTE**

SCALE: As Noted.
SHEET #:

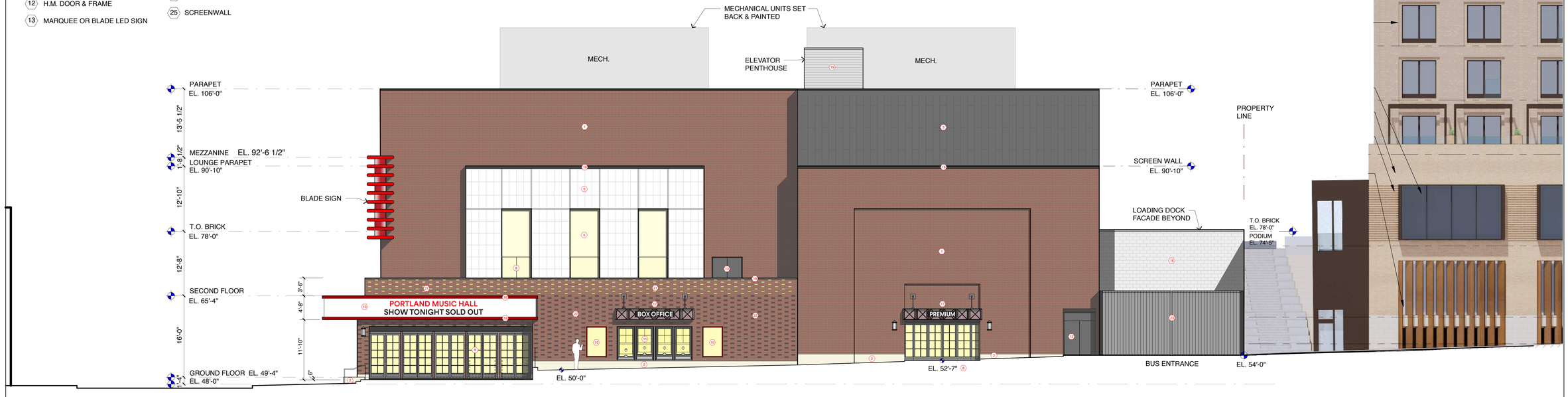



## 1 CUMBERLAND AVENUE - NORTH ELEVATION

SCALE: 1/8" = 1'-0"

## MATERIAL LEGEND

1. FACE BRICK
2. PRECAST
3. STANDING SEAM METAL PANEL
4. ALUMINUM WINDOW
5. ALUMINUM CURTAIN WALL
6. TRANSLUCENT PANELS
7. ACM METAL PANEL / PROFILE
8. ALUM. / GLASS DOORS & FRAME
9. LOUVER GATE
10. OUT-SWING ALUMINUM DISPLAY WINDOW
11. TICKET BOX WINDOW
12. H.M. DOOR & FRAME
13. MARQUEE OR BLADE LED SIGN
14. STAINLESS STEEL RAILING
15. OVERHEAD ROLL-UP DOORS, PAINTED
16. PAINTED CMU
17. METAL CANOPY
18. SHEET METAL COPING PROFILE
19. CORRUGATED METAL PANEL
20. DECORATIVE WALL SCONCE
21. PERFORATED BRICK PARAPET
22. ARTICULATED BRICK
23. METAL GATE
24. PAINTED CIP CONCRETE
25. SCREENWALL




## 2 MYRTLE STREET - WEST ELEVATION

SCALE: 1/8" = 1'-0"



P

# PORTLAND MUSIC HALL

PORTLAND , MAINE


Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
ONE ROBY ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**VANNUCCI**
99 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
1 BELMONT AVE, SUITE 1500
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
25017 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES**
60-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**WISS, JANNEY, ELSTNER ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 300
BOSTON, MA 02210

Specifications:
**DAIQ ARCHITECTS**
375 MAIN STREET
BOXFORD, MA 01921


D'AGOSTINO IZZO QUIRK ARCHITECTS

SEAL:

REVISIONS:

| | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 04/11/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**NORTH & WEST ELEVATIONS**

SCALE: As Noted.
SHEET #:

**A3.1**




## 2 HOTEL / RESIDENTIAL PLAZA - SOUTH ELEVATION

SCALE: 1/8" = 1'-0"

## MATERIAL LEGEND

1. FACE BRICK
2. PRECAST
3. STANDING SEAM METAL PANEL
4. ALUMINUM WINDOW
5. ALUMINUM STOREFRONT WITH DIVIDED LITES
6. TRANSLUCENT PANELS
7. ACM METAL PANEL / PROFILE
8. ALUM. / GLASS DOORS & FRAME
9. PAINTED LOUVER
10. OUT-SWING ALUMINUM DISPLAY WINDOW
11. TICKET BOX WINDOW
12. H.M. DOOR & FRAME
13. MARQUEE & BLADE SIGN
14. STAINLESS STEEL RAILING
15. OVERHEAD ROLL-UP DOORS, PAINTED
16. PAINTED CMU
17. METAL CANOPY
18. SHEET METAL FLASHING PROFILE
19. CORRUGATED METAL PANEL
20. DECORATIVE WALL SCONCE
21. PERFORATED BRICK PARAPET
22. ARTICULATED BRICK
23. METAL GATE
24. PAINTED CIP CONCRETE
25. SCREENWALL
26. MURAL







## 1 PEARL STREET - EAST ELEVATION

SCALE: 1/8" = 1'-0"

# PORTLAND MUSIC HALL
PORTLAND , MAINE


Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**BVH INC.**
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
1818 MARKET STREET, SUITE 1900
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
25017 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES**
65-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**RDH BUILDING SCIENCE ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 320
BOSTON, MA 02210

Specifications:
**WIL-SPEC LLC**
375 MAIN STREET
BOXFORD, MA 01921

DAIQ ARCHITECTS


SEAL:

| REVISIONS: | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 04/11/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**EAST & SOUTH ELEVATIONS**

SCALE: As Noted.
SHEET #:

**A3.2**

# CONTEXT IMAGES



NORTH-EAST VIEW



SOUTH-EAST VIEW



SOUTH-WEST VIEW



NORTH-WEST VIEW

PORTLAND MUSIC HALL
PORTLAND , MAINE

DAIQ ARCHITECTS

SEAL:

REVISIONS:

| | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**CONTEXT IMAGES**

SCALE: As Noted.
SHEET #:

R

# PORTLAND MUSIC HALL
PORTLAND , MAINE

CUMBERLAND AVENUE

223'-6 1/2"

MERRILL AUDITORIUM

MYRTLE STREET

PEARL STREET

174'-4 3/4"

155'-9"

MAIN ENTRANCE

SIDEWALK EXTENSION

VIP PREMIUM ENTRANCE

PROPERTY LINE

BUS ENTRANCE

SERVICE ENTRANCE

SLOPED CURB

ENTRY VESTIBULE 100

MAIN LOBBY 102

ELECT ROOM 104

COATS 103

BOX OFFICE 105

TICKET MGR. 106

LOBBY BAR #1 109

BAR - 6 POS

BAR #1 STOR. 110

TOILET 111

TOILET 112

MEDIC / SECURITY 107

VIP LOBBY CORRIDOR 114

P.E. #1

ELEVATOR CORRIDOR 113

STORAGE ROOM 108

JAN 117

GENDER NEUTRAL SINKS 118

VIP VINYL LOBBY 115

ACCESS CORRIDOR 116

MENS TOILET 119

MENS - 19 WC

WOMENS TOILET 121

WOMENS 17 WC

CHAIR STORAGE 120

STAIR 4

STAIR 1

BAR - 9 POS

HOUSE BAR #2 140

BAR #2 STOR 139

WATER SERVICE 138

GAS ALCOVE 137

MAIN ELECTRICAL 136

STAIR 2

DRESSING RM 1 131

150 sf

TOUR PROD. 135

100 sf

N. STAGE CORRIDOR 132

T/S 1 130

TOUR PROD. 134

100 sf

MDF ROOM 133

100 sf

TOILET ROOM 129

LEVEL 2 ABOVE

MERCH

THEATER HOUSE 122

MIX POSITION

STAGE 128

43'-6 5/8"

46'-0"

55'-4"

SE ELEV. VESTIBULE 126

SE #2

DOCK VESTIBULE 127

ELEV. CLOSET 125

STAIR 3

RAMP UP

RAMP DN

HOUSE BAR #1 123

BAR - 10 POS

BAR #1 STOR. 124

HOLDING 142

BUS PKG. CORRIDOR 145

BUS PARKING 146

CENTRAL GREASE SEPARATOR

GAS & OIL SEPARATOR

SLOPE @ +/- 3.14%

SLOPE @ 5%

SLOPE @ 2.05%

TRASH & RECYCLABLE 144

LOADING DOCK 143

LEVELER

LOADING BAYS 1 & 2 141

20'-0"

24'-0"

25'-0"

PROPOSED PARKING GARAGE (NIC)

225'-7"

North

0 2' 4' 8' 16'

Owner:
PORTLAND MUSIC HOLDINGS

Project Architect:
D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
McNAMARA SALVIA, INC.
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
SEBAGO
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
WSP USA
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
HOWE ENGINEERS
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
METROPOLITAN ACOUSTICS
8 PENN CENTER, SUITE 1902
PHILADELPHIA, PA 19103

Lighting Consultants:
VISUAL TERRAIN, INC.
25217 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
VAN DEUSEN & ASSOC.
1 EXPOSITION, WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**RDH BUILDING SCIENCE ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 300
BOSTON, MA 02210

Specifications:
**WIL-SPEC LLC**
370 MAIN STREET
BOXFORD, MA 01921

D'AGOSTINO IZZO QUIRK ARCHITECTS

SEAL:

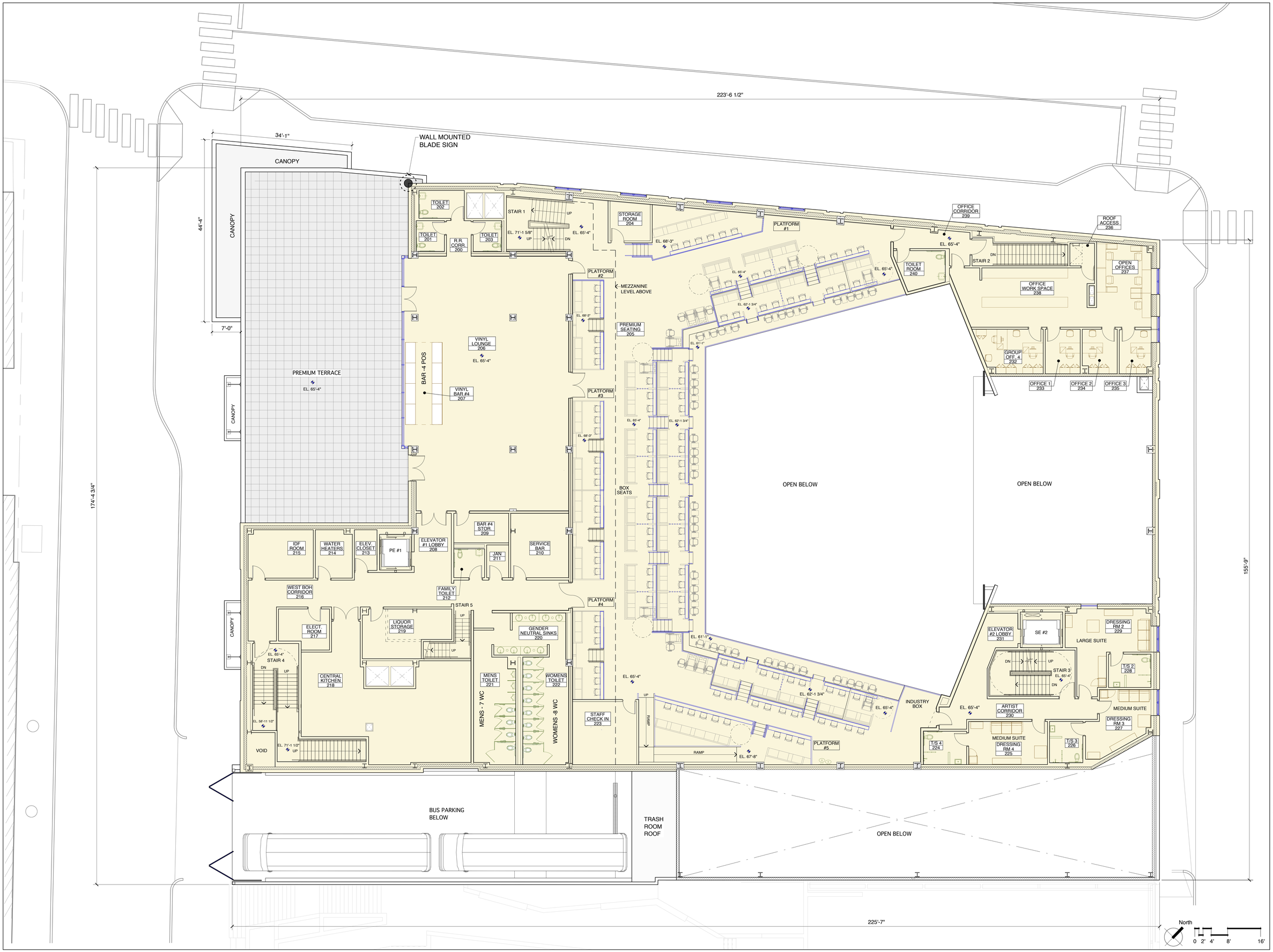
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| | 12/18/24 | PLANNING SUB. |
| | 12/20/24 | SCHEMATIC DESIGN |
| | 04/11/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**GROUND LEVEL 1 PLAN**

SCALE: As Noted.
SHEET #:

**A2.1**




# PORTLAND MUSIC HALL

PORTLAND , MAINE


Owner:
PORTLAND MUSIC HOLDINGS

Project Architect:
D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
McNAMARA SALVIA, INC.
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
SEBAGO
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
VANNUCCI
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
HOWE ENGINEERS
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
METROPOLITAN ACOUSTICS
8 PENN CENTER, SUITE 1902
PHILADELPHIA, PA 19103

Lighting Consultants:
VISUAL TERRAIN, INC.
25217 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
LERCH BATES
60-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**RDH BUILDING SCIENCE ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 320
BOSTON, MA 02210

Specifications:
**WIL-SPEC LLC**
375 MAIN STREET
BOXFORD, MA 01921


D'AGOSTINO IZZO QUIRK ARCHITECTS

SEAL:

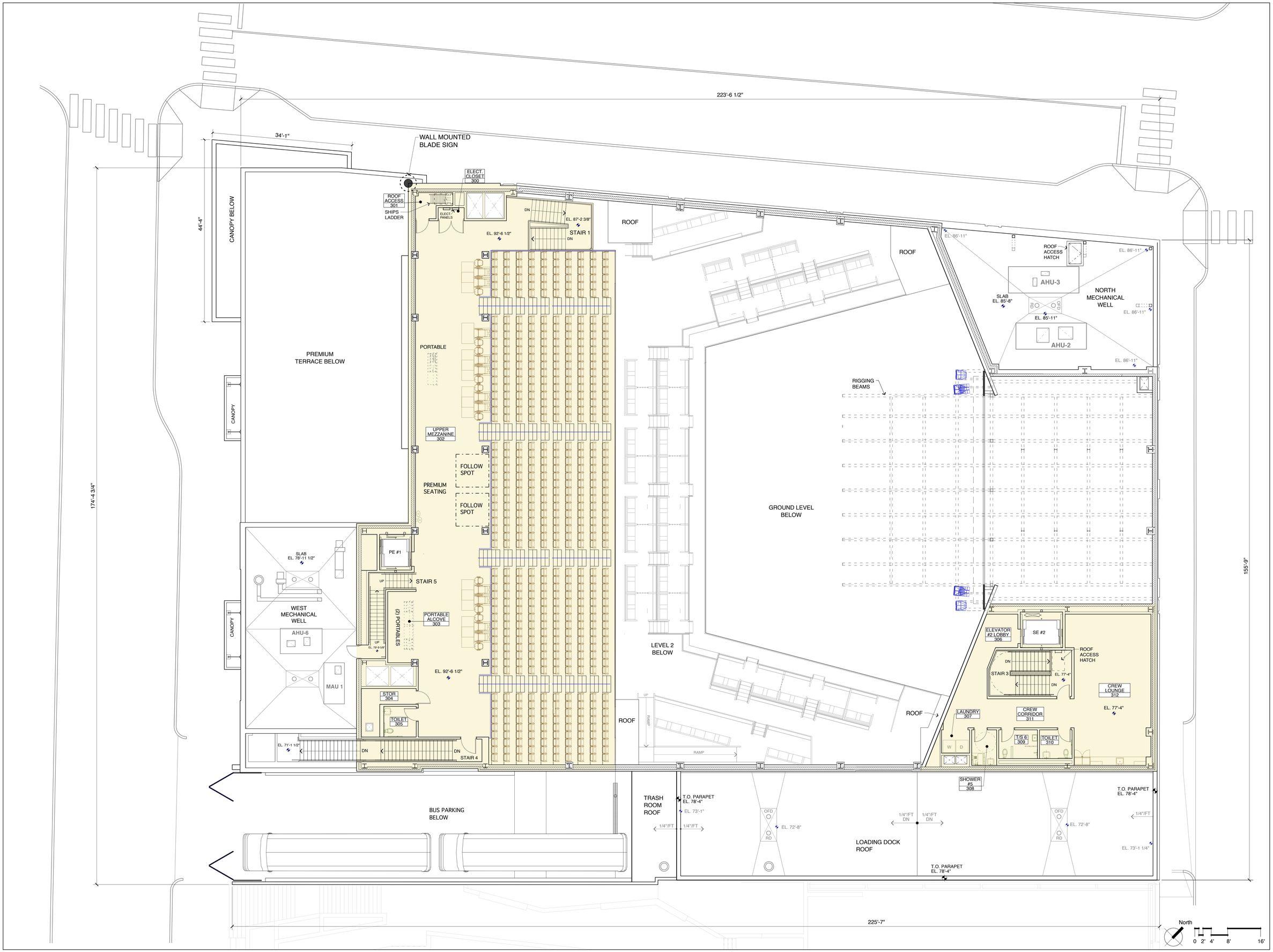
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| | 12/20/24 | SCHEMATIC DESIGN |
| | 04/11/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

## LEVEL 2 PLAN

SCALE: As Noted.
SHEET #:

**A2.2**




# PORTLAND MUSIC HALL

PORTLAND , MAINE


Owner:
PORTLAND MUSIC HOLDINGS

Project Architect:
D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
McNAMARA SALVIA, INC.
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
SEBAGO
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
BVH INC.
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
HOWE ENGINEERS
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
METROPOLITAN ACOUSTICS
1 BELLEVUE AVENUE, #302
PHILADELPHIA, PA 19103

Lighting Consultants:
VISUAL TERRAIN, INC.
25217 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
LERCH BATES
60-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**WISS, JANNEY, ELSTNER ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 300
BOSTON, MA 02210

Specifications:
**WILSPEC LLC**
375 MAIN STREET
BOXFORD, MA 01921


DAIQ ARCHITECTS

SEAL:

REVISIONS:

| | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 12/20/24 | SCHEMATIC DESIGN |
| | 04/11/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

## MEZZANINE LEVEL PLAN

SCALE: As Noted.
SHEET #:

**A2.3**

CUMBERLAND AVENUE

223'-6 1/2"

MERRILL AUDITORIUM

MYRTLE STREET →

PEARL STREET

34'-1"

WALL MOUNTED
BLADE SIGN - ALT 1

44'-4"

CANOPY BELOW

ROOF
ACCESS
HATCH

T.O. PARAPET
EL. 106'-0"

EL. 86'-11"

T.O. SCREEN
WALL
EL. 98'-10"

ROOF
ACCESS
HATCH

EL. 86'-11"

AHU-3

NORTH
MECHANICAL
WELL

EL. 86'-11"

AHU-2

EL. 86'-11"

T.O. PARAPET
EL. 99'-0"

PREMIUM
TERRACE BELOW

CANOPY

AHU-1-1

OFD
RD

EL. 104'-0 1/2"
T.O. SLAB

SMOKE
EXHAUST

133'-10"

T.O. PARAPET
EL. 106'-0"

1/4"/FT

EL. 103'-8 1/8"
T.O. SLAB

T.O. PARAPET
EL. 106'-0"

EL. 104'-8"
T.O. SLAB

EL. 103'-10 1/4"
T.O. SLAB

EL. 104'-7 1/2"
T.O. SLAB

EL. 98'-6"
T.O. SLAB

SCUP.

EL. 97'-8 5/8"
T.O. SLAB

T.O. PARAPET
EL. 99'-0"

174'-4 3/4"

WALL MOUNTED
BLADE SIGN
ALT 2

T.O. PARAPET
EL. 90'-10"

1/4"/FT

SCUPPER &
DOWNSPOUT

ELEVATOR
PENTHOUSE

AHU-1-2

AHU-1-3

1/4"/FT
DN

1/4"/FT
DN

T.O. PARAPET
EL. 98'-10"

EL. 90'-2"

ELEVATOR
PENTHOUSE
ROOF

ROOF
ACCESS
HATCH

SCUPPER &
DOWNSPOUT

SLAB
EL. 89'-4"

AHU-4

WEST
MECHANICAL
WELL

AHU-6

MAU 1

CANOPY

STAIR
ROOF

EL. 104'-2 11/16"
T.O. SLAB

EL. 103'-8 1/8"
T.O. SLAB

EL. 104'-0"
L.P.

T.O. SCREEN WALL
EL. 99'-0"

T.O. PARAPET
EL. 90'-10"

BUS PARKING
BELOW

TRASH
ROOM
ROOF

T.O. PARAPET
EL. 106'-0"

T.O. PARAPET
EL. 74'-8"

EL. 73'-1"

EL. 72'-8"

1/4"/FT
DN

1/4"/FT
DN

EL. 72'-8"

T.O. PARAPET
EL. 78'-4"

EL. 73'-1 1/4"

LOADING DOCK
ROOF BELOW

T.O. PARAPET
EL. 74'-8"

155'-9"

22'-0"
SETBACK

225'-7"

North

0 2' 4' 8' 16'

R

# PORTLAND MUSIC HALL

PORTLAND , MAINE


Owner:
PORTLAND MUSIC HOLDINGS

Project Architect:
D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
McNAMARA SALVIA, INC.
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
SEBAGO
25 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
WSP USA
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
HOWE ENGINEERS
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
METROPOLITAN ACOUSTICS
8 PENN CENTER, SUITE 1902
PHILADELPHIA, PA 19103

Lighting Consultants:
VISUAL TERRAIN, INC.
25217 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
LERCH BATES INC.
LERCH COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**RDH BUILDING SCIENCE ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 300
BOSTON, MA 02210

Specifications:
**WIL-SPEC LLC**
370 MAIN STREET
BOXFORD, MA 01921


D'AIQ ARCHITECTS

SEAL:

| REVISIONS: | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 12/20/24 | SCHEMATIC DESIGN |
| | 04/11/25 | REV PLANNING SUB. |

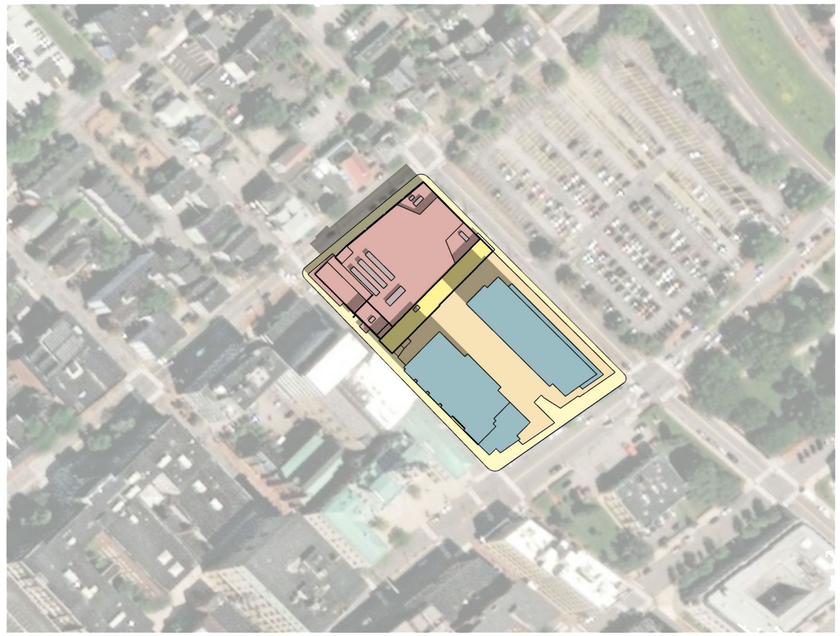
DAIQ PROJECT #: 24003
DRAWING TITLE:

## ROOF PLAN

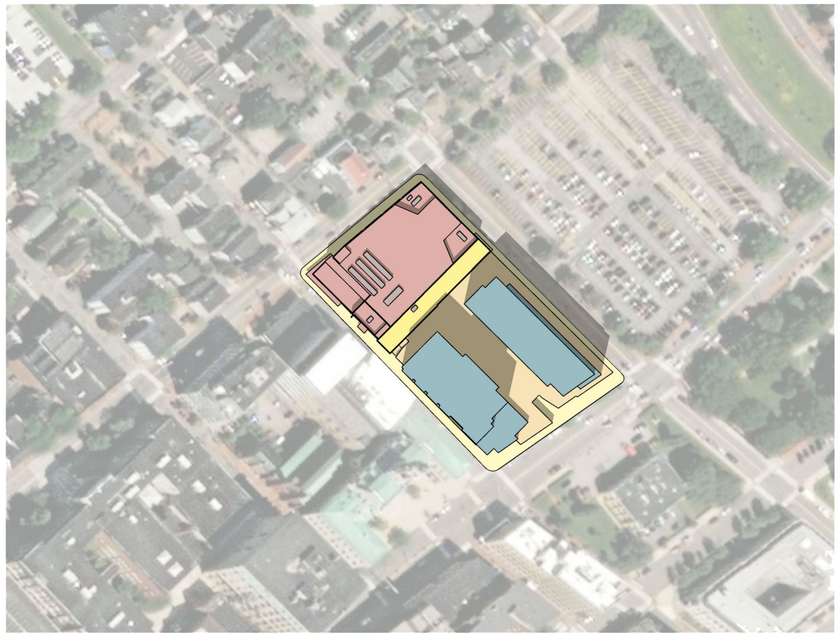
SCALE: As Noted.
SHEET #:

**A2.4**

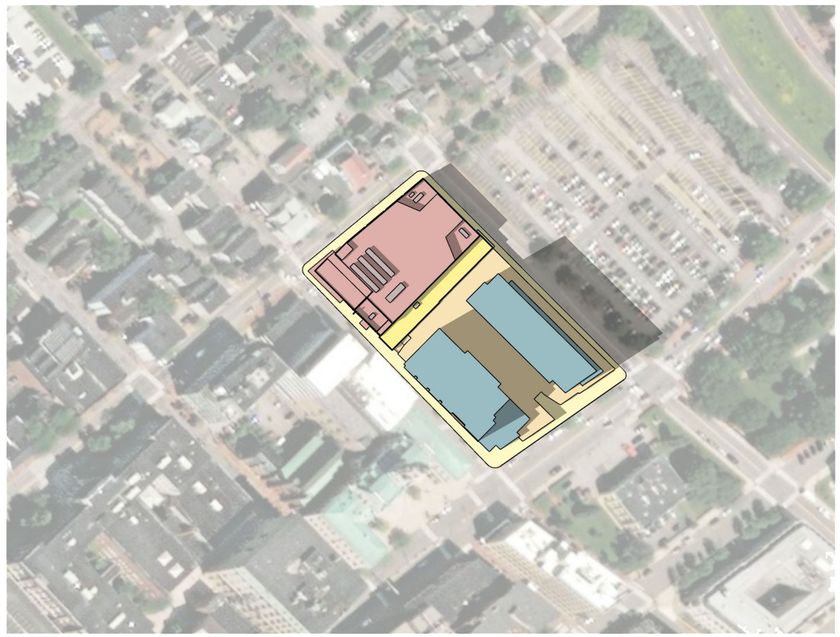
# SHADOW STUDY ANALYSIS



10:00 AM



12:00 PM



2:00 PM

**MAY 5**

North

S

PORTLAND MUSIC HALL
PORTLAND , MAINE

DAIQ ARCHITECTS

SEAL:

REVISIONS:

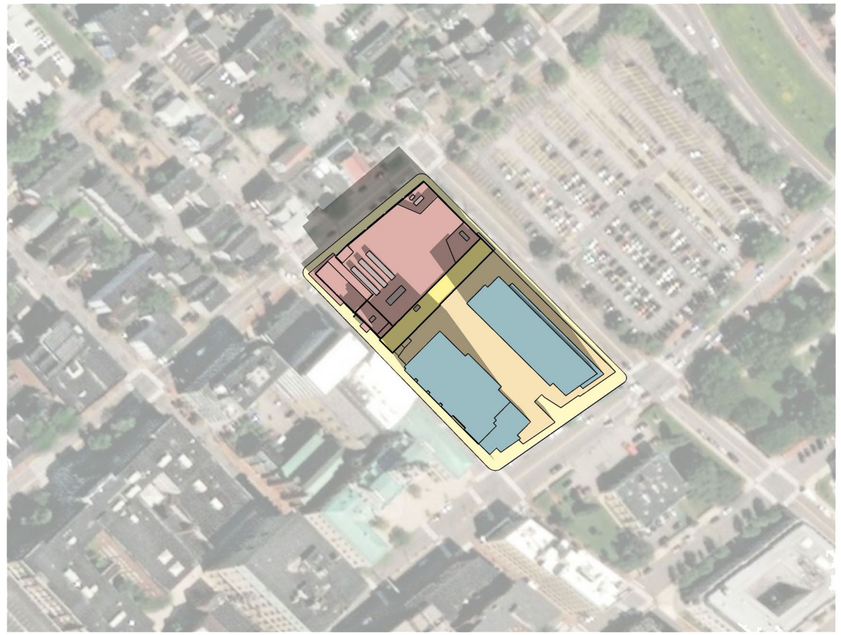
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| | 12/18/24 | PLANNING SUB. |

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DRAWING TITLE:

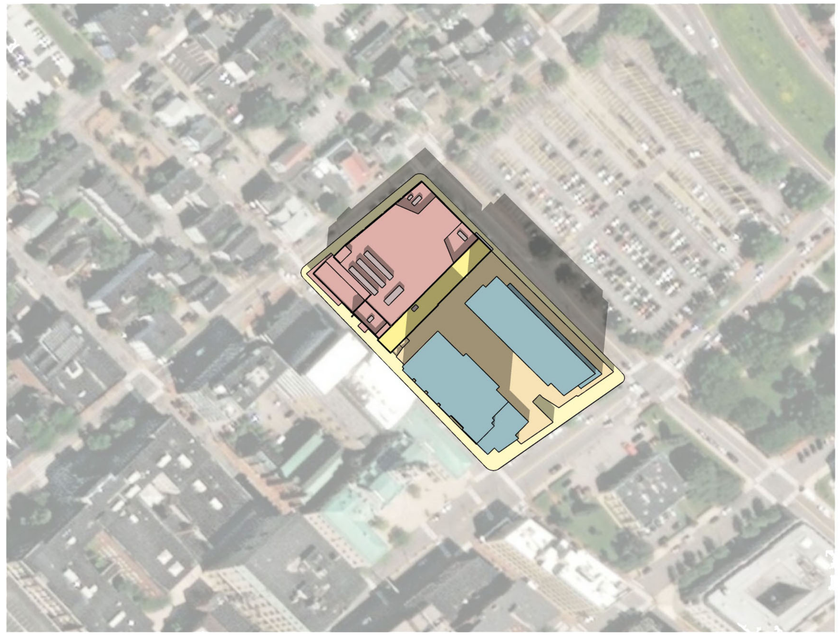
**SHADOW STUDY MAY 5**

SCALE: As Noted.
SHEET #:

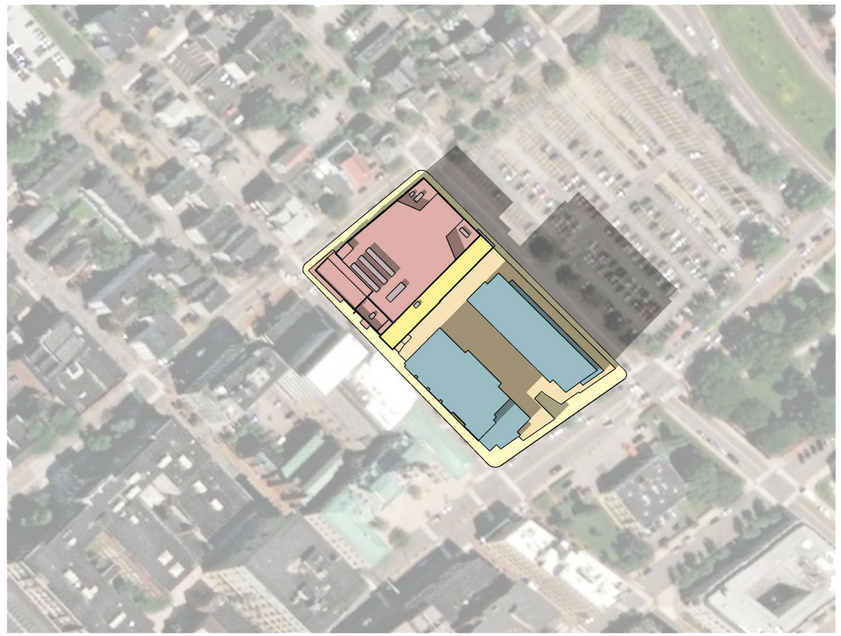
# SHADOW STUDY ANALYSIS



10:00 AM



12:00 PM



2:00 PM

**MARCH 21**

North

PORTLAND MUSIC HALL
PORTLAND , MAINE

DAIQ ARCHITECTS

SEAL:

REVISIONS:

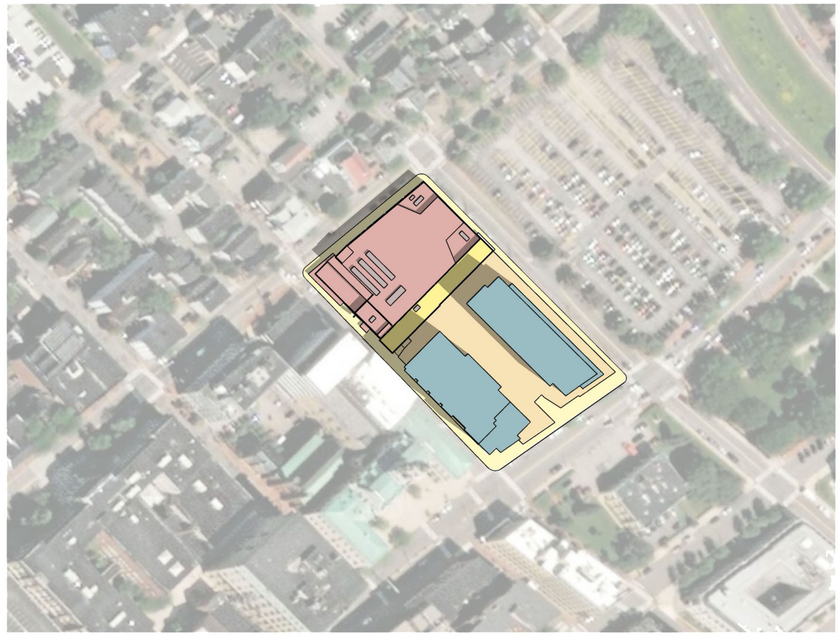
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| | 12/18/24 | PLANNING SUB. |

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DRAWING TITLE:

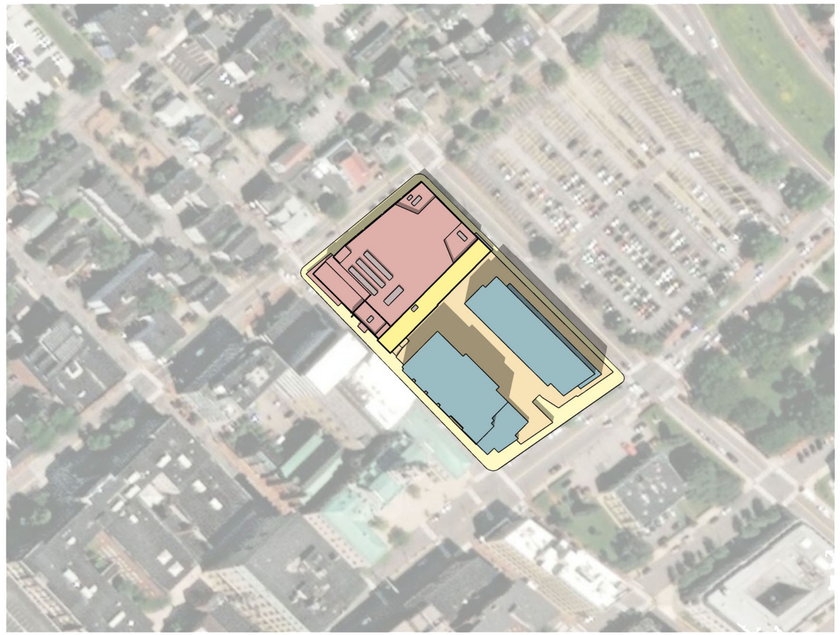
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SHEET #:

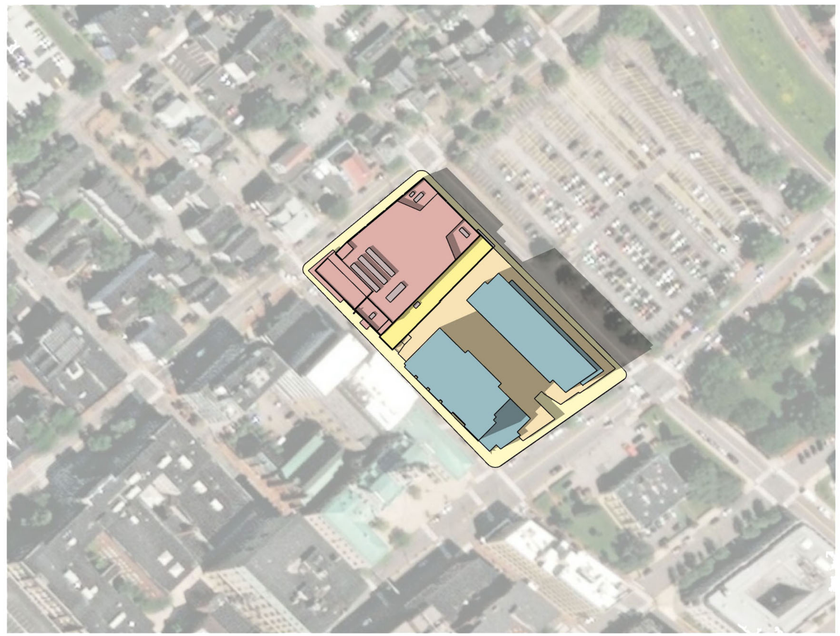
# SHADOW STUDY ANALYSIS



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**JUNE 21**

North

PORTLAND MUSIC HALL
PORTLAND , MAINE

DAIQ ARCHITECTS

SEAL:

REVISIONS:

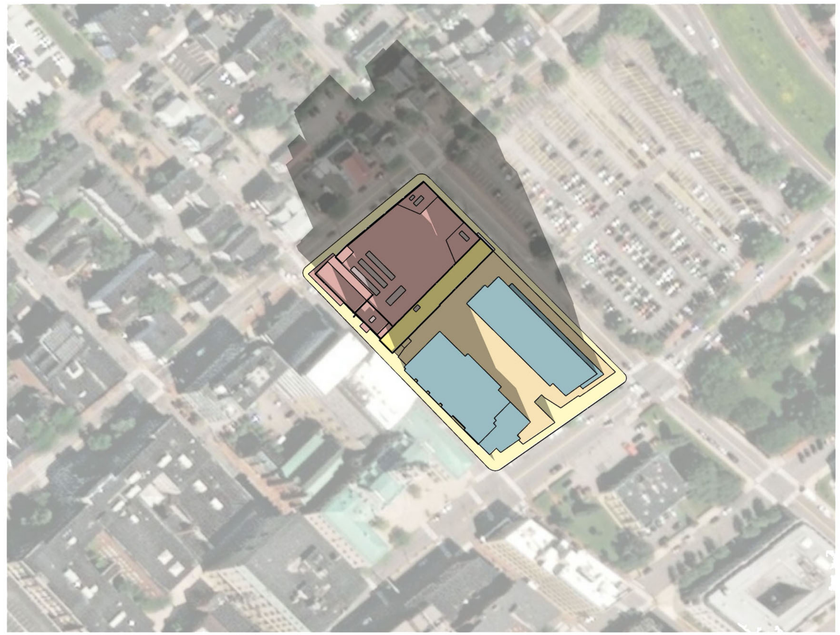
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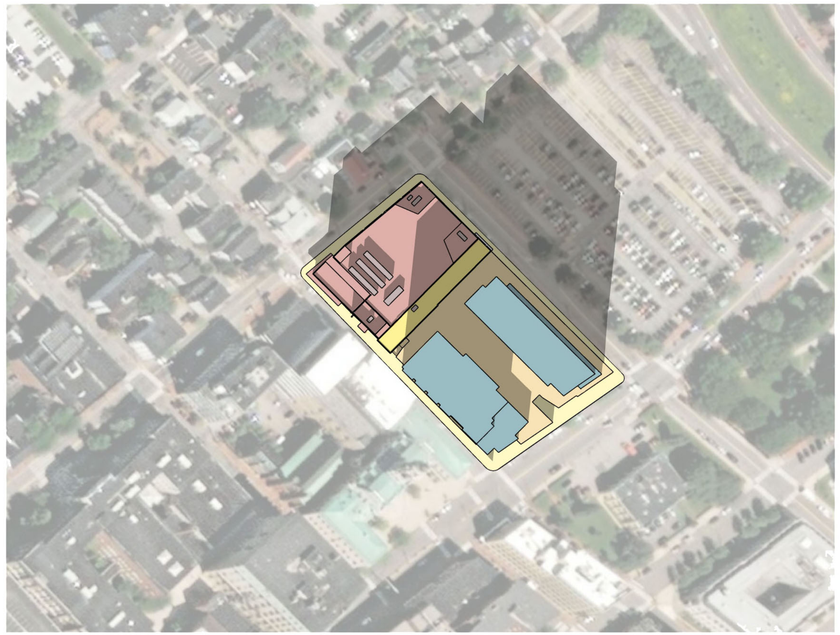
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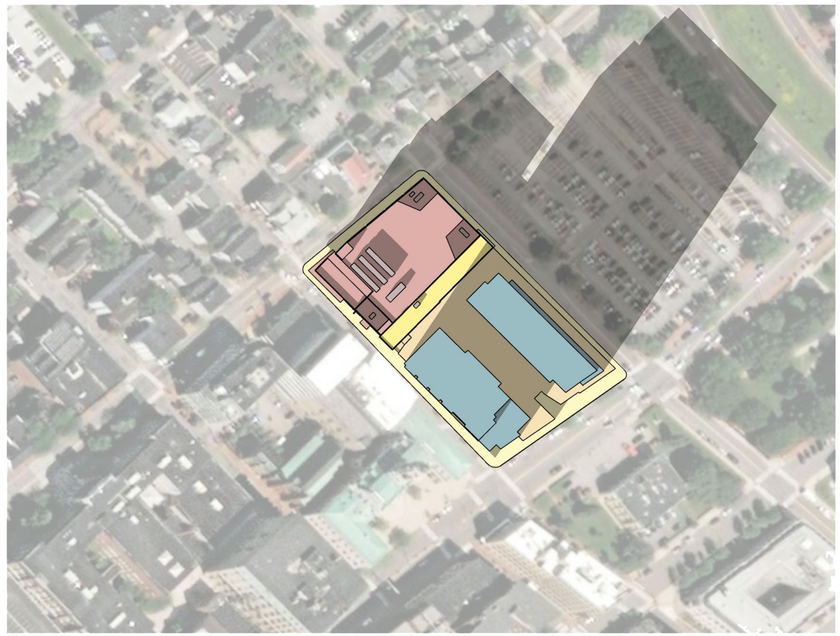
# SHADOW STUDY ANALYSIS



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**DECEMBER 21**

North

PORTLAND MUSIC HALL
PORTLAND , MAINE

DAIQ ARCHITECTS

SEAL:

REVISIONS:

| | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**SHADOW STUDY DECEMBER 21**

SCALE: As Noted.
SHEET #:

SEBAGO TECHNICS

CIVIL ENGINEERING ▪ SURVEYING ▪ LANDSCAPE ARCHITECTURE

T

# STORMWATER MANAGEMENT REPORT

## For

## 244 CUMBERLAND AVENUE
## LOT 3 OF 385 CONGRESS STREET SUBDIVISION
## PORTLAND, MAINE

Prepared for

Portland Music Holdings, LLC

**December, 2024**




12/19/2024

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Appendix 2: Inspection, Maintenance and Housekeeping Plan
Appendix 3: Flood Insurance Rate Map
Appendix 4: Subsurface Investigations
Appendix 5: Stormwater Management Plans

# STORMWATER MANAGEMENT REPORT
# 244 CUMBERLAND AVENUE
# LOT 3 OF 385 CONGRESS STREET SUBDIVISION
# PORTLAND, MAINE

## 1. Introduction

This Stormwater Management Plan and Report presents analyses performed to address stormwater management for the proposed development of Lot 3 of the 385 Congress Street Subdivision. The stormwater management controls outlined in this report are designed to suit the proposed development and to comply with applicable state and local regulatory requirements.

The project is comprised of the proposed development of a music event venue on Lot 3, a site occupying 0.88 acres located at the corner of Myrtle Street and Cumberland Avenue in Portland. Lot 3 is a portion of a larger 2.26-acre parcel bounded by Congress Street, Myrtle Street, Cumberland Avenue, and Pearl Street. The project is one of three phases for a Master Plan of Development for this larger site approved by the planning board in August 2022. An adjacent hotel project on Lot 1 of the subdivision was approved by the planning board in February 2023 and has not begun construction.

Development of the site is subject to the City of Portland's post-construction stormwater management standards, which adopt the MDEP Chapter 500 Basic, General, and Flooding standards, including the redevelopment standards, as incorporated into the City of Portland Land Use Ordinance and Site Plan review regulations. The project is a redevelopment project resulting in less than 5,000 sf or non-rooftop impervious area. As such, the City's stormwater standards for redevelopment do not require stormwater quality treatment.

The site is located in an area served by a combined sewer system where the City of Portland seeks to mitigate and reduce combined sewer overflow (CSO) events. The design storm event for CSO evaluation is a 1" rainfall, 24-hour design storm (CSO Storm).

Based on discussions with City staff during the Master Development Plan and Lot 1 Site Plan Review, the stormwater analysis and the proposed detention system have been designed to reduce the rate of runoff from the project site to the extent practicable during this 1" CSO Storm event.

The project site and the remaining land are currently fully developed with two buildings and surface parking. The site generally slopes from east to west (Congress Street toward Cumberland Avenue) with an approximately 12' change in grade along Myrtle Street and Pearl Street. The existing site includes a system of catch basins that connect into the City's combined sewer in the surrounding streets, ultimately discharging to the west along Myrtle Street and Pearl Street toward Marginal Way.

The City is undertaking a study for the future construction of storm drainage and sanitary sewer separation along Pearl Street from Marginal Way to Congress Street. In anticipation of future offsite improvements, Staff have requested that the projects associated with the Master Plan of Development for the property:

- Separate their sanitary sewer and storm drainage on site prior to connection into the City system;
- Direct as much of the storm drainage from the project site (and remaining land identified as Lot 1 and Lot 2) to the combined sewer in Pearl Street, with a connection near Cumberland Avenue to facilitate future separation, and;
- Detain and reduce the peak rate of runoff from the redeveloped areas of the site to the extent practicable during a 1-inch, 24-hour rainfall event to reduce flows during the City's CSO storm event.

## 2. Existing Conditions

The City's drainage system abutting the site is a combined sewer system tributary to an overflow location at the Back Cove discharging into Casco Bay. Base flow in the system is conveyed to the Portland wastewater treatment plant. This site is not tributary to any urban impaired streams or significant pond or lake watersheds defined in Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations.

The proposed development area of the site is not located in an identified flood zone shown on the FEMA Flood Insurance Rate Map for the City of Portland, Community Panel 2300510013B dated July 17, 1986. A copy of the Flood Insurance Rate Map is attached in appendix 3.

## 3. Soils

Soil information for the site was obtained from the USGS United States Department of Agriculture and Natural Resource Conservation Service's Web Soil Survey site. Boring logs from the site's geotechnical exploration reports indicate a groundwater depth of approximately 15 feet. The Hydrologic Groups (HSG) of the soils on site as classified by the Soil Conservation Service is as follows:

| Soil Map Symbol | Soil Name | Slope (%) | HSG |
|---|---|---|---|
| HIB | Hinckley loamy sand | 3-8 | A |

Hydrologic Soil Group boundaries are delineated on the Watershed Map. A copy of the Medium Intensity Soil Survey is included in Appendix 4.

## 4. Proposed Site Improvements

The proposed development consists of a subdivision plan amendment revising the lot line between Lots 2 and 3 and a major site plan review for the development of the revised Lot 3. The revised Lot 3 will be redeveloped as a commercial development.

The abutting Lot 1 to the east was approved as a proposed hotel and condominium development in September of 2023. Lot 2 is the remaining land retained by the owner for future development, currently envisioned as a residential condominium development.

## 5. Hydrologic Modeling

In order to evaluate drainage characteristics as a result of the proposed development, a quantitative analysis was performed to determine peak runoff rates in the pre-development and post-development conditions. The evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations.

## 6. Existing Conditions Model

The pre-development watershed plan consists of four subcatchments labeled 1.1S through 2.2S in the HydroCAD model. Two locations are identified as Points of Analysis (POA) for comparing peak runoff rates. These two POAs represent flows in the existing combined sewers in Pearl Street at Cumberland Avenue (POA-1) and Myrtle Street at Cumberland Avenue (POA-2).

POA-1 is located at the northerly (plan northwest) corner of the larger project site where runoff from the site is tributary to the 18" diameter combined sewer in Pearl Street at Cumberland Avenue. Subcatchments 1.1S represents on-site areas tributary to POA-1 and Subcatchment 1.2S represents offsite areas to the northeast contributing runoff to this point of analysis. The total modeled drainage area tributary to POA-1 in the pre-development condition is approximately 4.04 acres.

POA-2 is located at the westerly (plan southwest) corner of the larger project site where runoff from the site is tributary to the combined sewer in Myrtle Street at Cumberland Avenue. Subcatchments 2.1S and 2.2S represent on-site and offsite areas tributary to POA-2 contributing runoff to this point of analysis. The total modeled drainage area tributary to POA-2 in the pre-development condition is approximately 1.54 acres.

## 7. Proposed Conditions Model

The post-development watershed presents a consistent overall drainage area tributary to the points of analysis; subdividing the area into its anticipated post development subcatchments that will result from the proposed redevelopment of the site.

POA-1:

In the post-development model, subcatchment 10.1S represents offsite areas draining to POA-1 and is unaffected by the proposed development.

Subcatchment 10.2S represents the existing onsite area that will remain undeveloped.

Subcatchment 10.3S represents the proposed site development. As part of the current Site Plan application for Lot 3, this area will be minimally improved. Draining generally in its existing condition revised with connections to the proposed storm drain serving lot 3.

The proposed development of Lot 3 will include detention to store the required Stormwater Quality (WQv) volume and to provide peak runoff control provided by a corrugated metal pipe (CMP) detention system.

Analysis has been performed to evaluate two conditions:

- Assuming Lot 3 is constructed in isolation, with Lot 1 and Lot 2 remaining undeveloped. The overall post-development tributary area tributary to POA-1 increases to 4.51 acres; an increase of 0.47 acres due to the redirection of storm drainage from Myrtle Street (POA-2) to Pearl Street (POA-1) as requested by the City to facilitate its future combined sewer separation objectives. Refer to Plan Sheet 2 of 3 “Proposed Conditions SWM Plan – Lot 3 Only”.

- Assuming Lot 1 is developed as currently approved along with Lot 3, the overall post-development tributary area tributary to POA-1 increases to 4.51 acres; an increase of 0.47 acres due to the redirection of storm drainage from Myrtle Street (POA-2) to Pearl Street (POA-1) as requested by the City to facilitate its future combined sewer separation objectives. This analysis incorporates the stormwater management systems approved in the Hotel Site Plan Review. Refer to Plan Sheet 3 of 3 “Proposed Conditions SWM Plan – Full”.

The planned Hotel development on Lot 1 is proposed to include a treatment and detention system comprised of a 48” diameter CMP subsurface detention. A preliminary design of the full build-out condition for Lot 1 and Lot 3 is included in the analysis.

Upon installation of the Lot 1 and Lot 3 system, peak flows at POA-1 are reduced to pre-development levels detaining runoff associated with the re-direction of tributary areas from POA -2 to POA-1 that has been requested by the City.

POA-2:

In the Post-development model subcatchments 20.1S represents off-site areas draining to the Myrtle Street combined sewer.

Analysis has been performed to evaluate two conditions:

- Assuming Lot 3 is constructed in isolation, and Lot 1 and Lot 2 remain undeveloped. The drainage area at POA-1 sees a corresponding increase in tributary area.

and

- Assuming Lot 1 and Lot 3 are developed as currently proposed. The drainage area at POA-1 sees a corresponding increase in tributary area.

## 8. Stormwater Management

Municipal Requirements

The project is the redevelopment of a fully developed site, creating less than one acre of impervious area such that an MDEP Chapter 500 Stormwater permit is not required.

The redevelopment of Lot 3, upon completion, will result in less than 5,000 sf of non-rooftop impervious area on the site. As such, the City's Stormwater Standards for Redevelopment (Technical Manual Section 5.II.D) do not apply and stormwater quality treatment to meet the General Standards is not required.

The City of Portland Technical Manual Section 5.II-C states that all Major site plans are required to meet the Maine DEP Chapter 500 flooding standard.

The project proposes a subsurface detention system below the lower-level garage to detain runoff meeting the flooding standards. The proposed system will direct the separated site drainage to the intersection of Pearl Street and Cumberland Avenue to facilitate the City's future combined sewer separation efforts. The proposed system will detain and reduce flows from the site to the maximum extent practicable during a smaller 1" rain event to advance the City's Combined Sewer Overflow (CSO) objectives for this area of the City. This approach is consistent with the Stormwater management approach approved in the MDP for the project site and the Lot 1 Hotel site plan approval and as required by the City in its sewer capacity review findings for those developments.

Basic Standard - Chapter 500, Section 4(B)

The MDEP Basic Standards apply to all City site plans, requiring that grading or other construction activities on the site do not impede or otherwise alter drainage ways to have an unreasonable adverse impact. We have avoided adverse impacts by providing an Erosion & Sedimentation Control Plan, and an Inspection, Maintenance and Housekeeping Plan (Appendix 2) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines.

General Standard - Chapter 500, Section 4(C)

The MDEP General Standards do not apply as this project disturbs less than one acre and creates less than one acre of impervious area.

Redevelopment Standards - Chapter 500, Section (C)(2)(d), City Technical Standards – Section II-D

Because the General Standards do not apply to this project, the MDEP Redevelopment Standards also do not apply.

The redevelopment of Lot 3, upon completion, will result in less than 5,000 sf of non-rooftop impervious area on the site. As such, the City's Stormwater Standards for Redevelopment (Technical Manual Section 5.II.D) do not apply and stormwater quality treatment to meet the General Standards is not required.

Because the project is located in a combined sewer watershed, flooding control has been provided to reduce rates of runoff in the 1" CSO storm event.

Flooding Standard - Chapter 500, Section 4(F), City Technical Standards – Section II-C

The City of Portland Technical Manual Section 5.II-C states that all Major site plans are required to meet the Maine DEP Chapter 500 flooding standard.

The Flooding Standard requires a project's stormwater management system detain, retain, or result in the infiltration of stormwater from 24-hour storms of the 2, 10, and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project. Minor increases that do not exceed the capacity of existing systems may be approved on a case-by-case basis.

To address this standard, a runoff evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations.

Because the site will be developed in phases as outlined in the approved master plan, the site has been evaluated in two (2) conditions:

- Assuming Lot 3 is developed in isolation with Lot 1 and Lot 2 remaining undeveloped and
- Assuming Lot 1 and Lot 3 are developed as proposed with below-grade detention systems.

For this report it is anticipated that Lot 3 will be developed first and will include a 48" diameter CMP detention system as a standalone project.

The remaining land will be developed concurrently or later, with a second 48" diameter CMP detention system to meet the flooding standards.

Runoff curve numbers were determined for each of the watersheds by measuring the area of each hydrologic soil group within each type of land cover. Pre-development land cover was determined based on survey data, field reconnaissance and aerial photography. Post-development land cover is based on the proposed construction.

Times of concentration were determined from site topographic maps in accordance with SCS procedures, with a minimum of 6 minutes (0.1 hour).

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for Cumberland County (Southeast) are listed in the table below.

| Storm Frequency Precipitation (in./24 hr) Cumberland County (Southeast) | |
|---|---|
| 2-year | 3.1 |
| 10-year | 4.6 |
| 25-year | 5.8 |

**Analysis No. 1 Lot 3 Developed in Isolation**

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions upon completion of the Lot 3 development. These results assume that the remaining land on Lots 1 and 2 drains in its pre-development condition.

| Peak Runoff Rate Summary Table | | | |
|---|---|---|---|
| **Analysis Point** | **Storm Event** | **Existing Conditions (cfs)** | **Proposed Conditions (cfs)** |
| POA-1 | 1-Inch | 3.3 | 3.3 |
| | 2-year | 11.9 | 12.2 |
| | 10-year | 18.0 | 18.1 |
| | 25-year | 22.8 | 24.5 |
| POA-2 | 1-Inch | 1.3 | 0.9 |
| | 2-year | 4.6 | 3.2 |
| | 10-year | 6.9 | 4.8 |
| | 25-year | 8.7 | 6.1 |

The results indicate that the peak rate of runoff at POA 1 in Pearl Street is slightly increased in the 2, 10, and 25-year storm events. This is expected due to the requested diversion of runoff to Pearl Street and consistent with stormwater management plan approved for the adjacent Lot 1 project.

The HydroCAD calculations for this analysis are appended to this report (Appendix 1) along with the Stormwater Management Plans (Appendix 5).

To confirm that the Lot 3 project meets the flooding standard the following table compares the peak rates of runoff from the Lot 3 building site in isolation. This analysis presents the results for pond node 1P representing the system detaining runoff from the building rooftop (subcatchment 10.3S)

| Peak Runoff Rate Summary Table | | | |
|---|---|---|---|
| **Analysis Point** | **Storm Event** | **Un-Detained Runoff Subcatchment 10.3S (cfs)** | **Detention System Discharge Node 1P (cfs)** |
| 10.3S Pond 1P | 1-Inch | 0.8 | 0.5 |
| | 2-year | 2.5 | 1.6 |
| | 10-year | 3.8 | 2.7 |
| | 25-year | 4.8 | 4.4 |

**Analysis No. 2 Lot 1 and Lot 3 Fully Developed**

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions upon the construction of both the proposed Lot 1 and the Lot 3 detention and treatment systems.

| Peak Runoff Rate Summary Table | | | |
|---|---|---|---|
| **Analysis Point** | **Storm Event** | **Existing Conditions (cfs)** | **Proposed Conditions (cfs)** |
| POA-1 | 1-Inch | 3.3 | 3.2 |
| | 2-year | 11.9 | 11.3 |
| | 10-year | 18.0 | 16.6 |
| | 25-year | 22.8 | 22.6 |
| POA-2 | 1-Inch | 1.3 | 0.9 |
| | 2-year | 4.6 | 3.2 |
| | 10-year | 6.9 | 4.8 |
| | 25-year | 8.7 | 6.1 |

The results indicate that the peak rate of runoff is at or reduced from predevelopment rates in all storm events evaluated. The HydroCAD calculations for this analysis are appended to this report (Appendix 1) along with the Stormwater Management Plans (Appendix 5).

## 9. Summary

The proposed development has been designed to manage stormwater runoff through Best Management Practices meeting the applicable City of Portland Stormwater Management Standards. Peak rates of runoff from the project site are reduced from the pre-development conditions for the 1", 2, 10, and 25-year storm events.

Prepared by:

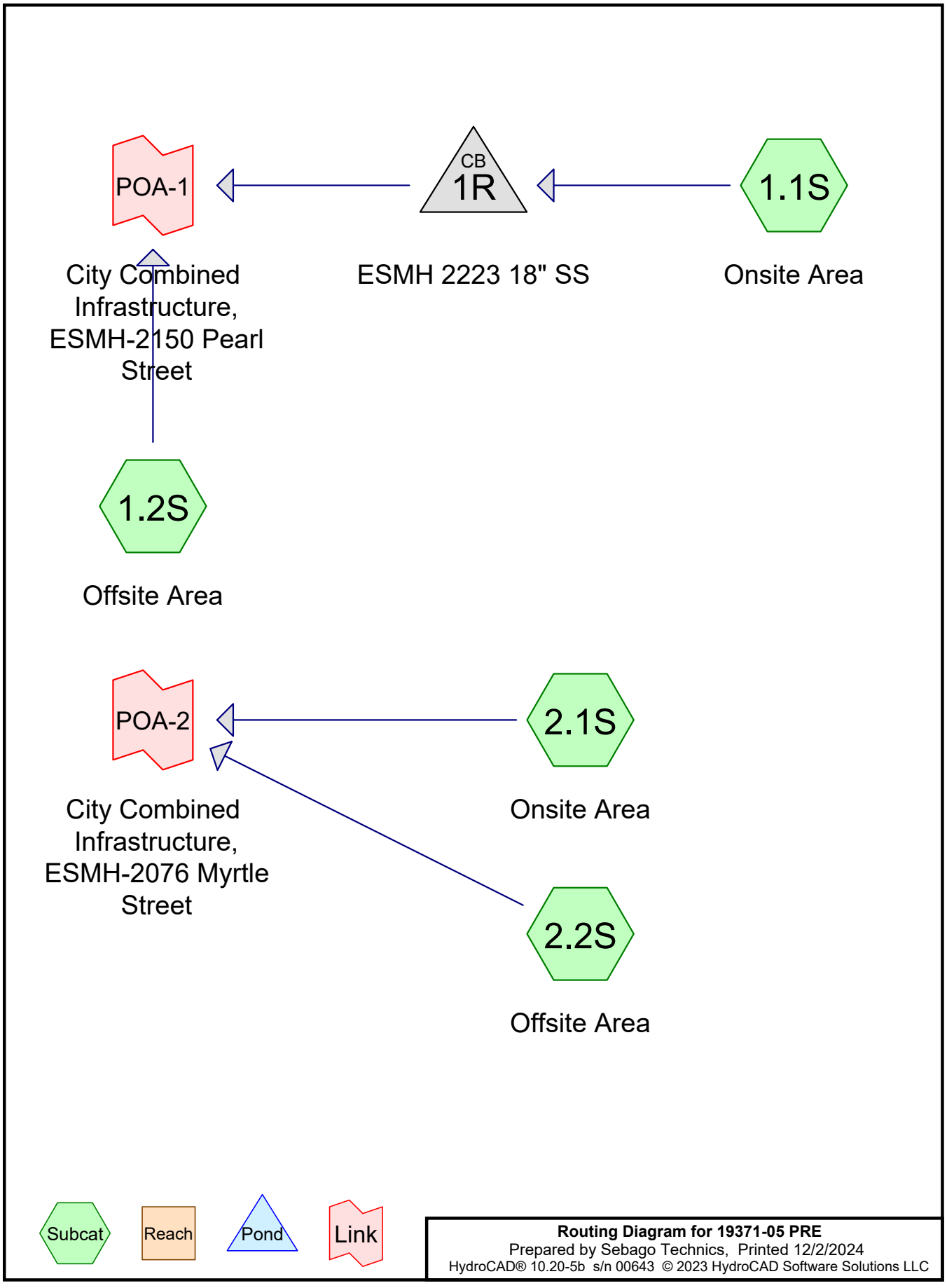
SEBAGO TECHNICS, INC.

Christopher P. Taylor, P.E.
Project Manager

Dylan J. Stuart
Civil Engineer

# Appendix 1A

## Hydrologic Modeling - Existing Conditions (HydroCAD) Summary


POA-1
CB
1R
1.1S
City Combined Infrastructure, ESMH-2150 Pearl Street
ESMH 2223 18" SS
Onsite Area
1.2S
Offsite Area
POA-2
2.1S
City Combined Infrastructure, ESMH-2076 Myrtle Street
Onsite Area
2.2S
Offsite Area
Subcat
Reach
Pond
Link
Routing Diagram for 19371-05 PRE
Prepared by Sebago Technics, Printed 12/2/2024
HydroCAD® 10.20-5b s/n 00643 © 2023 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.063 | 39 | >75% Grass cover, Good, HSG A (1.1S, 1.2S, 2.1S) |
| 5.511 | 98 | Paved parking & Roofs (1.1S, 1.2S, 2.1S, 2.2S) |
| **5.574** | **97** | **TOTAL AREA** |

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment1.1S: Onsite Area** Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=0.63"
Tc=6.0 min CN=96 Runoff=1.3 cfs 0.093 af

**Subcatchment1.2S: Offsite Area** Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.0 cfs 0.149 af

**Subcatchment2.1S: Onsite Area** Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=0.71"
Tc=6.0 min CN=97 Runoff=0.4 cfs 0.029 af

**Subcatchment2.2S: Offsite Area** Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.9 cfs 0.069 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.13' Inflow=1.3 cfs 0.093 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=1.3 cfs 0.093 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=3.3 cfs 0.242 af
Primary=3.3 cfs 0.242 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=1.3 cfs 0.098 af
Primary=1.3 cfs 0.098 af

**Total Runoff Area = 5.574 ac Runoff Volume = 0.340 af Average Runoff Depth = 0.73"**
**1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment1.1S: Onsite Area** Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=2.65"
Tc=6.0 min CN=96 Runoff=5.1 cfs 0.391 af

**Subcatchment1.2S: Offsite Area** Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=6.8 cfs 0.542 af

**Subcatchment2.1S: Onsite Area** Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=2.76"
Tc=6.0 min CN=97 Runoff=1.5 cfs 0.113 af

**Subcatchment2.2S: Offsite Area** Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.1 cfs 0.250 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.74' Inflow=5.1 cfs 0.391 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=5.1 cfs 0.391 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=11.9 cfs 0.933 af
Primary=11.9 cfs 0.933 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=4.6 cfs 0.363 af
Primary=4.6 cfs 0.363 af

**Total Runoff Area = 5.574 ac Runoff Volume = 1.295 af Average Runoff Depth = 2.79"**
**1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment1.1S: Onsite Area** Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=4.14"
Tc=6.0 min CN=96 Runoff=7.8 cfs 0.610 af

**Subcatchment1.2S: Offsite Area** Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.2 cfs 0.825 af

**Subcatchment2.1S: Onsite Area** Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=4.25"
Tc=6.0 min CN=97 Runoff=2.2 cfs 0.174 af

**Subcatchment2.2S: Offsite Area** Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.7 cfs 0.380 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=41.21' Inflow=7.8 cfs 0.610 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=7.8 cfs 0.610 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=18.0 cfs 1.435 af
Primary=18.0 cfs 1.435 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=6.9 cfs 0.554 af
Primary=6.9 cfs 0.554 af

**Total Runoff Area = 5.574 ac Runoff Volume = 1.988 af Average Runoff Depth = 4.28"**
**1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac**

## Summary for Subcatchment 1.1S: Onsite Area

Runoff = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af, Depth= 5.33"
Routed to Pond 1R : ESMH 2223 18" SS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 74,829 | 98 | Paved parking & Roofs |
| | 2,256 | 39 | >75% Grass cover, Good, HSG A |
| | 77,085 | 96 | Weighted Average |
| | 2,256 | | 2.93% Pervious Area |
| | 74,829 | | 97.07% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 1.2S: Offsite Area

Runoff = 12.9 cfs @ 12.08 hrs, Volume= 1.051 af, Depth= 5.56"
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 98,565 | 98 | Paved parking & Roofs |
| | 231 | 39 | >75% Grass cover, Good, HSG A |
| | 98,796 | 98 | Weighted Average |
| | 231 | | 0.23% Pervious Area |
| | 98,565 | | 99.77% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 2.1S: Onsite Area

Runoff = 2.8 cfs @ 12.08 hrs, Volume= 0.223 af, Depth= 5.44"
Routed to Link POA-2 : City Combined Infrastructure, ESMH-2076 Myrtle Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 21,146 | 98 | Paved parking & Roofs |
| | 246 | 39 | >75% Grass cover, Good, HSG A |
| | 21,392 | 97 | Weighted Average |
| | 246 | | 1.15% Pervious Area |
| | 21,146 | | 98.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 2.2S: Offsite Area

Runoff = 5.9 cfs @ 12.08 hrs, Volume= 0.484 af, Depth= 5.56"
Routed to Link POA-2 : City Combined Infrastructure, ESMH-2076 Myrtle Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 45,519 | 98 | Paved parking & Roofs |
| | 45,519 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Pond 1R: ESMH 2223 18" SS

Inflow Area = 1.770 ac, 97.07% Impervious, Inflow Depth = 5.33" for 25-YEAR event
Inflow = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af
Outflow = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af, Atten= 0%, Lag= 0.0 min
Primary = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 41.73' @ 12.08 hrs
Flood Elev= 48.67'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 39.62' | **18.0" Round Culvert** L= 80.0' Ke= 0.500<br>Inlet / Outlet Invert= 39.62' / 37.46' S= 0.0270 '/' Cc= 0.900<br>n= 0.013 Clay tile, Flow Area= 1.77 sf |

**Primary OutFlow** Max=9.9 cfs @ 12.08 hrs HW=41.73' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 9.9 cfs @ 5.61 fps)

## Summary for Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street

Inflow Area = 4.038 ac, 98.59% Impervious, Inflow Depth = 5.46" for 25-YEAR event
Inflow = 22.8 cfs @ 12.08 hrs, Volume= 1.837 af
Primary = 22.8 cfs @ 12.08 hrs, Volume= 1.837 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

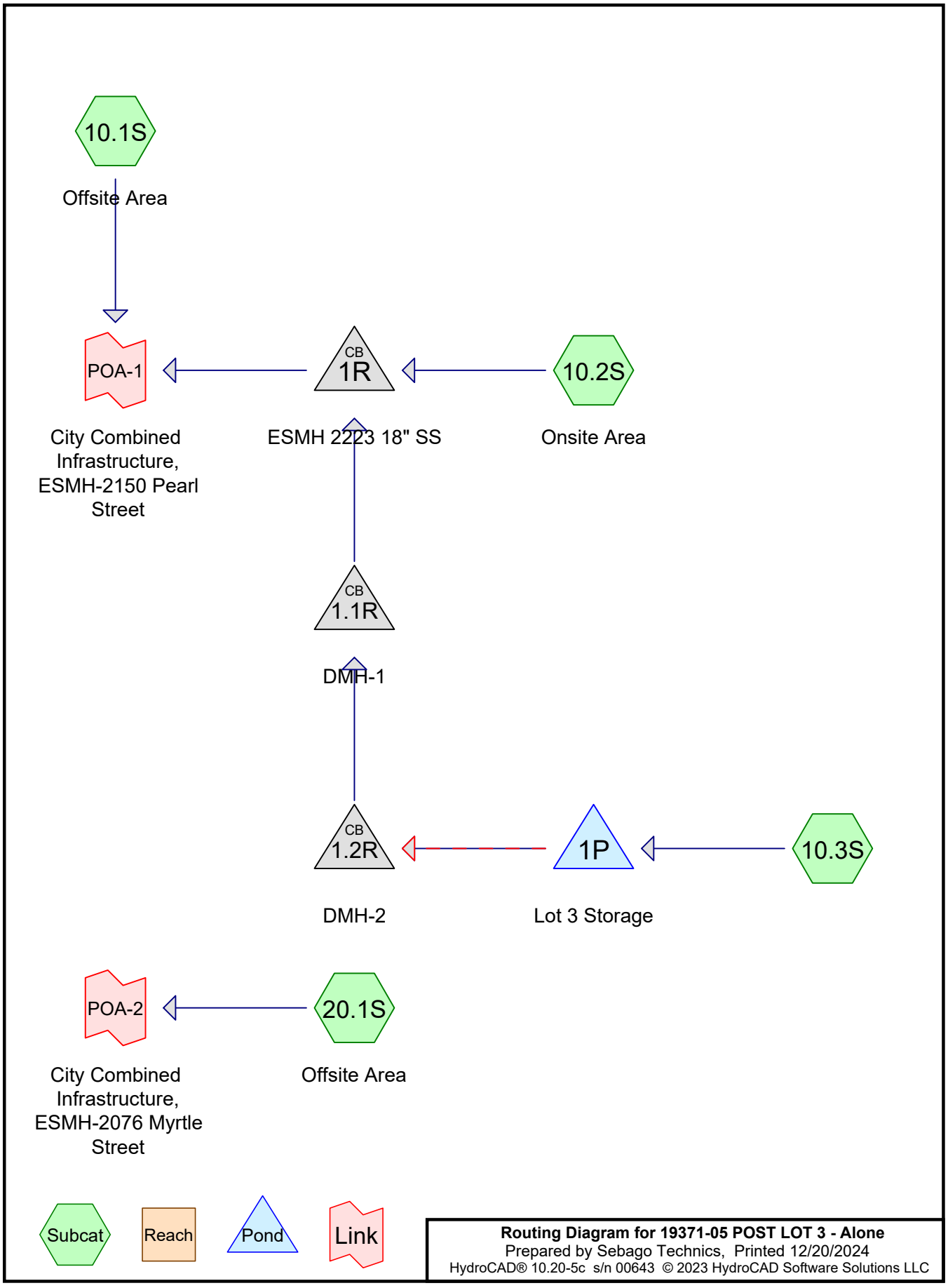
## Summary for Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street

Inflow Area = 1.536 ac, 99.63% Impervious, Inflow Depth = 5.52" for 25-YEAR event
Inflow = 8.7 cfs @ 12.08 hrs, Volume= 0.707 af
Primary = 8.7 cfs @ 12.08 hrs, Volume= 0.707 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

# Appendix 1B

## Hydrologic Modeling - Proposed Conditions (HydroCAD) Summary


10.1S
Offsite Area
POA-1
City Combined Infrastructure, ESMH-2150 Pearl Street
CB 1R
ESMH 2223 18" SS
10.2S
Onsite Area
CB 1.1R
DMH-1
CB 1.2R
DMH-2
1P
Lot 3 Storage
10.3S
POA-2
City Combined Infrastructure, ESMH-2076 Myrtle Street
20.1S
Offsite Area
Subcat
Reach
Pond
Link
Routing Diagram for 19371-05 POST LOT 3 - Alone
Prepared by Sebago Technics, Printed 12/20/2024
HydroCAD® 10.20-5c s/n 00643 © 2023 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.048 | 39 | >75% Grass cover, Good, HSG A (10.1S, 10.2S, 20.1S) |
| 5.526 | 98 | Paved parking & Roofs (10.1S, 10.2S, 10.3S, 20.1S) |
| **5.574** | **97** | **TOTAL AREA** |

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=99,424 sf 99.56% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.0 cfs 0.150 af

**Subcatchment10.2S: Onsite Area** Runoff Area=60,035 sf 97.42% Impervious Runoff Depth=0.63"
Tc=6.0 min CN=96 Runoff=1.0 cfs 0.072 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.8 cfs 0.056 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.9 cfs 0.070 af

**Pond 1.1R: DMH-1** Peak Elev=41.41' Inflow=0.5 cfs 0.056 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=0.5 cfs 0.056 af

**Pond 1.2R: DMH-2** Peak Elev=42.11' Inflow=0.5 cfs 0.056 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=0.5 cfs 0.056 af

**Pond 1P: Lot 3 Storage** Peak Elev=44.67' Storage=780 cf Inflow=0.8 cfs 0.056 af
Outflow=0.5 cfs 0.056 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.13' Inflow=1.3 cfs 0.128 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=1.3 cfs 0.128 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=3.3 cfs 0.279 af
Primary=3.3 cfs 0.279 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=0.9 cfs 0.070 af
Primary=0.9 cfs 0.070 af

**Total Runoff Area = 5.574 ac Runoff Volume = 0.349 af Average Runoff Depth = 0.75"**
**0.86% Pervious = 0.048 ac 99.14% Impervious = 5.526 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=99,424 sf 99.56% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=6.9 cfs 0.545 af

**Subcatchment10.2S: Onsite Area** Runoff Area=60,035 sf 97.42% Impervious Runoff Depth=2.65"
Tc=6.0 min CN=96 Runoff=4.0 cfs 0.304 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=2.5 cfs 0.202 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.2 cfs 0.255 af

**Pond 1.1R: DMH-1** Peak Elev=41.71' Inflow=1.6 cfs 0.202 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=1.6 cfs 0.202 af

**Pond 1.2R: DMH-2** Peak Elev=42.39' Inflow=1.6 cfs 0.202 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=1.6 cfs 0.202 af

**Pond 1P: Lot 3 Storage** Peak Elev=45.49' Storage=1,550 cf Inflow=2.5 cfs 0.202 af
Outflow=1.6 cfs 0.202 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.78' Inflow=5.4 cfs 0.507 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=5.4 cfs 0.507 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=12.2 cfs 1.052 af
Primary=12.2 cfs 1.052 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=3.2 cfs 0.255 af
Primary=3.2 cfs 0.255 af

**Total Runoff Area = 5.574 ac Runoff Volume = 1.307 af Average Runoff Depth = 2.81"**
**0.86% Pervious = 0.048 ac 99.14% Impervious = 5.526 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=99,424 sf 99.56% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.3 cfs 0.830 af

**Subcatchment10.2S: Onsite Area** Runoff Area=60,035 sf 97.42% Impervious Runoff Depth=4.14"
Tc=6.0 min CN=96 Runoff=6.1 cfs 0.475 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=3.8 cfs 0.308 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.8 cfs 0.388 af

**Pond 1.1R: DMH-1** Peak Elev=41.93' Inflow=2.7 cfs 0.308 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=2.7 cfs 0.308 af

**Pond 1.2R: DMH-2** Peak Elev=42.60' Inflow=2.7 cfs 0.308 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=2.7 cfs 0.308 af

**Pond 1P: Lot 3 Storage** Peak Elev=46.12' Storage=2,140 cf Inflow=3.8 cfs 0.308 af
Outflow=2.7 cfs 0.308 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=41.23' Inflow=7.9 cfs 0.783 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=7.9 cfs 0.783 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=18.1 cfs 1.613 af
Primary=18.1 cfs 1.613 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=4.8 cfs 0.388 af
Primary=4.8 cfs 0.388 af

**Total Runoff Area = 5.574 ac Runoff Volume = 2.001 af Average Runoff Depth = 4.31"**
**0.86% Pervious = 0.048 ac 99.14% Impervious = 5.526 ac**

## Summary for Subcatchment 10.1S: Offsite Area

Runoff = 13.0 cfs @ 12.08 hrs, Volume= 1.058 af, Depth= 5.56"
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 98,988 | 98 | Paved parking & Roofs |
| | 436 | 39 | >75% Grass cover, Good, HSG A |
| | 99,424 | 98 | Weighted Average |
| | 436 | | 0.44% Pervious Area |
| | 98,988 | | 99.56% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 10.2S: Onsite Area

Runoff = 7.7 cfs @ 12.08 hrs, Volume= 0.612 af, Depth= 5.33"
Routed to Pond 1R : ESMH 2223 18" SS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 58,489 | 98 | Paved parking & Roofs |
| | 1,546 | 39 | >75% Grass cover, Good, HSG A |
| | 60,035 | 96 | Weighted Average |
| | 1,546 | | 2.58% Pervious Area |
| | 58,489 | | 97.42% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 10.3S:

Runoff = 4.8 cfs @ 12.08 hrs, Volume= 0.393 af, Depth= 5.56"
Routed to Pond 1P : Lot 3 Storage

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 36,895 | 98 | Paved parking & Roofs |
| | 36,895 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 20.1S: Offsite Area

Runoff = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af, Depth= 5.56"
Routed to Link POA-2 : City Combined Infrastructure, ESMH-2076 Myrtle Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 46,336 | 98 | Paved parking & Roofs |
| | 116 | 39 | >75% Grass cover, Good, HSG A |
| | 46,452 | 98 | Weighted Average |
| | 116 | | 0.25% Pervious Area |
| | 46,336 | | 99.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Pond 1.1R: DMH-1

Inflow Area = 0.847 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af
Outflow = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af, Atten= 0%, Lag= 0.0 min
Primary = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af
Routed to Pond 1R : ESMH 2223 18" SS

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 42.45' @ 12.11 hrs
Flood Elev= 48.60'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 41.07' | **24.0" Round Culvert**<br>L= 2.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 41.07' / 41.06' S= 0.0050 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=5.3 cfs @ 12.12 hrs HW=42.44' TW=42.18' (Dynamic Tailwater)
**1=Culvert** (Outlet Controls 5.3 cfs @ 3.28 fps)

## Summary for Pond 1.2R: DMH-2

Inflow Area = 0.847 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af
Outflow = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af, Atten= 0%, Lag= 0.0 min
Primary = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af
Routed to Pond 1.1R : DMH-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 42.97' @ 12.12 hrs

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 41.80' | **24.0" Round Culvert**<br>L= 127.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 41.80' / 41.17' S= 0.0050 '/' Cc= 0.900<br>n= 0.012, Flow Area= 3.14 sf |

**Primary OutFlow** Max=4.4 cfs @ 12.12 hrs HW=42.96' TW=42.44' (Dynamic Tailwater)
**1=Culvert** (Outlet Controls 4.4 cfs @ 3.35 fps)

## Summary for Pond 1P: Lot 3 Storage

Inflow Area = 0.847 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.8 cfs @ 12.08 hrs, Volume= 0.393 af
Outflow = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af, Atten= 8%, Lag= 2.2 min
Primary = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af
Routed to Pond 1.2R : DMH-2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 46.27' @ 12.12 hrs Surf.Area= 875 sf Storage= 2,274 cf

Plug-Flow detention time= 59.0 min calculated for 0.393 af (100% of inflow)
Center-of-Mass det. time= 59.1 min ( 804.8 - 745.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 43.45' | 3,016 cf | **48.0" Round Pipe Storage** x 3<br>L= 80.0' |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 42.45' | **18.0" Round Culvert**<br>L= 21.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 42.45' / 42.30' S= 0.0071 '/' Cc= 0.900<br>n= 0.012, Flow Area= 1.77 sf |
| #2 | Device 1 | 42.45' | **0.7" Vert. Orifice** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 44.45' | **16.0" W x 3.0" H Vert. WQV Orifice** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 46.00' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=4.4 cfs @ 12.12 hrs HW=46.27' TW=42.96' (Dynamic Tailwater)
└**1=Culvert** (Passes 4.4 cfs of 14.9 cfs potential flow)
  ├**2=Orifice** (Orifice Controls 0.0 cfs @ 8.76 fps)
  ├**3=WQV Orifice** (Orifice Controls 2.1 cfs @ 6.27 fps)
  └**4=Sharp-Crested Rectangular Weir** (Weir Controls 2.3 cfs @ 1.70 fps)

## Summary for Pond 1R: ESMH 2223 18" SS

Inflow Area = 2.225 ac, 98.41% Impervious, Inflow Depth = 5.42" for 25-YEAR event
Inflow = 11.8 cfs @ 12.10 hrs, Volume= 1.005 af
Outflow = 11.8 cfs @ 12.10 hrs, Volume= 1.005 af, Atten= 0%, Lag= 0.0 min
Primary = 11.8 cfs @ 12.10 hrs, Volume= 1.005 af
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 42.28' @ 12.10 hrs
Flood Elev= 48.67'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 39.62' | **18.0" Round Culvert** L= 80.0' Ke= 0.500<br>Inlet / Outlet Invert= 39.62' / 37.46' S= 0.0270 '/' Cc= 0.900<br>n= 0.013 Clay tile, Flow Area= 1.77 sf |

**Primary OutFlow** Max=11.7 cfs @ 12.10 hrs HW=42.27' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 11.7 cfs @ 6.63 fps)

## Summary for Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street

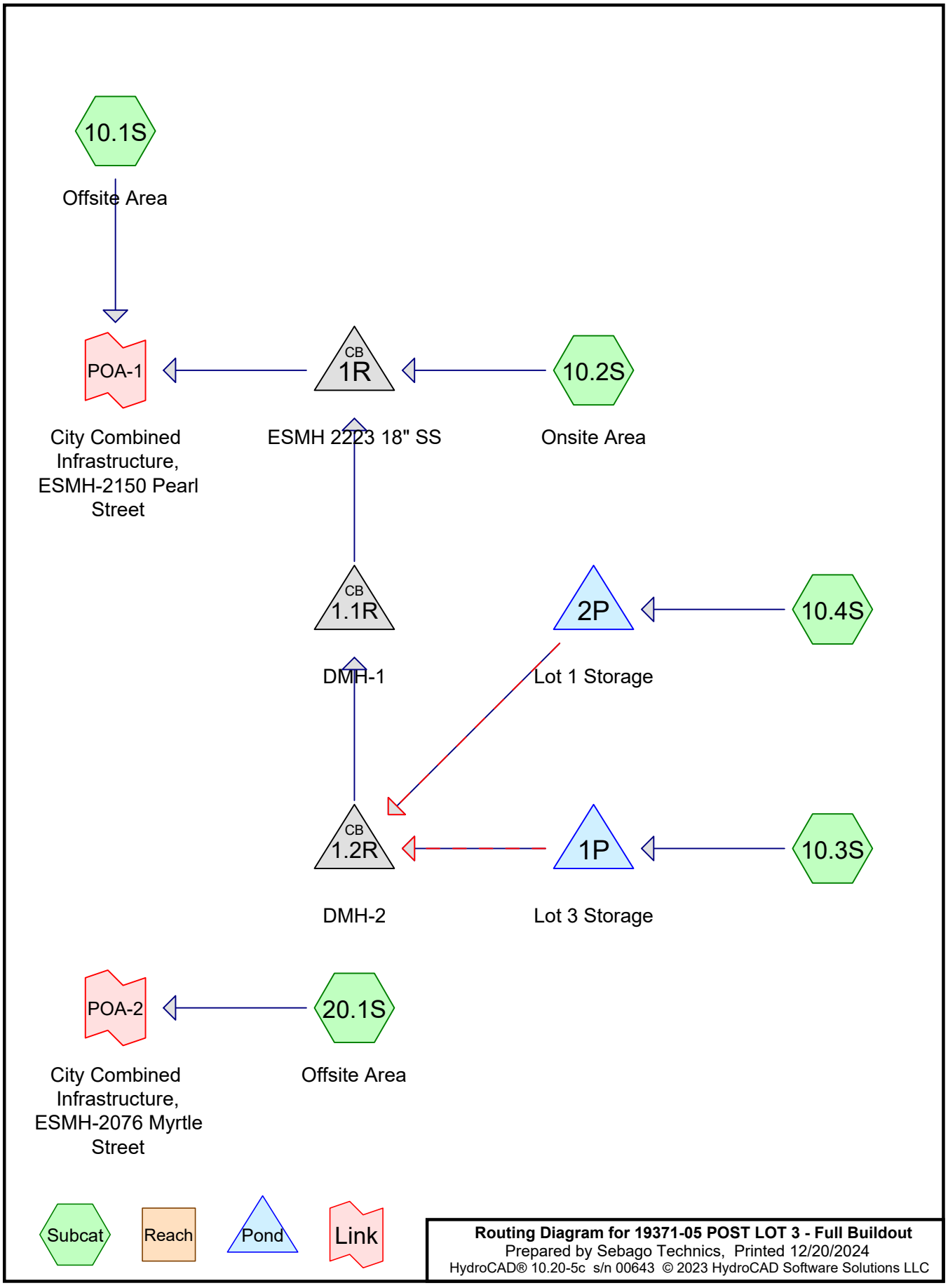
Inflow Area = 4.508 ac, 98.99% Impervious, Inflow Depth = 5.49" for 25-YEAR event
Inflow = 24.5 cfs @ 12.10 hrs, Volume= 2.062 af
Primary = 24.5 cfs @ 12.10 hrs, Volume= 2.062 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

## Summary for Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street

Inflow Area = 1.066 ac, 99.75% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af
Primary = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs


10.1S
Offsite Area
POA-1
City Combined Infrastructure, ESMH-2150 Pearl Street
CB 1R
ESMH 2223 18" SS
10.2S
Onsite Area
CB 1.1R
DMH-1
2P
Lot 1 Storage
10.4S
CB 1.2R
DMH-2
1P
Lot 3 Storage
10.3S
POA-2
City Combined Infrastructure, ESMH-2076 Myrtle Street
20.1S
Offsite Area
Subcat
Reach
Pond
Link
Routing Diagram for 19371-05 POST LOT 3 - Full Buildout
Prepared by Sebago Technics, Printed 12/20/2024
HydroCAD® 10.20-5c s/n 00643 © 2023 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.053 | 39 | >75% Grass cover, Good, HSG A (10.1S, 10.2S, 20.1S) |
| 5.521 | 98 | Paved parking & Roofs (10.1S, 10.2S, 10.3S, 10.4S, 20.1S) |
| **5.574** | **97** | **TOTAL AREA** |

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=103,524 sf 99.36% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.1 cfs 0.157 af

**Subcatchment10.2S: Onsite Area** Runoff Area=32,224 sf 95.20% Impervious Runoff Depth=0.56"
Tc=6.0 min CN=95 Runoff=0.5 cfs 0.035 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.8 cfs 0.056 af

**Subcatchment10.4S:** Runoff Area=23,708 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.5 cfs 0.036 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.9 cfs 0.070 af

**Pond 1.1R: DMH-1** Peak Elev=41.53' Inflow=0.8 cfs 0.092 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=0.8 cfs 0.092 af

**Pond 1.2R: DMH-2** Peak Elev=42.21' Inflow=0.8 cfs 0.092 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=0.8 cfs 0.092 af

**Pond 1P: Lot 3 Storage** Peak Elev=44.67' Storage=780 cf Inflow=0.8 cfs 0.056 af
Outflow=0.5 cfs 0.056 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.11' Inflow=1.2 cfs 0.126 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=1.2 cfs 0.126 af

**Pond 2P: Lot 1 Storage** Peak Elev=45.42' Storage=362 cf Inflow=0.5 cfs 0.036 af
Outflow=0.4 cfs 0.036 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=3.2 cfs 0.283 af
Primary=3.2 cfs 0.283 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=0.9 cfs 0.070 af
Primary=0.9 cfs 0.070 af

**Total Runoff Area = 5.574 ac Runoff Volume = 0.353 af Average Runoff Depth = 0.76"**
**0.96% Pervious = 0.053 ac 99.04% Impervious = 5.521 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=103,524 sf 99.36% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=7.1 cfs 0.568 af

**Subcatchment10.2S: Onsite Area** Runoff Area=32,224 sf 95.20% Impervious Runoff Depth=2.55"
Tc=6.0 min CN=95 Runoff=2.1 cfs 0.157 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=2.5 cfs 0.202 af

**Subcatchment10.4S:** Runoff Area=23,708 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=1.6 cfs 0.130 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.2 cfs 0.255 af

**Pond 1.1R: DMH-1** Peak Elev=41.88' Inflow=2.4 cfs 0.332 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=2.4 cfs 0.332 af

**Pond 1.2R: DMH-2** Peak Elev=42.55' Inflow=2.4 cfs 0.332 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=2.4 cfs 0.332 af

**Pond 1P: Lot 3 Storage** Peak Elev=45.49' Storage=1,550 cf Inflow=2.5 cfs 0.202 af
Outflow=1.6 cfs 0.202 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.62' Inflow=4.2 cfs 0.490 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=4.2 cfs 0.490 af

**Pond 2P: Lot 1 Storage** Peak Elev=46.32' Storage=963 cf Inflow=1.6 cfs 0.130 af
Outflow=0.9 cfs 0.130 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=11.3 cfs 1.057 af
Primary=11.3 cfs 1.057 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=3.2 cfs 0.255 af
Primary=3.2 cfs 0.255 af

**Total Runoff Area = 5.574 ac Runoff Volume = 1.312 af Average Runoff Depth = 2.83"**
**0.96% Pervious = 0.053 ac 99.04% Impervious = 5.521 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=103,524 sf 99.36% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.7 cfs 0.864 af

**Subcatchment10.2S: Onsite Area** Runoff Area=32,224 sf 95.20% Impervious Runoff Depth=4.02"
Tc=6.0 min CN=95 Runoff=3.2 cfs 0.248 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=3.8 cfs 0.308 af

**Subcatchment10.4S:** Runoff Area=23,708 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=2.4 cfs 0.198 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.8 cfs 0.388 af

**Pond 1.1R: DMH-1** Peak Elev=42.10' Inflow=3.8 cfs 0.506 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=3.8 cfs 0.506 af

**Pond 1.2R: DMH-2** Peak Elev=42.78' Inflow=3.8 cfs 0.506 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=3.8 cfs 0.506 af

**Pond 1P: Lot 3 Storage** Peak Elev=46.12' Storage=2,140 cf Inflow=3.8 cfs 0.308 af
Outflow=2.7 cfs 0.308 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.91' Inflow=6.2 cfs 0.754 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=6.2 cfs 0.754 af

**Pond 2P: Lot 1 Storage** Peak Elev=47.11' Storage=1,528 cf Inflow=2.4 cfs 0.198 af
Outflow=1.1 cfs 0.198 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=16.6 cfs 1.618 af
Primary=16.6 cfs 1.618 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=4.8 cfs 0.388 af
Primary=4.8 cfs 0.388 af

**Total Runoff Area = 5.574 ac Runoff Volume = 2.006 af Average Runoff Depth = 4.32"**
**0.96% Pervious = 0.053 ac 99.04% Impervious = 5.521 ac**

## Summary for Subcatchment 10.1S: Offsite Area

Runoff = 13.5 cfs @ 12.08 hrs, Volume= 1.102 af, Depth= 5.56"
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 102,863 | 98 | Paved parking & Roofs |
| | 661 | 39 | >75% Grass cover, Good, HSG A |
| | 103,524 | 98 | Weighted Average |
| | 661 | | 0.64% Pervious Area |
| | 102,863 | | 99.36% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 10.2S: Onsite Area

Runoff = 4.1 cfs @ 12.08 hrs, Volume= 0.321 af, Depth= 5.21"
Routed to Pond 1R : ESMH 2223 18" SS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 30,678 | 98 | Paved parking & Roofs |
| | 1,546 | 39 | >75% Grass cover, Good, HSG A |
| | 32,224 | 95 | Weighted Average |
| | 1,546 | | 4.80% Pervious Area |
| | 30,678 | | 95.20% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 10.3S:

Runoff = 4.8 cfs @ 12.08 hrs, Volume= 0.393 af, Depth= 5.56"
Routed to Pond 1P : Lot 3 Storage

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 36,895 | 98 | Paved parking & Roofs |
| | 36,895 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 10.4S:

Runoff = 3.1 cfs @ 12.08 hrs, Volume= 0.252 af, Depth= 5.56"
Routed to Pond 2P : Lot 1 Storage

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 23,708 | 98 | Paved parking & Roofs |
| | 23,708 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 20.1S: Offsite Area

Runoff = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af, Depth= 5.56"
Routed to Link POA-2 : City Combined Infrastructure, ESMH-2076 Myrtle Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 46,336 | 98 | Paved parking & Roofs |
| | 116 | 39 | >75% Grass cover, Good, HSG A |
| | 46,452 | 98 | Weighted Average |
| | 116 | | 0.25% Pervious Area |
| | 46,336 | | 99.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Pond 1.1R: DMH-1

Inflow Area = 1.391 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 5.6 cfs @ 12.12 hrs, Volume= 0.645 af
Outflow = 5.6 cfs @ 12.12 hrs, Volume= 0.645 af, Atten= 0%, Lag= 0.0 min
Primary = 5.6 cfs @ 12.12 hrs, Volume= 0.645 af
Routed to Pond 1R : ESMH 2223 18" SS

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 42.35' @ 12.12 hrs
Flood Elev= 48.60'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 41.07' | **24.0" Round Culvert**<br>L= 2.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 41.07' / 41.06' S= 0.0050 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=5.6 cfs @ 12.12 hrs HW=42.35' TW=41.57' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 5.6 cfs @ 3.74 fps)

## Summary for Pond 1.2R: DMH-2

Inflow Area = 1.391 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 5.6 cfs @ 12.12 hrs, Volume= 0.645 af
Outflow = 5.6 cfs @ 12.12 hrs, Volume= 0.645 af, Atten= 0%, Lag= 0.0 min
Primary = 5.6 cfs @ 12.12 hrs, Volume= 0.645 af
Routed to Pond 1.1R : DMH-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 43.04' @ 12.13 hrs

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 41.80' | **24.0" Round Culvert**<br>L= 127.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 41.80' / 41.17' S= 0.0050 '/' Cc= 0.900<br>n= 0.012, Flow Area= 3.14 sf |

**Primary OutFlow** Max=5.6 cfs @ 12.12 hrs HW=43.04' TW=42.35' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 5.6 cfs @ 3.88 fps)

## Summary for Pond 1P: Lot 3 Storage

Inflow Area = 0.847 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.8 cfs @ 12.08 hrs, Volume= 0.393 af
Outflow = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af, Atten= 8%, Lag= 2.2 min
Primary = 4.4 cfs @ 12.12 hrs, Volume= 0.393 af
Routed to Pond 1.2R : DMH-2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 46.27' @ 12.12 hrs Surf.Area= 875 sf Storage= 2,274 cf

Plug-Flow detention time= 59.0 min calculated for 0.393 af (100% of inflow)
Center-of-Mass det. time= 59.1 min ( 804.8 - 745.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 43.45' | 3,016 cf | **48.0" Round Pipe Storage** x 3<br>L= 80.0' |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 42.45' | **18.0" Round Culvert**<br>L= 21.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 42.45' / 42.30' S= 0.0071 '/' Cc= 0.900<br>n= 0.012, Flow Area= 1.77 sf |
| #2 | Device 1 | 42.45' | **0.7" Vert. Orifice** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 44.45' | **16.0" W x 3.0" H Vert. WQV Orifice** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 46.00' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=4.4 cfs @ 12.12 hrs HW=46.27' TW=43.04' (Dynamic Tailwater)
└─**1=Culvert** (Passes 4.4 cfs of 14.9 cfs potential flow)
  ├─**2=Orifice** (Orifice Controls 0.0 cfs @ 8.66 fps)
  ├─**3=WQV Orifice** (Orifice Controls 2.1 cfs @ 6.27 fps)
  └─**4=Sharp-Crested Rectangular Weir** (Weir Controls 2.3 cfs @ 1.70 fps)

## Summary for Pond 1R: ESMH 2223 18" SS

Inflow Area = 2.131 ac, 98.33% Impervious, Inflow Depth = 5.44" for 25-YEAR event
Inflow = 9.4 cfs @ 12.11 hrs, Volume= 0.966 af
Outflow = 9.4 cfs @ 12.11 hrs, Volume= 0.966 af, Atten= 0%, Lag= 0.0 min
Primary = 9.4 cfs @ 12.11 hrs, Volume= 0.966 af
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 41.60' @ 12.11 hrs
Flood Elev= 48.67'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 39.62' | **18.0" Round Culvert** L= 80.0' Ke= 0.500<br>Inlet / Outlet Invert= 39.62' / 37.46' S= 0.0270 '/' Cc= 0.900<br>n= 0.013 Clay tile, Flow Area= 1.77 sf |

**Primary OutFlow** Max=9.4 cfs @ 12.11 hrs HW=41.60' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 9.4 cfs @ 5.33 fps)

## Summary for Pond 2P: Lot 1 Storage

Inflow Area = 0.544 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 3.1 cfs @ 12.08 hrs, Volume= 0.252 af
Outflow = 1.3 cfs @ 12.27 hrs, Volume= 0.252 af, Atten= 57%, Lag= 11.1 min
Primary = 1.3 cfs @ 12.27 hrs, Volume= 0.252 af
Routed to Pond 1.2R : DMH-2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 47.90' @ 12.27 hrs Surf.Area= 533 sf Storage= 2,021 cf

Plug-Flow detention time= 40.3 min calculated for 0.252 af (100% of inflow)
Center-of-Mass det. time= 40.5 min ( 786.1 - 745.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 44.55' | 2,262 cf | **48.0" Round Pipe Storage** x 2<br>L= 90.0' |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 44.55' | **12.0" Round Culvert**<br>L= 4.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 44.55' / 44.43' S= 0.0300 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 44.55' | **0.6" Vert. Orifice** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 45.10' | **8.0" W x 3.0" H Vert. WQV Orifice** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 48.02' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=1.3 cfs @ 12.27 hrs HW=47.90' TW=42.76' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.3 cfs of 6.4 cfs potential flow)
  ├─**2=Orifice** (Orifice Controls 0.0 cfs @ 8.77 fps)
  ├─**3=WQV Orifice** (Orifice Controls 1.3 cfs @ 7.87 fps)
  └─**4=Sharp-Crested Rectangular Weir** ( Controls 0.0 cfs)

## Summary for Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street

Inflow Area = 4.508 ac, 98.88% Impervious, Inflow Depth = 5.50" for 25-YEAR event
Inflow = 22.6 cfs @ 12.10 hrs, Volume= 2.068 af
Primary = 22.6 cfs @ 12.10 hrs, Volume= 2.068 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

## Summary for Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street

Inflow Area = 1.066 ac, 99.75% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af
Primary = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

# Appendix 2

## Inspection, Maintenance and Housekeeping Plan

**INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN**

**For:**
**244 CUMBERLAND AVENUE**
**LOT 3 OF 385 CONGRESS STREET SUBDIVISION**
**PORTLAND, MAINE**

**By:**
**Sebago Technics, Inc.**
**75 John Roberts Road, Suite 4A**
**South Portland, Maine**

## Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation control measures and stormwater management facilities for the project. This plan outlines housekeeping requirements that shall be followed during and after construction. These procedures shall be followed to ensure the intended function of the designed measures and to prevent unreasonably adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (MDEP).

## During Construction

1. **Inspection:** During construction, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event (0.5" of rainfall), and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (0.5" of rainfall).

3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access

| INSPECTION MAINTENANCE AND HOUSEKEEPING FORM | | | |
|---|---|---|---|
| **General Information** | | | |
| **Project Name:** | | **Inspection Date:** | |
| **Project Location:** | | **Current Weather:** | |
| | | **Date / Amount Last Precip:** | |
| | | | |
| **BMP Owner:** | | **Company conducting inspection:** | |
| **Owner Mailing Address:** | | **Company Mailing Address** | |
| | | | |
| **Owner Phone #:** | | **Company Phone #:** | |
| **Owner Email:** | | **Inspector Name:** | |
| | | **Inspector Email:** | |

| Site Element | Suggested Maintenance (recm'd frequency) | Observations | Inspection Notes/Recommended Action |
|---|---|---|---|
| | | | |
| **Vegetated Areas** | Inspect Slopes/Embankments for erosion (annually) | | |
| | Replant bare areas or areas of sparse growth (annually) | | |
| **Paved Surfaces** | Clear accumulated winter sand (annually) | | |
| | Remove sediment along edges of parking and within low spots/pockets (annually) | | |
| **Ditches/Swales** | Remove obstructions/debris/sediment (monthly) | | |
| | Inspect for erosion/repair as needed (annually) | | |
| | Remove woody vegetation (annually) | | |
| | Mow vegetated ditches (annually) | | |
| **Catch Basins** | Remove sediment/debris from sump (annually) | | |
| **Culverts** | Remove sediment/debris from inlet/outlet aprons (annually) | | |
| | Inspect inlet/outlet aprons for erosion, repair as needed (annually) | | |
| | Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually) | | |
| **Pipe Outlets** | Remove sediment/debris from outlet aprons (annually) | | |
| | Inspect outlet aprons for erosion, repair as needed (annually) | | |
| | Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually) | | |

Additional Notes/Observations:

points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event (0.5" of rainfall). They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall 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.

B. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

C. Stabilized Construction Entrances/Exits:

- 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. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

D. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

E. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e., erosion control blankets), stone check dams may be needed to further reduce channel velocity.

F. Catch basins:

- Inspect and, if required, clean-out basins at least once a year, preferably in early spring.
- Cleaning of catch basins will be required when sediment of at least 6 inches accumulates in the sump.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

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, and appropriate spill prevention, containment, and response planning and implementation.

B. 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.

C. 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.

D. Debris and other materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.

E. Trench or foundation dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

**Post-Construction**

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. The owner shall inspect and maintain the BMPs, including but not limited to any parking areas, catch basins, drainage swales, treatment and detention systems, pipes and related structures, in accordance with municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the local municipality in the annual report.

   A. Vegetated Areas:

   - Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains (>0.5”) to identify active or potential erosion problems.
   - Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

   B. Removal of Winter Sand:

   - Clear accumulations of winter sand in parking lots.
   - Accumulations on pavement may be removed by pavement sweeping.

**3. Documentation:**

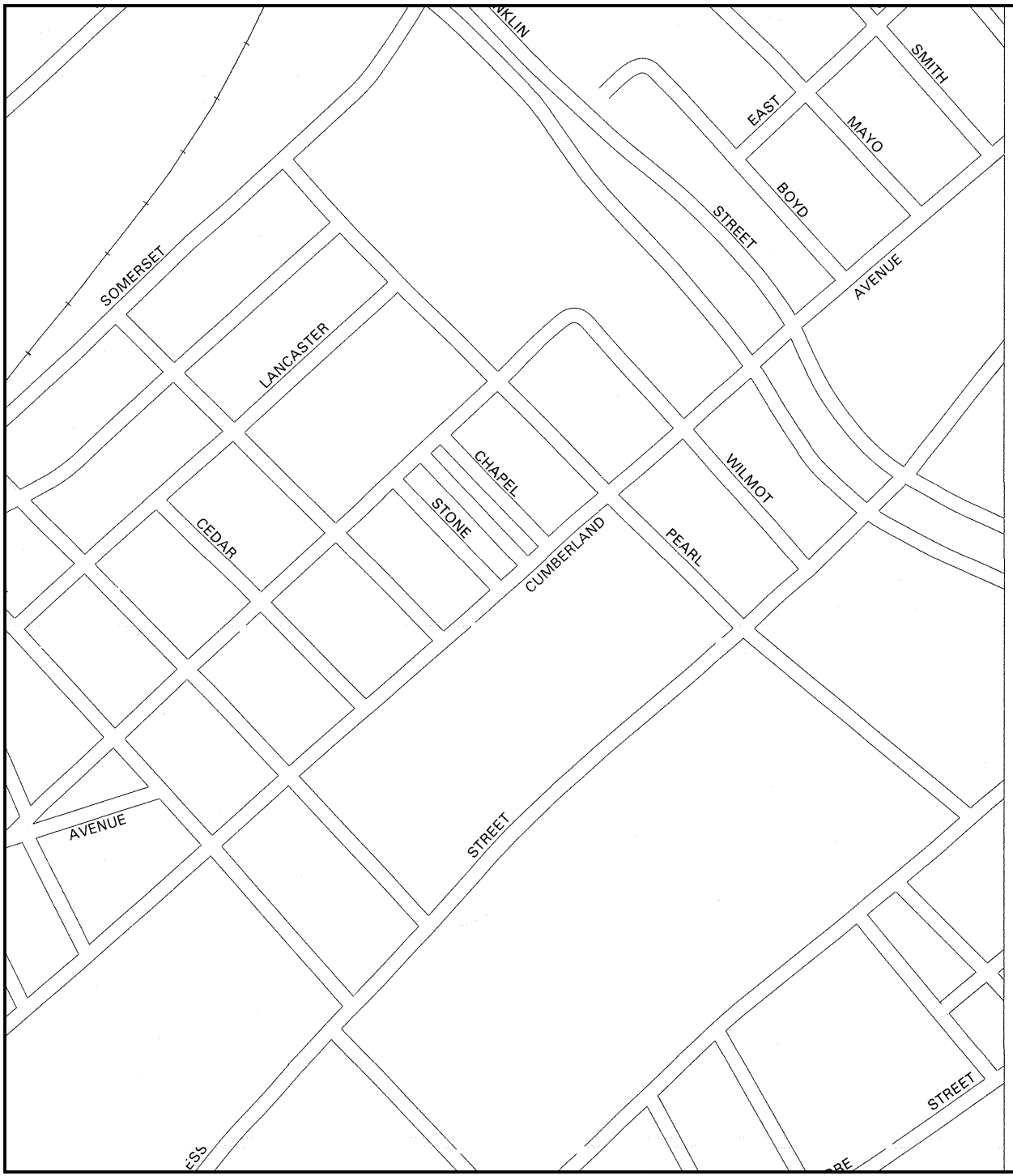
A. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, as required by the local municipality, provide a completed and signed certification on a form provided by the local municipality, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they required maintenance or repair, including the record of the deficiency and corrective action(s) taken.

B. A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

**4. Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. Upon such assumption of responsibility, the association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

# Appendix 3

## Flood Insurance Rate Map




APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

# FIRM

## FLOOD INSURANCE RATE MAP

CITY OF
**PORTLAND, MAINE**
CUMBERLAND COUNTY

PANEL 13 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)

**COMMUNITY-PANEL NUMBER**
230051 0013 B

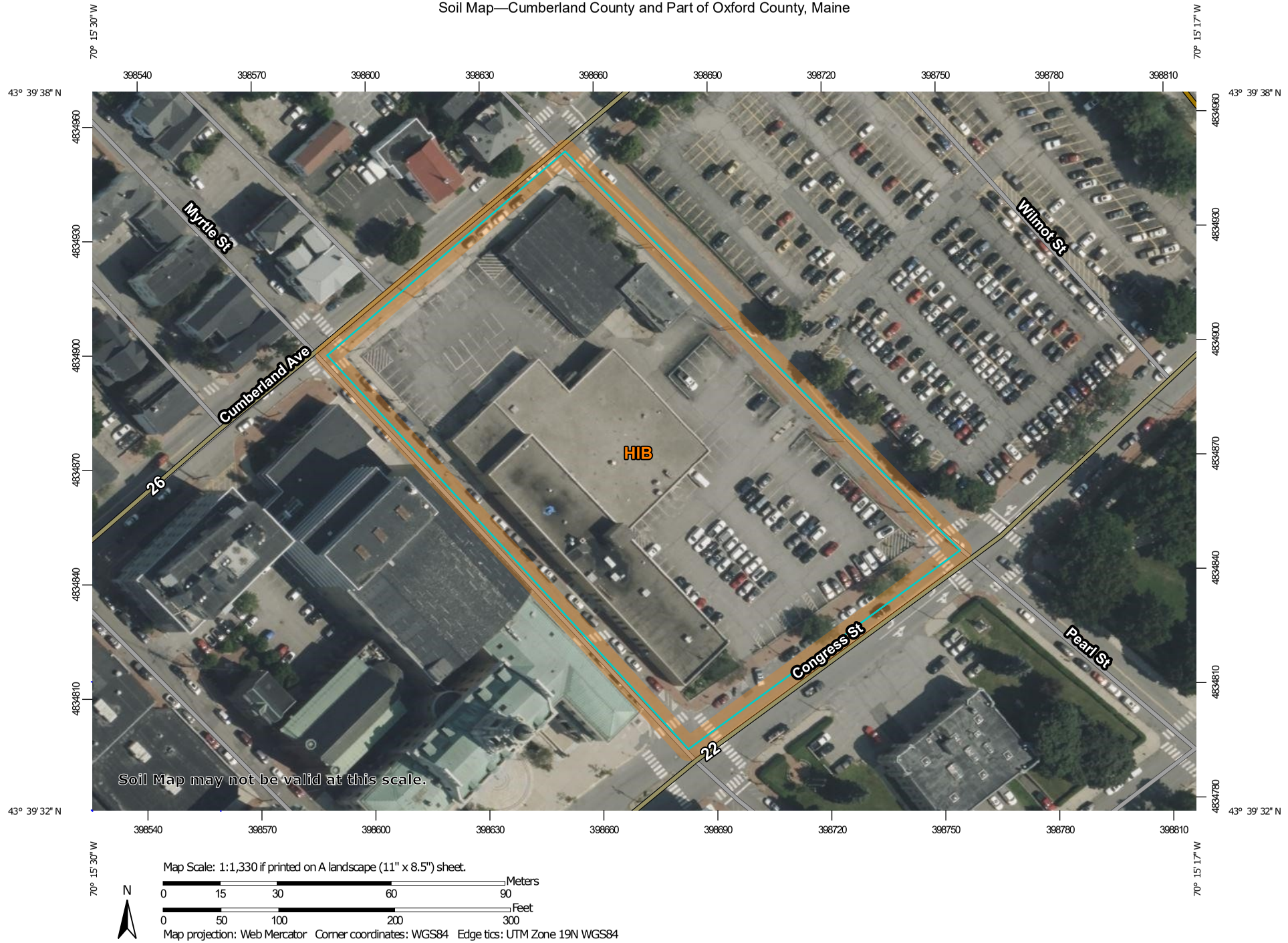
**EFFECTIVE DATE:**
JULY 17, 1986

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

# Appendix 4

## Subsurface Investigations




Map Scale: 1:1,330 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

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 18, Aug 31, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 22, 2021—Oct 7, 2021

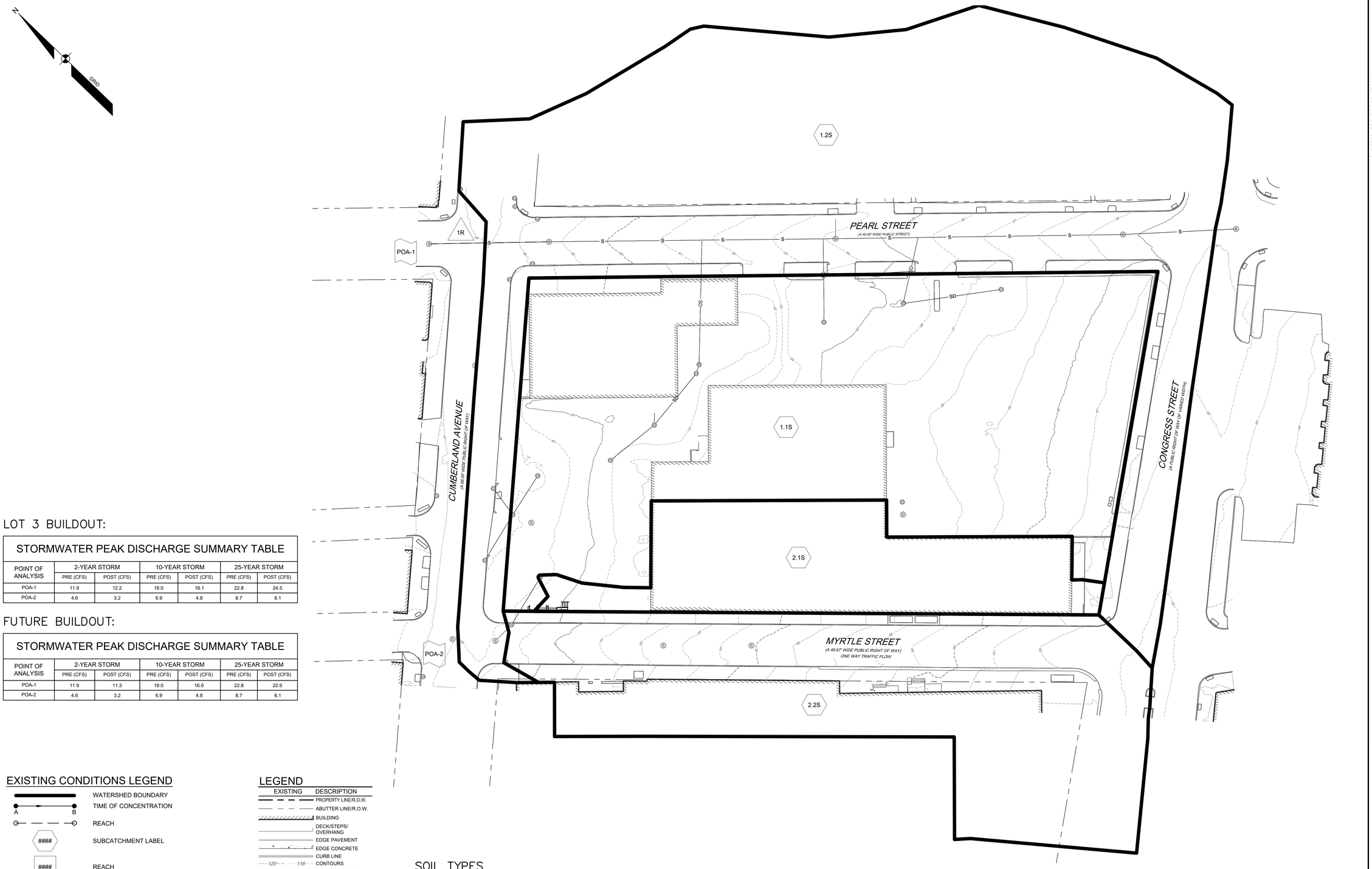
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| HIB | Hinckley loamy sand, 3 to 8 percent slopes | 3.0 | 100.0% |
| **Totals for Area of Interest** | | **3.0** | **100.0%** |

# Appendix 5

## Stormwater Management Plans




## LOT 3 BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 12.2 | 18.0 | 18.1 | 22.8 | 24.5 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## FUTURE BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 11.3 | 18.0 | 16.6 | 22.8 | 22.6 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## EXISTING CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A — B)
- REACH
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

## LEGEND

| EXISTING | DESCRIPTION |
|---|---|
| | PROPERTY LINE/R.O.W. |
| | ABUTTER LINE/R.O.W. |
| | BUILDING |
| | DECK/STEPS/ OVERHANG |
| | EDGE PAVEMENT |
| | EDGE CONCRETE |
| | CURB LINE |
| 120 118 | CONTOURS |
| S | SANITARY SEWER |
| Ⓢ | SANITARY MANHOLE |
| SD | STORM DRAIN |
| Ⓓ | DRAINAGE MANHOLE |
| | CATCH BASIN |

## SOIL TYPES

| SYMBOL | SOIL SERIES | PHASE | SLOPE | HSG | DRAINAGE CLASS |
|---|---|---|---|---|---|
| HIB | HINCKLEY | LOAMY SAND | 3–8% | A | EXCESSIVELY DRAINED |

NOTES:

1. EXISTING CONDITIONS INFORMATION IS BASED ON AN ELECTRONIC SURVEY FILE PREPARED BY SEBAGO TECHINCS, INC. IN DECEMBER 2019. TOPOGRAPHIC INFORMATION IS BASED ON A COMBINATION OF SURVEYED DATA WITHIN THE LIMITS OF PROPOSED WORK.
2. ON-SITE SOIL INFORMATION IS BASED ON THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) CUSTOM SOIL RESOURCE REPORT FOR CUMBERLAND COUNTY, MAINE, DATED MAY 26, 2022.

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

CHRISTOPHER P. TAYLOR, PE 16877

STATE OF MAINE CHRISTOPHER P. TAYLOR No. 16877 LICENSED PROFESSIONAL ENGINEER 12/19/2024

| REV.: | BY: | DATE: | STATUS |
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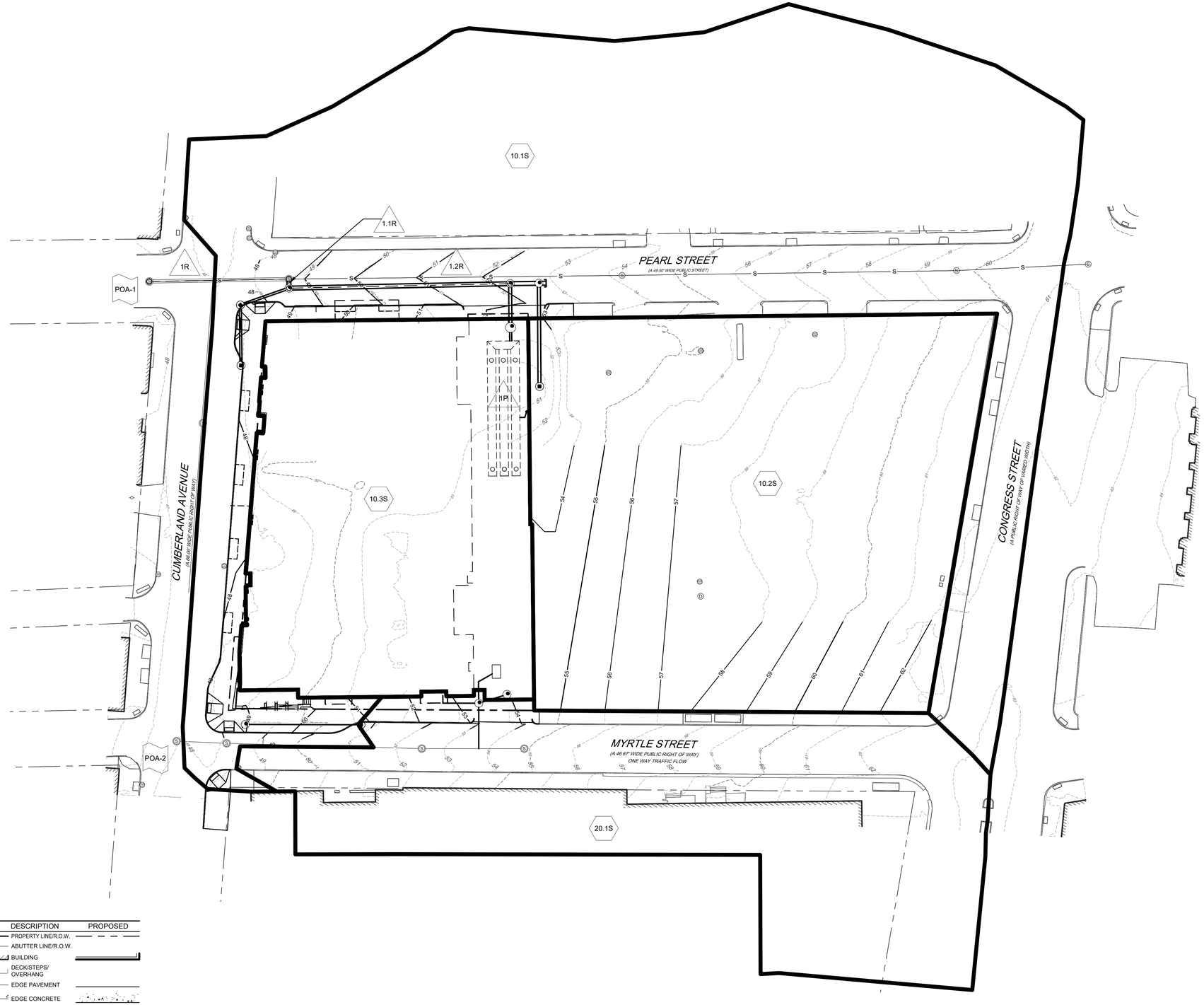
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WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

EXISTING CONDITIONS SWM PLAN
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVENUE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | DJS |
| CHECKED | CPT |
| DATE | 11/07/24 |
| SCALE | 1" = 30' |
| PROJECT | 19371-05 |

SHEET 1 OF 3

19371-05 SWP.dwg, TAB:PRE




## LOT 3 BUILDOUT:

### STORMWATER PEAK DISCHARGE SUMMARY TABLE

| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
|---|---|---|---|---|---|---|
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 12.2 | 18.0 | 18.1 | 22.8 | 24.5 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## FUTURE BUILDOUT:

### STORMWATER PEAK DISCHARGE SUMMARY TABLE

| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
|---|---|---|---|---|---|---|
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 11.3 | 18.0 | 16.6 | 22.8 | 22.6 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A, B)
- REACH
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

## LEGEND

| EXISTING | DESCRIPTION | PROPOSED |
|---|---|---|
| | PROPERTY LINE/R.O.W. | |
| | ABUTTER LINE/R.O.W. | |
| | BUILDING | |
| | DECK/STEPS/ OVERHANG | |
| | EDGE PAVEMENT | |
| | EDGE CONCRETE | |
| | CURB LINE | |
| 120 118 | CONTOURS | 120 |
| SD | STORM DRAIN | SD |
| Ⓓ | DRAINAGE MANHOLE | |
| | CATCH BASIN | |

## SOIL TYPES

| SYMBOL | SOIL SERIES | PHASE | SLOPE | HSG | DRAINAGE CLASS |
|---|---|---|---|---|---|
| HIB | HINCKLEY | LOAMY SAND | 3–8% | A | EXCESSIVELY DRAINED |

NOTES:

1. EXISTING CONDITIONS INFORMATION IS BASED ON AN ELECTRONIC SURVEY FILE PREPARED BY SEBAGO TECHINCS, INC. IN DECEMBER 2019. TOPOGRAPHIC INFORMATION IS BASED ON A COMBINATION OF SURVEYED DATA WITHIN THE LIMITS OF PROPOSED WORK.
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GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

CHRISTOPHER P. TAYLOR, PE 16877

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16877
REGISTERED PROFESSIONAL ENGINEER
12/19/2024

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South Portland, ME 04106
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PROPOSED CONDITIONS SWM PLAN - LOT 3 ONLY

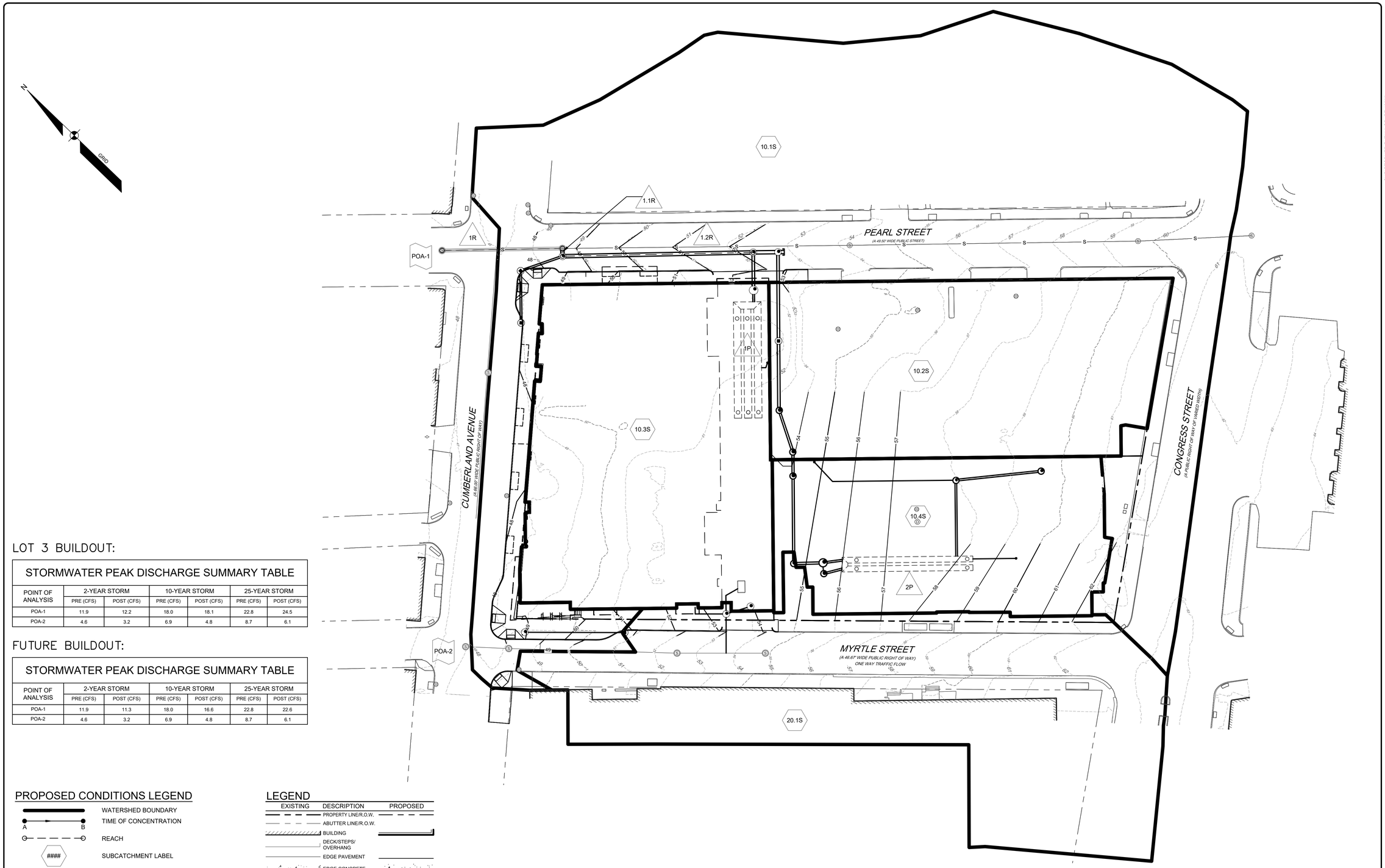
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | DJS |
| CHECKED | CPT |
| DATE | 11/07/24 |
| SCALE | 1" = 30' |
| PROJECT | 19371-05 |

19371-05 SWP.dwg, TAB:POST-ALONE

SHEET 2 OF 3




## LOT 3 BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 12.2 | 18.0 | 18.1 | 22.8 | 24.5 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## FUTURE BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 11.3 | 18.0 | 16.6 | 22.8 | 22.6 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A, B)
- REACH
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

## LEGEND

| EXISTING | DESCRIPTION | PROPOSED |
|---|---|---|
| | PROPERTY LINE/R.O.W. | |
| | ABUTTER LINE/R.O.W. | |
| | BUILDING | |
| | DECK/STEPS/ OVERHANG | |
| | EDGE PAVEMENT | |
| | EDGE CONCRETE | |
| | CURB LINE | |
| 120 118 | CONTOURS | 120 |
| SD | STORM DRAIN | SD |
| Ⓓ | DRAINAGE MANHOLE | |
| | CATCH BASIN | |

## SOIL TYPES

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|---|---|---|---|---|---|
| HIB | HINCKLEY | LOAMY SAND | 3–8% | A | EXCESSIVELY DRAINED |

NOTES:

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GRAPHIC SCALE
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(IN FEET)
1 INCH = 30 FT.

CHRISTOPHER P. TAYLOR, PE 16877

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16877
LICENSED PROFESSIONAL ENGINEER
12/19/2024

| REV. | BY: | DATE: | STATUS: |
|---|---|---|---|
| A | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

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South Portland, ME 04106
Tel. 207-200-2100

# PROPOSED CONDITIONS SWM PLAN - FULL

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | DJS |
| CHECKED | CPT |
| DATE | 11/07/24 |
| SCALE | 1" = 30' |
| PROJECT | 19371-05 |

19371-05 SWP.dwg, TAB:POST-FULL

SHEET 3 OF 3

SEBAGO TECHNICS

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U

# STORMWATER MANAGEMENT REPORT

## For

## 244 CUMBERLAND AVENUE
## LOT 3 OF 385 CONGRESS STREET SUBDIVISION
## PORTLAND, MAINE

Prepared for

Portland Music Holdings, LLC
325 N. Maple Drive
Beverly Hills, CA 90210

**April, 2025**




04/07/2025

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Appendix 3: Flood Insurance Rate Map
Appendix 4: Subsurface Investigations
Appendix 5: Stormwater Management Plans

# STORMWATER MANAGEMENT REPORT
# 244 CUMBERLAND AVENUE
# LOT 3 OF 385 CONGRESS STREET SUBDIVISION
# PORTLAND, MAINE

## 1. Introduction

This Stormwater Management Plan and Report presents analyses performed to address stormwater management for the proposed development of Lot 3 of the 385 Congress Street Subdivision. The stormwater management controls outlined in this report are designed to suit the proposed development and to comply with applicable state and local regulatory requirements.

The project is comprised of the proposed development of a music event venue on Lot 3, a site occupying 0.88 acres located at the corner of Myrtle Street and Cumberland Avenue in Portland. Lot 3 is a portion of a larger 2.26-acre parcel bounded by Congress Street, Myrtle Street, Cumberland Avenue, and Pearl Street. The project is one of three phases for a Master Plan of Development for this larger site approved by the planning board in August 2022. An adjacent hotel project on Lot 1 of the subdivision was approved by the planning board in February 2023 and has not begun construction.

Development of the site is subject to the City of Portland's post-construction stormwater management standards, which adopt the MDEP Chapter 500 Basic, General, and Flooding standards, including the redevelopment standards, as incorporated into the City of Portland Land Use Ordinance and Site Plan review regulations. The project is a redevelopment project resulting in less than 5,000 sf of non-rooftop impervious area. As such, the City's stormwater standards for redevelopment do not require stormwater quality treatment.

The site is located in an area served by a combined sewer system where the City of Portland seeks to mitigate and reduce combined sewer overflow (CSO) events. The design storm event for CSO evaluation is a 1" rainfall, 24-hour design storm (CSO Storm).

Based on discussions with City staff during the Master Development Plan and Lot 1 Site Plan Review, the stormwater analysis and the proposed detention system have been designed to reduce the rate of runoff from the project site to the extent practicable during this 1" CSO Storm event.

The project site and the remaining land are currently fully developed with two buildings and surface parking. The site generally slopes from east to west (Congress Street toward Cumberland Avenue) with an approximately 12' change in grade along Myrtle Street and Pearl Street. The existing site includes a system of catch basins that connect into the City's combined sewer in the surrounding streets, ultimately discharging to the west along Myrtle Street and Pearl Street toward Marginal Way.

The City is undertaking a study for the future construction of storm drainage and sanitary sewer separation along Pearl Street from Marginal Way to Congress Street. In anticipation of future offsite improvements, Staff have requested that the projects associated with the Master Plan of Development for the property:

- Separate their sanitary sewer and storm drainage on site prior to connection into the City system;
- Direct as much of the storm drainage from the project site (and remaining land identified as Lot 1 and Lot 2) to the combined sewer in Pearl Street, with a connection near Cumberland Avenue to facilitate future separation, and;
- Detain and reduce the peak rate of runoff from the redeveloped areas of the site to the extent practicable during a 1-inch, 24-hour rainfall event to reduce flows during the City's CSO storm event.

## 2. Existing Conditions

The City's drainage system abutting the site is a combined sewer system tributary to an overflow location at the Back Cove discharging into Casco Bay. Base flow in the system is conveyed to the Portland wastewater treatment plant. This site is not tributary to any urban impaired streams or significant pond or lake watersheds defined in Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations.

The proposed development area of the site is not located in an identified flood zone shown on the FEMA Flood Insurance Rate Map for the City of Portland, Community Panel 2300510013B dated July 17, 1986. A copy of the Flood Insurance Rate Map is attached in appendix 3.

## 3. Soils

Soil information for the site was obtained from the USGS United States Department of Agriculture and Natural Resource Conservation Service's Web Soil Survey site. Boring logs from the site's geotechnical exploration reports indicate a groundwater depth of approximately 15 feet. The Hydrologic Groups (HSG) of the soils on site as classified by the Soil Conservation Service is as follows:

| Soil Map Symbol | Soil Name | Slope (%) | HSG |
|---|---|---|---|
| HIB | Hinckley loamy sand | 3-8 | A |

Hydrologic Soil Group boundaries are delineated on the Watershed Map. A copy of the Medium Intensity Soil Survey is included in Appendix 4.

## 4. Proposed Site Improvements

The proposed development consists of a subdivision plan amendment revising the lot line between Lots 2 and 3 and a major site plan review for the development of the revised Lot 3. The revised Lot 3 will be redeveloped as a commercial development.

The abutting Lot 1 to the east was approved as a proposed hotel and condominium development in September of 2023. Lot 2 is the remaining land retained by the owner for future development, currently envisioned as a residential condominium development.

## 5. Hydrologic Modeling

In order to evaluate drainage characteristics as a result of the proposed development, a quantitative analysis was performed to determine peak runoff rates in the pre-development and post-development conditions. The evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations.

## 6. Existing Conditions Model

The pre-development watershed plan consists of four subcatchments labeled 1.1S through 2.2S in the HydroCAD model. Two locations are identified as Points of Analysis (POA) for comparing peak runoff rates. These two POAs represent flows in the existing combined sewers in Pearl Street at Cumberland Avenue (POA-1) and Myrtle Street at Cumberland Avenue (POA-2).

POA-1 is located at the northerly (plan northwest) corner of the larger project site where runoff from the site is tributary to the 18" diameter combined sewer in Pearl Street at Cumberland Avenue. Subcatchments 1.1S represents on-site areas tributary to POA-1 and Subcatchment 1.2S represents offsite areas to the northeast contributing runoff to this point of analysis. The total modeled drainage area tributary to POA-1 in the pre-development condition is approximately 4.04 acres.

POA-2 is located at the westerly (plan southwest) corner of the larger project site where runoff from the site is tributary to the combined sewer in Myrtle Street at Cumberland Avenue. Subcatchments 2.1S and 2.2S represent on-site and offsite areas tributary to POA-2 contributing runoff to this point of analysis. The total modeled drainage area tributary to POA-2 in the pre-development condition is approximately 1.54 acres.

## 7. Proposed Conditions Model

The post-development watershed presents a consistent overall drainage area tributary to the points of analysis; subdividing the area into its anticipated post development subcatchments that will result from the proposed redevelopment of the site.

POA-1:

In the post-development model, subcatchment 10.1S represents offsite areas draining to POA-1 and is unaffected by the proposed development.

Subcatchment 10.2S represents the existing onsite area that will remain undeveloped.

Subcatchment 10.3S represents the proposed site development. As part of the current Site Plan application for Lot 3, this area will be minimally improved. Draining generally in its existing condition revised with connections to the proposed storm drain serving lot 3.

The proposed development of Lot 3 will include detention to store the required Stormwater Quality (WQv) volume and to provide peak runoff control provided by a corrugated metal pipe (CMP) detention system.

Analysis has been performed to evaluate two conditions:

- Assuming Lot 3 is constructed in isolation, with Lot 1 and Lot 2 remaining undeveloped. The overall post-development tributary area tributary to POA-1 increases to 4.51 acres; an increase of 0.47 acres due to the redirection of storm drainage from Myrtle Street (POA-2) to Pearl Street (POA-1) as requested by the City to facilitate its future combined sewer separation objectives. Refer to Plan Sheet 2 of 3 “Proposed Conditions SWM Plan – Lot 3 Only”.

- Assuming Lot 1 is developed as currently approved along with Lot 3, the overall post-development tributary area tributary to POA-1 increases to 4.51 acres; an increase of 0.47 acres due to the redirection of storm drainage from Myrtle Street (POA-2) to Pearl Street (POA-1) as requested by the City to facilitate its future combined sewer separation objectives. This analysis incorporates the stormwater management systems approved in the Hotel Site Plan Review. Refer to Plan Sheet 3 of 3 “Proposed Conditions SWM Plan – Full”.

The planned Hotel development on Lot 1 is proposed to include a treatment and detention system comprised of a 48” diameter CMP subsurface detention. A preliminary design of the full build-out condition for Lot 1 and Lot 3 is included in the analysis.

Upon installation of the Lot 1 and Lot 3 system, peak flows at POA-1 are reduced to pre-development levels detaining runoff associated with the re-direction of tributary areas from POA -2 to POA-1 that has been requested by the City.

POA-2:

In the Post-development model subcatchments 20.1S represents off-site areas draining to the Myrtle Street combined sewer.

Analysis has been performed to evaluate two conditions:

- Assuming Lot 3 is constructed in isolation, and Lot 1 and Lot 2 remain undeveloped. The drainage area at POA-1 sees a corresponding increase in tributary area.

and

- Assuming Lot 1 and Lot 3 are developed as currently proposed. The drainage area at POA-1 sees a corresponding increase in tributary area.

## 8. Stormwater Management

Municipal Requirements

The project is the redevelopment of a fully developed site, creating less than one acre of impervious area such that an MDEP Chapter 500 Stormwater permit is not required.

The redevelopment of Lot 3, upon completion, will result in less than 5,000 sf of non-rooftop impervious area on the site. As such, the City's Stormwater Standards for Redevelopment (Technical Manual Section 5.II.D) do not apply and stormwater quality treatment to meet the General Standards is not required.

The City of Portland Technical Manual Section 5.II-C states that all Major site plans are required to meet the Maine DEP Chapter 500 flooding standard.

The project proposes a subsurface detention system below the lower-level garage to detain runoff meeting the flooding standards. The proposed system will direct the separated site drainage to the intersection of Pearl Street and Cumberland Avenue to facilitate the City's future combined sewer separation efforts. The proposed system will detain and reduce flows from the site to the maximum extent practicable during a smaller 1" rain event to advance the City's Combined Sewer Overflow (CSO) objectives for this area of the City. This approach is consistent with the Stormwater management approach approved in the MDP for the project site and the Lot 1 Hotel site plan approval and as required by the City in its sewer capacity review findings for those developments.

Basic Standard - Chapter 500, Section 4(B)

The MDEP Basic Standards apply to all City site plans, requiring that grading or other construction activities on the site do not impede or otherwise alter drainage ways to have an unreasonable adverse impact. We have avoided adverse impacts by providing an Erosion & Sedimentation Control Plan, and an Inspection, Maintenance and Housekeeping Plan (Appendix 2) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines.

General Standard - Chapter 500, Section 4(C)

The MDEP General Standards do not apply as this project disturbs less than one acre and creates less than one acre of impervious area.

Redevelopment Standards - Chapter 500, Section (C)(2)(d), City Technical Standards – Section II-D

Because the General Standards do not apply to this project, the MDEP Redevelopment Standards also do not apply.

The redevelopment of Lot 3, upon completion, will result in less than 5,000 sf of non-rooftop impervious area on the site. As such, the City's Stormwater Standards for Redevelopment (Technical Manual Section 5.II.D) do not apply and stormwater quality treatment to meet the General Standards is not required.

Because the project is located in a combined sewer watershed, flooding control has been provided to reduce rates of runoff in the 1" CSO storm event.

Flooding Standard - Chapter 500, Section 4(F), City Technical Standards – Section II-C

The City of Portland Technical Manual Section 5.II-C states that all Major site plans are required to meet the Maine DEP Chapter 500 flooding standard.

The Flooding Standard requires a project's stormwater management system detain, retain, or result in the infiltration of stormwater from 24-hour storms of the 2, 10, and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project. Minor increases that do not exceed the capacity of existing systems may be approved on a case-by-case basis.

To address this standard, a runoff evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations.

Because the site will be developed in phases as outlined in the approved master plan, the site has been evaluated in two (2) conditions:

- Assuming Lot 3 is developed in isolation with Lot 1 and Lot 2 remaining undeveloped and
- Assuming Lot 1 and Lot 3 are developed as proposed with below-grade detention systems.

For this report it is anticipated that Lot 3 will be developed first and will include a 48" diameter CMP detention system as a standalone project.

The remaining land will be developed concurrently or later, with a second 48" diameter CMP detention system to meet the flooding standards.

Runoff curve numbers were determined for each of the watersheds by measuring the area of each hydrologic soil group within each type of land cover. Pre-development land cover was determined based on survey data, field reconnaissance and aerial photography. Post-development land cover is based on the proposed construction.

Times of concentration were determined from site topographic maps in accordance with SCS procedures, with a minimum of 6 minutes (0.1 hour).

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for Cumberland County (Southeast) are listed in the table below.

| Storm Frequency Precipitation (in./24 hr) Cumberland County (Southeast) | |
|---|---|
| 2-year | 3.1 |
| 10-year | 4.6 |
| 25-year | 5.8 |

**Analysis No. 1 Lot 3 Developed in Isolation**

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions upon completion of the Lot 3 development. These results assume that the remaining land on Lots 1 and 2 drains in its pre-development condition.

| Peak Runoff Rate Summary Table | | | |
|---|---|---|---|
| **Analysis Point** | **Storm Event** | **Existing Conditions (cfs)** | **Proposed Conditions (cfs)** |
| POA-1 | 1-Inch | 3.3 | 3.1 |
| | 2-year | 11.9 | 12.2 |
| | 10-year | 18.0 | 18.2 |
| | 25-year | 22.8 | 24.7 |
| POA-2 | 1-Inch | 1.3 | 0.9 |
| | 2-year | 4.6 | 3.2 |
| | 10-year | 6.9 | 4.8 |
| | 25-year | 8.7 | 6.1 |

The results indicate that the peak rate of runoff at POA 1 in Pearl Street is slightly increased in the 2, 10, and 25-year storm events. This is expected due to the requested diversion of runoff to Pearl Street and consistent with stormwater management plan approved for the adjacent Lot 1 project.

The HydroCAD calculations for this analysis are appended to this report (Appendix 1) along with the Stormwater Management Plans (Appendix 5).

To confirm that the Lot 3 project meets the flooding standard the following table compares the peak rates of runoff from the Lot 3 building site in isolation. This analysis presents the results for pond node 1P representing the system detaining runoff from the building rooftop (subcatchment 10.3S)

| Peak Runoff Rate Summary Table | | | |
|---|---|---|---|
| **Analysis Point** | **Storm Event** | **Un-Detained Runoff Subcatchment 10.3S (cfs)** | **Detention System Discharge Node 1P (cfs)** |
| 10.3S Pond 1P | 1-Inch | 0.8 | 0.1 |
| | 2-year | 2.5 | 1.6 |
| | 10-year | 3.8 | 2.5 |
| | 25-year | 4.8 | 4.6 |

**Analysis No. 2 Lot 1 and Lot 3 Fully Developed**

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions upon the construction of both the proposed Lot 1 and the Lot 3 detention and treatment systems.

| Peak Runoff Rate Summary Table | | | |
|---|---|---|---|
| **Analysis Point** | **Storm Event** | **Existing Conditions (cfs)** | **Proposed Conditions (cfs)** |
| POA-1 | 1-Inch | 3.3 | 3.0 |
| | 2-year | 11.9 | 11.3 |
| | 10-year | 18.0 | 16.7 |
| | 25-year | 22.8 | 22.8 |
| POA-2 | 1-Inch | 1.3 | 0.9 |
| | 2-year | 4.6 | 3.2 |
| | 10-year | 6.9 | 4.8 |
| | 25-year | 8.7 | 6.1 |

The results indicate that the peak rate of runoff is at or reduced from predevelopment rates in all storm events evaluated. The HydroCAD calculations for this analysis are appended to this report (Appendix 1) along with the Stormwater Management Plans (Appendix 5).

## 9. Summary

The proposed development has been designed to manage stormwater runoff through Best Management Practices meeting the applicable City of Portland Stormwater Management Standards. Peak rates of runoff from the project site are reduced from the pre-development conditions for the 1", 2, 10, and 25-year storm events.

Prepared by:

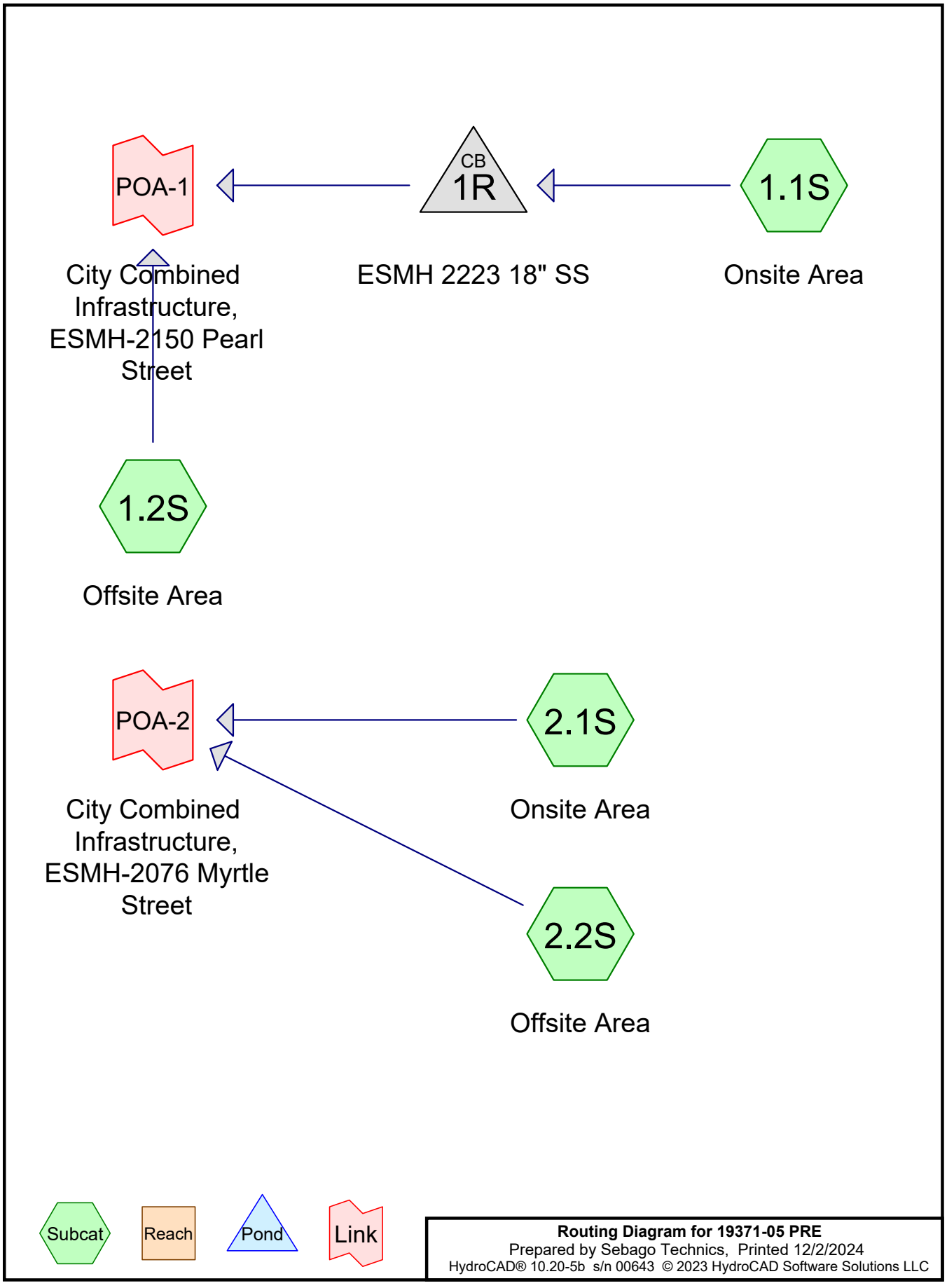
SEBAGO TECHNICS, INC.

Christopher P. Taylor, P.E.
Project Manager

Dylan J. Stuart
Civil Engineer

# Appendix 1A

## Hydrologic Modeling - Existing Conditions (HydroCAD) Summary


POA-1
CB
1R
1.1S
City Combined Infrastructure, ESMH-2150 Pearl Street
ESMH 2223 18" SS
Onsite Area
1.2S
Offsite Area
POA-2
2.1S
City Combined Infrastructure, ESMH-2076 Myrtle Street
Onsite Area
2.2S
Offsite Area
Subcat
Reach
Pond
Link
Routing Diagram for 19371-05 PRE
Prepared by Sebago Technics, Printed 12/2/2024
HydroCAD® 10.20-5b s/n 00643 © 2023 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.063 | 39 | >75% Grass cover, Good, HSG A (1.1S, 1.2S, 2.1S) |
| 5.511 | 98 | Paved parking & Roofs (1.1S, 1.2S, 2.1S, 2.2S) |
| **5.574** | **97** | **TOTAL AREA** |

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment1.1S: Onsite Area** Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=0.63"
Tc=6.0 min CN=96 Runoff=1.3 cfs 0.093 af

**Subcatchment1.2S: Offsite Area** Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.0 cfs 0.149 af

**Subcatchment2.1S: Onsite Area** Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=0.71"
Tc=6.0 min CN=97 Runoff=0.4 cfs 0.029 af

**Subcatchment2.2S: Offsite Area** Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.9 cfs 0.069 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.13' Inflow=1.3 cfs 0.093 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=1.3 cfs 0.093 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=3.3 cfs 0.242 af
Primary=3.3 cfs 0.242 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=1.3 cfs 0.098 af
Primary=1.3 cfs 0.098 af

**Total Runoff Area = 5.574 ac Runoff Volume = 0.340 af Average Runoff Depth = 0.73"**
**1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment1.1S: Onsite Area** Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=2.65"
Tc=6.0 min CN=96 Runoff=5.1 cfs 0.391 af

**Subcatchment1.2S: Offsite Area** Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=6.8 cfs 0.542 af

**Subcatchment2.1S: Onsite Area** Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=2.76"
Tc=6.0 min CN=97 Runoff=1.5 cfs 0.113 af

**Subcatchment2.2S: Offsite Area** Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.1 cfs 0.250 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.74' Inflow=5.1 cfs 0.391 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=5.1 cfs 0.391 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=11.9 cfs 0.933 af
Primary=11.9 cfs 0.933 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=4.6 cfs 0.363 af
Primary=4.6 cfs 0.363 af

**Total Runoff Area = 5.574 ac Runoff Volume = 1.295 af Average Runoff Depth = 2.79"**
**1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment1.1S: Onsite Area** Runoff Area=77,085 sf 97.07% Impervious Runoff Depth=4.14"
Tc=6.0 min CN=96 Runoff=7.8 cfs 0.610 af

**Subcatchment1.2S: Offsite Area** Runoff Area=98,796 sf 99.77% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.2 cfs 0.825 af

**Subcatchment2.1S: Onsite Area** Runoff Area=21,392 sf 98.85% Impervious Runoff Depth=4.25"
Tc=6.0 min CN=97 Runoff=2.2 cfs 0.174 af

**Subcatchment2.2S: Offsite Area** Runoff Area=45,519 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.7 cfs 0.380 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=41.21' Inflow=7.8 cfs 0.610 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=7.8 cfs 0.610 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=18.0 cfs 1.435 af
Primary=18.0 cfs 1.435 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=6.9 cfs 0.554 af
Primary=6.9 cfs 0.554 af

**Total Runoff Area = 5.574 ac Runoff Volume = 1.988 af Average Runoff Depth = 4.28"**
**1.13% Pervious = 0.063 ac 98.87% Impervious = 5.511 ac**

## Summary for Subcatchment 1.1S: Onsite Area

Runoff = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af, Depth= 5.33"
Routed to Pond 1R : ESMH 2223 18" SS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 74,829 | 98 | Paved parking & Roofs |
| | 2,256 | 39 | >75% Grass cover, Good, HSG A |
| | 77,085 | 96 | Weighted Average |
| | 2,256 | | 2.93% Pervious Area |
| | 74,829 | | 97.07% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 1.2S: Offsite Area

Runoff = 12.9 cfs @ 12.08 hrs, Volume= 1.051 af, Depth= 5.56"
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 98,565 | 98 | Paved parking & Roofs |
| | 231 | 39 | >75% Grass cover, Good, HSG A |
| | 98,796 | 98 | Weighted Average |
| | 231 | | 0.23% Pervious Area |
| | 98,565 | | 99.77% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 2.1S: Onsite Area

Runoff = 2.8 cfs @ 12.08 hrs, Volume= 0.223 af, Depth= 5.44"
Routed to Link POA-2 : City Combined Infrastructure, ESMH-2076 Myrtle Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 21,146 | 98 | Paved parking & Roofs |
| | 246 | 39 | >75% Grass cover, Good, HSG A |
| | 21,392 | 97 | Weighted Average |
| | 246 | | 1.15% Pervious Area |
| | 21,146 | | 98.85% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 2.2S: Offsite Area

Runoff = 5.9 cfs @ 12.08 hrs, Volume= 0.484 af, Depth= 5.56"
Routed to Link POA-2 : City Combined Infrastructure, ESMH-2076 Myrtle Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 45,519 | 98 | Paved parking & Roofs |
| | 45,519 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Pond 1R: ESMH 2223 18" SS

Inflow Area = 1.770 ac, 97.07% Impervious, Inflow Depth = 5.33" for 25-YEAR event
Inflow = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af
Outflow = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af, Atten= 0%, Lag= 0.0 min
Primary = 9.9 cfs @ 12.08 hrs, Volume= 0.786 af
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 41.73' @ 12.08 hrs
Flood Elev= 48.67'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 39.62' | **18.0" Round Culvert** L= 80.0' Ke= 0.500<br>Inlet / Outlet Invert= 39.62' / 37.46' S= 0.0270 '/' Cc= 0.900<br>n= 0.013 Clay tile, Flow Area= 1.77 sf |

**Primary OutFlow** Max=9.9 cfs @ 12.08 hrs HW=41.73' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 9.9 cfs @ 5.61 fps)

## Summary for Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street

Inflow Area = 4.038 ac, 98.59% Impervious, Inflow Depth = 5.46" for 25-YEAR event
Inflow = 22.8 cfs @ 12.08 hrs, Volume= 1.837 af
Primary = 22.8 cfs @ 12.08 hrs, Volume= 1.837 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

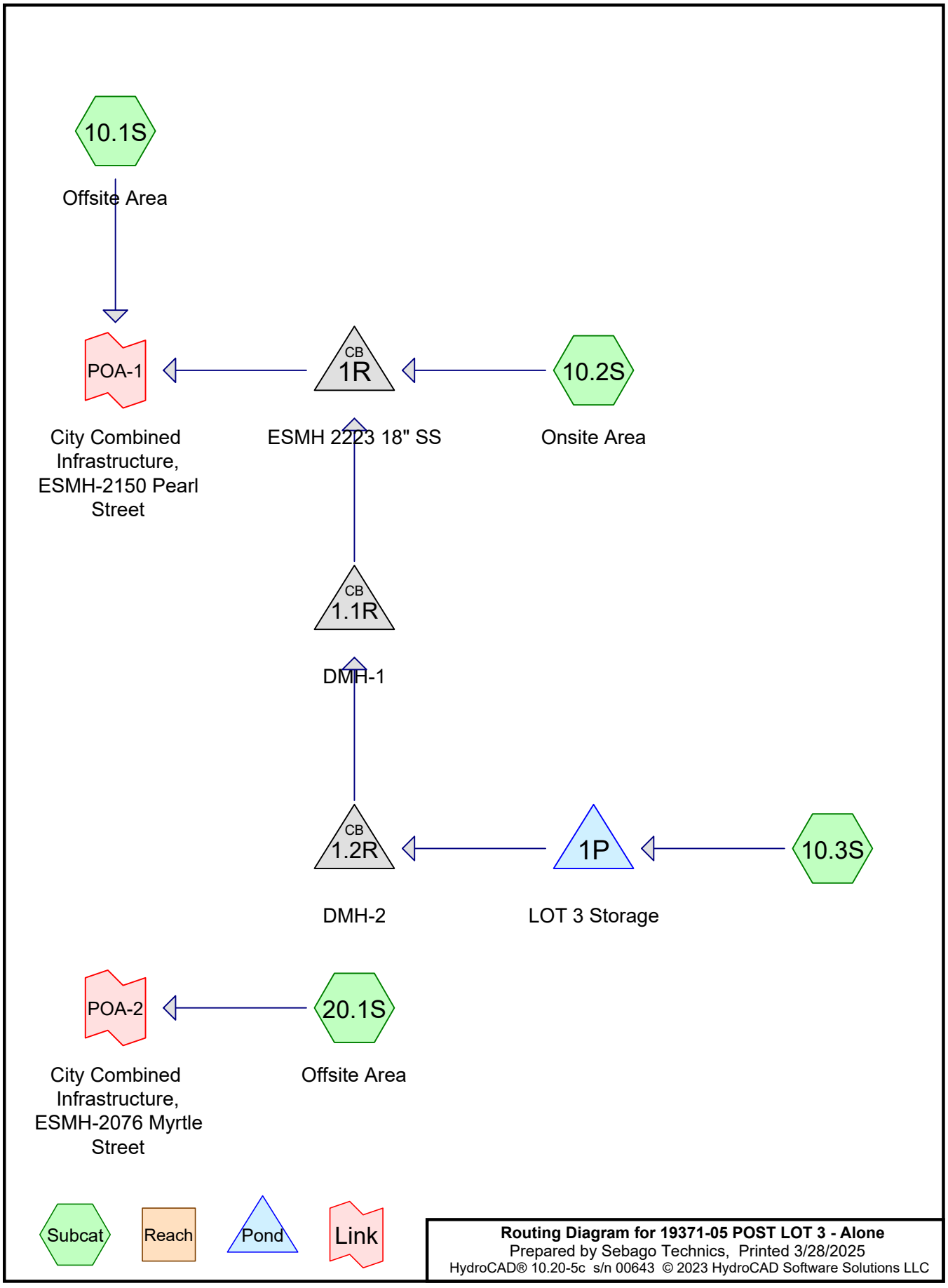
## Summary for Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street

Inflow Area = 1.536 ac, 99.63% Impervious, Inflow Depth = 5.52" for 25-YEAR event
Inflow = 8.7 cfs @ 12.08 hrs, Volume= 0.707 af
Primary = 8.7 cfs @ 12.08 hrs, Volume= 0.707 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

# Appendix 1B

## Hydrologic Modeling - Proposed Conditions (HydroCAD) Summary


10.1S
Offsite Area
POA-1
City Combined Infrastructure, ESMH-2150 Pearl Street
CB 1R
ESMH 2223 18" SS
10.2S
Onsite Area
CB 1.1R
DMH-1
CB 1.2R
DMH-2
1P
LOT 3 Storage
10.3S
POA-2
City Combined Infrastructure, ESMH-2076 Myrtle Street
20.1S
Offsite Area
Subcat
Reach
Pond
Link
Routing Diagram for 19371-05 POST LOT 3 - Alone
Prepared by Sebago Technics, Printed 3/28/2025
HydroCAD® 10.20-5c s/n 00643 © 2023 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.048 | 39 | >75% Grass cover, Good, HSG A (10.1S, 10.2S, 20.1S) |
| 5.526 | 98 | Paved parking & Roofs (10.1S, 10.2S, 10.3S, 20.1S) |
| **5.574** | **97** | **TOTAL AREA** |

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=99,424 sf 99.56% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.0 cfs 0.150 af

**Subcatchment10.2S: Onsite Area** Runoff Area=60,035 sf 97.42% Impervious Runoff Depth=0.63"
Tc=6.0 min CN=96 Runoff=1.0 cfs 0.072 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.8 cfs 0.056 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.9 cfs 0.070 af

**Pond 1.1R: DMH-1** Peak Elev=41.22' Inflow=0.1 cfs 0.056 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=0.1 cfs 0.056 af

**Pond 1.2R: DMH-2** Peak Elev=41.94' Inflow=0.1 cfs 0.056 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=0.1 cfs 0.056 af

**Pond 1P: LOT 3 Storage** Peak Elev=44.75' Storage=0.020 af Inflow=0.8 cfs 0.056 af
Outflow=0.1 cfs 0.056 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.09' Inflow=1.1 cfs 0.128 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=1.1 cfs 0.128 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=3.1 cfs 0.279 af
Primary=3.1 cfs 0.279 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=0.9 cfs 0.070 af
Primary=0.9 cfs 0.070 af

**Total Runoff Area = 5.574 ac Runoff Volume = 0.349 af Average Runoff Depth = 0.75"**
**0.86% Pervious = 0.048 ac 99.14% Impervious = 5.526 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=99,424 sf 99.56% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=6.9 cfs 0.545 af

**Subcatchment10.2S: Onsite Area** Runoff Area=60,035 sf 97.42% Impervious Runoff Depth=2.65"
Tc=6.0 min CN=96 Runoff=4.0 cfs 0.304 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=2.5 cfs 0.202 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.2 cfs 0.255 af

**Pond 1.1R: DMH-1** Peak Elev=41.71' Inflow=1.6 cfs 0.202 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=1.6 cfs 0.202 af

**Pond 1.2R: DMH-2** Peak Elev=42.39' Inflow=1.6 cfs 0.202 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=1.6 cfs 0.202 af

**Pond 1P: LOT 3 Storage** Peak Elev=46.19' Storage=0.050 af Inflow=2.5 cfs 0.202 af
Outflow=1.6 cfs 0.202 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.77' Inflow=5.3 cfs 0.507 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=5.3 cfs 0.507 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=12.2 cfs 1.052 af
Primary=12.2 cfs 1.052 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=3.2 cfs 0.255 af
Primary=3.2 cfs 0.255 af

**Total Runoff Area = 5.574 ac Runoff Volume = 1.307 af Average Runoff Depth = 2.81"**
**0.86% Pervious = 0.048 ac 99.14% Impervious = 5.526 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=99,424 sf 99.56% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.3 cfs 0.830 af

**Subcatchment10.2S: Onsite Area** Runoff Area=60,035 sf 97.42% Impervious Runoff Depth=4.14"
Tc=6.0 min CN=96 Runoff=6.1 cfs 0.475 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=3.8 cfs 0.308 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.8 cfs 0.388 af

**Pond 1.1R: DMH-1** Peak Elev=41.89' Inflow=2.5 cfs 0.308 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=2.5 cfs 0.308 af

**Pond 1.2R: DMH-2** Peak Elev=42.56' Inflow=2.5 cfs 0.308 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=2.5 cfs 0.308 af

**Pond 1P: LOT 3 Storage** Peak Elev=47.06' Storage=0.066 af Inflow=3.8 cfs 0.308 af
Outflow=2.5 cfs 0.308 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=41.24' Inflow=8.0 cfs 0.783 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=8.0 cfs 0.783 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=18.2 cfs 1.613 af
Primary=18.2 cfs 1.613 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=4.8 cfs 0.388 af
Primary=4.8 cfs 0.388 af

**Total Runoff Area = 5.574 ac Runoff Volume = 2.001 af Average Runoff Depth = 4.31"**
**0.86% Pervious = 0.048 ac 99.14% Impervious = 5.526 ac**

## Summary for Subcatchment 10.1S: Offsite Area

Runoff = 13.0 cfs @ 12.08 hrs, Volume= 1.058 af, Depth= 5.56"
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 98,988 | 98 | Paved parking & Roofs |
| | 436 | 39 | >75% Grass cover, Good, HSG A |
| | 99,424 | 98 | Weighted Average |
| | 436 | | 0.44% Pervious Area |
| | 98,988 | | 99.56% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 10.2S: Onsite Area

Runoff = 7.7 cfs @ 12.08 hrs, Volume= 0.612 af, Depth= 5.33"
Routed to Pond 1R : ESMH 2223 18" SS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 58,489 | 98 | Paved parking & Roofs |
| | 1,546 | 39 | >75% Grass cover, Good, HSG A |
| | 60,035 | 96 | Weighted Average |
| | 1,546 | | 2.58% Pervious Area |
| | 58,489 | | 97.42% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 10.3S:

Runoff = 4.8 cfs @ 12.08 hrs, Volume= 0.393 af, Depth= 5.56"
Routed to Pond 1P : LOT 3 Storage

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 36,895 | 98 | Paved parking & Roofs |
| | 36,895 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 20.1S: Offsite Area

Runoff = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af, Depth= 5.56"
Routed to Link POA-2 : City Combined Infrastructure, ESMH-2076 Myrtle Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 46,336 | 98 | Paved parking & Roofs |
| | 116 | 39 | >75% Grass cover, Good, HSG A |
| | 46,452 | 98 | Weighted Average |
| | 116 | | 0.25% Pervious Area |
| | 46,336 | | 99.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Pond 1.1R: DMH-1

Inflow Area = 0.847 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af
Outflow = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af, Atten= 0%, Lag= 0.0 min
Primary = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af
Routed to Pond 1R : ESMH 2223 18" SS

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 42.53' @ 12.11 hrs
Flood Elev= 48.60'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 41.07' | **24.0" Round Culvert**<br>L= 2.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 41.07' / 41.06' S= 0.0050 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=5.1 cfs @ 12.11 hrs HW=42.51' TW=42.31' (Dynamic Tailwater)
**1=Culvert** (Outlet Controls 5.1 cfs @ 2.93 fps)

## Summary for Pond 1.2R: DMH-2

Inflow Area = 0.847 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af
Outflow = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af, Atten= 0%, Lag= 0.0 min
Primary = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af
Routed to Pond 1.1R : DMH-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 43.01' @ 12.12 hrs

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 41.80' | **24.0" Round Culvert**<br>L= 127.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 41.80' / 41.17' S= 0.0050 '/' Cc= 0.900<br>n= 0.012, Flow Area= 3.14 sf |

**Primary OutFlow** Max=4.1 cfs @ 12.11 hrs HW=42.96' TW=42.51' (Dynamic Tailwater)
**1=Culvert** (Outlet Controls 4.1 cfs @ 3.10 fps)

## Summary for Pond 1P: LOT 3 Storage

Inflow Area = 0.847 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.8 cfs @ 12.08 hrs, Volume= 0.393 af
Outflow = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af, Atten= 5%, Lag= 1.7 min
Primary = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af
Routed to Pond 1.2R : DMH-2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 47.27' @ 12.11 hrs Surf.Area= 0.009 ac Storage= 0.068 af

Plug-Flow detention time= 70.0 min calculated for 0.393 af (100% of inflow)
Center-of-Mass det. time= 70.0 min ( 815.7 - 745.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 43.45' | 0.069 af | **48.0" Round Pipe Storage** x 3<br>L= 80.0' |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 42.45' | **18.0" Round Culvert**<br>L= 21.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 42.45' / 42.30' S= 0.0071 '/' Cc= 0.900<br>n= 0.012, Flow Area= 1.77 sf |
| #2 | Device 1 | 42.45' | **1.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 45.25' | **16.0" W x 3.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 47.00' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=4.6 cfs @ 12.11 hrs HW=47.27' TW=42.96' (Dynamic Tailwater)
└─**1=Culvert** (Passes 4.6 cfs of 17.2 cfs potential flow)
  ├─**2=Orifice/Grate** (Orifice Controls 0.1 cfs @ 9.99 fps)
  ├─**3=Orifice/Grate** (Orifice Controls 2.2 cfs @ 6.62 fps)
  └─**4=Sharp-Crested Rectangular Weir** (Weir Controls 2.2 cfs @ 1.69 fps)

## Summary for Pond 1R: ESMH 2223 18" SS

Inflow Area = 2.225 ac, 98.41% Impervious, Inflow Depth = 5.42" for 25-YEAR event
Inflow = 12.0 cfs @ 12.10 hrs, Volume= 1.005 af
Outflow = 12.0 cfs @ 12.10 hrs, Volume= 1.005 af, Atten= 0%, Lag= 0.0 min
Primary = 12.0 cfs @ 12.10 hrs, Volume= 1.005 af
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 42.37' @ 12.10 hrs
Flood Elev= 48.67'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 39.62' | **18.0" Round Culvert** L= 80.0' Ke= 0.500<br>Inlet / Outlet Invert= 39.62' / 37.46' S= 0.0270 '/' Cc= 0.900<br>n= 0.013 Clay tile, Flow Area= 1.77 sf |

**Primary OutFlow** Max=11.9 cfs @ 12.10 hrs HW=42.34' TW=0.00' (Dynamic Tailwater)
└─**1=Culvert** (Inlet Controls 11.9 cfs @ 6.76 fps)

## Summary for Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street

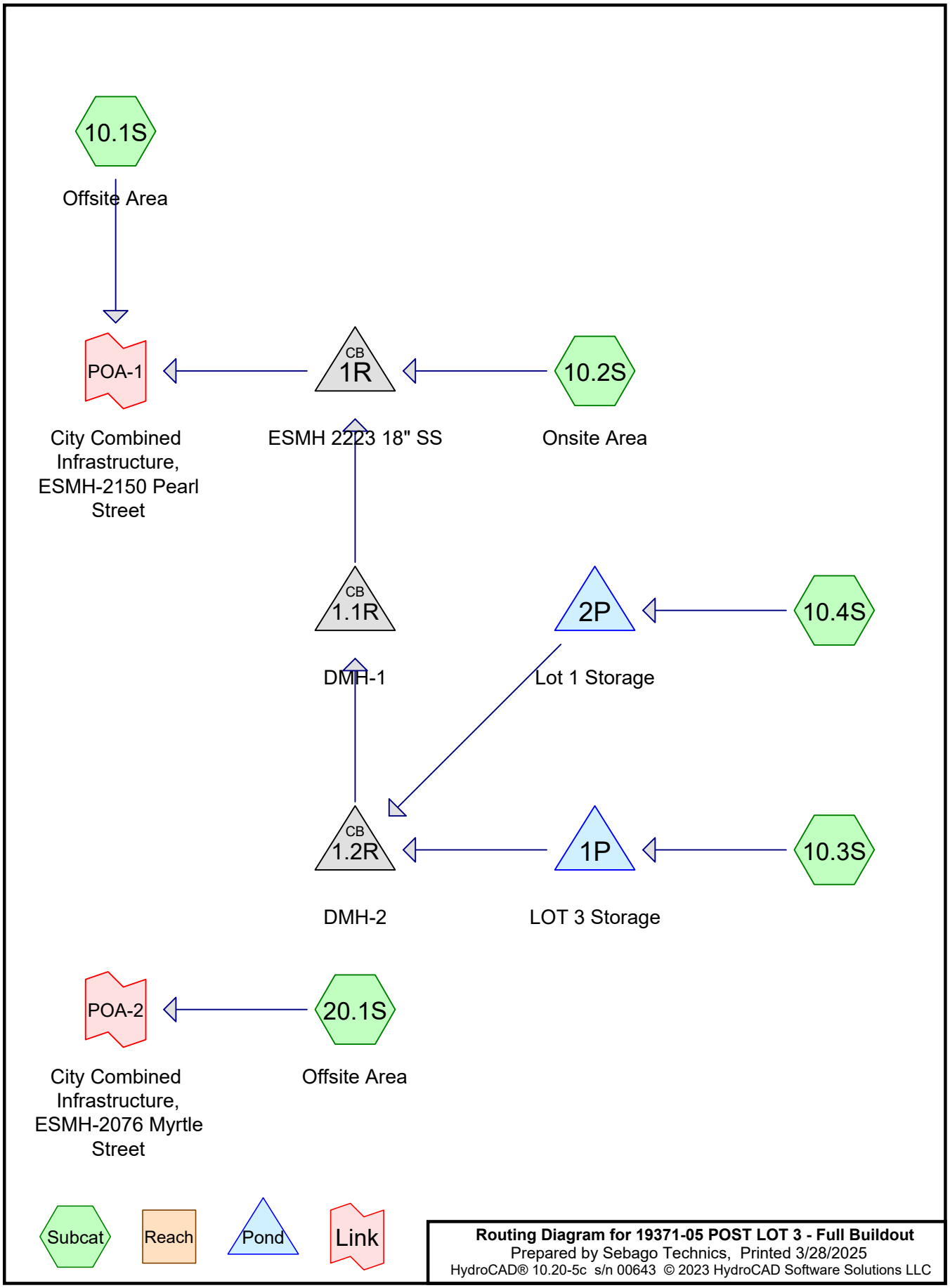
Inflow Area = 4.508 ac, 98.99% Impervious, Inflow Depth = 5.49" for 25-YEAR event
Inflow = 24.7 cfs @ 12.10 hrs, Volume= 2.062 af
Primary = 24.7 cfs @ 12.10 hrs, Volume= 2.062 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

## Summary for Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street

Inflow Area = 1.066 ac, 99.75% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af
Primary = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs


10.1S
Offsite Area
POA-1
City Combined Infrastructure, ESMH-2150 Pearl Street
CB 1R
ESMH 2223 18" SS
10.2S
Onsite Area
CB 1.1R
DMH-1
2P
Lot 1 Storage
10.4S
CB 1.2R
DMH-2
1P
LOT 3 Storage
10.3S
POA-2
City Combined Infrastructure, ESMH-2076 Myrtle Street
20.1S
Offsite Area
Subcat
Reach
Pond
Link
Routing Diagram for 19371-05 POST LOT 3 - Full Buildout
Prepared by Sebago Technics, Printed 3/28/2025
HydroCAD® 10.20-5c s/n 00643 © 2023 HydroCAD Software Solutions LLC

## Area Listing (all nodes)

| Area (acres) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 0.053 | 39 | >75% Grass cover, Good, HSG A (10.1S, 10.2S, 20.1S) |
| 5.521 | 98 | Paved parking & Roofs (10.1S, 10.2S, 10.3S, 10.4S, 20.1S) |
| **5.574** | **97** | **TOTAL AREA** |

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=103,524 sf 99.36% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=2.1 cfs 0.157 af

**Subcatchment10.2S: Onsite Area** Runoff Area=32,224 sf 95.20% Impervious Runoff Depth=0.56"
Tc=6.0 min CN=95 Runoff=0.5 cfs 0.035 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.8 cfs 0.056 af

**Subcatchment10.4S:** Runoff Area=23,708 sf 100.00% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.5 cfs 0.036 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=0.79"
Tc=6.0 min CN=98 Runoff=0.9 cfs 0.070 af

**Pond 1.1R: DMH-1** Peak Elev=41.40' Inflow=0.4 cfs 0.092 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=0.4 cfs 0.092 af

**Pond 1.2R: DMH-2** Peak Elev=42.10' Inflow=0.4 cfs 0.092 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=0.4 cfs 0.092 af

**Pond 1P: LOT 3 Storage** Peak Elev=44.75' Storage=0.020 af Inflow=0.8 cfs 0.056 af
Outflow=0.1 cfs 0.056 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.04' Inflow=0.9 cfs 0.126 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=0.9 cfs 0.126 af

**Pond 2P: Lot 1 Storage** Peak Elev=45.42' Storage=362 cf Inflow=0.5 cfs 0.036 af
Outflow=0.4 cfs 0.036 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=3.0 cfs 0.283 af
Primary=3.0 cfs 0.283 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=0.9 cfs 0.070 af
Primary=0.9 cfs 0.070 af

**Total Runoff Area = 5.574 ac Runoff Volume = 0.353 af Average Runoff Depth = 0.76"**
**0.96% Pervious = 0.053 ac 99.04% Impervious = 5.521 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=103,524 sf 99.36% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=7.1 cfs 0.568 af

**Subcatchment10.2S: Onsite Area** Runoff Area=32,224 sf 95.20% Impervious Runoff Depth=2.55"
Tc=6.0 min CN=95 Runoff=2.1 cfs 0.157 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=2.5 cfs 0.202 af

**Subcatchment10.4S:** Runoff Area=23,708 sf 100.00% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=1.6 cfs 0.130 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=2.87"
Tc=6.0 min CN=98 Runoff=3.2 cfs 0.255 af

**Pond 1.1R: DMH-1** Peak Elev=41.88' Inflow=2.4 cfs 0.332 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=2.4 cfs 0.332 af

**Pond 1.2R: DMH-2** Peak Elev=42.55' Inflow=2.4 cfs 0.332 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=2.4 cfs 0.332 af

**Pond 1P: LOT 3 Storage** Peak Elev=46.19' Storage=0.050 af Inflow=2.5 cfs 0.202 af
Outflow=1.6 cfs 0.202 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.61' Inflow=4.2 cfs 0.490 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=4.2 cfs 0.490 af

**Pond 2P: Lot 1 Storage** Peak Elev=46.32' Storage=963 cf Inflow=1.6 cfs 0.130 af
Outflow=0.9 cfs 0.130 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=11.3 cfs 1.057 af
Primary=11.3 cfs 1.057 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=3.2 cfs 0.255 af
Primary=3.2 cfs 0.255 af

**Total Runoff Area = 5.574 ac Runoff Volume = 1.312 af Average Runoff Depth = 2.83"**
**0.96% Pervious = 0.053 ac 99.04% Impervious = 5.521 ac**

Time span=0.00-60.00 hrs, dt=0.01 hrs, 6001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment10.1S: Offsite Area** Runoff Area=103,524 sf 99.36% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=10.7 cfs 0.864 af

**Subcatchment10.2S: Onsite Area** Runoff Area=32,224 sf 95.20% Impervious Runoff Depth=4.02"
Tc=6.0 min CN=95 Runoff=3.2 cfs 0.248 af

**Subcatchment10.3S:** Runoff Area=36,895 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=3.8 cfs 0.308 af

**Subcatchment10.4S:** Runoff Area=23,708 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=2.4 cfs 0.198 af

**Subcatchment20.1S: Offsite Area** Runoff Area=46,452 sf 99.75% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=4.8 cfs 0.388 af

**Pond 1.1R: DMH-1** Peak Elev=42.07' Inflow=3.6 cfs 0.506 af
24.0" Round Culvert n=0.012 L=2.0' S=0.0050 '/' Outflow=3.6 cfs 0.506 af

**Pond 1.2R: DMH-2** Peak Elev=42.74' Inflow=3.6 cfs 0.506 af
24.0" Round Culvert n=0.012 L=127.0' S=0.0050 '/' Outflow=3.6 cfs 0.506 af

**Pond 1P: LOT 3 Storage** Peak Elev=47.06' Storage=0.066 af Inflow=3.8 cfs 0.308 af
Outflow=2.5 cfs 0.308 af

**Pond 1R: ESMH 2223 18" SS** Peak Elev=40.89' Inflow=6.1 cfs 0.754 af
18.0" Round Culvert n=0.013 L=80.0' S=0.0270 '/' Outflow=6.1 cfs 0.754 af

**Pond 2P: Lot 1 Storage** Peak Elev=47.11' Storage=1,528 cf Inflow=2.4 cfs 0.198 af
Outflow=1.1 cfs 0.198 af

**Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street** Inflow=16.7 cfs 1.618 af
Primary=16.7 cfs 1.618 af

**Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street** Inflow=4.8 cfs 0.388 af
Primary=4.8 cfs 0.388 af

**Total Runoff Area = 5.574 ac Runoff Volume = 2.006 af Average Runoff Depth = 4.32"**
**0.96% Pervious = 0.053 ac 99.04% Impervious = 5.521 ac**

## Summary for Subcatchment 10.1S: Offsite Area

Runoff = 13.5 cfs @ 12.08 hrs, Volume= 1.102 af, Depth= 5.56"
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 102,863 | 98 | Paved parking & Roofs |
| | 661 | 39 | >75% Grass cover, Good, HSG A |
| | 103,524 | 98 | Weighted Average |
| | 661 | | 0.64% Pervious Area |
| | 102,863 | | 99.36% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Subcatchment 10.2S: Onsite Area

Runoff = 4.1 cfs @ 12.08 hrs, Volume= 0.321 af, Depth= 5.21"
Routed to Pond 1R : ESMH 2223 18" SS

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 30,678 | 98 | Paved parking & Roofs |
| | 1,546 | 39 | >75% Grass cover, Good, HSG A |
| | 32,224 | 95 | Weighted Average |
| | 1,546 | | 4.80% Pervious Area |
| | 30,678 | | 95.20% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 10.3S:

Runoff = 4.8 cfs @ 12.08 hrs, Volume= 0.393 af, Depth= 5.56"
Routed to Pond 1P : LOT 3 Storage

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 36,895 | 98 | Paved parking & Roofs |
| | 36,895 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 10.4S:

Runoff = 3.1 cfs @ 12.08 hrs, Volume= 0.252 af, Depth= 5.56"
Routed to Pond 2P : Lot 1 Storage

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 23,708 | 98 | Paved parking & Roofs |
| | 23,708 | | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct** |

## Summary for Subcatchment 20.1S: Offsite Area

Runoff = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af, Depth= 5.56"
Routed to Link POA-2 : City Combined Infrastructure, ESMH-2076 Myrtle Street

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YEAR Rainfall=5.80"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 46,336 | 98 | Paved parking & Roofs |
| | 116 | 39 | >75% Grass cover, Good, HSG A |
| | 46,452 | 98 | Weighted Average |
| | 116 | | 0.25% Pervious Area |
| | 46,336 | | 99.75% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, Direct Entry** |

## Summary for Pond 1.1R: DMH-1

Inflow Area = 1.391 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 5.7 cfs @ 12.11 hrs, Volume= 0.645 af
Outflow = 5.7 cfs @ 12.11 hrs, Volume= 0.645 af, Atten= 0%, Lag= 0.0 min
Primary = 5.7 cfs @ 12.11 hrs, Volume= 0.645 af
Routed to Pond 1R : ESMH 2223 18" SS

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 42.37' @ 12.11 hrs
Flood Elev= 48.60'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 41.07' | **24.0" Round Culvert**<br>L= 2.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 41.07' / 41.06' S= 0.0050 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=5.7 cfs @ 12.11 hrs HW=42.37' TW=41.64' (Dynamic Tailwater)
↑—**1=Culvert** (Barrel Controls 5.7 cfs @ 3.76 fps)

## Summary for Pond 1.2R: DMH-2

Inflow Area = 1.391 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 5.7 cfs @ 12.11 hrs, Volume= 0.645 af
Outflow = 5.7 cfs @ 12.11 hrs, Volume= 0.645 af, Atten= 0%, Lag= 0.0 min
Primary = 5.7 cfs @ 12.11 hrs, Volume= 0.645 af
Routed to Pond 1.1R : DMH-1

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 43.06' @ 12.12 hrs

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 41.80' | **24.0" Round Culvert**<br>L= 127.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 41.80' / 41.17' S= 0.0050 '/' Cc= 0.900<br>n= 0.012, Flow Area= 3.14 sf |

**Primary OutFlow** Max=5.7 cfs @ 12.11 hrs HW=43.06' TW=42.37' (Dynamic Tailwater)
↑—**1=Culvert** (Outlet Controls 5.7 cfs @ 3.89 fps)

## Summary for Pond 1P: LOT 3 Storage

Inflow Area = 0.847 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 4.8 cfs @ 12.08 hrs, Volume= 0.393 af
Outflow = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af, Atten= 5%, Lag= 1.7 min
Primary = 4.6 cfs @ 12.11 hrs, Volume= 0.393 af
Routed to Pond 1.2R : DMH-2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 47.27' @ 12.11 hrs Surf.Area= 0.009 ac Storage= 0.068 af

Plug-Flow detention time= 70.0 min calculated for 0.393 af (100% of inflow)
Center-of-Mass det. time= 70.0 min ( 815.7 - 745.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 43.45' | 0.069 af | **48.0" Round Pipe Storage** x 3<br>L= 80.0' |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 42.45' | **18.0" Round Culvert**<br>L= 21.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 42.45' / 42.30' S= 0.0071 '/' Cc= 0.900<br>n= 0.012, Flow Area= 1.77 sf |
| #2 | Device 1 | 42.45' | **1.5" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 45.25' | **16.0" W x 3.0" H Vert. Orifice/Grate** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 47.00' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=4.6 cfs @ 12.11 hrs HW=47.27' TW=43.05' (Dynamic Tailwater)
↑**1=Culvert** (Passes 4.6 cfs of 17.2 cfs potential flow)
↑**2=Orifice/Grate** (Orifice Controls 0.1 cfs @ 9.88 fps)
**3=Orifice/Grate** (Orifice Controls 2.2 cfs @ 6.62 fps)
**4=Sharp-Crested Rectangular Weir** (Weir Controls 2.2 cfs @ 1.69 fps)

## Summary for Pond 1R: ESMH 2223 18" SS

Inflow Area = 2.131 ac, 98.33% Impervious, Inflow Depth = 5.44" for 25-YEAR event
Inflow = 9.7 cfs @ 12.11 hrs, Volume= 0.966 af
Outflow = 9.7 cfs @ 12.11 hrs, Volume= 0.966 af, Atten= 0%, Lag= 0.0 min
Primary = 9.7 cfs @ 12.11 hrs, Volume= 0.966 af
Routed to Link POA-1 : City Combined Infrastructure, ESMH-2150 Pearl Street

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs
Peak Elev= 41.66' @ 12.11 hrs
Flood Elev= 48.67'

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 39.62' | **18.0" Round Culvert** L= 80.0' Ke= 0.500<br>Inlet / Outlet Invert= 39.62' / 37.46' S= 0.0270 '/' Cc= 0.900<br>n= 0.013 Clay tile, Flow Area= 1.77 sf |

**Primary OutFlow** Max=9.6 cfs @ 12.11 hrs HW=41.65' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 9.6 cfs @ 5.45 fps)

## Summary for Pond 2P: Lot 1 Storage

Inflow Area = 0.544 ac,100.00% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 3.1 cfs @ 12.08 hrs, Volume= 0.252 af
Outflow = 1.3 cfs @ 12.27 hrs, Volume= 0.252 af, Atten= 57%, Lag= 11.1 min
Primary = 1.3 cfs @ 12.27 hrs, Volume= 0.252 af
Routed to Pond 1.2R : DMH-2

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

Peak Elev= 47.90' @ 12.27 hrs Surf.Area= 533 sf Storage= 2,021 cf

Plug-Flow detention time= 40.3 min calculated for 0.252 af (100% of inflow)
Center-of-Mass det. time= 40.5 min ( 786.1 - 745.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 44.55' | 2,262 cf | **48.0" Round Pipe Storage** x 2<br>L= 90.0' |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 44.55' | **12.0" Round Culvert**<br>L= 4.0' CPP, square edge headwall, Ke= 0.500<br>Inlet / Outlet Invert= 44.55' / 44.43' S= 0.0300 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 0.79 sf |
| #2 | Device 1 | 44.55' | **0.6" Vert. Orifice** C= 0.600 Limited to weir flow at low heads |
| #3 | Device 1 | 45.10' | **8.0" W x 3.0" H Vert. WQV Orifice** C= 0.600<br>Limited to weir flow at low heads |
| #4 | Device 1 | 48.02' | **5.0' long Sharp-Crested Rectangular Weir** 2 End Contraction(s) |

**Primary OutFlow** Max=1.3 cfs @ 12.27 hrs HW=47.90' TW=42.75' (Dynamic Tailwater)
└─**1=Culvert** (Passes 1.3 cfs of 6.4 cfs potential flow)
  ├─**2=Orifice** (Orifice Controls 0.0 cfs @ 8.77 fps)
  ├─**3=WQV Orifice** (Orifice Controls 1.3 cfs @ 7.87 fps)
  └─**4=Sharp-Crested Rectangular Weir** ( Controls 0.0 cfs)

## Summary for Link POA-1: City Combined Infrastructure, ESMH-2150 Pearl Street

Inflow Area = 4.508 ac, 98.88% Impervious, Inflow Depth = 5.50" for 25-YEAR event
Inflow = 22.8 cfs @ 12.10 hrs, Volume= 2.068 af
Primary = 22.8 cfs @ 12.10 hrs, Volume= 2.068 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

## Summary for Link POA-2: City Combined Infrastructure, ESMH-2076 Myrtle Street

Inflow Area = 1.066 ac, 99.75% Impervious, Inflow Depth = 5.56" for 25-YEAR event
Inflow = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af
Primary = 6.1 cfs @ 12.08 hrs, Volume= 0.494 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.01 hrs

# Appendix 2

## Inspection, Maintenance and Housekeeping Plan

**INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN**

**For:**
**244 CUMBERLAND AVENUE**
**LOT 3 OF 385 CONGRESS STREET SUBDIVISION**
**PORTLAND, MAINE**

**By:**
**Sebago Technics, Inc.**
**75 John Roberts Road, Suite 4A**
**South Portland, Maine**

## Introduction

The following plan outlines the anticipated inspection and maintenance procedures for the erosion and sedimentation control measures and stormwater management facilities for the project. This plan outlines housekeeping requirements that shall be followed during and after construction. These procedures shall be followed to ensure the intended function of the designed measures and to prevent unreasonably adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional detail on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the Maine Department of Environmental Protection (MDEP).

## During Construction

1. **Inspection:** During construction, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event (0.5" of rainfall), and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within 7 calendar days and prior to any storm event (0.5" of rainfall).

3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access

points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event (0.5" of rainfall). They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall 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.

B. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to the requirements of this plan.

C. Stabilized Construction Entrances/Exits:

- 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. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

D. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

E. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e., erosion control blankets), stone check dams may be needed to further reduce channel velocity.

F. Catch basins:

- Inspect and, if required, clean-out basins at least once a year, preferably in early spring.
- Cleaning of catch basins will be required when sediment of at least 6 inches accumulates in the sump.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

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, and appropriate spill prevention, containment, and response planning and implementation.

B. 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.

C. 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.

D. Debris and other materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.

E. Trench or foundation dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

**Post-Construction**

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection and maintenance procedures outlined in this section. All measures must be maintained in effective operating condition. The owner shall inspect and maintain the BMPs, including but not limited to any parking areas, catch basins, trench drains, drainage swales, treatment and detention systems, pipes and related structures, in accordance with municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

2. **Specific Inspection and Maintenance Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection and maintenance tasks to be performed after construction. If the BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator of the BMP shall take corrective action(s) to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective action(s) to the local municipality in the annual report.

A. Removal of Winter Sand:

- Clear accumulations of winter sand in parking areas and sidewalks at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.

B. Gravel Parking Lot

- Inspect surface gravel areas for signs of erosion and sediment accumulation.
- Removed sediment accumulations.
- Regrade and compact gravel surface if erosion occurs.

C. Trench Drains

- Inspect and, if required, clean-out trench drain at least once a year, preferably

in early spring.

- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the trench and basin, and at any inlet grates.

D. Contech Subsurface Systems:

- Follow Operation & Maintenance procedures per manufacturer.
- Inspect subsurface storage pipes for standing water during a period of dry weather. The system should be draining within 24-48 hours after a rain event.
- Remove sediment, trash, debris, and leaf litter from subsurface storage pipes.
- Inspect outlet control structures at least once a year, preferably in early spring and, if required, clean-out.
- Make any repairs necessary to ensure the measure is operating properly.

**3. Documentation:**

A. The owner or operator of a BMP or a qualified post-construction stormwater inspector hired by that person, shall, as required by the local municipality, provide a completed and signed certification on a form provided by the local municipality, certifying that the person has inspected the BMP(s) and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they required maintenance or repair, including the record of the deficiency and corrective action(s) taken.

B. A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.

**4. Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. Upon such assumption of responsibility, the association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

## ATTACHMENT 1 – STORMWATER INSPECTION AND MAINTENANCE LOG

**244 CUMBERLAND AVENUE**
**LOT 3 OF 385 CONGRESS STREET SUBDIVISION**
**PORTLAND, MAINE**

This log is intended to accompany the Inspection, Maintenance, and Housekeeping Plan for the development at 244 Cumberland Avenue in Portland, Maine. The following items shall be checked, cleaned, and maintained on a regular basis as specified in the Maintenance Plan and as described in the sections below. This log shall be kept on file for a minimum of five (5) years and shall be available for review by the City of Portland. Qualified personnel familiar with the drainage systems shall perform the inspections. A copy of the construction and post-construction maintenance logs are provided.

| INSPECTION MAINTENANCE AND HOUSEKEEPING FORM | | | |
|---|---|---|---|
| **General Information** | | | |
| **Project Name:** | | **Inspection Date:** | |
| **Project Location:** | | **Current Weather:** | |
| | | **Date / Amount Last Precip:** | |
| | | | |
| **BMP Owner:** | | **Company conducting inspection:** | |
| **Owner Mailing Address:** | | **Company Mailing Address** | |
| | | | |
| **Owner Phone #:** | | **Company Phone #:** | |
| **Owner Email:** | | **Inspector Name:** | |
| | | **Inspector Email:** | |

| Site Element | Suggested Maintenance (recm'd frequency) | Observations | Inspection Notes/Recommended Action |
|---|---|---|---|
| | | | |
| **Vegetated Areas** | Inspect Slopes/Embankments for erosion (annually) | | |
| | Replant bare areas or areas of sparse growth (annually) | | |
| **Paved Surfaces** | Clear accumulated winter sand (annually) | | |
| | Remove sediment along edges of parking and within low spots/pockets (annually) | | |
| **Ditches/Swales** | Remove obstructions/debris/sediment (monthly) | | |
| | Inspect for erosion/repair as needed (annually) | | |
| | Remove woody vegetation (annually) | | |
| | Mow vegetated ditches (annually) | | |
| **Catch Basins** | Remove sediment/debris from sump (annually) | | |
| **Culverts** | Remove sediment/debris from inlet/outlet aprons (annually) | | |
| | Inspect inlet/outlet aprons for erosion, repair as needed (annually) | | |
| | Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually) | | |
| **Pipe Outlets** | Remove sediment/debris from outlet aprons (annually) | | |
| | Inspect outlet aprons for erosion, repair as needed (annually) | | |
| | Inspect, repair as needed, riprap aprons for dislodged/sparse coverage (annually) | | |

Additional Notes/Observations:

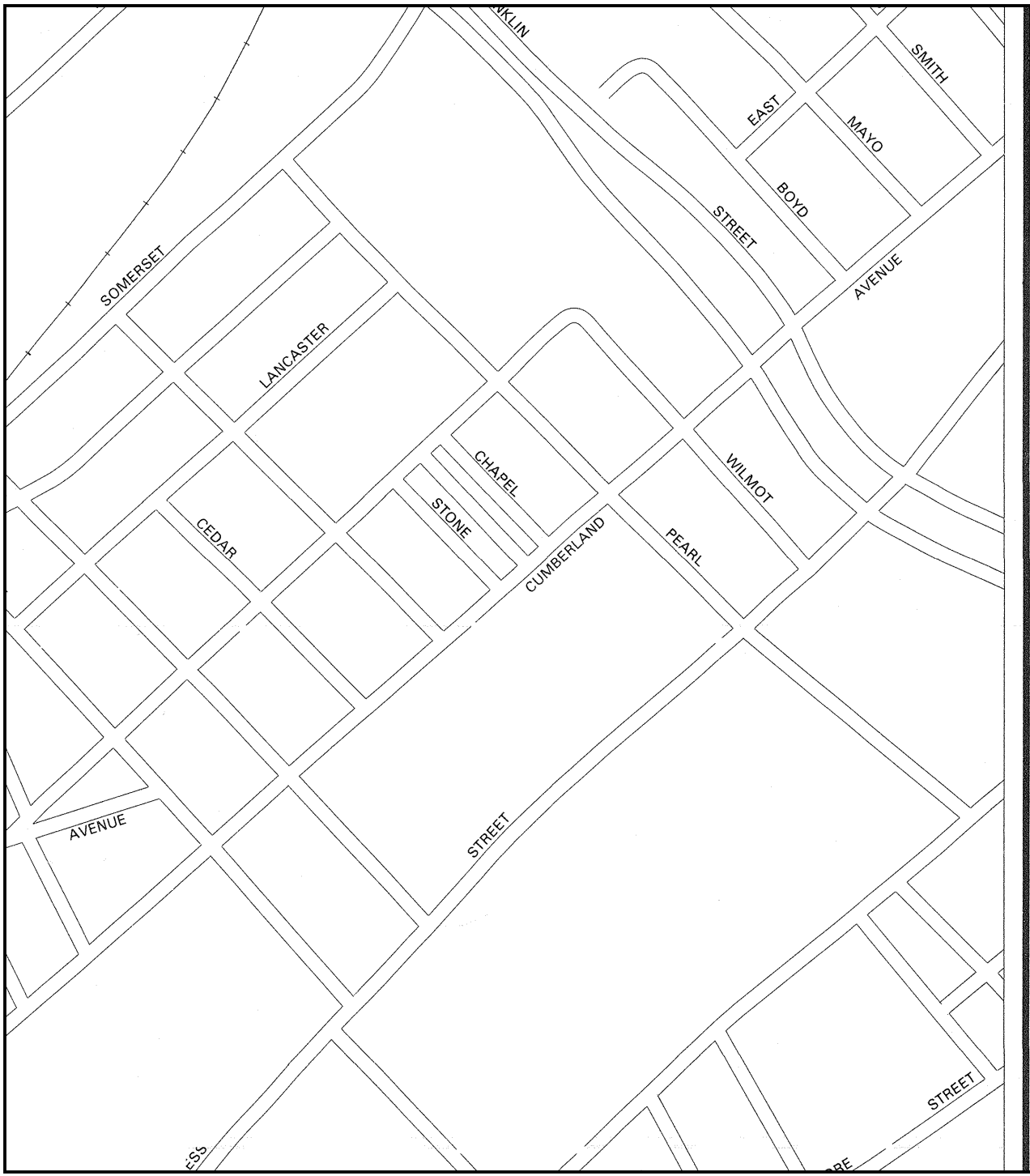
| INSPECTION MAINTENANCE AND HOUSEKEEPING FORM | | | |
|---|---|---|---|
| **General Information** | | | |
| **Project Name:** | | **Inspection Date:** | |
| **Project Location:** | | **Current Weather:** | |
| | | **Date / Amount Last Precip:** | |
| | | | |
| **BMP Owner:** | | **Company conducting inspection:** | |
| **Owner Mailing Address:** | | **Company Mailing Address** | |
| | | | |
| **Owner Phone #:** | | **Company Phone #:** | |
| **Owner Email:** | | **Inspector Name:** | |
| | | **Inspector Email:** | |

| BMP Element | Suggested Maintenance | Observations | Inspection Notes/Recommended Action |
|---|---|---|---|
| | | | |
| **Subsurface Pipes** | | | |
| | Sediment Depth/Removal (Annually) | | |
| **Outlet Control Structure** | | | |
| | Sediment Depth (Annually) | | |
| | Floatables/Debris (Annually) | | |
| | | | |
| | | | |

Additional Notes/Observations:

# Appendix 3

## Flood Insurance Rate Map




APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

# FIRM

## FLOOD INSURANCE RATE MAP

CITY OF
**PORTLAND, MAINE**
CUMBERLAND COUNTY

PANEL 13 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)

**COMMUNITY-PANEL NUMBER**
230051 0013 B

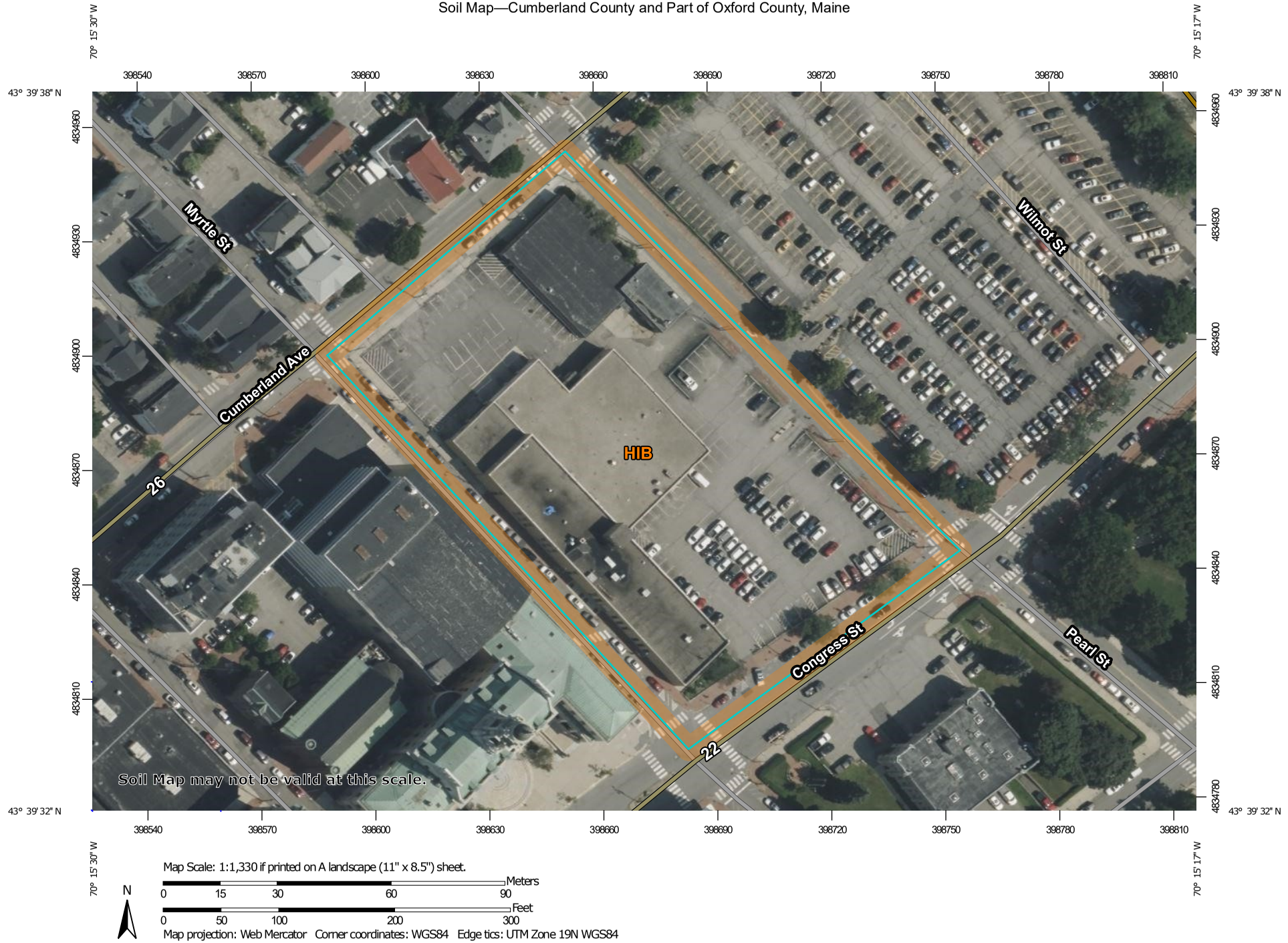
**EFFECTIVE DATE:**
JULY 17, 1986

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

# Appendix 4

## Subsurface Investigations




Map Scale: 1:1,330 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 15 30 60 90

Feet
0 50 100 200 300

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 18, Aug 31, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 22, 2021—Oct 7, 2021

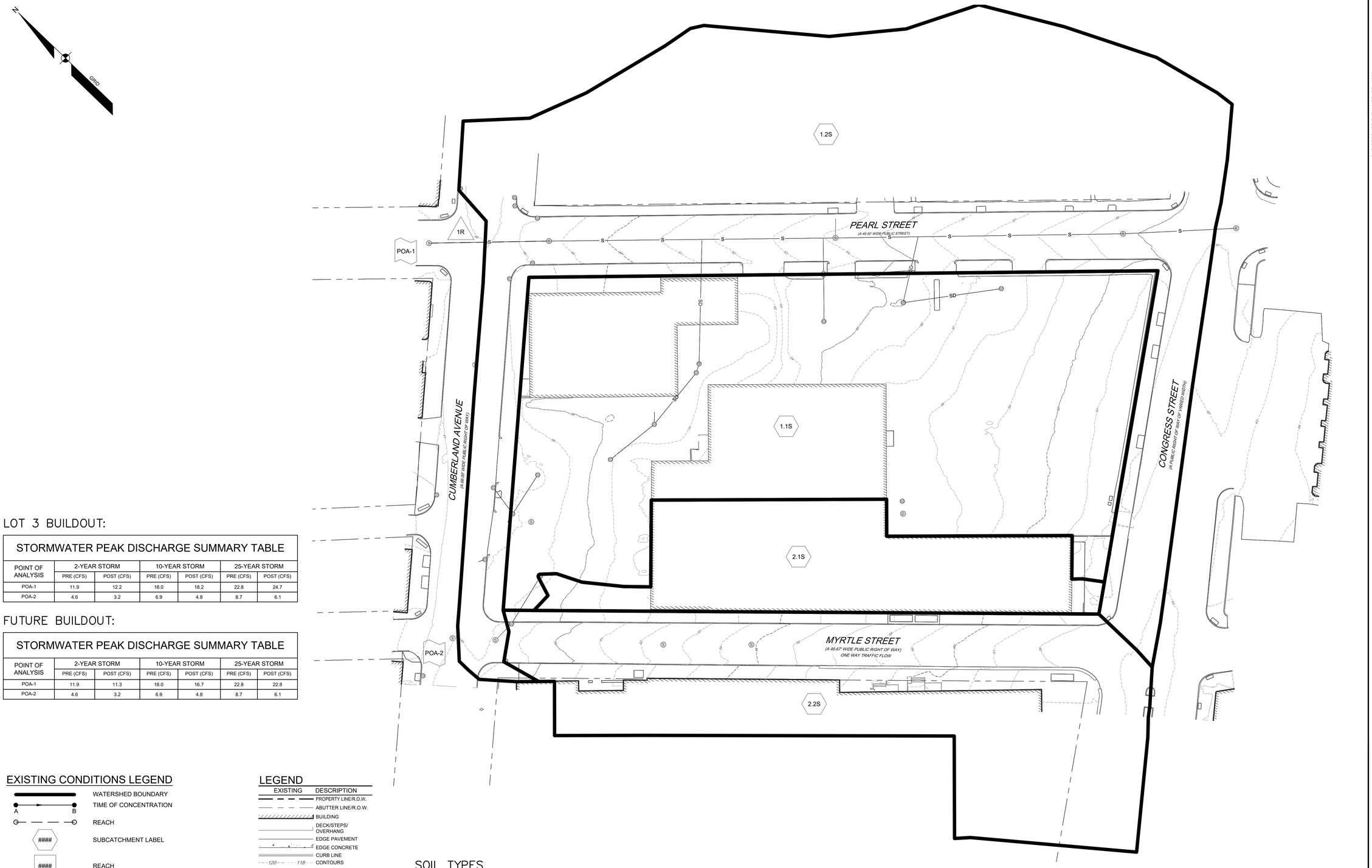
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

# Map Unit Legend

| Map Unit Symbol | Map Unit Name | Acres in AOI | Percent of AOI |
|---|---|---|---|
| HIB | Hinckley loamy sand, 3 to 8 percent slopes | 3.0 | 100.0% |
| **Totals for Area of Interest** | | **3.0** | **100.0%** |

# Appendix 5

## Stormwater Management Plans




## LOT 3 BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 12.2 | 18.0 | 18.2 | 22.8 | 24.7 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## FUTURE BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 11.3 | 18.0 | 16.7 | 22.8 | 22.8 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## EXISTING CONDITIONS LEGEND

- WATERSHED BOUNDARY
- A — B: TIME OF CONCENTRATION
- REACH
- #### : SUBCATCHMENT LABEL
- #### : REACH
- #### : POINT OF ANALYSIS
- #### : STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG #: SOILS BOUNDARY

## LEGEND

| EXISTING | DESCRIPTION |
|---|---|
| | PROPERTY LINE/R.O.W. |
| | ABUTTER LINE/R.O.W. |
| | BUILDING |
| | DECK/STEPS/ OVERHANG |
| | EDGE PAVEMENT |
| | EDGE CONCRETE |
| | CURB LINE |
| 120 118 | CONTOURS |
| S | SANITARY SEWER |
| Ⓢ | SANITARY MANHOLE |
| SD | STORM DRAIN |
| Ⓓ | DRAINAGE MANHOLE |
| | CATCH BASIN |

## SOIL TYPES

| SYMBOL | SOIL SERIES | PHASE | SLOPE | HSG | DRAINAGE CLASS |
|---|---|---|---|---|---|
| HIB | HINCKLEY | LOAMY SAND | 3–8% | A | EXCESSIVELY DRAINED |

NOTES:

1. EXISTING CONDITIONS INFORMATION IS BASED ON AN ELECTRONIC SURVEY FILE PREPARED BY SEBAGO TECHINCS, INC. IN DECEMBER 2019. TOPOGRAPHIC INFORMATION IS BASED ON A COMBINATION OF SURVEYED DATA WITHIN THE LIMITS OF PROPOSED WORK.
2. ON-SITE SOIL INFORMATION IS BASED ON THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) CUSTOM SOIL RESOURCE REPORT FOR CUMBERLAND COUNTY, MAINE, DATED MAY 26, 2022.

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

CHRISTOPHER P. TAYLOR, PE 16877

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16877 — REGISTERED PROFESSIONAL ENGINEER — 03/28/2025

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 01/30/2025 | REVISED PER CITY COMMENTS |
| C. | CPT | 03/28/2025 | REVISED PER CITY COMMENTS |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# EXISTING CONDITIONS SWM PLAN

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVENUE
PORTLAND, MAINE

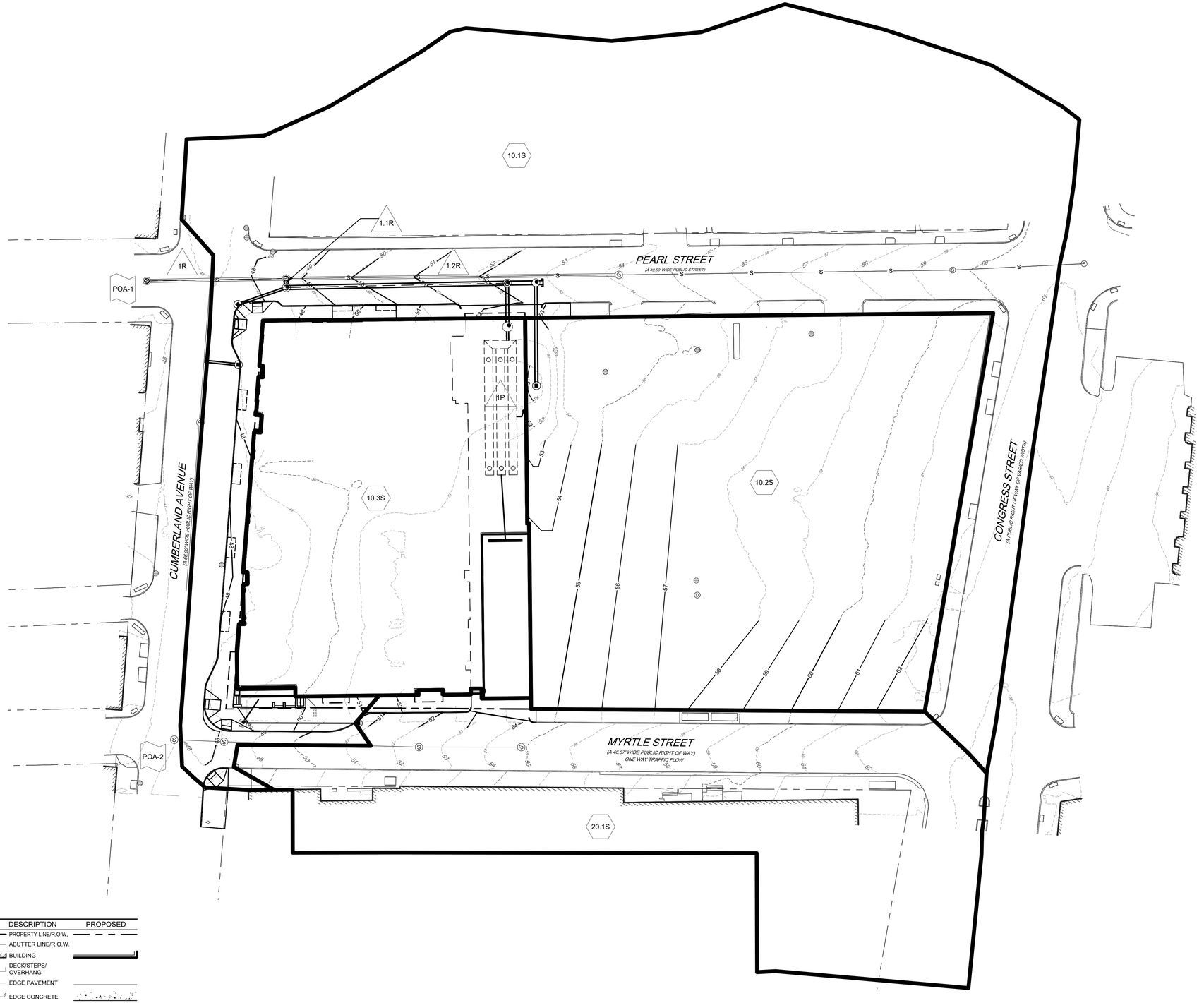
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
365 CONGRESS, LLC
2730 J TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | DJS |
| CHECKED | CPT |
| DATE | 11/07/24 |
| SCALE | 1" = 30' |
| PROJECT | 19371-05 |

SHEET 1 OF 3

19371-05 SWP-dwg TAB:PRE




## LOT 3 BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 12.2 | 18.0 | 18.2 | 22.8 | 24.7 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## FUTURE BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 11.3 | 18.0 | 16.7 | 22.8 | 22.8 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A, B)
- REACH
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

## LEGEND

| EXISTING | DESCRIPTION | PROPOSED |
|---|---|---|
| | PROPERTY LINE/R.O.W. | |
| | ABUTTER LINE/R.O.W. | |
| | BUILDING | |
| | DECK/STEPS/ OVERHANG | |
| | EDGE PAVEMENT | |
| | EDGE CONCRETE | |
| | CURB LINE | |
| 120 118 | CONTOURS | 120 |
| SD | STORM DRAIN | SD |
| Ⓓ | DRAINAGE MANHOLE | |
| | CATCH BASIN | |

## SOIL TYPES

| SYMBOL | SOIL SERIES | PHASE | SLOPE | HSG | DRAINAGE CLASS |
|---|---|---|---|---|---|
| HIB | HINCKLEY | LOAMY SAND | 3–8% | A | EXCESSIVELY DRAINED |

NOTES:

1. EXISTING CONDITIONS INFORMATION IS BASED ON AN ELECTRONIC SURVEY FILE PREPARED BY SEBAGO TECHINCS, INC. IN DECEMBER 2019. TOPOGRAPHIC INFORMATION IS BASED ON A COMBINATION OF SURVEYED DATA WITHIN THE LIMITS OF PROPOSED WORK.
2. ON-SITE SOIL INFORMATION IS BASED ON THE NATURAL RESOURCES CONSERVATION SERVICE (NRCS) CUSTOM SOIL RESOURCE REPORT FOR CUMBERLAND COUNTY, MAINE, DATED MAY 26, 2022.

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

CHRISTOPHER P. TAYLOR, PE 16877

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16877 — LICENSED PROFESSIONAL ENGINEER — 03/28/2025

| REV. | BY | DATE: | STATUS: |
|---|---|---|---|
| C. | CPT | 03/28/2025 | REVISED PER CITY COMMENTS |
| B. | CPT | 01/30/2025 | REVISED PER CITY COMMENTS |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

PROPOSED CONDITIONS SWM PLAN - LOT 3 ONLY

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVENUE
PORTLAND, MAINE

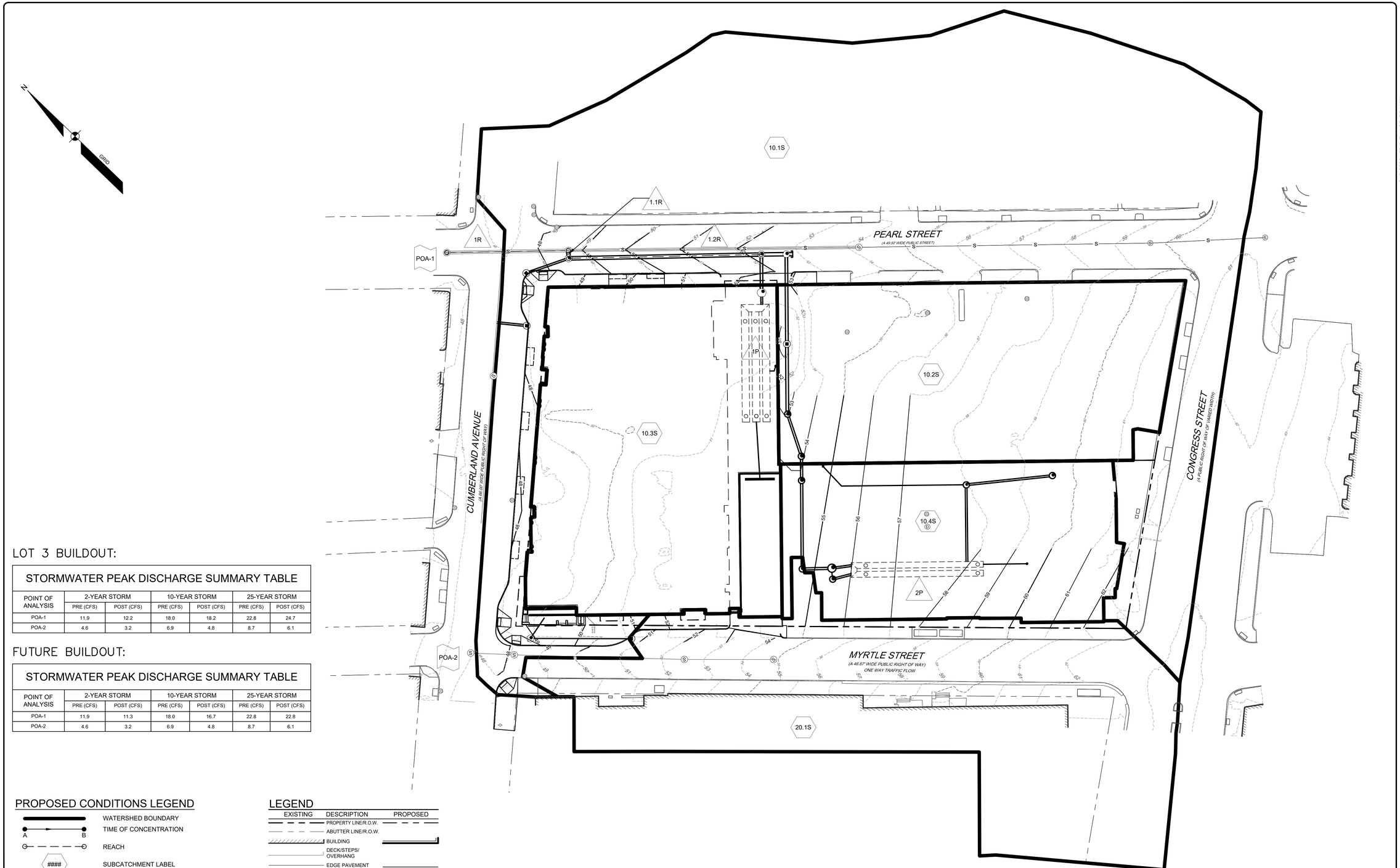
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | DJS |
| CHECKED | CPT |
| DATE | 11/07/24 |
| SCALE | 1" = 30' |
| PROJECT | 19371-05 |

SHEET 2 OF 3

19371-05 SWP.dwg, TAB:POST-ALONE




## LOT 3 BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 12.2 | 18.0 | 18.2 | 22.8 | 24.7 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## FUTURE BUILDOUT:

| STORMWATER PEAK DISCHARGE SUMMARY TABLE | | | | | | |
|---|---|---|---|---|---|---|
| POINT OF ANALYSIS | 2-YEAR STORM | | 10-YEAR STORM | | 25-YEAR STORM | |
| | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) | PRE (CFS) | POST (CFS) |
| POA-1 | 11.9 | 11.3 | 18.0 | 16.7 | 22.8 | 22.8 |
| POA-2 | 4.6 | 3.2 | 6.9 | 4.8 | 8.7 | 6.1 |

## PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- A → B — TIME OF CONCENTRATION
- REACH
- #### — SUBCATCHMENT LABEL
- #### — REACH
- #### — POINT OF ANALYSIS
- #### — STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # — SOILS BOUNDARY

## LEGEND

| EXISTING | DESCRIPTION | PROPOSED |
|---|---|---|
| | PROPERTY LINE/R.O.W. | |
| | ABUTTER LINE/R.O.W. | |
| | BUILDING | |
| | DECK/STEPS/ OVERHANG | |
| | EDGE PAVEMENT | |
| | EDGE CONCRETE | |
| | CURB LINE | |
| 120 118 | CONTOURS | 120 |
| SD | STORM DRAIN | SD |
| Ⓓ | DRAINAGE MANHOLE | |
| | CATCH BASIN | |

## SOIL TYPES

| SYMBOL | SOIL SERIES | PHASE | SLOPE | HSG | DRAINAGE CLASS |
|---|---|---|---|---|---|
| HIB | HINCKLEY | LOAMY SAND | 3–8% | A | EXCESSIVELY DRAINED |

NOTES:

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GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 INCH = 30 FT.

CHRISTOPHER P. TAYLOR, PE 16877

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16877 — LICENSED PROFESSIONAL ENGINEER — 03/28/2025

| REV. | BY | DATE: | STATUS |
|---|---|---|---|
| C. | CPT | 03/28/2025 | REVISED PER CITY COMMENTS |
| B. | CPT | 01/30/2025 | REVISED PER CITY COMMENTS |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite A
South Portland, ME 04106
Tel. 207-200-2100

# PROPOSED CONDITIONS SWM PLAN - FULL

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | DJS |
| CHECKED | CPT |
| DATE | 11/07/24 |
| SCALE | 1" = 30' |
| PROJECT | 19371-05 |

19371-05 SWP.dwg, TAB-POST-FULL

SHEET 3 OF 3

V

**Vehicle Turning Narrative**

Below is a description of the turning movements that have been analyzed and the vehicle turning exhibits prepared for the application.

1. Proposed Driveway on Pearl Street: The driveway on Pearl Street will be used by trucks utilizing the proposed loading docks. Turning movements for this driveway are shown on Vehicle Turning Movement Exhibit (TE-1). A WB-67 truck was used to model the turning movements for the Pearl Street driveway. The model shows the truck utilizing both lanes of traffic to back into the loading dock. The facility will have staff onsite to provide traffic control when trucks arrive at the facility.

2. Proposed Driveway on Myrtle Street: The driveway on Pearl Street will be used for tour buses. Turning movements for this driveway are shown on Vehicle Turning Movement (TE-2). A 45-foot long bus was used to model the turning movements for the Myrtle Street driveway. A widened loading zone on the northeast side of Myrtle Street is proposed to allow for buses to back into the driveway without eliminating parking on the southwest side of Myrtle Street.

3. Myrtle Street at Cumberland Avenue Intersection: Turning movements at this intersection were analyzed for the existing and proposed curb lines. A 45-foot long bus was used to model the turning movements at this intersection.

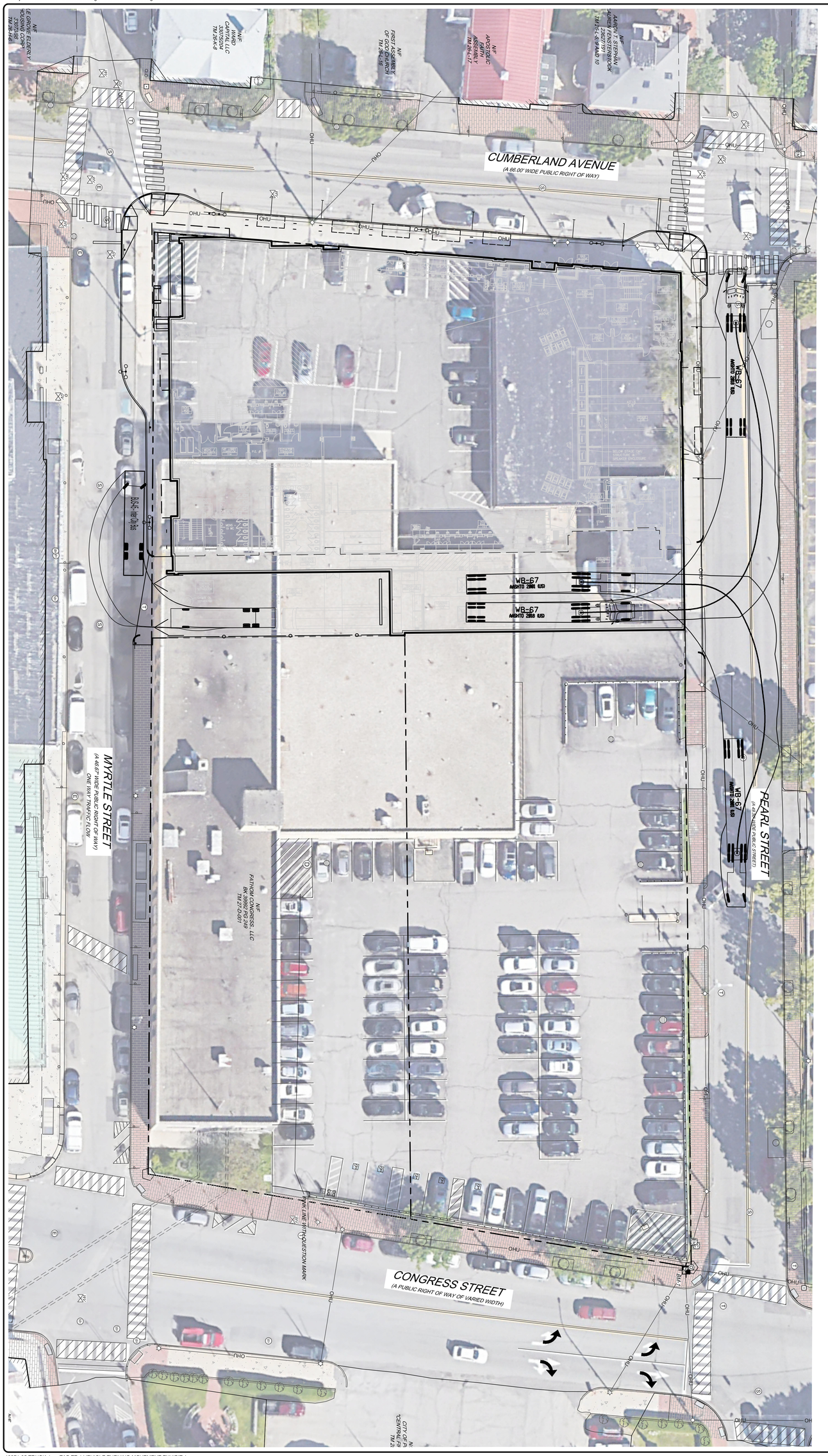
   Vehicle Turning Movements Exhibit (TE-3.1) shows the right and left turning movements for existing and proposed curb lines. The exhibit shows that the design vehicle can make the required turns with the proposed curb bump out. A bus making a right turn will need to utilize the opposing lane of traffic. This is consistent with the existing turning movement.

   Vehicle Turning Movement Exhibit (TE-3.2) shows right and left turning movements for a bus approaching from Cumberland Avenue and turning onto Myrtle Street driving in the reverse direction for the existing and proposed curb lines. This was requested as Merrill Auditorium buses occasionally park on Myrtle Street opposing the flow of traffic. The exhibit shows that the design vehicle can make the left and right turns with the proposed curb bump out.

4. Pearl Street at Cumberland Avenue Intersection: A right turn from Cumberland Avenue onto Pearl Street was analyzed for a 45-foot bus. Vehicle Turning Movement Exhibit (TE-4) shows this turning movement. The exhibit shows that a bus will need to utilize the opposing lane of traffic to make a right turn from Cumberland Avenue onto Pearl Street with the proposed curb bump out. If the curb lines were maintained a bus would need to utilize the opposing lane of traffic but would encroach less. We defer to city staff regarding the curb lines at this intersection.

   Trucks leaving the site and heading north on Pearl Street will continue straight until making a right onto Somerset Street and heading to Franklin Arterial.

5. Pearl Street at Congress Street Intersection: A left turn from Pearl Street onto Congress Street was analyzed for a WB-67 truck. Vehicle Turning Movement Exhibit (TE-5) shows this turning movement.






19371-05 TRUCK.dwg, TAB:TE-1 VEHICLE TURNING MOVEMENT EXHIBIT 1

CHRISTOPHER P. TAYLOR, PE 16677

SHEET TE-1

| PROJECT | 19371-05 | DESIGNED | DJS |
|---|---|---|---|
| SCALE | 1" = 20' | DRAWN | MRS |
| DATE | 06/27/2024 | CHECKED | |
| | | D.I.R. | |

# VEHICLE TURNING MOVEMENT EXHIBIT 1

OF:

## PORTLAND MUSIC HALL

244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:

PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

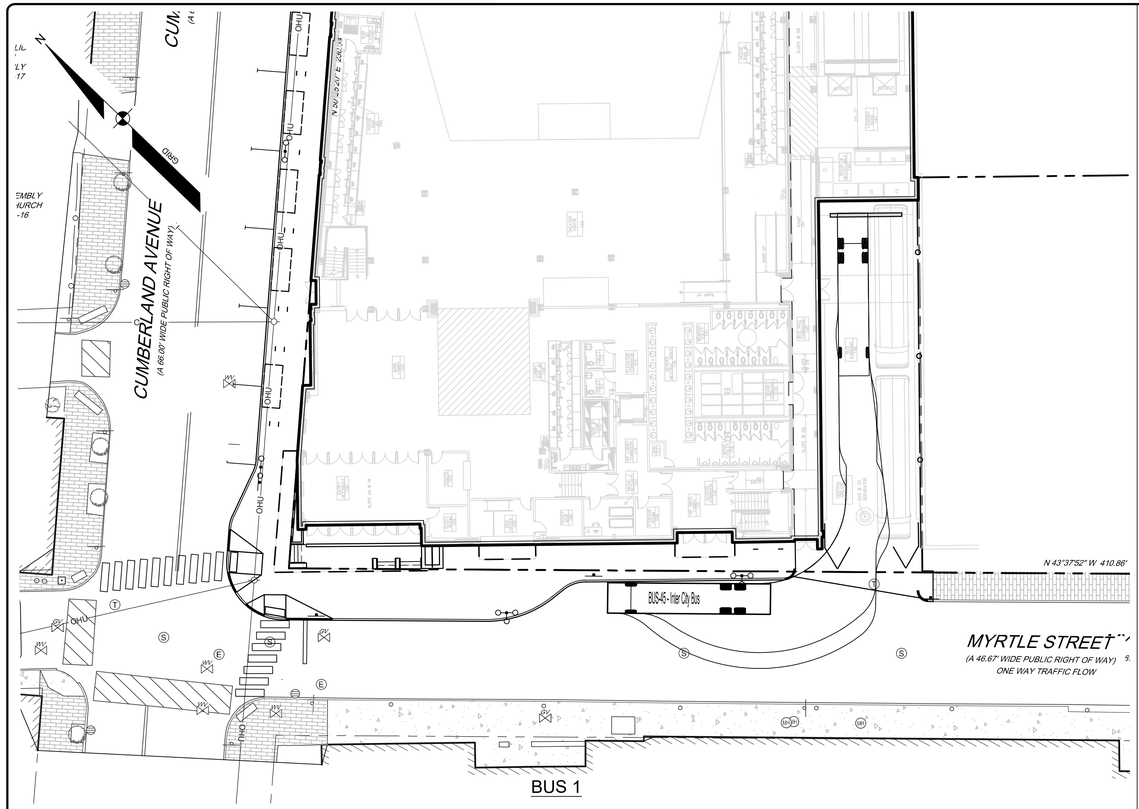
RECORD OWNER:
385 CONGRESS LLC
2730 TRANSIT ROAD
WEST SENECA, NY 14224

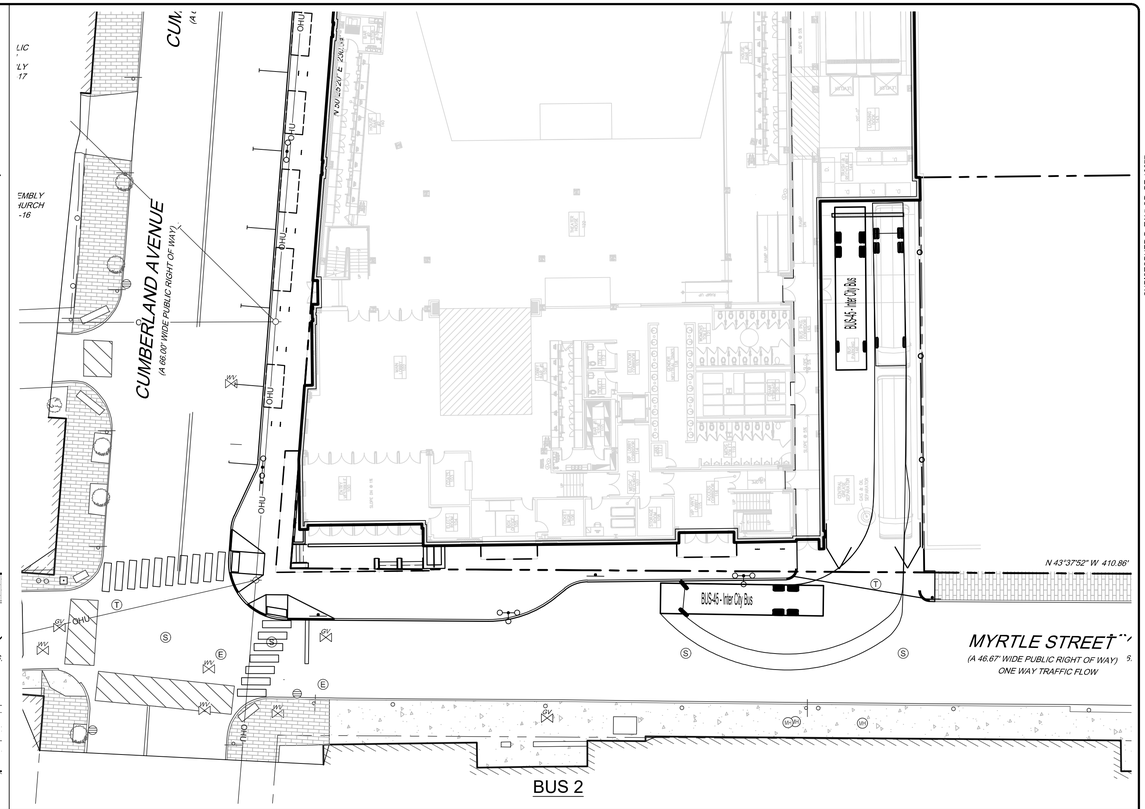
SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

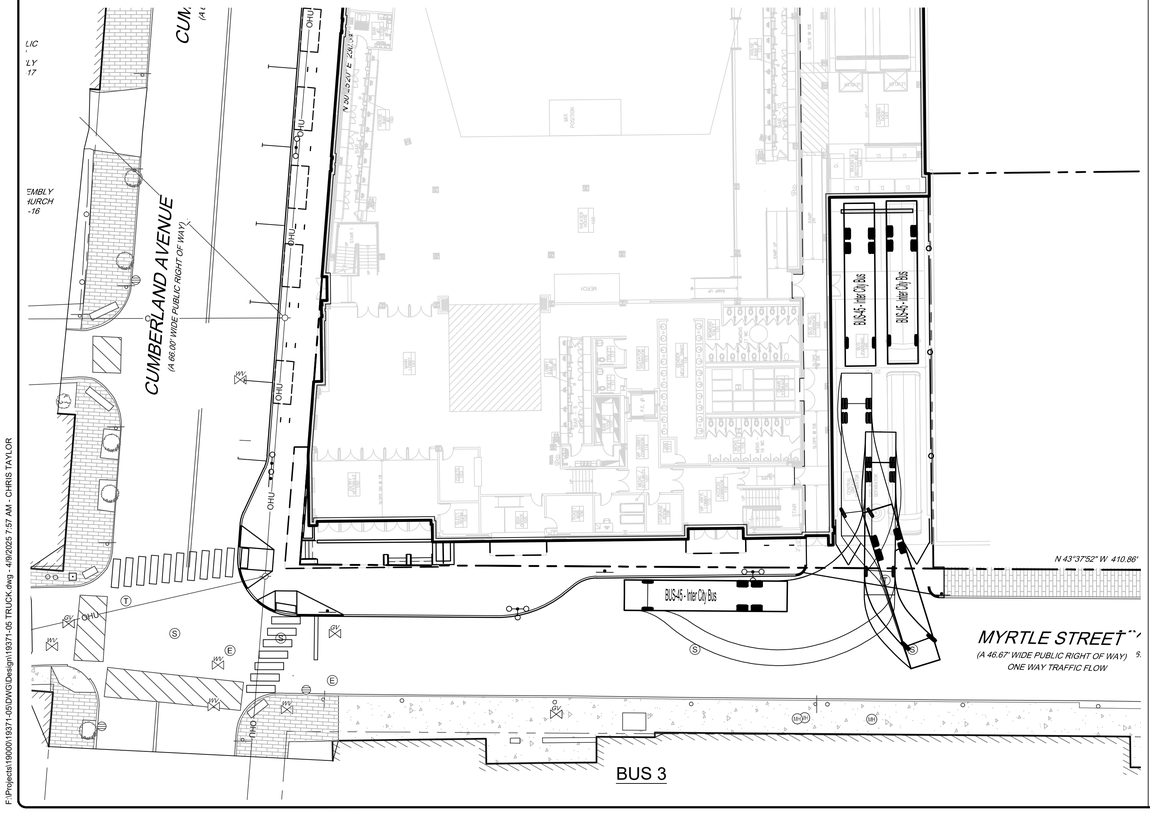
| REV: | BY: | DATE: | STATUS: |
|---|---|---|---|
| B | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |
| A | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

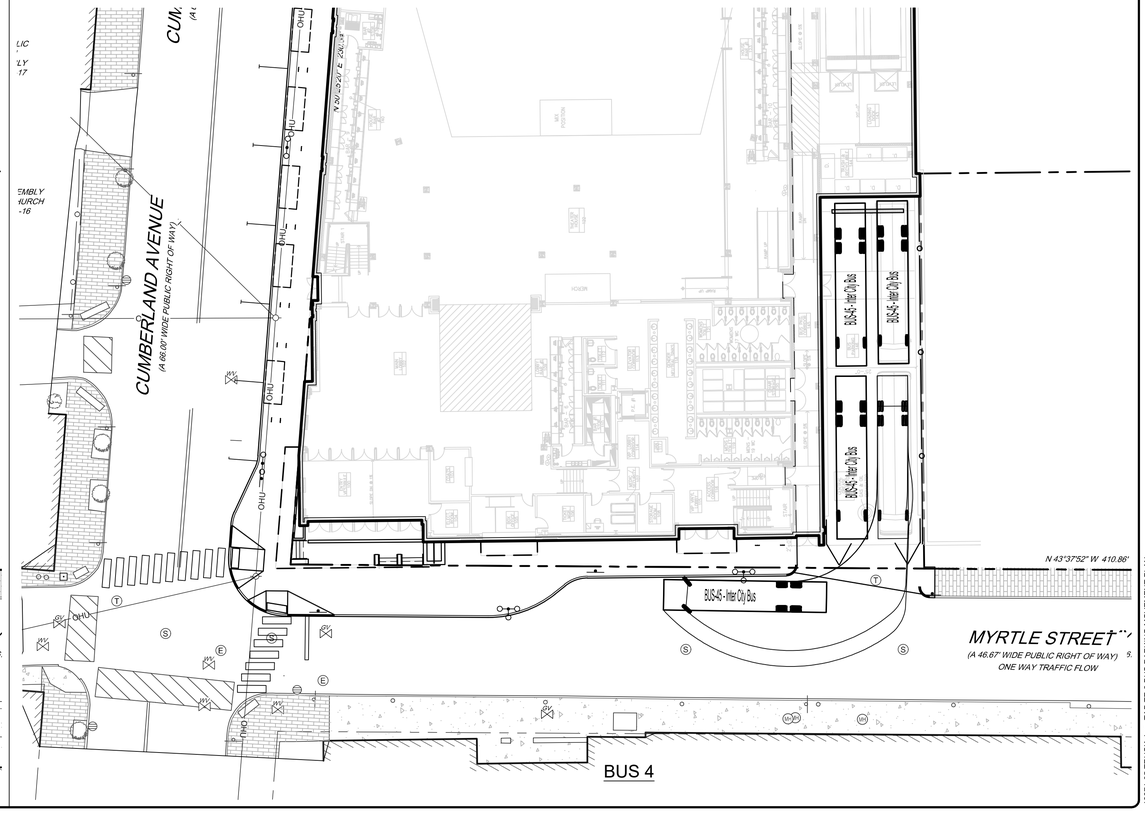
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NOT FOR CONSTRUCTION




NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

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Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# VEHICLE TURNING MOVEMENT EXHIBIT 2

OF:
## PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
STREET
CITY, STATE Zip

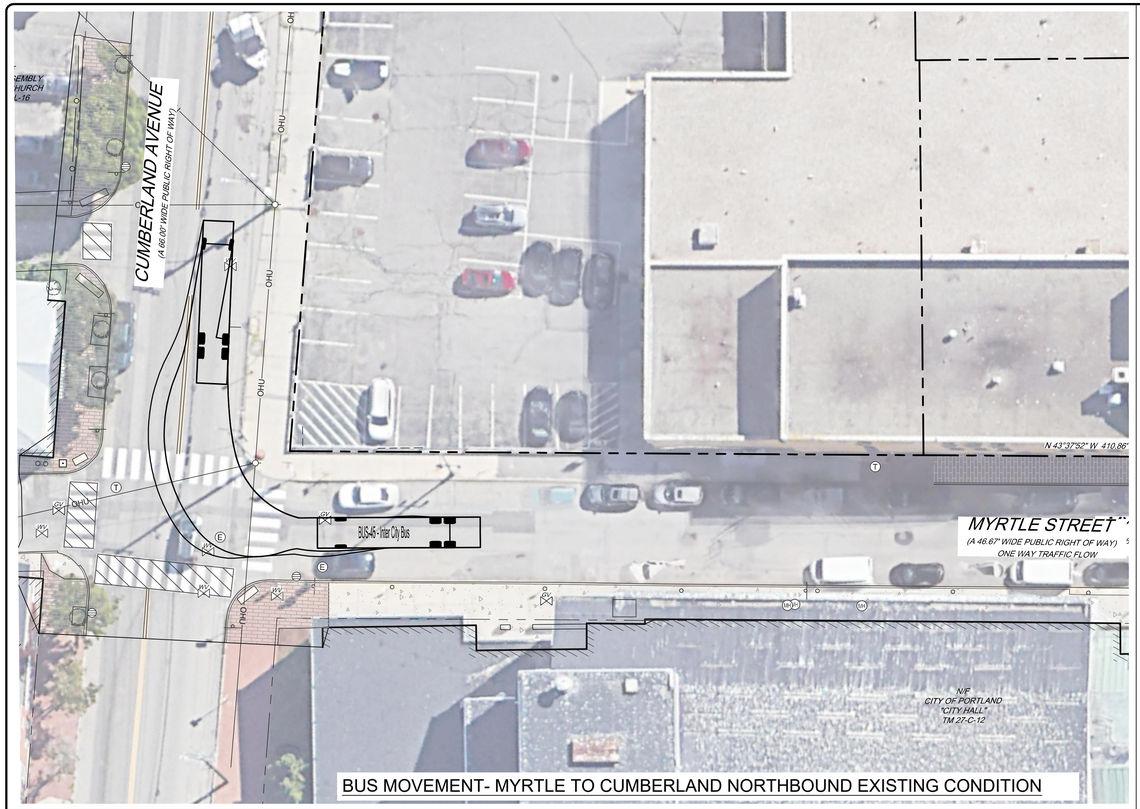
RECORD OWNER:
365 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

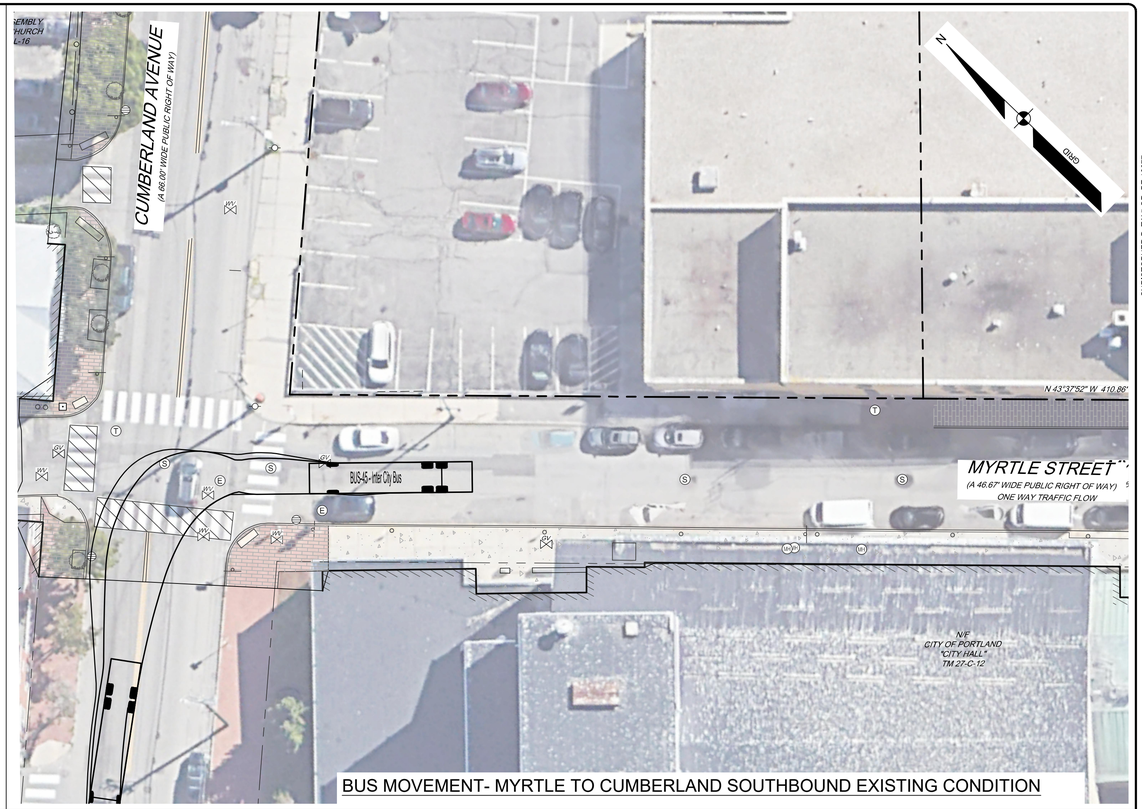
SHEET TE-2

19371-05 TRUCK.dwg, TAB:TE-2 BUS PARKING MOVEMENT PLAN

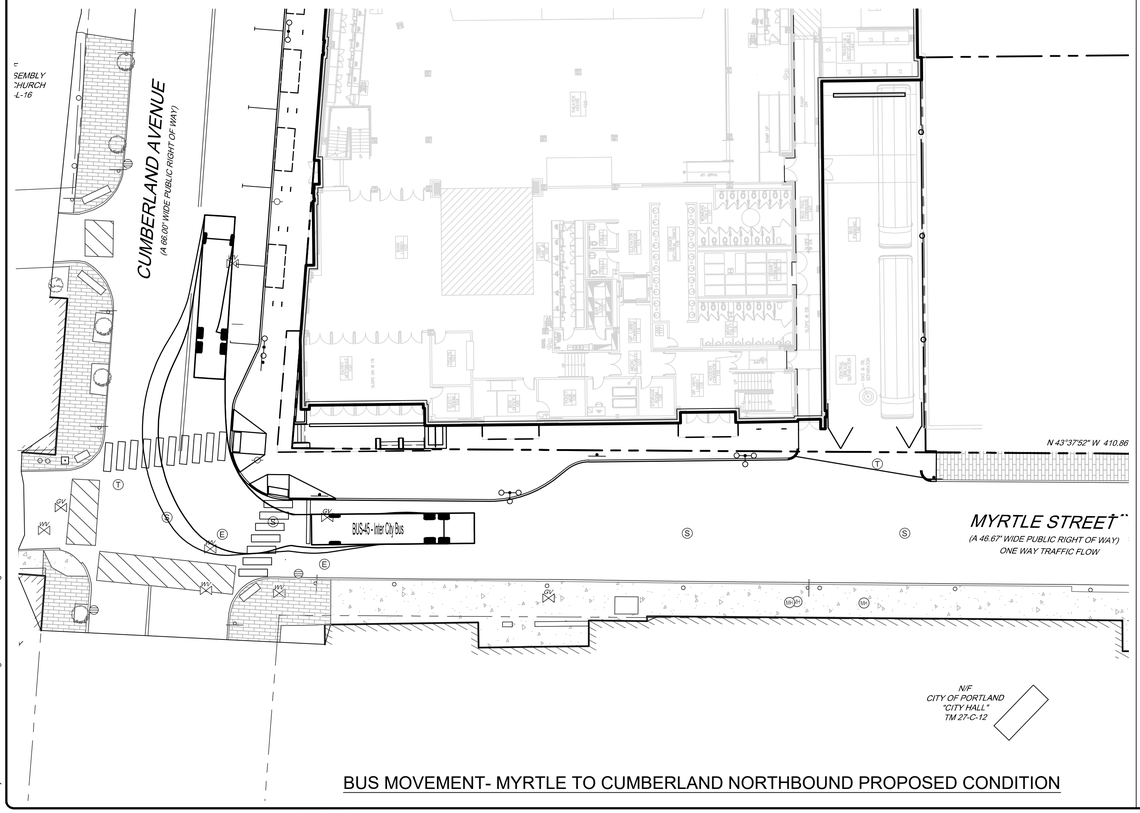
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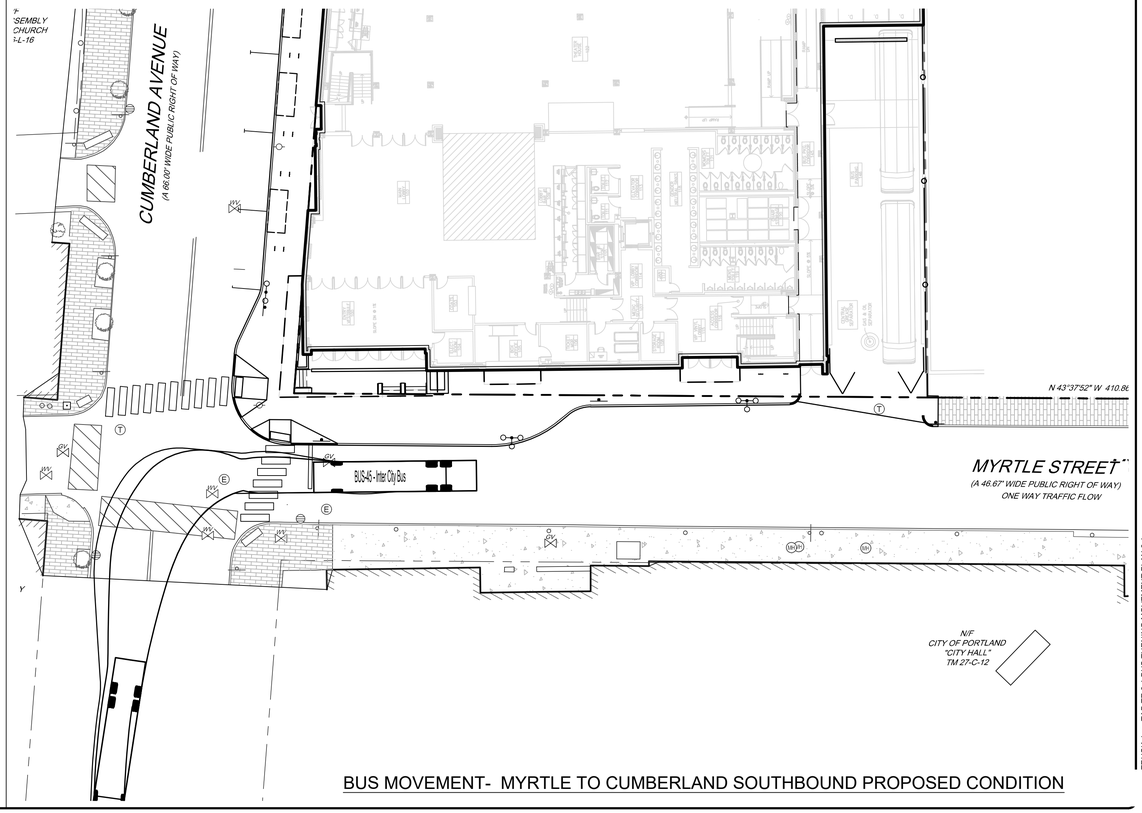

BUS MOVEMENT- MYRTLE TO CUMBERLAND NORTHBOUND EXISTING CONDITION




BUS MOVEMENT- MYRTLE TO CUMBERLAND SOUTHBOUND EXISTING CONDITION




BUS MOVEMENT- MYRTLE TO CUMBERLAND NORTHBOUND PROPOSED CONDITION




BUS MOVEMENT- MYRTLE TO CUMBERLAND SOUTHBOUND PROPOSED CONDITION

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

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South Portland, ME 04106
Tel. 207-200-2100

# VEHICLE TURNING MOVEMENT EXHIBIT 3.1

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
STREET
CITY, STATE Zip

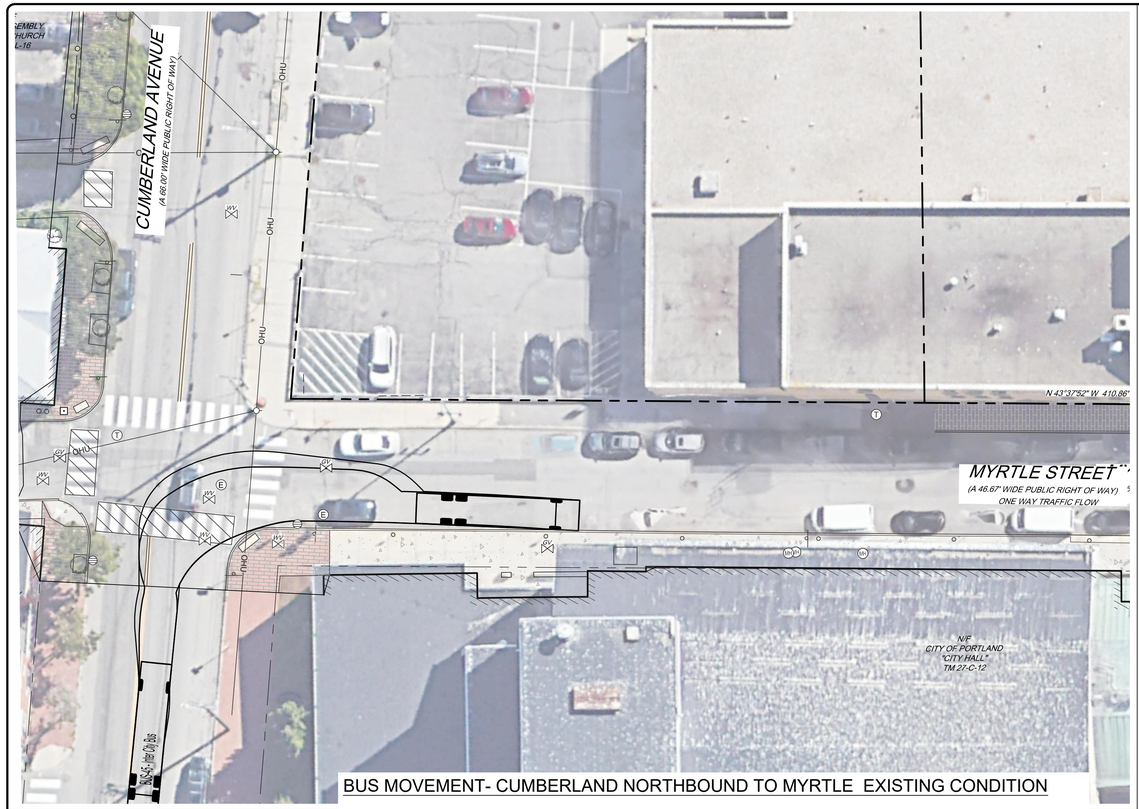
RECORD OWNER:
365 CONGRESS LLC
2700 TRANSIT ROAD
WEST SENECA, NY 14224

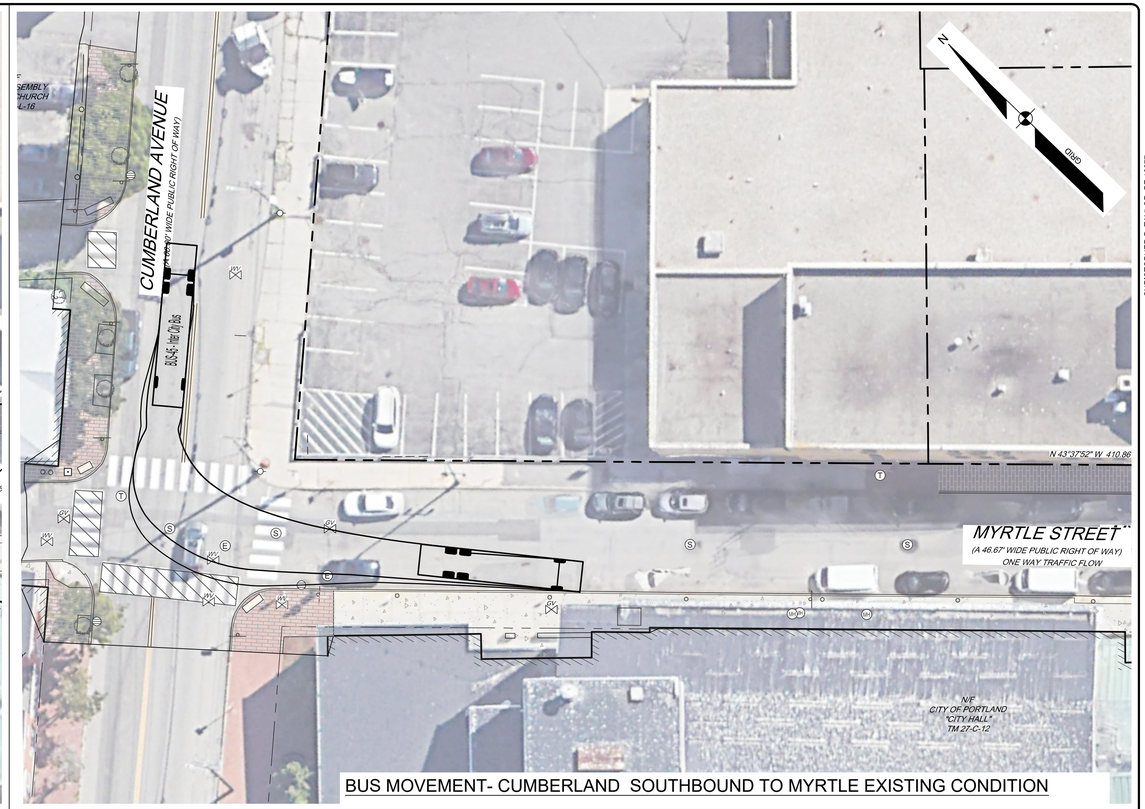
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| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

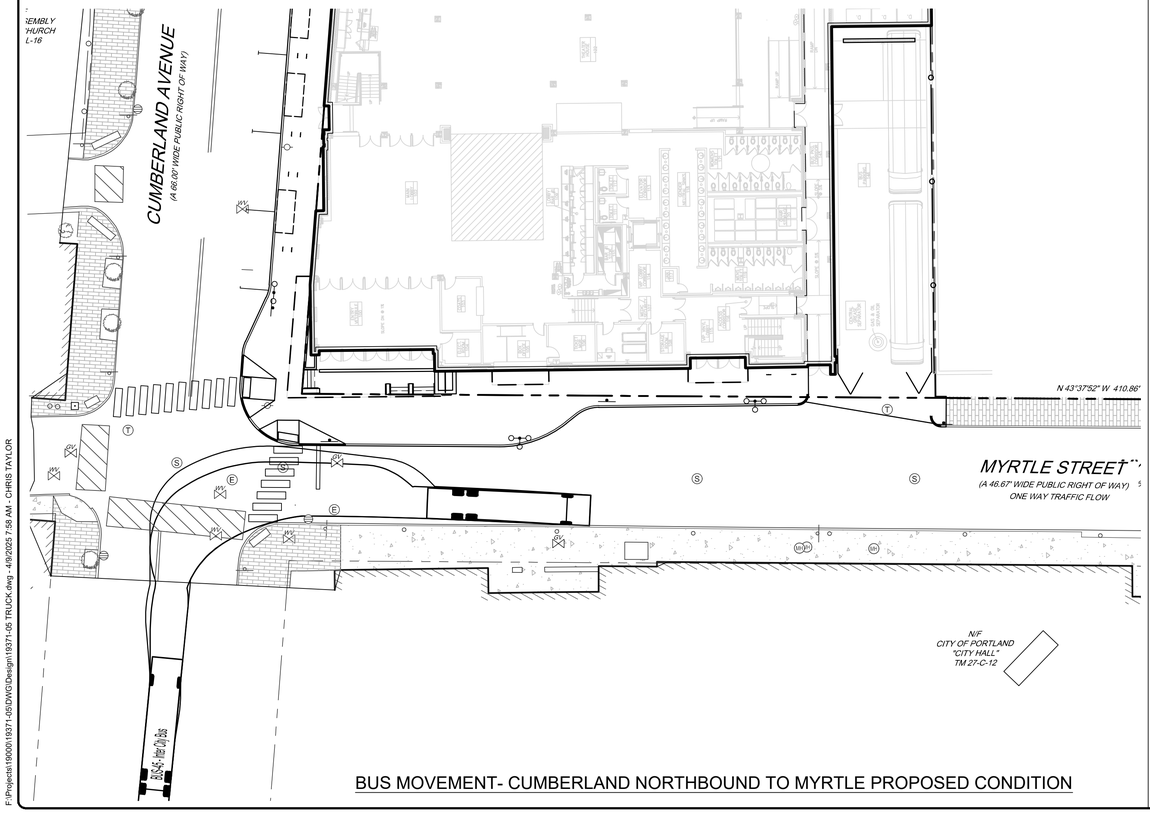
SHEET TE-3.1

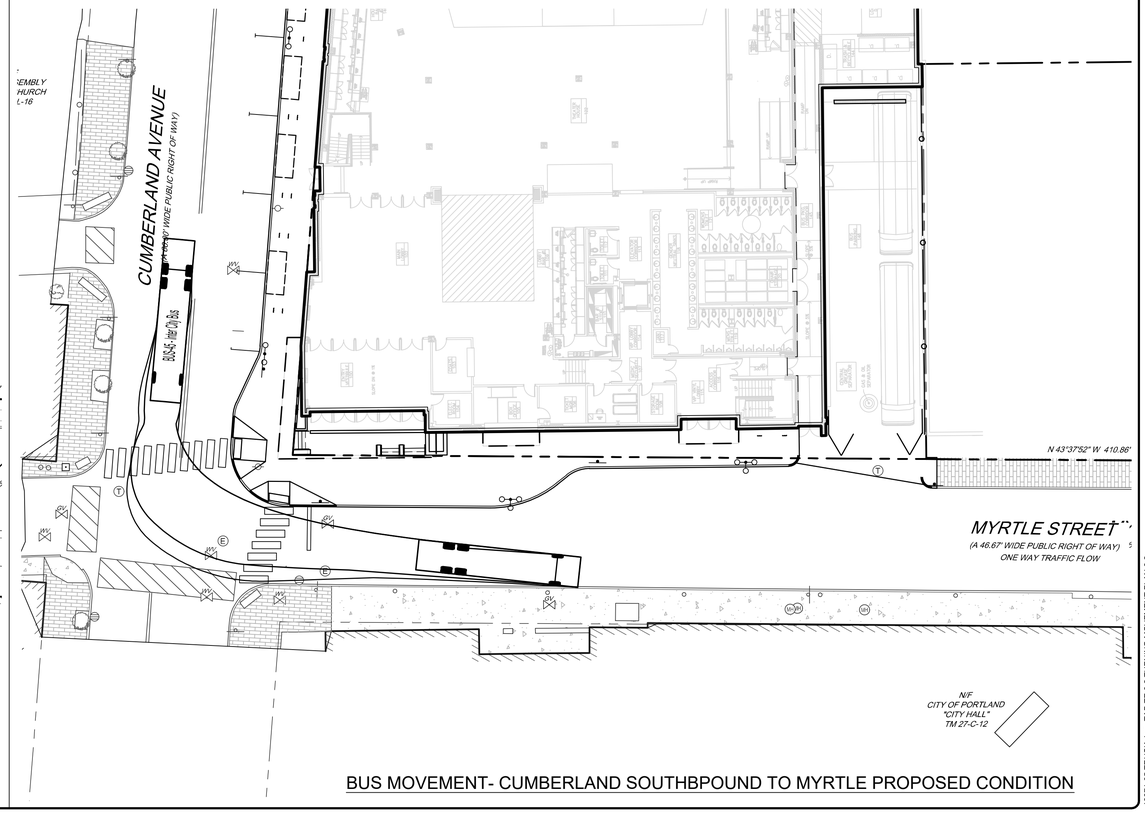
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TRUCK.dwg, TAB:TE-3.1 BUS TURNING MOVEMENT PLAN 3.1




NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

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South Portland, ME 04106
Tel. 207-200-2100

# VEHICLE TURNING MOVEMENT EXHIBIT 3.2

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
STREET
CITY, STATE Zip

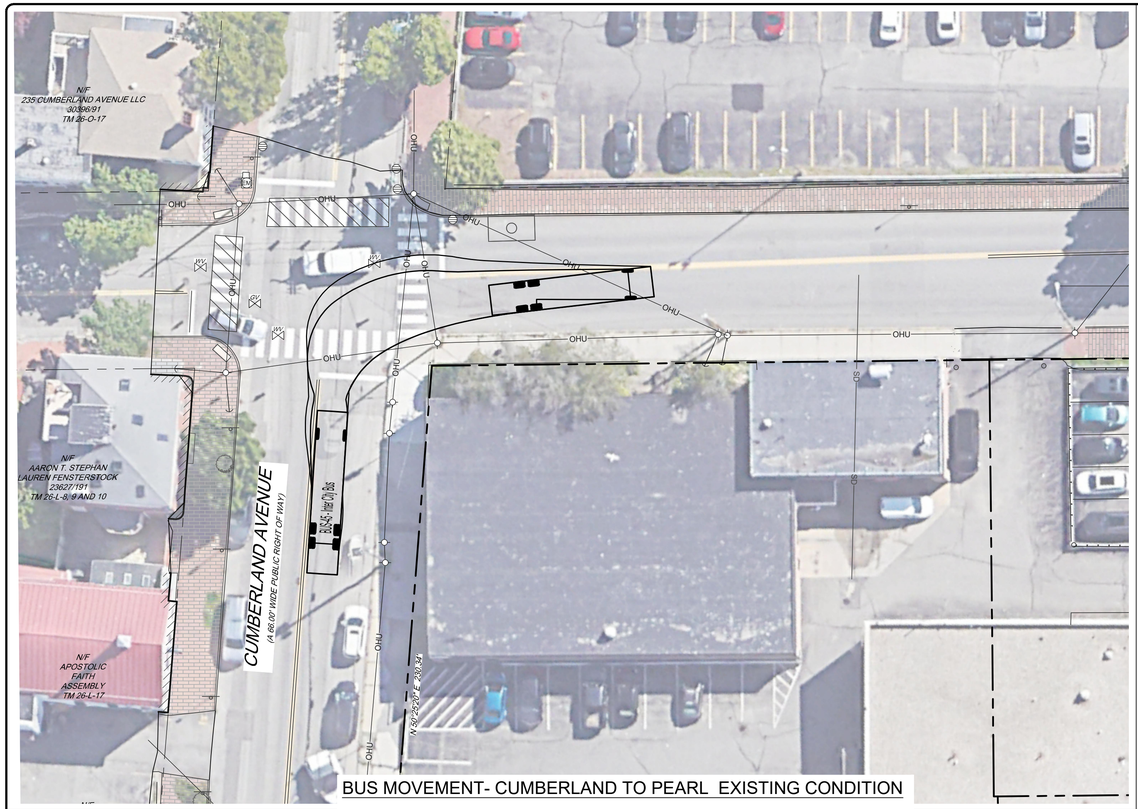
RECORD OWNER:
365 CONGRESS LLC
2700 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
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| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

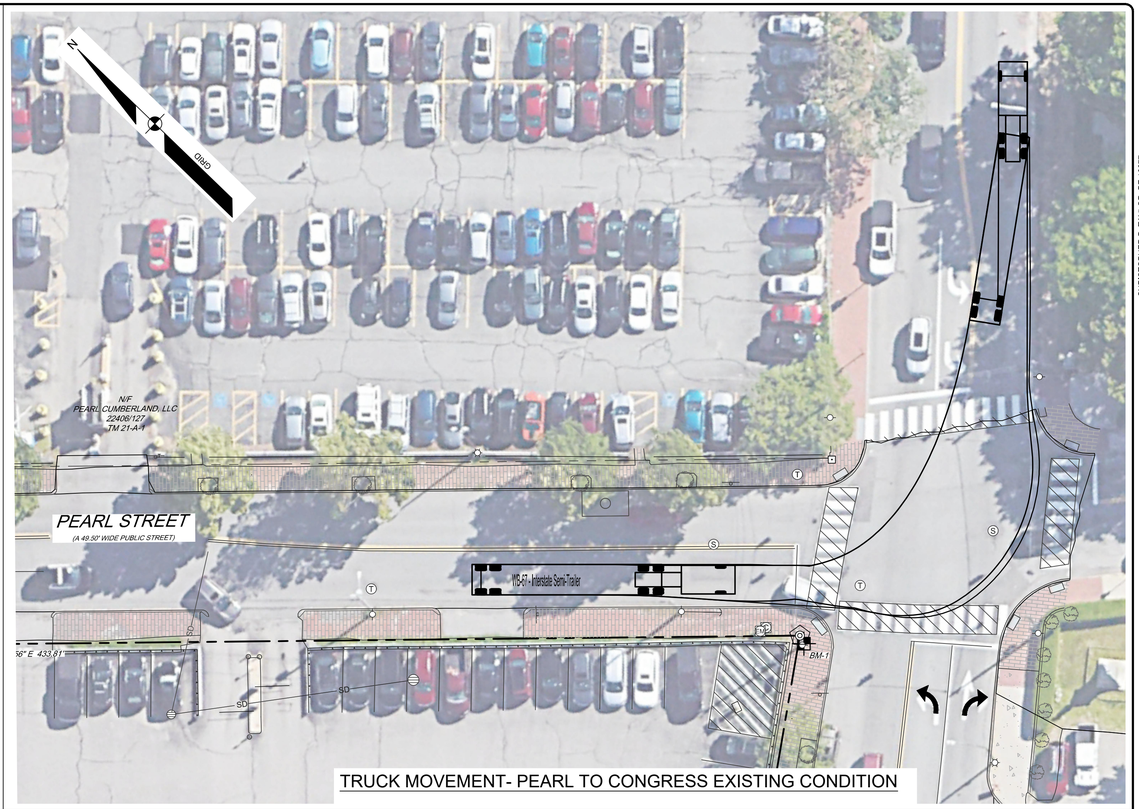
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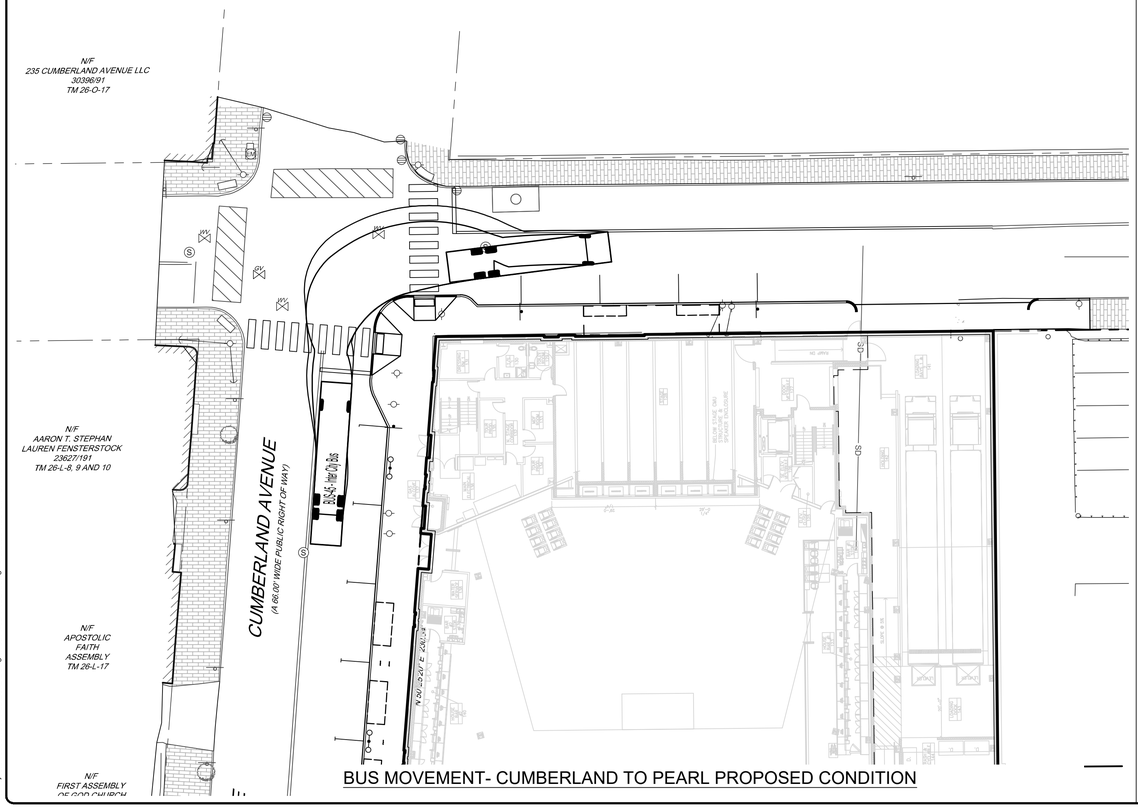
19371-05 TRUCK.dwg, TAB:TE-3.2 TURNING MOVEMENT PLAN 3.2




BUS MOVEMENT- CUMBERLAND TO PEARL EXISTING CONDITION




TRUCK MOVEMENT- PEARL TO CONGRESS EXISTING CONDITION




BUS MOVEMENT- CUMBERLAND TO PEARL PROPOSED CONDITION

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY: | DATE: | STATUS: |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

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Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# VEHICLE TURNING MOVEMENT EXHIBIT 4

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
STREET
CITY, STATE Zip

RECORD OWNER:
365 CONGRESS LLC
270 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET TE-4

19371-05 TRUCK.dwg, TAB:TE-4 TURNING MOVEMENT PLAN 4

F:\Projects\19000\19371-05\DWG\Design\19371-05 TRUCK.dwg - 4/9/2025 7:58 AM - CHRIS TAYLOR




# VIEW CORRIDOR - CUMBERLAND PROPOSED

W

PORTLAND MUSIC HALL
PORTLAND , MAINE

DAIQ ARCHITECTS

SEAL:

REVISIONS:

| | 12/18/24 | PLANNING SUB. |
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DAIQ PROJECT #: 24003
DRAWING TITLE:

**CUMBERLAND VIEW CORRIDOR**

SCALE: As Noted.
SHEET #:

X

SEBAGO TECHNICS

CIVIL ENGINEERING ▪ SURVEYING ▪ LANDSCAPE ARCHITECTURE

# City of Portland
# Traffic Movement Permit Application
# Sections 1-6

## Portland Music Hall
## Portland, Maine

Applicant:
Portland Music Holdings, LLC
325 N. Maple Drive
Beverly Hills, CA 90210

Prepared By:
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine 04106

April 21, 2025

# City of Portland Traffic Movement Permit Application
# Sections 1-6
# Portland Music Hall
# Portland, Maine

## Table of Contents

Traffic Movement Permit Application

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Abutters List and Map

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Section 2 – Traffic Accidents

Section 3 – Development Entrances and Exits

Section 4 – Title, Right, or Interest

Section 5 – Public or Private Rights-of-Way

Section 6 – Construction Schedule

## List of Appendices

Appendix A. MaineDOT Crash Data

Appendix B. Traffic Count Data

Appendix C. Previous Traffic Movement Permit

Appendix D. Parking Facilities Map

Appendix E. Existing Conditions and Site Plan

# Traffic Movement Permit Application

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: Portland Music Holdings, LLC

Address: 325 N. Maple Drive, Beverly Hills, CA 90210 Telephone: 207.885.4200

Name of local contact or agent: Derek Caldwell, PE, PTOE, Sebago Technics

Address: 75 John Roberts Rd - Suite 4A, South Portland, ME 04106 Telephone: 207.200.2100

Name and type of development: Portland Music Hall - Venue

Location of development including road, street, or nearest route number:

244 Cumberland Avenue

City/Town/Plantation: Portland, County: Cumberland, Tax Map # 27, Lot # D003

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 X

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?
No

Existing DEP or MDOT permit number (if applicable): N/A

Name(s) of DOT staff person(s) contacted concerning this application:

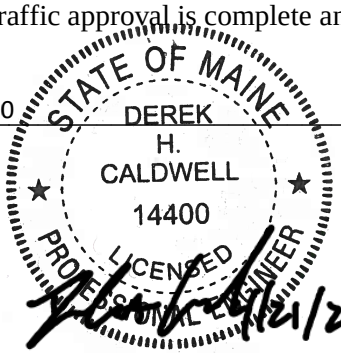
N/A - City Delegated Review

Name(s) of DOT staff person(s) present at the scoping meeting for 200+ applications:
N/A - City Delegated Review

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.: 14400




Name (print): Derek Caldwell, PE, PTOE

Date: 4/21/2025

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."

Christopher Taylor, PE
Applicant's Agent _____ 04/21/2025

Signature of applicant Date

# AGENT AUTHORIZATION

| | | | | | |
|---|---|---|---|---|---|
| **APPLICANT/ OWNER** | **Name** | Portland Music Holdings, LLC | | | |
| **PROPERTY DESCRIPTION** | **Physical Address** | 244 Cumberland Ave<br>Portland, ME | | **Map** | 27 |
| | | | | **Lot** | D003 |
| **APPLICANT'S AGENT INFORMATION** | **Name** | Christopher Taylor, P.E. | | | |
| | **Phone** | 207-200-2092 | **Business Name & Mailing Address** | 75 John Roberts Road<br>Suite 4A<br>South Portland, Maine 04106 | |
| | **Fax** | | | | |
| | **Email** | ctaylor@sebagotechnics.com | | | |

Todd Goldenfarb (Apr 19, 2025 16:15 EDT)
APPLICANT SIGNATURE

19/04/2025
DATE

Todd Goldenfarb
PLEASE TYPE OR PRINT NAME HERE

CO APPLICANT SIGNATURE (If applicable)

DATE

PLEASE TYPE OR PRINT NAME HERE

APPLICANT'S AGENT SIGNATURE

04/17/2025
DATE

Christopher Taylor, PE
PLEASE TYPE OR PRINT NAME HERE

## Notice of Intent to File

NOTICE OF INTENT TO FILE
Traffic Movement Permit

Please take notice that

*Portland Music Holdings, LLC*
*325 N. Maple Drive*
*Beverly Hills, California 90210*

is intending to file a Traffic Movement Permit application with the City of Portland pursuant to the provisions of 23 M.R.S.A. § 704 - A on or about

*April 21, 2025*

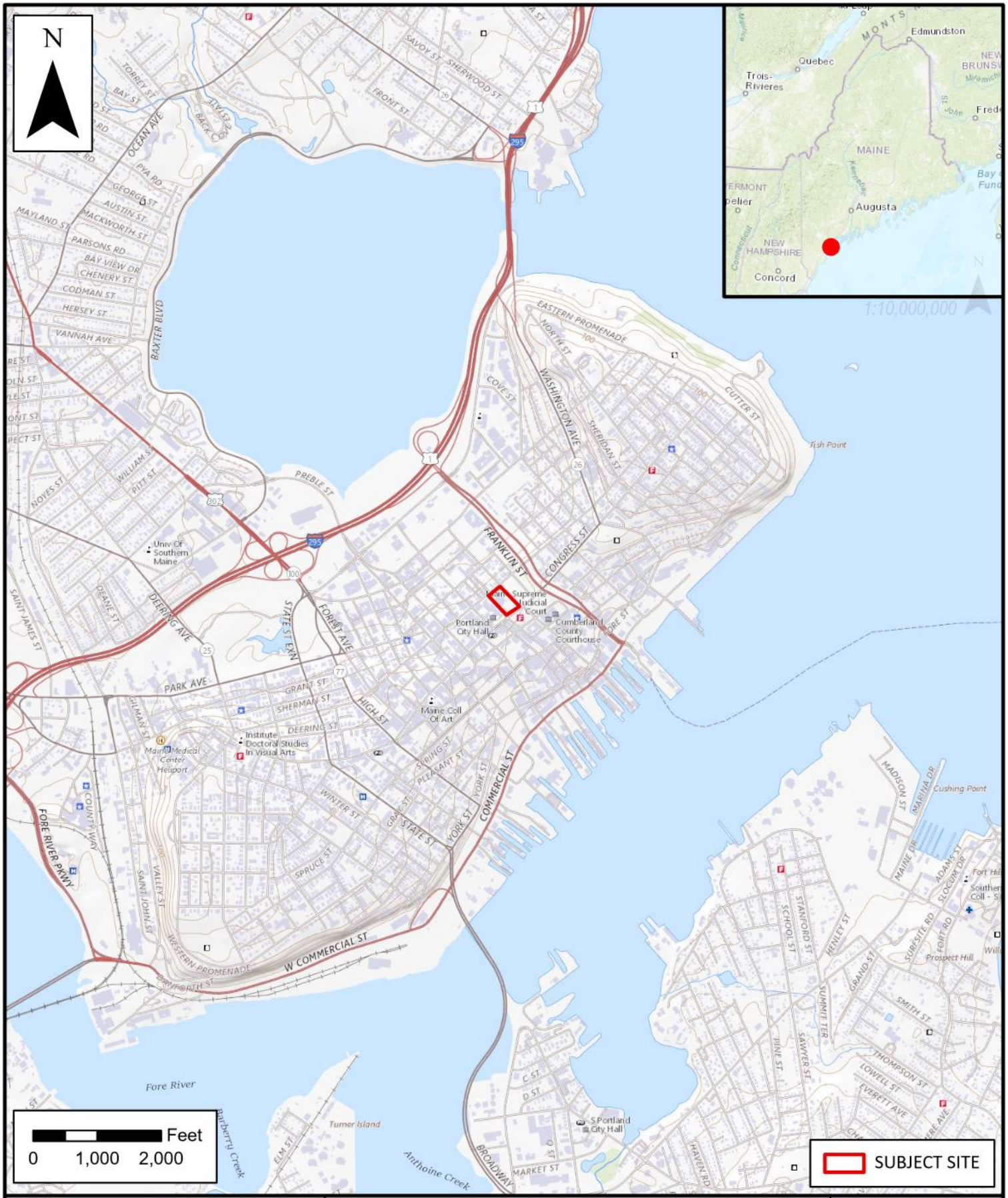
The application is for a 63,390 square foot music venue with an approximate 1,976 seated capacity and an extended floor space capacity of 3,310. The development is projected to generate a total of 334 vehicular trips in the PM Peak Hour of the Adjacent Street (5-6PM) distributed to available parking locations in the Portland Downtown area and a total of 1,140 vehicular trips during the peak departure hour of a maximum capacity event. Construction of the development is currently scheduled to start in late 2025 with occupancy scheduled for spring 2027.

The project is located at 244 Cumberland Avenue in Portland, Maine.

A request for a public hearing must be received by the City, in writing, no later than 20 days after the application is found by the City to be complete and is accepted for processing. Public comment on the application will be accepted throughout the processing of the application.

Written public comments concerning congestion or safety only, may be sent to the City of Portland, Planning and Urban Development Department, 389 Congress Street, Portland, ME 04101.

## Location Map




SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# LOCATION MAP

SCALE: 1:24,000

DATE: 9/16/2022

LOCATION:
244 CUMBERLAND AVENUE
PORTLAND, ME

INFORMATION:
MAINE GEOLIBRARY
USGS QUADRANGLE

## Abutters List and Map

19371-05
385 Congress Street Portland
Abutters List

| Map-Lot | Grantee | Mailing 1 | City | State | Zip |
|---|---|---|---|---|---|
| 021 A001001 | PEARL CUMBERLAND LLC | ONE CITY CENTER 4TH FLOOR | PORTLAND | ME | 04101 |
| 026 H006001 | AVESTA UNITY VILLAGE LP | 307 CUMBERLAND AVE | PORTLAND | ME | 04101 |
| 026 K008001 | WARDS CAPITAL LLC | 973 FOREST AVE STE 2 | PORTLAND | ME | 04103 |
| 026 L008001 | COUILLARD BRUCE R JR & LAURA T WITHERS JTS | 110 MARGINAL WAY # 241 | PORTLAND | ME | 04101 |
| 026 L008002 | BURKE LEAH FRANCES | 167 YORK ST # 2 | PORTLAND | ME | 04101 |
| 026 L008003 | HENRY ANGELA F & LOUIS A CHRISTEN | 239 CUMBERLAND AVE | PORTLAND | ME | 04101 |
| 026 L008004 | STEPHAN AARON T & LAUREN FENSTERSTOCK JTS | 142 PEARL ST | PORTLAND | ME | 04101 |
| 026 L016001 | FIRST ASSEMBLY OF GOD CHURCH | 243 CUMBERLAND AVE | PORTLAND | ME | 04101 |
| 026 L017001 | APOSTOLIC FAITH ASSEMBLY | 331 CONGRESS ST | PORTLAND | ME | 04101 |
| 026 O017001 | 235 CUMBERLAND AVENUE LLC | 225 CUMBERLAND AVE | PORTLAND | ME | 04101 |
| 027 C012001 | CITY OF PORTLAND | 389 CONGRESS ST | PORTLAND | ME | 04101 |
| 027 D001001 | FATHOM CONGRESS LLC | 80 EXCHANGE ST STE 400 | PORTLAND | ME | 04101 |
| 027 D002001 | 385 CONGRESS LLC | 2730 TRANSIT RD | WEST SENECA | NY | 14224 |
| 028 A001001 | CITY OF PORTLAND | 389 CONGRESS ST | PORTLAND | ME | 04101 |
| 028 B001001 | CITY OF PORTLAND | 389 CONGRESS ST | PORTLAND | ME | 04101 |
| 032 C001001 | HTLV PORTLAND LLC | 101 CALIFORNIA ST STE 980 | SAN FRANCISCO | CA | 94111 |

City of Portland

27

Tax Map

1' = 50 feet

PREBLE ST

ELM ST

CEDAR ST

CUMBERLAND AVE

STONE ST

CHAPEL ST

CHESTNUT ST

MYRTLE ST

CONGRESS ST

CENTER ST

MONUMENT SQ

LANCASTER LN

MONUMENT WAY

TEMPLE ST

FEDERAL ST

EXCHANGE ST

PEARL ST

FEDERAL ST W

FREE ST

CITY CENTER

CROSS ST N

MARKET ST

20230623

# Section 1 – Site and Traffic Information

A. Site Plan

Portland Music Holdings, LLC proposes redeveloping the approximately 0.45-acre parcel known as Map 27 Lot D003 in Portland, Maine. The parcel was recently subdivided from a greater lot into three (3) separate lots as part of the 385 Congress Street master plan development. The overall site is bounded by Congress Street to the south, Myrtle Street to the west, Cumberland Avenue to the north and Pearl Street to the east. The site is presently developed consisting of two buildings and a large area of paved surface parking. The site follows the natural topography of the surrounding roadways, sloping in a general northerly direction downward from Congress Street to Cumberland Avenue.

The previous mixed-use 385 Congress Street project development was granted a Traffic Movement Permit (TMP) as part of the Master Development Plan approval dated February 24, 2023. A new TMP is being pursued as part of the Site Plan review for the Portland Music Hall, given the change in land use on Lot 3. A copy of the previous TMP is included in Appendix C.

The former site currently has a total of six curb cuts: one (1) on Congress Street, two (2) on Cumberland Avenue and three (3) on Pearl Street.

Existing sidewalk is present adjacent to the site along all four roadway frontages which will be reconstructed along the entirety of the site frontage in conjunction with the proposed development and development on the adjacent lots. On-street parking is present along the majority of Congress Street and Myrtle Street frontages and partially along the Cumberland Street frontage. There is no on-street parking on Pearl Street.

An existing conditions and site plan are included with this application.

B. Existing and Proposed Uses

**Existing**

The site is currently developed consisting of two buildings formerly used by the Portland Press Herald printing operations. The remaining areas of the site are paved parking areas currently operated as paid private parking.

**Proposed**

The proposed development was originally granted a TMP as part of the Master Development Plan approval dated February 24, 2023. This approval was for the following proposed buildout:

- Lot 1 – 156 Room Hotel and 9 Residential Units
- Lot 2 – 110 Residential Units and 4,000 square feet (SF) of ground floor retail
- Lot 3 – 179 Residential Units and 6,900 SF of ground floor retail

The project now proposes to develop Lot 3 as a 63,390 SF music hall with an approximate fixed 1,976 seated capacity and an extended floor space capacity of 3,310. This would fully supplant the 179 Residential Units, and 6,900 SF of commercial/retail space previously proposed as part of the approved Master Development Plan. The proposed development program for Lots 1 and 2 have not changed.

Table 1 outlines the revised plan for the overall 385 Congress Street Development. It is our understanding the City has requested this Application to include only the revised Lot 3 development, whereas Lots 1 and 2 will remain under the existing TMP.

**Table 1 – Revised 385 Congress Street Development Program Summary**

| *Building* | *Multifamily Units* | *Hotel Rooms* | *Commercial Square Footage* | *Music Venue Square Footage* |
|---|---|---|---|---|
| **Myrtle Street Tower (Lot 1)** | 9 | 156 | 660 SF | - |
| **Pearl Street Tower (Lot 2)** | 110 | - | 4,000 SF | - |
| **Music Hall (Lot 3)** | - | - | - | 63,390 SF |
| **TOTAL** | **119** | **156** | **4,660 SF** | **63,390 SF** |

No parking on-site is proposed for the music hall, with the exception of an off-street area for bus and truck loading with two accesses, one on Pearl Street and another on Myrtle Street. This loading area is designed to completely contain the vehicles with no blockage of the adjacent streets once parked. Temporary traffic control to stop traffic on these streets may be required when a bus or truck is actively entering or exiting the loading area.

C. Regional Mapping

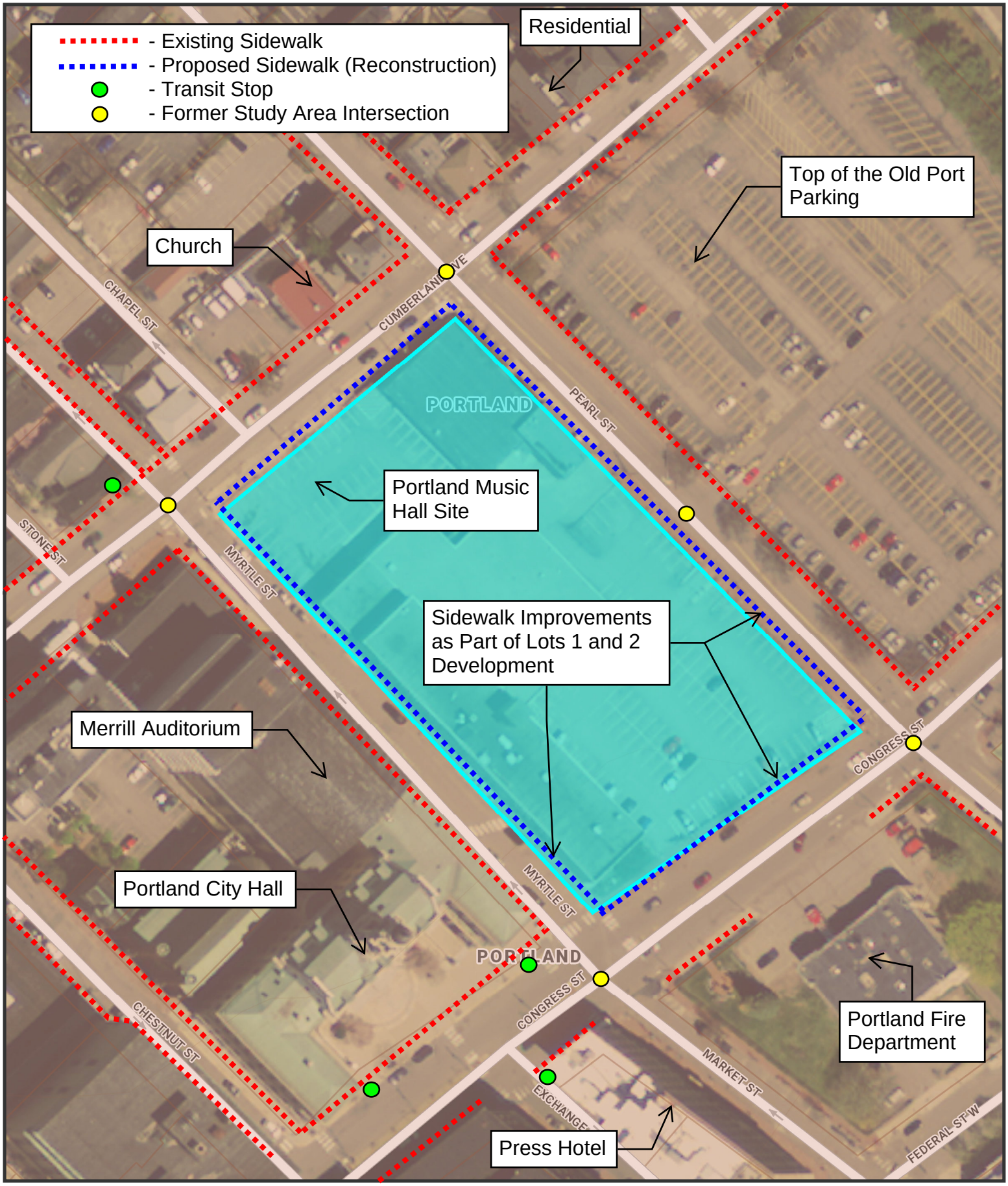
Lot 3 is bounded by Lots 1 and 2 as well as Congress Street to the south, Myrtle Street to the west, Cumberland Avenue to the north and Pearl Street to the east. In the immediate vicinity of the site there are several notable existing uses. Directly across Congress Street from the development is the City of Portland Central Fire Station. Portland City Hall and Merrill Auditorium are adjacent to the site across Myrtle Street. Adjacent to the site across Cumberland Avenue are several multi-family residences as well as a church. Finally, adjacent to the site across Pearl Street is a large private parking operation, known as “Top of the Old Port Parking."

The site is bordered by four existing intersections:

1. Myrtle Street at Cumberland Avenue (unsignalized)
2. Pearl Street at Cumberland Avenue (signalized)
3. Congress Street at Pearl Street (signalized)
4. Congress Street at Myrtle Street (unsignalized)

A map of existing pedestrian, bicycle, and transit generators and facilities within vicinity of the site is included within this Application.

# REGIONAL 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.

0.02 Miles

1 inch = 0.02 miles

Date: 4/16/2025
Time: 10:43:22 AM

D. Proposed Uses in the Vicinity of the Development

Contact was made with City of Portland officials to determine if any proposed but unbuilt uses in the vicinity of the development should be included in the background traffic volumes for this development's traffic analysis. At this time, no other developments have been identified. Projects will be reevaluated at the project's Scoping Meeting with the City of Portland.

Since this Application no longer include the other approved development on Lots 1 and 2, they will be considered part of other development background traffic.

E. Trip Generation

Typically, trip generation is completed utilizing the 11th Edition of the Institute of Transportation Engineers (ITE), *Trip Generation Manual.* As part of the original TMP approvals, the master plan development was estimated to generate a total of 286 trips and 287 trips in the AM and PM peak hours of the generator, respectively.

Trip generation for the proposed music hall was calculated using projected operational data as no ITE land use code was deemed applicable. The following data was utilized to estimate trip generation for the music hall portion of the revised development:

- Types and schedule of events
- Attendance of events (both employees and event attendees)
- Mode of transportation and vehicle occupancy

The 63,390 SF Portland Music Hall will have a maximum capacity of approximately 3,310 people between the ground, Mezzanine, and the second level hosting a variety of events on a year-round basis. This capacity includes standing room only space beyond the approximate seated capacity of 1,976. To reiterate, no parking is proposed on-site as part of the project.

The venue operators expect that a total of 250 employees will work when an at capacity event occurs. It is expected that a more typical average event would represent approximately 70% capacity and have a slightly reduced staff level of 175 employees.

For evaluating traffic impact, the anticipated operations of a peak (maximum capacity) event were reviewed. Given the nature of the site, classified by the operator as a small market venue with a low percentage of people walking and biking to the event, it was assumed that most traffic to the venue would be vehicle trips.

To establish the expected modal splits, assuming a majority of vehicle trips, the 2018 City of Portland *Impact Fee Study* was referenced. This study provided a modal trip breakdown for non-residential land uses within the of 82% vehicle, 2% transit, and 16% non-motorized (bike/pedestrian) one-way trips. These mode share rates were then applied to the event capacity of 3,310 attendees and 250 employees, to estimate the development person trips summarized in Table 2.

**Table 2 – Music Hall Mode of Travel One-Way Person Trips**

| *Mode* | *Mode Share* | *Attendee Trips* | *Employee Trips* |
|---|---|---|---|
| **Vehicle** | 82% | 2,714 | 205 |
| **Transit** | 2% | 66 | 5 |
| **Walk/Bike** | 16% | 530 | 40 |
| **Total** | **100%** | **3,310** | **250** |

As seen in Table 2, a peak (maximum capacity) event is estimated to generate 2,714 person trips by attendees and 205 person trips by employees that would use vehicles to travel to/from the site and surrounding area.

To determine the number of vehicular trips to the site, an occupancy rate of 2.2 persons per vehicle was assumed for attendee trips. The Federal Highway Administration (FHWA) states that "A discrete/recurring event at a permanent venue that occurs on the weekend will likely have a higher vehicle occupancy factor due to families and groups of tailgaters. A vehicle occupancy factor of 2.5 persons per vehicle represents a common assumption, however for forecasting purposes, practitioners should consider a range of factors from 2.2 to 2.8 depending on local conditions." A rate of 1.0 persons per vehicle was utilized per employee trip. After applying these rates, Table 3 summarizes the number of vehicles generated to the venue by a peak event.

**Table 3 – Music Hall Event Vehicular Trips**

| *Attendee Trips* | *Employee Trips* | *Total Vehicles* |
|---|---|---|
| 1,234 | 205 | 1,439 |

As seen in Table 3, there are an estimated 1,439 vehicle round trips generated by the music hall for a peak (maximum capacity) event. The proposed trip generation was distributed hourly based on the anticipated event schedule provided by the operator. The majority of shows at the music hall would start at 8:00 PM with doors opening one (1) hour prior at 7:00 PM. On a limited basis shows may have slightly earlier start times. For the purpose of this application, the presented trip distribution and assignment assumes the typical 8:00 PM start time.

The most frequent event schedule is expected to follow the following schedule, with a start time of 8:00 PM:

- Production staff and stagehands (approximately 15% of the total employees) arrive in the morning for an approximate shift of 6:00 AM to 2:00 AM. The remaining event staff (85%) arrive between 5:00 PM and 7:00 PM.
- Doors open at 7:00 PM. Shows typically start at 8:00 PM and conclude around 11:00 PM.
- It was estimated that 20% of guest traffic would travel to the area two hours before door opening, 60% of traffic would arrive during the hour before door opening, and the remaining 20% would arrive after doors had opened. A study done for the MGM music hall in Boston, Massachusetts, referenced that that a survey done around Fenway Park and the House of Blues 10% of guest traffic would travel to the area in advance of the scheduled event. 20% was selected for the Portland area to be conservative.
- It was assumed that most guest traffic would exit the venue immediately upon release, with 10% during both the hour preceding and succeeding the event ending. Most non-production staff employees (75%) will exit between 11:00 PM and 12:00 AM, with a portion (10%) exiting after midnight. The production staff (15%) would leave around 2:00 AM.

Utilizing the above information, the hourly trip generation for the music hall is shown in Table 4.

**Table 4 – Music Hall Hourly Trip Generation**

| *Time* | *Time* | *Employee Trips* | | | | *Guest Trips* | | | | *Total* |
|---|---|---|---|---|---|---|---|---|---|---|
| *Start* | *End* | *Enter %* | *Enter* | *Exit %* | *Exiting* | *Enter %* | *Enter* | *Exit %* | *Exit* | *Trips* |
| 5:00 AM | 6:00 AM | 15% | 31 | 0% | 0 | 0% | 0 | 0% | 0 | 31 |
| 6:00 AM | 7:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 7:00 AM | 8:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 8:00 AM | 9:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 9:00 AM | 10:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 3:00 PM | 4:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 4:00 PM | 5:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| **5:00 PM** | **6:00 PM** | **42.5%** | **87** | **0%** | **0** | **20%** | **247** | **0%** | **0** | **334** |
| 6:00 PM | 7:00 PM | 42.5% | 87 | 0% | 0 | 60% | 740 | 0% | 0 | 827 |
| 7:00 PM | 8:00 PM | 0% | 0 | 0% | 0 | 20% | 247 | 0% | 0 | 247 |
| 8:00 PM | 9:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 9:00 PM | 10:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 10:00 PM | 11:00 PM | 0% | 0 | 0% | 0 | 0% | 0 | 10% | 123 | 123 |
| **11:00 PM** | **12:00 AM** | **0%** | **0** | **75%** | **153** | **0%** | **0** | **80%** | **987** | **1140** |
| 12:00 AM | 1:00 AM | 0% | 0 | 10% | 21 | 0% | 0 | 10% | 124 | 145 |
| 1:00 AM | 2:00 AM | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0 |
| 2:00 AM | 3:00 AM | 0% | 0 | 15% | 31 | 0% | 0 | 0% | 0 | 31 |
| | **TOTAL** | **100%** | **205** | **100%** | **205** | **100%** | **1234** | **100%** | **1234** | **2878** |

Based on the previous table, the estimated peak hour vehicular trip generation for the music hall is summarized in Table 5.

**Table 5 – Music Hall Vehicular Trip Generation**

| *Time Period* | *Trips* | *Entering* | *Exiting* |
|---|---|---|---|
| **AM Peak Hour of Adjacent Street (7 – 9 AM)** | N/A* | N/A* | N/A* |
| **AM Peak Hour of Generator (5 – 6 AM)** | 31 | 31 | N/A* |
| **PM Peak Hour of Adjacent Street (4 – 6 PM)** | 334 | 334 | N/A* |
| **PM Peak Hour of Generator (11 PM – 12 AM)** | 1,140 | N/A* | 1,140 |

**Negligible trip generation*

As seen in Table 5, the Music Hall is estimated to generate 31 trips in the AM peak hour of the generator, and 1,140 trips during the PM peak hour of the Generator during a maximum capacity held event. For analysis, and trip assignments discussed in the subsequent sections, the PM peak hour of the adjacent street was utilized including 334 entering trips in the PM peak hour.

F. Trip Distribution

Given no on-site parking is required by the land use ordinance or is proposed, all vehicular traffic for employees or for attendees who arrive by private vehicle, will be destined for public and private parking options within the Portland downtown area. A map of available off-street parking facilities, including garages and lots, identifying the number of total spaces within 4/10 of a mile by a direct route to the site is included in Appendix D. These facilities were identified in the *March 2025 City of Portland Parking Division Annual Parking Survey*. From the identified facilities in the survey, five lots/garages were projected to be the primary parking destinations for the proposed music hall. These facilities were selected based on distance to the venue, current hours of operation, & parking capacity as shown in Table 6. Other locations identified in the parking survey were not considered primary parking destinations as the distance to the venue or limited operating hours would not present as convenient as an option as the five assumed for this Application. Additional public on-street and private off-street parking options, not identified in the City survey, are also present.

**Table 6 – Primary Parking Options**

| *Parking Facility* | *# of Spaces* | *Hour of Operation* | *Walking Distance from Site* |
|---|---|---|---|
| **Top of the Old Port Surface Lot** | 540 | Open 24hrs | 0.1 Miles |
| **Temple Street Parking Garage*** | 620 | Closes 12AM | 0.2 Miles |
| **Cumberland County Parking Garage** | 328 | Open 24hrs | 0.3 Miles |
| **Custom House Parking Garage*** | 761 | Closes 12AM | 0.4 Miles |
| **One City Center Parking Garage** | 600 | Open 24hrs | 0.4 Miles |

**Preliminary parking agreements between event operator and parking facility.*

The operator is executing agreements with the Temple Street and Custom House parking garage owner to provide parking incentives for the venue operator which will be advertised through the venue's "Know before you go" program to inform visitors of preferred parking locations, discounts and operating hours. This informed a larger assumed distribution to those two garages.

The projected distribution of vehicles to each of these locations with the corresponding number of entering trips in the PM Peak Hour of the adjacent street (5:00 PM-6:00PM) is shown in Table 7. Also listed is the total number of vehicles entering during the assumed arrival period for an event and an illustration of the percentage of the overall capacity for each facility the entering trips represent.

**Table 7 – Parking Facility Trip Distribution**

| *Parking Facility* | *# of Spaces* | *Trip Distribution* | *PM Peak Hour Trips (5 – 6 PM)* | *Total Entering Trips (Day of Event)* | *Music Hall Portion of Facility's Capacity (Day of Event)* |
|---|---|---|---|---|---|
| **Top of the Old Port Surface Lot** | 540 | 15% | 50 | 216 | 40% |
| **Temple Street Parking Garage*** | 620 | 30% | 100 | 432 | 70% |
| **Cumberland County Parking Garage** | 328 | 10% | 34 | 143 | 44% |
| **Custom House Parking Garage*** | 761 | 30% | 100 | 432 | 57% |
| **One City Center Parking Garage** | 600 | 15% | 50 | 216 | 36% |
| **TOTAL** | **2849** | **100%** | **334** | **1439** | |

**Preliminary parking agreements between event operator and parking facility.*

G. Trip Assignment

Trip assignment for this development would be based on the routing of vehicles from an origin area to one of the identified parking facilities.

The proposed development trip origins, retained from the previous TMP Application, is based upon published MaineDOT AADT data and local traffic patterns from the collected count data. The following primary origins are proposed:

- 25% to/from Congress Street to the west. This would encompass traffic from points west and south.
- 20% to/from Cumberland Avenue to the west. This would encompass traffic from points west and north.
- 17.5% to/from Franklin Street to the north. This would encompass traffic from I-295 and points north.
- 17.5% to/from Peal Street to the north. This would also encompass traffic from I-295 and points north.
- 10% to/from Pearl Street to the south. This would encompass traffic from points west and south.
- 10% to/from Congress Street to the east. This would encompass traffic from points east and north.

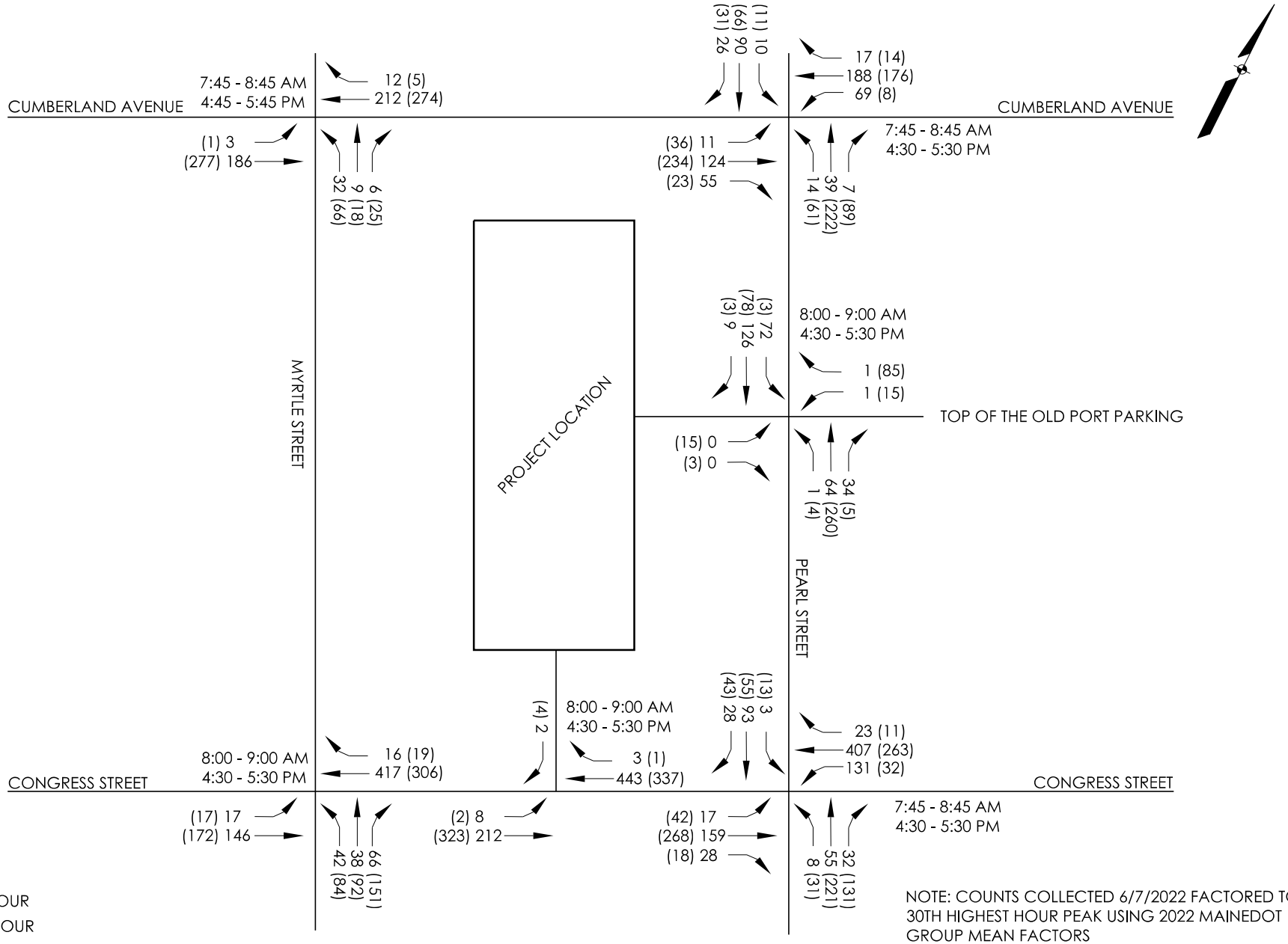
For reference, Turning Movement Counts (TMCs) were previously collected as part of the former Section 7 – Traffic Study on Tuesday, June 7, 2022 during the AM (7:00 AM – 9:00 AM) and PM (3:00 PM – 6:00 PM) Peak Hour periods at the following intersections around the site.

- Cumberland Avenue at Myrtle Street
- Cumberland Avenue at Pearl Street
- Congress Street at Myrtle Street
- Congress Street at Pearl Street
- Pearl Street at The Top of the Old Port Parking

The counts were factored to the 30th highest hour volumes, the volumes that are utilized for traffic analysis purposes as they represent peak seasonal conditions. The study area roadway network was classified by MaineDOT as a Group I – urban roadway. Data for this classification was utilized from the 2022 MaineDOT Weekly Group Mean Factors resulting in a rate of 0.89/0.87 = 1.02.

Figure 1 shows the 30th Highest Hour adjusted 2022 existing Peak Hour traffic volumes in vicinity of the site.

The project-generated trips were assigned to the roadway network based on the distributions to the parking facilities listed in Sections 1F and 1G. The resulting overall trip assignments for the PM peak hour period the day of a maximum capacity event, utilizing the aforementioned methodology, are shown in Figures 2 through 6. A summary of total trips in vicinity of the site (the former study area of the previous TMP Application) during the PM peak hour of the adjacent street is shown in Figure 7.




SEBAGO TECHNICS
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75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# 2022 EXISTING COUNT DATA

OF: PORTLAND MUSIC HALL

SCALE: N.T.S

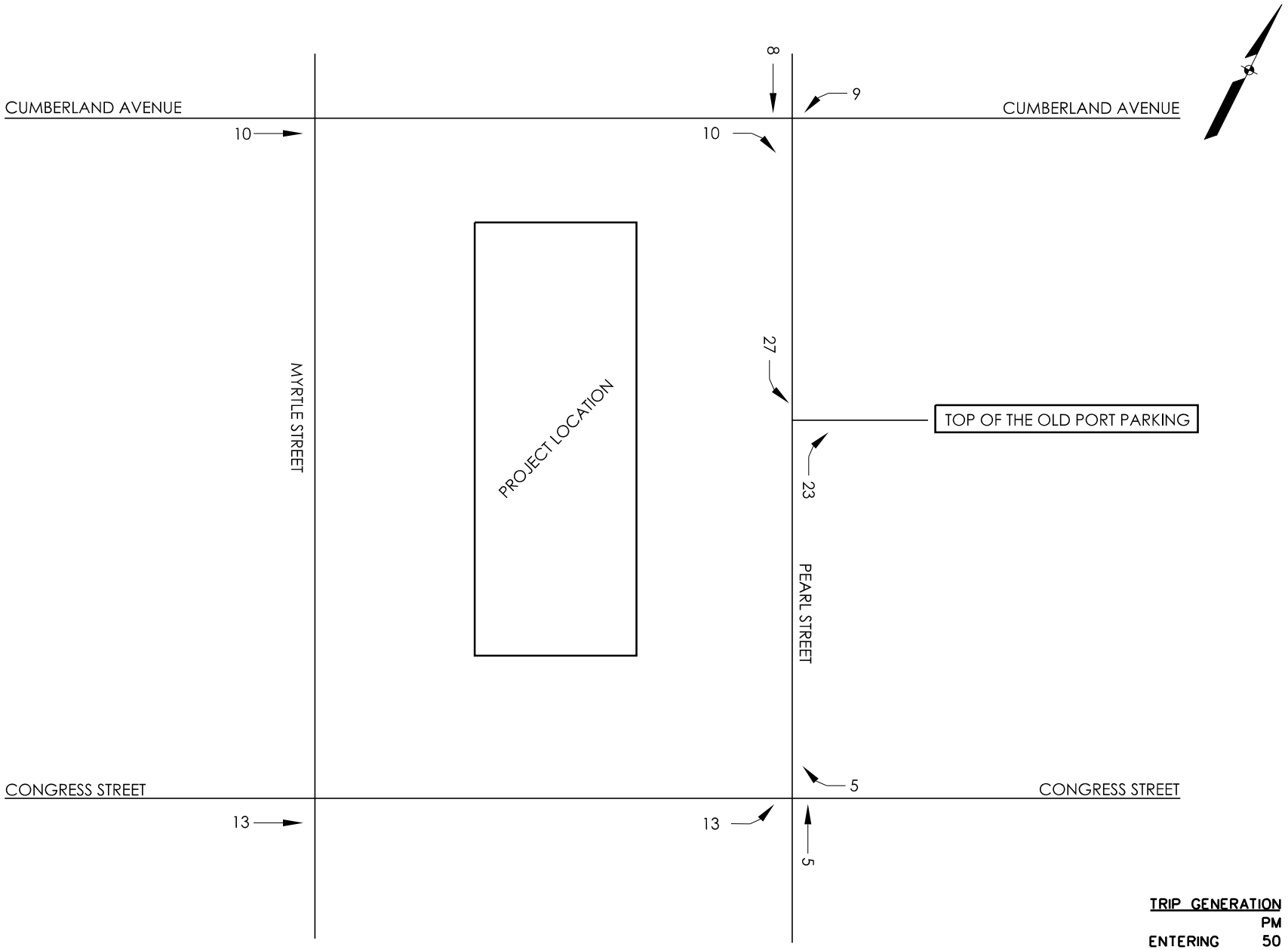
DATE: 4/18/25

LOCATION:
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR: PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

SHEET: 1 OF 7

...\19371-05 Traffic Diagrams.dgn




**TRIP GENERATION**

| | PM |
|---|---|
| ENTERING | 50 |

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# TRIP ASSIGNMENTS (TOP OF THE OLD PORT)

OF: PORTLAND MUSIC HALL

SCALE: N.T.S

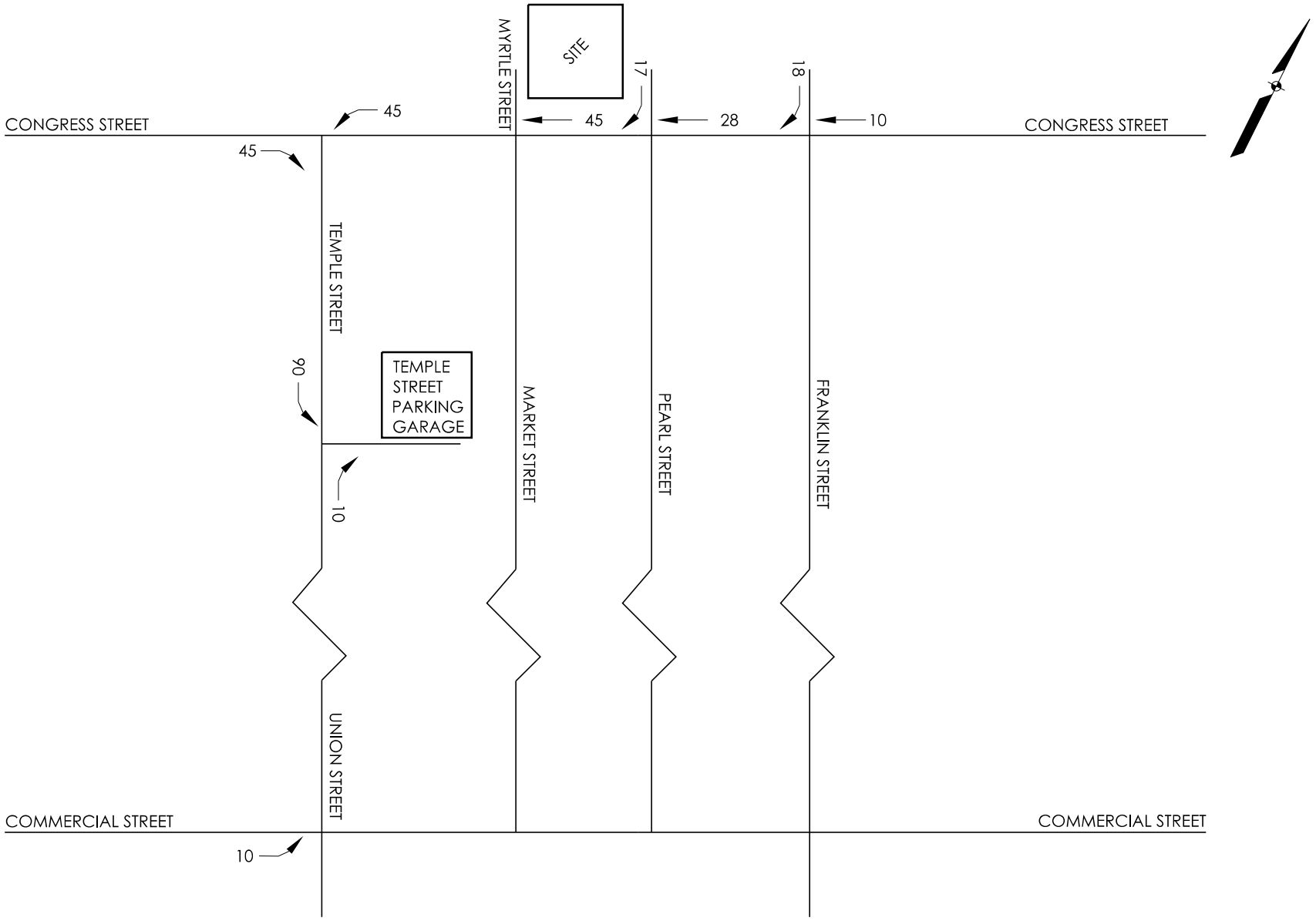
DATE: 4/18/25

LOCATION:
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR: PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

SHEET: 2 OF 7

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**TRIP GENERATION**

| | PM |
|---|---|
| ENTERING | 100 |

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Tel. 207-200-2100

# TRIP ASSIGNMENTS (TEMPLE STREET GARAGE)

OF: 385 CONGRESS STREET DEVELOPMENT

SCALE: N.T.S

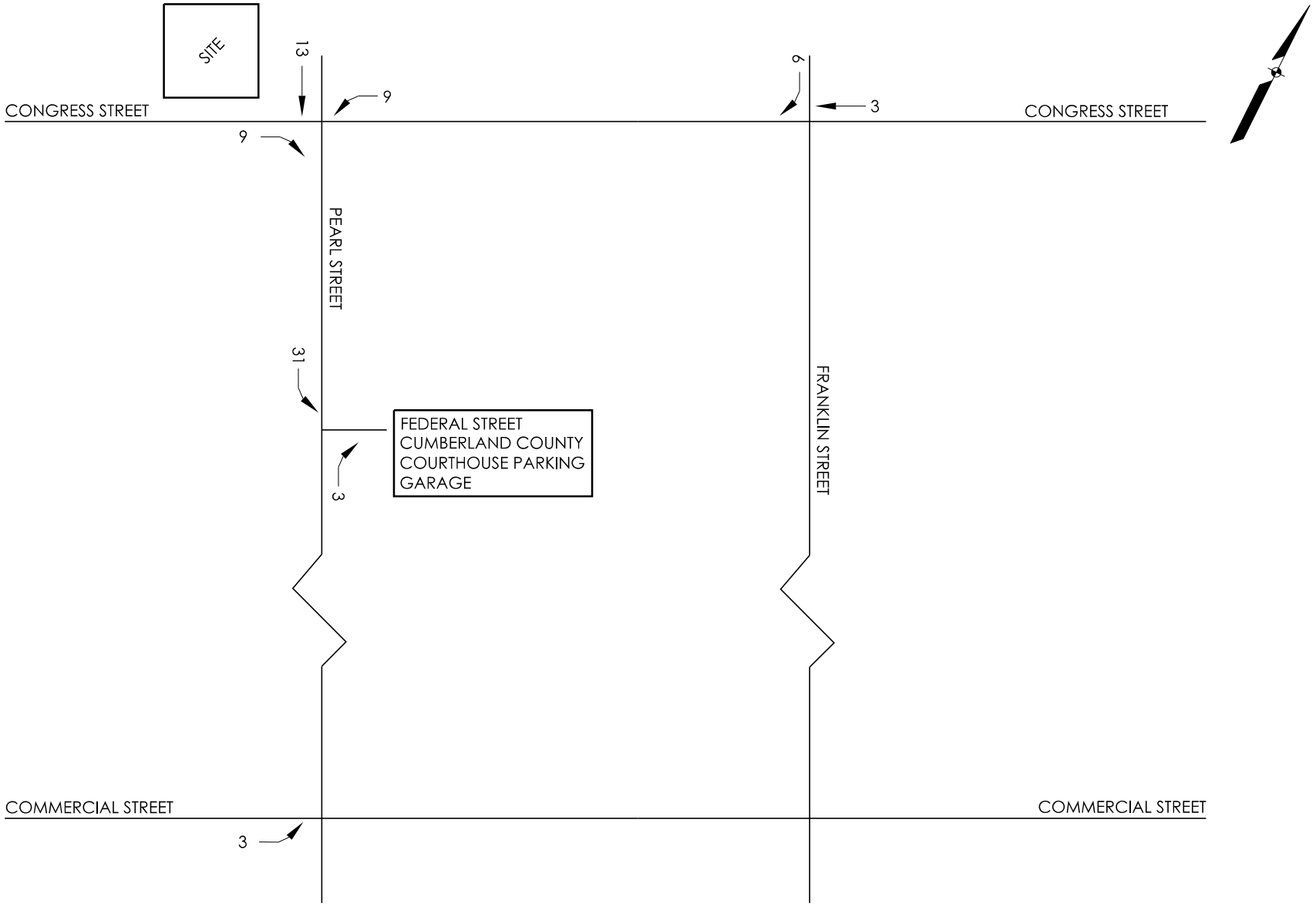
DATE: 4/18/25

LOCATION:
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR: PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

SHEET: 3 OF 7

...\19371-05 Traffic Diagrams.dgn




**TRIP GENERATION**

| | PM |
|---|---|
| ENTERING | 34 |

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South Portland, ME 04106
Tel. 207-200-2100

# TRIP ASSIGNMENTS (CUMBERLAND COUNTY COURTHOUSE)

OF: 385 CONGRESS STREET DEVELOPMENT

SCALE: N.T.S

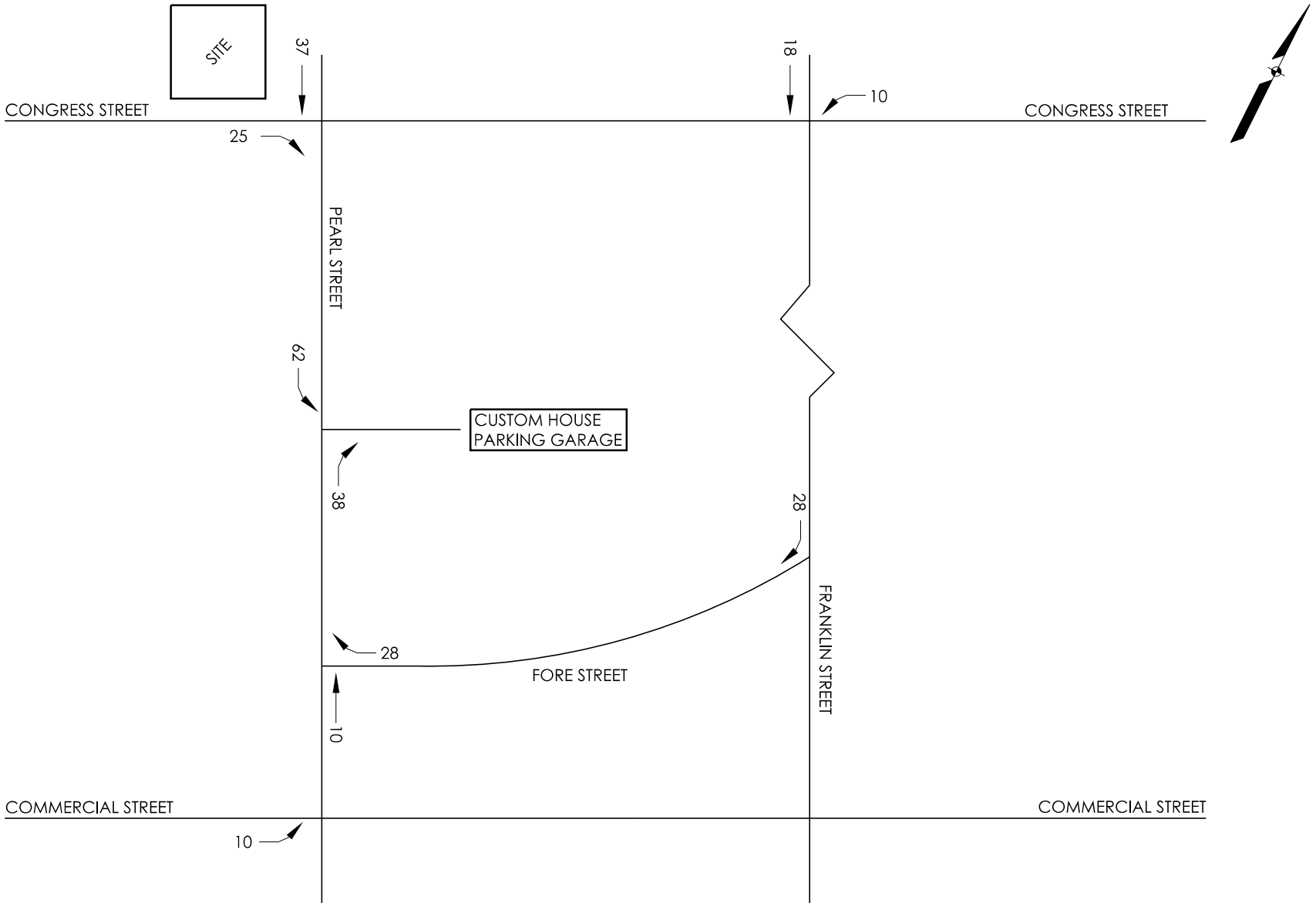
DATE: 4/18/25

LOCATION:
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR: PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

SHEET: 4 OF 7

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**TRIP GENERATION**

| | PM |
|---|---|
| ENTERING | 100 |

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# TRIP ASSIGNMENTS (CUSTOM HOUSE)

OF: 385 CONGRESS STREET DEVELOPMENT

SCALE: N.T.S

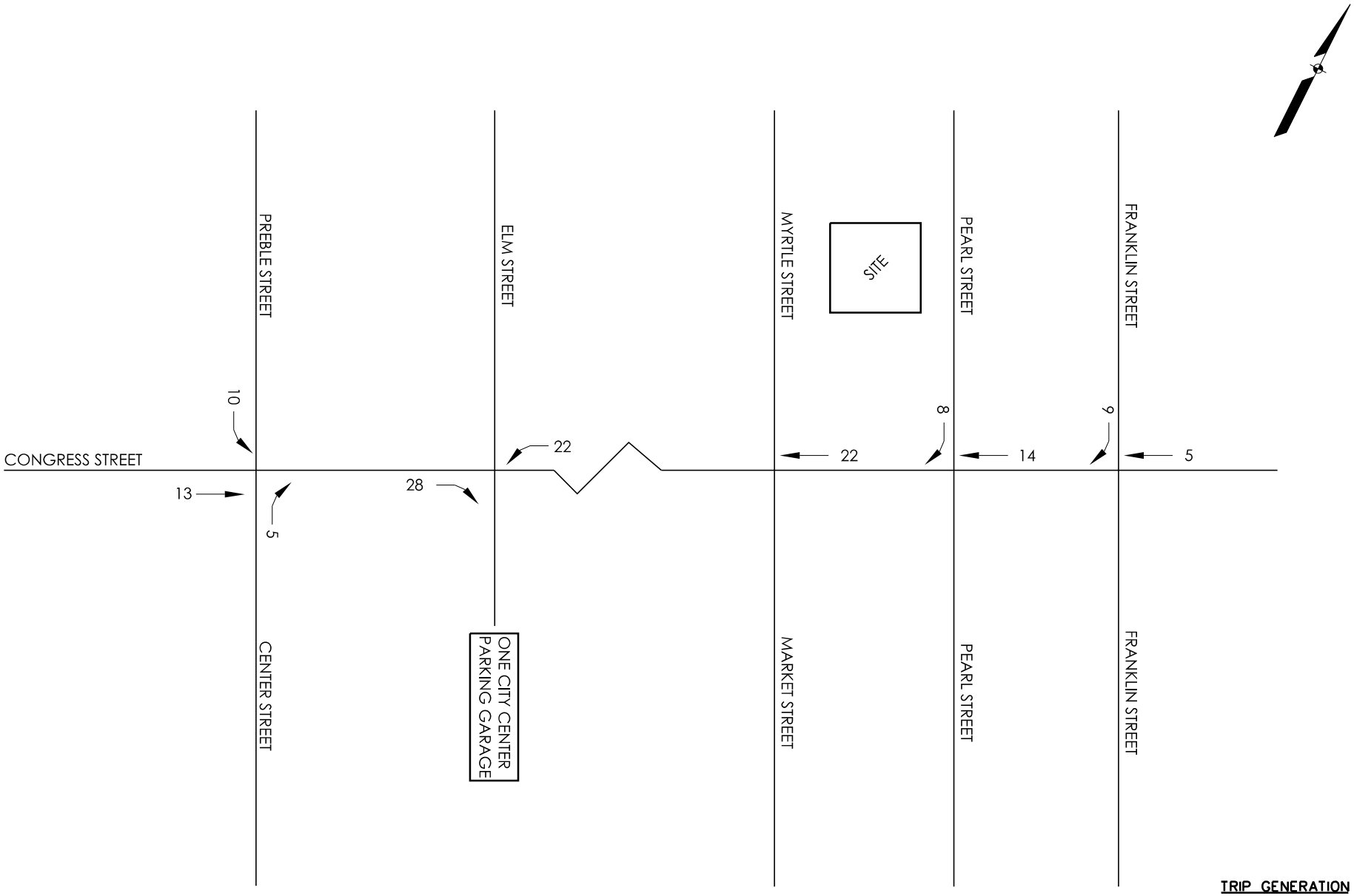
DATE: 4/18/25

LOCATION:
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR: PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

SHEET: 5 OF 7

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**TRIP GENERATION**

| | PM |
|---|---|
| ENTERING | 50 |

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# TRIP ASSIGNMENTS (ONE CITY CENTER)

OF: 385 CONGRESS STREET DEVELOPMENT

SCALE: N.T.S

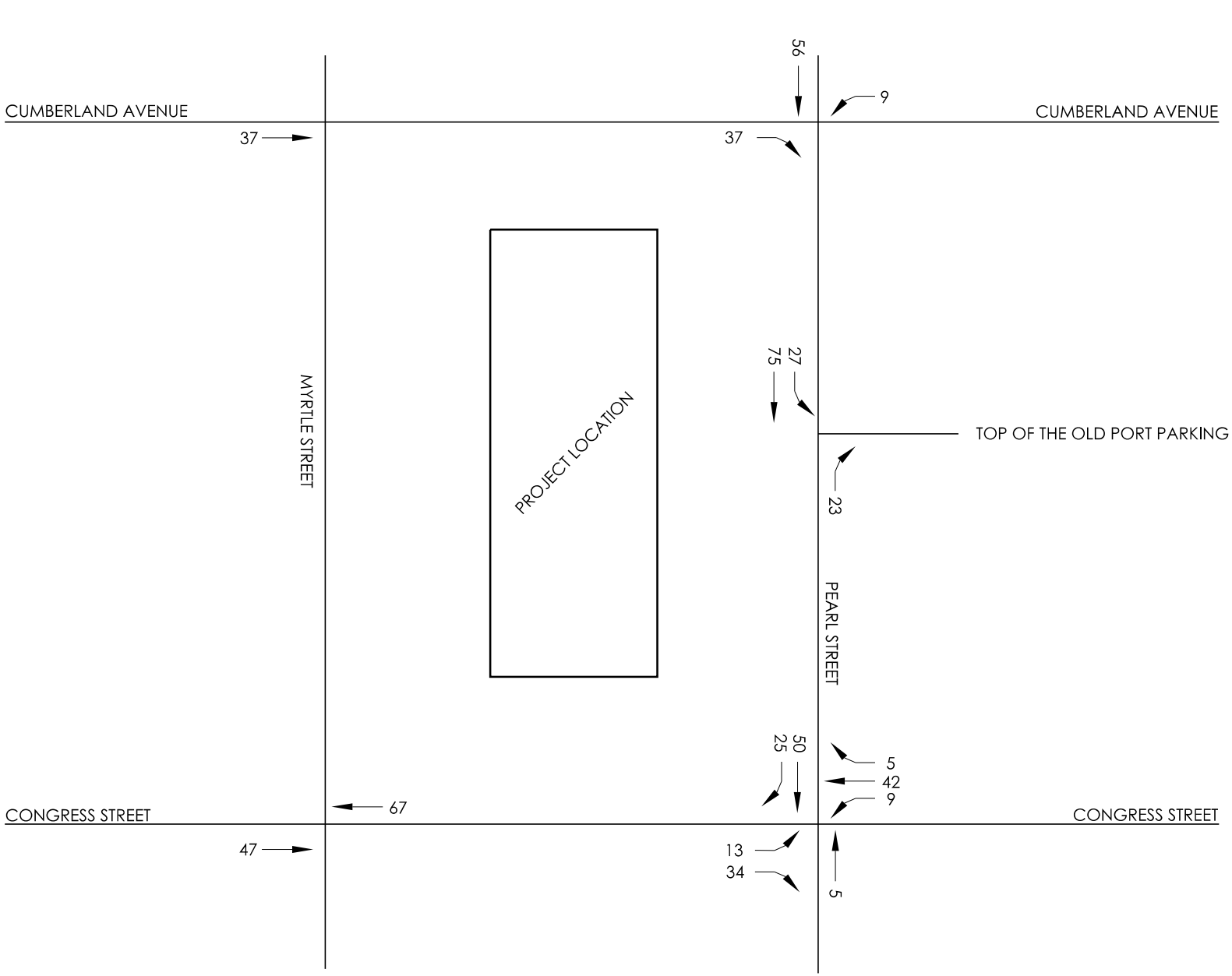
DATE: 4/18/25

LOCATION:
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR: PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

SHEET: 6 OF 7

...\19371-05 Traffic Diagrams.dgn




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75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# TRIP ASSIGNMENTS (TOTAL)

OF: PORTLAND MUSIC HALL

LOCATION:
244 CUMBERLAND AVENUE
PORTLAND, MAINE

FOR: PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

SCALE: N.T.S

DATE: 4/18/25

SHEET: 7 OF 7

...\19371-05 Traffic Diagrams.dgn

## Section 2 – Traffic Accidents

The most recently available three (3) year crash history (2022-2024) was obtained from MaineDOT for the intersections and roadway links in the vicinity of the project site. Intersections and roadway links are considered High Crash Locations (HCLs) if they have a Critical Rate Factor (CRF) greater than 1.0 and have a minimum of eight (8) accidents in a three (3) year period. A summary of this information is presented below and the MaineDOT summary reports are included in Appendix A.

**Table 8 – Intersection Crash Data Summary**

| *Node* | *Description* | *Crashes (CRF)* |
|---|---|---|
| 18813 | Congress Street at Pearl Street | 8 (0.48) |
| 18772 | Congress Street at Myrtle Street | 7 (1.37) |
| 18990 | Myrtle Street at Cumberland Avenue | 2 (0.68) |
| 18994 | Cumberland Avenue at Chapel Street | 2 (0.68) |
| 18812 | Cumberland Avenue at Pearl Street | 10 (0.66) |

**Table 9 – Segment Crash Data Summary**

| *Segment* | *Description* | *Crashes (CRF)* |
|---|---|---|
| 18813-18772 | Congress Street between Pearl Street and Myrtle Street | 1 (0.29) |
| 18772-18990 | Myrtle Street between Congress Street and Cumberland Avenue | 4 (3.08) |
| 18990-18994 | Cumberland Avenue between Myrtle Street and Chapel Street | 1 (1.29) |
| 18994-18812 | Cumberland Avenue between Chapel Street and Pearl Street | 3 (1.46) |
| 18812-18813 | Pearl Street between Cumberland Avenue and Congress Street | 1 (0.29) |

As seen in the previous Tables, no locations in the project area were identified as High Crash Locations.

Evaluation of Pedestrian and Bicycle Crashes

Evaluation of pedestrian and bicycle-related crashes was performed for the five-year period of 2020 to 2024. General review of crash data revealed two (2) pedestrian-related crashes in vicinity of the site, one at the intersection of Congress Street and Myrtle Street, and another at the intersection of Congress Street and Pearl Street. Three (3) bicycle-related crashes were located within the vicinity of the site, one at the intersection of Congress Street and Myrtle Street, one at the intersection of Congress Street and Pearl Street, and another at the intersection of Chapel Street and Cumberland Avenue.

## Section 3 – Development Entrances and Exits

a) No parking is proposed with this development. Access for off-street tour bus and truck parking for the development is proposed by way of two access with one each on Myrtle Street and Pearl Street. Access to Myrtle Street is proposed by a drive approximately 160’ south of the intersection with Cumberland Avenue. On Pearl Street, access is proposed by a driveway at a point approximately 135’ south of the intersection with Cumberland Avenue.

b) Sight distance was previously reviewed as part of the former TMP Application. On Pearl Street, sight distance is available the length of the city block between Cumberland Avenue and Congress Street looking from the proposed driveway location. On Myrtle Street, sight distance is similarly available the length of the block between Congress Street and Cumberland Avenue, however on-street parking may obstruct the view for an exiting vehicle.

## Section 4 – Title, Right, or Interest

The applicant Portland Music Holdings, LLC, has a purchase and sales agreement with 385 Congress Street, LLC, the owner of Lot 3.

Portland Music Holdings, LLC is a partnership between Portland Performance Ventures, LLC/Mile Marker Investments, LLC (Howard Goldenfarb, Todd Goldenfarb, Andrew Barowsky) and Live Nation New England, Inc. (NYSE:LYV). Donald Law is the Chairman of Live New England.

Please see the attached purchase and sales agreement for use as proof of right, title, interest.

Docusign Envelope ID: 139AC459-E8C5-425F-B570-98EE16D1AB58



# ASSIGNMENT OF PURCHASE AND SALE AGREEMENT

THIS ASSIGNMENT OF PURCHASE AND SALE AGREEMENT (this "Assignment"), is made as of this 13th day of December, 2024 (the "Effective Date"), by and between MILE MARKER INVESTMENTS LLC, a Delaware limited liability company, with a mailing address of 200 US Route One, Suite 200, Scarborough, ME 04074 ("Assignor"), and PORTLAND MUSIC HOLDINGS, LLC, a Delaware limited liability company, with a mailing address of c/o Live Nation Worldwide, Inc., 325 N. Maple Drive, Beverly Hills, CA 90210 ("Assignee"). Assignor and Assignee are sometimes referred herein, collectively, as the "Parties". All initially capitalized terms used herein which are not otherwise defined herein shall have the meanings ascribed to them in the Purchase Agreement (as defined below).

## RECITALS:

A. Assigner, as "Buyer", and 385 CONGRESS LLC, a Maine limited liability company, as "Seller", entered into that certain Purchase and Sale Agreement with an effective date of June 26, 2024 (the "Purchase Agreement") for the sale of that certain real property located on Cumberland Avenue, Portland, Maine (the "Property"), as more particularly described in the Purchase Agreement. A true and complete copy of the Purchase Agreement is attached hereto as Exhibit "A".

B. The Parties desire to enter into this Assignment to, among other things, assign the Assignor's rights, title and interests in and to the Purchase Agreement to Assignee and to evidence Assignee's assumption of Assignor's obligations under the Purchase Agreement.

## ASSIGNMENT:

NOW, THEREFORE, for value received, the receipt and sufficiency of which are hereby acknowledged, the Parties agree as follows:

1. Recitals. The Recitals stated above are true and correct and incorporated into this Assignment with this reference.

2. Assignment of Purchase Agreement. Assignor hereby assigns its right, title and interest in and to the Purchase Agreement, the Property and all sums paid or deposited into escrow or to Seller by Assignor in connection with the Purchase Agreement.

3. Assumption of Purchase Agreement. Assignee hereby assumes and agrees to perform and observe all agreements, covenants and obligations to be performed and observed by Assignor under the Purchase Agreement, effective as of the Effective Date.

4. Indemnification. Assignee agrees to indemnify, defend and hold harmless Assignor from and against all claims against Assignor under the Purchase Agreement by Seller, except to the extent arising from or caused by the negligence or willful misconduct of Assignor or breach of the Purchase Agreement by Assignor (whereby such breach is the result of Assignor acting without or otherwise contravening the consent or approval of Assignee's affiliate, Live Nation Worldwide, Inc.). Assignor agrees to indemnify, defend and hold harmless Assignee from and against all claims against Assignee under the Purchase Agreement by Seller arising from the negligence or

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willful misconduct of Assignor or breach of the Purchase Agreement by Assignor (whereby such breach is the result of Assignor acting without or otherwise contravening the consent or approval of Assignee's affiliate, Live Nation Worldwide, Inc.), except to the extent arising from or caused by the negligence or willful misconduct of Assignee or breach of the Purchase Agreement by Assignee.

5. Representations and Warranties. Assignor hereby represents and warrants to Assignee that: (a) Assignor has full power and authority to assign the Purchase Agreement to Assignee, (b) the Purchase Agreement is in full force and effect and has not been modified or amended in any manner whatsoever, (c) Assignor has neither sent nor received any notices of default under the Purchase Agreement, and (d) there are no sums due and owing by Assignor under the Purchase Agreement as of the Effective Date.

6. Counterparts. This Assignment may be executed in counterparts and/or by use of counterpart signature pages, which counterparts and counterpart signature pages may be delivered by electronic means, including by electronic mail of .pdf file or DocuSign, and counterpart and counterpart signature pages so delivered shall be deemed to be originals for all purposes.

7. Binding Effect. This Assignment shall be binding upon and inure to the benefit of Assignor, Assignee and their respective successors and assigns.

IN WITNESS WHEREOF, intending to be legally bound, Assignor and Assignee have caused this Assignment of Purchase and Sale Agreement to be executed under seal by their respective duly authorized representatives as of the Effective Date.

Assignor:
MILE MARKER INVESTMENTS LLC

DocuSigned by:
By: _____
6031C1FA3B7C4DF...
Name: Howard A. Goldenfarb
Title: Manager

Assignee:
PORTLAND MUSIC HOLDINGS, LLC

DocuSigned by:
By: _____
A1ABED27665E4B5...
Name: Jordan Zachary
Title: Co-President, US Concerts

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**Exhibit "A"**

**Purchase Agreement**

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**EFFECTIVE DATE:** June 26, 2024

# PURCHASE AND SALE AGREEMENT

AGREEMENT made and entered into by and between **385 CONGRESS LLC**, a Maine limited liability company ("Seller") and **MILE MARKER INVESTMENTS, LLC,** a Delaware limited liability company, and/or assigns ("Buyer").

WITNESSETH AS FOLLOWS:

1. PURCHASE AND SALE. Seller agrees to sell and Buyer agrees to buy, on the terms and conditions hereinafter set forth, that certain parcel of land located on Cumberland Avenue, Portland, Cumberland County, Maine, comprised of approximately 38,441 square feet, shown as Lot 3 ("Lot 3") on that certain Subdivision Plan of 385 Congress Street prepared by Sebago Technics dated December 2, 2022, revised through January 11, 2023, approved by the City of Portland Planning Board on January 24, 2023, signed on February 1, 2023, and recorded at the Cumberland County Registry of Deeds in Plan Book 223, Page 32 (the "Subdivision Plan"), and identified as "Phase 2" in that certain Master Development Plan for 385 Congress Street approved by the City of Portland Planning Board on August 9, 2022 (the "Master Development Plan"), together with all rights, privileges, and easements appurtenant to said parcel, including without limitation, all air rights, rights-of-way or other interests in, on, under or to the public streets abutting or adjoining said parcel, and any and all real property and rights directly associated with said parcel, and only said parcel, as set forth in the Master Development Plan, said parcel being a portion of the property conveyed to Seller by deed from Metro Media Properties LLC dated October 20, 2017 and recorded at said Registry of Deeds in Book 34401, Page 214 (the "Premises").

2. PURCHASE PRICE. Subject to any adjustments and prorations hereinafter described, Buyer agrees to pay for the Premises the sum of [redacted] Dollars [redacted] (the "Purchase Price"), payable as follows:

(a) Option Payments. Commencing on the Effective Date and continuing monthly thereafter (on the same day of the month as the Effective Date) until the expiration of the Approvals Period (as defined below) or earlier termination of this Agreement, Buyer shall pay to Seller the sum of [redacted], which payment shall not be refundable except in the event of a Seller default as expressly provided in this Agreement or in the event of a taking (in accordance with Section 8 below), but shall be credited against the Purchase Price at Closing (the "Option Payments").

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(b) At Closing. The balance of the Purchase Price, as adjusted for the Option Payments and the Demolition Deposit (if previously paid), pro-rations (prepared by Seller and reviewed by Buyer at least two (2) business days prior to Closing) and any other payments referenced herein, shall be paid to Seller at the closing by wired funds (in accordance with wiring instructions provided to Buyer in writing within a reasonable time prior to the time of Closing).

3. TITLE.

(a) Seller shall convey the Premises to Buyer at the Closing in fee simple, free and clear of Monetary Encumbrances (as defined below) and mortgages, and otherwise subject to all matters of record and Permitted Encumbrances (as defined below).

(b) Buyer will have until the expiration of the Approvals Period (as defined below) to examine title to the Premises, obtain a title commitment and survey with respect to the Premises, and to advise Seller in writing of any title or survey objections. Notwithstanding the foregoing, including the expiration of the Approvals Period, Buyer may update the effective date of its title examination and/or survey and give notice to Seller of objections to matters first appearing subsequent to the effective date of its previous title examination or survey, as the case may be. The encumbrances of record disclosed by Buyer's title examination or survey which are not objected to by Buyer, as well as: (i) all applicable land use/zoning laws, ordinances and regulations, including the Master Development Plan, as may be amended in accordance with Section 5 below, (ii) any public utilities serving the Premises, (iii) real estate taxes on the Premises that are not then due and payable as of the Closing, (iv) a limited restrictive covenant, to be imposed on the Premises by Seller at Closing, prohibiting the development of any apartment, condominium or cooperative residential units on the Premises which limited restrictive covenant shall be substantively identical to the limited restrictive covenant encumbering Lot 1 set forth in that certain Deed from Seller to Fathom Congress, LLC dated February 17, 2023 and recorded at the Cumberland County Registry of Deeds in Book 39992, Page 249 (the "Fathom Deed"), and (v) a building set-back covenant for the benefit of Lot 1 stating that no building shall be constructed or located on Lot 3 closer than twenty-three and eight hundredths (23.08) feet from the boundary line between Lot 3 and Lot 1 above elevation eighty (80) feet (NGVD 1929 datum), and a building set-back covenant for the benefit of Lot 2 stating that no building shall be constructed or located on Lot 3 closer than twenty-two (22) feet from the boundary line between Lot 3 and Lot 2 above elevation eighty (80) feet (NGVD 1929 datum), both as depicted on **Exhibit A** attached hereto, are together referred to as the "Permitted Exceptions," which definition may include additional items pursuant to subparagraph (c) below. Buyer acknowledges that the Premises currently are subject to that certain restrictive covenant set forth in the Fathom Deed prohibiting on the Premises the development, construction and operation of any hotel, inn, or other hospitality facilities providing over night or extended stay lodging accommodations.

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(c) Seller will have ten (10) business days after receipt of Buyer's notice ("Seller Cure Period") to advise Buyer in writing of the objections Seller agrees to cure, with Seller having no obligation to cure any such objections; however, Seller agrees that Seller will remove all monetary encumbrances, other than mechanics' liens arising from Buyer's due diligence and liens for taxes not yet due and payable (collectively, "Monetary Encumbrances") at or prior to Closing. If Seller fails to respond to any objection within the Seller Cure Period, then Seller will be deemed to have declined to cure any of the objections in Buyer's notice, other than Monetary Encumbrances. If Seller declines to cure any objection, then Buyer may elect either (i) to terminate this Agreement by written notice to Seller, in which event all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement, or (ii) to accept title subject to such objections (other than Monetary Encumbrances), which objections shall be deemed waived and the matters objected to also shall become "Permitted Exceptions" hereunder. If Seller expressly agrees in writing to cure a title or survey objection (or is obligated to) and fails to do so, Seller acknowledges that Buyer will have relied on Seller's agreement to do so and the failure will be a default by Seller if not cured within the cure period provided in this Agreement. In that event, (a) Buyer may declare Seller in default and pursue the remedies in Section 12 of this Agreement, (b) Buyer may attempt to cure the objection on Seller's behalf, in which event the Purchase Price will be reduced by the amount equal to the actual reasonable cost and expense incurred by Buyer in curing the defect or objection, (c) Buyer may accept title to the Premises subject to the objection, or (d) any combination of clauses (b) and (c). If Buyer elects to attempt to cure any objection pursuant to clause (b), Buyer may extend the Closing for a period not to exceed sixty (60) days. If Buyer is not successful in curing the objection, then Buyer may exercise its options under either clauses (a) or (c). Seller covenants and agrees that, during the pendency of this Agreement, Seller will not (i) materially change or alter the physical condition of the Premises except for the Demolition Work (as defined below), (ii) grant, create, consent to, or modify any encumbrance benefitting or burdening the Premises, including liens, mortgages, attachments, covenants, restrictions, easements, leases or otherwise, except in connection with amending the Master Development Plan in accordance with Section 5 below, provided, however, that Seller may modify the Middlesex Saving Bank mortgage encumbering the Premises or modify the UPP Lease (as defined below) so long as such modifications do not impair Seller's ability to have such encumbrances released from the Premises at Closing, or (iii) unless expressly provided in this Agreement, pursue or consent to any rezoning of the Premises.

4. DELIVERY OF DOCUMENTS / DUE DILIGENCE.

(a) Seller agrees to provide Buyer for Buyer's review and inspection within five (5) business days of the Effective Date digital copies of any of the following documents relating to the Premises in Seller's possession or under Seller's control: (i) title insurance policies; (ii) surveys; (iii) site plans; (iv) the Master Development Plan and all approvals and amendments thereof; (v) environmental studies or reports; (vi) geotechnical studies; (vii) traffic studies; (viii)

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parking studies; (ix) the UPP Lease (as defined below); (x) and any non-recorded agreements or instruments impacting the Premises that survive Closing.

(b) Seller hereby grants Buyer and its agents the right, upon reasonable prior notice of at least 24 hours, to enter upon or in any part of the Premises at all reasonable times and from time to time prior to the Closing in order to inspect the Premises, conduct surveys, percolation tests, soil tests, feasibility studies, zoning analysis, traffic pattern studies, sound and lighting studies, investigation of availability, location and accessibility of utilities, engineering and environmental testing, and such other investigatory studies as may be necessary or appropriate, or required by planning authorities, or lenders, for determining the adequacy of the Premises for Buyer's intended development. Specifically, Buyer may conduct tests related to surface, subsurface, topographic, geotechnical, and environmental conditions of the Premises, including a Phase I Environmental Site Assessment and any Phase II Environmental Site Assessments or other studies or analyses as may be required based upon the Phase I Environmental Site Assessment (expressly including boring, drilling sampling, and other subsurface exploration as Buyer may reasonably deem appropriate). Prior to such entry onto the Premises, Buyer shall furnish Seller with a certificate of commercial general liability insurance maintained by the contractor or consultant entering the Premises (which may be part of an umbrella policy) with combined limit single insurance coverage of at least One Million and 00/100 Dollars ($1,000,000.00) and naming Seller as an additional insured. Seller shall have the right to have a representative present for all of Buyer's on-site activities. Buyer will promptly restore any area of the Premises disturbed by Buyer to as near its original condition as reasonably possible. Except for the negligence or willful acts or omissions of Seller or Seller's agents, contractors or employees, Buyer will indemnify, defend and hold Seller harmless against any claims, expense, cause of action, penalty, fine, or damages incurred by Seller as a result of persons or firms entering the Premises on Buyer's behalf to complete the inspection of the Premises, including mechanics liens and reasonable attorneys' and paralegals' fees.

(c) Buyer shall have the right to contact and communicate directly with representatives of the tenant under the UPP Lease and any governmental officials regarding the Premises and/or Buyer's intended development thereof as Buyer may deem appropriate.

(d) Buyer's obligation to close under this Agreement is conditioned on Buyer's determination in its sole discretion that the Premises are satisfactory for the use and development intended by Buyer, including that such development is economically feasible. Buyer has the right to terminate this Agreement on written notice to Seller given at any time and for any reason prior to the expiration of the Approvals Period, in which event the all rights and obligations of the parties under this Agreement will be of no further force or effect, except for obligations that are expressly stated to survive the termination of this Agreement. Buyer's inspection of the Premises and review of documents, records and other items inspected or reviewed by Buyer in connection with its due diligence, shall not be deemed a waiver of any of the

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representations and warranties made by Seller hereunder, unless such items or due diligence gave rise to actual knowledge of Buyer of an inaccuracy contained within Seller's representations and warranties, in which case Buyer shall be deemed to have waived a claim for misrepresentation or breach of warranty against Seller with respect to such fact.

5. APPROVALS AND MASTER DEVELOPMENT PLAN AMENDMENT.

(a) Notwithstanding any other provisions of this Agreement to the contrary, Buyer shall be entitled to apply for and obtain all necessary federal, state and local governmental land-use permits, licenses and approvals of any type or nature required, including historic preservation review, as may be necessary for the development on the Premises of a performing arts, music and live entertainment venue (the "Project"), including without limiting the generality of the foregoing, all necessary site plan, and other governmental land-use permits, licenses, and approvals, of any type and from any necessary public or governmental authority or other party, for Buyer's development of the Project at the Premises (excluding building permits and other construction related permits and approvals and operating permits and licenses) (collectively, the "Approvals"). Buyer shall endeavor to apply for Level III Site Plan approval for the Project from the City of Portland ("Site Plan Application") prior to or concurrently with Seller's submission of the MP Amendment Application (as defined below).

(b) If for any reason whatsoever all Approvals have not been obtained on a final, non-appealable basis (subject only to such terms and conditions as may be approved by Buyer, in its sole discretion) on or before the expiration of thirteen (13) months from the Effective Date (the "Approvals Period") (as the same may be extended as provided below), then Buyer may, in its sole discretion, terminate this Agreement by giving Seller written notice thereof, in which event this Agreement shall terminate and the parties shall have no further obligations of any nature whatsoever hereunder except those that expressly survive termination. If Buyer fails to give Seller a notice of termination on or before the expiration of the Approvals Period, then Buyer shall be deemed to have waived this condition and Buyer's right to terminate this Agreement for failure to satisfy this condition. Buyer shall have the right to extend the Approvals Period for up to six (6) periods of one (1) month each, provided the Buyer is diligently pursuing the Approvals in good faith. Buyer shall notify the Seller of its exercise of each such one (1) month extension by written notice to Seller provided on or before the expiration of the Approvals Period, each of which exercise notice must include payment of an extension fee in the amount of [redacted] which extension fee payments shall be deemed Option Payments and shall not be refundable except in the event of a Seller default hereunder or in the event of a taking (in accordance with Section 8 below), but shall be credited against the Purchase Price at Closing.

(c) Buyer shall have the right to apply for and pursue the Approvals on a stand-alone basis, separate from the [redacted] and [redacted]

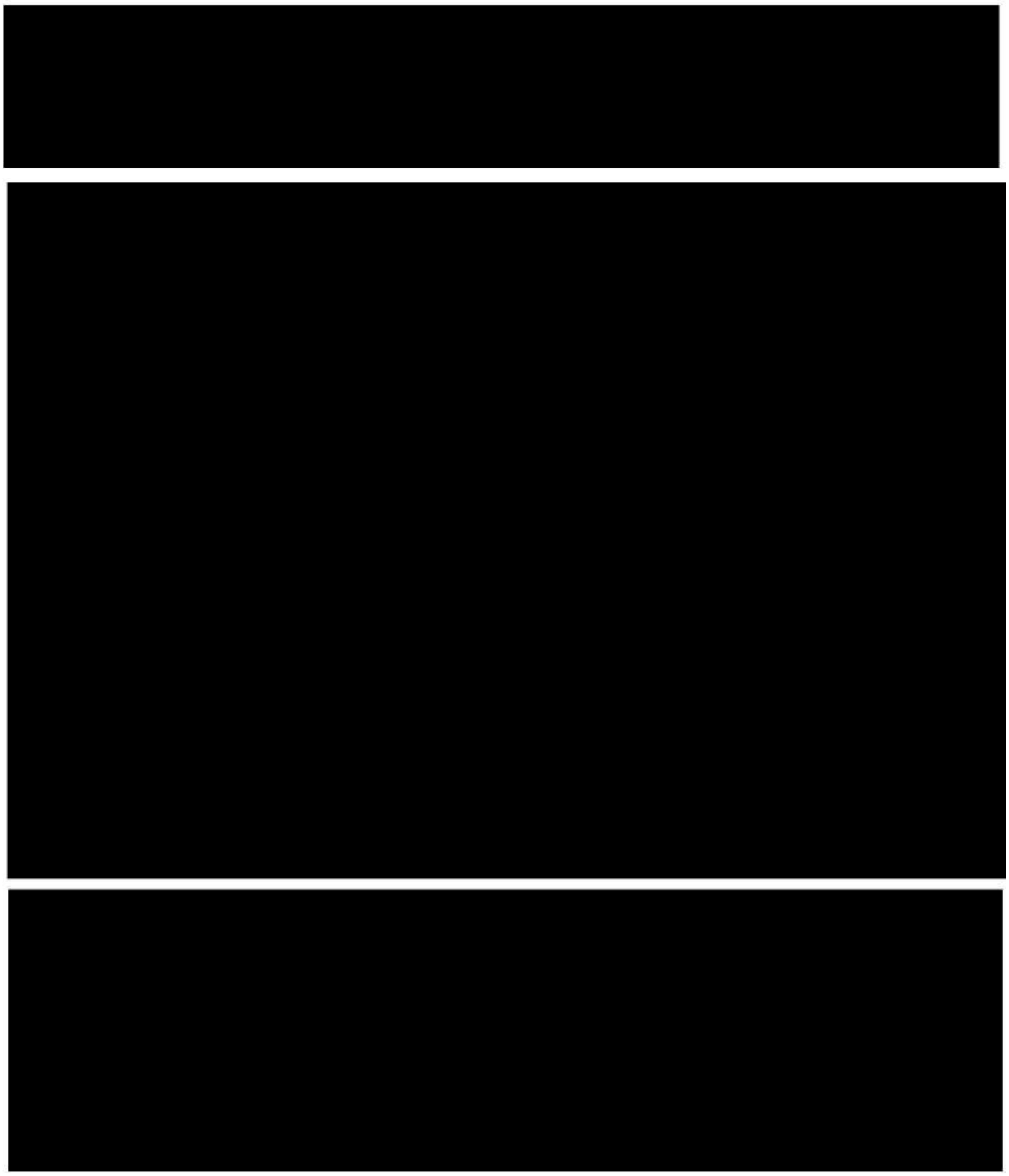
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[redacted] so long as such Approvals do not materially adversely interfere with the existing Master Development Plan and [redacted]

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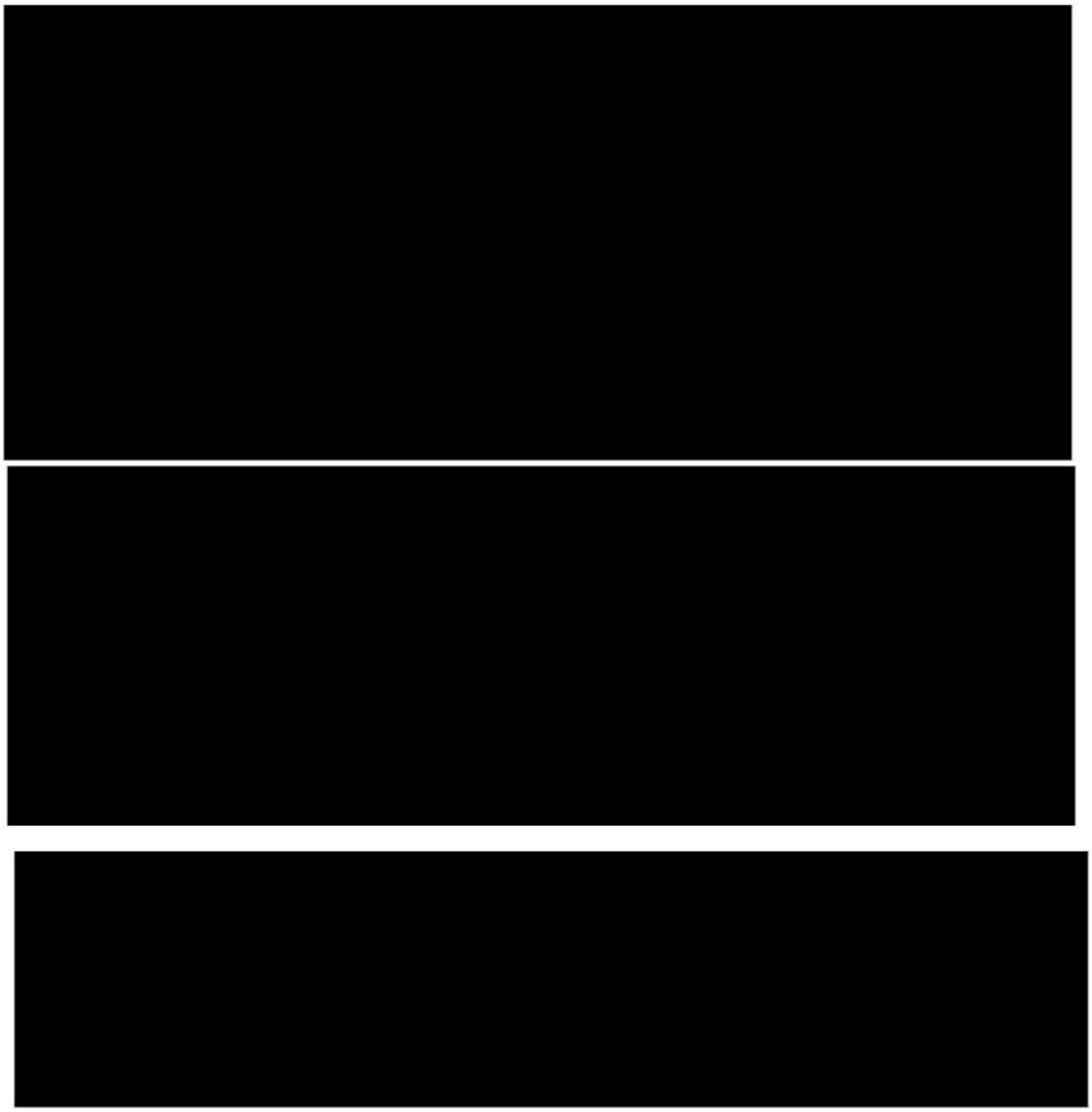
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6. DEMOLITION. Seller shall, at its expense, either prior to Closing as provided below or following Closing (at Buyer's election), perform the "Demolition Work" as it pertains to the Premises, as Demolition Work is defined in that certain Demolition Agreement by and between Seller and Fathom Congress LLC dated February 17, 2023, a copy of which is attached hereto as **Exhibit B** (the "Demolition Agreement"); provided, however, that the Demolition

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Work also shall include for the benefit of Buyer the removal of the garage building located on the Premises near Pearl Street and removal of asphalt and concrete paving from the Premises. Upon completion of the Demolition Work, and provided that the Closing has occurred, Buyer shall assume and be responsible for the rental cost of all rented construction fencing located on the Premises.

In the event that Buyer desires the Demolition Work be completed prior to Closing, Buyer shall provide written notice thereof (the "Demolition Notice") to Seller no later than one hundred fifty (150) days prior to Closing, and thereupon completion of the Demolition Work shall become a condition to Closing for the benefit of Buyer. As a condition of the obligation of Seller to perform the Demolition Work prior to Closing, Buyer shall pay to Seller a deposit of [redacted] (the "Demolition Deposit"), which funds shall be credited towards the Purchase Price at Closing, but which otherwise shall be held in trust by Seller, in a segregated escrow account, to be used and applied by Seller to pay the costs and expenses of the Demolition Work, as and when due. In the event that Seller does not timely receive the Demolition Deposit together with the Demolition Notice, Seller shall be relieved of an obligation to commence or complete the Demolition Work prior to Closing and such building demolition obligations shall not be a condition of Closing. The Demolition Deposit shall be refunded to Buyer in full in the event that the Closing does not occur as a result of any default by Seller hereunder. In the event that the Demolition Work is not completed prior to Closing, Seller shall have thirty (30) days to cure such default and complete the Demolition Work as specified herein and the Closing shall be extended up to thirty (30) days to accommodate the completion of the Demolition Work. In the event that the Demolition Work is not complete at the end of the 30-day cure period, and Seller has proceeded in good faith in pursuing the Demolition Work, then the parties shall proceed to Closing and a reasonable estimate of the cost of completing the Demolition Work shall be escrowed from the Purchase Price and held by Buyer, in a segregated escrow account, to be used and applied as follows: (i) in the event the Seller does not complete the Demolition Work within sixty (60) days of Closing, then to pay the costs and expenses of Buyer's arranging for and proceeding with completion of Demolition Work, as and when such costs become due, and (ii) the balance, after payment of all such costs of substitute performance, to be paid to Seller, less any out-of-pocket delay damages incurred by Buyer as a result of Seller's failure to complete Demolition Work as of Closing. The provisions of this section shall survive Closing.

In the event that Seller does not timely receive the Demolition Notice prior to Closing, the Demolition Work shall be performed by Seller following Closing pursuant to the terms and conditions of the Demolition Agreement (including the expansion of the Demolition Work as provided above), including the time frames therefor, upon written notice from Buyer to Seller requesting that the Demolition Work be performed, except that if the Demolition Notice is provided to Seller later than the aforesaid 150 day period, but prior to Closing, notwithstanding anything to the contrary in the Demolition Agreement, Seller shall be obligated to complete the

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Demolition Work within the shorter of 150 days from receipt of the Demolition Notice or the time period set forth in the Demolition Agreement; to accommodate the performance of the Demolition Work following Closing, Buyer shall grant Seller a temporary license to enter the Premises to perform the Demolition Work.

The provisions of this Section 6 shall expressly survive Closing.

7. CLOSING. The closing (the "Closing") shall take place at the offices of Bernstein, Shur, Sawyer and Nelson, 100 Middle Street, Portland, Maine or at Buyer's election, the offices of Buyer's lender's attorney, thirty (30) days after the expiration of the Approvals Period or at such earlier date designated by Buyer upon five (5) days prior notice to Seller (the "Closing Date"), or if Buyer and Seller shall mutually agree in advance and in writing, at another time and place. Buyer's attorney or Buyer's lender's attorney shall act as closing agent, with control over receipt and delivery of closing documents and receipt and disbursement of closing funds pursuant to customary and reasonable escrowed closing practices. At the Closing, against payment of the Purchase Price, Seller shall execute and deliver to Buyer a Quitclaim Deed with Covenant to the Premises in accordance with the Short Form Deeds Act, 33 M.R.S.A. § 761 et seq. (the "Deed"), together with such documents, affidavits and certificates as are otherwise required by this Agreement, required by law and/or reasonably necessary for Buyer's acquisition, development and financing of the Premises, including without limitation, a Maine State Real Estate Transfer Tax Declaration, a Nonresidential Real Property Road Disclosure Statement pursuant to 33 M.R.S. §193, a bring-down Certificate of Seller's representations and warranties, 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), a "Seller's Affidavit" regarding mechanics liens and persons in possession in form and substance reasonably acceptable to Buyer and Buyer's title insurance company, applicable Maine State REW forms, IRS Form W-9, the information required for Buyer to file IRS Form 1099-S, evidence of Seller's existence, authority to convey the Premises, and good standing in form and substance reasonably satisfactory to Buyer and Buyer's title insurance company, and any other usual and customary documents deemed reasonably necessary by Buyer or Buyer's title insurance company.

8. RISK OF LOSS, CONDEMNATION.

(a) All risk of loss to the improvements at the Premises prior to Closing shall be borne by Seller. Seller shall keep the Premises 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) If all or any material portion of the Premises, or any material portion of any land on which off-site access, parking, utility service or stormwater detention is located (and

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which is required for Buyer's contemplated the use and development of the Premises), is taken or condemned by any entity with the power of eminent domain prior to the date of the Closing, or if Buyer receives notice of a proposed taking prior to the date of the Closing, then Buyer will have the option of either (i) terminating this Agreement by giving written notice to Seller, in which event all previously paid Option Payments and the Demolition Deposit (if previously paid) will be immediately refunded to Buyer and this Agreement and all rights and obligations of the parties hereunder will be of no further force or effect, except for obligations that are expressly stated to survive the termination of this Agreement, or (ii) requiring Seller to convey the remaining portion of the Premises to Buyer pursuant to the terms and provisions of this Agreement and to transfer and assign to Buyer at the Closing all of Seller's right, title and interest in and to any award made or to be made for the Premises. Seller acknowledges and agrees that Buyer shall have the right to participate in all negotiations relating to such condemnation, including the amount of compensation to be paid for any portion or portions of the Premises to be condemned.

9. POSSESSION OF THE PREMISES. The Premises 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, including without limitation, the UPP Lease.

10. 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 a limited liability company 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) This Agreement constitutes the valid and binding obligation of Seller, enforceable against Seller in accordance with its respective terms, except to the extent that enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the rights of contracting parties generally;

(c) 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 Certificate of Formation and Limited Liability Company Agreement; (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;

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(d) 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;

(e) 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;

(f) There are no litigation, liens (other than for taxes and assessments not due and payable and the mortgage to Middlesex Savings Bank), judgments, violations, or proceedings pending, or to Seller's actual knowledge, threatened against or relating to the Premises, nor does Seller actually know of any governmental investigation relating to the Premises;

(g) Seller has received no written notice of any outstanding violation of any federal, state, county, or municipal laws, ordinances, orders, codes, rules, regulations, or requirements affecting all or any portion of the Premises;

(h) There is no pending or to the Seller's actual 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 Premises or any portion thereof, or which may adversely affect Seller's ability to perform its obligations under this Agreement, or which may affect the Premises or any portion thereof;

(i) Seller is not a "foreign person" within the meaning of § 1445 of the Internal Revenue Code;

(j) There are no leases, tenancy agreements, tenancies at will, parking space agreements or other contracts, agreements or occupancy arrangements to which Seller is a party in effect with respect to any portion of the Premises, except for that certain Commercial Lease (Net Lease) by and between Seller, as landlord, and Unified Parking Partners Maine and New Hampshire LLC, as tenant, dated February 17, 2023, and any derivative parking subleases and licenses (the "UPP Lease");

(k) There are no management, service, equipment, supply, maintenance or concession agreements to which Seller is a party with respect to or affecting all or any portion of the Premises that are not terminable by Seller by the Closing;

(l) To Seller's actual knowledge, no work has been performed or is in progress at, and no materials have been furnished to the Premises or any portion thereof which

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may give rise to mechanic's, materialmen's or other liens against the Premises or any portion thereof, except for any work performed for Buyer by Buyer's consultants;

(m) Seller has not used, operated or knowingly permitted the use of the Premises in any manner for the storage, use, treatment, manufacture or disposal of any Hazardous Materials (as defined below) other than in compliance with applicable law or regulation. The term "Hazardous Materials" means and refers to any "hazardous waste" or "hazardous substance," as such terms are set forth in, under or pursuant to the Environmental Laws and Regulations, oil or petroleum products or their derivatives, polychlorinated biphenyls, asbestos, radioactive materials or waste, and any other toxic, ignitable, reactive, corrosive, explosive, contaminating or polluting materials which are now or in the future subject to governmental regulation. "Environmental Laws and Regulations" means any federal, state or local laws now or hereafter in effect relating to pollution or protection of the environment or emissions, discharges, spills, releases or threatened releases of any Hazardous Substance into the environment (including without limitation indoor air, ambient air, surface water, ground water or land), including without limitation, the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 *et seq.*, as amended, the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA"), 42 U.S.C. §§ 9601 *et seq.*, as amended, the Hazardous Materials Transportation Act, 49 U.S.C. §§ 1801 *et seq.*, as amended, the Clean Water Act, 33 U.S.C. §§ 1251 *et seq.*, as amended, the Clean Air Act, 42 U.S.C. §§ 7401 *et seq.*, as amended, the Toxic Substance Control Act, 15 U.S.C. §§ 2601 *et seq.*, as amended, and any rules and regulations now or hereafter promulgated under any of such acts;

(n) There are no outstanding pending or to Seller's actual knowledge, threatened, claims, options, rights of first refusal, boundary disputes, or encumbrances against or encroachments by, any portion of the Premises, except as may appear in the public record;

(o) Neither Seller nor any of its affiliates, nor any of their respective partners, members, shareholders or other equity owners, and none of their respective employees, officers, directors, representatives or agents is, nor will they become, a person or entity with whom United States persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action and is not and will not engage in any dealings or transactions or be otherwise associated with such persons or entities; and

(p) Pursuant to 33 MRSA Section 193, the Premises abuts the following public streets: Pearl Street, Cumberland Avenue, and Myrtle Street, with current access to the Premises from Cumberland Avenue.

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Seller will take, or cause to be taken, all action necessary to cause its warranties and representations to remain true and correct, in all material respects, through the date of the Closing. Buyer's obligation to acquire the Premises is conditioned upon the above representations and warranties remaining true and correct, in all material respects, as of the date of the Closing. If any of the representations and warranties become untrue or misleading in any material respect prior to the Closing, Seller will give prompt written notice to Buyer; and in such event (i) if the change is due to the fault of Seller, and is not cured within forty-five (45) days of written notice thereof from Buyer, the event will constitute a default by Seller under this Agreement and Buyer will have the remedies set forth in Section 12 below, and (ii) if the change is not due to the fault of Seller, Buyer may either waive such condition, in writing, or terminate this Agreement, in which event all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement. All of the above representations and warranties will be reaffirmed by Seller as true and correct in all material respects as of the date of the Closing and will survive the Closing for a period of one (1) year. Buyer shall not have any claim against Seller for misrepresentation or breach of warranty with respect to any fact actually known to Buyer prior to Closing. Representations of Seller which are made to Seller's actual knowledge shall be deemed to be made to the actual knowledge of Joseph Dasco.

11. 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 a limited liability company 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) This Agreement constitutes the valid and binding obligation of Buyer, enforceable against Buyer in accordance with its respective terms, except to the extent that enforcement may be limited by applicable bankruptcy, insolvency, moratorium and other principles relating to or limiting the rights of contracting parties generally;

(c) 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 Certificate of Formation; (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;

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(d) The person executing this Agreement on behalf of Buyer is duly authorized to do so and to bind Buyer to enter into and fully perform the obligations and transactions contemplated by this Agreement;

(e) 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; and

(f) Neither Buyer nor any of its affiliates, nor any of their respective partners, members, shareholders or other equity owners, and none of their respective employees, officers, directors, representatives or agents is, nor will they become, a person or entity with whom United States persons or entities are restricted from doing business under regulations of the Office of Foreign Asset Control ("OFAC") of the Department of the Treasury (including those named on OFAC's Specially Designated Nationals and Blocked Persons List) or under any statute, executive order (including the September 24, 2001, Executive Order Blocking Property and Prohibiting Transactions with Persons Who Commit, Threaten to Commit, or Support Terrorism), or other governmental action and is not and will not engage in any dealings or transactions or be otherwise associated with such persons or entities.

Buyer will take, or cause to be taken, all action necessary to cause its warranties and representations to remain true and correct, in all material respects, through the date of the Closing. Seller's obligation to sell the Premises is conditioned upon the above representations and warranties remaining true and correct, in all material respects, as of the date of the Closing. If any of the representations and warranties become untrue or misleading in any material respect prior to the Closing, Buyer will give prompt written notice to Seller; and in such event (i) if the change is due to the fault of Buyer, and is not cured within forty-five (45) days of written notice thereof from Seller, the event will constitute a default by Buyer under this Agreement and Seller will have the remedies set forth in Section 12 below, and (ii) if the change is not due to the fault of Buyer, Seller may either waive such condition, in writing, or terminate this Agreement and retain all previously paid Option Payments, in which event all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement. All of the above representations and warranties will be reaffirmed by Buyer as true and correct in all material respects as of the date of the Closing and will survive the Closing for a period of one (1) year.

12. DEFAULT AND REMEDIES.

(a) Seller Default. In the event that Seller defaults in the performance of its obligations hereunder or if any of Seller's representations and warranties set forth in this Agreement are untrue or misleading in any material respect due to Seller's fault, and such default or misrepresentation or breach of warranty is not cured by Seller within forty-five (45) days of

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written notice thereof from Buyer, then Buyer may elect at its option: (i) to terminate this Agreement by written notice to Seller, in which event all previously paid Option Payments and the Demolition Deposit (if previously paid) will be immediately refunded to Buyer and all rights and obligations of the parties under this Agreement will be of no further force or effect, except for obligations that are expressly stated to survive the termination of this Agreement, and except that Seller shall immediately reimburse Buyer for its reasonable, actual, out-of-pocket, third-party expenses incurred in connection with this Agreement and the transaction contemplated hereby including the Site Plan Application and Buyer's intended development of the Project (including reasonable attorney's fees) in an amount not to exceed [redacted] or (ii) to seek specific performance of this Agreement and if successful, shall be reimbursed by Seller for its out-of-pocket expenses, including court costs and reasonable attorneys' fees incurred in connection with such action.

(b) Buyer Default. In the event that Buyer defaults in its obligation to close hereunder, then Seller's sole and exclusive remedy for the default will be to terminate this Agreement by written notice to Buyer, in which event all previously paid Option Payments and the Demo Deposit (if paid) shall be retained by Seller, together [redacted] reimbursement as provided below when paid by Buyer, as full and complete liquidated damages for Buyer's default in lieu of any other legal or equitable remedy, and thereafter all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement. Buyer shall within ten (10) business days of presentation of invoices to Buyer for the reasonable, actual, out-of-pocket, third-party expenses incurred by Seller in connection with this Agreement and the transaction contemplated hereby including [redacted], reimburse Seller for such costs in an amount not to exceed [redacted] which obligation and payment by Buyer shall be an additional component of liquidated damages to Seller for Buyer's default. Seller and Buyer acknowledge and agree that Seller's damages due of Buyer's default hereunder are difficult or impossible to ascertain and that the amount of all previously paid Option Payments, the Demo Deposit, and expense reimbursement as provided above represent a reasonable estimate by both parties of Seller's damages.

13. BUYER'S CONDITIONS PRECEDENT. In addition to other conditions set forth in this Agreement, the obligation of Buyer to close is subject to the satisfaction at or before the Closing of all of the following conditions:

(a) All representations and warranties of Seller contained in this Agreement shall be true and correct in all material respects as of the Closing;

(b) Seller shall have materially and timely performed all of its obligations and commitments hereunder;

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(c) Seller shall have terminated the UPP Lease with respect to the Premises.

(d) Seller shall have completed the Demolition Work if timely notified by Buyer as provided above, otherwise there shall have been no material adverse change in the Premises, from the conclusion of the Approvals Period through the date of Closing that would cause the Premises to be unsuitable for Buyer's intended use and development.

In the event that at the time of Closing any of the foregoing conditions is not satisfied, Buyer shall have the option of terminating this Agreement by written notice to Seller, in which event all rights and obligations of the parties under this Agreement will be of no further force or effect, except for those obligations that are expressly stated to survive the termination of this Agreement, provided however if such unsatisfied condition is due to the fault of Seller, and is not cured by Seller within forty-five (45) days of written notice from Buyer thereof, the event will constitute a default by Seller under this Agreement and Buyer will have the remedies set forth in Section 12 above. Buyer may, however, elect to close notwithstanding such unsatisfied conditions as may exist. It is acknowledged by the parties that the foregoing conditions and any other conditions on Buyer's obligation to close contained in this Agreement are not intended to condition Seller's obligations and are solely for Buyer's benefit.

14. OFF MARKET. So long as this Agreement remains in effect, Seller shall not list or offer the Premises for sale and shall not seek, accept, solicit or negotiate any third party offers, nor engage in any discussions concerning the sale or lease of the Premises or any portion thereof with potential third-party purchasers or tenants, other than in connection with the transaction contemplated by this Agreement.

15. BROKERAGE. Seller and Buyer respectively represent and warrant to each other that they have not had any dealings with any person or entity other than Malone Commercial Brokers, as agent for Seller ("Seller's Broker") and The Dunham Group, as agent for Buyer ("Buyer's Broker" and collectively with Seller's Broker, the "Brokers") which may entitle such person or entity to a fee or commission in connection with the transaction contemplated by this Agreement. Seller agrees to be responsible for the payment of all fees and commissions due to the Brokers with respect to this transaction. Seller and Buyer hereby agree to indemnify, defend, and hold the other harmless from and against any losses, costs or expenses (including reasonable attorney's fees) arising out of any and all liabilities, claims, demands, costs, expenses (including reasonable attorneys' fees and disbursements) and judgments relating to any fee, commission or other compensation asserted by any broker, finder or intermediary, other than the Brokers, in connection with this Agreement or the transaction contemplated hereby, arising out of Seller's or Buyer's (as applicable) acts.

16. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

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(a) Real estate taxes for the Premises will be prorated as of the Closing Date based upon the most recently available tax bills for the Premises and the proportionate land area of the Premises and Seller's Retained Land. If the amount of the real estate taxes is not known on the Closing Date, such taxes shall be prorated on the basis of taxes assessed for the preceding fiscal period, subject to reapportionment as soon as the new tax rate and valuation can be ascertained. In the event of any abatement of such taxes subsequent to the apportionment thereof, the amount of such abatement, less the reasonable cost of obtaining the same, shall be prorated as of the Closing Date. If any special assessment affects the Premises as of the Closing Date, all unpaid installments of the assessment (including those which will become due and payable after the Closing) will be paid by Seller. Seller will cooperate with Buyer and share the reasonable, out-of-pocket cost (if any) equally to obtain a separate tax parcel identification number for the Premises after the Closing if the Premises is not separately assessed. If the Premises is not separately assessed, (i) Seller will pay all real estate taxes on the tax parcel for the entire tax year of Closing, subject to Buyer's payment of its share of the tax bill, and (ii) Buyer's share shall be based on the relative acreage of the Premises and the remaining land included in the tax parcel, applied to the value of the land (excluding improvements) contained in the tax parcel.

(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 and all title examination fees and premiums for the policy insuring Buyer and its lender will be paid by Buyer.

(d) The recording fees for any title clearance items will be paid by Seller.

(e) A portion of the Purchase Price shall be withheld at Closing by Buyer if required by 36 M.R.S.A. § 5250-A unless Seller furnishes Buyer with an affidavit stating, under penalty of perjury, that Seller is a resident of Maine or that the transfer is otherwise exempt from withholding tax.

The obligations of Seller and Buyer in this Section 16 will survive the Closing.

17. MISCELLANEOUS.

(a) Time. Time is of the essence of this Agreement.

(b) Notices. Notices given pursuant to this Agreement will be effective only if in writing and delivered (i) by reputable overnight courier guaranteeing next business day delivery, (ii) if sent on a business day during the business hours of 9:00 a.m. until 5:00 p.m.,

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eastern time, via email, with either an acknowledgement of receipt or a copy to follow by reputable overnight courier guaranteeing next business day delivery, or (iii) by United States certified mail, return receipt requested. All notices will be directed to the other party at its address provided below or such other address as either party may designate by notice given in accordance with this Section. Notices will be effective (i) if by overnight courier, one (1) business day after deposit with all delivery charges prepaid, (ii) if by email, on the date of delivery, provided receipt is acknowledged or a copy of such notice is sent as required above, and (iii) in the case of certified mail, the earlier of the date receipt is acknowledged on the return receipt for such notice or five (5) business days after the date of posting by the United States Post Office. The notice addresses for Seller and Buyer are as follows:

TO SELLER: 385 Congress LLC
2730 Transit Road
West Seneca, New York 14224
Attn: Joseph Dasco
Tel: 413-244-9092
Email: joedasco@comcast.net

WITH A COPY TO: Bernstein Shur
PO Box 9729
100 Middle Street
Portland, ME 04104-5029
Attn: Tom Hanson, Esq.
Tel: (207) 228-7335
Email: thanson@bernsteinshur.com

TO BUYER: Mile Marker Investments, LLC
200 US Route One, Suite 200
Scarborough, ME 04074
Attn: Howard A. Goldenfarb, Manager
Tel: (207) 885-4200
Email: HG@ramcompaniesusa.com

WITH A COPY TO: Bernstein Shur
PO Box 9729
100 Middle Street
Portland, ME 04104-5029
Attn: William M. Welch, Esq.
Tel: (207) 228-7339
Email: wwelch@bernsteinshur.com

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and

Live Nation
325 N. Maple Drive
Beverly Hills, CA 90210
Attn: Fred Kim
Email: fredkim@livenation.com
(Notices to Live Nation must be delivered by email, in addition to any other notice delivery methods permitted hereunder)

(c) Business Day. As used herein, the term "business day" shall mean any day other than a Saturday, Sunday, or any Federal or State of Maine holiday. If any period expires on a day which is not a business day or any event or condition is required by the terms of this Agreement to occur or be fulfilled on a day which is not a business day, such period shall expire or such event or condition shall occur or be fulfilled, as the case may be, on the next succeeding business day.

(d) 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 and obligations hereunder to its nominee or an entity formed by Buyer prior to Closing, including to a joint venture entity directly or indirectly owned by Buyer or its affiliate and Live Nation Worldwide, Inc. or its affiliate, but the originally-named Buyer shall remain liable jointly and severally with such assignee under this Agreement notwithstanding such assignment.

(e) 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, and therefore supersedes and replaces in its entirety that certain Letter of Intent/Offer to Purchase dated April 11, 2024, which shall be of no further force and effect. 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.

(f) Further Assurances. Whenever reasonably requested to do so by the other party, Seller and Buyer shall take such further actions and execute, acknowledge, and deliver any

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and all such further reasonable instruments as may be necessary in order to carry out the intent and purpose of this Agreement.

(g) Execution. This Agreement and any documents executed or initialed in connection herewith may be executed in multiple counterparts, which together shall be construed to be a single document. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000, e.g., www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

(h) Non-Disclosure. Each of Seller and Buyer agrees to keep all discussions and negotiations with the other, which shall include, without limitation, the existence and terms of this Agreement, and all information obtained by or provided to either Seller or Buyer regarding the Premises or the transaction contemplated by this Agreement, in strict confidence and shall not disclose the same except to Seller's or Buyer's respective attorneys, brokers, consultants, lenders, potential joint venture partners, investors, or professional advisors who are actively and directly participating in the transaction, each of whom will be informed by Seller or Buyer (as applicable) of the confidential nature of this transaction. At or after Closing, Buyer will have the right, at its sole discretion, to publicize the transaction (other than the specific economics thereof) in whatever manner it deems appropriate. Seller agrees that Seller will not, at any time, prepare, circulate or contribute to any press release concerning the transaction contemplated by this Agreement without Buyer's prior written consent (to be granted or withheld in Buyer's sole discretion). The provisions of this paragraph will survive the Closing or any termination of this Agreement. None of the foregoing shall be applicable to any information regarding the transaction contemplated by this Agreement that must or reasonably should be disclosed in connection with [redacted] the Site Plan Application, which information may become public.

(i) 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.

(j) 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.

*[Remainder of Page Intentionally Left Blank]*

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IN WITNESS WHEREOF, Seller and Buyer have caused this Agreement to be executed under seal by their respective duly authorized representatives as of the dates indicated below.

WITNESS:

Michelle Cole
Name: Michelle Cole

SELLER:

385 CONGRESS LLC

By: _____ / 6/26/24
Name: Gordon Reget
Title: Manager
Date

BUYER:

MILE MARKER INVESTMENTS, LLC

_____
Name:

By: _____ / _____
Howard A. Goldenfarb
Its Manager
Date:

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IN WITNESS WHEREOF, Seller and Buyer have caused this Agreement to be executed under seal by their respective duly authorized representatives as of the dates indicated below.

WITNESS:

_____
Name:

SELLER:

385 CONGRESS LLC

By: _____ / _____
Name: Date
Title:

BUYER:

MILE MARKER INVESTMENTS, LLC

_____
Name:

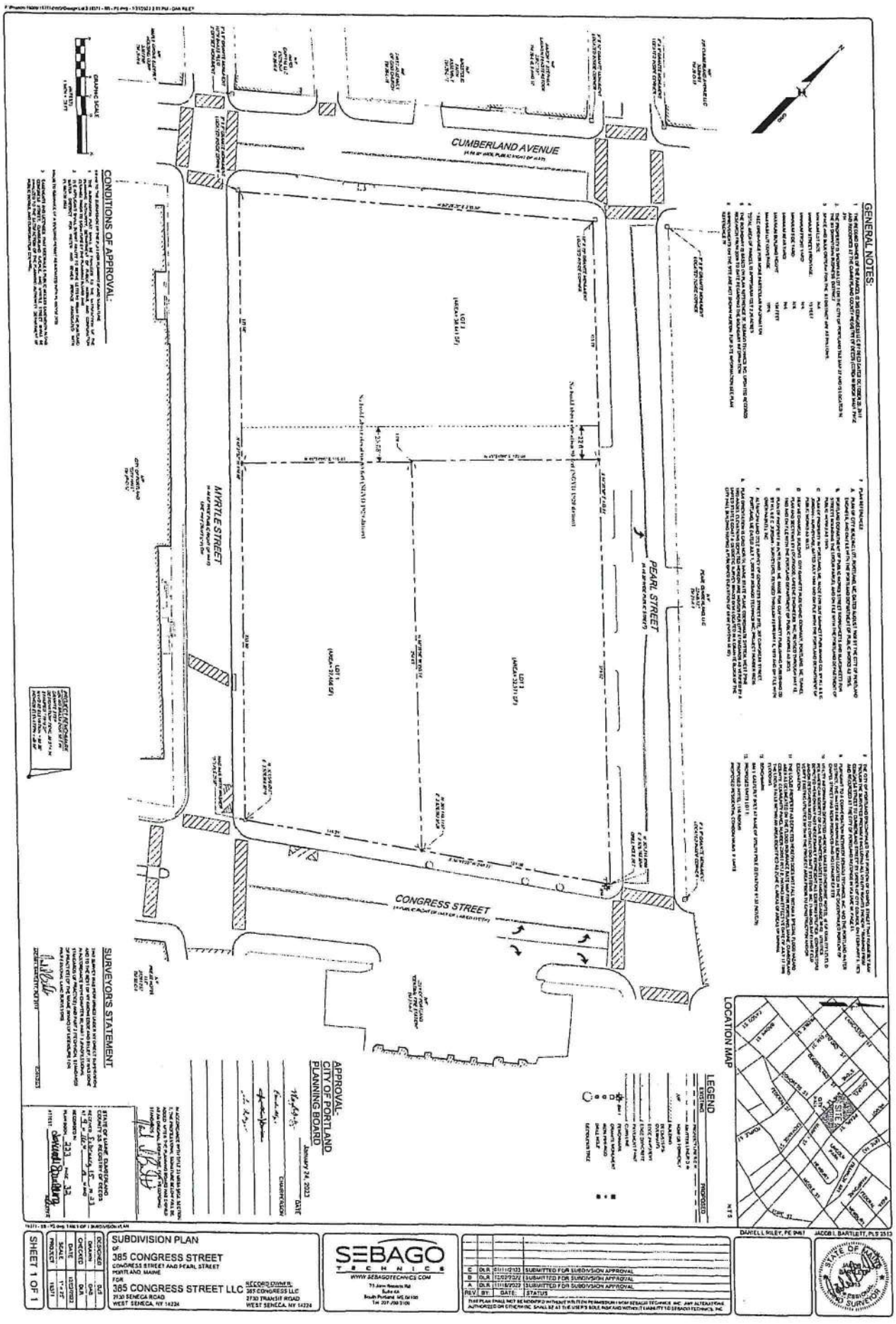
By: DocuSigned by: [signature] / 6/26/2024
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Howard A. Goldenfarb Date:
Its Manager

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# EXHIBIT A

Annotated Subdivision Plan
(see attached)

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**EXHIBIT B**

Demolition Agreement
(see attached)

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# DEMOLITION AGREEMENT

This Demolition Agreement (this "Agreement") made as of 17th day of February, 2023, is by and between **385 CONGRESS LLC**, a Maine limited liability company with a mailing address c/o 2730 Transit Road, West Seneca, New York 14224 ("385 Congress"), and **FATHOM CONGRESS, LLC**, a Delaware limited liability company with a mailing address of 80 Exchange Street, Suite 400, Portland, Maine 04101 ("Fathom");

WITNESSETH:

WHEREAS, as of the date hereof, 385 Congress is the owner of certain parcels of real estate known as Lot 2 and Lot 3 as shown on the plan entitled "Subdivision Plan of: 385 Congress Street" prepared by Sebago Technics dated December 2, 2022, revised through January 11, 2023, and approved by the City of Portland Planning Board on January 24, 2023, and recorded in the Cumberland County Registry of Deeds in Plan Book 223, Page 32 (the "Subdivision Plan"); and

WHEREAS, on or about the date hereof, 385 Congress has conveyed Lot 1 as shown on the Subdivision Plan to Fathom; and

WHEREAS, 385 Congress has agreed, in part for the benefit of Fathom, to perform the demolition of the existing building that is located on Lots 1, 2, and 3 (collectively, the "Property"), subject to the terms and conditions in this Agreement, which Agreement is intended to survive the closing of the conveyance of Lot 1 to Fathom.

NOW, THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration paid by Licensee, the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree as follows:

1. *Demolition Work.* 385 Congress shall, at its expense, commence the demolition and removal of the so-called "printing press building" from the Property within sixty (60) days after (i) receipt of notice from Fathom requesting the commencement of such demolition or (ii) delivery to Fathom of notice from 385 Congress that 385 Congress intends to commence demolition and removal of the so-called "printing press building" from the Property (the "Demolition Notice"), which demolition and removal work shall be performed in accordance with all of the following (the "Demolition Work"):

(a) The removal of the "printing press building," excluding (i) the foundation wall along Myrtle Street (which 385 Congress may leave as a retaining wall) and (ii), the foundation wall along Congress Street (which 385 Congress may leave as a retaining wall), provided,

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however, that if Fathom notifies 385 Congress in the Demolition Notice that Fathom elects to have the Congress Street foundation wall removed (which shall not include any portion of the tunnel structure), 385 Congress shall remove the Congress Street foundation wall as part of the Demolition Work;

(b) Proper handling, removal and disposal of any Hazardous Materials identified in the ESA and located within the building or its structure, or encountered in the building or its structure in the process of building demolition (but not the soils around or under the building structure) in accordance with applicable laws, rules and regulations;

(c) The Demolition Work shall include only the removal of all foundation walls, slab and related infrastructure (except the foundation wall along Myrtle Street and, unless otherwise elected by Fathom, the foundation wall along Congress Street), systems and other man-made materials associated with the buildings and improvements on the Property

(d) Utilities to be cut and capped in place or capped at the Property boundary, as reasonably determined by 385 Congress according to site conditions;

(e) Installation of construction fencing around the excavation created by the Demolition Work;

(f) Temporary bracing of any foundation walls that are excluded from Demolition Work (including through leaving slab in place as necessary); and

(g) Demolition Work shall not require any soils remediation by 385 Congress or any demolition or other work to the tunnel under Congress Street.

As a condition for the foregoing obligations of 385 Congress to undertake and complete the Demolition Work, Fathom has deposited with Pierce Atwood ("Escrow Agent") a deposit of [redacted] (the "Demolition Deposit"), which funds may be used by 385 Congress to pay for costs and expenses of the Demolition Work, as and when due, and shall be promptly released by Escrow Agent to 385 Congress upon presentation of invoices for Demolition Work. In the event that 385 Congress has not completed Demolition Work with one hundred and twenty (120) days following receipt of the Demolition Notice (the "Demolition Period"), 385 Congress shall have an additional thirty (30) days to cure such default and complete the Demolition Work as specified herein. In the event that the Demolition Work is not completed at the end of the 30-day cure period, 385 Congress shall be required to pay over to Fathom, to be held by Fathom in a segregated escrow account, a reasonable estimate of any additional amounts needed to complete the Demolition Work (in addition to the Demolition Deposit), which amounts, together with the Demolition Deposit shall be released to Fathom and applied as follows: (i) to pay the costs and expenses of Fathom's arranging for and proceeding with completion of Demolition Work, as and when such costs become due, and (ii) the balance, if any, after payment of all such costs of substitute performance, to be paid to 385 Congress, less any out-of-pocket delay damages incurred by Fathom as a result of 385 Congress's failure to complete Demolition Work by the expiration of the Demolition Period.

If Lot 1 is subject to any lease at the time of delivery of a Demolition Notice in accordance with this Agreement, Fathom shall terminate any such lease encumbering Lot 1 and shall render the

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portions of the "printing press building" located on Lot 1 vacant and unoccupied (a) on or before delivery of a Demolition Notice by Fathom to 385 Congress, or (b) as soon as possible following receipt of Demolition Notice from 385 Congress, but in no event later than thirty-five (35) days from receipt of said Demolition Notice; provided, however that the Demolition Period shall be extended by the number of days in excess of five (5) days following Fathom's receipt of Demolition Notice from 385 Congress that Lot 1 is not rendered vacant and unoccupied as required under this paragraph.

385 Congress covenants and agrees with Fathom that it shall not convey or transfer all or any portion of either Lot 2 or Lot 3 or both Lots, or otherwise encumber all or any portion of Lot 2 and Lot 3 if such encumbrance would result in any limitation or material impact on the ability of 385 Congress to undertake and complete the Demolition Work as contemplated hereunder, until 385 Congress shall have completed the Demolition Work on the Property, and any such conveyance, transfer or encumbrance in violation of the foregoing shall be void; provided, however that 385 Congress may grant a mortgage on either Lot 2 or Lot 3 or both Lots so long as any such mortgage grant is made expressly subject to this Agreement and the obligations of 385 Congress as the owner of Lots 2 and 3 hereunder. Upon the completion of the Demolition Work in accordance with the terms of this Agreement, the foregoing prohibition on the sale or transfer of Lot 2 or Lot 3 or both Lots automatically shall terminate and be of no further force and effect. Within five (5) business days written request of 385 Congress to Fathom, Fathom shall execute and deliver to 385 Congress in recordable form an acknowledgment of completion of the Demolition Work on Lot 1 and a release of the foregoing prohibition on conveyance. The foregoing covenant touches and concerns Lot 2 and Lot 3 and shall run with Lot 2 and Lot 3.

2. *Insurance; Release*. 385 Congress shall obtain and maintain commercial general liability coverage during the duration of the performance of the Demolition Work , with reputable and financially sound insurance companies licensed to provide insurance in Maine, in an amount of not less than Three Million Dollars ($3,000,000.00) combined single limit with deductibles of not more than Ten Thousand Dollars ($10,000.00) per occurrence. 385 Congress shall name Fathom as an additional insured on the commercial general liability insurance policy. 385 Congress shall provide Fathom with evidence of the aforementioned insurance coverage, in the form of insurance certificates or copies of the insurance policies if requested by Fathom, prior to 385 Congress's or its employees', agents' or contractors' entry upon Lot 1 to perform the Demolition Work. 385 Congress acknowledges and agrees that Fathom shall in no way be responsible for the security, safety or condition of Lot 1 (other than the termination of any leases encumbering Lot 1 and the vacating of the building as aforesaid), for the oversight of 385 Congress's employees, agents, or contractors operating in or around Lot 1 during the performance of the Demolition Work, all of which shall be at 385 Congress's sole risk.

3. *Subordination*. This Agreement automatically shall be subject and subordinate to the lien of any mortgage now affecting, or that may in the future affect, Lot 1 or any portion thereof, and to the lien of any extension, modification or refinancing of said mortgage (such existing or future mortgage, as the same may be extended, modified or refinanced, the "Mortgage"), on the condition that, in the event of a foreclosure or other action taken under the Mortgage by the holder thereof, this Agreement shall not be disturbed but shall continue in full force and effect until the Demolition Work on Lot 1 is complete and that 385 Congress shall not be named to the foreclosure proceedings unless required by law. The foregoing subordination shall be self-

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operative and no further instrument of subordination shall be required. 385 Congress shall, however, at the request of either Fathom or a mortgage holder promptly execute, acknowledge and deliver an agreement confirming such subordination on the form of subordination agreement customarily used by the mortgage holder.

4. *Release; Indemnity*. Without limitation of any other provision herein, Fathom or its employees, contractors, principals, officers, managers and agents (collectively, the "Fathom Parties") shall be not be liable for, and 385 Congress hereby releases the Fathom Parties from and against, any and all claims for injury or death to any person, or damage to or theft of property or damage to business (including without limitation consequential damages) sustained by 385 Congress or any person claiming by, through or under 385 Congress in connection with the Demolition Work or any part thereof, or due to the happening of any accident in or about the Property or any part thereof in connection with the Demolition Work, or due to any act or omission of 385 Congress or of any employee, contractor, agent, or visitor of 385 Congress. Except to the extent caused by the negligence, willful misconduct or violation of law by any of the Fathom Parties, 385 Congress shall indemnify, defend and hold harmless the Fathom Parties from and against any and all claims, causes of action, demands, penalties, fines, damages (but expressly excluding consequential or punitive damages), and costs, including without limitation reasonable attorneys' and paralegals' fees, incurred or suffered by Fathom or such other related parties related to or arising in connection with the Demolition Work and access to Lot in connection therewith.385 Congress hereby waives any immunity arising under workers' compensation laws with respect to the enforcement of the foregoing indemnity. The foregoing indemnity shall survive termination or expiration of this Agreement.

5. *License for Access to Lot 1*. Fathom hereby grants a license to 385 Congress, and its employees, agents and contractors, to enter upon Lot 1 for purposes of performing the Demolition Work, and only for the purpose of the Demolition Work. Upon the completion of the Demolition Work, the foregoing license automatically shall terminate.

6. *Contract Only*. This Agreement shall be deemed to create only the relationship of contractual counterparties, and shall not be deemed to create any other relationship, including, without limitation, grantor-grantee, landlord-tenant, principal-agent, master-servant, employer-employee or partner-joint venturer.

7. *Compliance with Law*. 385 Congress shall, at its sole cost and expense, materially comply, and shall cause all of its employees, agents and contractors to comply, with all applicable laws, rules, regulations, ordinances, orders or codes with respect to the Demolition Work and with respect to access to Lot 1 by 385 Congress, its employees, agents and contractors in connection therewith.

8. *Entire Agreement*. This Agreement constitutes the entire agreement between the parties hereto with respect to the specific subject matter of this Agreement and supersedes all prior written and oral agreements and understanding relating to the specific subject matter hereof.

9. *Modification*. This Agreement may not be modified or amended except by an instrument in writing signed by the parties hereto. No waiver or consent may be enforced unless such waiver or consent shall be in writing and signed by the party against whom enforcement thereof is sought.

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*10.* *Applicable Law*. This Agreement shall be governed by the laws of the State of Maine.

*11.* *Successors and Assigns*. This Agreement shall be binding upon, and inure to the benefit of the parties hereto and their respective beneficiaries, representatives, administrators, successors and permitted assigns, the covenants and agreements set forth herein touch and concern the land and shall run with Lot 1, Lot 2 and Lot 3. This Agreement shall be recorded in the Registry of Deeds.

*12.* *Notices; Contact Information*. Any notice, demand or other communication that any party hereto may wish or is required to send to the other party hereto under or pursuant to the provisions of this Agreement shall be in writing and sent by certified mail, return receipt requested, Fedex or other reliable national overnight courier, or by email (provided that a copy of the emailed communication shall be sent by one of the other means above within One (1) business day of the emailed communication), addressed to the party for which such notice, demand or other communication is intended at such party's address as set forth below:

If to Licensor:

385 Congress LLC
Attn: Joseph Dasco
2730 Transit Road
West Seneca, New York 14224
413-244-9092
joedasco@comcast.net

With Copy to:

Bernstein Shur Sawyer & Nelson, PA
Attn. Tom Hanson, Esq.
100 Middle Street
P.O. Box 9729
Portland, ME 04104-5029
207-228-7335
thanson@bernsteinshur.com

If to Licensee:

Fathom Congress, LLC
Attn: Marieke Thormann
80 Exchange Street, Suite 400
Portland, Maine 04101
mthormann@fathomcompanies.com

With Copy to:

Pierce Atwood LLP
Attn. Rebecca Greenfield, Esq.

Docusign Envelope ID: 139AC459-E8C5-425F-B570-98EE16D1AB58

254 Commercial Street
Portland, ME 04101
rgreenfield@pierceatwood.com

Any address, telephone number or email address may be changed by the applicable party by notice given to other party in the manner set forth above. Notices and communication shall be deemed received on the date shown on the return receipt or the courier confirmation of delivery or the email time stamp (provided that copy is sent by other means as provided above).

*13.* *Counterparts*. This Agreement may be signed in any number of identical counterparts, including without limitation electronic copy, with the same binding effect as if the signatures were on one instrument.

14. *Defined Terms.*

(a) "Hazardous Materials" as used herein shall mean any pollutants, contaminants or hazardous substances (as such terms are defined under CERCLA), pesticides (as such term is defined under the Federal Insecticide, Fungicide and Rodenticide Act, 7 U.S.C. §§ 136 et seq.), solid wastes and hazardous wastes (as such terms are defined under the Resource Conservation and Recovery Act, 42 U.S.C. §§ 6901 et seq.), chemicals, other hazardous, radioactive or toxic materials, oil, petroleum and petroleum products (and fractions thereof), asbestos and asbestos-containing materials, polychlorinated biphenels ("PCBs") or PCB-containing materials, or any other material (or article containing such material) listed or subject to regulation under any law, statute, rule, regulation, order, permit, or directive due to its potential, directly or indirectly, to harm the environment or the health of humans or other living beings.

(b) "ESA" as used herein shall mean

i. That certain Phase I Environmental Site Assessment prepared by St. Germain for Fathom Congress, LLC and Reger Dasco Properties for Commercial Property located at 385 Congress Street, Portland, Maine, dated November 29, 2022 (St. Germain File No.: 4635-0001);

ii. That certain letter regarding No Action Assurance Letter – Voluntary Response Action Program for 386 Congress Street, Portland, Maine, from the State of Maine, Department of Environmental Protection, dated March 30, 2022;

iii. That certain letter regarding Soil Vapor Testing Results prepared by St. Germain for Maine Department of Environmental Protection for 385 Congress Street, Portland, Maine, dated as of February 23, 2022;

iv. That certain Environmental Assessment Report prepared by MAI Environmental for Reger Holdings for 385 Congress Street, Portland, Maine, dated September 21, 2017; and

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v. That certain Phase I Environmental Site Assessment prepared by MAI Environmental for Reger Holdings, LLC for 385 Congress Street, Portland, Maine, dated July 2017.

[Signature Page Follows]

Docusign Envelope ID: 139AC459-E8C5-425F-B570-98EE16D1AB58

IN WITNESS WHEREOF the parties hereto have caused this Agreement to be signed by their duly-authorized agents under seal as of the day and year first above written.

WITNESS:

Carol Ann Pagano

Name: Carol Ann Pagano

385 CONGRESS LLC

By: _____

Gordon Reger
Its duly-authorized Manager

STATE OF NEW YORK
COUNTY OF ERIE

On the 13th day of February, 2023, before me personally came Gordon Reger, to me known, who, being by me duly sworn, did depose and say that he resides in East Aurora, New York; that he is the Manager of 385 Congress LLC, the limited liability company described in and which executed the above instrument; and that he signed his name thereto by proper authority of said limited liability company.

Michelle Cole

Notary Public
Print Name: Michelle Cole
Commission Expiration Date: 3/9/2024

Michelle Cole
Notary Public State of New York
Qualified in Erie County
Lic.# 01CO6405363
My Commission Expires 03/09/2024



Demo Agmt

Docusign Envelope ID: 139AC459-E8C5-425F-B570-98EE16D1AB58

FATHOM CONGRESS, LLC

By: _____
James Brady, President

_____
Name:

STATE OF MAINE
COUNTY OF CUMBERLAND

February 17, 2023

Then personally appeared before me the above named James Brady, President of Fathom Congress, LLC, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said limited liability company.

_____
Attorney at Law/~~Notary Public~~
Printed Name: PETER H. KGN CAN

#15768832v3

## Section 5 – Public or Private Rights-of-Way

No Public or Private Rights-of-Way are proposed on the project parcel.

## Section 6 – Construction Schedule

Construction is anticipated to begin in Fall 2025 once all permits are received with occupancy of the Music Hall in Spring 2027

# Appendix A. MaineDOT Crash Data

Maine Department Of Transportation - Office of Safety, Crash Records Section

# 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
Myrtle St-Pearl St-Congress St-Cumberland Ave area

### REPORT PARAMETERS

Year 2022, Start Month 1 through Year 2024 End Month: 12

| | | | |
|---|---|---|---|
| Route: **0560571** | Start Node: **18813** | Start Offset: **0** | ☐ **Exclude First Node** |
| | End Node: **18812** | End Offset: **0** | ☐ **Exclude Last Node** |
| Route: **0560527** | Start Node: **18772** | Start Offset: **0** | ☐ **Exclude First Node** |
| | End Node: **18990** | End Offset: **0** | ☐ **Exclude Last Node** |
| Route: **0561238** | Start Node: **18990** | Start Offset: **0** | ☑ **Exclude First Node** |
| | End Node: **18812** | End Offset: **0** | ☑ **Exclude Last Node** |
| Route: **0560160** | Start Node: **18813** | Start Offset: **0** | ☑ **Exclude First Node** |
| | End Node: **18772** | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18813 | 0560571 - 0.31 | Int of CONGRESS ST PEARL ST | 9 | 8 | 0 | 0 | 0 | 1 | 7 | 12.5 | 4.540 | 0.59 | 1.23 | 0.48 |
| | | | | | | | | | | | Statewide Crash Rate: | 0.69 | | |
| 18812 | 0560571 - 0.40 | Int of CUMBERLAND AV PEARL ST | 9 | 10 | 0 | 0 | 0 | 1 | 9 | 10.0 | 3.979 | 0.84 | 1.27 | 0.66 |
| | | | | | | | | | | | Statewide Crash Rate: | 0.69 | | |
| 18772 | 0560527 - 0 | Int of CONGRESS ST MARKET ST MYRTLE ST | 2 | 7 | 0 | 0 | 0 | 3 | 4 | 42.9 | 4.424 | 0.53 | 0.39 | 1.37 |
| | | | | | | | | | | | Statewide Crash Rate: | 0.15 | | |
| 18990 | 0560527 - 0.09 | Int of CUMBERLAND AV MYRTLE ST | 2 | 2 | 0 | 0 | 0 | 0 | 2 | 0.0 | 2.404 | 0.28 | 0.41 | 0.68 |
| | | | | | | | | | | | Statewide Crash Rate: | 0.13 | | |
| 18994 | 0561238 - 0.64 | Int of CHAPEL ST CUMBERLAND AV | 2 | 2 | 0 | 0 | 0 | 1 | 1 | 50.0 | 2.510 | 0.27 | 0.40 | 0.68 |
| | | | | | | | | | | | Statewide Crash Rate: | 0.13 | | |
| **Study Years:** | 3.00 | **NODE TOTALS:** | | 29 | 0 | 0 | 0 | 6 | 23 | 20.7 | 17.857 | 0.54 | 0.62 | 0.88 |

# 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18812 | 18813 | 5080413 | 0 - 0.09 | 0560571 - 0.31 | 0.09 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0.0 | 0.00106 | 313.18 | 1079.88 | 0.29 |
| Int of CUMBERLAND AV PEARL ST | | | | RD INV 05 60571 | | | | | | | | | | | Statewide Crash Rate: 365.24 | | |
| 18772 | 18990 | 194351 | 0 - 0.09 | 0560527 - 0 | 0.09 | 2 | 4 | 0 | 0 | 0 | 0 | 3 | 0.0 | 0.00030 | 4479.97 | 1452.81 | 3.08 |
| Int of CONGRESS ST MARKET ST MYRTLE ST | | | | RD INV 05 60527 | | | | | | | | | | | Statewide Crash Rate: 365.24 | | |
| 18990 | 18994 | 3106833 | 0 - 0.02 | 0561238 - 0.62 | 0.02 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.00038 | 869.59 | 671.56 | 1.29 |
| Int of CUMBERLAND AV MYRTLE ST | | | | RD INV 05 61238 | | | | | | | | | | | Statewide Crash Rate: 156.39 | | |
| 18812 | 18994 | 3119280 | 0 - 0.04 | 0561238 - 0.64 | 0.04 | 2 | 3 | 0 | 0 | 1 | 1 | 1 | 66.7 | 0.00124 | 805.61 | 550.02 | 1.46 |
| Int of CUMBERLAND AV PEARL ST | | | | RD INV 05 61238 | | | | | | | | | | | Statewide Crash Rate: 156.39 | | |
| 18772 | 18813 | 3938300 | 0 - 0.06 | 0560160 - 0.87 | 0.06 | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0.0 | 0.00193 | 173.04 | 603.33 | 0.29 |
| Int of CONGRESS ST MARKET ST MYRTLE ST | | | | RD INV 05 60160 | | | | | | | | | | | Statewide Crash Rate: 204.85 | | |
| **Study Years:** 3.00 | | | | **Section Totals:** | 0.30 | | 10 | 0 | 0 | 1 | 1 | 6 | 20.0 | 0.00491 | 678.49 | 523.45 | 1.30 |
| | | | | **Grand Totals:** | 0.30 | | 39 | 0 | 0 | 1 | 7 | 29 | 20.5 | 0.00491 | 2646.09 | 684.18 | 3.87 |

# Appendix B. Traffic Count Data

# Accurate Counts

978-664-2565

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
Page No : 1

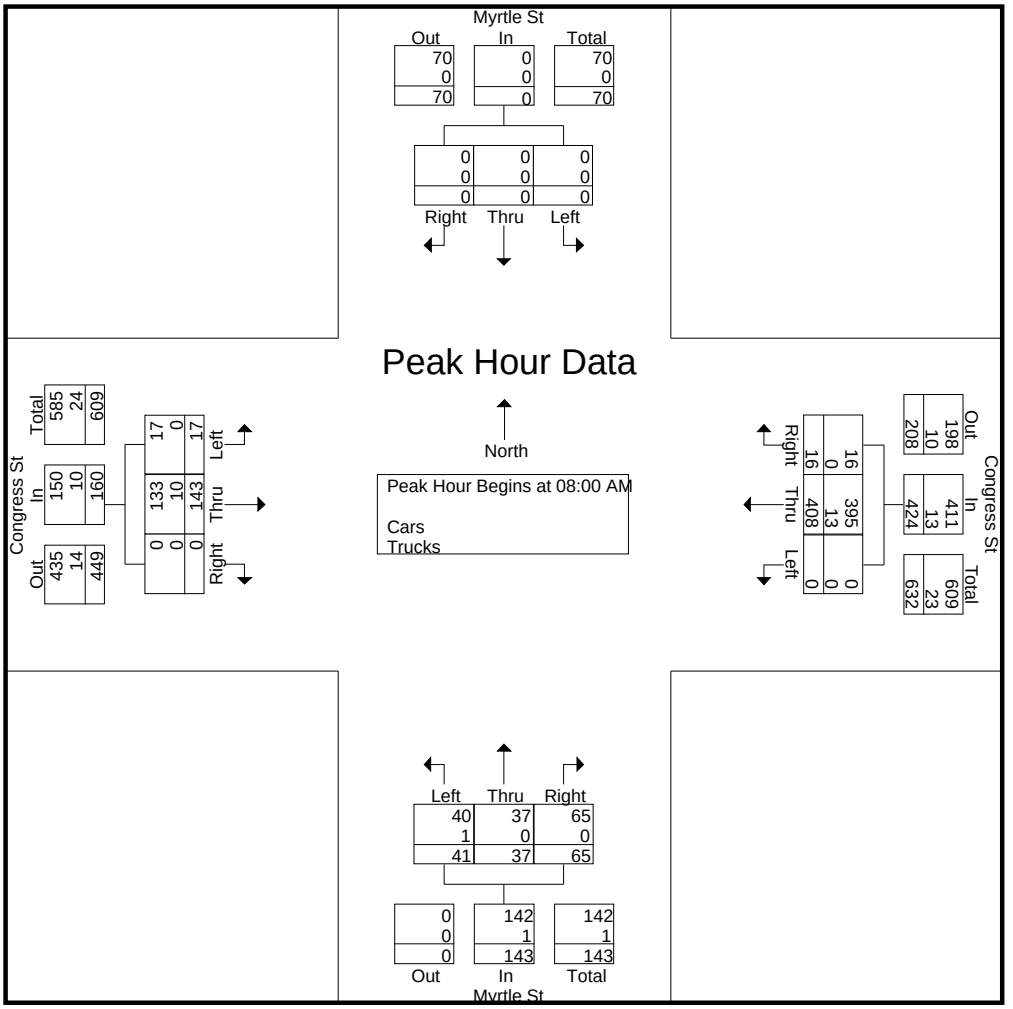
Groups Printed- Cars - Trucks

| | Myrtle St From North | | | Congress St From East | | | Myrtle St From South | | | Congress St From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 37 | 0 | 4 | 4 | 6 | 1 | 18 | 0 | 70 |
| 07:15 AM | 0 | 0 | 0 | 0 | 49 | 2 | 5 | 2 | 7 | 1 | 18 | 0 | 84 |
| 07:30 AM | 0 | 0 | 0 | 0 | 73 | 2 | 9 | 9 | 14 | 3 | 31 | 0 | 141 |
| 07:45 AM | 0 | 0 | 0 | 0 | 94 | 2 | 6 | 5 | 11 | 2 | 41 | 0 | 161 |
| Total | 0 | 0 | 0 | 0 | 253 | 6 | 24 | 20 | 38 | 7 | 108 | 0 | 456 |
| | | | | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 0 | 117 | 5 | 13 | 9 | 15 | 3 | 32 | 0 | 194 |
| 08:15 AM | 0 | 0 | 0 | 0 | 101 | 2 | 9 | 4 | 14 | 6 | 46 | 0 | 182 |
| 08:30 AM | 0 | 0 | 0 | 0 | 95 | 4 | 9 | 12 | 13 | 1 | 29 | 0 | 163 |
| 08:45 AM | 0 | 0 | 0 | 0 | 95 | 5 | 10 | 12 | 23 | 7 | 36 | 0 | 188 |
| Total | 0 | 0 | 0 | 0 | 408 | 16 | 41 | 37 | 65 | 17 | 143 | 0 | 727 |
| | | | | | | | | | | | | | |
| Grand Total | 0 | 0 | 0 | 0 | 661 | 22 | 65 | 57 | 103 | 24 | 251 | 0 | 1183 |
| Apprch % | 0 | 0 | 0 | 0 | 96.8 | 3.2 | 28.9 | 25.3 | 45.8 | 8.7 | 91.3 | 0 | |
| Total % | 0 | 0 | 0 | 0 | 55.9 | 1.9 | 5.5 | 4.8 | 8.7 | 2 | 21.2 | 0 | |
| Cars | 0 | 0 | 0 | 0 | 634 | 22 | 63 | 57 | 103 | 24 | 233 | 0 | 1136 |
| % Cars | 0 | 0 | 0 | 0 | 95.9 | 100 | 96.9 | 100 | 100 | 100 | 92.8 | 0 | 96 |
| Trucks | 0 | 0 | 0 | 0 | 27 | 0 | 2 | 0 | 0 | 0 | 18 | 0 | 47 |
| % Trucks | 0 | 0 | 0 | 0 | 4.1 | 0 | 3.1 | 0 | 0 | 0 | 7.2 | 0 | 4 |

| | Myrtle St From North | | | | Congress St From East | | | | Myrtle St From South | | | | Congress St From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 AM | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | **117** | **5** | **122** | **13** | 9 | 15 | 37 | 3 | 32 | 0 | 35 | **194** |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 101 | 2 | 103 | 9 | 4 | 14 | 27 | 6 | **46** | 0 | **52** | 182 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 95 | 4 | 99 | 9 | **12** | 13 | 34 | 1 | 29 | 0 | 30 | 163 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 95 | 5 | 100 | 10 | 12 | **23** | **45** | **7** | 36 | 0 | 43 | 188 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 408 | 16 | 424 | 41 | 37 | 65 | 143 | 17 | 143 | 0 | 160 | 727 |
| % App. Total | 0 | 0 | 0 | | 0 | 96.2 | 3.8 | | 28.7 | 25.9 | 45.5 | | 10.6 | 89.4 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .872 | .800 | .869 | .788 | .771 | .707 | .794 | .607 | .777 | .000 | .769 | .937 |
| Cars | 0 | 0 | 0 | 0 | 0 | 395 | 16 | 411 | 40 | 37 | 65 | 142 | 17 | 133 | 0 | 150 | 703 |
| % Cars | 0 | 0 | 0 | 0 | 0 | 96.8 | 100 | 96.9 | 97.6 | 100 | 100 | 99.3 | 100 | 93.0 | 0 | 93.8 | 96.7 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 1 | 0 | 0 | 1 | 0 | 10 | 0 | 10 | 24 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 3.2 | 0 | 3.1 | 2.4 | 0 | 0 | 0.7 | 0 | 7.0 | 0 | 6.3 | 3.3 |

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
Page No : 2

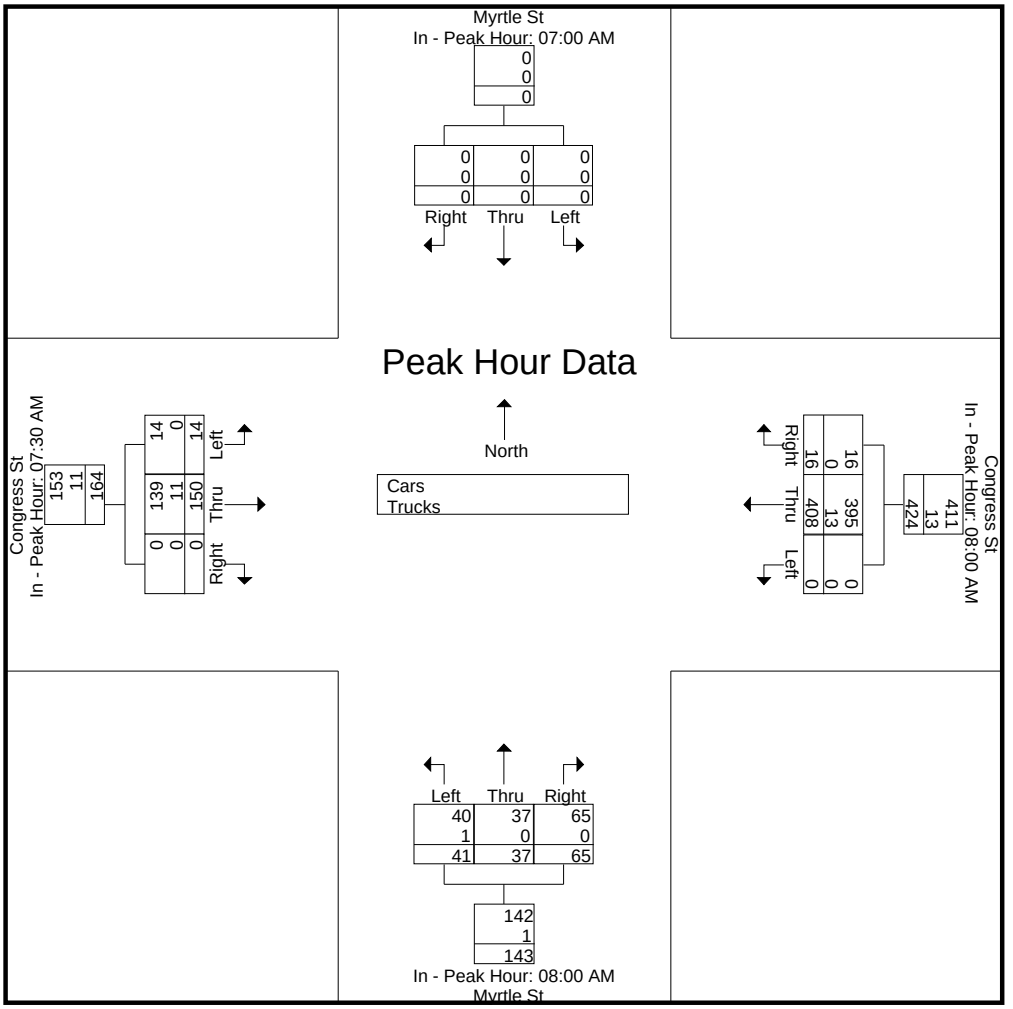



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:00 AM | | | | 08:00 AM | | | | 08:00 AM | | | | 07:30 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | **117** | **5** | **122** | **13** | 9 | 15 | 37 | 3 | 31 | 0 | 34 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 101 | 2 | 103 | 9 | 4 | 14 | 27 | 2 | 41 | 0 | 43 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 95 | 4 | 99 | 9 | **12** | 13 | 34 | 3 | 32 | 0 | 35 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 95 | 5 | 100 | 10 | 12 | **23** | **45** | **6** | **46** | 0 | **52** |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 408 | 16 | 424 | 41 | 37 | 65 | 143 | 14 | 150 | 0 | 164 |
| % App. Total | 0 | 0 | 0 | | 0 | 96.2 | 3.8 | | 28.7 | 25.9 | 45.5 | | 8.5 | 91.5 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .872 | .800 | .869 | .788 | .771 | .707 | .794 | .583 | .815 | .000 | .788 |
| Cars | 0 | 0 | 0 | 0 | 0 | 395 | 16 | 411 | 40 | 37 | 65 | 142 | 14 | 139 | 0 | 153 |
| % Cars | 0 | 0 | 0 | 0 | 0 | 96.8 | 100 | 96.9 | 97.6 | 100 | 100 | 99.3 | 100 | 92.7 | 0 | 93.3 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 | 1 | 0 | 0 | 1 | 0 | 11 | 0 | 11 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 3.2 | 0 | 3.1 | 2.4 | 0 | 0 | 0.7 | 0 | 7.3 | 0 | 6.7 |

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
Page No : 3



N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
Page No : 10

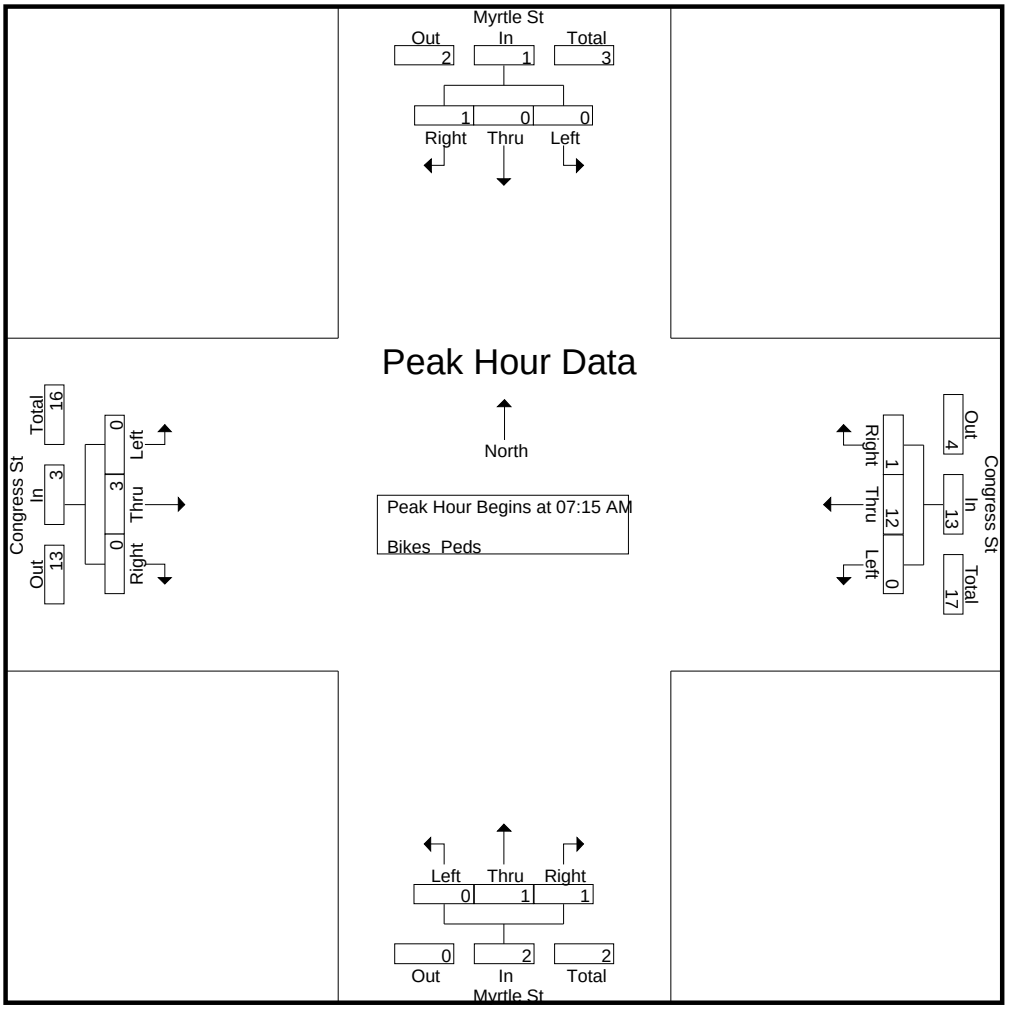
Groups Printed- Bikes Peds

| | Myrtle St From North | | | | Congress St From East | | | | Myrtle St From South | | | | Congress St From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 6 | 0 | 2 | 1 | 6 | 0 | 0 | 0 | 9 | 0 | 1 | 0 | 7 | 28 | 4 | 32 |
| 07:15 AM | 0 | 0 | 0 | 13 | 0 | 3 | 0 | 5 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 7 | 30 | 3 | 33 |
| 07:30 AM | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 4 | 0 | 1 | 1 | 7 | 0 | 1 | 0 | 12 | 35 | 3 | 38 |
| 07:45 AM | 0 | 0 | 1 | 14 | 0 | 5 | 1 | 13 | 0 | 0 | 0 | 19 | 0 | 1 | 0 | 5 | 51 | 8 | 59 |
| Total | 0 | 0 | 1 | 45 | 0 | 10 | 2 | 28 | 0 | 1 | 1 | 40 | 0 | 3 | 0 | 31 | 144 | 18 | 162 |
| | | | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 14 | 0 | 4 | 0 | 5 | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 11 | 37 | 5 | 42 |
| 08:15 AM | 0 | 0 | 1 | 17 | 0 | 1 | 0 | 7 | 0 | 0 | 0 | 16 | 0 | 0 | 0 | 9 | 49 | 2 | 51 |
| 08:30 AM | 0 | 0 | 0 | 17 | 0 | 3 | 0 | 17 | 0 | 0 | 0 | 16 | 0 | 1 | 0 | 12 | 62 | 4 | 66 |
| 08:45 AM | 0 | 0 | 0 | 19 | 0 | 2 | 0 | 14 | 0 | 1 | 0 | 12 | 0 | 0 | 0 | 10 | 55 | 3 | 58 |
| Total | 0 | 0 | 1 | 67 | 0 | 10 | 0 | 43 | 0 | 1 | 0 | 51 | 0 | 2 | 0 | 42 | 203 | 14 | 217 |
| | | | | | | | | | | | | | | | | | | | |
| Grand Total | 0 | 0 | 2 | 112 | 0 | 20 | 2 | 71 | 0 | 2 | 1 | 91 | 0 | 5 | 0 | 73 | 347 | 32 | 379 |
| Apprch % | 0 | 0 | 100 | | 0 | 90.9 | 9.1 | | 0 | 66.7 | 33.3 | | 0 | 100 | 0 | | | | |
| Total % | 0 | 0 | 6.2 | | 0 | 62.5 | 6.2 | | 0 | 6.2 | 3.1 | | 0 | 15.6 | 0 | | 91.6 | 8.4 | |

| | Myrtle St From North | | | | Congress St From East | | | | Myrtle St From South | | | | Congress St From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | **1** | **2** | 0 | **1** | 0 | **1** | 3 |
| 07:45 AM | 0 | 0 | **1** | **1** | 0 | **5** | **1** | **6** | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | **8** |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 5 |
| Total Volume | 0 | 0 | 1 | 1 | 0 | 12 | 1 | 13 | 0 | 1 | 1 | 2 | 0 | 3 | 0 | 3 | 19 |
| % App. Total | 0 | 0 | 100 | | 0 | 92.3 | 7.7 | | 0 | 50 | 50 | | 0 | 100 | 0 | | |
| PHF | .000 | .000 | .250 | .250 | .000 | .600 | .250 | .542 | .000 | .250 | .250 | .250 | .000 | .750 | .000 | .750 | .594 |

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
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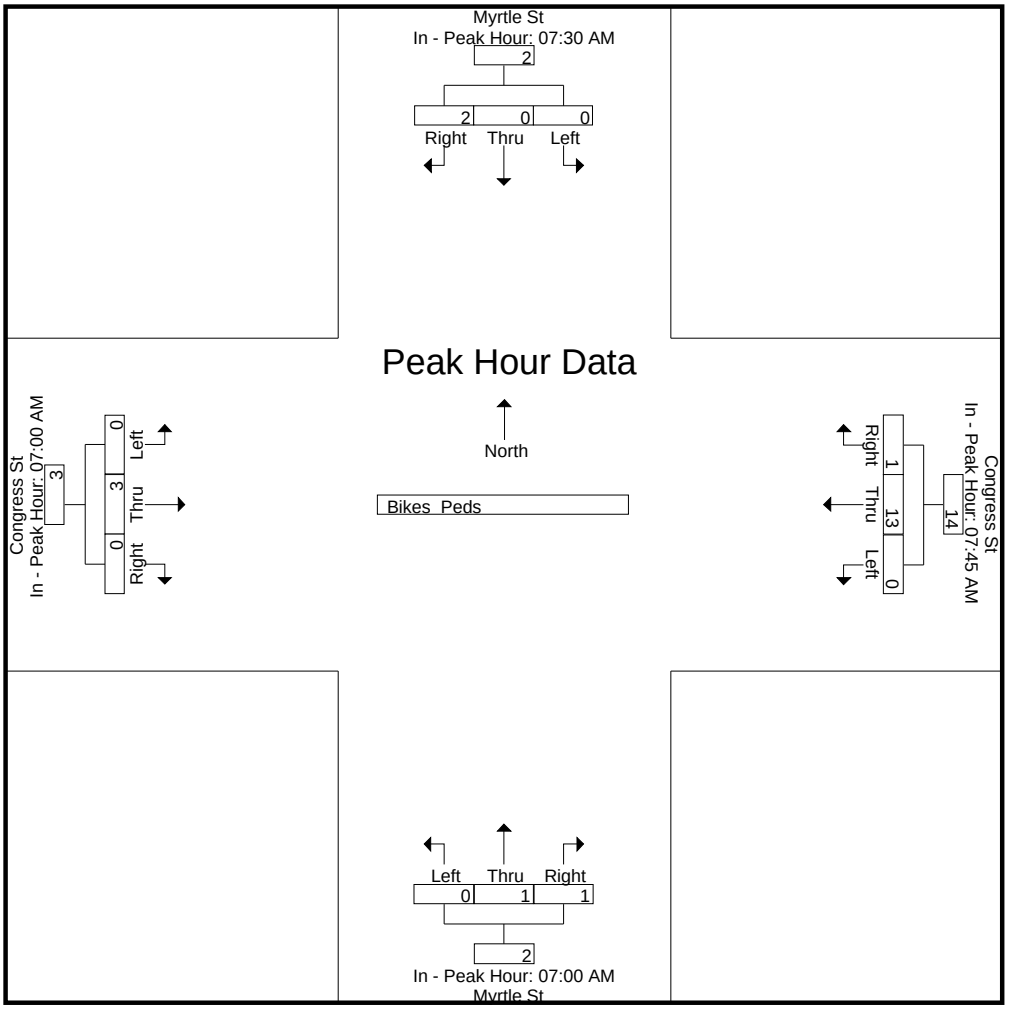



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:30 AM | | | | 07:45 AM | | | | 07:00 AM | | | | 07:00 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | **5** | **1** | **6** | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** |
| +15 mins. | 0 | 0 | **1** | **1** | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | **1** | **1** | **2** | 0 | 1 | 0 | 1 |
| +45 mins. | 0 | 0 | 1 | 1 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total Volume | 0 | 0 | 2 | 2 | 0 | 13 | 1 | 14 | 0 | 1 | 1 | 2 | 0 | 3 | 0 | 3 |
| % App. Total | 0 | 0 | 100 | | 0 | 92.9 | 7.1 | | 0 | 50 | 50 | | 0 | 100 | 0 | |
| PHF | .000 | .000 | .500 | .500 | .000 | .650 | .250 | .583 | .000 | .250 | .250 | .250 | .000 | .750 | .000 | .750 |

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
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# Accurate Counts

978-664-2565

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
Page No : 1

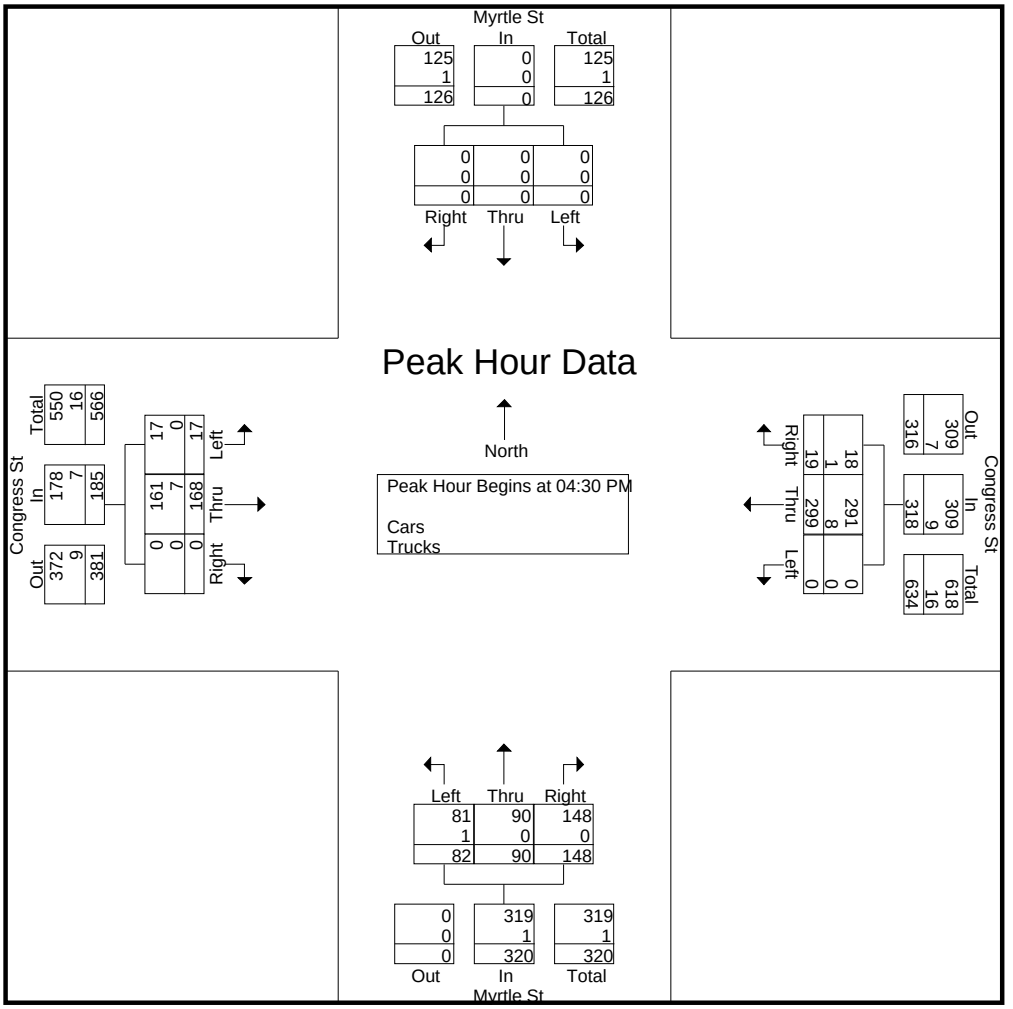
Groups Printed- Cars - Trucks

| | Myrtle St From North | | | Congress St From East | | | Myrtle St From South | | | Congress St From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 0 | 50 | 2 | 17 | 20 | 36 | 1 | 49 | 0 | 175 |
| 04:15 PM | 0 | 0 | 0 | 0 | 55 | 3 | 20 | 17 | 33 | 2 | 44 | 0 | 174 |
| 04:30 PM | 0 | 0 | 0 | 0 | 69 | 6 | 22 | 23 | 29 | 5 | 46 | 0 | 200 |
| 04:45 PM | 0 | 0 | 0 | 0 | 84 | 8 | 12 | 13 | 42 | 5 | 53 | 0 | 217 |
| Total | 0 | 0 | 0 | 0 | 258 | 19 | 71 | 73 | 140 | 13 | 192 | 0 | 766 |
| 05:00 PM | 0 | 0 | 0 | 0 | 74 | 5 | 19 | 22 | 44 | 3 | 34 | 0 | 201 |
| 05:15 PM | 0 | 0 | 0 | 0 | 72 | 0 | 29 | 32 | 33 | 4 | 35 | 0 | 205 |
| 05:30 PM | 0 | 0 | 0 | 0 | 61 | 1 | 13 | 17 | 25 | 2 | 49 | 0 | 168 |
| 05:45 PM | 0 | 0 | 0 | 0 | 67 | 1 | 10 | 22 | 20 | 1 | 52 | 0 | 173 |
| Total | 0 | 0 | 0 | 0 | 274 | 7 | 71 | 93 | 122 | 10 | 170 | 0 | 747 |
| Grand Total | 0 | 0 | 0 | 0 | 532 | 26 | 142 | 166 | 262 | 23 | 362 | 0 | 1513 |
| Apprch % | 0 | 0 | 0 | 0 | 95.3 | 4.7 | 24.9 | 29.1 | 46 | 6 | 94 | 0 | |
| Total % | 0 | 0 | 0 | 0 | 35.2 | 1.7 | 9.4 | 11 | 17.3 | 1.5 | 23.9 | 0 | |
| Cars | 0 | 0 | 0 | 0 | 517 | 25 | 140 | 166 | 262 | 23 | 349 | 0 | 1482 |
| % Cars | 0 | 0 | 0 | 0 | 97.2 | 96.2 | 98.6 | 100 | 100 | 100 | 96.4 | 0 | 98 |
| Trucks | 0 | 0 | 0 | 0 | 15 | 1 | 2 | 0 | 0 | 0 | 13 | 0 | 31 |
| % Trucks | 0 | 0 | 0 | 0 | 2.8 | 3.8 | 1.4 | 0 | 0 | 0 | 3.6 | 0 | 2 |

| | Myrtle St From North | | | | Congress St From East | | | | Myrtle St From South | | | | Congress St From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 69 | 6 | 75 | 22 | 23 | 29 | 74 | **5** | 46 | 0 | 51 | 200 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | **84** | **8** | **92** | 12 | 13 | 42 | 67 | 5 | **53** | 0 | **58** | **217** |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 74 | 5 | 79 | 19 | 22 | **44** | 85 | 3 | 34 | 0 | 37 | 201 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 72 | **29** | **32** | 33 | **94** | 4 | 35 | 0 | 39 | 205 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 299 | 19 | 318 | 82 | 90 | 148 | 320 | 17 | 168 | 0 | 185 | 823 |
| % App. Total | 0 | 0 | 0 | | 0 | 94 | 6 | | 25.6 | 28.1 | 46.2 | | 9.2 | 90.8 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .890 | .594 | .864 | .707 | .703 | .841 | .851 | .850 | .792 | .000 | .797 | .948 |
| Cars | 0 | 0 | 0 | 0 | 0 | 291 | 18 | 309 | 81 | 90 | 148 | 319 | 17 | 161 | 0 | 178 | 806 |
| % Cars | 0 | 0 | 0 | 0 | 0 | 97.3 | 94.7 | 97.2 | 98.8 | 100 | 100 | 99.7 | 100 | 95.8 | 0 | 96.2 | 97.9 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 9 | 1 | 0 | 0 | 1 | 0 | 7 | 0 | 7 | 17 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 2.7 | 5.3 | 2.8 | 1.2 | 0 | 0 | 0.3 | 0 | 4.2 | 0 | 3.8 | 2.1 |

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
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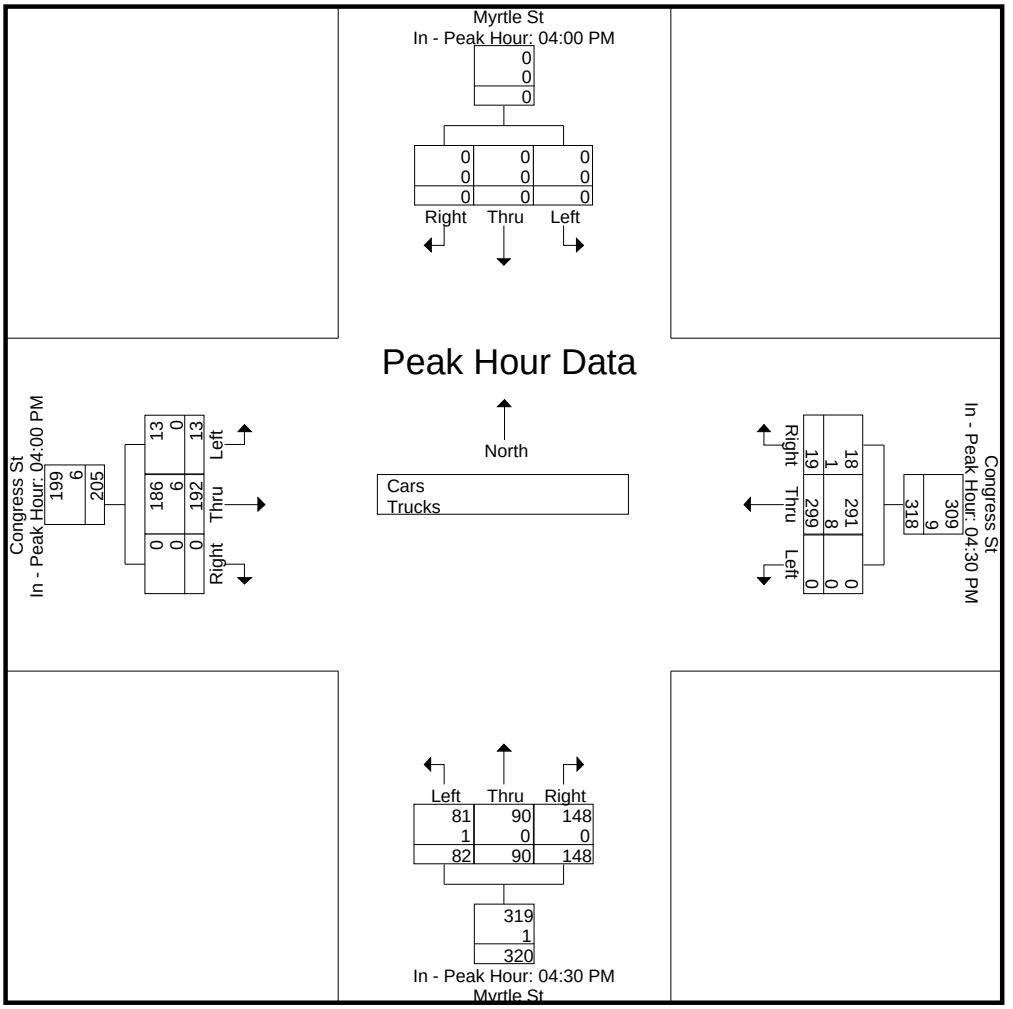



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:00 PM | | | | 04:30 PM | | | | 04:30 PM | | | | 04:00 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 69 | 6 | 75 | 22 | 23 | 29 | 74 | 1 | 49 | 0 | 50 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | **84** | **8** | **92** | 12 | 13 | 42 | 67 | 2 | 44 | 0 | 46 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 74 | 5 | 79 | 19 | 22 | **44** | 85 | **5** | 46 | 0 | 51 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 72 | 0 | 72 | **29** | **32** | 33 | **94** | 5 | **53** | 0 | **58** |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 299 | 19 | 318 | 82 | 90 | 148 | 320 | 13 | 192 | 0 | 205 |
| % App. Total | 0 | 0 | 0 | | 0 | 94 | 6 | | 25.6 | 28.1 | 46.2 | | 6.3 | 93.7 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .890 | .594 | .864 | .707 | .703 | .841 | .851 | .650 | .906 | .000 | .884 |
| Cars | 0 | 0 | 0 | 0 | 0 | 291 | 18 | 309 | 81 | 90 | 148 | 319 | 13 | 186 | 0 | 199 |
| % Cars | 0 | 0 | 0 | 0 | 0 | 97.3 | 94.7 | 97.2 | 98.8 | 100 | 100 | 99.7 | 100 | 96.9 | 0 | 97.1 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 9 | 1 | 0 | 0 | 1 | 0 | 6 | 0 | 6 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 2.7 | 5.3 | 2.8 | 1.2 | 0 | 0 | 0.3 | 0 | 3.1 | 0 | 2.9 |

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
Page No : 3



# Accurate Counts

978-664-2565

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
Page No : 10

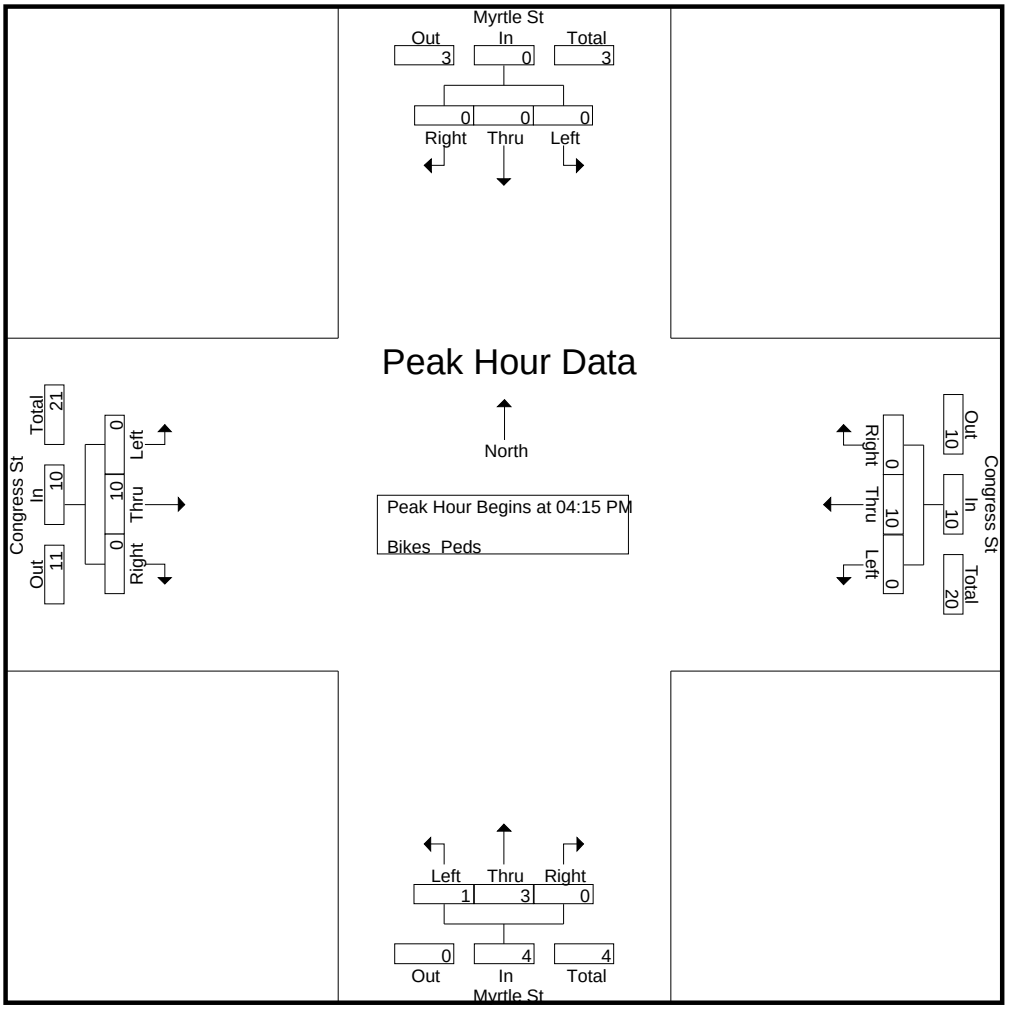
Groups Printed- Bikes Peds

| | Myrtle St From North | | | | Congress St From East | | | | Myrtle St From South | | | | Congress St From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 18 | 0 | 2 | 0 | 8 | 1 | 0 | 0 | 13 | 1 | 1 | 0 | 12 | 51 | 5 | 56 |
| 04:15 PM | 0 | 0 | 0 | 14 | 0 | 5 | 0 | 6 | 0 | 2 | 0 | 13 | 0 | 1 | 0 | 6 | 39 | 8 | 47 |
| 04:30 PM | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 5 | 0 | 1 | 0 | 17 | 0 | 2 | 0 | 15 | 47 | 5 | 52 |
| 04:45 PM | 0 | 0 | 0 | 28 | 0 | 2 | 0 | 6 | 0 | 0 | 0 | 8 | 0 | 2 | 0 | 11 | 53 | 4 | 57 |
| Total | 0 | 0 | 0 | 70 | 0 | 11 | 0 | 25 | 1 | 3 | 0 | 51 | 1 | 6 | 0 | 44 | 190 | 22 | 212 |
| 05:00 PM | 0 | 0 | 0 | 16 | 0 | 1 | 0 | 11 | 1 | 0 | 0 | 26 | 0 | 5 | 0 | 14 | 67 | 7 | 74 |
| 05:15 PM | 0 | 0 | 0 | 26 | 0 | 2 | 0 | 3 | 0 | 1 | 2 | 22 | 0 | 1 | 0 | 12 | 63 | 6 | 69 |
| 05:30 PM | 0 | 0 | 0 | 20 | 0 | 1 | 0 | 12 | 0 | 0 | 0 | 9 | 0 | 2 | 0 | 3 | 44 | 3 | 47 |
| 05:45 PM | 0 | 0 | 0 | 26 | 0 | 1 | 0 | 7 | 0 | 2 | 0 | 18 | 0 | 2 | 0 | 3 | 54 | 5 | 59 |
| Total | 0 | 0 | 0 | 88 | 0 | 5 | 0 | 33 | 1 | 3 | 2 | 75 | 0 | 10 | 0 | 32 | 228 | 21 | 249 |
| Grand Total | 0 | 0 | 0 | 158 | 0 | 16 | 0 | 58 | 2 | 6 | 2 | 126 | 1 | 16 | 0 | 76 | 418 | 43 | 461 |
| Apprch % | 0 | 0 | 0 | | 0 | 100 | 0 | | 20 | 60 | 20 | | 5.9 | 94.1 | 0 | | | | |
| Total % | 0 | 0 | 0 | | 0 | 37.2 | 0 | | 4.7 | 14 | 4.7 | | 2.3 | 37.2 | 0 | | 90.7 | 9.3 | |

| | Myrtle St From North | | | | Congress St From East | | | | Myrtle St From South | | | | Congress St From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:15 PM | | | | | | | | | | | | | | | | | |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | **5** | 0 | **5** | 0 | **2** | 0 | **2** | 0 | 1 | 0 | 1 | **8** |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 | 5 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 4 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | **1** | 0 | 0 | 1 | 0 | **5** | 0 | **5** | 7 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 1 | 3 | 0 | 4 | 0 | 10 | 0 | 10 | 24 |
| % App. Total | 0 | 0 | 0 | | 0 | 100 | 0 | | 25 | 75 | 0 | | 0 | 100 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .500 | .000 | .500 | .250 | .375 | .000 | .500 | .000 | .500 | .000 | .500 | .750 |

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
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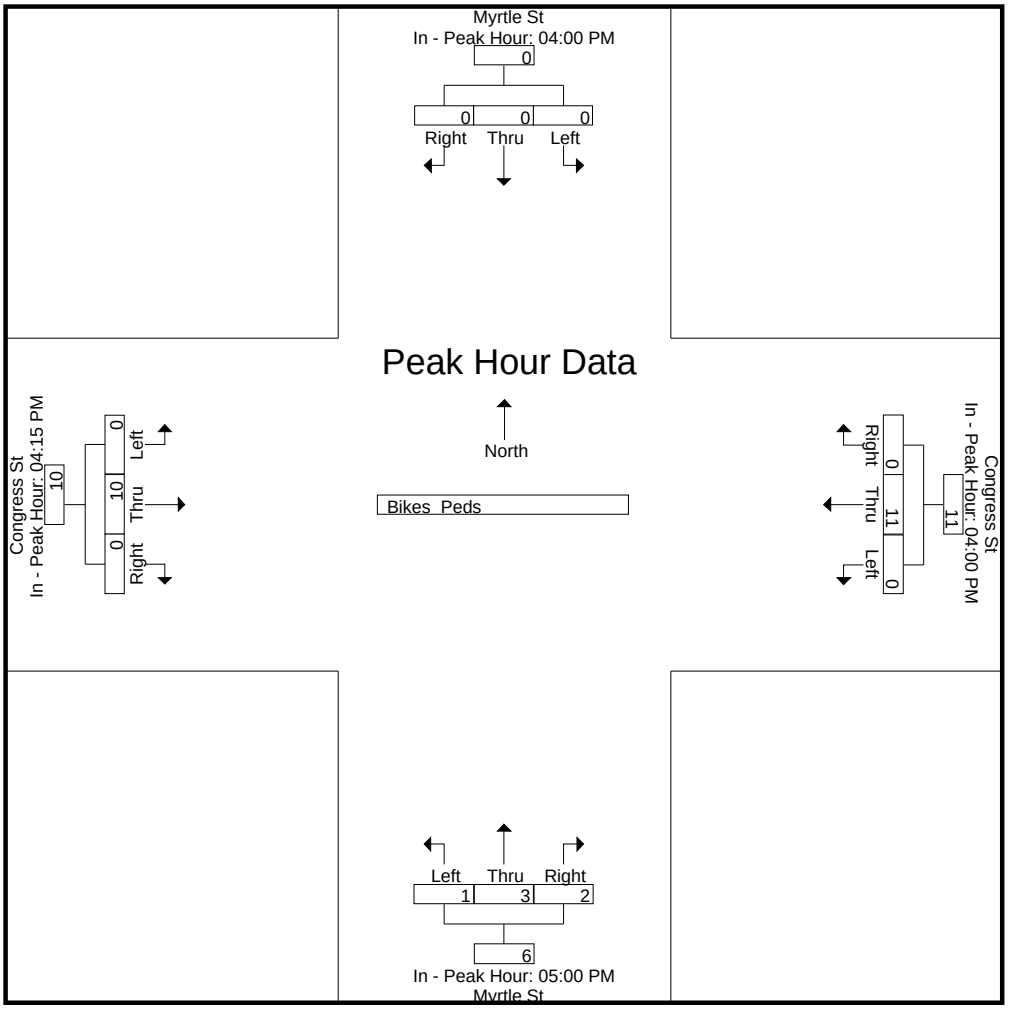



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:00 PM | | | | 04:00 PM | | | | 05:00 PM | | | | 04:15 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | **1** | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | **5** | 0 | **5** | 0 | 1 | **2** | **3** | 0 | 2 | 0 | 2 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | **2** | 0 | 2 | 0 | **5** | 0 | **5** |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 11 | 1 | 3 | 2 | 6 | 0 | 10 | 0 | 10 |
| % App. Total | 0 | 0 | 0 | | 0 | 100 | 0 | | 16.7 | 50 | 33.3 | | 0 | 100 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .550 | .000 | .550 | .250 | .375 | .250 | .500 | .000 | .500 | .000 | .500 |

N/S Street : Myrtle Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371001
Site Code : 19371001
Start Date : 6/7/2022
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# Accurate Counts

978-664-2565

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
Page No : 1

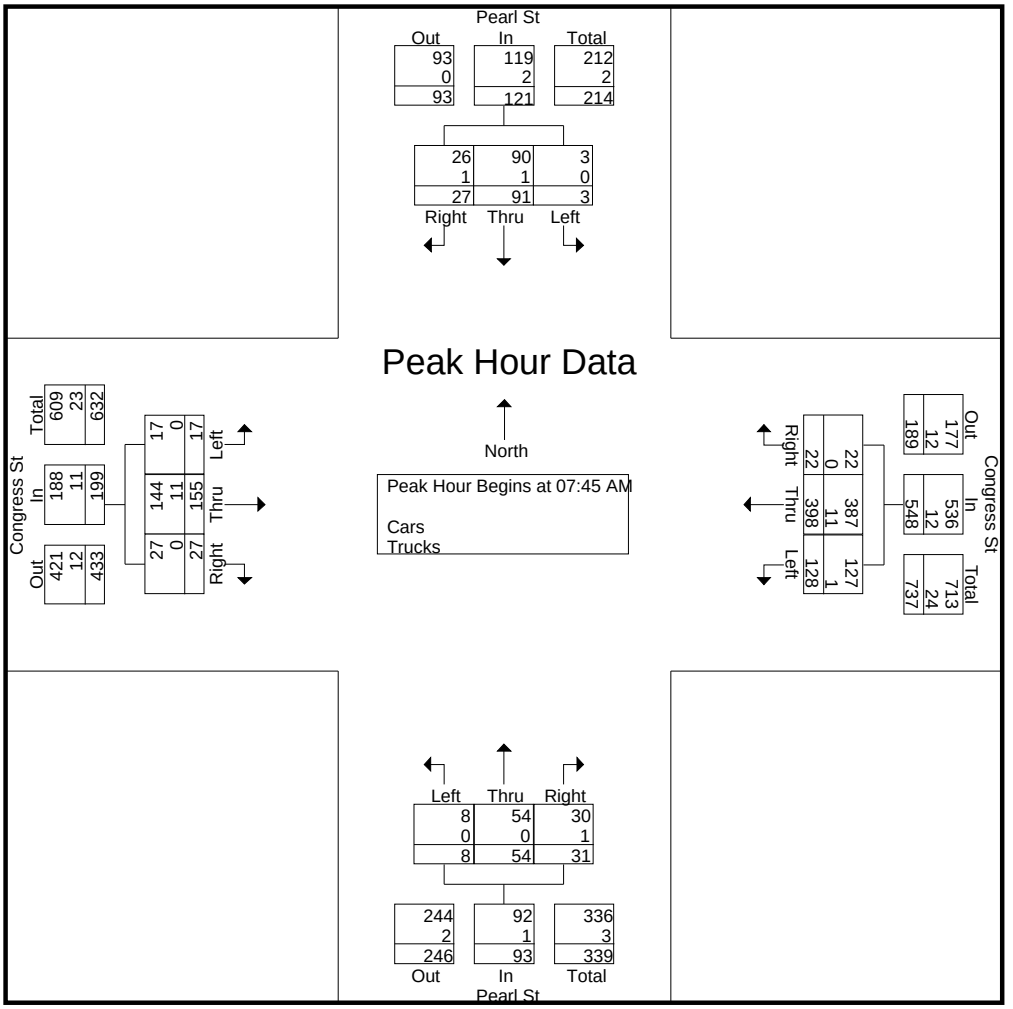
Groups Printed- Cars - Trucks

| | Pearl St From North | | | Congress St From East | | | Pearl St From South | | | Congress St From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 1 | 11 | 3 | 11 | 33 | 3 | 1 | 6 | 3 | 2 | 20 | 2 | 96 |
| 07:15 AM | 0 | 21 | 2 | 21 | 49 | 5 | 1 | 4 | 4 | 1 | 15 | 8 | 131 |
| 07:30 AM | 0 | 14 | 4 | 26 | 73 | 3 | 2 | 11 | 7 | 1 | 39 | 4 | 184 |
| 07:45 AM | 0 | 24 | 2 | 42 | 92 | 5 | 4 | 13 | 8 | 2 | 42 | 8 | 242 |
| Total | 1 | 70 | 11 | 100 | 247 | 16 | 8 | 34 | 22 | 6 | 116 | 22 | 653 |
| | | | | | | | | | | | | | |
| 08:00 AM | 0 | 29 | 5 | 29 | 120 | 7 | 2 | 13 | 7 | 7 | 34 | 6 | 259 |
| 08:15 AM | 2 | 21 | 13 | 36 | 90 | 5 | 1 | 11 | 9 | 6 | 49 | 5 | 248 |
| 08:30 AM | 1 | 17 | 7 | 21 | 96 | 5 | 1 | 17 | 7 | 2 | 30 | 8 | 212 |
| 08:45 AM | 1 | 28 | 9 | 20 | 84 | 3 | 7 | 19 | 15 | 5 | 42 | 6 | 239 |
| Total | 4 | 95 | 34 | 106 | 390 | 20 | 11 | 60 | 38 | 20 | 155 | 25 | 958 |
| | | | | | | | | | | | | | |
| Grand Total | 5 | 165 | 45 | 206 | 637 | 36 | 19 | 94 | 60 | 26 | 271 | 47 | 1611 |
| Apprch % | 2.3 | 76.7 | 20.9 | 23.4 | 72.5 | 4.1 | 11 | 54.3 | 34.7 | 7.6 | 78.8 | 13.7 | |
| Total % | 0.3 | 10.2 | 2.8 | 12.8 | 39.5 | 2.2 | 1.2 | 5.8 | 3.7 | 1.6 | 16.8 | 2.9 | |
| Cars | 5 | 164 | 44 | 205 | 615 | 36 | 15 | 94 | 58 | 26 | 253 | 47 | 1562 |
| % Cars | 100 | 99.4 | 97.8 | 99.5 | 96.5 | 100 | 78.9 | 100 | 96.7 | 100 | 93.4 | 100 | 97 |
| Trucks | 0 | 1 | 1 | 1 | 22 | 0 | 4 | 0 | 2 | 0 | 18 | 0 | 49 |
| % Trucks | 0 | 0.6 | 2.2 | 0.5 | 3.5 | 0 | 21.1 | 0 | 3.3 | 0 | 6.6 | 0 | 3 |

| | Pearl St From North | | | | Congress St From East | | | | Pearl St From South | | | | Congress St From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | | | | | | | | |
| 07:45 AM | 0 | 24 | 2 | 26 | **42** | 92 | 5 | 139 | **4** | 13 | 8 | **25** | 2 | 42 | **8** | 52 | 242 |
| 08:00 AM | 0 | **29** | 5 | 34 | 29 | **120** | **7** | **156** | 2 | 13 | 7 | 22 | **7** | 34 | 6 | 47 | **259** |
| 08:15 AM | **2** | 21 | **13** | **36** | 36 | 90 | 5 | 131 | 1 | 11 | **9** | 21 | 6 | **49** | 5 | **60** | 248 |
| 08:30 AM | 1 | 17 | 7 | 25 | 21 | 96 | 5 | 122 | 1 | **17** | 7 | 25 | 2 | 30 | 8 | 40 | 212 |
| Total Volume | 3 | 91 | 27 | 121 | 128 | 398 | 22 | 548 | 8 | 54 | 31 | 93 | 17 | 155 | 27 | 199 | 961 |
| % App. Total | 2.5 | 75.2 | 22.3 | | 23.4 | 72.6 | 4 | | 8.6 | 58.1 | 33.3 | | 8.5 | 77.9 | 13.6 | | |
| PHF | .375 | .784 | .519 | .840 | .762 | .829 | .786 | .878 | .500 | .794 | .861 | .930 | .607 | .791 | .844 | .829 | .928 |
| Cars | 3 | 90 | 26 | 119 | 127 | 387 | 22 | 536 | 8 | 54 | 30 | 92 | 17 | 144 | 27 | 188 | 935 |
| % Cars | 100 | 98.9 | 96.3 | 98.3 | 99.2 | 97.2 | 100 | 97.8 | 100 | 100 | 96.8 | 98.9 | 100 | 92.9 | 100 | 94.5 | 97.3 |
| Trucks | 0 | 1 | 1 | 2 | 1 | 11 | 0 | 12 | 0 | 0 | 1 | 1 | 0 | 11 | 0 | 11 | 26 |
| % Trucks | 0 | 1.1 | 3.7 | 1.7 | 0.8 | 2.8 | 0 | 2.2 | 0 | 0 | 3.2 | 1.1 | 0 | 7.1 | 0 | 5.5 | 2.7 |

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
Page No : 2

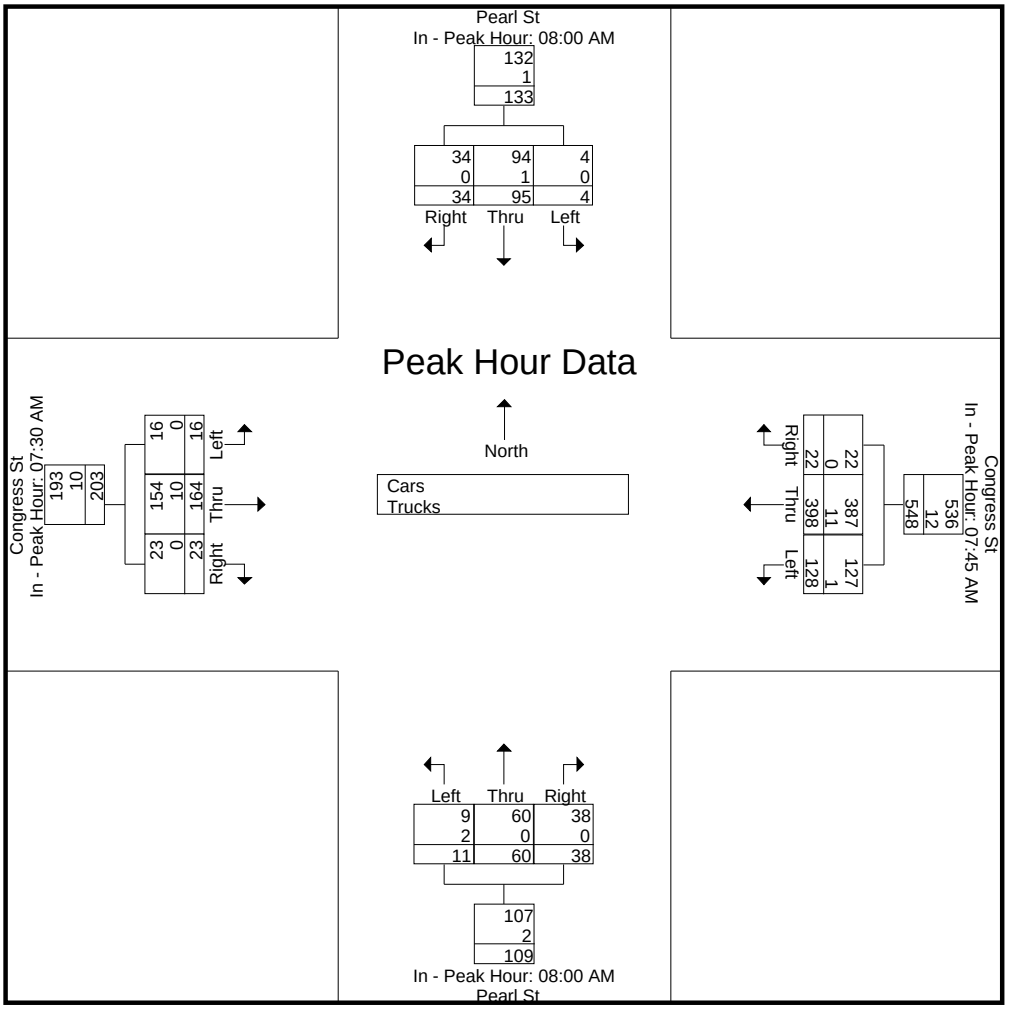



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 08:00 AM | | | | 07:45 AM | | | | 08:00 AM | | | | 07:30 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **29** | 5 | 34 | **42** | 92 | 5 | 139 | 2 | 13 | 7 | 22 | 1 | 39 | 4 | 44 |
| +15 mins. | **2** | 21 | **13** | 36 | 29 | **120** | **7** | **156** | 1 | 11 | 9 | 21 | 2 | 42 | **8** | 52 |
| +30 mins. | 1 | 17 | 7 | 25 | 36 | 90 | 5 | 131 | 1 | 17 | 7 | 25 | **7** | 34 | 6 | 47 |
| +45 mins. | 1 | 28 | 9 | **38** | 21 | 96 | 5 | 122 | **7** | **19** | **15** | **41** | 6 | **49** | 5 | **60** |
| Total Volume | 4 | 95 | 34 | 133 | 128 | 398 | 22 | 548 | 11 | 60 | 38 | 109 | 16 | 164 | 23 | 203 |
| % App. Total | 3 | 71.4 | 25.6 | | 23.4 | 72.6 | 4 | | 10.1 | 55 | 34.9 | | 7.9 | 80.8 | 11.3 | |
| PHF | .500 | .819 | .654 | .875 | .762 | .829 | .786 | .878 | .393 | .789 | .633 | .665 | .571 | .837 | .719 | .846 |
| Cars | 4 | 94 | 34 | 132 | 127 | 387 | 22 | 536 | 9 | 60 | 38 | 107 | 16 | 154 | 23 | 193 |
| % Cars | 100 | 98.9 | 100 | 99.2 | 99.2 | 97.2 | 100 | 97.8 | 81.8 | 100 | 100 | 98.2 | 100 | 93.9 | 100 | 95.1 |
| Trucks | 0 | 1 | 0 | 1 | 1 | 11 | 0 | 12 | 2 | 0 | 0 | 2 | 0 | 10 | 0 | 10 |
| % Trucks | 0 | 1.1 | 0 | 0.8 | 0.8 | 2.8 | 0 | 2.2 | 18.2 | 0 | 0 | 1.8 | 0 | 6.1 | 0 | 4.9 |

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
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N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
Page No : 10

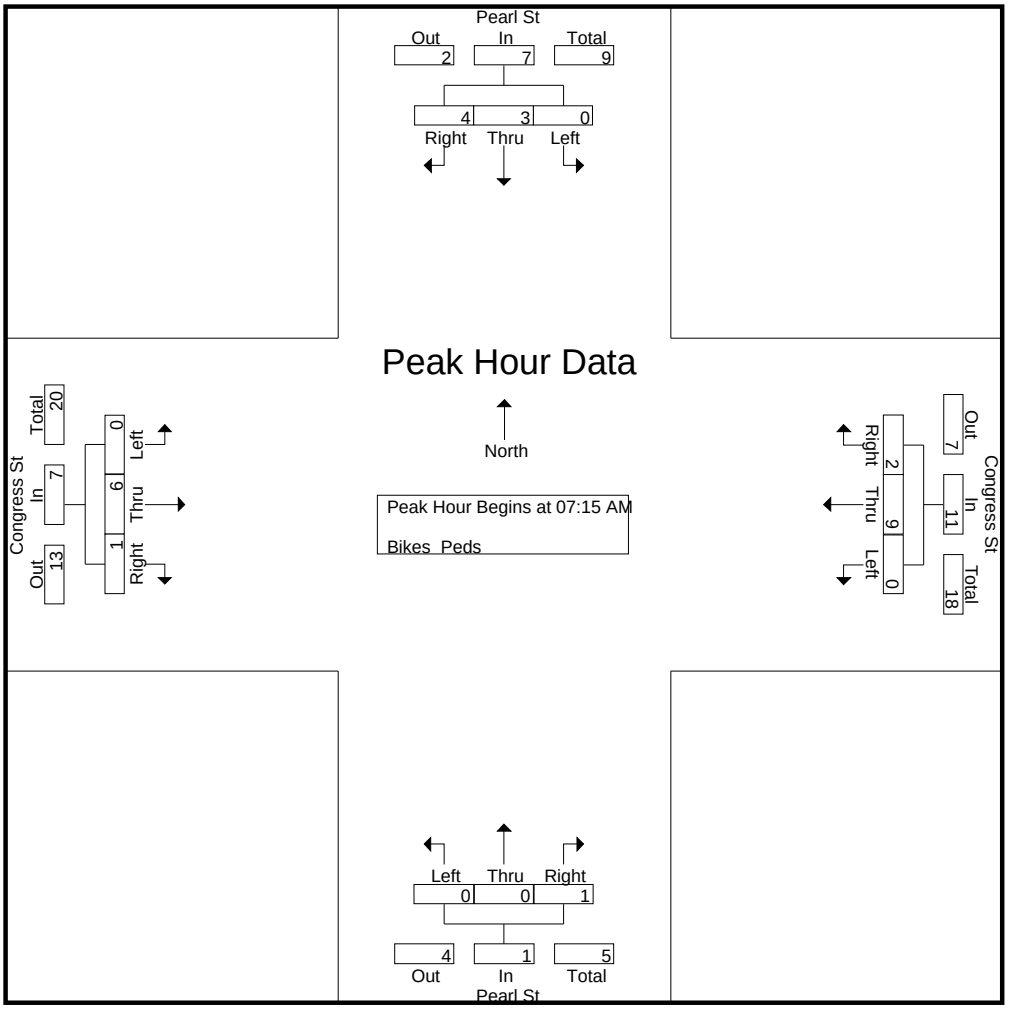
Groups Printed- Bikes Peds

| | Pearl St From North | | | | Congress St From East | | | | Pearl St From South | | | | Congress St From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 5 | 0 | 3 | 0 | 2 | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 1 | 16 | 3 | 19 |
| 07:15 AM | 0 | 0 | 0 | 6 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 13 | 3 | 16 |
| 07:30 AM | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 8 | 0 | 0 | 1 | 3 | 0 | 1 | 1 | 4 | 25 | 3 | 28 |
| 07:45 AM | 0 | 2 | 3 | 6 | 0 | 3 | 2 | 13 | 0 | 0 | 0 | 8 | 0 | 4 | 0 | 9 | 36 | 14 | 50 |
| Total | 0 | 2 | 3 | 27 | 0 | 9 | 2 | 24 | 0 | 0 | 1 | 23 | 0 | 5 | 1 | 16 | 90 | 23 | 113 |
| | | | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 1 | 1 | 8 | 0 | 3 | 0 | 23 | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 3 | 41 | 6 | 47 |
| 08:15 AM | 0 | 0 | 0 | 12 | 0 | 1 | 0 | 18 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 4 | 46 | 1 | 47 |
| 08:30 AM | 0 | 0 | 0 | 15 | 0 | 3 | 0 | 13 | 0 | 0 | 0 | 11 | 0 | 0 | 1 | 7 | 46 | 4 | 50 |
| 08:45 AM | 0 | 0 | 0 | 14 | 0 | 2 | 0 | 16 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 1 | 42 | 2 | 44 |
| Total | 0 | 1 | 1 | 49 | 0 | 9 | 0 | 70 | 0 | 0 | 0 | 41 | 0 | 1 | 1 | 15 | 175 | 13 | 188 |
| | | | | | | | | | | | | | | | | | | | |
| Grand Total | 0 | 3 | 4 | 76 | 0 | 18 | 2 | 94 | 0 | 0 | 1 | 64 | 0 | 6 | 2 | 31 | 265 | 36 | 301 |
| Apprch % | 0 | 42.9 | 57.1 | | 0 | 90 | 10 | | 0 | 0 | 100 | | 0 | 75 | 25 | | | | |
| Total % | 0 | 8.3 | 11.1 | | 0 | 50 | 5.6 | | 0 | 0 | 2.8 | | 0 | 16.7 | 5.6 | | 88 | 12 | |

| | Pearl St From North | | | | Congress St From East | | | | Pearl St From South | | | | Congress St From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | **3** | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **1** | **1** | 0 | 1 | **1** | 2 | 3 |
| 07:45 AM | 0 | **2** | **3** | **5** | 0 | 3 | **2** | **5** | 0 | 0 | 0 | 0 | 0 | **4** | 0 | **4** | **14** |
| 08:00 AM | 0 | 1 | 1 | 2 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 6 |
| Total Volume | 0 | 3 | 4 | 7 | 0 | 9 | 2 | 11 | 0 | 0 | 1 | 1 | 0 | 6 | 1 | 7 | 26 |
| % App. Total | 0 | 42.9 | 57.1 | | 0 | 81.8 | 18.2 | | 0 | 0 | 100 | | 0 | 85.7 | 14.3 | | |
| PHF | .000 | .375 | .333 | .350 | .000 | .750 | .250 | .550 | .000 | .000 | .250 | .250 | .000 | .375 | .250 | .438 | .464 |

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
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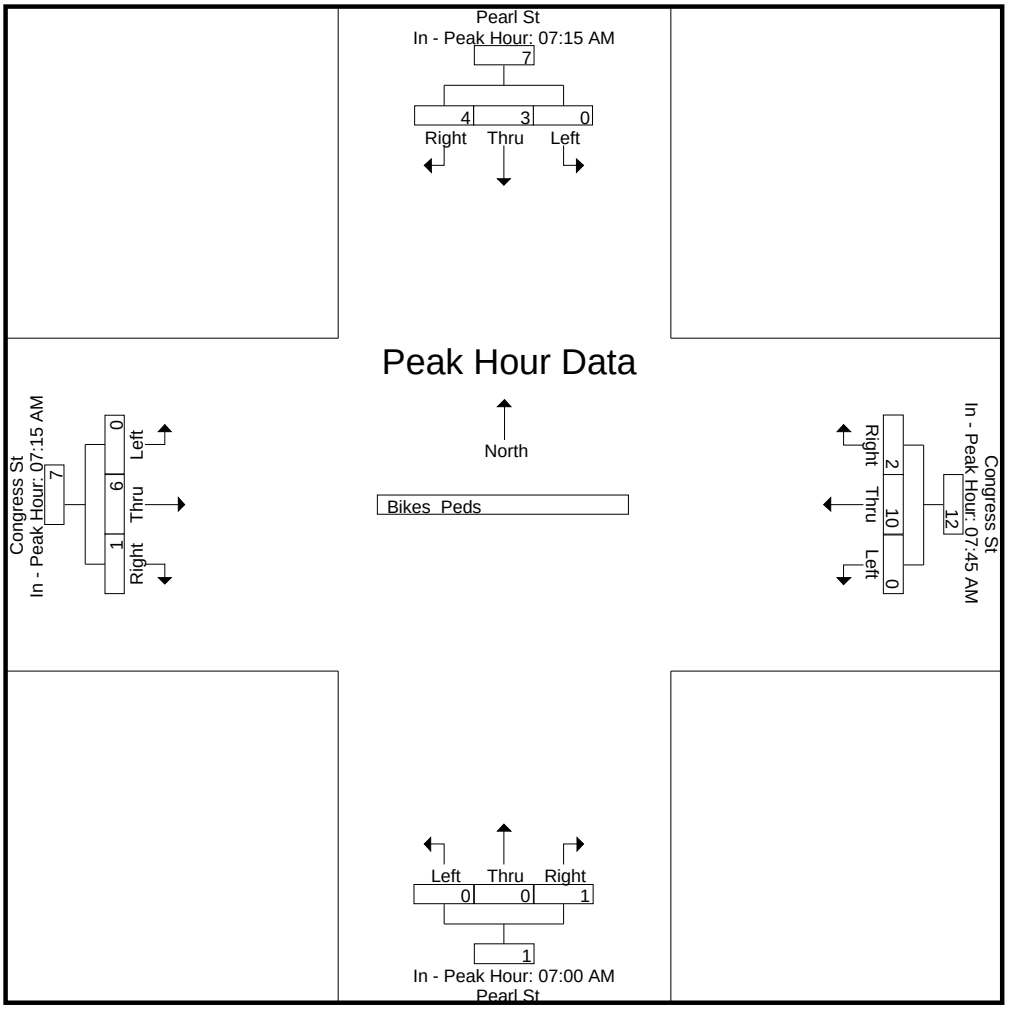



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:15 AM | | | | 07:45 AM | | | | 07:00 AM | | | | 07:15 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | **3** | **2** | **5** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | **1** | 2 |
| +30 mins. | 0 | **2** | **3** | **5** | 0 | 1 | 0 | 1 | 0 | 0 | **1** | **1** | 0 | **4** | 0 | **4** |
| +45 mins. | 0 | 1 | 1 | 2 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total Volume | 0 | 3 | 4 | 7 | 0 | 10 | 2 | 12 | 0 | 0 | 1 | 1 | 0 | 6 | 1 | 7 |
| % App. Total | 0 | 42.9 | 57.1 | | 0 | 83.3 | 16.7 | | 0 | 0 | 100 | | 0 | 85.7 | 14.3 | |
| PHF | .000 | .375 | .333 | .350 | .000 | .833 | .250 | .600 | .000 | .000 | .250 | .250 | .000 | .375 | .250 | .438 |

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
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# Accurate Counts

978-664-2565

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
Page No : 1

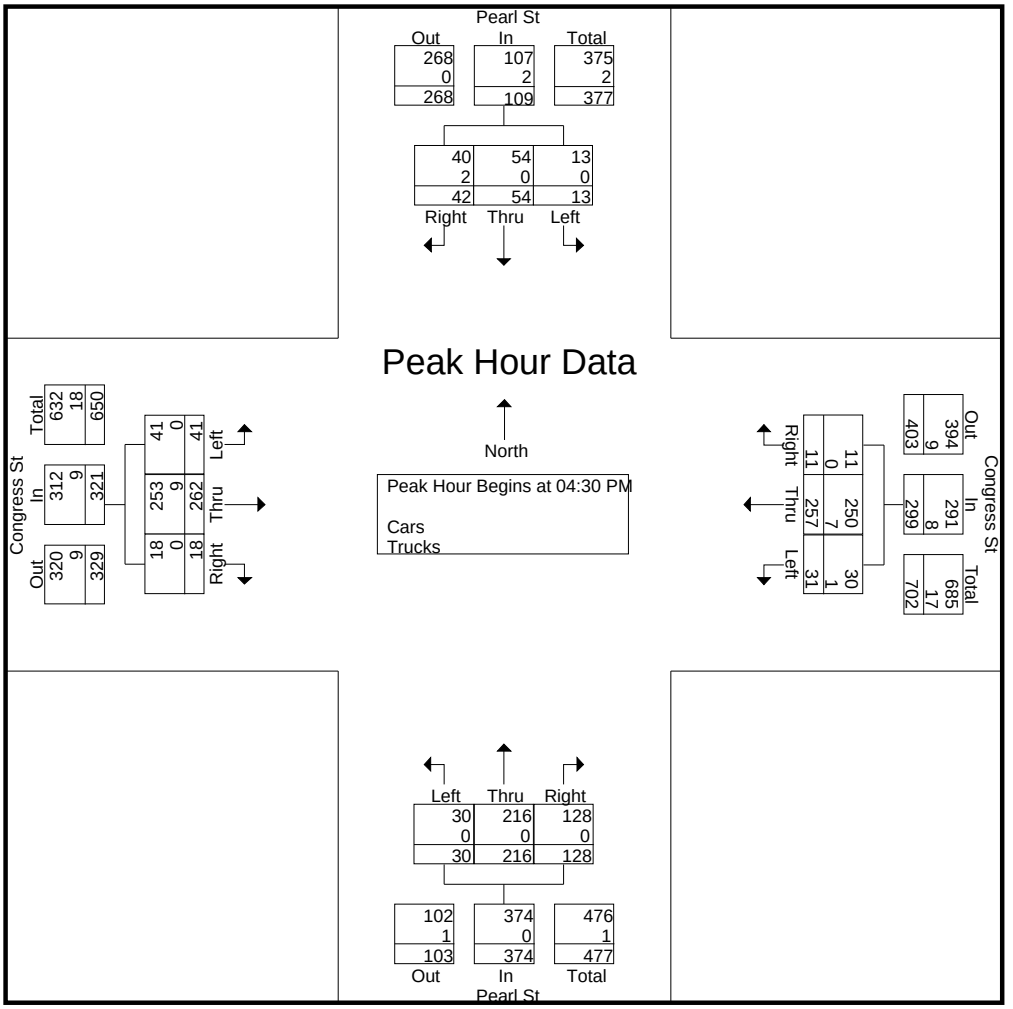
Groups Printed- Cars - Trucks

| | Pearl St From North | | | Congress St From East | | | Pearl St From South | | | Congress St From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 04:00 PM | 8 | 12 | 6 | 9 | 37 | 2 | 9 | 42 | 32 | 7 | 82 | 2 | 248 |
| 04:15 PM | 2 | 17 | 8 | 5 | 42 | 1 | 9 | 52 | 28 | 4 | 67 | 3 | 238 |
| 04:30 PM | 6 | 12 | 10 | 6 | 60 | 3 | 9 | 65 | 41 | 7 | 68 | 4 | 291 |
| 04:45 PM | 3 | 12 | 6 | 8 | 78 | 1 | 9 | 55 | 33 | 12 | 78 | 4 | 299 |
| Total | 19 | 53 | 30 | 28 | 217 | 7 | 36 | 214 | 134 | 30 | 295 | 13 | 1076 |
| | | | | | | | | | | | | | |
| 05:00 PM | 3 | 16 | 16 | 8 | 61 | 4 | 7 | 45 | 31 | 9 | 62 | 6 | 268 |
| 05:15 PM | 1 | 14 | 10 | 9 | 58 | 3 | 5 | 51 | 23 | 13 | 54 | 4 | 245 |
| 05:30 PM | 4 | 15 | 8 | 5 | 49 | 6 | 5 | 42 | 18 | 12 | 60 | 3 | 227 |
| 05:45 PM | 1 | 15 | 7 | 6 | 57 | 2 | 5 | 25 | 24 | 2 | 65 | 3 | 212 |
| Total | 9 | 60 | 41 | 28 | 225 | 15 | 22 | 163 | 96 | 36 | 241 | 16 | 952 |
| | | | | | | | | | | | | | |
| Grand Total | 28 | 113 | 71 | 56 | 442 | 22 | 58 | 377 | 230 | 66 | 536 | 29 | 2028 |
| Apprch % | 13.2 | 53.3 | 33.5 | 10.8 | 85 | 4.2 | 8.7 | 56.7 | 34.6 | 10.5 | 84.9 | 4.6 | |
| Total % | 1.4 | 5.6 | 3.5 | 2.8 | 21.8 | 1.1 | 2.9 | 18.6 | 11.3 | 3.3 | 26.4 | 1.4 | |
| Cars | 28 | 113 | 69 | 55 | 429 | 22 | 58 | 377 | 230 | 66 | 523 | 29 | 1999 |
| % Cars | 100 | 100 | 97.2 | 98.2 | 97.1 | 100 | 100 | 100 | 100 | 100 | 97.6 | 100 | 98.6 |
| Trucks | 0 | 0 | 2 | 1 | 13 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 29 |
| % Trucks | 0 | 0 | 2.8 | 1.8 | 2.9 | 0 | 0 | 0 | 0 | 0 | 2.4 | 0 | 1.4 |

| | Pearl St From North | | | | Congress St From East | | | | Pearl St From South | | | | Congress St From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | **6** | 12 | 10 | 28 | 6 | 60 | 3 | 69 | **9** | **65** | **41** | **115** | 7 | 68 | 4 | 79 | 291 |
| 04:45 PM | 3 | 12 | 6 | 21 | 8 | **78** | 1 | **87** | 9 | 55 | 33 | 97 | 12 | **78** | 4 | **94** | **299** |
| 05:00 PM | 3 | **16** | **16** | **35** | 8 | 61 | **4** | 73 | 7 | 45 | 31 | 83 | 9 | 62 | **6** | 77 | 268 |
| 05:15 PM | 1 | 14 | 10 | 25 | **9** | 58 | 3 | 70 | 5 | 51 | 23 | 79 | **13** | 54 | 4 | 71 | 245 |
| Total Volume | 13 | 54 | 42 | 109 | 31 | 257 | 11 | 299 | 30 | 216 | 128 | 374 | 41 | 262 | 18 | 321 | 1103 |
| % App. Total | 11.9 | 49.5 | 38.5 | | 10.4 | 86 | 3.7 | | 8 | 57.8 | 34.2 | | 12.8 | 81.6 | 5.6 | | |
| PHF | .542 | .844 | .656 | .779 | .861 | .824 | .688 | .859 | .833 | .831 | .780 | .813 | .788 | .840 | .750 | .854 | .922 |
| Cars | 13 | 54 | 40 | 107 | 30 | 250 | 11 | 291 | 30 | 216 | 128 | 374 | 41 | 253 | 18 | 312 | 1084 |
| % Cars | 100 | 100 | 95.2 | 98.2 | 96.8 | 97.3 | 100 | 97.3 | 100 | 100 | 100 | 100 | 100 | 96.6 | 100 | 97.2 | 98.3 |
| Trucks | 0 | 0 | 2 | 2 | 1 | 7 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 9 | 19 |
| % Trucks | 0 | 0 | 4.8 | 1.8 | 3.2 | 2.7 | 0 | 2.7 | 0 | 0 | 0 | 0 | 0 | 3.4 | 0 | 2.8 | 1.7 |

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
Page No : 2

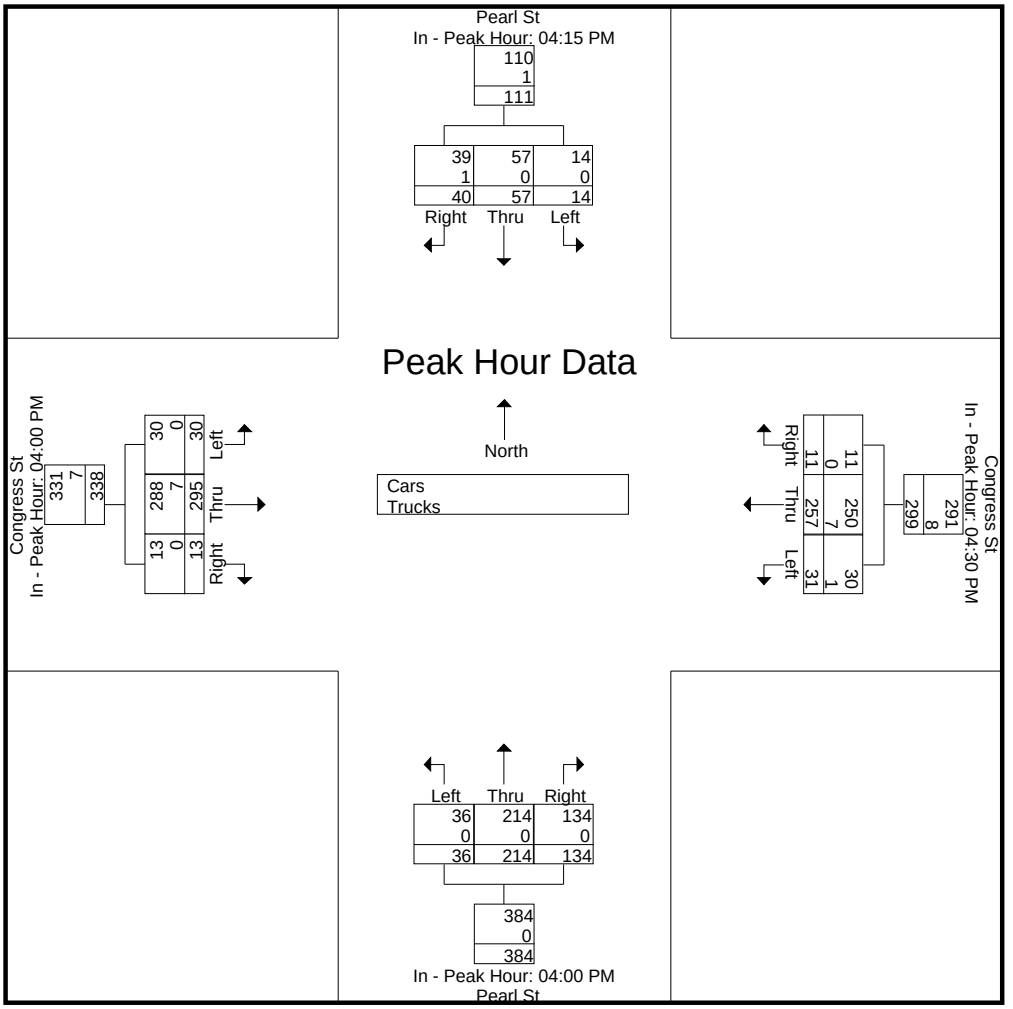



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:15 PM | | | | 04:30 PM | | | | 04:00 PM | | | | 04:00 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 2 | **17** | 8 | 27 | 6 | 60 | 3 | 69 | **9** | 42 | 32 | 83 | 7 | **82** | 2 | 91 |
| +15 mins. | **6** | 12 | 10 | 28 | 8 | **78** | 1 | **87** | 9 | 52 | 28 | 89 | 4 | 67 | 3 | 74 |
| +30 mins. | 3 | 12 | 6 | 21 | 8 | 61 | **4** | 73 | 9 | **65** | **41** | **115** | 7 | 68 | **4** | 79 |
| +45 mins. | 3 | 16 | **16** | **35** | **9** | 58 | 3 | 70 | 9 | 55 | 33 | 97 | **12** | 78 | 4 | **94** |
| Total Volume | 14 | 57 | 40 | 111 | 31 | 257 | 11 | 299 | 36 | 214 | 134 | 384 | 30 | 295 | 13 | 338 |
| % App. Total | 12.6 | 51.4 | 36 | | 10.4 | 86 | 3.7 | | 9.4 | 55.7 | 34.9 | | 8.9 | 87.3 | 3.8 | |
| PHF | .583 | .838 | .625 | .793 | .861 | .824 | .688 | .859 | 1.000 | .823 | .817 | .835 | .625 | .899 | .813 | .899 |
| Cars | 14 | 57 | 39 | 110 | 30 | 250 | 11 | 291 | 36 | 214 | 134 | 384 | 30 | 288 | 13 | 331 |
| % Cars | 100 | 100 | 97.5 | 99.1 | 96.8 | 97.3 | 100 | 97.3 | 100 | 100 | 100 | 100 | 100 | 97.6 | 100 | 97.9 |
| Trucks | 0 | 0 | 1 | 1 | 1 | 7 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 |
| % Trucks | 0 | 0 | 2.5 | 0.9 | 3.2 | 2.7 | 0 | 2.7 | 0 | 0 | 0 | 0 | 0 | 2.4 | 0 | 2.1 |

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
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N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
Page No : 10

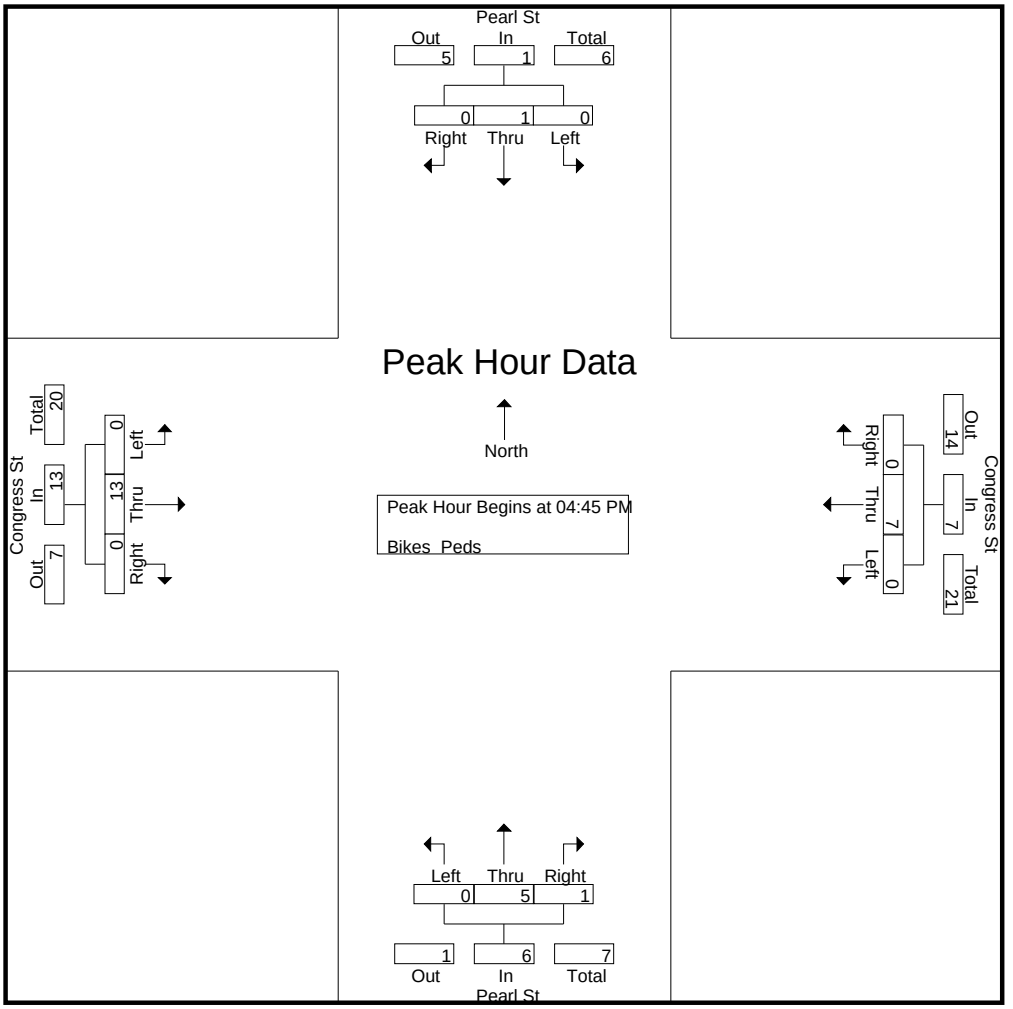
Groups Printed- Bikes Peds

| | Pearl St From North | | | | Congress St From East | | | | Pearl St From South | | | | Congress St From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 04:00 PM | 0 | 2 | 0 | 18 | 0 | 3 | 0 | 20 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 3 | 53 | 5 | 58 |
| 04:15 PM | 0 | 0 | 0 | 20 | 0 | 3 | 0 | 6 | 0 | 0 | 0 | 10 | 0 | 1 | 0 | 6 | 42 | 4 | 46 |
| 04:30 PM | 0 | 0 | 2 | 7 | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 17 | 0 | 2 | 0 | 6 | 42 | 4 | 46 |
| 04:45 PM | 0 | 0 | 0 | 20 | 0 | 0 | 0 | 18 | 0 | 2 | 0 | 13 | 0 | 3 | 0 | 1 | 52 | 5 | 57 |
| Total | 0 | 2 | 2 | 65 | 0 | 6 | 0 | 56 | 0 | 2 | 0 | 52 | 0 | 6 | 0 | 16 | 189 | 18 | 207 |
| 05:00 PM | 0 | 0 | 0 | 15 | 0 | 2 | 0 | 40 | 0 | 1 | 0 | 32 | 0 | 6 | 0 | 2 | 89 | 9 | 98 |
| 05:15 PM | 0 | 1 | 0 | 12 | 0 | 3 | 0 | 23 | 0 | 0 | 0 | 19 | 0 | 2 | 0 | 2 | 56 | 6 | 62 |
| 05:30 PM | 0 | 0 | 0 | 22 | 0 | 2 | 0 | 18 | 0 | 2 | 1 | 8 | 0 | 2 | 0 | 8 | 56 | 7 | 63 |
| 05:45 PM | 0 | 0 | 0 | 18 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | 15 | 0 | 2 | 0 | 9 | 46 | 4 | 50 |
| Total | 0 | 1 | 0 | 67 | 0 | 8 | 0 | 85 | 0 | 4 | 1 | 74 | 0 | 12 | 0 | 21 | 247 | 26 | 273 |
| Grand Total | 0 | 3 | 2 | 132 | 0 | 14 | 0 | 141 | 0 | 6 | 1 | 126 | 0 | 18 | 0 | 37 | 436 | 44 | 480 |
| Apprch % | 0 | 60 | 40 | | 0 | 100 | 0 | | 0 | 85.7 | 14.3 | | 0 | 100 | 0 | | | | |
| Total % | 0 | 6.8 | 4.5 | | 0 | 31.8 | 0 | | 0 | 13.6 | 2.3 | | 0 | 40.9 | 0 | | 90.8 | 9.2 | |

| | Pearl St From North | | | | Congress St From East | | | | Pearl St From South | | | | Congress St From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **2** | 0 | 2 | 0 | 3 | 0 | 3 | 5 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | **6** | 0 | **6** | **9** |
| 05:15 PM | 0 | **1** | 0 | **1** | 0 | **3** | 0 | **3** | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 6 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 2 | **1** | **3** | 0 | 2 | 0 | 2 | 7 |
| Total Volume | 0 | 1 | 0 | 1 | 0 | 7 | 0 | 7 | 0 | 5 | 1 | 6 | 0 | 13 | 0 | 13 | 27 |
| % App. Total | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 83.3 | 16.7 | | 0 | 100 | 0 | | |
| PHF | .000 | .250 | .000 | .250 | .000 | .583 | .000 | .583 | .000 | .625 | .250 | .500 | .000 | .542 | .000 | .542 | .750 |

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
Page No : 11

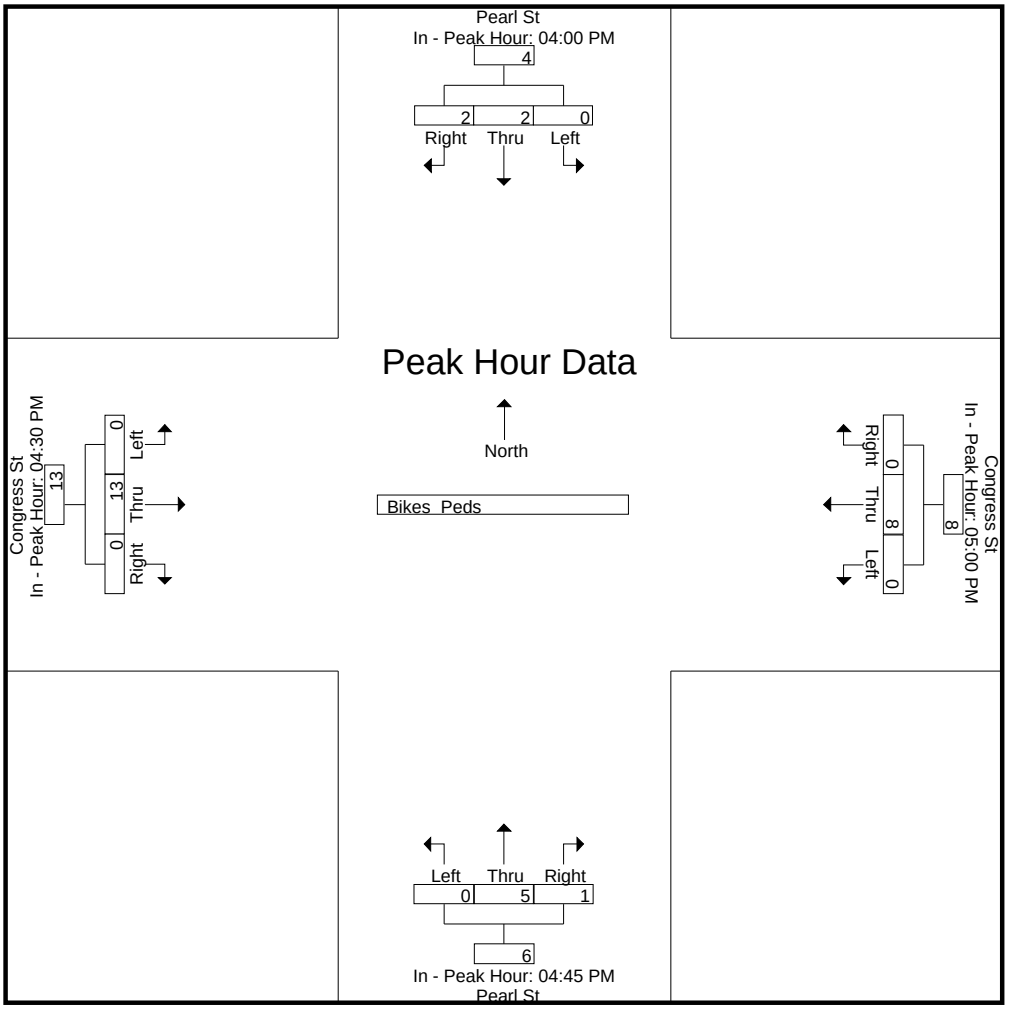



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:00 PM | | | | 05:00 PM | | | | 04:45 PM | | | | 04:30 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **2** | 0 | **2** | 0 | 2 | 0 | 2 | 0 | **2** | 0 | 2 | 0 | 2 | 0 | 2 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 3 |
| +30 mins. | 0 | 0 | **2** | 2 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | **6** | 0 | **6** |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | **1** | **3** | 0 | 2 | 0 | 2 |
| Total Volume | 0 | 2 | 2 | 4 | 0 | 8 | 0 | 8 | 0 | 5 | 1 | 6 | 0 | 13 | 0 | 13 |
| % App. Total | 0 | 50 | 50 | | 0 | 100 | 0 | | 0 | 83.3 | 16.7 | | 0 | 100 | 0 | |
| PHF | .000 | .250 | .250 | .500 | .000 | .667 | .000 | .667 | .000 | .625 | .250 | .500 | .000 | .542 | .000 | .542 |

N/S Street : Pearl Street
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371002
Site Code : 19371002
Start Date : 6/7/2022
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# Accurate Counts

978-664-2565

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 1

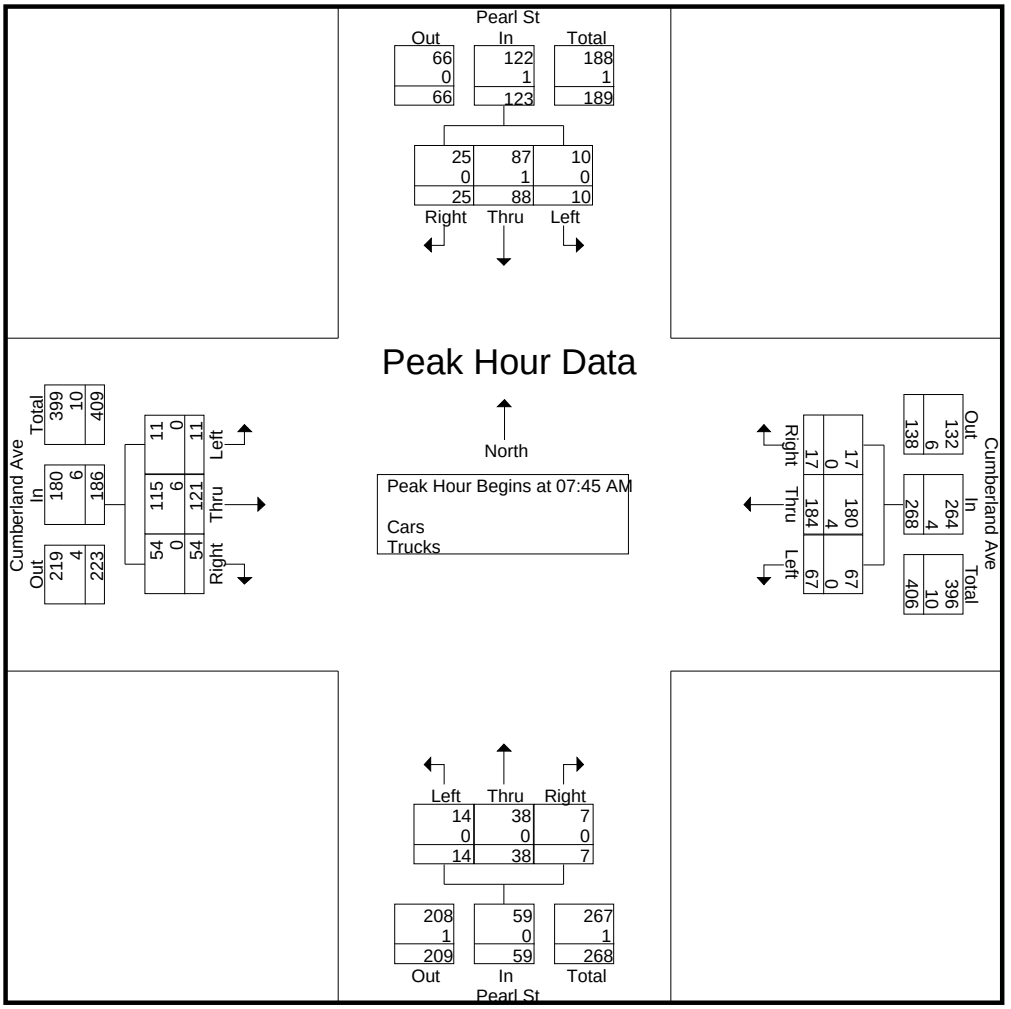
Groups Printed- Cars - Trucks

| | Pearl St From North | | | Cumberland Ave From East | | | Pearl St From South | | | Cumberland Ave From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 1 | 13 | 1 | 5 | 16 | 2 | 1 | 6 | 1 | 1 | 15 | 2 | 64 |
| 07:15 AM | 2 | 16 | 3 | 5 | 29 | 0 | 3 | 2 | 2 | 1 | 21 | 5 | 89 |
| 07:30 AM | 4 | 17 | 5 | 11 | 36 | 4 | 2 | 7 | 3 | 1 | 21 | 6 | 117 |
| 07:45 AM | 3 | 16 | 2 | 15 | 64 | 7 | 3 | 8 | 2 | 0 | 37 | 13 | 170 |
| Total | 10 | 62 | 11 | 36 | 145 | 13 | 9 | 23 | 8 | 3 | 94 | 26 | 440 |
| 08:00 AM | 3 | 27 | 9 | 16 | 46 | 5 | 3 | 14 | 2 | 2 | 30 | 17 | 174 |
| 08:15 AM | 2 | 28 | 8 | 23 | 40 | 2 | 4 | 9 | 0 | 6 | 33 | 9 | 164 |
| 08:30 AM | 2 | 17 | 6 | 13 | 34 | 3 | 4 | 7 | 3 | 3 | 21 | 15 | 128 |
| 08:45 AM | 5 | 24 | 5 | 19 | 36 | 2 | 4 | 11 | 4 | 8 | 21 | 16 | 155 |
| Total | 12 | 96 | 28 | 71 | 156 | 12 | 15 | 41 | 9 | 19 | 105 | 57 | 621 |
| Grand Total | 22 | 158 | 39 | 107 | 301 | 25 | 24 | 64 | 17 | 22 | 199 | 83 | 1061 |
| Apprch % | 10 | 72.1 | 17.8 | 24.7 | 69.5 | 5.8 | 22.9 | 61 | 16.2 | 7.2 | 65.5 | 27.3 | |
| Total % | 2.1 | 14.9 | 3.7 | 10.1 | 28.4 | 2.4 | 2.3 | 6 | 1.6 | 2.1 | 18.8 | 7.8 | |
| Cars | 21 | 157 | 39 | 107 | 289 | 25 | 24 | 64 | 17 | 22 | 190 | 83 | 1038 |
| % Cars | 95.5 | 99.4 | 100 | 100 | 96 | 100 | 100 | 100 | 100 | 100 | 95.5 | 100 | 97.8 |
| Trucks | 1 | 1 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 9 | 0 | 23 |
| % Trucks | 4.5 | 0.6 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4.5 | 0 | 2.2 |

| | Pearl St From North | | | | Cumberland Ave From East | | | | Pearl St From South | | | | Cumberland Ave From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | | | | | | | | |
| 07:45 AM | **3** | 16 | 2 | 21 | 15 | **64** | **7** | **86** | 3 | 8 | 2 | 13 | 0 | **37** | 13 | **50** | 170 |
| 08:00 AM | 3 | 27 | **9** | **39** | 16 | 46 | 5 | 67 | 3 | **14** | 2 | **19** | 2 | 30 | **17** | 49 | **174** |
| 08:15 AM | 2 | **28** | 8 | 38 | **23** | 40 | 2 | 65 | **4** | 9 | 0 | 13 | **6** | 33 | 9 | 48 | 164 |
| 08:30 AM | 2 | 17 | 6 | 25 | 13 | 34 | 3 | 50 | 4 | 7 | **3** | 14 | 3 | 21 | 15 | 39 | 128 |
| Total Volume | 10 | 88 | 25 | 123 | 67 | 184 | 17 | 268 | 14 | 38 | 7 | 59 | 11 | 121 | 54 | 186 | 636 |
| % App. Total | 8.1 | 71.5 | 20.3 | | 25 | 68.7 | 6.3 | | 23.7 | 64.4 | 11.9 | | 5.9 | 65.1 | 29 | | |
| PHF | .833 | .786 | .694 | .788 | .728 | .719 | .607 | .779 | .875 | .679 | .583 | .776 | .458 | .818 | .794 | .930 | .914 |
| Cars | 10 | 87 | 25 | 122 | 67 | 180 | 17 | 264 | 14 | 38 | 7 | 59 | 11 | 115 | 54 | 180 | 625 |
| % Cars | 100 | 98.9 | 100 | 99.2 | 100 | 97.8 | 100 | 98.5 | 100 | 100 | 100 | 100 | 100 | 95.0 | 100 | 96.8 | 98.3 |
| Trucks | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 11 |
| % Trucks | 0 | 1.1 | 0 | 0.8 | 0 | 2.2 | 0 | 1.5 | 0 | 0 | 0 | 0 | 0 | 5.0 | 0 | 3.2 | 1.7 |

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 2

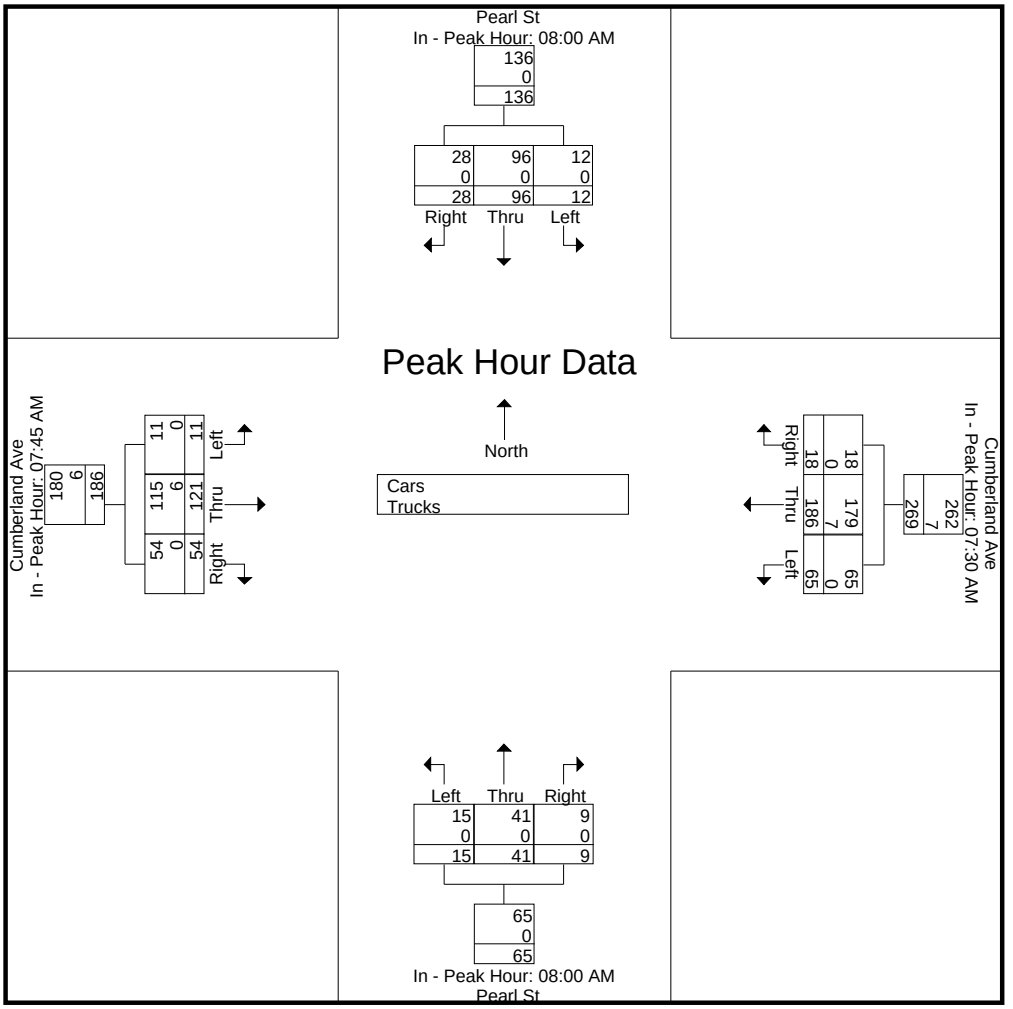



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 08:00 AM | | | | 07:30 AM | | | | 08:00 AM | | | | 07:45 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 3 | 27 | **9** | **39** | 11 | 36 | 4 | 51 | 3 | **14** | 2 | **19** | 0 | **37** | 13 | **50** |
| +15 mins. | 2 | **28** | 8 | 38 | 15 | **64** | **7** | **86** | **4** | 9 | 0 | 13 | 2 | 30 | **17** | 49 |
| +30 mins. | 2 | 17 | 6 | 25 | 16 | 46 | 5 | 67 | 4 | 7 | 3 | 14 | **6** | 33 | 9 | 48 |
| +45 mins. | **5** | 24 | 5 | 34 | **23** | 40 | 2 | 65 | 4 | 11 | **4** | 19 | 3 | 21 | 15 | 39 |
| Total Volume | 12 | 96 | 28 | 136 | 65 | 186 | 18 | 269 | 15 | 41 | 9 | 65 | 11 | 121 | 54 | 186 |
| % App. Total | 8.8 | 70.6 | 20.6 | | 24.2 | 69.1 | 6.7 | | 23.1 | 63.1 | 13.8 | | 5.9 | 65.1 | 29 | |
| PHF | .600 | .857 | .778 | .872 | .707 | .727 | .643 | .782 | .938 | .732 | .563 | .855 | .458 | .818 | .794 | .930 |
| Cars | 12 | 96 | 28 | 136 | 65 | 179 | 18 | 262 | 15 | 41 | 9 | 65 | 11 | 115 | 54 | 180 |
| % Cars | 100 | 100 | 100 | 100 | 100 | 96.2 | 100 | 97.4 | 100 | 100 | 100 | 100 | 100 | 95 | 100 | 96.8 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 3.8 | 0 | 2.6 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 3.2 |

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 3



N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 10

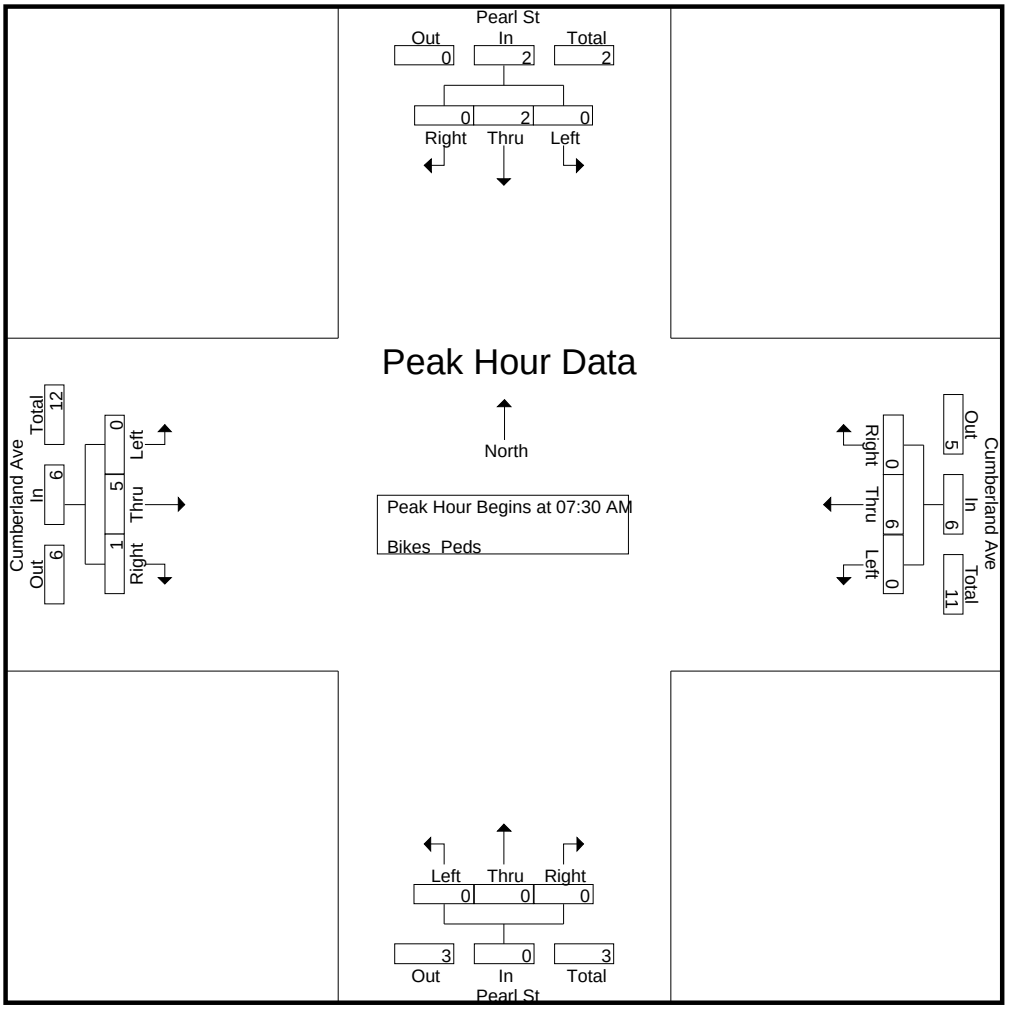
Groups Printed- Bikes Peds

| | Pearl St From North | | | | Cumberland Ave From East | | | | Pearl St From South | | | | Cumberland Ave From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 3 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 1 | 12 | 2 | 14 |
| 07:15 AM | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 15 | 0 | 15 |
| 07:30 AM | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 4 | 21 | 2 | 23 |
| 07:45 AM | 0 | 2 | 0 | 8 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 10 | 0 | 1 | 1 | 4 | 25 | 6 | 31 |
| Total | 0 | 2 | 0 | 32 | 0 | 5 | 0 | 10 | 0 | 1 | 0 | 21 | 0 | 1 | 1 | 10 | 73 | 10 | 83 |
| | | | | | | | | | | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 6 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 11 | 0 | 1 | 0 | 2 | 22 | 2 | 24 |
| 08:15 AM | 0 | 0 | 0 | 8 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 9 | 0 | 3 | 0 | 4 | 23 | 4 | 27 |
| 08:30 AM | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 1 | 17 | 2 | 19 |
| 08:45 AM | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 8 | 0 | 1 | 0 | 1 | 18 | 2 | 20 |
| Total | 0 | 0 | 0 | 28 | 0 | 4 | 0 | 9 | 0 | 0 | 0 | 35 | 0 | 6 | 0 | 8 | 80 | 10 | 90 |
| | | | | | | | | | | | | | | | | | | | |
| Grand Total | 0 | 2 | 0 | 60 | 0 | 9 | 0 | 19 | 0 | 1 | 0 | 56 | 0 | 7 | 1 | 18 | 153 | 20 | 173 |
| Apprch % | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 87.5 | 12.5 | | | | |
| Total % | 0 | 10 | 0 | | 0 | 45 | 0 | | 0 | 5 | 0 | | 0 | 35 | 5 | | 88.4 | 11.6 | |

| | Pearl St From North | | | | Cumberland Ave From East | | | | Pearl St From South | | | | Cumberland Ave From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:30 AM | | | | | | | | | | | | | | | | | |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | **2** | 0 | **2** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 07:45 AM | 0 | **2** | 0 | **2** | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | **1** | 2 | **6** |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** | 4 |
| Total Volume | 0 | 2 | 0 | 2 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 6 | 14 |
| % App. Total | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 0 | 0 | | 0 | 83.3 | 16.7 | | |
| PHF | .000 | .250 | .000 | .250 | .000 | .750 | .000 | .750 | .000 | .000 | .000 | .000 | .000 | .417 | .250 | .500 | .583 |

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 11

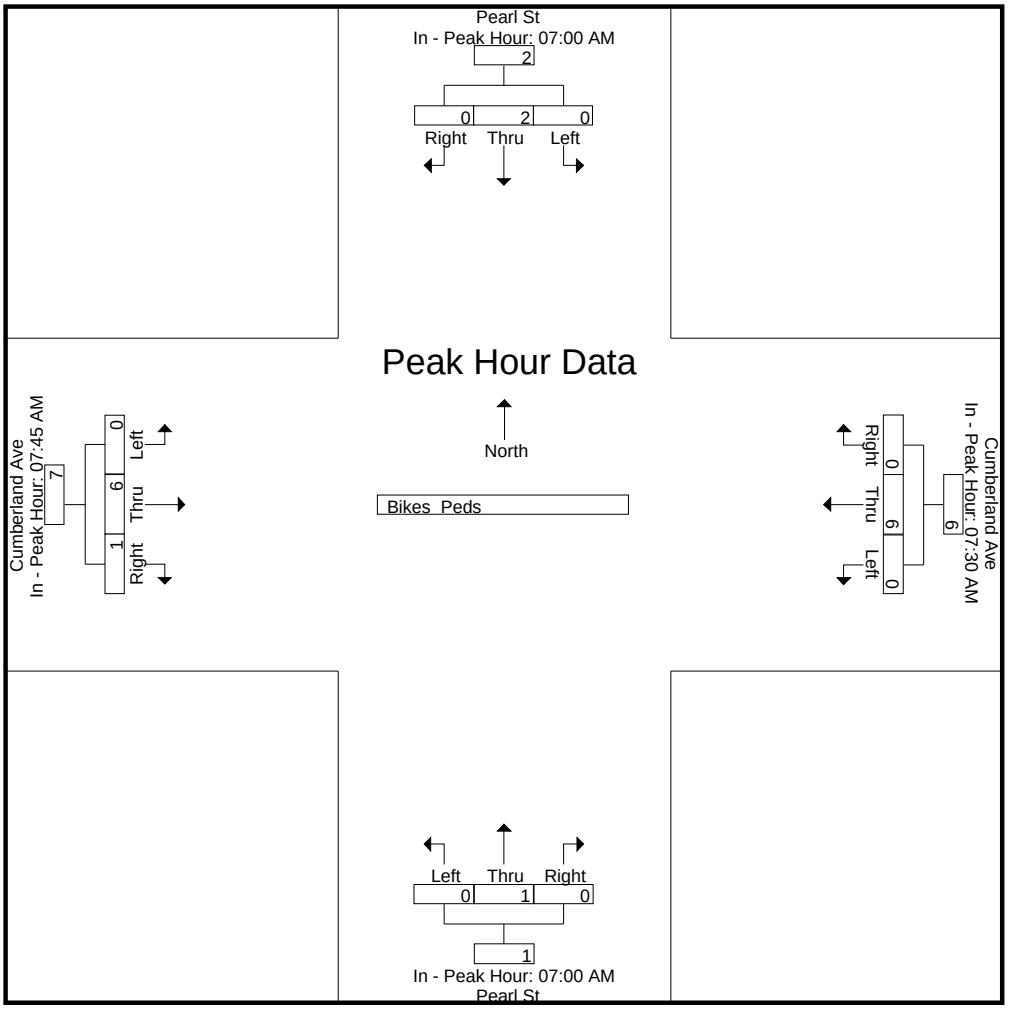



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:00 AM | | | | 07:30 AM | | | | 07:00 AM | | | | 07:45 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | **2** | 0 | **2** | 0 | **1** | 0 | **1** | 0 | 1 | **1** | 2 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** |
| +45 mins. | 0 | **2** | 0 | **2** | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total Volume | 0 | 2 | 0 | 2 | 0 | 6 | 0 | 6 | 0 | 1 | 0 | 1 | 0 | 6 | 1 | 7 |
| % App. Total | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 85.7 | 14.3 | |
| PHF | .000 | .250 | .000 | .250 | .000 | .750 | .000 | .750 | .000 | .250 | .000 | .250 | .000 | .500 | .250 | .583 |

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 12



# Accurate Counts

978-664-2565

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 1

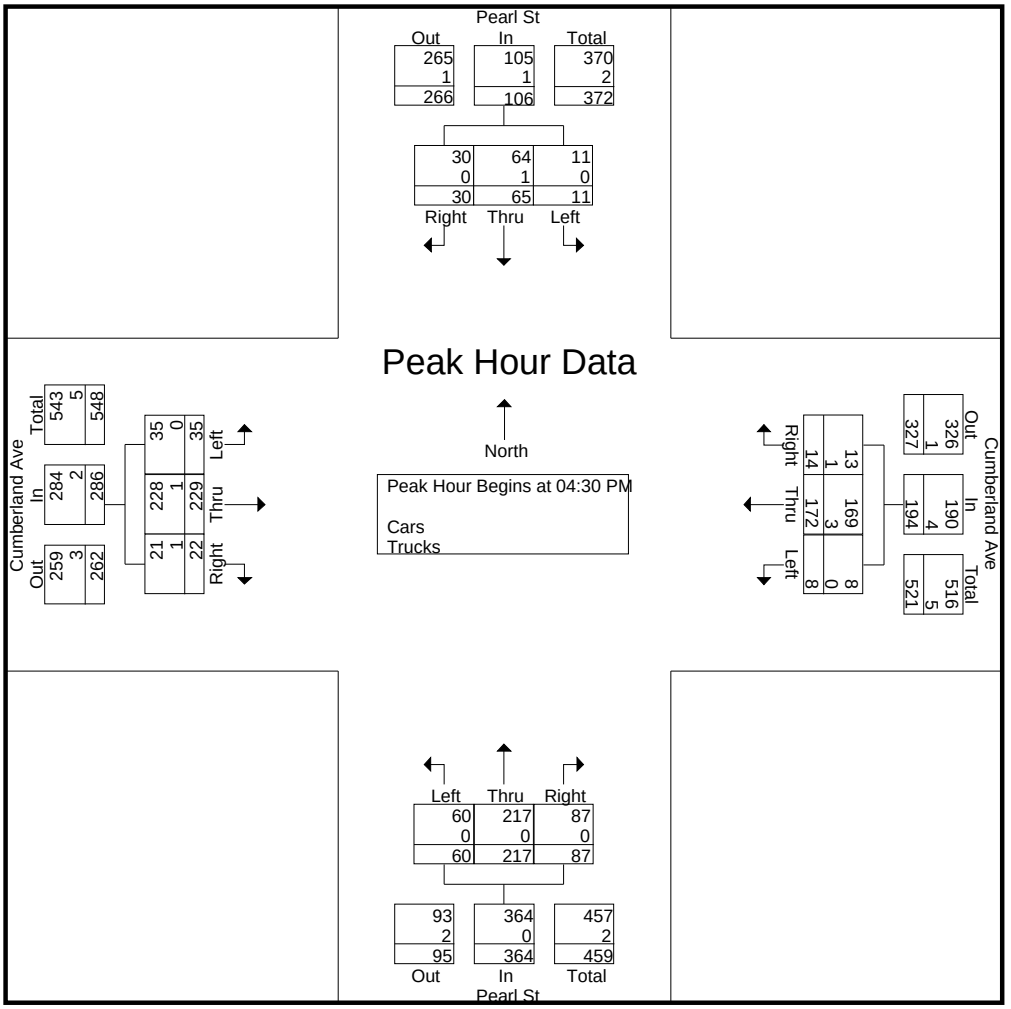
Groups Printed- Cars - Trucks

| | Pearl St From North | | | Cumberland Ave From East | | | Pearl St From South | | | Cumberland Ave From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 04:00 PM | 2 | 12 | 6 | 3 | 38 | 4 | 20 | 39 | 10 | 5 | 53 | 8 | 200 |
| 04:15 PM | 3 | 13 | 9 | 5 | 40 | 2 | 15 | 52 | 4 | 9 | 46 | 7 | 205 |
| 04:30 PM | 6 | 18 | 10 | 1 | 35 | 1 | 18 | 60 | 15 | 5 | 42 | 6 | 217 |
| 04:45 PM | 2 | 12 | 1 | 2 | 49 | 6 | 16 | 50 | 19 | 9 | 69 | 4 | 239 |
| Total | 13 | 55 | 26 | 11 | 162 | 13 | 69 | 201 | 48 | 28 | 210 | 25 | 861 |
| | | | | | | | | | | | | | |
| 05:00 PM | 2 | 22 | 13 | 4 | 36 | 4 | 9 | 57 | 30 | 13 | 64 | 7 | 261 |
| 05:15 PM | 1 | 13 | 6 | 1 | 52 | 3 | 17 | 50 | 23 | 8 | 54 | 5 | 233 |
| 05:30 PM | 0 | 19 | 9 | 2 | 46 | 1 | 18 | 39 | 16 | 4 | 53 | 4 | 211 |
| 05:45 PM | 3 | 11 | 7 | 2 | 42 | 2 | 12 | 22 | 5 | 5 | 60 | 7 | 178 |
| Total | 6 | 65 | 35 | 9 | 176 | 10 | 56 | 168 | 74 | 30 | 231 | 23 | 883 |
| | | | | | | | | | | | | | |
| Grand Total | 19 | 120 | 61 | 20 | 338 | 23 | 125 | 369 | 122 | 58 | 441 | 48 | 1744 |
| Apprch % | 9.5 | 60 | 30.5 | 5.2 | 88.7 | 6 | 20.3 | 59.9 | 19.8 | 10.6 | 80.6 | 8.8 | |
| Total % | 1.1 | 6.9 | 3.5 | 1.1 | 19.4 | 1.3 | 7.2 | 21.2 | 7 | 3.3 | 25.3 | 2.8 | |
| Cars | 19 | 119 | 61 | 20 | 329 | 22 | 125 | 369 | 122 | 58 | 438 | 47 | 1729 |
| % Cars | 100 | 99.2 | 100 | 100 | 97.3 | 95.7 | 100 | 100 | 100 | 100 | 99.3 | 97.9 | 99.1 |
| Trucks | 0 | 1 | 0 | 0 | 9 | 1 | 0 | 0 | 0 | 0 | 3 | 1 | 15 |
| % Trucks | 0 | 0.8 | 0 | 0 | 2.7 | 4.3 | 0 | 0 | 0 | 0 | 0.7 | 2.1 | 0.9 |

| | Pearl St From North | | | | Cumberland Ave From East | | | | Pearl St From South | | | | Cumberland Ave From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | **6** | 18 | 10 | 34 | 1 | 35 | 1 | 37 | **18** | **60** | 15 | 93 | 5 | 42 | 6 | 53 | 217 |
| 04:45 PM | 2 | 12 | 1 | 15 | 2 | 49 | **6** | **57** | 16 | 50 | 19 | 85 | 9 | **69** | 4 | 82 | 239 |
| 05:00 PM | 2 | **22** | **13** | **37** | **4** | 36 | 4 | 44 | 9 | 57 | **30** | **96** | **13** | 64 | **7** | **84** | **261** |
| 05:15 PM | 1 | 13 | 6 | 20 | 1 | **52** | 3 | 56 | 17 | 50 | 23 | 90 | 8 | 54 | 5 | 67 | 233 |
| Total Volume | 11 | 65 | 30 | 106 | 8 | 172 | 14 | 194 | 60 | 217 | 87 | 364 | 35 | 229 | 22 | 286 | 950 |
| % App. Total | 10.4 | 61.3 | 28.3 | | 4.1 | 88.7 | 7.2 | | 16.5 | 59.6 | 23.9 | | 12.2 | 80.1 | 7.7 | | |
| PHF | .458 | .739 | .577 | .716 | .500 | .827 | .583 | .851 | .833 | .904 | .725 | .948 | .673 | .830 | .786 | .851 | .910 |
| Cars | 11 | 64 | 30 | 105 | 8 | 169 | 13 | 190 | 60 | 217 | 87 | 364 | 35 | 228 | 21 | 284 | 943 |
| % Cars | 100 | 98.5 | 100 | 99.1 | 100 | 98.3 | 92.9 | 97.9 | 100 | 100 | 100 | 100 | 100 | 99.6 | 95.5 | 99.3 | 99.3 |
| Trucks | 0 | 1 | 0 | 1 | 0 | 3 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 7 |
| % Trucks | 0 | 1.5 | 0 | 0.9 | 0 | 1.7 | 7.1 | 2.1 | 0 | 0 | 0 | 0 | 0 | 0.4 | 4.5 | 0.7 | 0.7 |

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 2

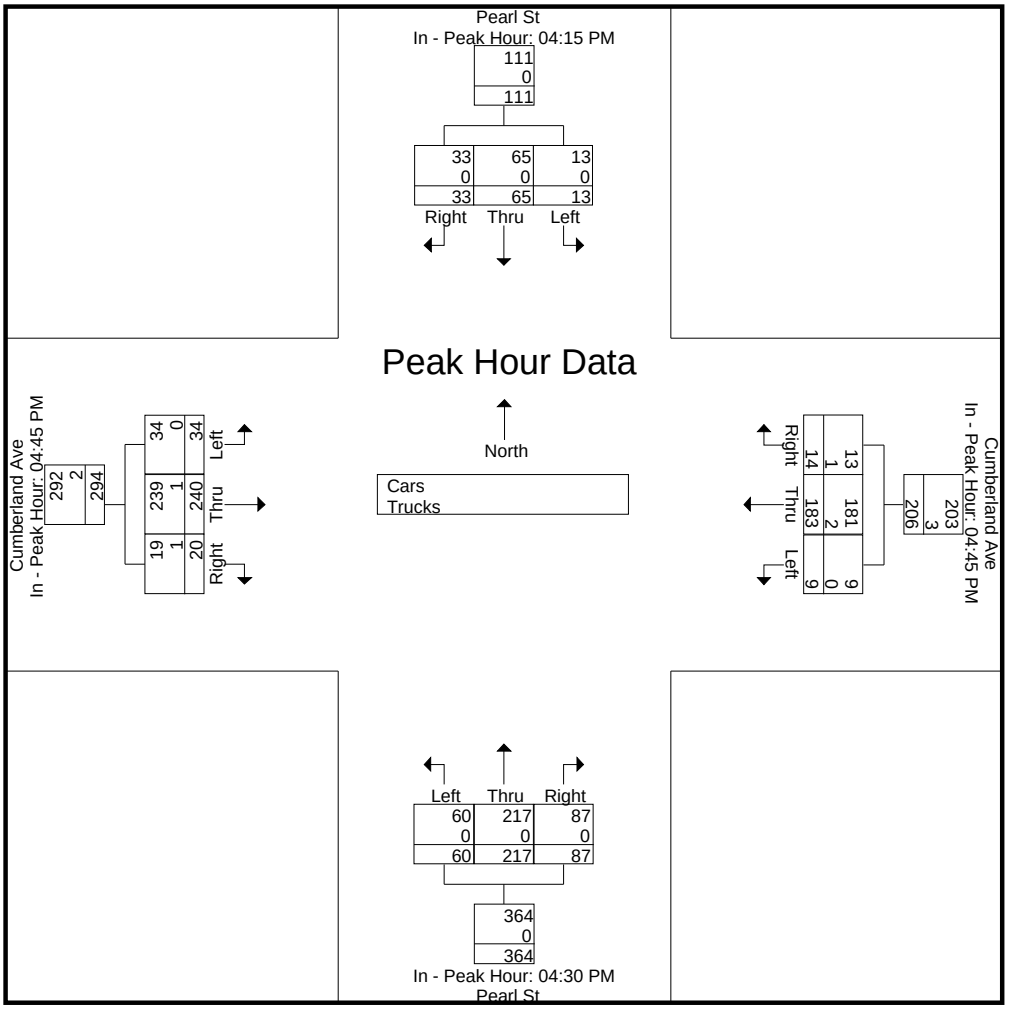



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:15 PM | | | | 04:45 PM | | | | 04:30 PM | | | | 04:45 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 3 | 13 | 9 | 25 | 2 | 49 | **6** | **57** | **18** | **60** | 15 | 93 | 9 | **69** | 4 | 82 |
| +15 mins. | **6** | 18 | 10 | 34 | **4** | 36 | 4 | 44 | 16 | 50 | 19 | 85 | **13** | 64 | **7** | **84** |
| +30 mins. | 2 | 12 | 1 | 15 | 1 | **52** | 3 | 56 | 9 | 57 | **30** | **96** | 8 | 54 | 5 | 67 |
| +45 mins. | 2 | **22** | **13** | **37** | 2 | 46 | 1 | 49 | 17 | 50 | 23 | 90 | 4 | 53 | 4 | 61 |
| Total Volume | 13 | 65 | 33 | 111 | 9 | 183 | 14 | 206 | 60 | 217 | 87 | 364 | 34 | 240 | 20 | 294 |
| % App. Total | 11.7 | 58.6 | 29.7 | | 4.4 | 88.8 | 6.8 | | 16.5 | 59.6 | 23.9 | | 11.6 | 81.6 | 6.8 | |
| PHF | .542 | .739 | .635 | .750 | .563 | .880 | .583 | .904 | .833 | .904 | .725 | .948 | .654 | .870 | .714 | .875 |
| Cars | 13 | 65 | 33 | 111 | 9 | 181 | 13 | 203 | 60 | 217 | 87 | 364 | 34 | 239 | 19 | 292 |
| % Cars | 100 | 100 | 100 | 100 | 100 | 98.9 | 92.9 | 98.5 | 100 | 100 | 100 | 100 | 100 | 99.6 | 95 | 99.3 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 1.1 | 7.1 | 1.5 | 0 | 0 | 0 | 0 | 0 | 0.4 | 5 | 0.7 |

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 3



# Accurate Counts

978-664-2565

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 10

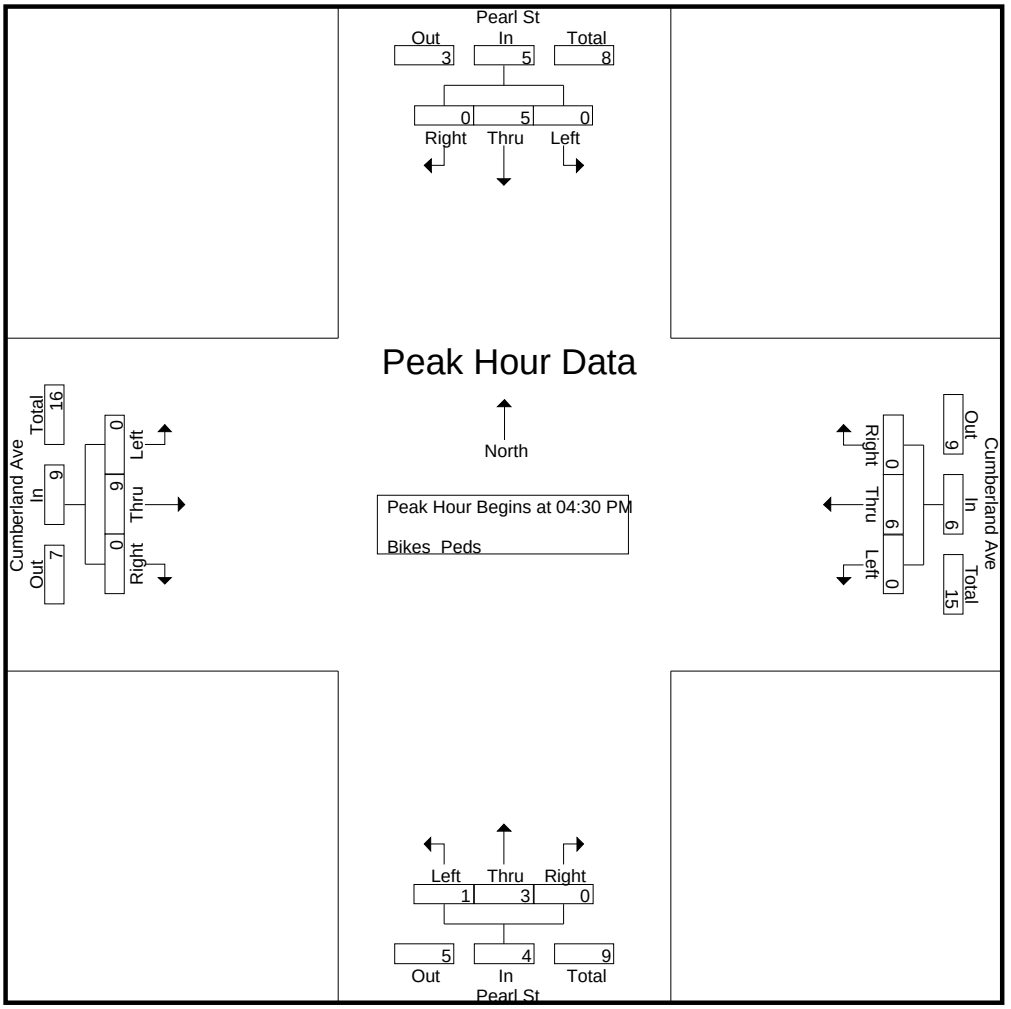
Groups Printed- Bikes Peds

| | Pearl St From North | | | | Cumberland Ave From East | | | | Pearl St From South | | | | Cumberland Ave From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 04:00 PM | 0 | 1 | 0 | 22 | 0 | 0 | 1 | 5 | 0 | 0 | 2 | 4 | 0 | 2 | 1 | 4 | 35 | 7 | 42 |
| 04:15 PM | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 6 | 20 | 2 | 22 |
| 04:30 PM | 0 | 4 | 0 | 7 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | 7 | 18 | 9 | 27 |
| 04:45 PM | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 3 | 1 | 0 | 0 | 10 | 0 | 2 | 0 | 4 | 22 | 4 | 26 |
| Total | 0 | 5 | 0 | 41 | 0 | 5 | 1 | 8 | 1 | 1 | 2 | 25 | 0 | 6 | 1 | 21 | 95 | 22 | 117 |
| 05:00 PM | 0 | 0 | 0 | 7 | 0 | 2 | 0 | 6 | 0 | 1 | 0 | 16 | 0 | 3 | 0 | 4 | 33 | 6 | 39 |
| 05:15 PM | 0 | 1 | 0 | 10 | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 5 | 0 | 3 | 0 | 4 | 24 | 5 | 29 |
| 05:30 PM | 0 | 0 | 1 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 6 | 0 | 0 | 0 | 6 | 22 | 3 | 25 |
| 05:45 PM | 0 | 0 | 0 | 16 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 8 | 0 | 1 | 0 | 2 | 26 | 4 | 30 |
| Total | 0 | 1 | 1 | 43 | 0 | 4 | 0 | 11 | 0 | 3 | 2 | 35 | 0 | 7 | 0 | 16 | 105 | 18 | 123 |
| Grand Total | 0 | 6 | 1 | 84 | 0 | 9 | 1 | 19 | 1 | 4 | 4 | 60 | 0 | 13 | 1 | 37 | 200 | 40 | 240 |
| Apprch % | 0 | 85.7 | 14.3 | | 0 | 90 | 10 | | 11.1 | 44.4 | 44.4 | | 0 | 92.9 | 7.1 | | | | |
| Total % | 0 | 15 | 2.5 | | 0 | 22.5 | 2.5 | | 2.5 | 10 | 10 | | 0 | 32.5 | 2.5 | | 83.3 | 16.7 | |

| | Pearl St From North | | | | Cumberland Ave From East | | | | Pearl St From South | | | | Cumberland Ave From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | 0 | **4** | 0 | **4** | 0 | **3** | 0 | **3** | 0 | **1** | 0 | **1** | 0 | 1 | 0 | 1 | **9** |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | **1** | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 4 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | **3** | 0 | **3** | 6 |
| 05:15 PM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 0 | 3 | 5 |
| Total Volume | 0 | 5 | 0 | 5 | 0 | 6 | 0 | 6 | 1 | 3 | 0 | 4 | 0 | 9 | 0 | 9 | 24 |
| % App. Total | 0 | 100 | 0 | | 0 | 100 | 0 | | 25 | 75 | 0 | | 0 | 100 | 0 | | |
| PHF | .000 | .313 | .000 | .313 | .000 | .500 | .000 | .500 | .250 | .750 | .000 | 1.00 | .000 | .750 | .000 | .750 | .667 |

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 11

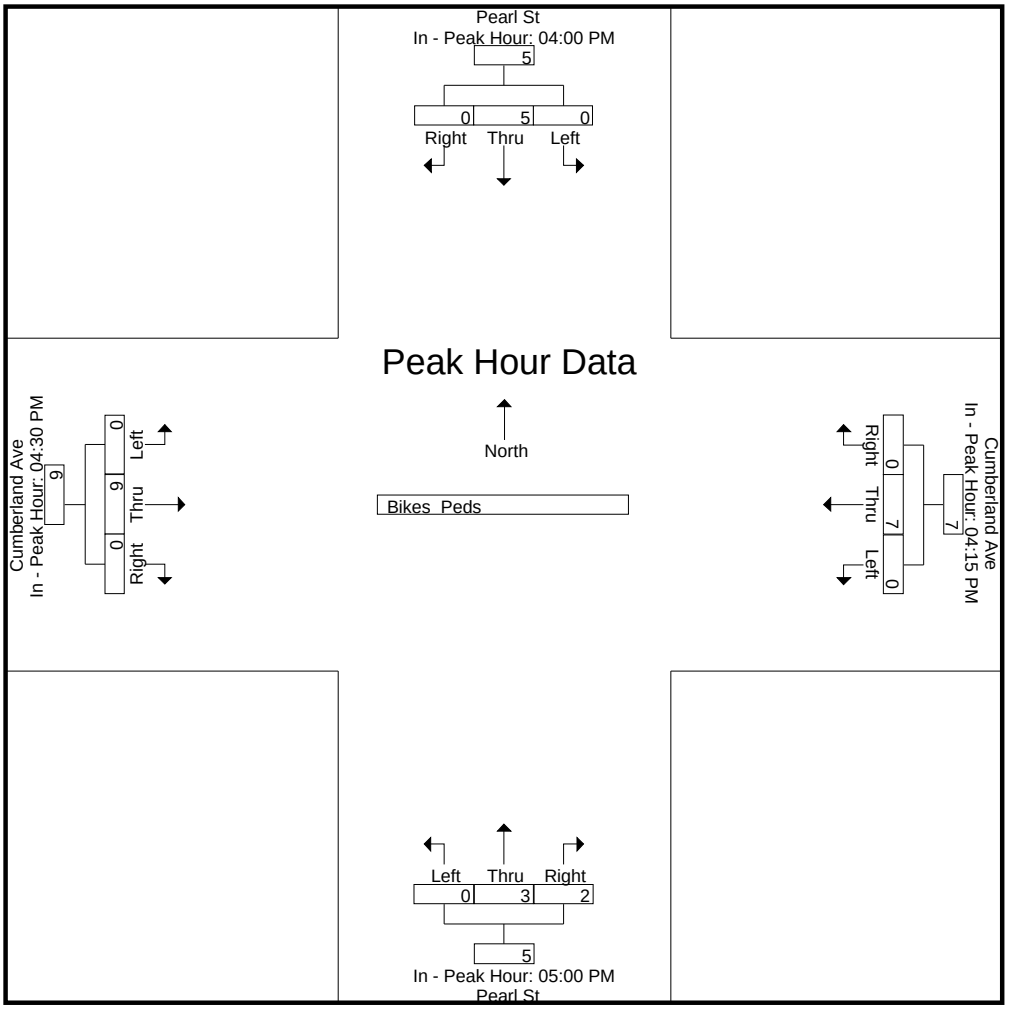



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:00 PM | | | | 04:15 PM | | | | 05:00 PM | | | | 04:30 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | **1** | 0 | 1 | 0 | 1 | 0 | 1 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 2 |
| +30 mins. | 0 | **4** | 0 | **4** | 0 | 1 | 0 | 1 | 0 | 0 | **1** | 1 | 0 | **3** | 0 | **3** |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 1 | 1 | **2** | 0 | 3 | 0 | 3 |
| Total Volume | 0 | 5 | 0 | 5 | 0 | 7 | 0 | 7 | 0 | 3 | 2 | 5 | 0 | 9 | 0 | 9 |
| % App. Total | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 60 | 40 | | 0 | 100 | 0 | |
| PHF | .000 | .313 | .000 | .313 | .000 | .583 | .000 | .583 | .000 | .750 | .500 | .625 | .000 | .750 | .000 | .750 |

N/S Street : Pearl Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371003
Site Code : 19371003
Start Date : 6/7/2022
Page No : 12



# Accurate Counts

978-664-2565

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 1

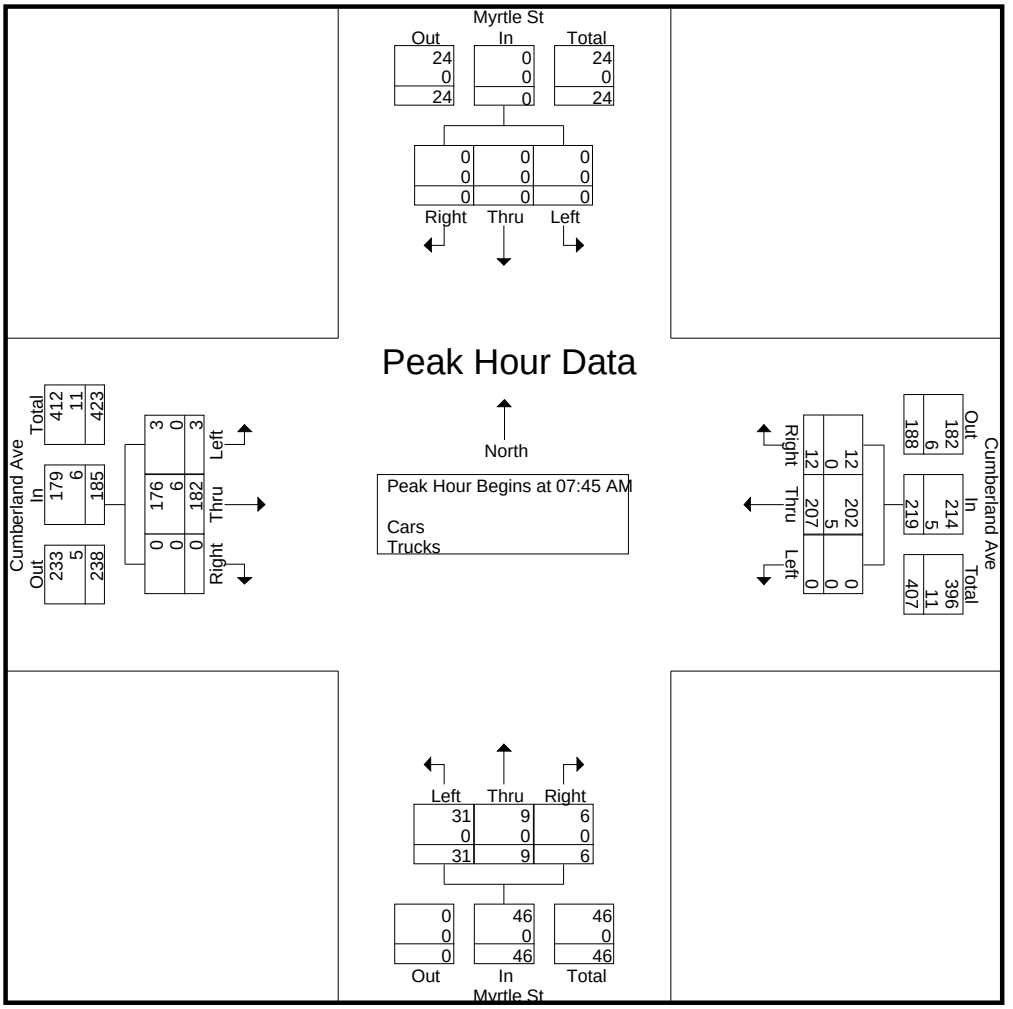
Groups Printed- Cars - Trucks

| | Myrtle St From North | | | Cumberland Ave From East | | | Myrtle St From South | | | Cumberland Ave From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 15 | 2 | 1 | 0 | 2 | 1 | 13 | 0 | 34 |
| 07:15 AM | 0 | 0 | 0 | 0 | 34 | 1 | 6 | 0 | 0 | 0 | 28 | 0 | 69 |
| 07:30 AM | 0 | 0 | 0 | 0 | 37 | 5 | 6 | 5 | 1 | 0 | 28 | 0 | 82 |
| 07:45 AM | 0 | 0 | 0 | 0 | 64 | 7 | 4 | 4 | 1 | 0 | 49 | 0 | 129 |
| Total | 0 | 0 | 0 | 0 | 150 | 15 | 17 | 9 | 4 | 1 | 118 | 0 | 314 |
| | | | | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 0 | 53 | 3 | 9 | 2 | 1 | 2 | 48 | 0 | 118 |
| 08:15 AM | 0 | 0 | 0 | 0 | 48 | 2 | 7 | 2 | 1 | 0 | 46 | 0 | 106 |
| 08:30 AM | 0 | 0 | 0 | 0 | 42 | 0 | 11 | 1 | 3 | 1 | 39 | 0 | 97 |
| 08:45 AM | 0 | 0 | 0 | 0 | 41 | 2 | 10 | 3 | 3 | 1 | 42 | 0 | 102 |
| Total | 0 | 0 | 0 | 0 | 184 | 7 | 37 | 8 | 8 | 4 | 175 | 0 | 423 |
| | | | | | | | | | | | | | |
| Grand Total | 0 | 0 | 0 | 0 | 334 | 22 | 54 | 17 | 12 | 5 | 293 | 0 | 737 |
| Apprch % | 0 | 0 | 0 | 0 | 93.8 | 6.2 | 65.1 | 20.5 | 14.5 | 1.7 | 98.3 | 0 | |
| Total % | 0 | 0 | 0 | 0 | 45.3 | 3 | 7.3 | 2.3 | 1.6 | 0.7 | 39.8 | 0 | |
| Cars | 0 | 0 | 0 | 0 | 321 | 22 | 53 | 17 | 12 | 5 | 284 | 0 | 714 |
| % Cars | 0 | 0 | 0 | 0 | 96.1 | 100 | 98.1 | 100 | 100 | 100 | 96.9 | 0 | 96.9 |
| Trucks | 0 | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 0 | 0 | 9 | 0 | 23 |
| % Trucks | 0 | 0 | 0 | 0 | 3.9 | 0 | 1.9 | 0 | 0 | 0 | 3.1 | 0 | 3.1 |

| | Myrtle St From North | | | | Cumberland Ave From East | | | | Myrtle St From South | | | | Cumberland Ave From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | | | | | | | | |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | **64** | **7** | **71** | 4 | **4** | 1 | 9 | 0 | **49** | 0 | 49 | **129** |
| 08:00 AM | 0 | 0 | 0 | 0 | 0 | 53 | 3 | 56 | 9 | 2 | 1 | 12 | **2** | 48 | 0 | **50** | 118 |
| 08:15 AM | 0 | 0 | 0 | 0 | 0 | 48 | 2 | 50 | 7 | 2 | 1 | 10 | 0 | 46 | 0 | 46 | 106 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 42 | 0 | 42 | **11** | 1 | **3** | **15** | 1 | 39 | 0 | 40 | 97 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 207 | 12 | 219 | 31 | 9 | 6 | 46 | 3 | 182 | 0 | 185 | 450 |
| % App. Total | 0 | 0 | 0 | | 0 | 94.5 | 5.5 | | 67.4 | 19.6 | 13 | | 1.6 | 98.4 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .809 | .429 | .771 | .705 | .563 | .500 | .767 | .375 | .929 | .000 | .925 | .872 |
| Cars | 0 | 0 | 0 | 0 | 0 | 202 | 12 | 214 | 31 | 9 | 6 | 46 | 3 | 176 | 0 | 179 | 439 |
| % Cars | 0 | 0 | 0 | 0 | 0 | 97.6 | 100 | 97.7 | 100 | 100 | 100 | 100 | 100 | 96.7 | 0 | 96.8 | 97.6 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 | 11 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 2.4 | 0 | 2.3 | 0 | 0 | 0 | 0 | 0 | 3.3 | 0 | 3.2 | 2.4 |

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 2

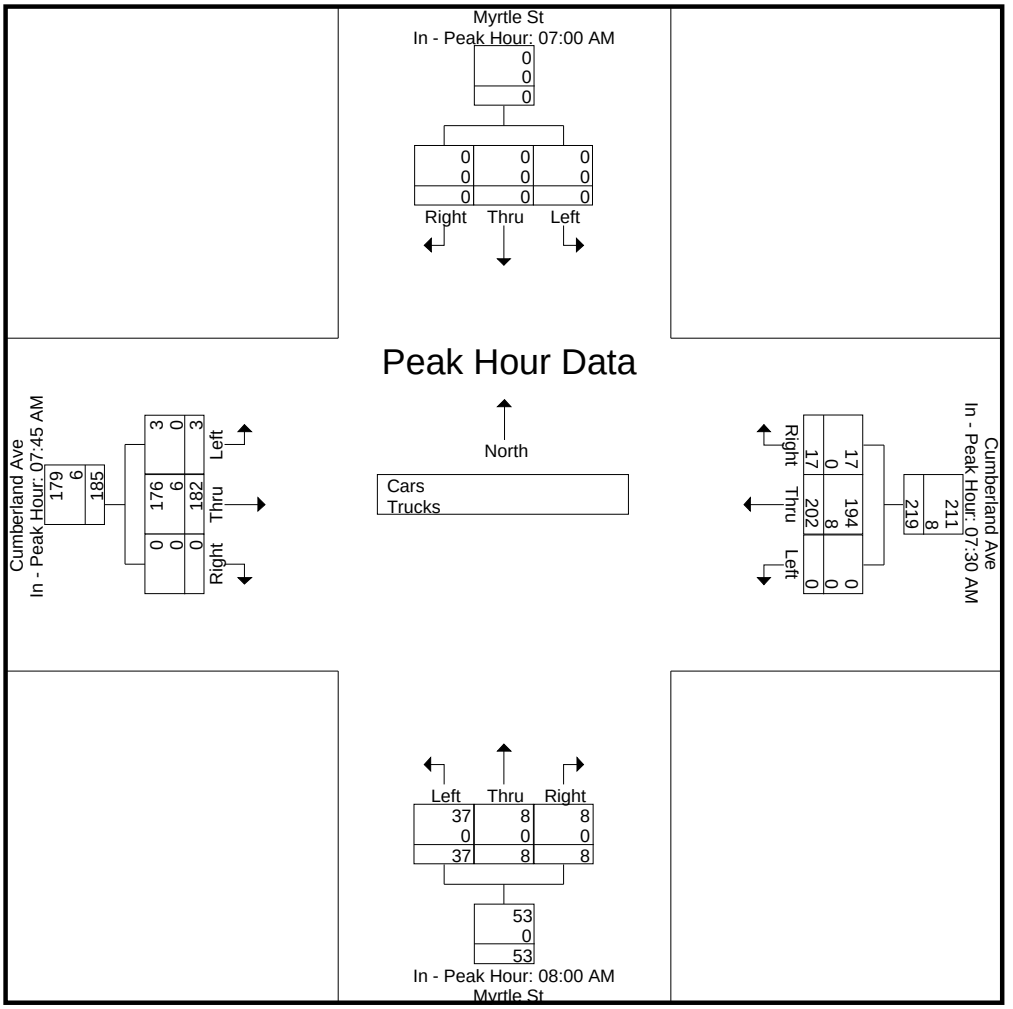



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:00 AM | | | | 07:30 AM | | | | 08:00 AM | | | | 07:45 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 37 | 5 | 42 | 9 | 2 | 1 | 12 | 0 | **49** | 0 | 49 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | **64** | **7** | **71** | 7 | 2 | 1 | 10 | **2** | 48 | 0 | **50** |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 53 | 3 | 56 | **11** | 1 | **3** | 15 | 0 | 46 | 0 | 46 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 48 | 2 | 50 | 10 | **3** | 3 | **16** | 1 | 39 | 0 | 40 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 202 | 17 | 219 | 37 | 8 | 8 | 53 | 3 | 182 | 0 | 185 |
| % App. Total | 0 | 0 | 0 | | 0 | 92.2 | 7.8 | | 69.8 | 15.1 | 15.1 | | 1.6 | 98.4 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .789 | .607 | .771 | .841 | .667 | .667 | .828 | .375 | .929 | .000 | .925 |
| Cars | 0 | 0 | 0 | 0 | 0 | 194 | 17 | 211 | 37 | 8 | 8 | 53 | 3 | 176 | 0 | 179 |
| % Cars | 0 | 0 | 0 | 0 | 0 | 96 | 100 | 96.3 | 100 | 100 | 100 | 100 | 100 | 96.7 | 0 | 96.8 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 6 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 3.7 | 0 | 0 | 0 | 0 | 0 | 3.3 | 0 | 3.2 |

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 3



# Accurate Counts

978-664-2565

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 10

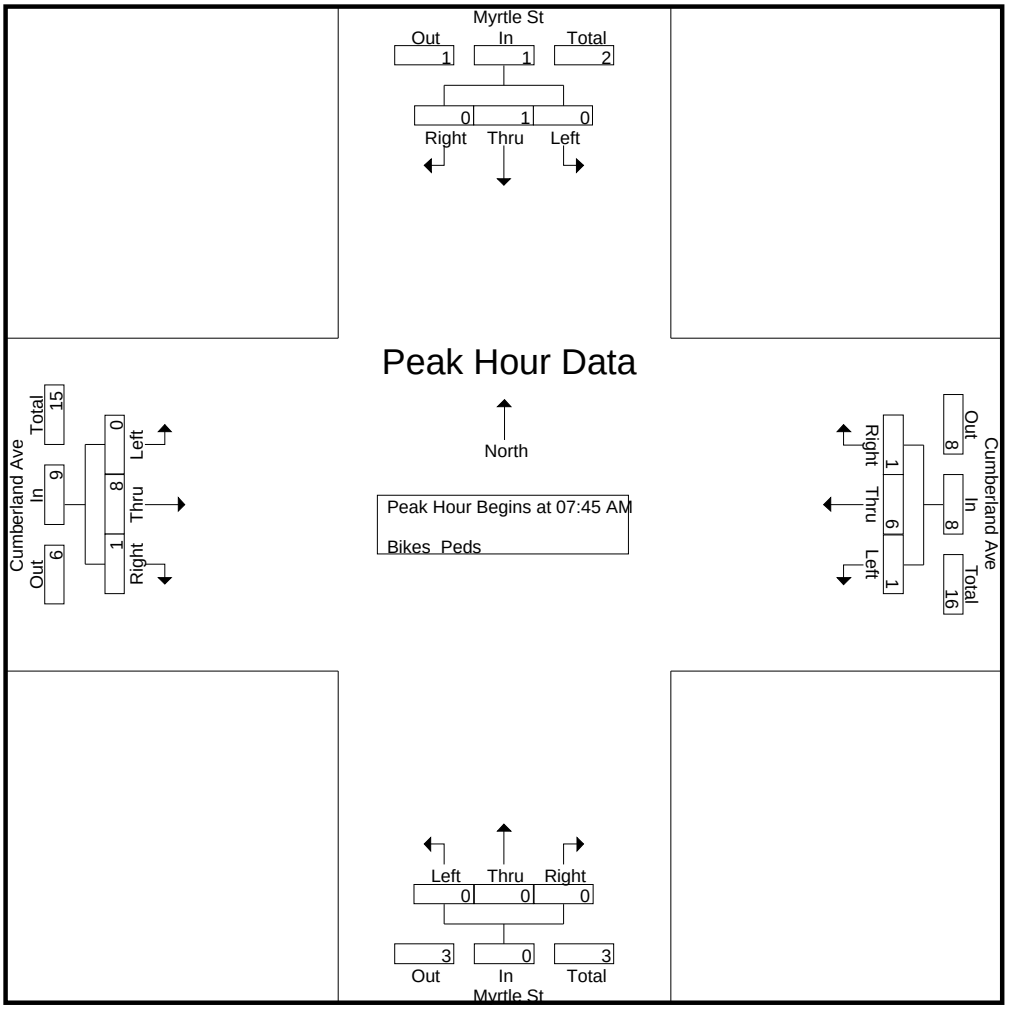
Groups Printed- Bikes Peds

| | Myrtle St From North | | | | Cumberland Ave From East | | | | Myrtle St From South | | | | Cumberland Ave From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 16 | 0 | 16 |
| 07:15 AM | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 0 | 7 | 21 | 1 | 22 |
| 07:30 AM | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 13 | 28 | 2 | 30 |
| 07:45 AM | 0 | 0 | 0 | 10 | 0 | 2 | 0 | 4 | 0 | 0 | 0 | 8 | 0 | 2 | 1 | 34 | 56 | 5 | 61 |
| Total | 0 | 0 | 0 | 40 | 0 | 4 | 0 | 6 | 1 | 0 | 0 | 16 | 0 | 2 | 1 | 59 | 121 | 8 | 129 |
| 08:00 AM | 0 | 1 | 0 | 9 | 0 | 2 | 0 | 3 | 0 | 0 | 0 | 15 | 0 | 1 | 0 | 11 | 38 | 4 | 42 |
| 08:15 AM | 0 | 0 | 0 | 5 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 11 | 0 | 4 | 0 | 4 | 21 | 6 | 27 |
| 08:30 AM | 0 | 0 | 0 | 6 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 6 | 0 | 1 | 0 | 5 | 17 | 3 | 20 |
| 08:45 AM | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 12 | 0 | 2 | 0 | 5 | 23 | 3 | 26 |
| Total | 0 | 1 | 0 | 24 | 1 | 5 | 1 | 6 | 0 | 0 | 0 | 44 | 0 | 8 | 0 | 25 | 99 | 16 | 115 |
| Grand Total | 0 | 1 | 0 | 64 | 1 | 9 | 1 | 12 | 1 | 0 | 0 | 60 | 0 | 10 | 1 | 84 | 220 | 24 | 244 |
| Apprch % | 0 | 100 | 0 | | 9.1 | 81.8 | 9.1 | | 100 | 0 | 0 | | 0 | 90.9 | 9.1 | | | | |
| Total % | 0 | 4.2 | 0 | | 4.2 | 37.5 | 4.2 | | 4.2 | 0 | 0 | | 0 | 41.7 | 4.2 | | 90.2 | 9.8 | |

| | Myrtle St From North | | | | Cumberland Ave From East | | | | Myrtle St From South | | | | Cumberland Ave From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:45 AM | | | | | | | | | | | | | | | | | |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | **2** | 0 | **2** | 0 | 0 | 0 | 0 | 0 | 2 | **1** | 3 | 5 |
| 08:00 AM | 0 | **1** | 0 | **1** | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 4 |
| 08:15 AM | 0 | 0 | 0 | 0 | **1** | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | **4** | 0 | **4** | **6** |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 1 | **1** | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 |
| Total Volume | 0 | 1 | 0 | 1 | 1 | 6 | 1 | 8 | 0 | 0 | 0 | 0 | 0 | 8 | 1 | 9 | 18 |
| % App. Total | 0 | 100 | 0 | | 12.5 | 75 | 12.5 | | 0 | 0 | 0 | | 0 | 88.9 | 11.1 | | |
| PHF | .000 | .250 | .000 | .250 | .250 | .750 | .250 | 1.00 | .000 | .000 | .000 | .000 | .000 | .500 | .250 | .563 | .750 |

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 11

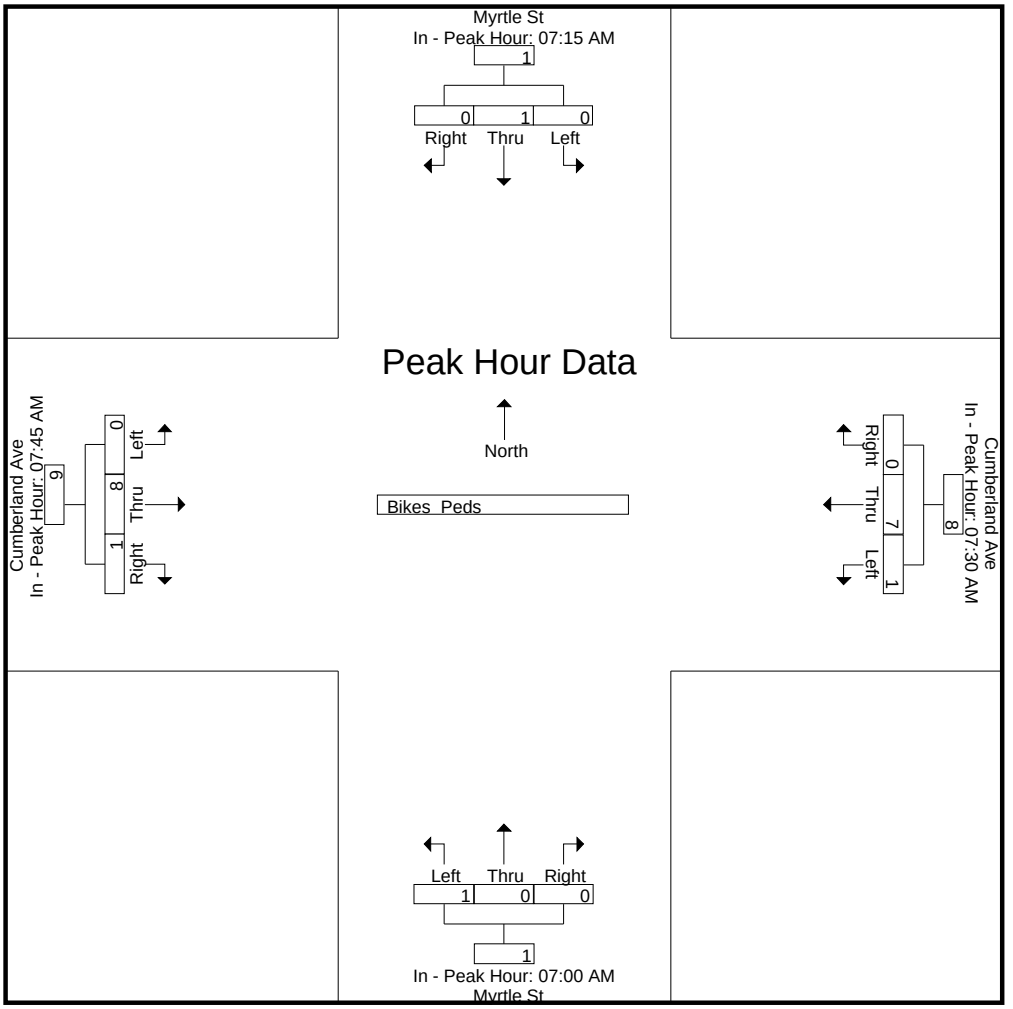



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:15 AM | | | | 07:30 AM | | | | 07:00 AM | | | | 07:45 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | **2** | 0 | **2** | 0 | 0 | 0 | 0 | 0 | 2 | **1** | 3 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | **1** | 0 | 0 | **1** | 0 | 1 | 0 | 1 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | **4** | 0 | **4** |
| +45 mins. | 0 | **1** | 0 | **1** | **1** | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total Volume | 0 | 1 | 0 | 1 | 1 | 7 | 0 | 8 | 1 | 0 | 0 | 1 | 0 | 8 | 1 | 9 |
| % App. Total | 0 | 100 | 0 | | 12.5 | 87.5 | 0 | | 100 | 0 | 0 | | 0 | 88.9 | 11.1 | |
| PHF | .000 | .250 | .000 | .250 | .250 | .875 | .000 | 1.000 | .250 | .000 | .000 | .250 | .000 | .500 | .250 | .563 |

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 12



# Accurate Counts

978-664-2565

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 1

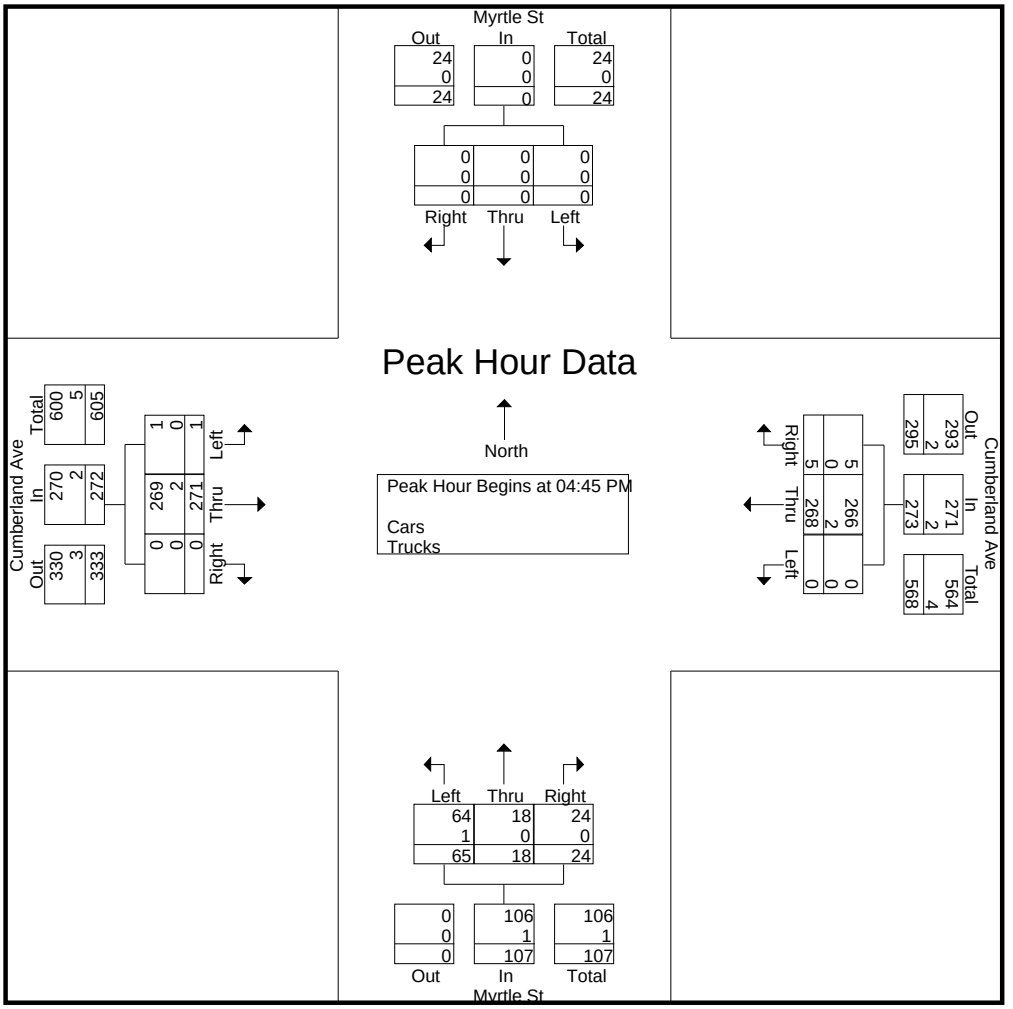
Groups Printed- Cars - Trucks

| | Myrtle St From North | | | Cumberland Ave From East | | | Myrtle St From South | | | Cumberland Ave From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 0 | 61 | 1 | 14 | 2 | 6 | 3 | 59 | 0 | 146 |
| 04:15 PM | 0 | 0 | 0 | 0 | 62 | 2 | 17 | 2 | 7 | 0 | 54 | 0 | 144 |
| 04:30 PM | 0 | 0 | 0 | 0 | 62 | 2 | 28 | 0 | 7 | 2 | 49 | 0 | 150 |
| 04:45 PM | 0 | 0 | 0 | 0 | 63 | 1 | 12 | 2 | 8 | 1 | 75 | 0 | 162 |
| Total | 0 | 0 | 0 | 0 | 248 | 6 | 71 | 6 | 28 | 6 | 237 | 0 | 602 |
| | | | | | | | | | | | | | |
| 05:00 PM | 0 | 0 | 0 | 0 | 59 | 1 | 18 | 5 | 5 | 0 | 73 | 0 | 161 |
| 05:15 PM | 0 | 0 | 0 | 0 | 74 | 2 | 21 | 7 | 8 | 0 | 61 | 0 | 173 |
| 05:30 PM | 0 | 0 | 0 | 0 | 72 | 1 | 14 | 4 | 3 | 0 | 62 | 0 | 156 |
| 05:45 PM | 0 | 0 | 0 | 0 | 59 | 0 | 20 | 2 | 1 | 1 | 64 | 0 | 147 |
| Total | 0 | 0 | 0 | 0 | 264 | 4 | 73 | 18 | 17 | 1 | 260 | 0 | 637 |
| | | | | | | | | | | | | | |
| Grand Total | 0 | 0 | 0 | 0 | 512 | 10 | 144 | 24 | 45 | 7 | 497 | 0 | 1239 |
| Apprch % | 0 | 0 | 0 | 0 | 98.1 | 1.9 | 67.6 | 11.3 | 21.1 | 1.4 | 98.6 | 0 | |
| Total % | 0 | 0 | 0 | 0 | 41.3 | 0.8 | 11.6 | 1.9 | 3.6 | 0.6 | 40.1 | 0 | |
| Cars | 0 | 0 | 0 | 0 | 503 | 10 | 143 | 24 | 45 | 7 | 493 | 0 | 1225 |
| % Cars | 0 | 0 | 0 | 0 | 98.2 | 100 | 99.3 | 100 | 100 | 100 | 99.2 | 0 | 98.9 |
| Trucks | 0 | 0 | 0 | 0 | 9 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 14 |
| % Trucks | 0 | 0 | 0 | 0 | 1.8 | 0 | 0.7 | 0 | 0 | 0 | 0.8 | 0 | 1.1 |

| | Myrtle St From North | | | | Cumberland Ave From East | | | | Myrtle St From South | | | | Cumberland Ave From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:45 PM | | | | | | | | | | | | | | | | | |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 63 | 1 | 64 | 12 | 2 | **8** | 22 | **1** | **75** | 0 | **76** | 162 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 59 | 1 | 60 | 18 | 5 | 5 | 28 | 0 | 73 | 0 | 73 | 161 |
| 05:15 PM | 0 | 0 | 0 | 0 | 0 | **74** | **2** | **76** | **21** | **7** | 8 | **36** | 0 | 61 | 0 | 61 | **173** |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 72 | 1 | 73 | 14 | 4 | 3 | 21 | 0 | 62 | 0 | 62 | 156 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 268 | 5 | 273 | 65 | 18 | 24 | 107 | 1 | 271 | 0 | 272 | 652 |
| % App. Total | 0 | 0 | 0 | | 0 | 98.2 | 1.8 | | 60.7 | 16.8 | 22.4 | | 0.4 | 99.6 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .905 | .625 | .898 | .774 | .643 | .750 | .743 | .250 | .903 | .000 | .895 | .942 |
| Cars | 0 | 0 | 0 | 0 | 0 | 266 | 5 | 271 | 64 | 18 | 24 | 106 | 1 | 269 | 0 | 270 | 647 |
| % Cars | 0 | 0 | 0 | 0 | 0 | 99.3 | 100 | 99.3 | 98.5 | 100 | 100 | 99.1 | 100 | 99.3 | 0 | 99.3 | 99.2 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 5 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0.7 | 1.5 | 0 | 0 | 0.9 | 0 | 0.7 | 0 | 0.7 | 0.8 |

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 2

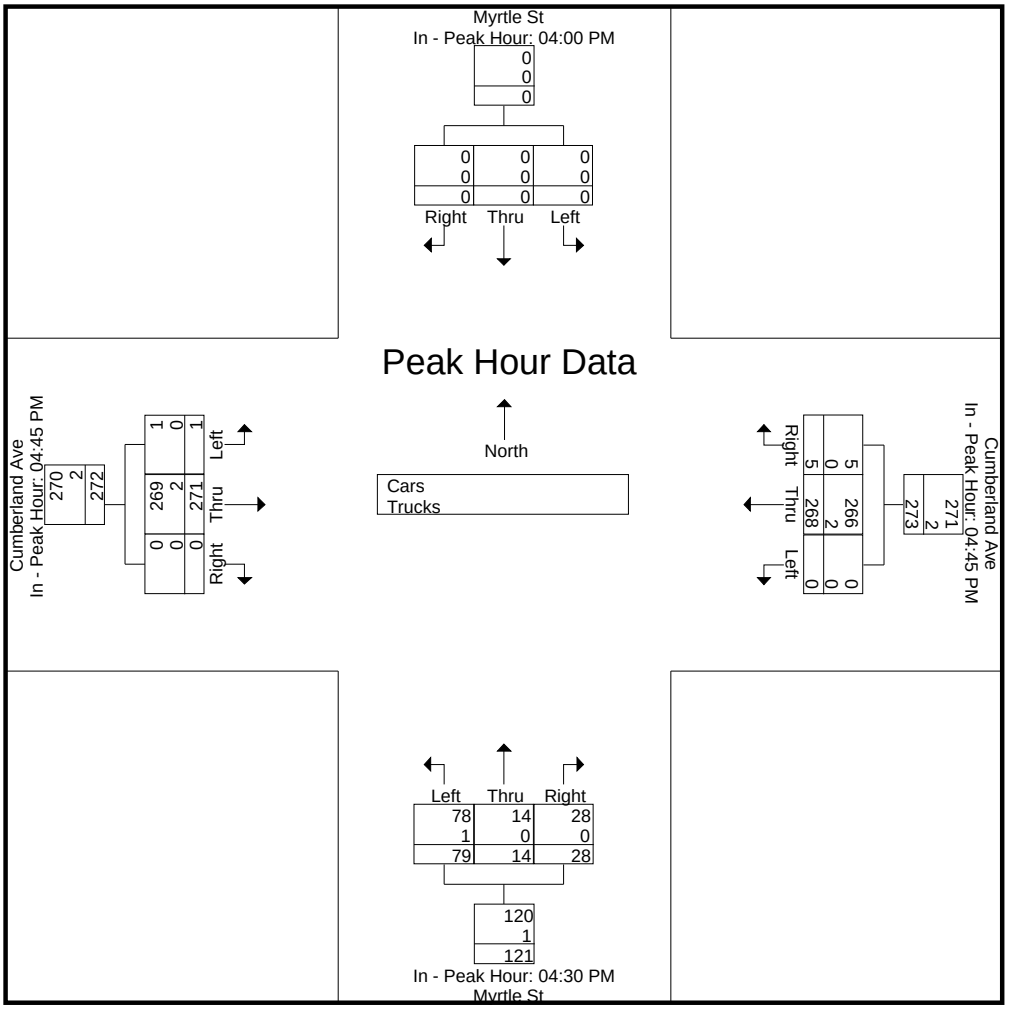



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:00 PM | | | | 04:45 PM | | | | 04:30 PM | | | | 04:45 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 63 | 1 | 64 | **28** | 0 | 7 | 35 | **1** | **75** | 0 | **76** |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 59 | 1 | 60 | 12 | 2 | **8** | 22 | 0 | 73 | 0 | 73 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | **74** | **2** | **76** | 18 | 5 | 5 | 28 | 0 | 61 | 0 | 61 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 72 | 1 | 73 | 21 | **7** | 8 | **36** | 0 | 62 | 0 | 62 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 268 | 5 | 273 | 79 | 14 | 28 | 121 | 1 | 271 | 0 | 272 |
| % App. Total | 0 | 0 | 0 | | 0 | 98.2 | 1.8 | | 65.3 | 11.6 | 23.1 | | 0.4 | 99.6 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .905 | .625 | .898 | .705 | .500 | .875 | .840 | .250 | .903 | .000 | .895 |
| Cars | 0 | 0 | 0 | 0 | 0 | 266 | 5 | 271 | 78 | 14 | 28 | 120 | 1 | 269 | 0 | 270 |
| % Cars | 0 | 0 | 0 | 0 | 0 | 99.3 | 100 | 99.3 | 98.7 | 100 | 100 | 99.2 | 100 | 99.3 | 0 | 99.3 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 2 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0.7 | 1.3 | 0 | 0 | 0.8 | 0 | 0.7 | 0 | 0.7 |

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 3



N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 10

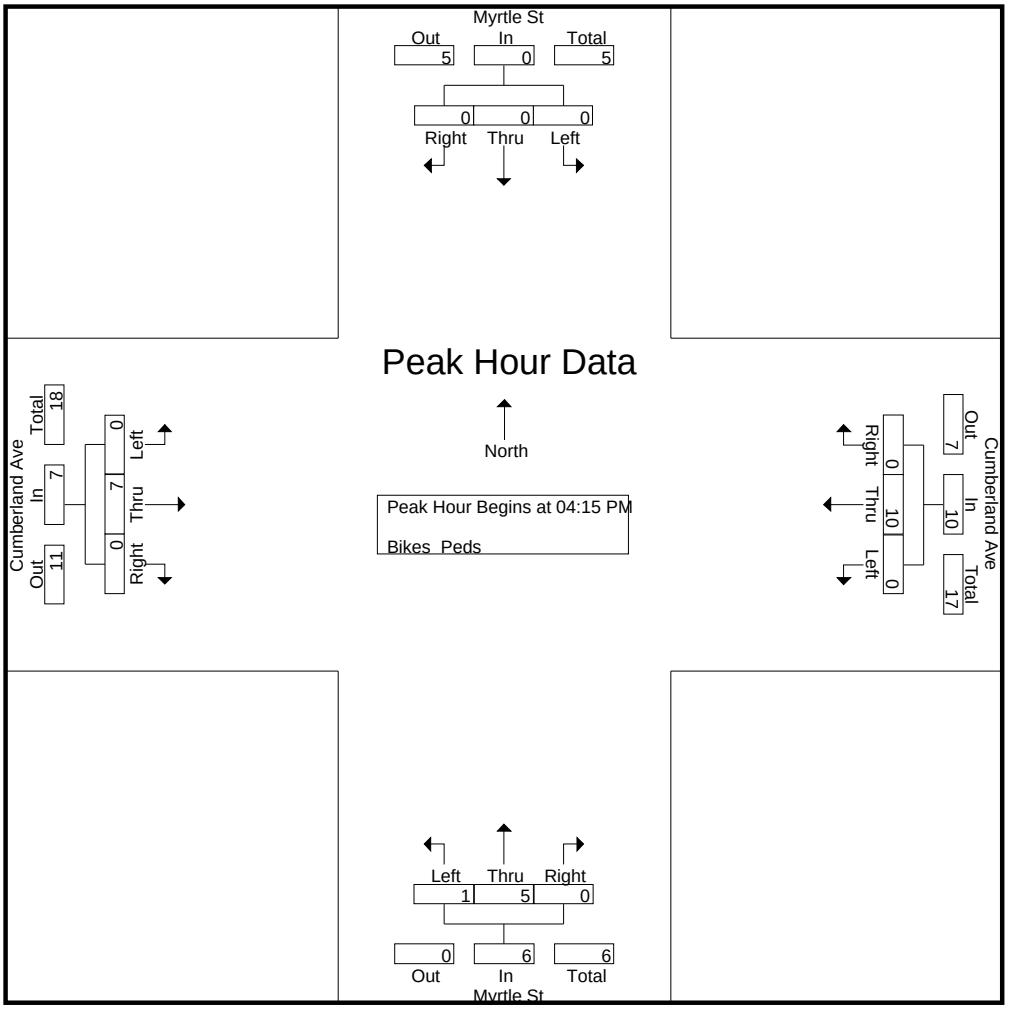
Groups Printed- Bikes Peds

| | Myrtle St From North | | | | Cumberland Ave From East | | | | Myrtle St From South | | | | Cumberland Ave From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 04:00 PM | 0 | 0 | 0 | 21 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 9 | 0 | 3 | 0 | 11 | 45 | 4 | 49 |
| 04:15 PM | 0 | 0 | 0 | 7 | 0 | 1 | 0 | 3 | 0 | 2 | 0 | 7 | 0 | 1 | 0 | 7 | 24 | 4 | 28 |
| 04:30 PM | 0 | 0 | 0 | 9 | 0 | 3 | 0 | 2 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 24 | 37 | 5 | 42 |
| 04:45 PM | 0 | 0 | 0 | 8 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 12 | 0 | 2 | 0 | 9 | 30 | 5 | 35 |
| Total | 0 | 0 | 0 | 45 | 0 | 8 | 0 | 10 | 0 | 3 | 0 | 30 | 0 | 7 | 0 | 51 | 136 | 18 | 154 |
| 05:00 PM | 0 | 0 | 0 | 6 | 0 | 3 | 0 | 4 | 1 | 2 | 0 | 10 | 0 | 3 | 0 | 14 | 34 | 9 | 43 |
| 05:15 PM | 0 | 0 | 0 | 10 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 10 | 0 | 2 | 0 | 6 | 28 | 4 | 32 |
| 05:30 PM | 0 | 0 | 0 | 8 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 13 | 0 | 1 | 0 | 11 | 33 | 3 | 36 |
| 05:45 PM | 0 | 0 | 0 | 14 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 10 | 0 | 1 | 0 | 6 | 32 | 5 | 37 |
| Total | 0 | 0 | 0 | 38 | 0 | 7 | 0 | 9 | 3 | 3 | 1 | 43 | 0 | 7 | 0 | 37 | 127 | 21 | 148 |
| Grand Total | 0 | 0 | 0 | 83 | 0 | 15 | 0 | 19 | 3 | 6 | 1 | 73 | 0 | 14 | 0 | 88 | 263 | 39 | 302 |
| Apprch % | 0 | 0 | 0 | | 0 | 100 | 0 | | 30 | 60 | 10 | | 0 | 100 | 0 | | | | |
| Total % | 0 | 0 | 0 | | 0 | 38.5 | 0 | | 7.7 | 15.4 | 2.6 | | 0 | 35.9 | 0 | | 87.1 | 12.9 | |

| | Myrtle St From North | | | | Cumberland Ave From East | | | | Myrtle St From South | | | | Cumberland Ave From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:15 PM | | | | | | | | | | | | | | | | | |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | **2** | 0 | 2 | 0 | 1 | 0 | 1 | 4 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 5 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 5 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | **1** | 2 | 0 | **3** | 0 | **3** | 0 | **3** | **9** |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 1 | 5 | 0 | 6 | 0 | 7 | 0 | 7 | 23 |
| % App. Total | 0 | 0 | 0 | | 0 | 100 | 0 | | 16.7 | 83.3 | 0 | | 0 | 100 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .833 | .000 | .833 | .250 | .625 | .000 | .500 | .000 | .583 | .000 | .583 | .639 |

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 11

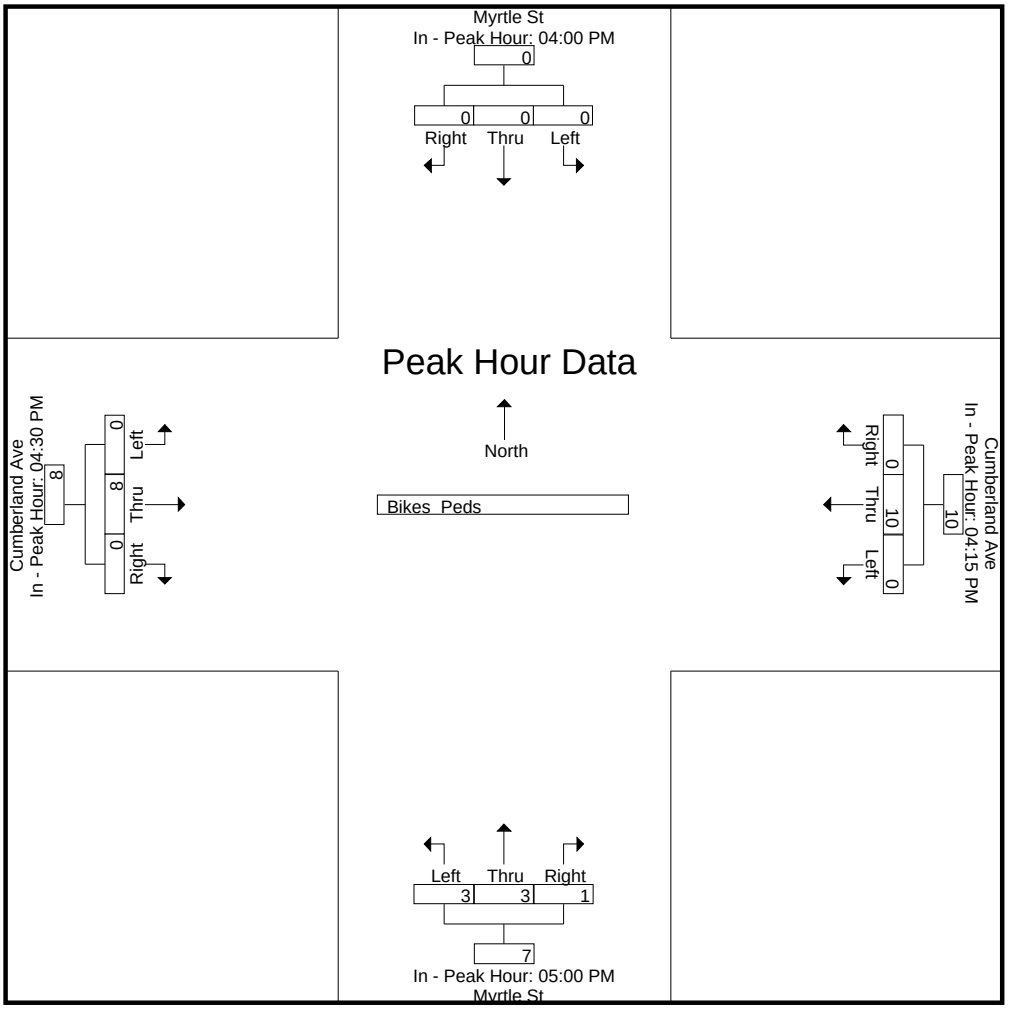



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:00 PM | | | | 04:15 PM | | | | 05:00 PM | | | | 04:30 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | **1** | **2** | 0 | **3** | 0 | 1 | 0 | 1 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** | 1 | 0 | **1** | 2 | 0 | 2 | 0 | 2 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 1 | 1 | 0 | 2 | 0 | 2 | 0 | 2 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 3 | 3 | 1 | 7 | 0 | 8 | 0 | 8 |
| % App. Total | 0 | 0 | 0 | | 0 | 100 | 0 | | 42.9 | 42.9 | 14.3 | | 0 | 100 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .833 | .000 | .833 | .750 | .375 | .250 | .583 | .000 | .667 | .000 | .667 |

N/S Street : Myrtle Street
E/W Street : Cumberland Avenue
City/State : Portland, ME
Weather : Clear

File Name : 19371004
Site Code : 19371004
Start Date : 6/7/2022
Page No : 12



# Accurate Counts

978-664-2565

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 1

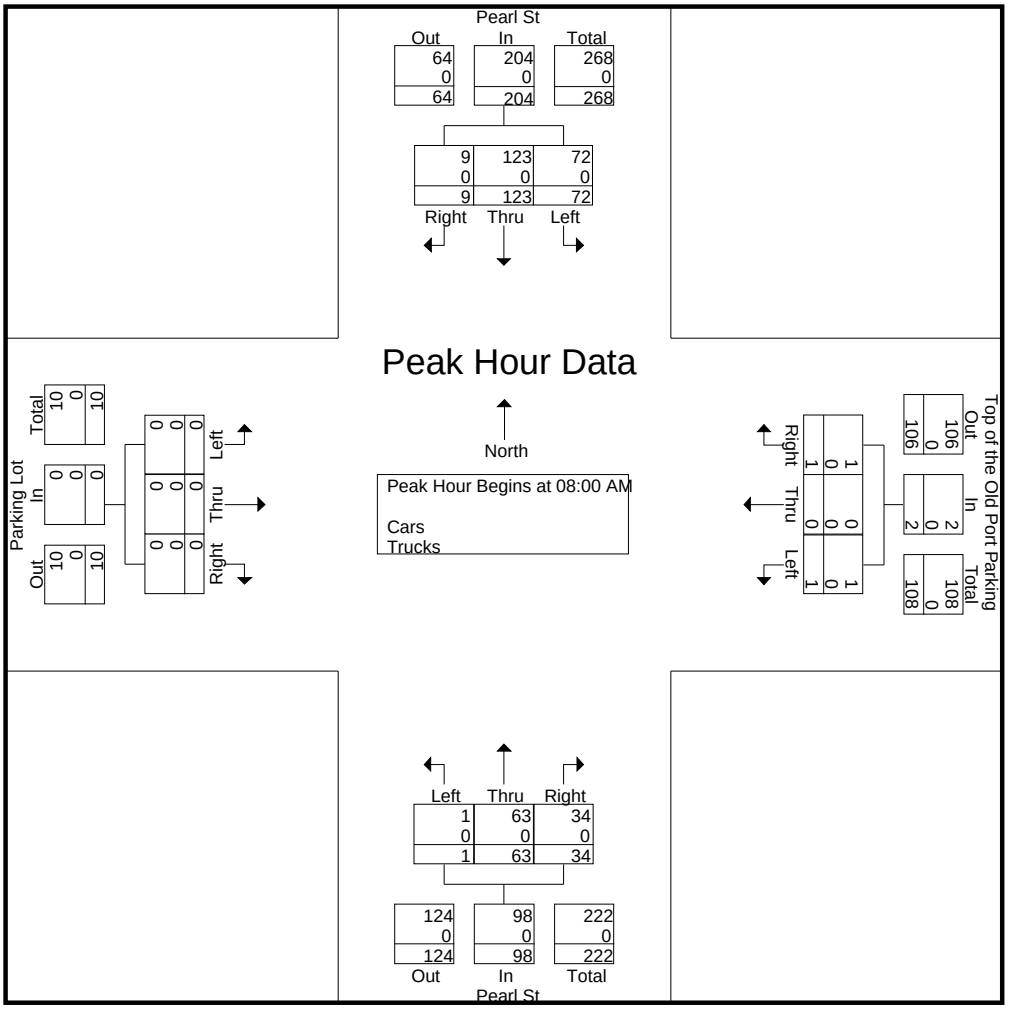
Groups Printed- Cars - Trucks

| | Pearl St From North | | | Top of the Old Port Parking From East | | | Pearl St From South | | | Parking Lot From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 3 | 16 | 0 | 0 | 0 | 0 | 0 | 7 | 3 | 0 | 0 | 0 | 29 |
| 07:15 AM | 3 | 20 | 1 | 1 | 0 | 1 | 1 | 6 | 2 | 0 | 0 | 0 | 35 |
| 07:30 AM | 11 | 18 | 3 | 0 | 0 | 0 | 0 | 12 | 4 | 1 | 0 | 1 | 50 |
| 07:45 AM | 15 | 25 | 2 | 0 | 0 | 0 | 0 | 13 | 8 | 1 | 0 | 0 | 64 |
| Total | 32 | 79 | 6 | 1 | 0 | 1 | 1 | 38 | 17 | 2 | 0 | 1 | 178 |
| | | | | | | | | | | | | | |
| 08:00 AM | 20 | 35 | 1 | 0 | 0 | 0 | 0 | 16 | 8 | 0 | 0 | 0 | 80 |
| 08:15 AM | 21 | 31 | 3 | 0 | 0 | 1 | 0 | 11 | 10 | 0 | 0 | 0 | 77 |
| 08:30 AM | 16 | 22 | 2 | 1 | 0 | 0 | 1 | 15 | 9 | 0 | 0 | 0 | 66 |
| 08:45 AM | 15 | 35 | 3 | 0 | 0 | 0 | 0 | 21 | 7 | 0 | 0 | 0 | 81 |
| Total | 72 | 123 | 9 | 1 | 0 | 1 | 1 | 63 | 34 | 0 | 0 | 0 | 304 |
| | | | | | | | | | | | | | |
| Grand Total | 104 | 202 | 15 | 2 | 0 | 2 | 2 | 101 | 51 | 2 | 0 | 1 | 482 |
| Apprch % | 32.4 | 62.9 | 4.7 | 50 | 0 | 50 | 1.3 | 65.6 | 33.1 | 66.7 | 0 | 33.3 | |
| Total % | 21.6 | 41.9 | 3.1 | 0.4 | 0 | 0.4 | 0.4 | 21 | 10.6 | 0.4 | 0 | 0.2 | |
| Cars | 104 | 201 | 15 | 2 | 0 | 2 | 2 | 101 | 51 | 2 | 0 | 1 | 481 |
| % Cars | 100 | 99.5 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 100 | 0 | 100 | 99.8 |
| Trucks | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Trucks | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 |

| | Pearl St From North | | | | Top of the Old Port Parking From East | | | | Pearl St From South | | | | Parking Lot From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 AM | | | | | | | | | | | | | | | | | |
| 08:00 AM | 20 | **35** | 1 | **56** | 0 | 0 | 0 | 0 | 0 | 16 | 8 | 24 | 0 | 0 | 0 | 0 | 80 |
| 08:15 AM | **21** | 31 | **3** | 55 | 0 | 0 | **1** | **1** | 0 | 11 | **10** | 21 | 0 | 0 | 0 | 0 | 77 |
| 08:30 AM | 16 | 22 | 2 | 40 | **1** | 0 | 0 | 1 | **1** | 15 | 9 | 25 | 0 | 0 | 0 | 0 | 66 |
| 08:45 AM | 15 | 35 | 3 | 53 | 0 | 0 | 0 | 0 | 0 | **21** | 7 | **28** | 0 | 0 | 0 | 0 | **81** |
| Total Volume | 72 | 123 | 9 | 204 | 1 | 0 | 1 | 2 | 1 | 63 | 34 | 98 | 0 | 0 | 0 | 0 | 304 |
| % App. Total | 35.3 | 60.3 | 4.4 | | 50 | 0 | 50 | | 1 | 64.3 | 34.7 | | 0 | 0 | 0 | | |
| PHF | .857 | .879 | .750 | .911 | .250 | .000 | .250 | .500 | .250 | .750 | .850 | .875 | .000 | .000 | .000 | .000 | .938 |
| Cars | 72 | 123 | 9 | 204 | 1 | 0 | 1 | 2 | 1 | 63 | 34 | 98 | 0 | 0 | 0 | 0 | 304 |
| % Cars | 100 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 0 | 0 | 0 | 0 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 2

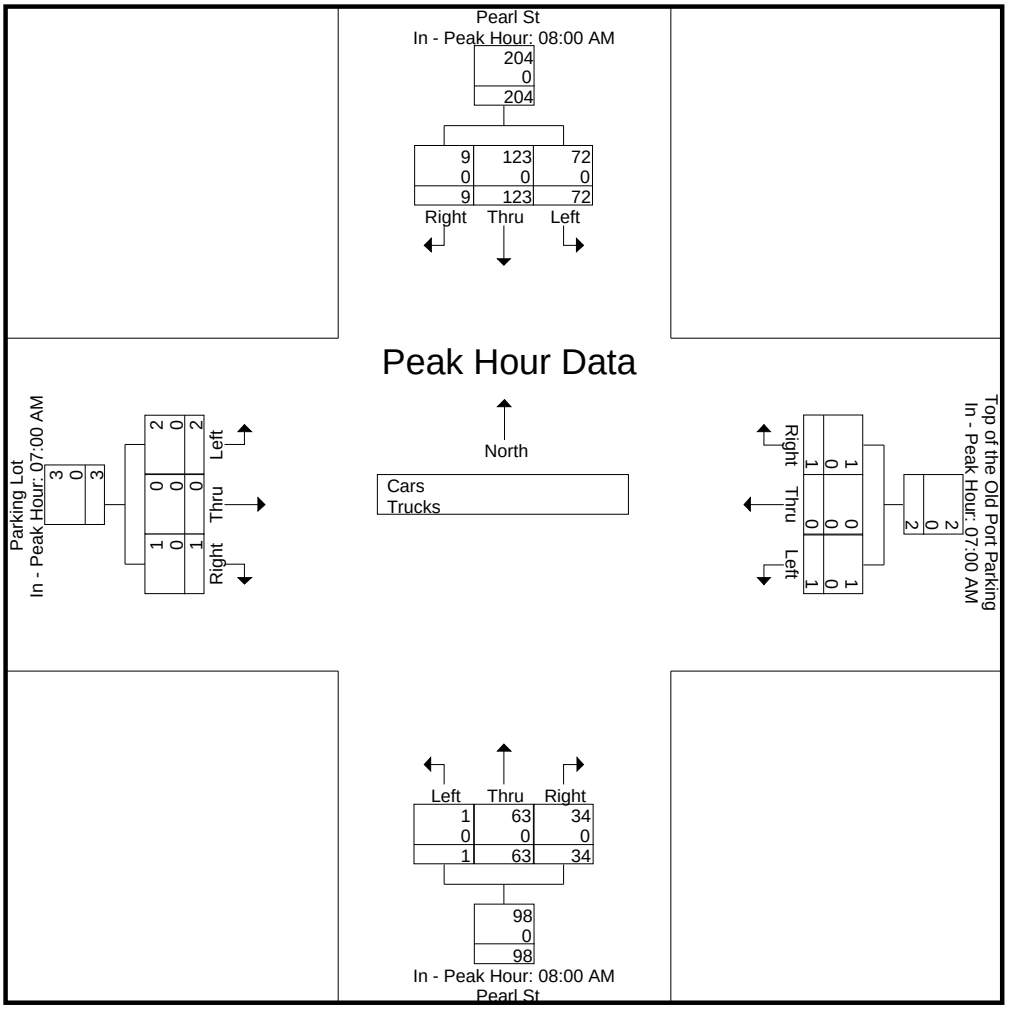



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 08:00 AM | | | | 07:00 AM | | | | 08:00 AM | | | | 07:00 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 20 | **35** | 1 | **56** | 0 | 0 | 0 | 0 | 0 | 16 | 8 | 24 | 0 | 0 | 0 | 0 |
| +15 mins. | **21** | 31 | **3** | 55 | **1** | 0 | **1** | **2** | 0 | 11 | **10** | 21 | 0 | 0 | 0 | 0 |
| +30 mins. | 16 | 22 | 2 | 40 | 0 | 0 | 0 | 0 | **1** | 15 | 9 | 25 | **1** | 0 | **1** | **2** |
| +45 mins. | 15 | 35 | 3 | 53 | 0 | 0 | 0 | 0 | 0 | **21** | 7 | **28** | 1 | 0 | 0 | 1 |
| Total Volume | 72 | 123 | 9 | 204 | 1 | 0 | 1 | 2 | 1 | 63 | 34 | 98 | 2 | 0 | 1 | 3 |
| % App. Total | 35.3 | 60.3 | 4.4 | | 50 | 0 | 50 | | 1 | 64.3 | 34.7 | | 66.7 | 0 | 33.3 | |
| PHF | .857 | .879 | .750 | .911 | .250 | .000 | .250 | .250 | .250 | .750 | .850 | .875 | .500 | .000 | .250 | .375 |
| Cars | 72 | 123 | 9 | 204 | 1 | 0 | 1 | 2 | 1 | 63 | 34 | 98 | 2 | 0 | 1 | 3 |
| % Cars | 100 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 0 | 100 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 3



N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 10

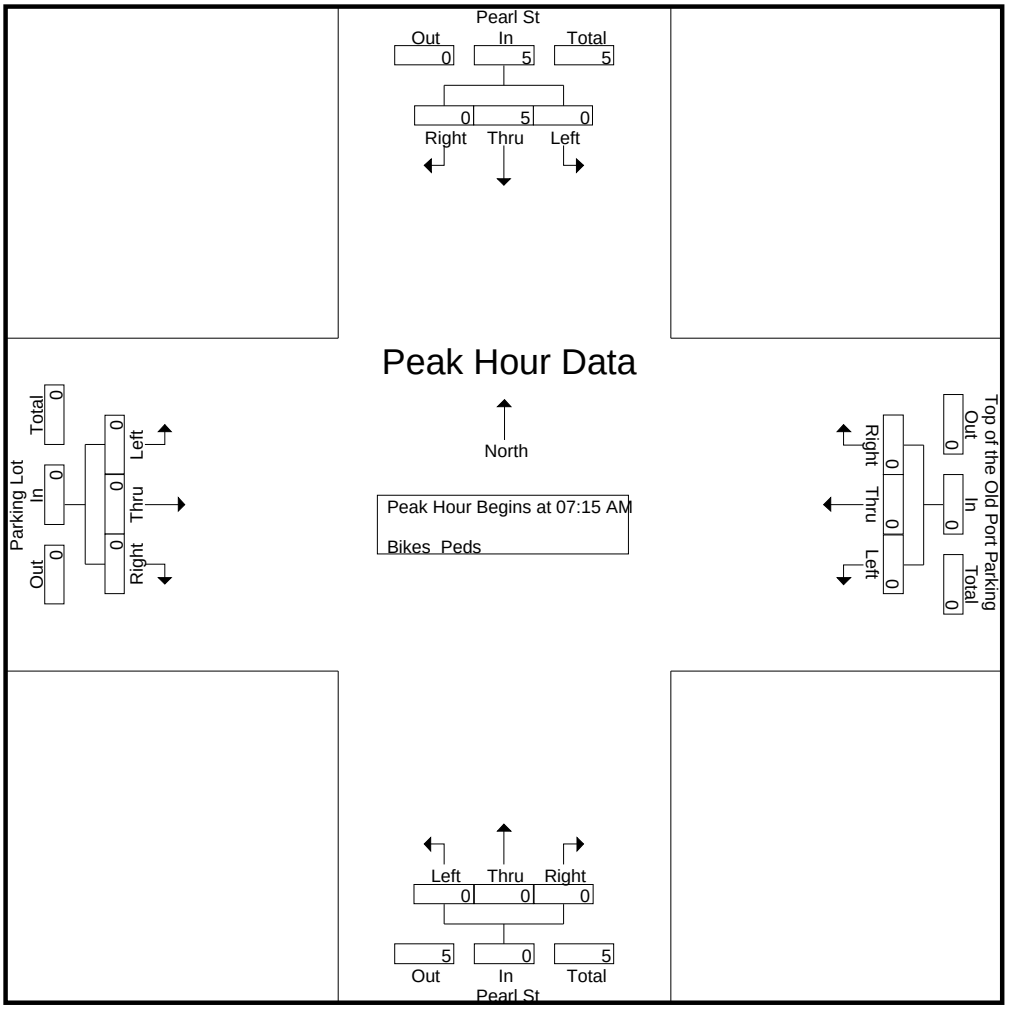
Groups Printed- Bikes Peds

| | Pearl St From North | | | | Top of the Old Port Parking From East | | | | Pearl St From South | | | | Parking Lot From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 3 | 0 | 3 |
| 07:15 AM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 5 | 1 | 6 |
| 07:30 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 10 | 0 | 10 |
| 07:45 AM | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 3 | 9 | 3 | 12 |
| Total | 0 | 4 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 13 | 0 | 0 | 0 | 8 | 27 | 4 | 31 |
| 08:00 AM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 2 | 14 | 1 | 15 |
| 08:15 AM | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 9 | 0 | 9 |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 17 | 0 | 17 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 10 | 1 | 11 |
| Total | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 15 | 1 | 0 | 0 | 28 | 0 | 0 | 0 | 4 | 50 | 2 | 52 |
| Grand Total | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 19 | 1 | 0 | 0 | 41 | 0 | 0 | 0 | 12 | 77 | 6 | 83 |
| Apprch % | 0 | 100 | 0 | | 0 | 0 | 0 | | 100 | 0 | 0 | | 0 | 0 | 0 | | | | |
| Total % | 0 | 83.3 | 0 | | 0 | 0 | 0 | | 16.7 | 0 | 0 | | 0 | 0 | 0 | | 92.8 | 7.2 | |

| | Pearl St From North | | | | Top of the Old Port Parking From East | | | | Pearl St From South | | | | Parking Lot From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | |
| 07:15 AM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 AM | 0 | **3** | 0 | **3** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **3** |
| 08:00 AM | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Total Volume | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 |
| % App. Total | 0 | 100 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | 0 | 0 | 0 | | |
| PHF | .000 | .417 | .000 | .417 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .417 |

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 11

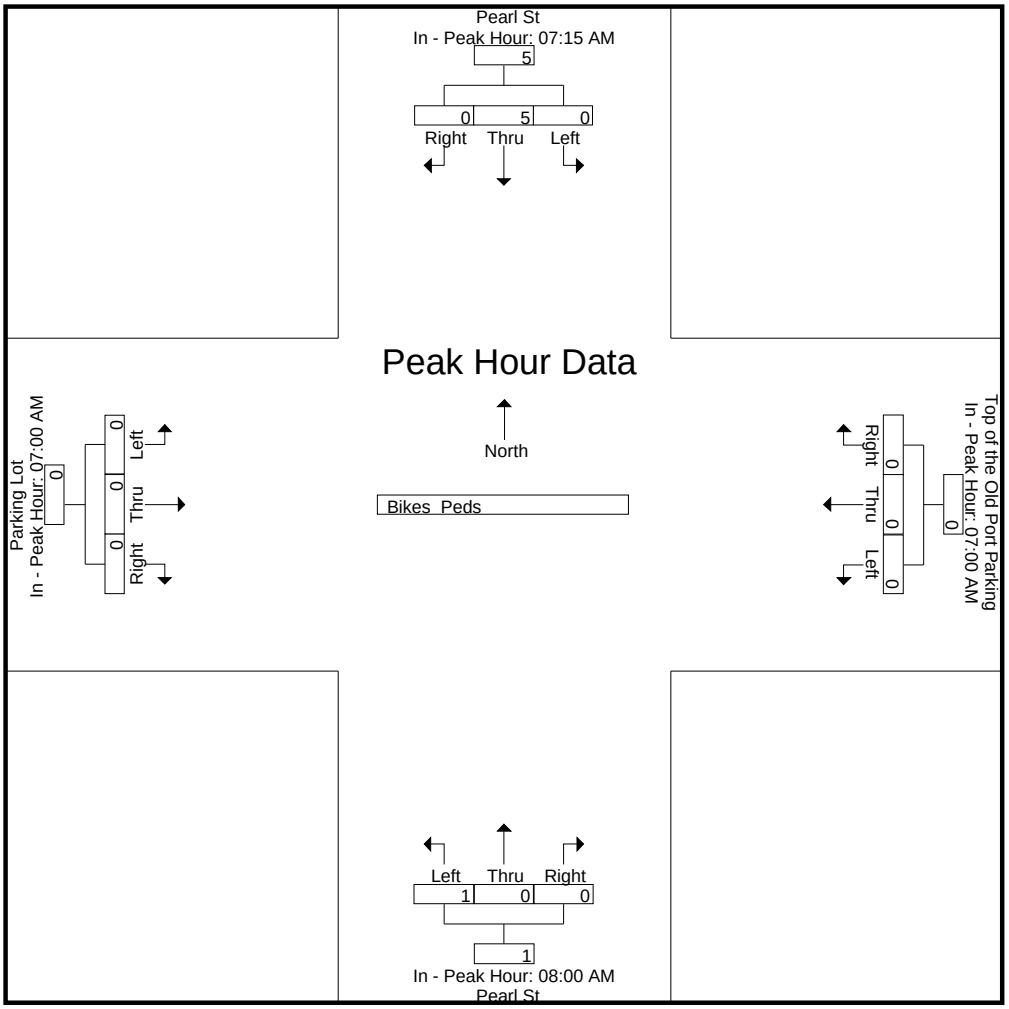



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:15 AM | | | | 07:00 AM | | | | 08:00 AM | | | | 07:00 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | **3** | 0 | **3** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | **1** | 0 | 0 | **1** | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 5 | 0 | 5 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 |
| % App. Total | 0 | 100 | 0 | | 0 | 0 | 0 | | 100 | 0 | 0 | | 0 | 0 | 0 | |
| PHF | .000 | .417 | .000 | .417 | .000 | .000 | .000 | .000 | .250 | .000 | .000 | .250 | .000 | .000 | .000 | .000 |

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 12



# Accurate Counts

978-664-2565

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 1

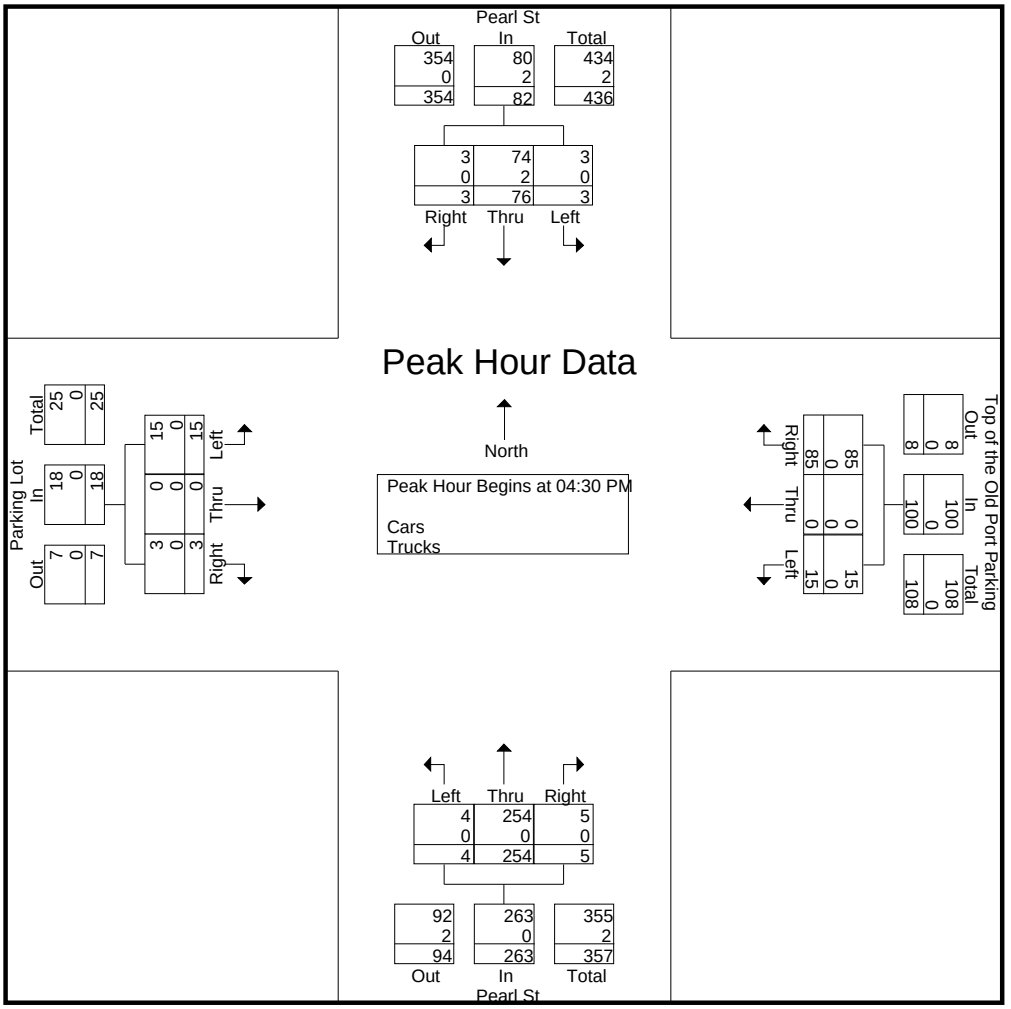
Groups Printed- Cars - Trucks

| | Pearl St From North | | | Top of the Old Port Parking From East | | | Pearl St From South | | | Parking Lot From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 04:00 PM | 0 | 22 | 0 | 4 | 0 | 20 | 0 | 53 | 0 | 0 | 0 | 1 | 100 |
| 04:15 PM | 0 | 24 | 0 | 2 | 0 | 13 | 0 | 55 | 0 | 1 | 0 | 0 | 95 |
| 04:30 PM | 0 | 24 | 0 | 2 | 0 | 15 | 1 | 73 | 1 | 4 | 0 | 0 | 120 |
| 04:45 PM | 1 | 13 | 0 | 3 | 0 | 16 | 0 | 66 | 2 | 2 | 0 | 0 | 103 |
| Total | 1 | 83 | 0 | 11 | 0 | 64 | 1 | 247 | 3 | 7 | 0 | 1 | 418 |
| 05:00 PM | 2 | 23 | 1 | 6 | 0 | 33 | 3 | 51 | 1 | 8 | 0 | 1 | 129 |
| 05:15 PM | 0 | 16 | 2 | 4 | 0 | 21 | 0 | 64 | 1 | 1 | 0 | 2 | 111 |
| 05:30 PM | 0 | 23 | 0 | 2 | 0 | 10 | 0 | 62 | 0 | 0 | 0 | 0 | 97 |
| 05:45 PM | 0 | 18 | 0 | 3 | 0 | 8 | 0 | 29 | 0 | 2 | 0 | 0 | 60 |
| Total | 2 | 80 | 3 | 15 | 0 | 72 | 3 | 206 | 2 | 11 | 0 | 3 | 397 |
| Grand Total | 3 | 163 | 3 | 26 | 0 | 136 | 4 | 453 | 5 | 18 | 0 | 4 | 815 |
| Apprch % | 1.8 | 96.4 | 1.8 | 16 | 0 | 84 | 0.9 | 98.1 | 1.1 | 81.8 | 0 | 18.2 | |
| Total % | 0.4 | 20 | 0.4 | 3.2 | 0 | 16.7 | 0.5 | 55.6 | 0.6 | 2.2 | 0 | 0.5 | |
| Cars | 3 | 161 | 3 | 26 | 0 | 136 | 4 | 453 | 5 | 18 | 0 | 4 | 813 |
| % Cars | 100 | 98.8 | 100 | 100 | 0 | 100 | 100 | 100 | 100 | 100 | 0 | 100 | 99.8 |
| Trucks | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| % Trucks | 0 | 1.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 |

| | Pearl St From North | | | | Top of the Old Port Parking From East | | | | Pearl St From South | | | | Parking Lot From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | | | | | | | | |
| 04:30 PM | 0 | **24** | 0 | 24 | 2 | 0 | 15 | 17 | 1 | **73** | 1 | **75** | 4 | 0 | 0 | 4 | 120 |
| 04:45 PM | 1 | 13 | 0 | 14 | 3 | 0 | 16 | 19 | 0 | 66 | **2** | 68 | 2 | 0 | 0 | 2 | 103 |
| 05:00 PM | **2** | 23 | 1 | **26** | **6** | 0 | **33** | **39** | **3** | 51 | 1 | 55 | **8** | 0 | 1 | **9** | **129** |
| 05:15 PM | 0 | 16 | **2** | 18 | 4 | 0 | 21 | 25 | 0 | 64 | 1 | 65 | 1 | 0 | **2** | 3 | 111 |
| Total Volume | 3 | 76 | 3 | 82 | 15 | 0 | 85 | 100 | 4 | 254 | 5 | 263 | 15 | 0 | 3 | 18 | 463 |
| % App. Total | 3.7 | 92.7 | 3.7 | | 15 | 0 | 85 | | 1.5 | 96.6 | 1.9 | | 83.3 | 0 | 16.7 | | |
| PHF | .375 | .792 | .375 | .788 | .625 | .000 | .644 | .641 | .333 | .870 | .625 | .877 | .469 | .000 | .375 | .500 | .897 |
| Cars | 3 | 74 | 3 | 80 | 15 | 0 | 85 | 100 | 4 | 254 | 5 | 263 | 15 | 0 | 3 | 18 | 461 |
| % Cars | 100 | 97.4 | 100 | 97.6 | 100 | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 0 | 100 | 100 | 99.6 |
| Trucks | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| % Trucks | 0 | 2.6 | 0 | 2.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 |

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 2

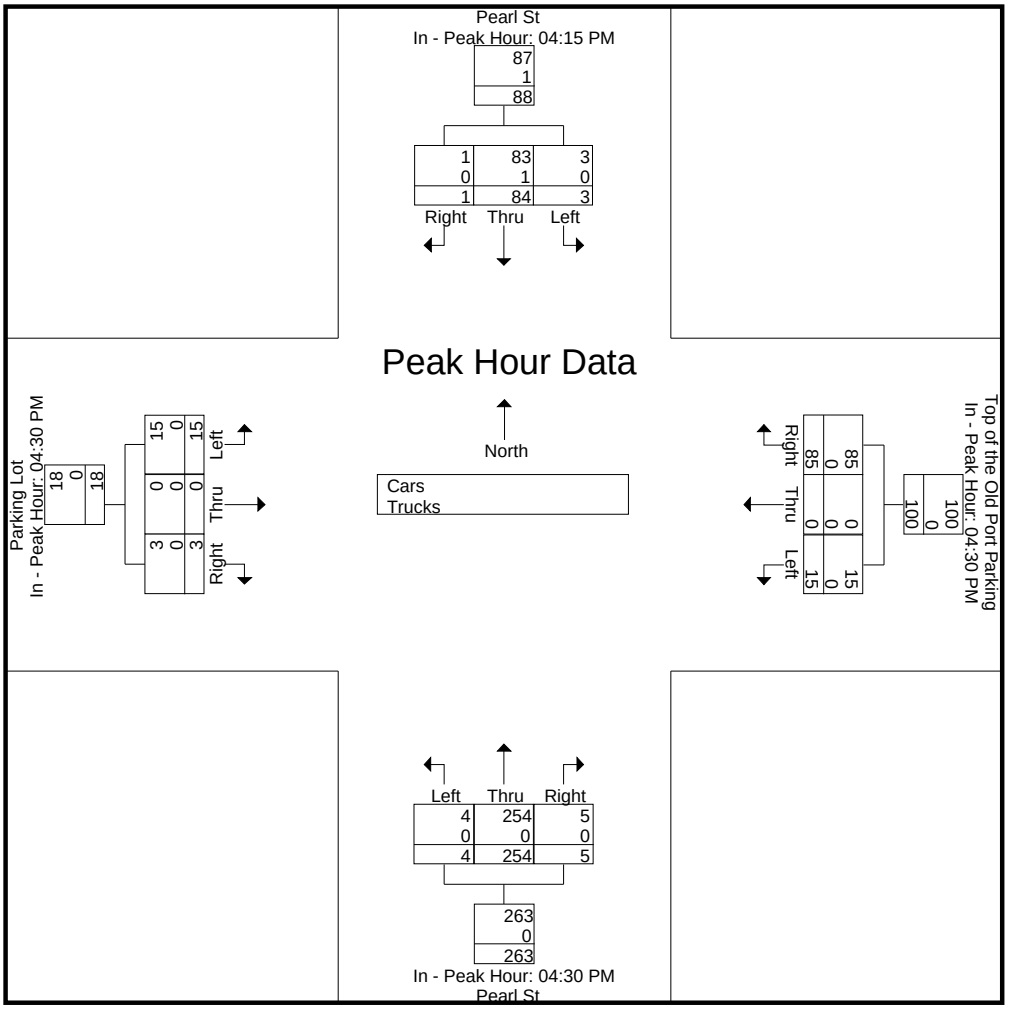



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:15 PM | | | | 04:30 PM | | | | 04:30 PM | | | | 04:30 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **24** | 0 | 24 | 2 | 0 | 15 | 17 | 1 | **73** | 1 | **75** | 4 | 0 | 0 | 4 |
| +15 mins. | 0 | 24 | 0 | 24 | 3 | 0 | 16 | 19 | 0 | 66 | **2** | 68 | 2 | 0 | 0 | 2 |
| +30 mins. | 1 | 13 | 0 | 14 | **6** | 0 | **33** | **39** | **3** | 51 | 1 | 55 | **8** | 0 | 1 | **9** |
| +45 mins. | **2** | 23 | **1** | **26** | 4 | 0 | 21 | 25 | 0 | 64 | 1 | 65 | 1 | 0 | **2** | 3 |
| Total Volume | 3 | 84 | 1 | 88 | 15 | 0 | 85 | 100 | 4 | 254 | 5 | 263 | 15 | 0 | 3 | 18 |
| % App. Total | 3.4 | 95.5 | 1.1 | | 15 | 0 | 85 | | 1.5 | 96.6 | 1.9 | | 83.3 | 0 | 16.7 | |
| PHF | .375 | .875 | .250 | .846 | .625 | .000 | .644 | .641 | .333 | .870 | .625 | .877 | .469 | .000 | .375 | .500 |
| Cars | 3 | 83 | 1 | 87 | 15 | 0 | 85 | 100 | 4 | 254 | 5 | 263 | 15 | 0 | 3 | 18 |
| % Cars | 100 | 98.8 | 100 | 98.9 | 100 | 0 | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 0 | 100 | 100 |
| Trucks | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 1.2 | 0 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 3



# Accurate Counts
978-664-2565

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022

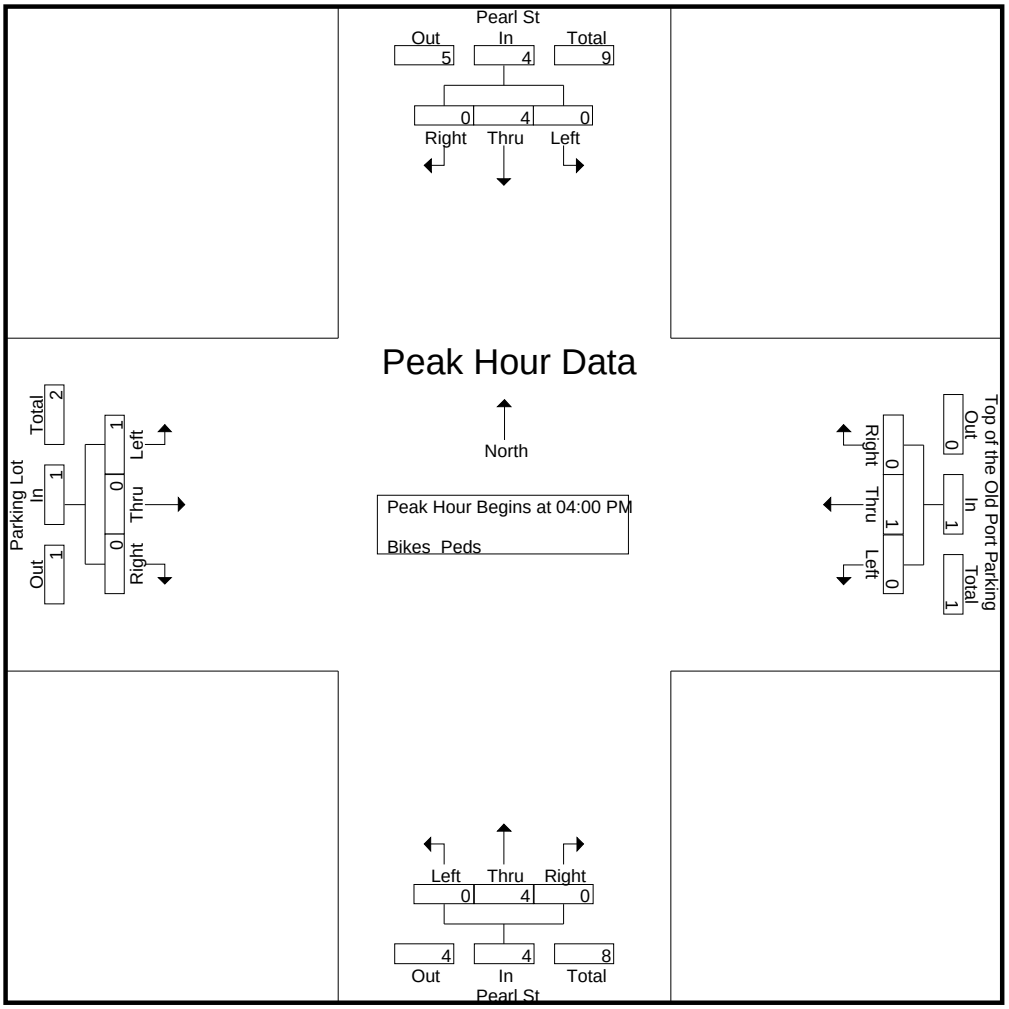

Groups Printed- Bikes Peds

| | Pearl St From North | | | | Top of the Old Port Parking From East | | | | Pearl St From South | | | | Parking Lot From West | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Left | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 04:00 PM | 0 | 2 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 3 | 11 | 4 | 15 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 6 | 0 | 6 |
| 04:30 PM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 7 | 15 | 2 | 17 |
| 04:45 PM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 4 | 1 | 0 | 0 | 1 | 7 | 4 | 11 |
| Total | 0 | 4 | 0 | 3 | 0 | 1 | 0 | 7 | 0 | 4 | 0 | 16 | 1 | 0 | 0 | 13 | 39 | 10 | 49 |
| 05:00 PM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 6 | 0 | 2 | 0 | 6 | 0 | 0 | 0 | 0 | 13 | 2 | 15 |
| 05:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 0 | 6 | 0 | 0 | 0 | 5 | 16 | 2 | 18 |
| 05:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 7 | 0 | 0 | 0 | 6 | 16 | 1 | 17 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 7 | 1 | 8 |
| Total | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 17 | 0 | 5 | 0 | 23 | 0 | 0 | 0 | 11 | 52 | 6 | 58 |
| Grand Total | 0 | 5 | 0 | 4 | 0 | 1 | 0 | 24 | 0 | 9 | 0 | 39 | 1 | 0 | 0 | 24 | 91 | 16 | 107 |
| Apprch % | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 100 | 0 | | 100 | 0 | 0 | | | | |
| Total % | 0 | 31.2 | 0 | | 0 | 6.2 | 0 | | 0 | 56.2 | 0 | | 6.2 | 0 | 0 | | 85 | 15 | |

| | Pearl St From North | | | | Top of the Old Port Parking From East | | | | Pearl St From South | | | | Parking Lot From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:00 PM | | | | | | | | | | | | | | | | | |
| 04:00 PM | 0 | **2** | 0 | **2** | 0 | **1** | 0 | **1** | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | **4** |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:30 PM | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** | **1** | 0 | 0 | **1** | 4 |
| Total Volume | 0 | 4 | 0 | 4 | 0 | 1 | 0 | 1 | 0 | 4 | 0 | 4 | 1 | 0 | 0 | 1 | 10 |
| % App. Total | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 100 | 0 | | 100 | 0 | 0 | | |
| PHF | .000 | .500 | .000 | .500 | .000 | .250 | .000 | .250 | .000 | .333 | .000 | .333 | .250 | .000 | .000 | .250 | .625 |

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 11

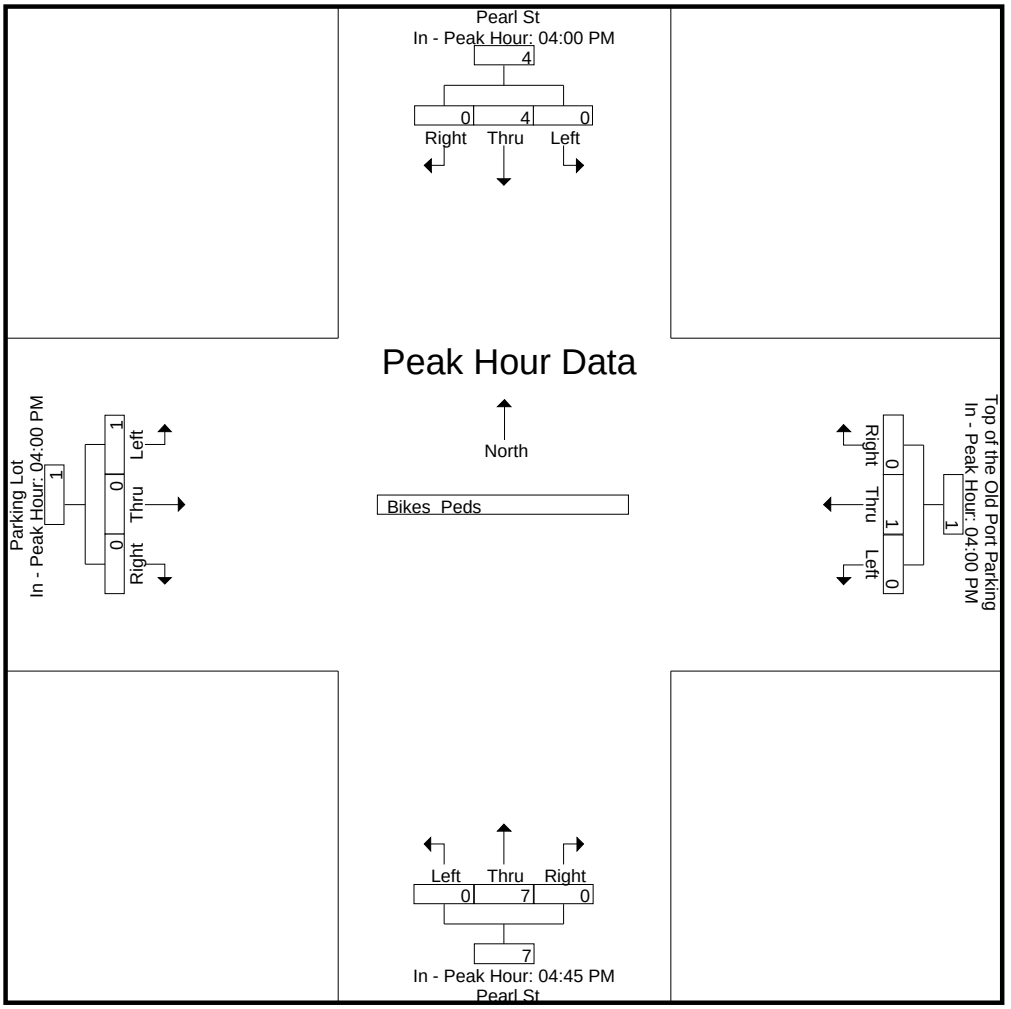



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:00 PM | | | | 04:00 PM | | | | 04:45 PM | | | | 04:00 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | **2** | 0 | **2** | 0 | **1** | 0 | **1** | 0 | **3** | 0 | **3** | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | **1** | 0 | 0 | **1** |
| Total Volume | 0 | 4 | 0 | 4 | 0 | 1 | 0 | 1 | 0 | 7 | 0 | 7 | 1 | 0 | 0 | 1 |
| % App. Total | 0 | 100 | 0 | | 0 | 100 | 0 | | 0 | 100 | 0 | | 100 | 0 | 0 | |
| PHF | .000 | .500 | .000 | .500 | .000 | .250 | .000 | .250 | .000 | .583 | .000 | .583 | .250 | .000 | .000 | .250 |

N/S Street : Pearl Street
E/W Street : Top of the Old Port / Lot
City/State : Portland, ME
Weather : Clear

File Name : 19371005
Site Code : 19371005
Start Date : 6/7/2022
Page No : 12



# Accurate Counts

978-664-2565

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 1

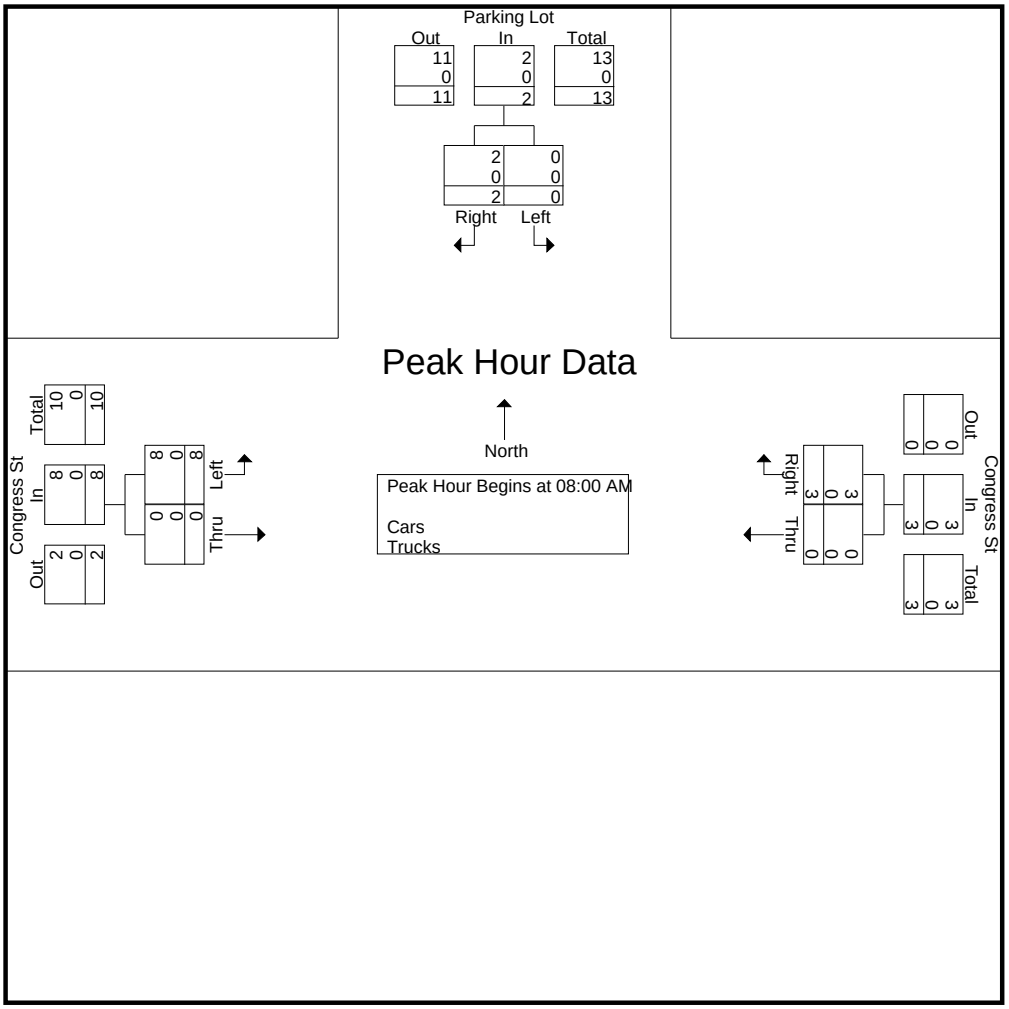
Groups Printed- Cars - Trucks

| | Parking Lot From North | | Congress St From East | | Congress St From West | | |
|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | Thru | Right | Left | Thru | Int. Total |
| 07:00 AM | 0 | 1 | 0 | 1 | 2 | 0 | 4 |
| 07:15 AM | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| 07:30 AM | 0 | 2 | 0 | 0 | 0 | 0 | 2 |
| 07:45 AM | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Total | 0 | 3 | 0 | 1 | 6 | 0 | 10 |
| | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| 08:15 AM | 0 | 1 | 0 | 1 | 2 | 0 | 4 |
| 08:30 AM | 0 | 0 | 0 | 0 | 3 | 0 | 3 |
| 08:45 AM | 0 | 1 | 0 | 1 | 2 | 0 | 4 |
| Total | 0 | 2 | 0 | 3 | 8 | 0 | 13 |
| | | | | | | | |
| Grand Total | 0 | 5 | 0 | 4 | 14 | 0 | 23 |
| Apprch % | 0 | 100 | 0 | 100 | 100 | 0 | |
| Total % | 0 | 21.7 | 0 | 17.4 | 60.9 | 0 | |
| Cars | 0 | 5 | 0 | 4 | 14 | 0 | 23 |
| % Cars | 0 | 100 | 0 | 100 | 100 | 0 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | Parking Lot From North | | | Congress St From East | | | Congress St From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 08:00 AM | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 0 | 0 | **1** | **1** | 1 | 0 | 1 | 2 |
| 08:15 AM | 0 | **1** | **1** | 0 | 1 | 1 | 2 | 0 | 2 | **4** |
| 08:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | **3** | 0 | **3** | 3 |
| 08:45 AM | 0 | 1 | 1 | 0 | 1 | 1 | 2 | 0 | 2 | 4 |
| Total Volume | 0 | 2 | 2 | 0 | 3 | 3 | 8 | 0 | 8 | 13 |
| % App. Total | 0 | 100 | | 0 | 100 | | 100 | 0 | | |
| PHF | .000 | .500 | .500 | .000 | .750 | .750 | .667 | .000 | .667 | .813 |
| Cars | 0 | 2 | 2 | 0 | 3 | 3 | 8 | 0 | 8 | 13 |
| % Cars | 0 | 100 | 100 | 0 | 100 | 100 | 100 | 0 | 100 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 2

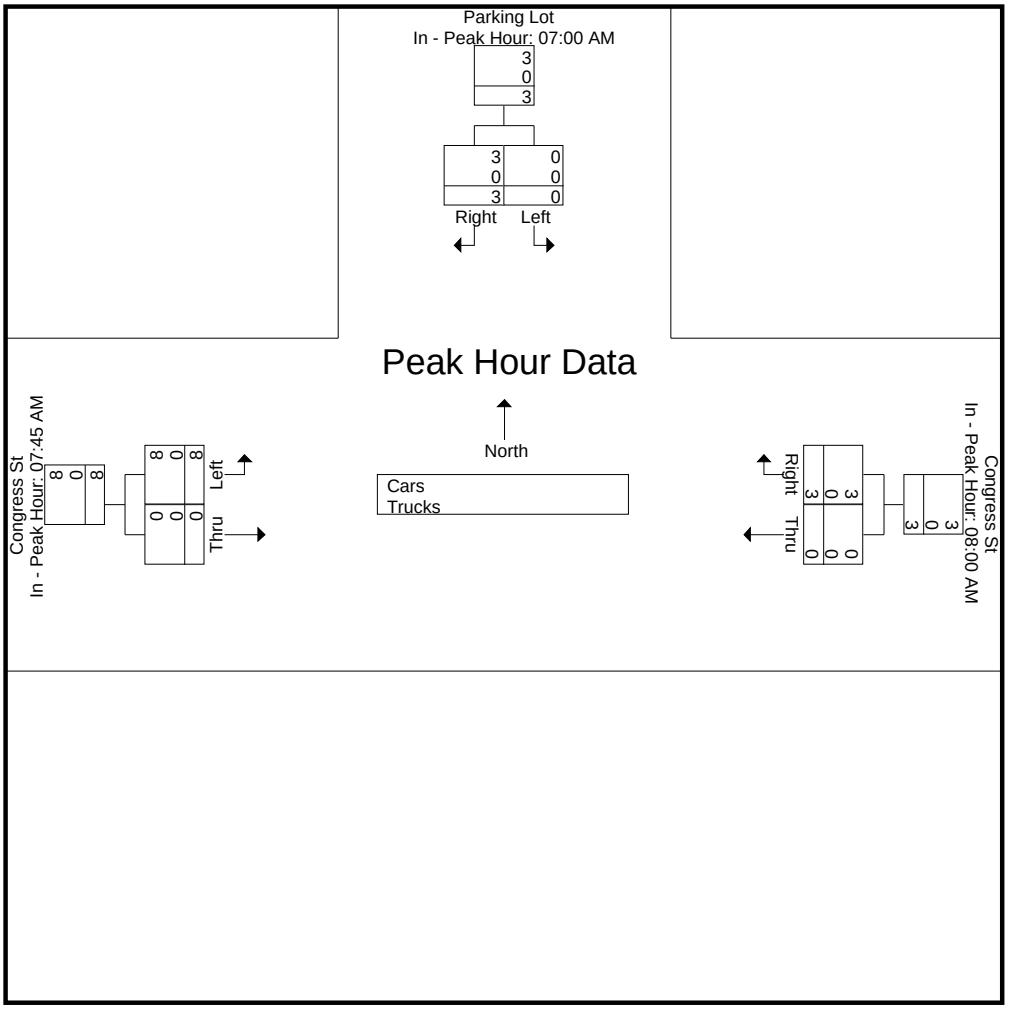



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:00 AM | | | 08:00 AM | | | 07:45 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 1 | 1 | 0 | **1** | **1** | 2 | 0 | 2 |
| +15 mins. | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 |
| +30 mins. | 0 | **2** | **2** | 0 | 0 | 0 | 2 | 0 | 2 |
| +45 mins. | 0 | 0 | 0 | 0 | 1 | 1 | **3** | 0 | **3** |
| Total Volume | 0 | 3 | 3 | 0 | 3 | 3 | 8 | 0 | 8 |
| % App. Total | 0 | 100 | | 0 | 100 | | 100 | 0 | |
| PHF | .000 | .375 | .375 | .000 | .750 | .750 | .667 | .000 | .667 |
| Cars | 0 | 3 | 3 | 0 | 3 | 3 | 8 | 0 | 8 |
| % Cars | 0 | 100 | 100 | 0 | 100 | 100 | 100 | 0 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 3



N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 10

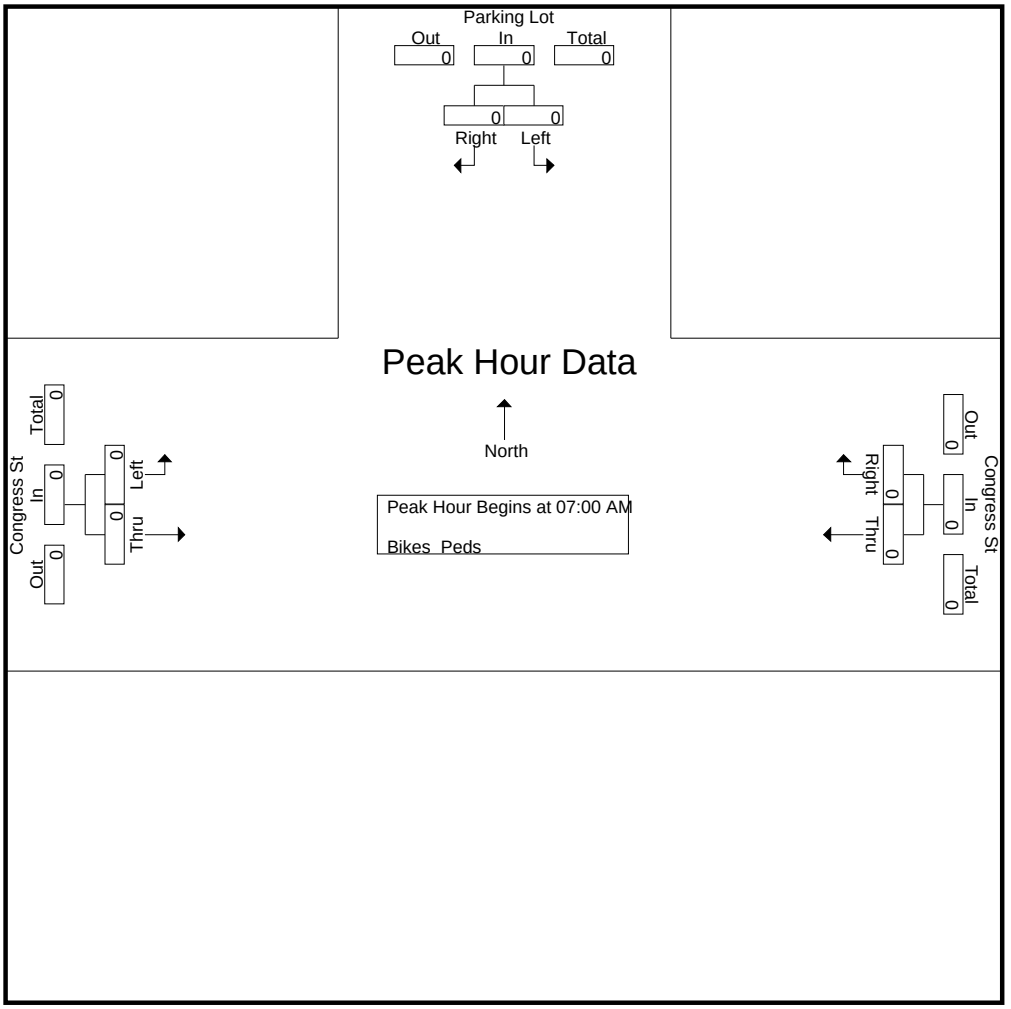
Groups Printed- Bikes Peds

| | Parking Lot From North | | | Congress St From East | | | Congress St From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | Peds | Thru | Right | Peds | Left | Thru | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 |
| 07:15 AM | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 |
| 07:30 AM | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| 07:45 AM | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 5 |
| Total | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 21 |
| | | | | | | | | | | | | |
| 08:00 AM | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 08:15 AM | 0 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 |
| 08:30 AM | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 0 | 8 |
| 08:45 AM | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 18 |
| Total | 0 | 0 | 37 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 0 | 37 |
| | | | | | | | | | | | | |
| Grand Total | 0 | 0 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 0 | 58 |
| Apprch % | 0 | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Total % | | | | | | | | | | 100 | 0 | |

| | Parking Lot From North | | | Congress St From East | | | Congress St From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 07:00 AM | | | | | | | | | | |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:30 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % App. Total | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 11

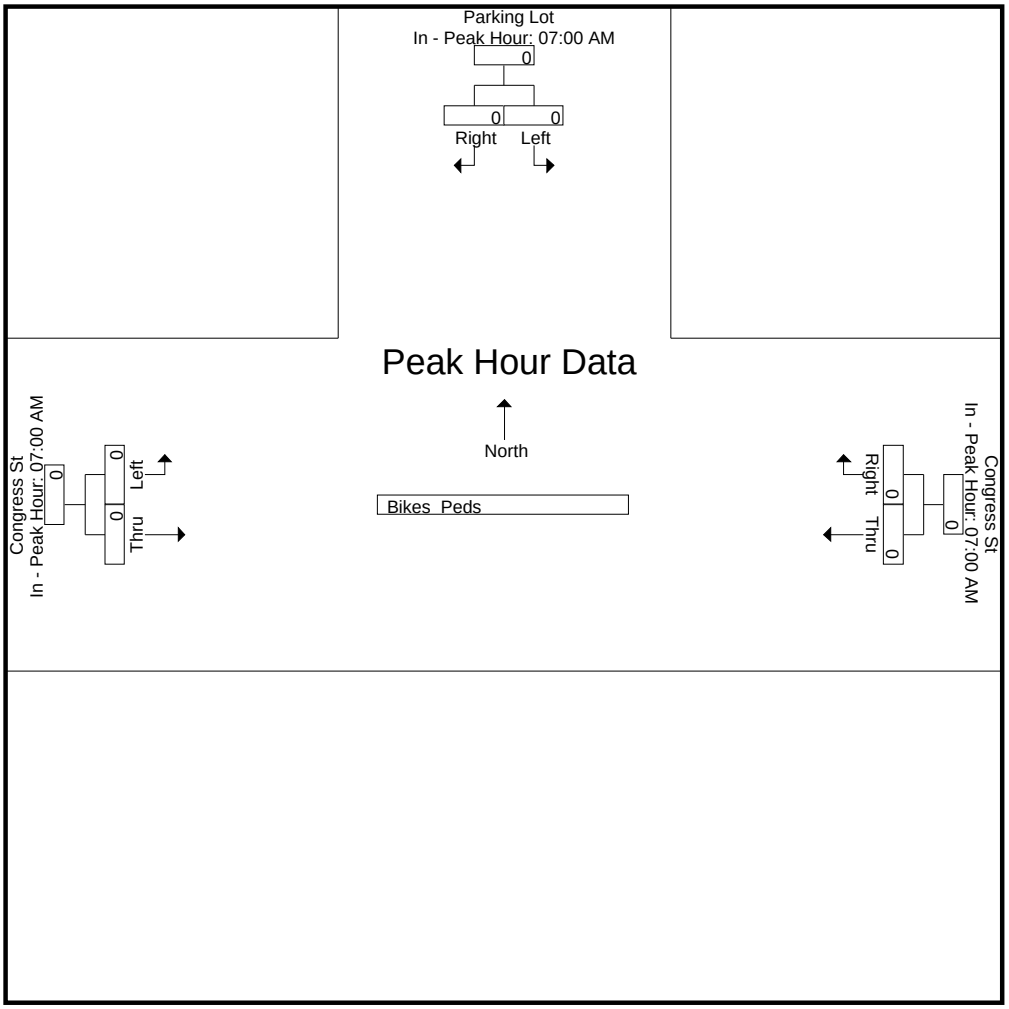



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 07:00 AM | | | 07:00 AM | | | 07:00 AM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % App. Total | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 12



# Accurate Counts

978-664-2565

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 1

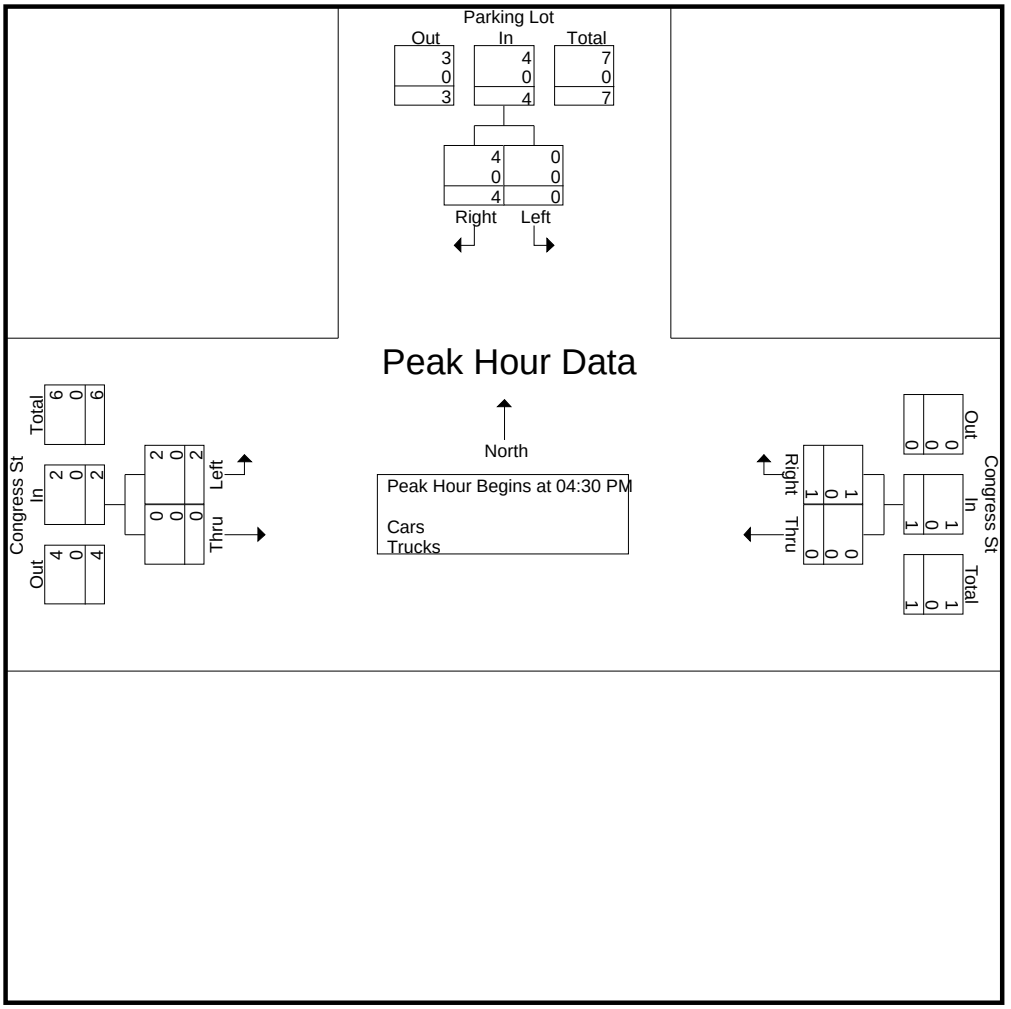
Groups Printed- Cars - Trucks

| | Parking Lot From North | | Congress St From East | | Congress St From West | | |
|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | Thru | Right | Left | Thru | Int. Total |
| 04:00 PM | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 04:15 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 04:30 PM | 0 | 1 | 0 | 1 | 0 | 0 | 2 |
| 04:45 PM | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total | 0 | 2 | 0 | 1 | 2 | 0 | 5 |
| | | | | | | | |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 PM | 0 | 3 | 0 | 0 | 1 | 0 | 4 |
| 05:30 PM | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| 05:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 4 | 0 | 0 | 1 | 0 | 5 |
| | | | | | | | |
| Grand Total | 0 | 6 | 0 | 1 | 3 | 0 | 10 |
| Apprch % | 0 | 100 | 0 | 100 | 100 | 0 | |
| Total % | 0 | 60 | 0 | 10 | 30 | 0 | |
| Cars | 0 | 6 | 0 | 1 | 3 | 0 | 10 |
| % Cars | 0 | 100 | 0 | 100 | 100 | 0 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| | Parking Lot From North | | | Congress St From East | | | Congress St From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:30 PM | | | | | | | | | | |
| 04:30 PM | 0 | 1 | 1 | 0 | **1** | **1** | 0 | 0 | 0 | 2 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** | 1 |
| 05:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 05:15 PM | 0 | **3** | **3** | 0 | 0 | 0 | 1 | 0 | 1 | **4** |
| Total Volume | 0 | 4 | 4 | 0 | 1 | 1 | 2 | 0 | 2 | 7 |
| % App. Total | 0 | 100 | | 0 | 100 | | 100 | 0 | | |
| PHF | .000 | .333 | .333 | .000 | .250 | .250 | .500 | .000 | .500 | .438 |
| Cars | 0 | 4 | 4 | 0 | 1 | 1 | 2 | 0 | 2 | 7 |
| % Cars | 0 | 100 | 100 | 0 | 100 | 100 | 100 | 0 | 100 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 2

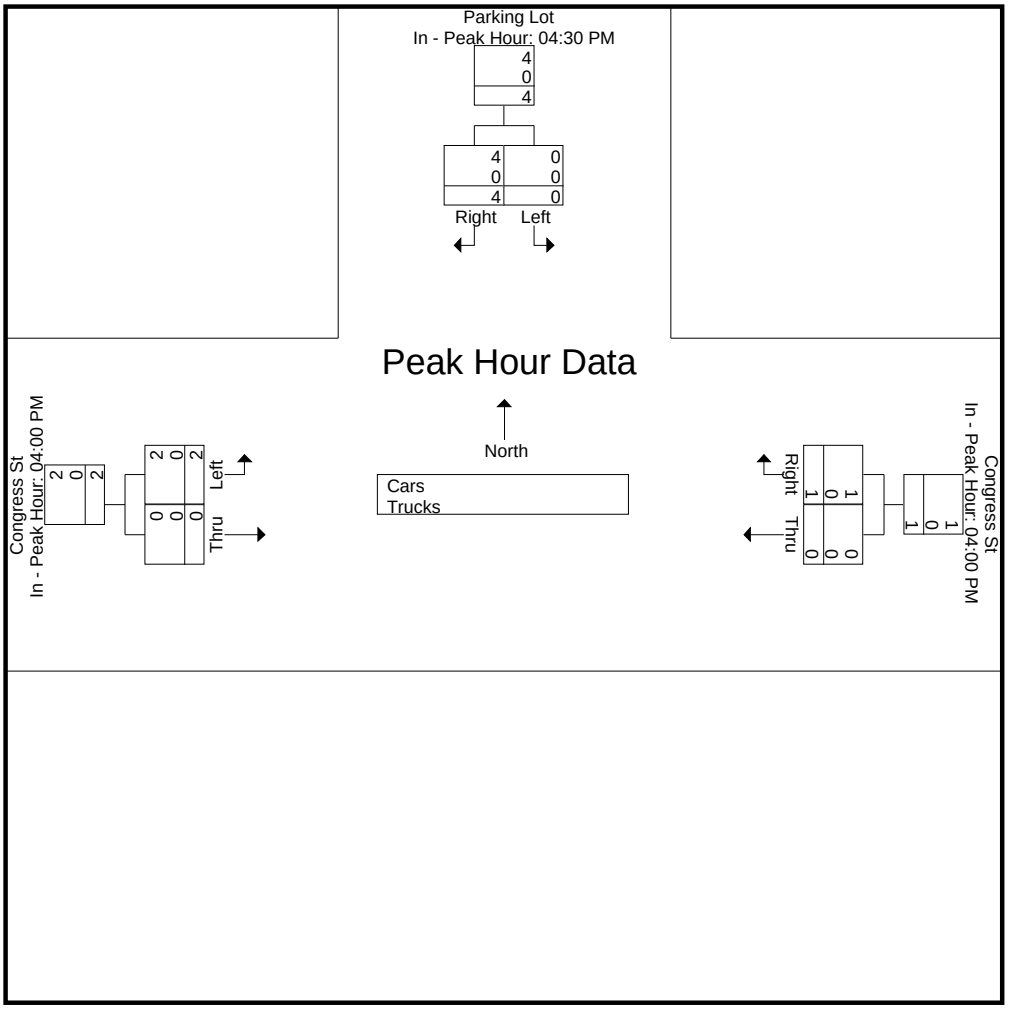



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:30 PM | | | 04:00 PM | | | 04:00 PM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | **1** | 0 | **1** |
| +30 mins. | 0 | 0 | 0 | 0 | **1** | **1** | 0 | 0 | 0 |
| +45 mins. | 0 | **3** | **3** | 0 | 0 | 0 | 1 | 0 | 1 |
| Total Volume | 0 | 4 | 4 | 0 | 1 | 1 | 2 | 0 | 2 |
| % App. Total | 0 | 100 | | 0 | 100 | | 100 | 0 | |
| PHF | .000 | .333 | .333 | .000 | .250 | .250 | .500 | .000 | .500 |
| Cars | 0 | 4 | 4 | 0 | 1 | 1 | 2 | 0 | 2 |
| % Cars | 0 | 100 | 100 | 0 | 100 | 100 | 100 | 0 | 100 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 3



N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 10

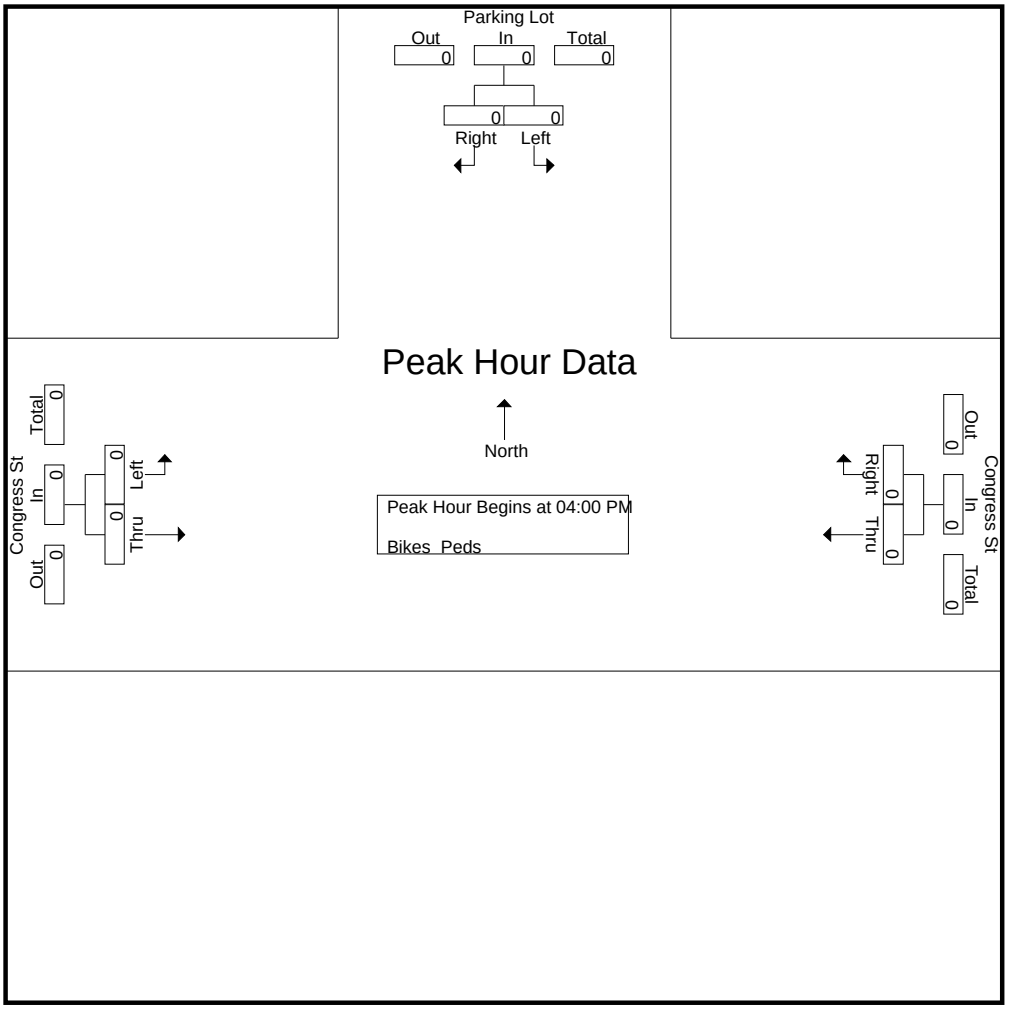
Groups Printed- Bikes Peds

| | Parking Lot From North | | | Congress St From East | | | Congress St From West | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | Peds | Thru | Right | Peds | Left | Thru | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 04:00 PM | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 |
| 04:15 PM | 0 | 0 | 13 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 0 | 13 |
| 04:30 PM | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| 04:45 PM | 0 | 0 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 19 |
| Total | 0 | 0 | 43 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 0 | 43 |
| 05:00 PM | 0 | 0 | 17 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 0 | 17 |
| 05:15 PM | 0 | 0 | 11 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 0 | 11 |
| 05:30 PM | 0 | 0 | 18 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 0 | 18 |
| 05:45 PM | 0 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 0 | 21 |
| Total | 0 | 0 | 67 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 0 | 67 |
| Grand Total | 0 | 0 | 110 | 0 | 0 | 0 | 0 | 0 | 0 | 110 | 0 | 110 |
| Apprch % | 0 | 0 | | 0 | 0 | | 0 | 0 | | | | |
| Total % | | | | | | | | | | 100 | 0 | |

| | Parking Lot From North | | | Congress St From East | | | Congress St From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Right | App. Total | Thru | Right | App. Total | Left | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 04:00 PM | | | | | | | | | | |
| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:15 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % App. Total | 0 | 0 | | 0 | 0 | | 0 | 0 | | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 11

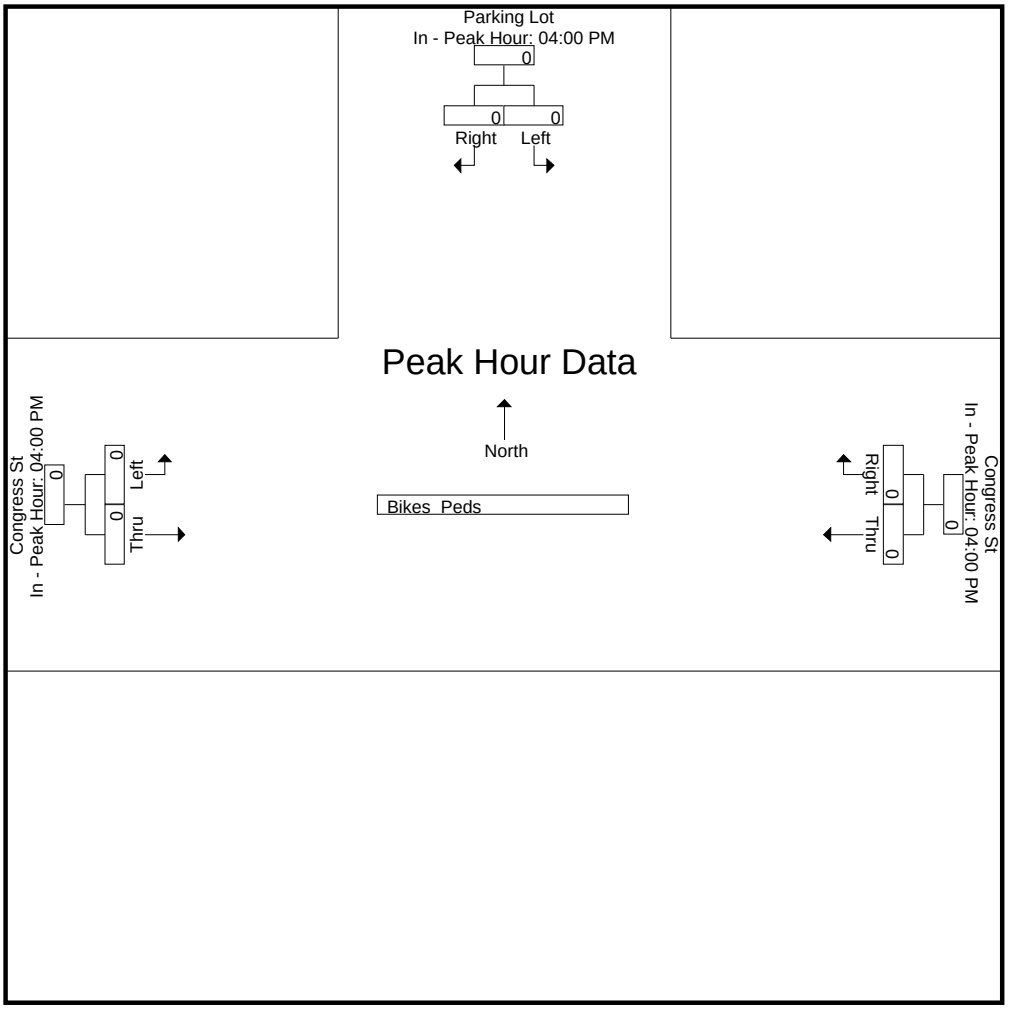



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

| | 04:00 PM | | | 04:00 PM | | | 04:00 PM | | |
|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +15 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % App. Total | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| PHF | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 |

N/S Street : Parking Lot
E/W Street : Congress Street
City/State : Portland, ME
Weather : Clear

File Name : 19371006
Site Code : 19371006
Start Date : 6/7/2022
Page No : 12



# Appendix C. Previous Traffic Movement Permit

# CITY OF PORTLAND, MAINE

## PLANNING BOARD

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

February 24, 2023

Joseph Dasco
385 Congress Street LLC
383 Commercial Street
Portland, ME 04101

Marieke Thormann
Fathom Companies
80 Exchange Street
Portland, ME 04101

| | | | |
|---|---|---|---|
| **Project Name:** | 385 Congress Street | **Project ID:** | PL-001970-2022 |
| **Address:** | 385 Congress Street | **CBL:** | 012 P027001 |

**Applicant:** 385 Congress Street LLC & Fathom Companies
**Planner:** Zach Powell

Dear Joesph Dasco and Marieke Thormann:

On February 14, 2023, the Planning Board approved a Traffic Movement Permit application for the proposed phased mixed-use development at 385 Congress Street. The Planning Board voted (6-0, Silk Absent) to approve the application with the following conditions as presented below:

PRIOR TO BUILDING PERMIT SUBMISSION FOR PHASE 1 (HOTEL)

1. The Applicant shall update the site plan set to state that the City will review conditions on Pearl Street post-occupancy and determine the feasibility of on-street parking in a future phase of the MDP, offset the eastbound Congress Street left-turn lane off-set STOP bar by 15 feet, and replace site plan key note 17 on site plan sheet 5 with a metered parking sign (PS6).

PRIOR TO ISSUANCE OF BUILDING PERMIT FOR PHASE 1 (HOTEL)

2. The Applicant shall submit a scope of work for the traffic monitoring program of the valet operations for review and approval by the Planning Authority. The scope of work shall outline specific actions that will be taken by the hotel/valet vendor if vehicle queuing problems are identified.

PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR PHASE 1 (HOTEL)

3. The Applicant shall upgrade the entire traffic signal system at the intersection of Congress & Pearl Street (except for the controller cabinet, unless modification to equipment may be needed for a full functioning signal) to meet the City's Traffic Signal Policy and Guidance Manual. This upgrade shall include mast arm supports. Sidewalk ADA upgrades may be required to meet MaineDOT's policy regarding ADA upgrades associated with a signal project that disturbs the ground
4. The Applicant shall install pedestrian signal heads at the intersection of Cumberland Avenue & Pearl Street.

POST OCCUPANCY CONDITIONS FOR PHASE 1 (HOTEL)

5. The Applicant shall be required to perform a traffic monitoring program of the valet operations and queuing conditions. The monitoring study shall be performed within the first month of occupancy, three months after occupancy, and annually for at least three years. At the conclusion of Year 3, City Staff shall make a determination on continuation. The monitoring program shall be conducted under normal traffic system conditions and when Myrtle Street is closed. The monitoring program shall report at a minimum vehicle arrival/departure volumes, number of valet personnel, vehicle queuing, impacts of the co-location of automobile and bicycle parking, and photographs of conditions

MAJOR SITE PLAN APPLICATION PHASE 2 (CONDO A)

6. As part of the Major Site Plan application for Phase 2 (Condo A) the Applicant shall submit signal plans for an upgrade to the entire traffic system for the intersection of Cumberland & Pearl Street.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR PHASE 3 (CONDO B)

7. The Applicant shall upgrade the entire traffic signal system at the intersection of Cumberland & Pearl Street (except for the controller cabinet, unless modification to equipment may be needed for a full functioning signal) to meet the City's Traffic Signal Policy and Guidance Manual. This upgrade shall include mast arm supports. Sidewalk ADA upgrades may be required to meet MaineDOT's policy regarding ADA upgrades associated with a signal project that disturbs the ground

The approval is based on the submitted plans and findings related to site plan review as contained in the Planning Board report dated February 10, 2023 for application #PL-002156-2022, which is attached.

If there are any questions, please contact Zach Powell at 207-756-8083 or at zpowell@portlandmaine.gov.

Sincerely,



Maggie Stanley, Chair

Attachments:

1. Planning Board Public Hearing Report (February 10, 2023)

# Planning Board Report
# Planning and Urban Development Department

385 Congress Street
Major Site Plan Review and MDP Traffic Movement Permit Review
PL-002156-2023
Fathom Congress, LLC., Applicant

| | | | |
|---|---|---|---|
| **Submitted to:** | Portland Planning Board | **Prepared By:** | Zach Powell |
| **Public Hearing Date:** | February 14, 2023 | **Date:** | February, 10, 2023 |

## I. INTRODUCTION

Fathom Congress, LLC has submitted an application for Major Site Plan Review to facilitate the construction of a mixed-use development including 179 hotel rooms on the southeast corner of the site. The project is part of a larger Master Development Plan that was approved by the Planning Board on August 9, 2022, and the subject property received subdivision approval by the Planning Board on January 24, 2023. The applicant is currently seeking Major Site Plan Approval for the project's first phase and approval of the Traffic Movement Permit associated with the larger Master Development Plan.




Figure 1: Perspective View from Congress & Exchange Street looking northwest with rendered elevations of the proposed hotel in black and brown, and the massing of future phases in light gray.

From the last meeting, the Applicant has updated the submitted plans to add an additional floor that will be occupied by 20 additional hotel rooms.

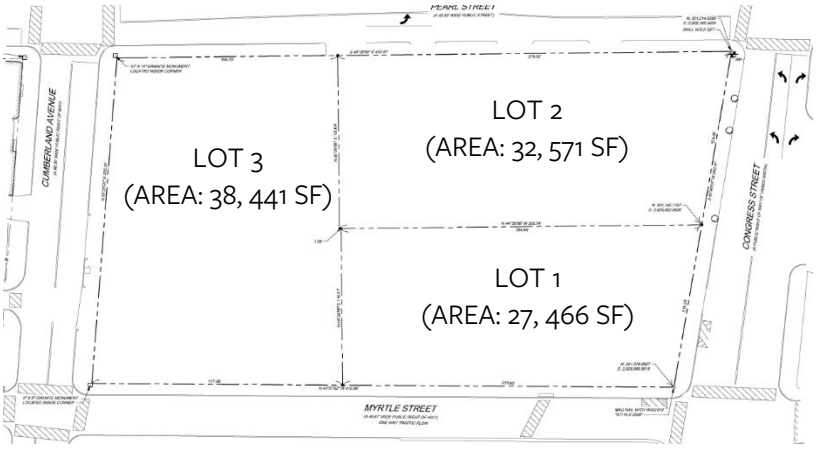



Figure 2: Map of subdivision approved at January 24, 2023 Planning Board Hearing, with the subject site plan application involving the redevelopment of Lot 1.

The Planning and Urban Development Department mailed 104 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the February 4, 2023 edition of the *Portland Press Herald*.

**Applicant:** Marieke Thormann, Fathom Congress, LLC
**Consultants:** Daniel Riley, Sebago Technics Inc.; Gregory Lemon & Tobias Strohe, JNS Architecture and Interior Design

## II. REQUIRED REVIEWS

| Review | Applicable Standards |
|---|---|
| Major Site Plan Review | Section 14.6 |
| B-3 Design Review Standards | Design Manual & August 2, 2022 MDP Design Memorandum (**Attachment 1**) |
| Traffic Movement Permit (TMP) | Technical Manual Section 1.1 |
| **Waivers Granted Under August 9, 2022 MDP Approval** | **Applicable Standard** |
| Sec. 7.3 – Table 7-E: Mixed-Use Zone Dimensional Standards – to vary the front setbacks on Cumberland Avenue, Myrtle Street, and Pearl Street up to 22 feet. | Sec. 7.3 – The maximum permitted front setback from all street frontages in the B-3 zone is 5 feet. |
| Technical Standards - Sec. 14.1.2 – to construct structured parking on the portion of the site identified as Lots '2' and '3' where 96 of the total 267 spaces (±35%) will be compact parking spaces and construct structured parking on the portion of the site identified as 'Lot 1' that is 100% comprised of compact spaces. | Sec. 14.1.2 – Parking lots with greater than 10 spaces may be comprised of up to 20% compact parking spaces. |
| Technical Standards - Sec. 14.1.3 – to stripe parking spaces on the portion of the site identified as 'Lot 1' that have parallel valet parking spaces across the ends of double-stacked, 90-degree compact spaces. | Sec. 14.1.3 – Parking lot layout shall conform to Figures I-28 thru I-32. |
| Technical Standards - Sec. 14.1.5 – to waive the minimum 24' drive aisle width in the garage on the portion of the site identified as 'Lot 1' to allow parallel valet parking spaces across the ends of double stacked, 90-degree compact spaces and an aisle width of 15 feet. | Sec. 14.1.5. – Vehicular access shall be provided by one or more aisles. The minimum widths of aisles are illustrated in Figures I-28 thru I-31. |

## III. PROJECT DATA

| | | | |
|---|---|---|---|
| Existing Zoning | B-3 Downtown Business, Downtown Entertainment Overlay, PAD Encouragement Area | | |
| Existing Use | Off-Street Parking (Surface and Structured) (141 spaces)<br>Storage (±3,914 SF) | | |
| Proposed Use | Hotel | 118,083SF (179 rooms) | |
| | Condominiums | 16,315 SF (9 units) | |
| | Restaurant | 4,630 SF (1 restaurant) | |
| | Retail Space | 755 SF (1 unit) | |
| | Passive Recreation Space (Amenity Deck) | 6,128 SF | |
| | Structured Parking | 27,425 SF (75 spaces) | |
| Property Size | 27,466 SF (0.63 acres) | | |
| | *Existing* | *Proposed* | *Net Change* |
| Building Footprint | 16,694 SF | 20,875 SF | + 4,181 SF |

| | | | |
|---|---|---|---|
| Building Floor Area | 16,694 SF | 152,387 SF | +135693 SF |
| Automobile Parking Spaces | 44 (29 surface; 15 structured) | 75 structured spaces | +31 spaces |
| Bicycle Parking Spaces | 0 spaces | 18 spaces | +18 spaces |
| Curb Cuts | 1 | 2 | +1 curb cut |
| Trees in Streetscape | 9 | 7 | -2 |

## IV. EXISTING CONDITIONS

The site is bounded to the South by Myrtle Street, to the East by Congress Street, and to the North and West by parcels created through the recent subdivision that will not be held under common ownership. The Comprehensive Plan, Portland 2030, identifies Congress Street as a priority corridor. Priority corridors are key corridors that connect major nodes and neighborhoods and therefore serve as areas that can accommodate additional mixed-use, higher-density growth to take advantage of the transit benefits and services that well-designed, diverse corridors can offer.

The subject block and immediate area is well-served by public transit. Approximately two blocks to the southwest is the METRO PULSE at Elm Street (Downtown Transportation Center), the hub for METRO where bus routes, #2, #4, #5, #7, and the Husky Line begin and end their routes. METRO bus routes #1, #7, #8, #9A, #9B, and the Biddeford Saco Old Orchard Beach Transit 60 Green line can be accessed along Congress Street within one block of the site. South Portland Bus routes 21, 24A, and 24B can be accessed along Congress Street roughly two blocks southwest of the site. METRO bus route 8 is located along Cumberland Avenue less than one block from the site.

The site was formerly occupied by a number of commercial and residential structures. In the 1960s, a portion of the site served as the printing facilities for the Portland Press Herald. Currently, the site serves as off-street parking (both surface and structured) for daily and monthly parking .The existing parking structure: (±13,408 SF) is proposed to be demolished to facilitate the development of the site.

## V. RIGHT, TITLE & INTEREST

The owner of the property is 385 Congress, LLC. The owner and applicant for the construction of the hotel (The Fathom Companies d/b/a Fathom Congress, LLC) have entered into a Purchase and Sale Agreement which serves as sufficient right-title-interest documentation for The Fathom Companies for the purpose of reviewing a site plan application.

The submitted existing conditions survey (**P.46** and **P.47**) indicates the property has no existing easements. Sidewalk access and maintenance agreements along Myrtle Street, Congress Street & Cumberland Avenue will be established for the expanded sidewalk area on the subject property. As noted in the Purchase and Sale Agreement, utility easements will be created to facilitate access pre-and and post-construction.

## VI. FINANCIAL & TECHNICAL CAPACITY

The applicant has submitted a letter of financial capacity from their financial institutions as documentation stating that the Applicant is in good standing (**Attachments H and I**).

## VII. ZONING ANALYSIS

The site is encompassed by the B-3 Downtown Business Zone, the Pedestrian Activities District (PAD) encouragement area, and the Downtown Entertainment Overlay Zone.

The purpose statement for the B-3 zone includes the following relevant to the proposal:

- *Enhance and promote the orderly expansion of retail and service businesses downtown, satisfying the related needs of the city's resident, working and visitor populations;*
- *Encourage increased housing opportunity downtown for a diverse residential population;*
- *Enhance the pedestrian environment through the encouragement of intensive mixed-use activities, through the enhancement and maintenance of public and private open space, and through the enlivenment and increased attractiveness of the street environment;*
- *To encourage excellence in urban design;*
- *In the PAD Overlay Zone, to create continuity of pedestrian-oriented uses along streets where such uses predominate and along streets which, over time, will establish and maintain a strong retail and pedestrian-oriented use pattern.*

The zoning dimensional requirements are intentionally permissive in this urban downtown zone and are intended to facilitate intensive forms of development which maximize site coverage and maintain the existing street wall pattern. Regarding height for this block, there is a 50-foot maximum street wall height within 15 feet of the property line along Congress and Myrtle Streets, and a maximum building height of 150 feet as per the Downtown Height Overlay map. Compliance with the B-3 dimensional requirements is shown in Table 1. Based on the waivers granted during the review of the MDP and approval of the proposed subdivision, the submitted Major Site Plan application complies with the zoning.

**Table 1: Compliance with B-3 Dimensional Lot Standards**

| Standard | Required | Proposed |
|---|---|---|
| Maximum Front Setback | 5 feet | 3-20 feet (Waiver Granted with MDP Approval) |
| Minimum Cumulative Stepback at 50 feet (Congress & Myrtle) | 15 feet | 15 feet (Met at ground level) |
| Minimum Side & Rear Setbacks | N/A | Complies |
| Maximum length of undifferentiated blank wall | 30 feet | 20 feet (Complies) |
| Maximum Floor Area | 15,000 square feet for each floor above 125 feet | Complies. L11 has ±8,535 square feet of floor area. |
| Maximum Structure Height | 150 feet with a 90-foot maximum street wall height on Pearl Street and a 50-foot maximum on Congress and Myrtle Streets | 143.75 feet (Complies) |
| Maximum Lot Coverage | 25% of lot area for portions of structures exceeding 125 feet in height or 10,500 square feet, whichever is more | Complies. Proposed floor area of L11 is 10,500 square feet. |

Downtown Urban Design Guidelines & Pedestrian Activities District (PAD) Encouragement Area: The site is required to comply with the Downtown Urban Design Guidelines. Additionally, the Congress Street frontage falls within the Pedestrian Activities District (PAD) encouragement area. This overlay zone is intended to encourage ground floor uses that activate pedestrian spaces, creating a safe and vibrant pedestrian environment in Portland's downtown. Buildings located within the encouragement area are required to be designed and constructed to be reasonably capable of being converted to accommodate uses permitted in the PAD overlay zone. Further, all sidewalk areas and open spaces shall be designed to complement the general pattern of the downtown pedestrian environment.

During the MDP review, the Applicant took steps to develop a more pedestrian-centric design by:

- Expansion of the sidewalk area along Congress Street;
- Addition of a pedestrian entrance facing and visible from Congress Street;
- Inclusion of a retail unit that wraps around the corner of Congress & Myrtle Street, and
- Increased accessibility to the Amenity Deck from the street level.

Further discussion of compliance with the PAD Overlay & B-3 design standards is provided in the following Section of this report.

## VIII. DESIGN REVIEW

A total of three design reviews have been completed for the project, dated respectively October 19, 2022, January 6, 2023, and February 8, 2023 (**Attachments 3-5**). The reviews were conducted by Sean King, Urban Designer, Evan Schueckler, Historic Preservation Manager, Rob Weiner, Historic Preservation Compliance Coordinator, Kevin Kraft, Deputy Director of Planning and Urban Development, and Zach Powell, Senior Planner. Key updates to the application based on the Design Review Memorandums are included below:

- Reduction in the number of proposed materials along the ground level to create a stronger, more cohesive building design by using masonry banding along the Congress & Myrtle Street frontages for the majority of the massing, with the corner of the building near the intersection of Congress & Myrtle Streets with the curtain wall and ground floor commercial unit utilizing an ironspot brick.
- Replacement of black metal panels along the retail space on the corner of Congress and Myrtle streets with ironspot brick.
- Inclusion of a horizontal belt course along the building's 1-2 story base and recessed elements that are consistent with the historical character of surrounding buildings.
- Breaking up the vertical scale of the building through a delineation in building materials.
- Creation of a unified window pattern on the ground floor through the substitution of vertical windows at ground level along Congress Street and the interior northern elevation with storefront windows to match the hotel lobby façade.
- Development of a more prominent entrance along Congress Street through the recession of entrance doors, articulation through changes in material, and alignment of the suspended canopy with the canopy proposed on the northern elevation.
- Consistency in paving materials for publicly-accessible paved areas and delineation of changes in material with a flush band to the edges of paved surfaces.
- Reconfiguration of planters along the expanded Congress Street sidewalk/linear park area to develop a more inviting, connected space for pedestrians.

The final design review memorandum (**Attachment 5**) recommends two conditions of approval related to the final review and approval of proposed fencing along Myrtle Street to access the exterior staircase and elevator, the proposed final design for the railing on the rooftop. Through the incorporation of the changes mentioned above and the recommended conditions of approval, the submitted application meets the applicable B-3, PAD Overlay, Multiple-family, and MDP design standards.

## IX. TRAFFIC MOVEMENT PERMIT

At the August 9, 2022 Planning Board Hearing for the Master Development Plan, the Board approved a condition that the Traffic Movement Permit (TMP) shall receive approval prior to the approval of the first site plan application. The Applicant submitted a draft methodology to City Staff for trip generation estimations and traffic counts pursuant to TMP application requirements on August 5, 2022. Upon review of these materials, City Staff recommended changing the Institute of Traffic Engineers (ITE) Land Use Codes (LUCs) to derive estimates, with these changes shown in Table 2 below.

Table 2: Changes to ITE Land Use Codes

| Use(s) | March 24, 2022 Submission | August 5, 2022 Update |
|---|---|---|
| Hotel & Restaurant | 310- Hotel | 310- Hotel |
| Residential & Retail | 232- High-Rise Residential with 1,000-25,000 square feet of ground floor commercial | 222 – Multifamily Housing (Highrise) |
| | | 932- High-Turnover (Sit-Down) Restaurant |

The Applicant submitted an updated and expanded TMP application on December 16, 2022 (**Attachment N**) that included updated information on existing parking demand and crash data, a relocated garage access point from Cumberland Avenue to Pearl Street, relocation of an existing mid-block crosswalk on Myrtle Street, and parking management plan.

Comments from the consulting Traffic Engineer Tom Errico (**Attachment 8**) have focused on:

- Assessing parking lot usage at 385 Congress Street and the Top of the Old Parking Lot in future phases to use more accurate counts, given that parking occupancy has not returned to pre-COVID conditions.
- Assessing the restriping of Pearl Street in regards to on-street parking, and removal of the dedicated left turn lane for the Top of the Old Port Parking Lot post-occupancy to better understand multi-modal impacts.
- Ensuring that there will not be significant queuing/sidewalk obstructions waiting for garage doors to open through doors opening in advance of a vehicle arriving.
- Upgrading the traffic signal (except for the controller cabinet) at the Congress & Pearl Street intersection to meet the City's Traffic Signal Policy and Guidance Manual.
- Upgrading the traffic signal at the Cumberland Avenue & Pearl Street intersection to meet the City's Traffic Signal Policy and Guidance Manual.
- Conducting ADA facility assessments of pedestrian facilities at all intersections of the MDP block and upgrade as necessary, based on proposed signal improvements.
- Recommendation for monitoring at 1-month, 3-months, and annually through three years after issuance of a Certificate of Occupancy to better assess the impacts of valet operations, given that the block serves as automobile parking for the Press Hotel.

- Requesting the submission of parking demand estimates from the ITE, 5th Edition to better quantify the anticipated parking demand for the site.

To address these comments, conditions have been recommended for the TMP. Through the adoption of the recommended conditions, the proposed application will satisfy the requirements of the TMP.

As a condition of the TMP, the applicant will be required to replace/upgrade the traffic signal equipment and associated street, ramp, and sidewalk conditions at the intersections of Congress Street and Pearl Street. As a result of the required upgrades the applicant is requesting a modification of the transportation related impact fees (**Attachment QQ**) for the costs associated with sidewalk and street improvements directly related to the traffic signal upgrades, at the corners across from the site. Additionally, the applicant is requesting that costs associated with traffic signal improvements be applied as a credit against the Transportation Impact Fee.

The 2018 Impact Fee Study identifies the need for signal improvements and facilities as an element of growth-related costs. City staff has identified that improvements to traffic signals and sidewalks not along the project's frontage are eligible for credits against the transportation impact fee. The total impact fee credit shall be calculated based on cost estimates submitted at the time of a building permit application and to be reviewed and approved by the Planning Authority and the Department of Public Works.

## X. STAFF REVIEW

### A. Site Plan Review Standards Section 14.6

Section 14.6 of the City's Land Use Code establishes standards under which Site Plan applications must be reviewed. Per this section, Site Plans shall adhere to the following requirements:

Section 14.6.1. Transportation Standards

### A. Impact on Surrounding Street Systems

Please refer to Section IX of this staff report for a review of the proposed project on the surrounding street systems, as well as the recommended conditions of approval for the proposed TMP.

In regards to the anticipated construction impacts of the proposed Phase 1 project, a Construction Management Plan (**Attachment PP**) has been submitted to City Staff and is currently under review. Submission and finalization of the Construction Management Plan is a standard condition of approval, and should include specific provisions to ensure a provision for a pedestrian facility on the western side of Congress Street throughout construction and the installation of applicable parking signage on Cumberland Avenue in the event that driveways are blocked off during construction.

### B. Access and Circulation

1. In General

The proposed project is not expected to create or aggravate any significant hazard to safety on the surrounding street or increase congestion. The proposed project will include a driveway entrance accessed via Congress Street and a garage entrance for exiting onto Myrtle Street. The proposed hotel and retail space would include primary entrances facing Congress Street. An expanded sidewalk would be included for the building's entire frontage along Congress Street to accommodate pedestrians. The site is located in a walkable Downtown Portland location that is accessible to public transit.

2. Loading and Servicing

The subject property has frontages on Congress & Myrtle Streets, with one proposed curb cut on Congress Street and one on Myrtle Street. Additionally, the lower garage level will establish an access easement with the property to the west to be able to access that parking level from Cumberland Avenue. The proposed dimensions of the ground level structured parking allows the movement of box trucks, but is not anticipated based on narratives provided by the Applicant. City staff has discouraged the use of the Level 1 structured parking for deliveries and loading as well, given that the design of the parking/waivers for the parking was predicated on the sole use of area by valet drivers. The Applicant has proposed the designation of a loading space on the north side of Myrtle Street to align with the proposed loading area. Updates to the design have helped provide better separation between the proposed loading space and the mid-block pedestrian crossing on Myrtle Street, as well as sufficient space from the existing loading space on the south side of Myrtle Street to ensure safe access for emergency vehicles.

3. Curb and sidewalks

ADA improvements on Congress Street at the intersection of Myrtle Street have been identified by City Staff based on the current slope. Conditions to ensure assessment of the ADA compliance of the Congress & Pearl Street intersection has been recommended as a condition, along with final review by the Department of Public Works, the City's Historic Preservation Staff, and the Planning Authority to ensure that the collective sidewalk improvements meet City Technical and Design standards.

Together with the recommended conditions of approval for the TMP and site plan, the proposed application has ensured that the proposed access and circulation for the site will not result in negative impacts on the surrounding area.

## C. Public Transit Access

Staff Comment: The site is located within a quarter mile of an existing transit shelter on Congress Street and is not required to provide a transit shelter on-site.

## D. Parking

1. Vehicular parking

The proposed development proposes 75 automobile parking spaces on two levels of parking. The subject property is located within a quarter mile of an existing fixed transit route and is further required, based upon the scope of the project as a major site plan, to complete a parking study. The parking study has been completed as part of the larger TMP for the MDP application. Please refer to Section IX of this report for additional information on the scope and results of the TMP. A TDM plan has been developed for the project and is further discussed in the review of standards for Section 14.6.1.E. As mentioned at the beginning of this report, the Applicant received waivers for the number of compact spaces, parking layout, and required width of access aisles. Through the completion of the TMP and the previously approved waivers, the proposed application is meeting the parking requirements for the proposed development.

2. Bicycle parking

Sixteen bicycle parking spaces are required in total, with nine being for the hotel, four being for the condominium units, and three being for the restaurant. The Applicant has provided 18 bicycle parking spaces within level one of the parking garage, with two of those spaces, (10% of the total provided in level one) meeting the distance requirements from the main egress by being located no further from the entrance than

the nearest five spaces. Section 1.15.4 of the City Technical Manual at the time of application submission (Current Section 1.12.4) states that if bicycle parking is not directly visible from the public right-of-way, directional signage shall be provided indicating the availability and location of bicycle parking facilities. Based on the proposed location of the bicycle parking in the garage, recommended conditions of approval have been included to require the submission of signage that indicates the availability and location of the facilities to meet the standard of Section 1.15.4 of the City's Technical Manual.

3. Snow storage

The proposed parking for the hotel is to be located within structured parking, which is anticipated to have minimal snow storage impacts. Access points and any existing surface parking on the block is proposed to have snow transported off-site, which has been proposed as well for the right-of-way along Congress and Myrtle Streets.

4. Electric Vehicle (EV) charging

Sixteen of the 75 proposed parking spaces (21%) have been identified as having electric vehicle charging stations, which exceeds the minimum required (20%) by the City's Technical Manual.

With the recommended conditions and updates to the application, the proposed project is not anticipated to result in negative parking impacts for the site and the surrounding area.

## E. Transportation Demand Management

Staff Comment: The application was reviewed on January 5, 2023 by the City's Transportation Program Manager Bruce Hyman, who provided the following comments:

*Based on the applicant's memo, the following items appear to be outstanding/unresolved:*

- *The parking reduction target – The Applicant has not stated a parking reduction target but references that the parking to be allocated to the hotel is already below the national average. Clarification was (and still is) requested whether a parking reduction target will be developed.*
- *Level of transit subsidy to be provided to employees – The Applicant states that the level of transit subsidy will be determined by the hotel operator based upon its staffing plan. An updated TDM Plan with this information should be required to be approved prior to Certificate of Occupancy.*
- *A commitment to information related to transportation options to the hotel on the hotel's website should be required in an updated TDM Plan to be approved prior to Certificate of Occupancy – an electronic kiosk in the hotel lobby is highly recommended to highlight the education materials identified in the draft TDM Plan (transit schedules and stop locations, real-time departure for transit routes, transportation alternatives, pedestrian routes, etc.)*

The Applicant has updated the submitted TDM plan to include a baseline anticipated number of trips (AM: 52 | PM: 53) that the hotel will generate and a proposed reduction of 10% (5 trips) through the implementation of TDM strategies. The Applicant has also stated that a TDM kiosk will be provided in the main lobby and that transportation options will be posted on the hotel's website. The level of transit subsidy to be offered to employees has not been finalized since the eventual hotel chain/operator is not known at this time. This standard has been met. A recommended condition has been included at the end of this report requiring the Applicant to submit and receive approval from the Planning Authority for an updated TDM plan that includes the level of transit subsidy to be provided for employees.

## Section 14.6.2. Environmental Quality Standards

### A. Preservation of Significant Natural Features

Staff Comment: As a lot used for parking, both surface and within an existing building) within a densely developed urban context, there are no significant natural features located on the subject property.

### B. Landscape Preservation

Staff Comment: As a condition of the Master Development Plan, the Applicant was required to consult with the City Arborist to evaluate the preservation of existing street trees along Congress Street. Based on this consultation with City Arborist Jeff Tarling, preservation of the existing street trees has been determined to not be viable based on the proposed work. Replacement street trees have been proposed as part of the site plan application.

### C. Site Landscaping and Buffers

Staff Comment: §14.6.2.C.1. of the Land Use Code states that all development subject to required zoning setbacks shall include a minimum of one shade tree or six plantings (Shrub, ornamental grass, or three perennials) per 30 linear feet of all frontages as measured along the property line (370 feet of frontage/30 feet = 12.3 = 12 shade trees or six plantings) and can be planted anywhere on the site.

Four moveable and three permanent planters have been proposed at street level. 6 trees, 90 shrubs, 92 ornamental grasses and 216 perennials have been proposed on the amenity deck. Together, the proposed landscaping plan complies with §14.6.2.C.4. of the Land Use Code.

The site is required to provide 9 street trees for the proposed multi-family requirement (1 street tree per dwelling unit) and for commercial uses, providing a street tree every 35-45 feet (370 feet of frontage/ 35-45 feet = 8-11 street trees). The Applicant has included 7 street trees with a spacing of one tree every 22-23 feet. Trees originally proposed for Myrtle Street were deemed not viable by the Forester Jeff Tarling and the Department of Public Works due to space constraints and sunlight.

The applicant will be required to contribute $4,000 (10 trees x $400 contribution = $4,000) into the city's Tree Fund for the remaining 10 required street trees.

### D. Water Quality, Stormwater Management, and Erosion Control

Staff Comment: The Applicant has identified erosion & sediment control measures proposed for the site and has proposed on-site detention & will reroute stormwater to the combined sewer on Pearl Street in anticipation of future separation by the City and reduce impacts on the combined sewer at Myrtle Street.

A review of the application documents by Consulting Stormwater Engineer Lauren Swett noted that:

- *The Applicant has provided a detail for sediment barrier, but has not shown any sediment barrier erosion controls on their grading plan. This may be able to be addressed as part of the construction management plan, understanding that barrier controls may move around as construction happens; the current construction management plan just refers back to the approved erosion control plan.*
- *Building demolition sites are proposed to be left with gravel surfaces, and erosion controls should be in place until these areas have permanent stabilization.*

A recommended condition of approval has been included to document the proposed erosion controls and ensure that adequate perimeter erosion controls are provided throughout all areas of the site with measures to remain until each area reaches permanent stabilization.

## Section 14.6.3. Public Infrastructure and Community Safety Standards

### A. Consistency with City Master Plans

Staff Comment: The submitted plan is consistent with City Council-approved master plans by:

- Improving transportation access to arts and cultural venues throughout the City by enhancing intersection and mid-block connections to Merrill Auditorium (**Arts District Plan, 1996**),
- Proposing the construction of dense housing in Downtown and pedestrian enhancements such as curb extensions and expanded sidewalks to promote walkability and traffic calming (**Peninsula Transit Plan, 2009**), and
- Providing infill development within a transit-oriented location with pedestrian-oriented streets to make walking more inviting, and connection to bus routes, bike networks, and other mobility options easier to access to other parts of the city. Providing residential density as well as employment and job density that can support and drive transit ridership as well as walk to work opportunities **(One Climate Future, 2021)**.

### B. Public Safety and Fire Prevention

Staff Comment: Based on staff comments, the Applicant has provided additional information on how access will be provided to the amenity deck from the street level after the completion of Phase 2 (Condo A). The submitted lighting plan provides sufficient lighting to ensure clear sight lines between the property and the right-of-way.

The site includes two frontages (Congress & Myrtle Streets) that provide sufficient access for emergency vehicles. The application has been reviewed by City Staff to ensure the safe travel of emergency vehicles onto Myrtle Street with the new curb extensions at Congress Street, given that the street is used by fire trucks at the Central Fire Station across the street.

Based on these updates and the submitted design, the proposed project will not result in negative public safety issues and will provide sufficient access for emergency vehicles to the site.

### C. Public Utilities

Staff Comment: The site currently provides electrical service underground and the proposed development continues to provide underground service.

The Applicant has coordinated with the City to address Combined Sewer Overflow (CSO) capacity issues through the use of on-site detention and rerouting of stormwater to Pearl Street.

**Attachment Y1** from the Portland Water District provides an ability to serve letter for the proposed project, with noted improvements that will need to be made as part of providing service.

The Applicant is proposing to provide on-site trash & recycling storage interior to the building at street level next to the structured parking area, with trash receptacles being moved out to the street curb for collection. This standard is met.

## Section 14.6.4. Site Design Standards

### A. Massing, Ventilation, and Wind Impact

Staff Comment: Based upon the submitted architectural plans depicting massing, location, and height of the proposed building the development is not anticipated to result in a substantial diminution in the value of neighboring structures.

### B. Shadows

Staff Comment: This standard is not applicable since the property is located in the B-3 zone. However, shadow impacts of the proposed development were reviewed under the Master Development Plan approval and found that the proposed design would not result in significant negative impacts on adjacent open spaces (City Hall Plaza & Lincoln Park) from the hours of 10:00 AM to 2:00 PM.

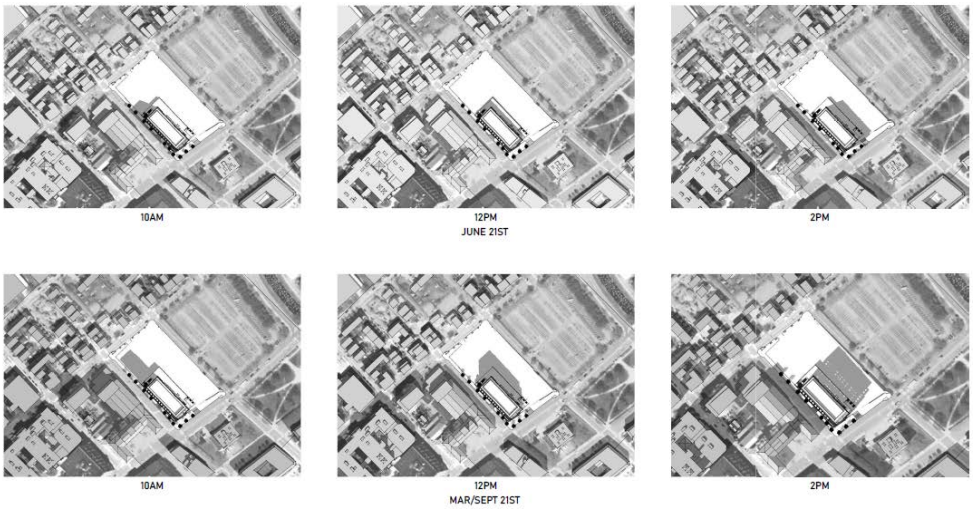



Figure 3: Shadow Study for Phase 1, which does not demonstrate any negative shadow impacts on nearby open spaces at City Hall Plaza or Lincoln Park.

### C. Snow and Ice Loading

Staff Comment: Based on comments from City Staff, the Applicant has updated the application to remove a proposed art installation in front of the Myrtle Street staircase and has confirmed that snow would be removed from the site to meet City requirements.

The updates to the application, along with the proposed flat roof design will prevent significant amounts of accumulated snow and ice from loading or falling onto the right-of-way or adjacent properties.

### D. View Corridors

Staff Comment: The project site is located adjacent to a view corridor along Congress Street. Feedback from the MDP review resulted in the Applicant matching the front setback of the building along Congress Street

with City Hall to provide more consistency in the street wall. This also provides additional viewshed benefits. Based upon these findings this standard is considered met.

### E. Historic Resources

Staff Comment: The proposed development is not located within a locally designated historic district. Since the site is adjacent to the Congress Street Historic District and local landmark City Hall, an advisory historic preservation review was provided by Historic Preservation staff as part of the City design review to ensure compatibility with the neighboring district and landmarks.

### F. Exterior Lighting

Staff Comment: The Applicant has submitted photometric plans and lighting details (**Attachment NN and P.22a**) for the site and for street lighting. At street level, the Application is complying with the maximum permitted illumination levels of the Technical Manual. Final review and approval of the photometric plan by the Planning Authority has been included as a recommended condition to ensure that the proposed lighting on the Myrtle Street staircase and Level 2 (Amenity Deck) meets the maximum permitted illumination levels of Section 12.3 of the City's Technical Manual.

### G. Noise and Vibration

Staff Comment: The proposed mechanical equipment will be located on Level 12 and the roof. Equipment on the roof is set back from the street frontages and screened by walls. Based on the proposed use of the site, it is anticipated that the mechanical equipment will comply with State and Federal emissions requirements.

### H. Signage and Wayfinding

Staff Comment: Finalized signage has not been included as part of the site plan application materials. Future review of signage with the standards of Article 20 will occur upon submission of separate sign permits.

### I. Design Standards

Staff Comment: Please refer to the comments in Section VIII of this report.

## XI. NEIGHBORHOOD MEETING & PUBLIC COMMENT

As of the writing of this report, no written public comments have been received.. The applicant held a Neighborhood Meeting on October 6, 2022, and 2 members of the public attended (**Attachment II**). Questions raised at the Neighborhood Meeting addressed the following topics:

- Security at the amenity deck;
- Phasing, and
- Retention of on-street parking.

## XII. STAFF RECOMMENDATION

Subject to the proposed motions and conditions of approval listed below, Planning Department staff recommends that the Planning Board find that application #PL-002156-2022 meets the applicable standards of Portland's Land Use Code.

# XIII. PROPOSED MOTIONS

## A. TRAFFIC MOVEMENT PERMIT

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 February 14, 2023 for application #PL-002156-2022 relevant to Portland's Technical Standards and other regulations; and the testimony presented at the Planning Board hearing, the Planning Board [finds/does not find] that the plan is in conformance with 23 M.R.S. §704-A and Chapter 305 Rules and Regulations pertaining to Traffic Movement Permits, subject to the following conditions of approval:

PRIOR TO BUILDING PERMIT SUBMISSION FOR PHASE 1 (HOTEL)

1. The Applicant shall update the site plan set to state that the City will review conditions on Pearl Street post-occupancy and determine the feasibility of on-street parking in a future phase of the MDP, offset the eastbound Congress Street left-turn lane off-set STOP bar by 15 feet, and replace site plan key note 17 on site plan sheet 5 with a metered parking sign (PS6).

PRIOR TO ISSUANCE OF BUILDING PERMIT FOR PHASE 1 (HOTEL)

2. The Applicant shall submit a scope of work for the traffic monitoring program of the valet operations for review and approval by the Planning Authority. The scope of work shall outline specific actions that will be taken by the hotel/valet vendor if vehicle queuing problems are identified.

PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY FOR PHASE 1 (HOTEL)

3. The Applicant shall upgrade the entire traffic signal system at the intersection of Congress & Pearl Street (except for the controller cabinet, unless modification to equipment may be needed for a full functioning signal) to meet the City's Traffic Signal Policy and Guidance Manual. This upgrade shall include mast arm supports. Sidewalk ADA upgrades may be required to meet MaineDOT's policy regarding ADA upgrades associated with a signal project that disturbs the ground
4. The Applicant shall install pedestrian signal heads at the intersection of Cumberland Avenue & Pearl Street.

POST OCCUPANCY CONDITIONS FOR PHASE 1 (HOTEL)

5. The Applicant shall be required to perform a traffic monitoring program of the valet operations and queuing conditions. The monitoring study shall be performed within the first month of occupancy, three months after occupancy, and annually for at least three years. At the conclusion of Year 3, City Staff shall make a determination on continuation. The monitoring program shall be conducted under normal traffic system conditions and when Myrtle Street is closed. The monitoring program shall report at a minimum vehicle arrival/departure volumes, number of valet personnel, vehicle queuing, impacts of the co-location of automobile and bicycle parking, and photographs of conditions

MAJOR SITE PLAN APPLICATION PHASE 2 (CONDO A)

6. As part of the Major Site Plan application for Phase 2 (Condo A) the Applicant shall submit signal plans for an upgrade to the entire traffic system for the intersection of Cumberland & Pearl Street.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR PHASE 3 (CONDO B)

7. The Applicant shall upgrade the entire traffic signal system at the intersection of Cumberland & Pearl Street (except for the controller cabinet, unless modification to equipment may be needed for a full functioning signal) to meet the City's Traffic Signal Policy and Guidance Manual. This upgrade shall include mast arm supports. Sidewalk ADA upgrades may be required to meet MaineDOT's policy regarding ADA upgrades associated with a signal project that disturbs the ground

## B. INCLUSIONARY ZONING FOR HOTEL PROJECTS CONDITIONAL USE

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 February 14, 2023 for application #PL-002156-2022 at 385 Congress Street relevant to Portland's Inclusionary Zoning Conditional Use Standards and other regulations, and the testimony presented at the Planning Board hearing, the Planning Board [finds/does not find] the proposed project meets the requirements of section 18.2.5 and section 18.2.3 with the following condition(s):

PRIOR TO ISSUANCE OF A BUILDING PERMIT

1. Should the applicant choose to provide the required low-income housing units on-site the Applicant and the City shall enter into an agreed upon Affordable Housing Agreement (AHA).

PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY

2. The applicant shall pay an agreed upon fee-in-lieu into the City's Housing Trust Fund calculated at time of Building Permit application or should the applicant choose to provide the required Hotel Inclusionary Zoning low-income units on-site an Affordable Housing Agreement (AHA) shall be filed as a covenant to the property's deed with the Cumberland County Registry of Deeds.

## C. MAJOR SITE PLAN

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 February 14, 2023 for application #PL-002156-2022 relevant to the Site Plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board [finds/does not 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 DEMOLITION PERMIT APPLICATION FOR PHASE 1 (HOTEL)

1. The Applicant shall coordinate erosion control shown on their grading plan and referred to in the construction management plan to ensure that adequate perimeter erosion controls are provided on all areas of the site, including the main building construction site and on the building demolition areas, with these measures to remain in place until each area reaches permanent stabilization.

PRIOR TO BUILDING PERMIT SUBMISSION FOR PHASE 1 (HOTEL)

2. The Applicant shall submit an updated site plan to the set delineating the boundaries of the proposed work as part of Phase 1, and shall extend 2 hour limit parking spaces along closed driveways to the site, as applicable.

3. The Applicant shall submit an updated photometric plan to the Planning Authority to confirm the proposed lighting on the Myrtle Street staircase and Level 2 (Amenity Deck) meets the maximum permitted illumination levels of Section 12.3 of the City's Technical Manual.
4. The Applicant shall submit details of the security fence facing Myrtle Street to access the exterior staircase and elevator and final railing details to the Planning Authority for final review and approval.
5. The Applicant shall submit directional signage details for review and approval by the Planning Authority that indicate the availability and location of bicycle parking facilities.
6. The applicant shall submit the final Construction Management Plan (CMP) to the Planning Authority for review and approval.

PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR PHASE 1 (HOTEL)

7. Public Access Easement: That the pedestrian plaza area along Congress Street and the publicly accessible staircase/walkway area located along Myrtle Street, shall be accessible to the public, and managed and maintained by the operator of the hotel. A public access easement confirming this and other details shall be finalized to the satisfaction of the Planning Authority and Corporation Counsel.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY FOR PHASE 1 (HOTEL)

8. Due to site constraints preventing the planting of required street trees in the right-of-way, the applicant shall contribute $4,000 for the 10 remaining required street trees (10 x $400 - $4,000).
9. The Applicant shall submit an updated TDM plan that confirms the level of transit subsidy to be provided to employees to be reviewed and approved by the Planning Authority.
10. The Hotel Operator/Valet Vendor shall identify off-site parking locations that meet the parking demand estimate and the parking spaces shall be located in close proximity to the hotel to allow for efficient valet operations. Documentation of off-site parking shall be provided in conjunction with the valet monitoring requirement.

## D. IMPACT FEES

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 February 14, 2023 for application #PL-002156-2022 relevant to the Site Plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board [finds/does not find] that the plan is in conformance with the Site Plan standards and impact fee regulations of the Land Use Code, and the impact fee modification shall be granted under the following conditions:

11. Impact fee credits are available for portions of the traffic signal upgrade at Congress & Pearl Street and sidewalk ADA improvements on non-applicant frontages.
12. Prior to issuance of a Building Permit, the applicant shall provide plans, details, and cost estimates to be prepared by a licensed professional engineer and approved by the Planning Authority and the Department of Public Works for the Congress & Pearl Street intersection upgraded traffic signal system and sidewalk ADA upgrades on non-applicant frontages.

# Appendix D. Parking Facilities Map

**NOTES:**

INFORMATION CONTAINED ON THIS PLAN IS BASED PRIMARILY OR ENTIRELY ON PUBLICLY AVAILABLE INFORMATION.

PARKING LOCATIONS AND SPACE COUNTS DERIVED FROM THE PORTLAND MAINE MARCH 2025 PARKING SURVEY.

**EXTERNAL DATA SOURCES:**
CITY OF PORTLAND, MAINE
MAINE GEOLIBRARY
2020 ORTHOREGIONAL IMAGERY

MARGINAL WAY PARK & RIDE 175 SPACES
CHESTNUT & LANCASTER PARKING GARAGE 450 SPACES
TOP OF THE OLD PORT 540 SPACES
2 INDIA STREET LOT 20 SPACES
CUMBERLAND COUNTY COURTHOUSE GARAGE 328 SPACES
SIMBA PARKING LOT 115 SPACES
PUBLIC MARKET GARAGE 595 SPACES
ELM STREET GARAGE 398 SPACES
HUB FURNITURE PARKING LOT 32 SPACES
MIDDLE & PEARL LOT 208 SPACES
EAST BROWN COW LOT 46 SPACES
CASCO BAY GARAGE 419 SPACES
MONUMENT SQUARE GARAGE 340 SPACES
CUSTOM HOUSE SQUARE GARAGE 761 SPACES
ARTS DISTRICT GARAGE 270 SPACES
MAINE HISTORICAL SOCIETY 37 SPACES
ONE CITY CENTER PARKING GARAGE 600 SPACES
TEMPLE STREET GARAGE 620 SPACES
FORE STREET GARAGE 423 SPACES
DIMILLO'S ON THE WHARF 317 SPACES
MIDTOWN PARKING LOT 175 SPACES
PORTLAND SQUARE 237 SPACES
FREE STREET LOT: OPPOSITE ARENA 44 SPACES
PORTLAND HARBOR HOTEL 195 SPACES
FISHERMAN'S WHARF 250 SPACES
VENTURE PARKING LOT 48 SPACES
FREE STREET: MAINE HEALTH LOT 155 SPACES
SPRING STREET GARAGE 569 SPACES
14 YORK STREET 66 SPACES
HOLIDAY INN BY THE BAY 285 SPACES
CENTER STREET PARKING 63 SPACES
4/10 MILE

PORTLAND MUSIC HALL
DISTANCE BUFFER FROM VENUE - 4/10 MI
PARKING LOCATIONS
DIMENSIONS & NOTES
PORTLAND TAX PARCELS
TAX
CONVEYANCE
0 150 300 600 900 1,200 1,500 Feet

GIS PLAN

NOT FOR CONSTRUCTION

| REV: | BY: | DATE: | STATUS: |
|---|---|---|---|
| | | | |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, THE REVISED OR THE ORIGINAL PLAN MUST BE SIGNED, STAMPED AND DATED BY A LICENSED PROFESSIONAL. SEE ALL OF THE INFORMATION USED IN THIS GIS PLAN IS AS PER GIS ON PUBLIC DATA, THIS IS NOT A BOUNDARY SURVEY.

SEBAGO TECHNICS
SEBAGOTECHNICS.COM
75 John Roberts Rd, Suite 4A
South Portland, ME 04106
207-200-2100

South Portland, Bridgton, Sanford and Bath

PORTLAND PENINSULA PARKING FACILITIES
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVENUE
PORTLAND, MAINE
FOR:
MILE MARKER INVESTMENTS
200 US ROUTE 1, SUITE 200
SCARBOROUGH, MAINE 04074

| | |
|---|---|
| DESIGNED | |
| DRAWN | MTM |
| CHECKED | |
| DATE | 4/14/2025 |
| SCALE | 1" = 300' |
| PROJECT | 19371-05 |

SHEET 1 OF 1

# Appendix E. Existing Conditions and Site Plan

# GENERAL NOTES:

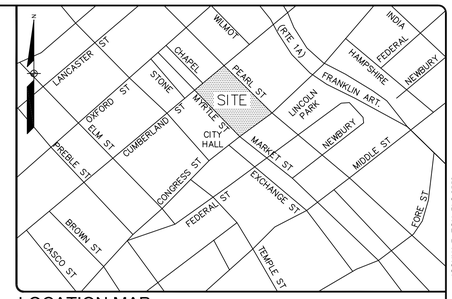
1. THE RECORD OWNER OF THE PARCEL IS 385 CONGRESS LLC BY DEED DATED OCTOBER 20, 2017 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 34401, PAGE 214.
2. THE PROPERTY IS SHOWN AS LOT 1 ON THE CITY OF PORTLAND TAX MAP 27 AND IS LOCATED IN THE B3 DOWNTOWN BUSINESS DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE B3 DISTRICT ARE AS FOLLOWS:

| | |
|---|---|
| MINIMUM LOT SIZE: | N/A |
| MINIMUM STREET FRONTAGE: | 15 FEET |
| MINIMUM FRONT YARD: | N/A |
| MINIMUM SIDE YARD: | N/A |
| MINIMUM REAR YARD: | N/A |
| MAXIMUM BUILDING HEIGHT: | 150 FEET |
| MAXIMUM LOT COVERAGE: | 100% |

* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.

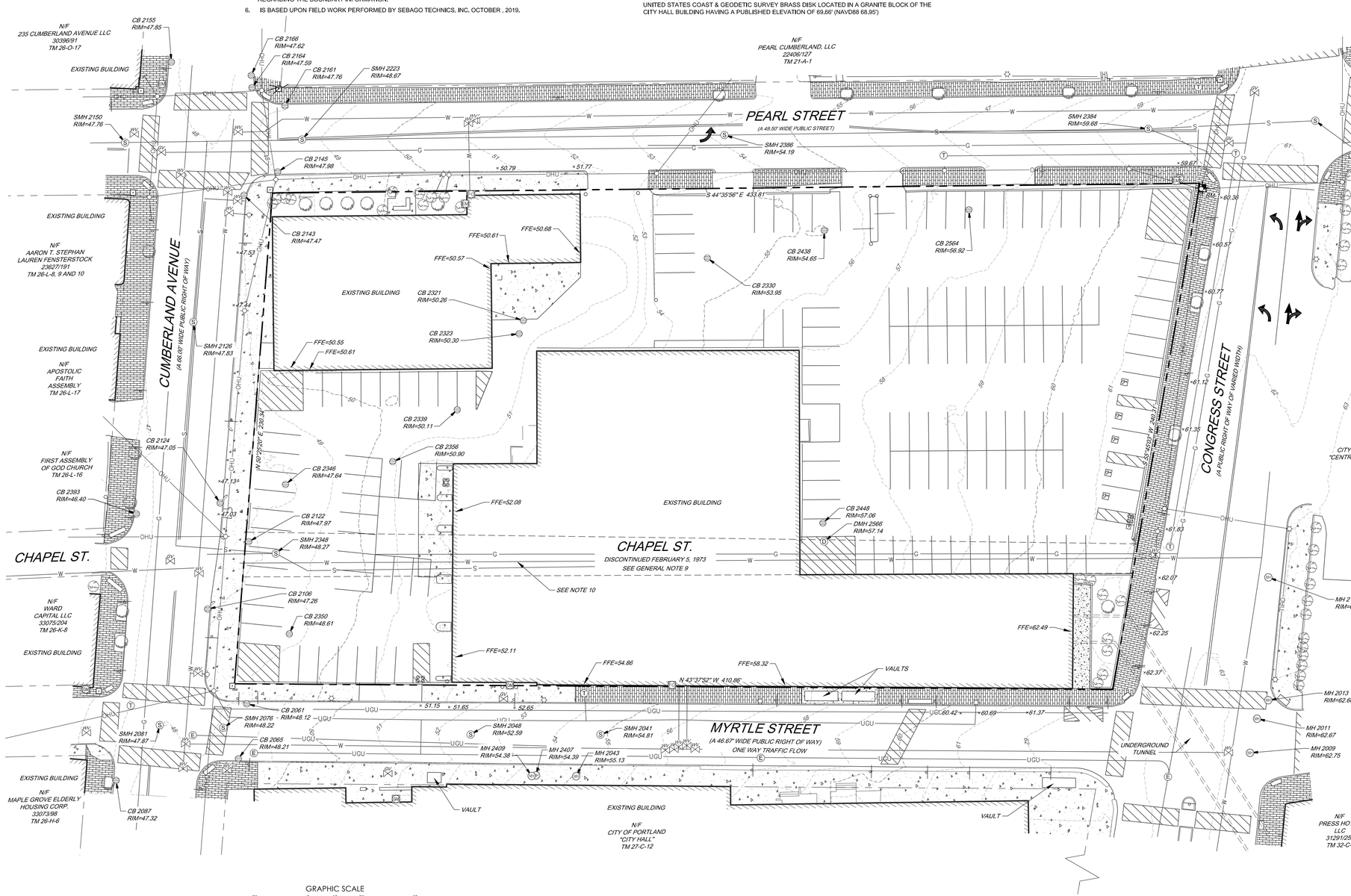
4. TOTAL AREA OF PARCEL IS APPROXIMATELY 2.26 ACRES.
5. THE BOUNDARY IS BASED ON PLAN REFERENCE 6F. TOPOGRAPHIC INFORMATION SHOWN HEREON. SEBAGO TECHNICS INC. UPDATED RECORDS RESEARCH FROM 2009 TO DATE REGARDING THE BOUNDARY INFORMATION.
6. IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. OCTOBER , 2019.
7. PLAN REFERENCES:
   - A. PLAN OF CITY BUILDING LOT, PORTLAND, ME, DATED AUGUST 1908 BY THE CITY OF PORTLAND ENGINEER, AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   - B. PORTLAND DEPARTMENT OF PUBLIC WORKS STREET WORKSHEETS AND BLUESHEETS FOR STREETS BOUNDING THE LOCUS PARCEL AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   - C. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, DATED JULY 1964 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 663/2.
   - D. NEW MECHANICAL BUILDING, GUY GANNETT PUBLISHING COMPANY, PORTLAND, ME, TUNNEL PLAN AND SECTIONS BY LOCKWOOD, GREENE ENGINEERS, INC, REVISED THROUGH MAY 12, 1965 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 203/2.
   - E. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, REVISED THROUGH FEBRUARY 6, 1973 AND ON FILE WITH OWEN HASKELL INC.
   - F. ALTA/ACSM LAND TITLE SURVEY OF CONGRESS STREET SITE, 385 CONGRESS STREET, PORTLAND, ME DATED JULY 1, 2009 BY SEBAGO TECHNICS INC, PROJECT NUMBER 09235.
8. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NGVD29 PER CITY STANDARDS AS VERIFIED BY A UNITED STATES COAST & GEODETIC SURVEY BRASS DISK LOCATED IN A GRANITE BLOCK OF THE CITY HALL BUILDING HAVING A PUBLISHED ELEVATION OF 69.66' (NAVD88 68.95')
9. THE CITY OF PORTLAND DISCONTINUED THAT PORTION OF CHAPEL STREET ''RUNNING FROM CONGRESS STREET TO CUMBERLAND STREET'' BY ORDER OF CITY COUNCIL ON FEBRUARY 5, 1973 AND RECORDED AT THE CITY OF PORTLAND RECORDS IN VOLUME 89, PAGE 61, PUBLIC AND PRIVATE RIGHTS MAY EXIST FOR PUBLIC HIGHWAY AND UTILITIES THAT STILL LIE WITHIN THE LIMITS OF CHAPEL STREET. SEBAGO TECHNICS, INC. SUGGEST LEGAL COUNSEL BE SOUGHT TO CLARIFY THE INTEREST OF OTHERS IN THESE RIGHTS.
10. PURSUANT TO A CONVERSATION BETWEEN SEBAGO TECHNICS, INC. AND THE PORTLAND WATER DISTRICT, THE WATER LINE SHOWN AS BEING LOCATED IN THE DISCONTINUED PORTION OF CHAPEL STREET HAS BEEN REMOVED AND NO LONGER EXISTS.
11. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
12. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 230051 0013 B, HAVING AN EFFECTIVE DATE OF JULY 17 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF AREAS OF MINIMAL FLOODING.
13. BENCHMARK:

BM-1 EASTERLY BOLT AT BASE OF UTILITY POLE ELEVATION: 61.55 (NGVD29)




LOCATION MAP N.T.S.

JOSHUA R. EON, PLS 2558




## LEGEND

EXISTING

- PROPERTY LINE/R.O.W.
- ABUTTER LINE/R.O.W.
- DEED LINE/R.O.W.
- N/F NOW OR FORMERLY
- BUILDING
- DECK/STEPS/ OVERHANG
- EDGE PAVEMENT
- EDGE CONCRETE
- PAVEMENT PAINT
- CURB LINE
- 120 118 CONTOURS
- DECIDUOUS TREE
- SHRUB
- BOLLARD
- SIGN
- G GAS
- GAS GATE VALVE
- GAS METER
- W WATER
- WATER GATE VALVE
- HYDRANT
- S SANITARY SEWER
- SANITARY MANHOLE
- UNKNOWN MANHOLE
- D DRAINAGE MANHOLE
- CATCH BASIN
- OHU OVERHEAD UTILITY
- UGU UNDERGROUND UTILITY
- ELECTRICAL MANHOLE
- ELECTRIC METER
- COMMUNICATIONS BOX
- T TELEPHONE MANHOLE
- LIGHT POLE
- UTILITY POLE
- GUY WIRE
- BM-1 BENCHMARK
- FIRE DEPARTMENT HOOKUP
- GRANITE MONUMENT

GRAPHIC SCALE

25 0 12 25 50

(IN FEET)
1 INCH = 25 FT.

*PROJECT BENCHMARK*
USC&G BRASS DISK SET IN GRANITE STEP.
DESIGNATION: TIDAL 38 STA 84
STAMPED ''1919/38''
NAVD 88 ELEVATION = 68.95'
NGVD29 ELEVATION = 69.66'

## SURVEYOR'S STATEMENT

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT WAS DONE IN ACCORDANCE WITH CHAPTER 90, PART 1 (PROFESSIONAL STANDARDS OF PRACTICE) AND PART 2 (TECHNICAL STANDARDS OF PRACTICE) OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

JOSHUA R. EON, PLS 2558 12/16/2019

| REV: | BY: | DATE: | STATUS: |
|---|---|---|---|
| A. | JRE | 12/16/2019 | ISSUED TO CLIENT FOR REVIEW |
| B. | JRE | 1/09/2020 | CORRECTED SPACE AND BULK CRITERIA PER PM REQUEST |
| C. | JRE | 1/20/2020 | MINOR DRAFTING REVISIONS PER PM REQUEST |
| D. | JRE | 2/7/2020 | MINOR DRAFTING REVISIONS PER PM REQUEST, ADDED NOTE 9 |
| E. | JRE | 2/10/2020 | ADDED NOTE 10 |
| F. | JRE | 2/20/2020 | ADDED STRUCTURE INFO AND MINOR DRAFTING REVISIONS |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC., ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

STATE OF MAINE JOSHUA R. EON 2558 REGISTERED PROFESSIONAL LAND SURVEYOR

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

EXISTING CONDITIONS PLAN
OF:
CONGRESS / PEARL BLOCK
CONGRESS STREET AND PEARL STREET
PORTLAND, MAINE 04101
FOR RECORD OWNER:
385 CONGRESS STREET, LLC.
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | - |
| DRAWN | RHS/TSL |
| CHECKED | JRE/CDM |
| DATE | 12/16/19 |
| SCALE | 1" = 25' |
| PROJECT | 19371 |

SHEET 1 OF 2

19371EC.dwg TABEC1

## GENERAL NOTES:

1. THE RECORD OWNER OF THE PARCEL IS 385 CONGRESS LLC BY DEED DATED OCTOBER 20, 2017 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 34401, PAGE 214.
2. THE PROPERTY IS SHOWN AS LOT 1 ON THE CITY OF PORTLAND TAX MAP 27 AND IS LOCATED IN THE B3 DOWNTOWN BUSINESS DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE B3 DISTRICT ARE AS FOLLOWS:

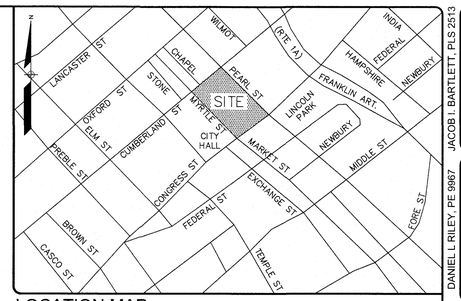
| | |
|---|---|
| MINIMUM LOT SIZE: | N/A |
| MINIMUM STREET FRONTAGE: | 15 FEET |
| MINIMUM FRONT YARD: | N/A |
| MINIMUM SIDE YARD: | N/A |
| MINIMUM REAR YARD: | N/A |
| MAXIMUM BUILDING HEIGHT: | 150 FEET |
| MAXIMUM LOT COVERAGE: | 100% |

* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.

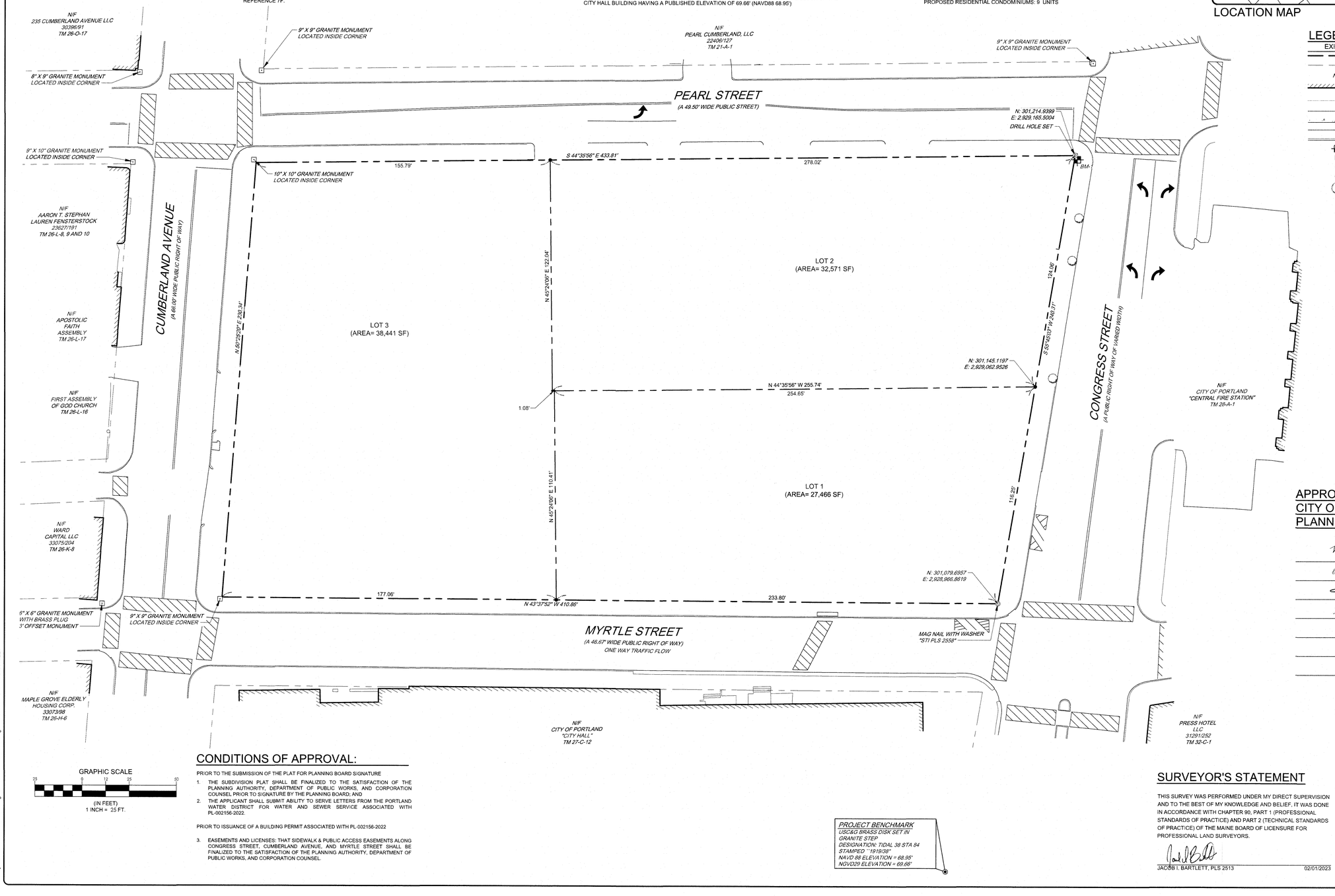
4. TOTAL AREA OF PARCEL IS APPROXIMATELY 2.26 ACRES.
5. THE BOUNDARY IS BASED ON PLAN REFERENCE 7F. SEBAGO TECHNICS INC. UPDATED RECORDS RESEARCH FROM 2099 TO DATE REGARDING THE BOUNDARY INFORMATION.
6. IMPROVEMENTS ON THE SITE ARE NOT SHOWN HEREON. FOR SITE INFORMATION SEE PLAN REFERENCE 7F.
7. PLAN REFERENCES:
   A. PLAN OF CITY BUILDING LOT, PORTLAND, ME, DATED AUGUST 1908 BY THE CITY OF PORTLAND ENGINEER, AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   B. PORTLAND DEPARTMENT OF PUBLIC WORKS STREET WORKSHEETS AND BLUESHEETS FOR STREETS BOUNDING THE LOCUS PARCEL AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   C. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, DATED JULY 1964 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 663/2.
   D. NEW MECHANICAL BUILDING, GUY GANNETT PUBLISHING COMPANY, PORTLAND, ME, TUNNEL PLAN AND SECTIONS BY LOCKWOOD, GREENE ENGINEERS, INC, REVISED THROUGH MAY 12, 1965 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 203/2.
   E. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, REVISED THROUGH FEBRUARY 6, 1973 AND ON FILE WITH OWEN HASKELL INC.
   F. ALTA/ACSM LAND TITLE SURVEY OF CONGRESS STREET SITE, 385 CONGRESS STREET, PORTLAND, ME DATED JULY 1, 2009 BY SEBAGO TECHNICS INC, PROJECT NUMBER 09235.
8. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NGVD29 PER CITY STANDARDS AS VERIFIED BY A UNITED STATES COAST & GEODETIC SURVEY BRASS DISK LOCATED IN A GRANITE BLOCK OF THE CITY HALL BUILDING HAVING A PUBLISHED ELEVATION OF 69.66' (NAVD88 68.95')
8. THE CITY OF PORTLAND DISCONTINUED THAT PORTION OF CHAPEL STREET THAT FORMERLY RAN TROUGH THE SURVEYED PREMISES INCLUDING ALL UTILITY RIGHTS THEREIN '' RUNNING FROM CONGRESS STREET TO CUMBERLAND STREET" BY ORDER OF CITY COUNCIL ON FEBRUARY 5, 1973 AND RECORDED AT THE CITY OF PORTLAND RECORDS IN VOLUME 89, PAGE 61.
9. PURSUANT TO A CONVERSATION BETWEEN SEBAGO TECHNICS, INC. AND THE PORTLAND WATER DISTRICT, THE WATER LINE SHOWN AS BEING LOCATED IN THE DISCONTINUED PORTION OF CHAPEL STREET HAS BEEN REMOVED AND NO LONGER EXISTS.
10. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
11. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 230051 0013 B, HAVING AN EFFECTIVE DATE OF JULY 17 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF AREAS OF MINIMAL FLOODING.
12. BENCHMARK:

    BM-1 EASTERLY BOLT AT BASE OF UTILITY POLE ELEVATION: 61.55 (NGVD29)
13. PROPOSED UNITS LOT 1:

    PROPOSED HOTEL : 156 ROOMS
    PROPOSED RESIDENTIAL CONDOMINIUMS: 9 UNITS




LOCATION MAP N.T.S.




## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE/R.O.W. | |
| | ABUTTER LINE/R.O.W. | |
| N/F | NOW OR FORMERLY | |
| | BUILDING | |
| | DECK/STEPS/ OVERHANG | |
| | EDGE PAVEMENT | |
| | EDGE CONCRETE | |
| | PAVEMENT PAINT | |
| | CURB LINE | |
| BM-1 | BENCHMARK | |
| | GRANITE MONUMENT | |
| | IRON PIPE/ROD | |
| | DRILL HOLE | |
| | DECIDUOUS TREE | |

GRAPHIC SCALE
25 0 12 25 50
(IN FEET)
1 INCH = 25 FT.

## CONDITIONS OF APPROVAL:

PRIOR TO THE SUBMISSION OF THE PLAT FOR PLANNING BOARD SIGNATURE

1. THE SUBDIVISION PLAT SHALL BE FINALIZED TO THE SATISFACTION OF THE PLANNING AUTHORITY, DEPARTMENT OF PUBLIC WORKS, AND CORPORATION COUNSEL PRIOR TO SIGNATURE BY THE PLANNING BOARD; AND
2. THE APPLICANT SHALL SUBMIT ABILITY TO SERVE LETTERS FROM THE PORTLAND WATER DISTRICT FOR WATER AND SEWER SERVICE ASSOCIATED WITH PL-002156-2022.

PRIOR TO ISSUANCE OF A BUILDING PERMIT ASSOCIATED WITH PL-002156-2022

3. EASEMENTS AND LICENSES: THAT SIDEWALK & PUBLIC ACCESS EASEMENTS ALONG CONGRESS STREET, CUMBERLAND AVENUE, AND MYRTLE STREET SHALL BE FINALIZED TO THE SATISFACTION OF THE PLANNING AUTHORITY, DEPARTMENT OF PUBLIC WORKS, AND CORPORATION COUNSEL.

*PROJECT BENCHMARK*
*USC&G BRASS DISK SET IN GRANITE STEP*
*DESIGNATION: TIDAL 38 STA 84*
*STAMPED "1919/38"*
*NAVD 88 ELEVATION = 68.95'*
*NGVD29 ELEVATION = 69.66'*

## APPROVAL- CITY OF PORTLAND PLANNING BOARD

January 24, 2023 DATE

CHAIRPERSON

IN ACCORDANCE WITH TITLE 33 MRSA §652, SECTION 3, THE PROFESSIONAL SIGNATURE BELOW WILL BE ADDED AFTER THE PLANNING BOARD HAS SIGNED, AS AN ORIGINAL SIGNATURE, FOR RECORDING STANDARDS.

## SURVEYOR'S STATEMENT

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT WAS DONE IN ACCORDANCE WITH CHAPTER 90, PART 1 (PROFESSIONAL STANDARDS OF PRACTICE) AND PART 2 (TECHNICAL STANDARDS OF PRACTICE) OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

JACOB I. BARTLETT, PLS 2513 02/01/2023

STATE OF MAINE, CUMBERLAND COUNTY SS, REGISTRY OF DEEDS

RECEIVED February 15 20 23
AT 9 H 10 M A M AND
RECORDED IN
PLAN BOOK 223 PAGE 32
ATTEST: REGISTER

DANIEL L RILEY, PE 9967 JACOB I. BARTLETT, PLS 2513

| REV.: | BY: | DATE: | STATUS: |
|---|---|---|---|
| C | DLR | 01/11/2023 | SUBMITTED FOR SUBDIVISION APPROVAL |
| B | DLR | 12/02/2022 | SUBMITTED FOR SUBDIVISION APPROVAL |
| A | DLR | 11/18/2022 | SUBMITTED FOR SUBDIVISION APPROVAL |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel: 207-200-2100

SUBDIVISION PLAN
OF:
385 CONGRESS STREET
CONGRESS STREET AND PEARL STREET
PORTLAND, MAINE
FOR:
385 CONGRESS STREET LLC
2730 SENECA ROAD
WEST SENECA, NY 14224

RECORD OWNER:
385 CONGRESS LLC
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | DAB |
| CHECKED | DLR |
| DATE | 12/02/2022 |
| SCALE | 1" = 25' |
| PROJECT | 19371 |

SHEET 1 OF 1

F:\Projects\1900\19371\DWG\Design\Lot 2\19371 - SB - P2.dwg - 1/31/2023 2:07 PM - DAN RILEY

19371 - SB - P2.dwg, TAB:1 OF 1 SUBDIVISION PLAN

## ON STREET PARKING SCHEDULE

1. PARKING SIGNS MEETING CITY OF PORTLAND STANDARDS SHALL BE INSTALLED AT THE LOCATIONS INDICATED. SIGNAGE PROVIDED SHALL BE REVIEWED AND APPROVED BY THE CITY PARKING DIRECTOR. THE PARKING SCHEDULE SHALL BE AS NOTED BELOW UNLESS OTHERWISE APPROVED BY THE PLANNING AUTHORITY.

   A. SPACES ON MYRTLE STREET SHALL BE 30 MINUTE TIME LIMIT PARKING.

   B. SPACES ON CUMBERLAND AVENUE BETWEEN MYRTLE STREET AND PEARL STREET SHALL BE 2 HOUR TIME LIMIT PARKING

   C. SPACES ON PEARL STREET BETWEEN CUMBERLAND AVENUE AND CONGRESS STREET SHALL BE 2 HOUR TIME LIMIT PARKING

## LIGHTING FIXTURES LEGEND

A — CITY OF PORTLAND STANDARD STREET LIGHT- TECHNICAL STANDARDS FIGURE X-5F SEE DETAILS, COLOR GREEN
TOP LUMINAIRE: HOLOPHANE ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2X2-BDHF13-200CMC
LOWER LUMINAIRES: (2) HOLOPHANE PEDESTRIAN ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2X2-BDHF13-200CMC

B — CITY OF PORTLAND STANDARD STREET LIGHT- TECHNICAL STANDARDS FIGURE X-5B SEE DETAILS, COLOR GREEN
LOWER LUMINAIRES: (2) HOLOPHANE PEDESTRIAN ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2x2-BDHF13-200CMC

REFER TO CITY OF PORTLAND TECHNICAL STANDARDS SECTION 8 MUNICIPAL STREET LIGHTING STANDARDS FOR SPECIFICATIONS

## SITE PLAN KEY NOTES

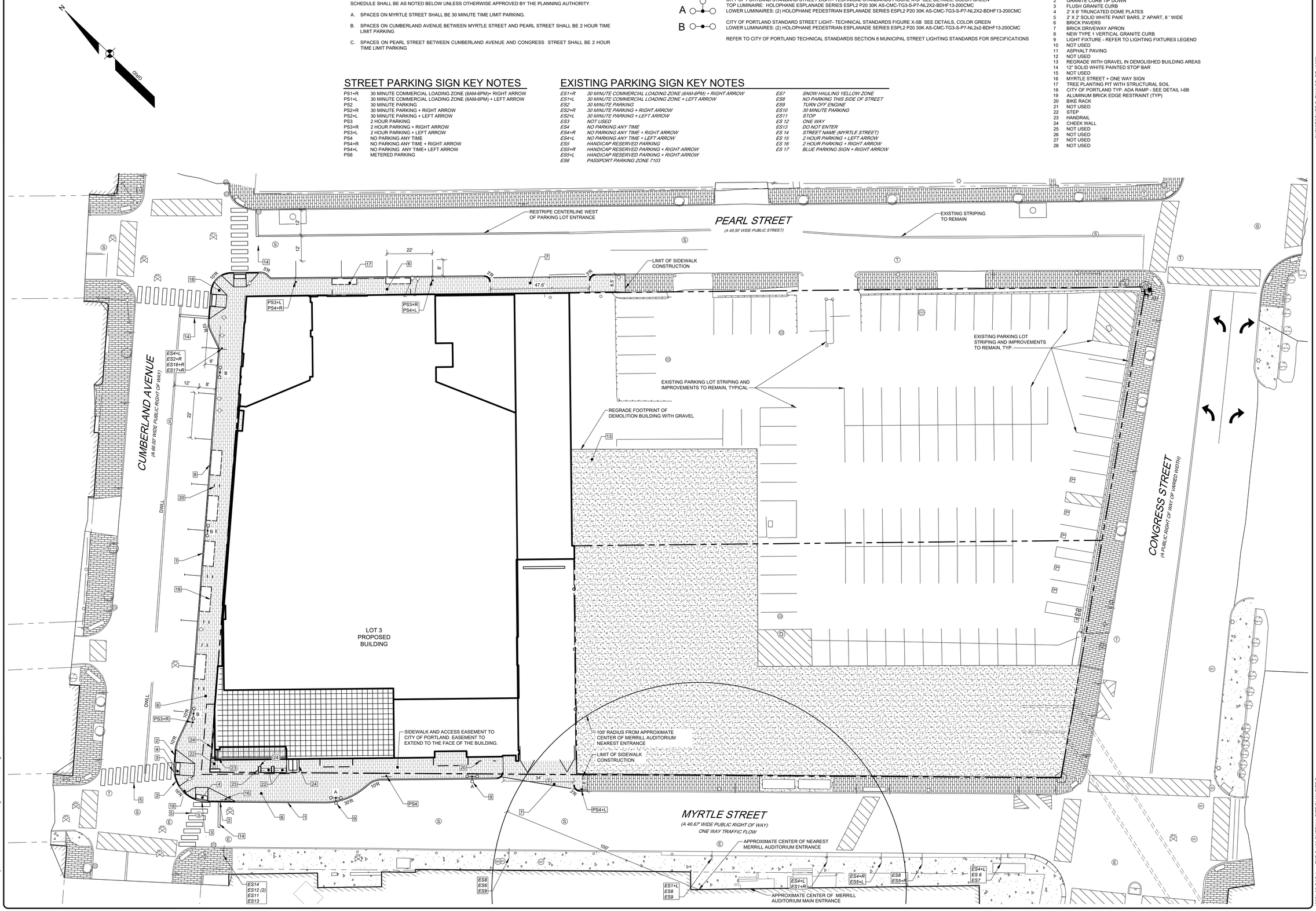
1 RESET SALVAGED GRANITE CURB
2 GRANITE CURB TIP DOWN
3 FLUSH GRANITE CURB
4 2' X 6' TRUNCATED DOME PLATES
5 2' X 2' SOLID WHITE PAINT BARS, 2' APART, 8 ' WIDE
6 BRICK PAVERS
7 BRICK DRIVEWAY APRON
8 NEW TYPE 1 VERTICAL GRANITE CURB
9 LIGHT FIXTURE - REFER TO LIGHTING FIXTURES LEGEND
10 NOT USED
11 ASPHALT PAVING
12 NOT USED
13 REGRADE WITH GRAVEL IN DEMOLISHED BUILDING AREAS
14 12" SOLID WHITE PAINTED STOP BAR
15 NOT USED
16 MYRTLE STREET + ONE WAY SIGN
17 TREE PLANTING PIT WITH STRUCTURAL SOIL
18 CITY OF PORTLAND TYP. ADA RAMP - SEE DETAIL I-6B
19 ALUMINUM BRICK EDGE RESTRAINT (TYP)
20 BIKE RACK
21 NOT USED
22 STEP
23 HANDRAIL
24 CHEEK WALL
25 NOT USED
26 NOT USED
27 NOT USED
28 NOT USED

## STREET PARKING SIGN KEY NOTES

| | |
|---|---|
| PS1+R | 30 MINUTE COMMERCIAL LOADING ZONE (6AM-6PM)+ RIGHT ARROW |
| PS1+L | 30 MINUTE COMMERCIAL LOADING ZONE (6AM-6PM) + LEFT ARROW |
| PS2 | 30 MINUTE PARKING |
| PS2+R | 30 MINUTE PARKING + RIGHT ARROW |
| PS2+L | 30 MINUTE PARKING + LEFT ARROW |
| PS3 | 2 HOUR PARKING |
| PS3+R | 2 HOUR PARKING + RIGHT ARROW |
| PS3+L | 2 HOUR PARKING + LEFT ARROW |
| PS4 | NO PARKING ANY TIME |
| PS4+R | NO PARKING ANY TIME + RIGHT ARROW |
| PS4+L | NO PARKING ANY TIME+ LEFT ARROW |
| PS6 | METERED PARKING |

## EXISTING PARKING SIGN KEY NOTES

| | |
|---|---|
| *ES1+R* | *30 MINUTE COMMERCIAL LOADING ZONE (6AM-6PM) + RIGHT ARROW* |
| *ES1+L* | *30 MINUTE COMMERCIAL LOADING ZONE + LEFT ARROW* |
| *ES2* | *30 MINUTE PARKING* |
| *ES2+R* | *30 MINUTE PARKING + RIGHT ARROW* |
| *ES2+L* | *30 MINUTE PARKING + LEFT ARROW* |
| *ES3* | *NOT USED* |
| *ES4* | *NO PARKING ANY TIME* |
| *ES4+R* | *NO PARKING ANY TIME + RIGHT ARROW* |
| *ES4+L* | *NO PARKING ANY TIME + LEFT ARROW* |
| *ES5* | *HANDICAP RESERVED PARKING* |
| *ES5+R* | *HANDICAP RESERVED PARKING + RIGHT ARROW* |
| *ES5+L* | *HANDICAP RESERVED PARKING + RIGHT ARROW* |
| *ES6* | *PASSPORT PARKING ZONE 7103* |
| *ES7* | *SNOW HAULING YELLOW ZONE* |
| *ES8* | *NO PARKING THIS SIDE OF STREET* |
| *ES9* | *TURN OFF ENGINE* |
| *ES10* | *30 MINUTE PARKING* |
| *ES11* | *STOP* |
| *ES 12* | *ONE WAY* |
| *ES13* | *DO NOT ENTER* |
| *ES 14* | *STREET NAME (MYRTLE STREET)* |
| *ES 15* | *2 HOUR PARKING + LEFT ARROW* |
| *ES 16* | *2 HOUR PARKING + RIGHT ARROW* |
| *ES 17* | *BLUE PARKING SIGN + RIGHT ARROW* |




NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16877

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16877 — REGISTERED PROFESSIONAL ENGINEER — 04/08/2025

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

OVERALL SITE PLAN
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC

RECORD OWNER:
385 CONGRESS, LLC
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET C-100

\\st-fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 OAS.dwg - 4/8/2025 10:04 AM - CHRIS TAYLOR

19371-05 OAS.dwg - TAB:C-100 OVERALL SITE PLAN SIZE:D

Y

March 18, 2025
19371-05

Taylor Colbeth
City of Portland Office of Planning and Urban Development
Congress Street
Portland, ME 04101

**Comment Response – Design Review No. 1:**
**PL-003179-2024, 385 Congress Street - Dated February 3, 2025 (Received March 5, 2025)**

Dear Taylor:

On behalf of Portland Music Holdings, LLC, we are pleased to submit the enclosed response to Design Review – First Review for the Major Site Plan for the proposed entertainment venue development at 385 Congress Street Lot 3 dated February 3, 2025, and received on March 5, 2025. Included with this comment response are revised building floor plans and elevations.

In response to comments and as part of the normal design process changes to the proposed development have occurred since the Site Plan application submission in December. Some of the more significant changes include reducing the volume of the building, by eliminating the roof over the bus parking area, and revisions and further definition to the building façade.

The elimination of the roof and enclosed bus spaces facilitates the potential use of the bus bays for Merrill Auditorium buses as discussed with staff. The bays are to be equipped with shore power outlets so that busses will not routinely idle in this space.

The Applicant is not prepared to respond to all of the staff comments at this time but thought it would be beneficial to provide you with revised floor plans and elevations prior to the workshop.

- Changes to the elevations have been made to create a cleaner, modern appearance and include deletion of metal channels, elimination of redundant metal panels or faux window infill, revised storefront windows to punch windows at the lobby along Cumberland Avenue, and revised vinyl lounge façade.
- The roll down door at the bus entrance has been revised to a bi-fold gate.
- The plan deletes an exterior mounted roll-down door enclosure over the loading dock entrance on Pearl Street, and
- Has relocated the elevator penthouse away from the edge of the Cumberland parapet. The building elevations have been revised to indicate steps at the main entrance consistent with the site plans.

- The revised plan relocated a portion of the artist suites from over the loading dock to the south mechanical well level and lowered stage roof and adjacent screen walls.

The following items address the design review comments received from the City, dated February 3, 2025, which require a response or additional information. Items in the staff comments noted as complete or referencing other comments are omitted for clarity. The City's comments are presented in italics for reference followed by our response.

DESIGN REVIEW COMMENTS:

*A. Creation of a cohesive identity.*

*A master development plan shall be designed to create a cohesive identity through building scale, massing, and articulation;*

*Staff comment: Staff requests that the Applicant resubmit building elevations incorporating Lot 1 (hotel) along Myrtle Street and Lot 2 (multi-family residential building) to illustrate the building relationship between these structures and the proposed music venue.*
**Response: The elevation views have been updated to include the adjacent hotel and residential developments.**
*Consistency of design and materials for streetscape and pedestrian amenities;*

*Staff comment: Staff requests that the Applicant resubmit plans with granite curb treewells per the City's technical manual section 4, Figure 4-4C. Additionally, Staff request that the Applicant revise the submission to clearly label the location of proposed bicycle racks along Cumberland Avenue.*
**Response: A meeting was held with Mark Reiland, City Arborist on March 7, 2025, with a follow-up email on March 10, 2025. Based on the meeting, it is our understanding that the City Arborist prefers a flush tree well without the granite curbing as shown on the proposed site plans stating:**
***"Yes, I absolutely agree that providing structural soil and a flush tree well border is preferred over the raised granite tree wells currently spec'd in the tech manual. Please include reference to our meeting on Friday and follow up email in the comment response letter. " Mark Reiland, City Arborist.***

**We we happy to provide either detial as directed by staff.**

*-Materials*

- *Quality Exterior Materials includes the detailing, articulation, transition, durability, and visual interest of the materials, both in their selection and placement. These aspects will be reviewed with special attention to the ground floors and areas most visible to pedestrians;*

  *Staff comment: Staff recommends that the applicant enhance the distinction between the brick base of the building and the standing seam metal panel on the upper portion.*

*This can be achieved by incorporating a brick or concrete band detail or the use of another architectural feature to create a clear visual separation between the building's lower and upper levels. See Figure 1 as an example of a successful break between the base of the building and the upper portions.*
**Response: The elevations have been revised as requested. A distinction between the façade materials is proposed with sheet metal flashing to provide visual separation. It is the architect's and applicants' opinion that adding a concrete element is not in alignment with the design style. We welcome a discussion with staff regarding this detail.**

*In addition, Staff recommends that the applicant eliminate the perforated brick parapet along the Myrtle Street frontage and instead continue the brick façade with a cornice detail. This would create a more prominent and cohesive edge that integrates seamlessly into the overall building design. The perforated design introduces an element that disrupts the building's cohesive architectural expression. See Figure 2 for an example of a successful parapet integrated into the building's overall façade.*
**Response: The perforated parapet and articulated brick are an integral part of the design style and intent. We welcome a discussion with staff regarding this detail.**

- Cumberland Avenue - The massing and function of the podium base along Cumberland shall be pedestrian scaled that responds to the surrounding neighborhood context.

  Staff comment: The proposed development includes pedestrian-scaled activation along the streets. Staff recommends additional fenestrations as indicated in Figures 3, 4, & 5.
  **Response: The elevations and fenestrations have been updated. The façade meets the design requirements for maximum blank wall space.**

- *Signage – Signage shall be integrated into the building design and respond to the storefront façade at the ground level and be pedestrian-scaled, especially along the Congress Street historic district;*

  *Staff comment: Staff requests more information for the materiality and illumination of the monument sign located at the corner of Myrtle Street and Cumberland Avenue. Additionally, staff recommend that the applicant consider including wall-mounted banners along the upper portions of the building on either Cumberland Avenue or Pearl Street.*
  **Response: The monument sign has not yet been fully designed but shows the scale and intent. Additional information will be provided in subsequent submittals.**

*The project at 385 Congress Street shall meet the following standards based on the B-3 Downtown Business Zone design standards in the City of Portland Design Manual, Land Use Code Section 14.6.4.I Design standards.*

*§(b)(1)a.1. Relationship of pedestrian environment:*

- *§(b)(1)a.1.i. General: The exterior design of portions of buildings within the first thirty-five (35) feet of height shall enhance the character, attractiveness, comfort, security, and usability of the street level pedestrian environment. Factors to be considered include the design, placement, character and quality of the following: Storefronts and building facades, Building entrances, Blank facades; and Special features*

  *Staff comment: Staff recommends an expansion of the storefront windows along the Cumberland Avenue façade to provide greater visibility into the ground floor use. Additionally, staff requests that the Applicant explore additional fenestration above the aluminum storefront / curtainwall along Cumberland Avenue as a more symmetrical arrangement.*
  *Staff recommends additional fenestration along Myrtle and Pearl Street to reduce larger expanses of blank facades facing the street, see figure 4 and 5.*
  **Response: The elevation drawings have been revised to allow more visibility into the lobby. Fenestration has been focused on the lower portion of the building to activate pedestrian areas. We are of the opinion that repeating the treatment of panels along the Pearl Street façade as shown in Figure 5 would dilute the uniqueness and function of the facility and create a monotone appearance. We believe that the proposed facade meets the design requirements and does not have a continuous plain that exceeds 20 feet. We welcome a discussion with staff regarding this detail.**

- *§(b)(1)d. Sidewalk areas and open space: The design of publicly accessible sidewalk areas and open space shall complement the general pattern of the downtown pedestrian environment, conform to special City of Portland streetscape programs described in the Technical Manual, and enhance the attractiveness, comfort, security, and usability of the pedestrian environment. Factors to be considered include the design, placement, character, durability, and quality of the following:*
  1. *Sidewalk, crosswalk, and street paving materials; Landscaping, planters, irrigation, and tree guards and grates; Lighting; Pedestrian amenities such as benches and other seating, trash receptacles, kiosks, bus shelters, artwork, directional and informational signage, fountains, and other special features; and Sidewalk vendors and sidewalk cafes.*

     *Staff comment: Staff requests that the Applicant resubmit plans with granite curb treewells per the City's technical manual section 4, Figure 4-4C. Additionally, Staff request that the Applicant revise the submission to clearly label the location of proposed bicycle racks along Cumberland Avenue.*
     **Response: See the earlier response above regarding granite tree wells. The site plan will be revised to more clearly identify the bicycle racks.**

- *§(b)(1)e. Relationship to existing development:*

2. *Standards for increasing setback beyond street build-to line: A proposed development may exceed maximum setbacks as required in Section 14-220(c) only where the applicant demonstrates to the Planning Board that the introduction of increased building setbacks at the street level:*

   *<u>Staff comment:</u> v. Staff requests that the applicant indicate all mechanical equipment with all elevations along the street facing facades. The Myrtle Street – west elevation indicates rooftop appurtenances as corrugated metal panels. Rooftop appurtenances shall be screened and located away from building edges.*
   **Response: Mechanical equipment has been included on the revised elevation drawings. Mechanical equipment is set back from the edge of the roof and will be screened from view.**

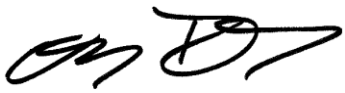
- *§(b)(1)h. Setbacks for existing structures: The location and design of proposed structures shall not create a detrimental impact on the structural integrity or the safety of adjacent structures or the occupants thereof;*

  *Staff comment: The applicant is requested to describe the potential party wall condition between the proposed Lot 3 and approved hotel at Lot 1.*
  **Response: Each development will have its own structural wall along the common property line, with an air gap between walls. The elevation view has been updated to show the interim condition after the music hall is completed and before the adjacent developments are constructed.**

Thank you for your continued time and attention to this project. We look forward to continuing the design and review of the project with staff and the Planning Board.

Sincerely,

SEBAGO TECHNICS, INC.



Christopher P. Taylor, PE
Project Manager

SEBAGO TECHNICS

Z

April 9, 2025
19371-05

Taylor Colbeth
City of Portland Office of Planning and Urban Development
Congress Street
Portland, ME 04101

**Comment Response – Staff Comments No. 1:**
**PL-003179-2024, 385 Congress Street - Dated March 5, 2025**

Dear Taylor:

On behalf of Portland Music Holdings, LLC, we are pleased to submit the enclosed response to comments for the Site Plan and Subdivision Application for the proposed entertainment venue development at 385 Congress Street Lot 3.

The following items address those comments received from the City, dated March 5, 2025, which require a response or additional information. Items in the staff comments noted as complete or referencing other comments are omitted for clarity. The City's comments are presented in italics for reference followed by our response.

General Comments

*The applicant shall check Site Plan Key Notes. There are callouts using numbers that are not identified in key notes.*

**Response: Noted. The site plans (sheets C-100 and C-101) have been revised. Site Plan Key Note 3 is listed as flush granite curb on the revised site plan.**

*Site Plan Review Standards (Sec 13.6)*
*Transportation Standards (Sec 13.6.1)*

*Impact on Surrounding Street System*

- *Due to the significant change in programming from that assumed in the 2023 Traffic Movement Permit (TMP) for the 385 Congress Street MDP, and that the proposed project is anticipated to increase traffic levels by over 100 peak hour trips, the applicant shall be required to submit a new TMP Application. Upon receipt and approval of the TMP application, a traffic scoping meeting will be scheduled. Our traffic reviewer has provided feedback to the applicant for preparing the TMP Application, as outlined below:*
  1. *Provide backup information for the assumed 2.3 persons per vehicle assumption.*

2. *The city will provide guidance on mode share for the project.*
3. *It was assumed that the event venue opens for attendees 30 minutes from the start of an event. In reviewing existing music venues information, most events open one hour before the event begins.*
4. *Will there be events that start prior to 7:30PM.*
5. *Provide backup data for arrival distribution.*
6. *TMP process will require an evaluation of pedestrian and bicycle facilities in the vicinity of the project.*

**Response: These items will be addressed and incorporated in Sections 1-6 of a TMP application to be submitted. We will work with city staff to receive input on mode share for the project. The typical event will start at 8 pm and doors will open 1 hour before the start at 7 pm. The vast majority of events will be in the evening. When afternoon events occur they are primarily on weekends.**

*The applicant shall provide turning templates and documentation demonstrating that the curb extension at the Cumberland/Pearl corner can accommodate vehicular maneuverability while enhancing pedestrian safety.*

**Response: Turning template exhibits have been included in the revised upload documents. This includes existing and proposed turning movements for vehicles at the intersections of Cumberland Avenue and Pearl Street.**

- *The applicant shall provide a vehicle queuing detail plan with regards to the curb extension at the Myrtle/Cumberland intersection. DPW supports a curb extension of up to 6 feet but does not support extensions exceeding this length.*

  **Response: The development proposes a curb extension of 6 feet in front of the main entrance on Myrtle Street. The proposed loading zone on Myrtle Street is intended to be used for buses to back up into the off-street bus parking area. It is not intended as a passenger vehicle pick up/drop off.**

- *The applicant shall square off the proposed pavement repair in Pearl Street.*

  **Response: The site plans have been updated to show full-width pavement repair in Pearl Street.**

- *City staff recommends that the applicant remove the proposed bollards and mountable curb and revise the design to incorporate granite curbing that runs coterminous with where the bollards were proposed to accommodate an additional loading area. Additionally, an easement or license agreement for the sidewalk on private property must be completed before a building permit is issued.*

  **Response: The plans have been updated to remove the proposed bollards and mountable curb. The plans show granite curbing with a revised paved loading area.**

- *The applicant shall provide the following turning templates to demonstrate acceptable movements:*
  1. *From Myrtle Street onto Cumberland Avenue*
  2. *From Cumberland Avenue to Myrtle Street (to confirm that Merrill Auditorium can continue to pull buses in from this direction)*

3. *From Pearl Street onto Cumberland Avenue and Congress Street*
4. *A turning movement alternative that does not utilize mountable curb and the City sidewalk.*

**Response: Turning template exhibits have been included in the revised upload documents to show the requested turning movements.**

- *The construction management plan shall be revised to include more information on closures on Cumberland and crane activity. Can crane be set up on Lot 2 and Cumberland remain open?*
  **Response: Construction equipment will be placed within the construction limits to avoid road closures as much as possible. Based on the building size and orientation a crane will be required to be placed in the street for periods of construction. This will be minimized to the extent possible.**

*Access and Circulation*

- *Proposed improvements and existing conditions in the City ROW shall be identified and dimensioned on the plan view sheets. For example, ROW, street, lanes sidewalk, esplanade driveways, tip downs, and other improvements widths as well as when a width changes.*
  **Response: Plans have been revised to provide additional dimensions of proposed improvements within the City ROW.**

- *The site plan shall be revised to show proposed sidewalk easement.*
  **Response: The site plan (Sheet C-101) has been revised to include a note calling for a sidewalk and public access easement in front of the proposed building along Myrtle Street. We request that the sidewalk and public assess easement be a condition of approval to be finalized prior to building permit approval, which is consistent with the conditions of the approved subdivision.**

- *Plans shall show sidewalk and sidewalk easement from proposed hotel site plan at property line along Myrtle Street.*
  **Response: The proposed sidewalk along Myrtle Street for the approved hotel project is shown on an exhibit titled Overall Site with Hotel Exhibit.**

- *The applicant shall check sidewalk cross slopes. There appears to be several areas where proposed cross slopes exceed 2% on Cumberland Avenue.*
  **Response: Cross slopes have been revised for the sidewalk along Cumberland Avenue to not exceed 2%. The proposed sidewalk grading is shown on sheet C-201.**

- *Staff recommends that the applicant consider installing heated sidewalks along the building's main entry and the entire Myrtle Street façade, extending partially down Cumberland Avenue to align with the main entrance vestibule. This would help minimize snow storage impacts in an area expected to experience increased pedestrian activity.*
  **Response: The operator of the facility will be responsible for clearing snow from the sidewalk and winter maintenance around the facility. If snow storage availability is**

**exceeded snow will be removed and disposed of off site. The business is dependent on pedestrian access. It is in the facility operator's best interest to maintain clear access around the facility.**

- *Staff recommends extending the main entry marquee to cover the full length of the stairs along Myrtle Street, providing protection during wet weather events.*
  **Response: The canopy at the main entrance has been revised and covers the proposed steps at the main entrance. See sheet C-101 and Floor Plan sheet A2.1.**

*Parking*

- *The applicant shall update street level site plan to include the location of the proposed bike racks and include the proposed bike rack in the detail sheets.*
  **Response: Site Plan (sheet C-101) has been revised to call out the location of proposed bike racks and detail sheets have been updated to include bike rack detail (sheet C-506).**

- *Due to the loss of existing metered parking spaces on Myrtle Street, the applicant must provide an equivalent or greater number of on-street parking spaces along Cumberland Avenue. To compensate for the reduction of sidewalk space within the public right-of-way on Myrtle Street to accommodate an additional loading area, City staff recommend shifting the building's Pearl Street façade back by a minimum of approximately 5 feet from the property line. This adjustment to the building along Pearl Street would allow for the creation of an extended sidewalk as well as additional on-street parking spaces and/or a loading area along Pearl Street between Cumberland Avenue and loading bays 1 and 2.*
  **Response: The development proposed to eliminate 7 parking spaces along the site frontage on Myrtle Street. The development proposed 8 parking spaces along the frontage of Cumberland Avenue. This is an increase of 4 parking spaces along Cumberland Avenue. The plans have been revised to include 3 additional parking spaces along Pearl Street Frontage (See sheets C-100 and C-101).**

*Transportation Demand Management*

- *The current plan proposes no parking, which complies with the Land Use Code. To ensure a comprehensive approach to site access, the applicant should coordinate with the City and METRO to explore bus service options to and from the site, as well as potential improvements or partnerships to encourage patrons to use public transit.*
  **Response: We have reached out to METRO to set up and coordination meeting. We will work with METRO and city planning staff regarding this comment.**

*Environmental Quality Standards (Sec. 13.6.2)*

*Preservation of Significant Natural Features*

- *The applicant shall review Section 3 of the Technical Manual and submit a completed LID scoring worksheet as part of their second submission. The LID scoring tool can be found in Appendix 3A of the Technical Manual.*

**Response: Please see the completed LID scoring worksheet included at the end of Section 13 Environmental with this submission.**

*Site Landscaping and Buffers*

- *The applicant shall review Standard 13.6.2.B.5 and update site plan accordingly. If the applicant is unable to provide additional street trees, the applicant will be required to contribute to the City's tree fund, per Technical Manual Section 4.1.3.*
  **Response: The design has been revised to include five street trees along Cumberland Avenue. Given the limited space and presence of underground utilities, it may not be possible to provide more street trees. It is understood that the applicant will be required to contribute to the City's tree fund.**

- *The applicant shall revise plans to include granite curb tree wells per the City's Technical Manual section 4, Figure 4-4C.*
  **Response: A meeting was held with Mark Reiland, City Arborist on March 7, 2025, with a follow-up email on March 10, 2025. Based on the meeting, it is our understanding that the City Arborist prefers a flush tree well without the granite curbing as shown on the proposed site plans stating:**
  **"Yes, I absolutely agree that providing structural soil and a flush tree well border is preferred over the raised granite tree wells currently spec'd in the tech manual. Please include reference to our meeting on Friday and follow up email in the comment response letter. " Mark Reiland, City Arborist.**

  **We are happy to provide either detail as directed by staff.**

*Water Quality, Stormwater Management and Erosion Control*

- *The applicant should provide an erosion and sedimentation control plan. Notes and details for erosion control materials have been included in submitted materials, but not a plan that shows the locations of erosion and sedimentation control measures. For this site, some of the most critical erosion control will be protecting catch basins around the site.*
  **Response: The plan set has been updated to provide erosion and sediment control information. The Grading Plan (Sheet C-301) shows locations for stabilized construction entrance and catch basin inlet protection.**

- *As part of this project, existing buildings are being demolished, and a portion of the site is going to be graded and left with gravel surface. This area slopes directly towards the new building, some existing and proposed catch basins on the site, and Pearl Street. Erosion control should be identified to remain in place around this area, pending how phasing of the rest of the site's development is timed. The applicant shall clearly identify this area on the plans included in this set, including the site and utility plans.*
  **Response: The plan set has been updated to provide more defined erosion and sediment information. Erosion control measures will be left in place at the catch basin that received runoff from the temporary gravel surface. A note has been added to the grading plans (Sheets C-300 and C-301) to this effect.**

- *The stormwater report includes an Inspection, Maintenance, and Housekeeping plan that is associated with construction and post construction maintenance on the site. This plan shall be updated to address project-specific conditions including post-construction housekeeping of the gravel area that will be remaining on the site. The post-construction inspection plan should also include the proposed subsurface storage systems, and address any specific inspection requirements impacted by the installation of these systems within the building footprint.*
  **Response: The Inspection, Maintenance, and Housekeeping plan has been revised to include project specific conditions including information regarding maintenance for the gravel area remaining at the site and the proposed subsurface storage systems.**

*Public Infrastructure and Community Safety Standards (Sec. 13.6.3)*
*Public Utilities*

- *The applicant shall update the utility plan to depict the covered parking structure's floor drain system connection into the proposed oil/water separator.*
  **Response: The Utility Plan (sheet C-300) has been revised to show the proposed loading dock's floor drain system connection to the proposed oil/water separator.**

- *The applicant shall provide clarification on the electrical layout around the site. Some existing overhead electrical systems on Pearl Street and Cumberland Avenue that are not identified for demolition appear to conflict with project features including building corners, proposed trees, and grading associated with sidewalks and ramps. The applicant shall review site and overhead electrical for potential conflicts and ensure that utilities are located below grade.*
  **Response: In coordination with CMP, the development program has been revised to keep the overhead utilities along Cumberland Avenue. The overhead electrical will be relocated on alley arms away from the proposed building. The demolition and Utility plans (Sheets C-002 and C-300) have been revised to reflect the proposed electrical design.**

*Site Design Standards (Sec. 13.6.4)*
*Massing, Ventilation, Wind, and Heat Impacts*

- *The applicant shall revise elevations to include average grade and the intervals and measurements taken to determine average grade.*
  **Response: An average grade exhibit has been included at the end of revised section 5 (Zoning Analysis Table).**

- *The applicant shall screen rooftop mechanicals/HVAC equipment.*
  **Response: Screening walls are included in the design along portions of Myrtle and Pearl Street and at the intersection of Cumberland Ave and Pearl Street. The mechanical units located near the Myrtle and Pearl Street facades are located behind the screening walls. The remaining rooftop mechanical equipment is located towards the center of the**

**building to reduce visibility from the street level. Additionally, the mechanical equipment will have painted enclosures to minimize the appearance.**

*Exterior Lighting*

- *Technical Manual Lighting Standard has changed from Section 10 to Section 8. Revise multiple locations.*
  **Response: The plans (Sheets C-100 and C-101) have been revised to reflect the correct Technical Manual Section.**

Thank you for your continued time and attention to this project. We look forward to continuing the design and review of the project with staff and the Planning Board.

Sincerely,

SEBAGO TECHNICS, INC.

Christopher P. Taylor, PE
Project Manager

**Response to Planning Workshop Comments**
5 March 2025

## Design Concept

1. The design takes a cue from early to mid-century brick buildings while maintaining a contemporary expression. A number of early brick structures, some in Portland convey a clean and unencumbered expression as illustrated on the palette sheet. There is no precast or stone articulation around the windows and cornice. The simplicity and clean lines of the Music Hall is reflected by a simple, painted metal cornice between the brick and metal panels above, a change in the brick plane and pattern through articulation and perforation, and by punched windows with traditional divided lites in lieu of storefront. The Portland Music Hall is intended to capture the flavor of Portland's architectural vocabulary while reflecting the function of the facility in a contemporary fashion.

## Response to the Workshop comments

1. *The board articulated the requirement to activate pedestrian areas along Cumberland and Pearl Street facades as much as possible.*

   The division and scale of the brick bays reflect the residential massing across Cumberland Avenue. The façade along Cumberland is broken up by a change in the brick plane, niches, display windows, doors and metal panel bays at street level.

   The Pearl St. façade has been refined by adding a mural (potentially lit) in the middle of the recessed brick bay that creates interest and further activates the façade. This introduces a clean, distinctive expression along the street and avoids a uniform rhythm of windows. There are no blank brick walls more than 20' long.

   As noted in the workshop, the elevator penthouse has been relocated away from the Cumberland parapet and the rooftop mechanical units will be setback and painted. The theater is not overpowering, it is designed in context with the surrounding environment.

2. *The board enquired about the outdoor terrace.*

   The outdoor terrace is a seasonal terrace that serves the vinyl lounge. The capacity of the full terrace is 185 persons.

PC 2

8:47 AM (7 minutes ago)

Abby Fuller <fullerwollman@gmail.com>
to planningboard@portlandmaine.gov

Dear Planning Board,

I vehemently oppose approving Live Nation's proposal to build a 3,300 person life venue downtown. The primary reason is that the parking and traffic congestion would be atrocious. It's already difficult to find parking spaces downtown, and this would make it astronomically worse. In addition, local restaurants and hotels are already well supported by tourists. Finally, the existing smaller local venues for musical acts are pleasant places and are sufficient for a city of our size. If people want to see major performers, they can - and do - go to Boston or the summer outdoor festivals.

Thank you,

Abigail A. Fuller

Carter Frank <cfrank@portlandmaine.gov>

# Letter of Reference, Don Law, Chairman of Live Nation

1 message

**Aleksandra Tugbiyele** <ATugbiyele@baafdn.org> Tue, Apr 1, 2025 at 12:10 PM
Reply-To: atugbiyele@baafdn.org
To: "Planningboard@portlandmaine.gov" <Planningboard@portlandmaine.gov>

Good afternoon Members of the Planning Board, City of Portland,

I am reaching out on behalf of Denella J. Clark, President and CEO of the Boston Arts Academy to share a reference for Don Law, Chairman of Live Nation. Attached, please find Ms. Clark's letter of reference, and her direct contact information for any questions.

Thank you for your time and consideration.

With kind regards,

Aleksandra Tugbiyele

**Aleksandra Tugbiyele (2-B-L-A), she/hers**

Chief of Staff and Board Clerk

Boston Arts Academy Foundation

(617) 943-9209 * atugbiyele@baafdn.org

BOSTON ARTS ACADEMY FOUNDATION

126 Brookline Avenue, 3rd Floor, Boston, MA 02215

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**D. Law Reference to Planning Board from Denella J. Clark.pdf**
252K

BOSTON ARTS ACADEMY FOUNDATION

**Denella J. Clark**
President and CEO

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**Sandra Gordon**
Founding Chair

March 31, 2025

Planning Board
City of Portland
389 Congress Street
Portland, ME 04101

Dear Planning Board Members David Silk, Austin Smith, Marpheen Chann, and Brandon Mazor,

It is with great pleasure that I write on behalf of Don Law, a great neighbor, supporter, and partner of the Boston Arts Academy Foundation (BAAF), and students of the Boston Arts Academy (BAA). Located across the street from the MGM Fenway Music Hall, BAA is the only public high school for the arts in the city of Boston.

I met Don in 2019 when the MGM Fenway was preparing for their grand opening. Don reached out to me, wanting to learn more about our students and to invite them to perform during their opening weekend. I am excited to share that the BAA students made history that weekend as the first performers on the MGM Fenway Music Hall's stage.

Don's support of our students did not stop there- our partnership has brought more performance opportunities for our students, as well as internships. The MGM has even hosted the Graduation exercises for the Class of 2023.

In October of 2024, Don was recognized for his contributions to the arts, specifically in Music, by the Board of Directors and the entire BAAF Community at BAA HONORS, our signature event and largest annual fundraiser recognizing individuals who are leaders in our community and celebrating the talents and hard work of our student performers. This annual celebration of the arts benefits BAA where, as a full-inclusion school, we serve nearly 500 students each year who represent the diversity of Boston's 23 neighborhoods, with approximately 90% identifying as Black, Latinx, Multiracial, or Asian.

Don and the MGM team welcomed the Foundation and more than 550 of our supporters to the MGM last year for HONORS. He also helped us secure a guest appearance by James Taylor, who invited our students to perform with him on the MGM stage. After the event, Don supported the establishment of scholarships for our students interested in pursuing a music and arts education.

Don's commitment to our students and the Boston Arts Academy Foundation is remarkable. I believe that Philanthropy, by definition, is the love of humankind. Here at the Boston Arts Academy Foundation, we know that talent is equally distributed within our community, but opportunity is not. Don's work as a champion for the students of BAA and Boston Arts Academy Foundation embodies philanthropy and love in all forms.

I can unequivocally attest that Don Law and Live Nation would be a great addition to your community. If you have any additional questions, please do not hesitate to contact me directly at (617) 650-3434 (Cell) and dclark@baafdn.org.

With warmest regards,

Denella J. Clark
President and CEO
Boston Arts Academy Foundation

126 Brookline Avenue
3rd Floor
Boston, MA 02215
T 617.650.3434
**baafdn.org**

PC 4

From: Andres Llorente <andresfllorente@googlemail.com>
Date: Thursday, March 27, 2025 at 8:38:23 PM UTC-4
Subject: No to Ticketmaster/Live Nation
To: planning@portlandmaine.gov <planning@portlandmaine.gov>

Again, this seems like a no-brainer but I still worry the City of Portland will find a way to make a terrible decision.

Ticketmaster Live Nation is a heartless greedy monopoly that does not embody the values of Portland, Maine. Please do not let them construct a totally unnecessary venue and accompanying parking lot in downtown Portland. That site is better used for a restoration of Lincoln Park to its original glory and badly needed housing. The proposal is a waste of valuable space that would compete directly against the more local State Theater, Civic Center, Aura, and Merrill Auditorium...essentially pitting the city against itself.

It is shameful that you have even let it get this far.

NO to Ticketmaster Live Nation. Now and forever.

Think local. Think community.

Andres Llorente
61 Sherman Street

Carter Frank <cfrank@portlandmaine.gov>

# Opposition to Live Nation

1 message

**afahraymusic** <afahraymusic@gmail.com> Tue, Mar 25, 2025 at 1:42 PM
Reply-To: afahraymusic@gmail.com
To: planningboard@portlandmaine.gov

Hey Planning Board,

The whole thing with Live Nation building a venue here like naahhh. I oppose that.

Thank you,
Angie

Carter Frank <cfrank@portlandmaine.gov>

# 3,350 seat venue opposition

1 message

**'Ashley Beaupre' via Planning Board** <planningboard@portlandmaine.gov> Tue, Mar 25, 2025 at 1:50 PM
Reply-To: ashley.beau@icloud.com
To: planningboard@portlandmaine.gov

Dear Planning board,

As a long time Portland resident, I have witnessed firsthand how much gentrification has hurt our community and economy.

I would like to make my concerns about the live nation partnership to open a new large venue known. I do not support this, this would be incredibly detrimental to our small local musicians & venues.

Please remember to support the people who are trying to live and survive here, the ones who are trying to keep Portland great. Do not allow a major company to funnel money out of our already struggling community.

I’m begging you to please support the people of Portland and deny this project from happening.

Ashley Beaupre
Portland resident of over 10 years.

PC 7

Bessie Sandberg <bessie@rootedentertainment.com> Mar 25, 2025, 5:27:49 PM (15 hours ago)

to Planningboard@portlandmaine.gov

To whom it may concern;
As a concert goer and production company owner, i fully and wholeheartedly oppose the live nation development in Portland Maine.
Please keep venues local and support our local artists!!!
-With all my love and support for healing and connecting through music,

Bessie Sandberg
Rooted entertainment
Vermont

PC 8

Carter Frank <cfrank@portlandmaine.gov>

# Comments on Portland Music Holdings application, PL-003197-2024

1 message

**'Brian Rayback' via Planning Board** <planningboard@portlandmaine.gov> Thu, May 1, 2025 at 1:23 PM
Reply-To: brayback@pierceatwood.com
To: "planningboard@portlandmaine.gov" <planningboard@portlandmaine.gov>
Cc: "TGoldenfarb@ramcompaniesusa.com" <TGoldenfarb@ramcompaniesusa.com>, "Anastasia Contos (ancontos@yahoo.com)" <ancontos@yahoo.com>

Dear Chair Mazer and Members of the Planning Board,

Please find attached comments from our client, Top of the Old Port Parking, on the pending application of Portland Music Holdings. We look forward to discussing this further with all parties involved.

Kind regards,

Brian Rayback

**Brian M. Rayback**
Chair, Environmental & Land Use Practice Group
PIERCE ATWOOD LLP

Merrill's Wharf
254 Commercial Street
Portland, ME 04101

**PH** 207.791.1188
**FAX** 207.791.1350
**CELL** 207.653.0717

brayback@pierceatwood.com BIO ▸

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**2025-05-01 Letter to City of Portland PB re Comments on Portland Music Holdings Pending Application(18120052.1).pdf**
190K

May 1, 2025

**VIA EMAIL**
planningboard@portlandmaine.gov

Chair Brandon Mazer & Members of the Planning Board
City of Portland
389 Congress Street
Portland, ME 04101

Re: 385 Congress Street – Live Nation Music Venue
PL-003197-2024

Dear Chair Mazer and Members of the Planning Board:

We write to offer comments on the pending application of Portland Music Holdings, LLC, for the Live Nation music venue at 385 Congress Street. A portion of the project site – where tractor trailer trucks will enter and exit the music venue – is located across from the only entrance and exit to our parking facility on Pearl Street, Top of the Old Port Parking. Although we do not oppose the project, we are concerned about the impact of the project on our operations, which on an average day support the needs of over 700 individuals coming to the city. We respectfully ask that the Planning Board consider what we believe are several reasonable steps to mitigate the potential traffic and safety impacts of the project, both during construction and during regular operations, on our business and the surrounding neighborhood.

## I. Ordinance Framework

As an initial matter, we note that the transportation standards in the Land Use Code provide that the applicant must demonstrate that its project does not create safety hazards from vehicular traffic or significantly increase traffic congestion and must also generally ensure that the project provides safe access that does not conflict with existing turning movements or traffic flows.

First, under Section 13.6.1.A:

> The provisions for vehicular loading and unloading, parking, and vehicular and pedestrian circulation on the site and onto adjacent public streets and ways and the incremental volume of vehicular . . . traffic will not:
>
> 1. Create or aggravate any significant hazard to safety on the surrounding street network.
>
> 2. Substantially increase congestion on any street without mitigation proportionate to the level of impact.

Second, under Section 13.6.1.B(1), the following standards also apply:

> a. All development subject to this article shall provide safe and reasonable access . . . .
>
> e. Points of access and egress shall be located to avoid conflicts with turning movements and traffic flows.

In short, the Planning Board has discretion to ensure that new projects do not create undue congestion or safety problems due to vehicular traffic.

**II. Comments on Application**

The primary impacts of the proposed music venue on the Top of the Old Port will occur during both its construction phase and during the course of its regular operations. The most substantial impacts will be because of traffic on Pearl Street. The venue proposes two off-street parking spaces for tractor-trailer trucks that will be accessed from Pearl Street, almost directly across from the existing entrance and exit to the Top of the Old Port. Further during construction substantial improvements to infrastructure beneath Pearl Street are required that will no doubt cause material street closures. As discussed in greater detail below, we have two basic concerns about these impacts. First, during construction, we ask that traffic flow not be interrupted on Pearl Street. Second, once the facility is operational, we ask that the Planning Board consider ways to ensure that the tractor-trailer parking does not unduly interfere with traffic flow on Pearl Street or otherwise create a safety hazard.

With respect to the construction process, we understand that the applicant's filings require upgrades to certain underground utility infrastructure, such as for water, sewer, and stormwater, on Pearl Street. Given that the only access and egress to Top of the Old Port is via a curb cut on Pearl Street, we recommend that the applicant be required during construction to keep at least one lane of traffic flowing at all times, and to otherwise minimize the disruption to traffic from shutting down or restricting use of the local roadways. As one option, the work might be required to occur at nighttime, when traffic is typically greatly reduced. At a minimum, we would ask that the work not be done during the morning (7:30-9:30 AM) or afternoon (3:30-5:30 PM) rush hours. Otherwise, we are concerned that our customers will be unable to enter or exit our parking lot or otherwise find long delays when they try to do so. That would effectively shut down our operations on such days.

Additionally, the placement of the crane on Cumberland Avenue will restrict traffic flows on a major access road to not only our business but Portland as a city. The project proponents would appear to have access to ample land that allows for off-street placement of the crane. The entirety of the former Press buildings, including the portions of the land retained by Reger Dasco, will be demolished for the purpose of this project's construction, benefiting both landowners, and making available open space to place the crane off-street. It seems appropriate to ask the property owners benefiting from the development to bear the burden of hosting the crane on their own vacant land rather than to have others in the city to bear the nuisance and economic impact of the crane.

With respect to the operation of the venue once it is built, we are particularly concerned with the impacts of tractor-trailer trucks trying to park in a small area at the venue from the relatively narrow Pearl Street. The turn radius analysis provided by Sebago Technics reflects a difficult set of maneuvers that requires the drivers to cross the yellow line into opposing traffic. As depicted in the turn radius analysis these will be difficult maneuvers that will block traffic in both directions, presenting safety issues given the lack of room for the existing traffic to move out of the way. As is the standard safety practice amongst traffic engineers when a maneuver crosses the yellow line into opposing traffic, we think it is appropriate to enforce the typical steps to ensure traffic safety – restricted hours and possibly a setback of the garage entrance.

- We believe that more information is required to evaluate the turning radius for the trucks entering and exiting the venue. Fundamentally, can the trucks consistently turn into the site from Pearl Street without causing safety issues or congestion? The turning plan provided in the application materials seems to show that it will be challenging to make the turn both into and out of the site, and that it will take a significant amount of space on Pearl Street to do so by blocking two lanes at a time nearly to the intersection of both cross streets (Cumberland Avenue and Congress Street). This seems likely to require expert drivers and plenty of patience from other vehicles on the street, if it can be done at all. The site may need to be redesigned to provide more room for these maneuvers. There should also be a plan, akin to what has apparently been presented for the tour buses on Myrtle Street, for temporary traffic control measures and on-site personnel to stop or shift traffic, as needed, while vehicles are entering and exiting the site.

- We recommend that tractor-trailer trucks be limited to entering and exiting the venue during nighttime hours only (9:00 PM to 6:00 AM), as we understand may be done at Merrill Auditorium already. This will ensure that the difficult movements required to enter and exit the facility will have the least disruption to traffic on Pearl Street and the surrounding area, which will necessarily improve safety.

We appreciate your consideration of our perspective and look forward to continuing to work with you on this project. Please do not hesitate to contact me directly at ancontos@yahoo.com or (617) 834-1936 if you have any questions.

Sincerely,



Anastasia Contos
Manager

cc: Todd Goldenfarb, Portland Music Holdings
Brian Rayback, Pierce Atwood

PC 9

**Cam Jones** camjones0@gmail.com via portlandmaine.gov 11:56 AM (1 hour ago)
to Planningboard@portlandmaine.gov

Hi there -

My name is Cam Jones, I am a musician, a photographer, and most importantly a born and bred Portlander. I have been an active and contributing member of our arts scene since I could set foot in a bar. I've played just about every venue in this city several times over, I have taken photos of musicians on those stages, I go as a fan, I go because they are owned, operated, and employ my friends and people I care about.

The proposed venue of this size is something that our small city and state cannot sustain, I am not saying this as a member of a team who is opening a mid sized club in the fall of this year, I am saying it as a concerned citizen who has been priced out of the city I grew up in. Since the announcement of this proposal I have seen zero public market research but yet countless comments online of people asking why something this size is needed, and many comments pining for a smaller venue like the now closed Port City Music Hall which held around 5-600 people.
The constant comparison to Boston does not make sense in a city our size as well. The greater Boston area currently has 4 MILLION people which gives way for Live Nation, Bowery, and independent venues to coexist. Even the state of Maine cannot sustain a venue run by a cooperation this size and have an ecosystem where each existing venue can run as is.
This is not "competition". This is Walmart. This is Amazon.

As far as I know there is no plan for true parking solution in this proposal. That is absolutely asinine. While the portland peninsula may be very walkable, that only would account to a small % of the people who would actually attend a show on a regular basis. Ride shares are hardly worth it due to surge pricing, and our public transpiration as it stands is very poor. Most people coming into Portland drive their cars.

In my time as a touring musician I've played shows in towns that used to have an incredible local ecosystem of artists and venues with a dedicated audience that would come out in support no matter what. More recently these towns have been injected with outside money by larger, unchecked monopolies (i.e. Livenation) which in turn gentrifies the community and pushes the people who made these places appealing to begin with. Does that sound familiar?

In recent years, per votes by some people on this planning board and city council, this city has become harder and harder to live in, open, operate, and sustain a business and approving this will make it even harder, property values and taxes will go up. Thus higher rents which are unattainable already for many creative and working class propel.

I know my statements are not necessarily going to be considered by the planning board and
I don't mean to sound condescending but music is not a novelty nor a luxury it is the livelihood for myself, and the lionshare of the people in this room who DO NOT WANT THIS unchecked corporation further taking away everything we have dedicated our lives to.

I implore you to make a wise decision for the people who are still doing the good work in this city. Please acknowledge that they made this city appealing enough for a multi billion dollar corporation to want to build a massive tax write off with no parking. Please vote in the interest of YOUR constituents and not the supposed bottom line that is hardly a promise

Carter Frank <cfrank@portlandmaine.gov>

# Fwd: Concerns regarding the proposed Live Nation Venue at 244 Cumberland Ave

1 message

**cfr...@portlandmaine.gov** <cfrank@portlandmaine.gov> Fri, May 23, 2025 at 1:16 PM
To: Carter Frank <cfrank@portlandmaine.gov>

---------- Forwarded message ---------
From: Caroline Hadilaksono <Unknown>
Date: Thursday, May 15, 2025 at 7:14:26 PM UTC-4
Subject: Concerns regarding the proposed Live Nation Venue at 244 Cumberland Ave
To: pa...@portlandmaine.gov <Unknown>, smichn...@portlandmaine.gov <Unknown>, wpell...@portlandmaine.gov <Unknown>, abul...@portlandmaine.gov <Unknown>, planni...@portlandmaine.gov <Unknown>

Hello,
My name is Caroline, I'm a Portland District 1 resident. I'm writing to voice my opposition to the proposed Live Nation Venue at 244 Cumberland Ave.

I've been a renter in District 1 of Portland for 8 years. I echo all the concerns that have been voiced regarding the Live Nation Venue proposal such as: parking issues, traffic congestion, the impact on existing arts venues and the cannibalizing of smaller local performance spaces.

If you live in Portland, you know that it doesn't take much to cause traffic congestion in downtown Portland, even a stopped school bus will jam up Cumberland Ave. Every time there's an event happening at Merrill Auditorium, the surrounding streets (all along Congress and Cumberland) would get backed up for miles with cars trying to get in/out of the surrounding parking lots. And that's for a show at a venue with a 1,900-seat capacity.

And every year in anticipation of the 4th of July fireworks on the Eastern Prom, my neighborhood by Kennedy Park is swarming with police officers, their cruisers lined up all along Fox St. Myself and residents in my neighborhood dare not move our cars from our street parking spots, because we won't be able to find another parking spot late into the night after all the fireworks crowds have cleared. And that's just the chaos and disruption from one big event.

And yet, these aren't what worry me most about the proposed Live Nation Venue.

Currently, the federal government, the public school system, the health care system, and more, are being gutted from the inside out. Systems that are supposed to be in place as safeguards for citizens are systematically being taken away. As a US citizen, as an immigrant, as a non-white-cis-male person, more than ever, I need the support of my local community.

I'm glad that there's interest in developing 244 Cumberland Ave. However instead of an entertainment venue, what Portland needs now more than ever are third spaces. Places for fostering community and connection.

I understand that the creation of a 3,300-person music venue is supposedly going to "boost the economy year-round, directly benefiting the hotels, restaurants, and small businesses." I do appreciate the proclivity to simulate the local economy, but rather than focusing on the tourism industry and attracting more people to Portland, why not focus on people who are *already* here? The people who work and live here year-round, and have been here for decades, people who send their children to school here, people who create art/music that put Portland on the map as a unique destination.

I'm not against development or stimulating the local economy, but there's a lack of *imagination* in what is being proposed. Instead of constructing a building that most people (Portland residents or not) will only go into a few times a year, what if we create a place that everyone would want to go into everyday, all the time? A safe space for the community, where people can live, work, connect, or play — a mix-income housing complex meets art/community center, meets a recreation center, with a rooftop community garden and an underground parking garage that could be offered as off-street parking to nearby residents during snow bans? Surely there are examples out there for successful community spaces.

Please don't let a $32 billion company that was sued for monopoly and an investment company that uses Scarborough as a mailing address but is actually registered in Florida (and is owned and run by people who live in Miami Beach, FL) make decisions that would impact Portland's landscape and community for years to come. These developers have a lot of profits to gain but no real stake in the community.

Portland as a community and as a destination doesn't need more/bigger *entertainment* to thrive, we need more connection. If you create places that foster connection and community, people will come, restaurants and small businesses will benefit, the local economy will grow.

I'm writing to you now because it seems that the city councilors have postponed the proposed moratorium, and the matter is now referred to the Sustainability and Transportation Committee.

I'm counting on you City Council At-Large, Pious Ali and District 1 City Council Sarah Michniewicz to advocate for the interest of your constituents. I'm also including other members who have been pertinent to this ongoing issue: Councilor Wes Pelletier and Councilor Anna Bullet, who proposed the moratorium, and the Planning Board.

Thank you,
- Caroline Hadilaksono

Clare Hannan & Steve Von Vogt <hannanvonvogt@gma… Mar 25, 2025, 4:43:45 PM (15 hours ago)

to Planningboard@portlandmaine.gov

Dear Planning Board Members:

We want to express our concern about the proposed development directly across from Merrill Auditorium. As residents of Portland and patrons of many local concert venues, we are concerned about a development of this scale directly adjacent to Merrill Auditorium. We are concerned about traffic and parking in an area so dense. We urge the Planning Board to carefully consider this development's effect on the downtown district and existing local venues and the quality of our downtown environment.

Thank you for your consideration.

**Clare Hannan & Steve Von Vogt**
19 Lennox Street
Portland, ME 04013
Mobile & Text: 207-671-7942

PC 12



Courtney Jane <cjviolette12@gmail.com> Mar 25, 2025, 5:25:18 PM (15 hours ago)

to planningboard@portlandmaine.gov

Good afternoon, I am writing you today to voice my opposition to the proposed 3500 seat venue in partnership with Live Nation Entertainment.

The opening of such a venue would greatly impact the life of independently owned and operated venues and local arts presenters. These types of venues help to enrich our community in ways that a larger venue would not.

I also would like to point out that Live Nation Entertainment is under federal investigation regarding their abuse of market power to overcharge consumers. This would put an undue burden on our local community by not only pushing out smaller venues and eliminating places for our local music and arts community to grow; but also would effect the community's wallet as well. Art should always be accessible.

I hope you take these points into consideration when discussing the proposed venue. Thank you for your time, Courtney Violette, community member.

Dan Bernard <daniel.t.bernard@gmail.com> Mar 25, 2025, 4:45:50 PM (16 hours ago)
to planning@portlandmaine.gov

Good afternoon,

As someone that spends an incredible amount of time and money on the music industry in our city, I wanted to share my thoughts and feelings on the possible live nation venue.

First of all, live nation is a monopoly and they scam all ticket buyers into ridiculous fees (money that should not be paid at all, or that should be going directly to the musicians). As a city we should not support them in any way.

Secondly, we have a beautiful infrastructure for providing concerts of various sizes. From the smaller bars and galleries, OLS, PHOM, up to the State Theatre and Thompsons Point, we can support a huge range of sizes of bands and performances already. These are locally managed organizations that do an incredible job and would be undercut financially by the live nation venue.

We do not need another even bigger venue! And certainly not one that is owned by the monstrosity that is Live Nation! Everyone that I have spoken with is equally appalled by this possibility. Please protect our local musicians and artists and do not allow Live Nation in!

Thank you for your time and consideration.

Respectfully,
Daniel Bernard
Portland Resident since 2012

Carter Frank <cfrank@portlandmaine.gov>

# Public comment: opposition to Live Nation

1 message

**Emily Harris** <emilydickinsonharris@gmail.com> Tue, Mar 25, 2025 at 2:16 PM
Reply-To: emilydickinsonharris@gmail.com
To: planningboard@portlandmaine.gov

Hello,

I'm writing to express my strong opposition to building an industrial sized music venue in Portland, ME in partnership with Live Nation. Not only does this take business away from the smaller and more intimate local venues, it takes away from the rich sense of community that makes our local music scene something to be so proud of.

I have two big concerns about Live Nation. First, this company takes opportunities away from lesser known, local artists and performers, and this directly impacts the local sense of community. Second, Live Nation is currently under federal investigation. This is not the energy or the vibe I want to bring to our local music scene.

I hope we can make the right choice to preserve our special music community and put our money and energy into the local, independently owned, community-minded venues instead of this large venue.

Thank you,
Emily Harris

PC 15

mercier.erica@gmail.com <mercier.erica@gmail.com> Mar 25, 2025, 7:46:27 PM (12 hours ago)

to planningboard@portlandmaine.gov

Good evening,

I write to you as a fourth generation Mainer, born and raised in the greater Portland area and who currently owns a home in Gorham. I am writing to express my concerns over the proposal to build an enormous live nation venue in downtown Portland.

The majority of the people who live in this community do not support this proposal. We do not want a company that has a monopoly to put local venues that have been in this community for decades out of business. We need affordable housing, not an overpriced music venue. There is no plan for parking when parking is already incredibly difficult downtown. If you actually represent the interests of the people in this community, you cannot approve this project and construction of this venue.

I urge you to reconsider approving this project and listen to the needs of the people not the greed of a corporation.

Thank you,
Erica

Hana Zoe Rosenfield <hannah.zoe.rosenfield@gmail.c… Mar 25, 2025, 5:35:18 PM (15 hours ago)

to planningboard@portlandmaine.gov

Hello! I am a Portland resident and I am reaching out to express my strong opposition to the proposal to build a Live Nation venue. This will be detrimental to the local music and events scene, and I believe would bring closures to multiple venues in the city, which would then lead to less opportunity for the many small acts of Portland, and also lead to less profits from these events to be funneled back into the Portland economy. Please consider the significant negative impacts this would bring. Thank you for taking the time to read my plea!

Hannah Rosenfield

Mar 25, 2025, 4:21:23 PM (16 hours ago)

Hannah Watson <hannahwatson114@gmail.com>
to planning@portlandmaine.gov

Hi there,

I attend numerous concerts in Portland every year and am opposed to the Live Nation venue. They have shown in other cities to cripple the local music scene. Do not sell out Portland to them.

Hannah Watson

Carter Frank <cfrank@portlandmaine.gov>

# Opposition to Live Nation Venue

1 message

**Jackie Schrader** <schrader.jackie@gmail.com> Tue, Mar 25, 2025 at 12:47 PM
Reply-To: schrader.jackie@gmail.com
To: planningboard@portlandmaine.gov

To Whom it May Concern,

I am voicing my concern for our local musicians and venues with the proposition of building a Live  Nation venue. Live Nation monopolizes the concert industry and often charges fees that are not feeding the local economy but rather the conglomerate itself. It restricts artists from using its venues unless the artist agrees to use its promotion services and is currently being sued by the DOJ for this reason. This threatens artistic autonomy and supports the monopolization of the music industry which already grossly underserves its artists. Live Nation and Ticketmaster demand excessive extra costs for processing fees and ticketing that make music unaffordable and unattainable for many people. While it may draw in tourists (which i understand are important for our economy as well but am wondering how we can support our local musicians to be a draw for them instead) it could seriously impact the ability of locals to access affordable entertainment. And then who are we serving? I vehemently object to the building of this venue. Please don’t make the pockets of this immoral company bigger and take money away from artists and music lovers alike.

Best,
Jackie Schrader

4:23 AM (4 hours ago)

saco9@gwi.net <saco9@gwi.net>
to mdion@portlandmaine.gov, rphillips@portlandmaine.gov, planningboard@portlandmaine.gov

Hello Mayor Dion and Councilor Phillips,

Simply put as previously stated, the public's business/access is conducted on Myrtle St and for that matter the parking spaces around City Hall.

My hope is that a developer would not look to burden citizen access and keep activity to their property, no matter who it is.

Take care!

Jamie Willey
186 Caleb St.
(off-peninsula person)
Cell: 207-272-7674

cc: Planning Board

Carter Frank <cfrank@portlandmaine.gov>

# Fwd: Portland Music Hall

1 message

**Jay York** <jay@jayyork.biz> Tue, Apr 1, 2025 at 3:09 PM
Reply-To: jay@jayyork.biz
To: Mark Dion <mdion@portlandmaine.gov>, Sarah Michniewicz <sarahmichniewicz@me.com>, Pious Ali <pali@portlandmaine.gov>
Cc: planningboard@portlandmaine.gov, citymanager@portlandmaine.gov

Begin forwarded message:

**From:** Jay York <jay@jayyork.biz>
**Subject: Portland Music Hall**
**Date:** April 1, 2025 at 12:32:42 PM EDT
**To:** Todd Goldenfarb <TGoldenfarb@ramcompaniesusa.com>
**Cc:** Robert Sylvain <robertsylvain@icloud.com>, development@baysideportland.org

Todd,

PSO and Portland Ovations' publicly stated concerns about parking issues in Bayside related to Mile Marker Investment's proposed music venue is so hypocritical of them. Their events have created on-street parking issues in Bayside for decades and they've ignored them. Neither of them have spoken out against Redfern's 325 unit apartment building to be built on the peninsula (Washington Avenue) with only 11 parking spots. Why should your business be held to a different standard than that business. In terms of your partnership in this project with Live Nation and the fierce opposition focused on that by downtown music venues I understand their concerns but think they are unfounded. In other cities (like Austin, TX) where Live Nation has a venue the music scene has flourished. Look forward to seeing this wonderful addition to the neighborhood, city, and southern Maine happen.

Jay York
34 years as a Bayside resident and business owner

Jeannie Doherty <jeandoherty16@gmail.com> Mar 25, 2025, 11:35:39 PM (9 hours ago)

to planning@portlandmaine.gov

Hello!

I've been seeing news about the city of Portland opening a new venue presented by Live Nation in Portland ME. As a citizen of Portland and of Maine for my whole life, this is disappointing to me, and to many others. The local Portland music scene has been something that has set the city apart for decades. With the rise of rent prices and more and more expensive restaurants making things nearly impossible for small local businesses to keep up, it's important to keep some of that locality alive. Respecting the local music scene is important to so many people, please reconsider opening this venue, as it could close down smaller venues for good.

Sincerely,
A concerned Portland citizen

Carter Frank <cfrank@portlandmaine.gov>

# Proposed Event Venue - Myrtle Street

1 message

**Jennifer Whitley** <jenwhitleyjw@gmail.com> Tue, Mar 25, 2025 at 2:35 PM
Reply-To: jenwhitleyjw@gmail.com
To: Planningboard@portlandmaine.gov

Good afternoon,

I'm reaching out to share my concerns of the proposed Live Nation-Ticketmaster event venue. I have lived in Portland for 26 years and over the past five years I have watched the traffic grow in this small city due to rapid and increased development. In the last two years the traffic has caused congestion, not only downtown, but on 295 North and Southbound. The proposed venue would cause problems for our already overwhelmed city's infrastructure, as well as possibly increasing safety risks to pedestrian and bicycle traffic. If shows at Merrill Auditorium, Cross Insurance Arena, and this proposed venue were all held on the same night, it would be gridlock, not to mention cause noise and air quality issues. I live near an incredibly busy intersection and I no longer feel safe crossing the street due to increased traffic in my own neighborhood. Let's hold a better vision for the future of Portland, not just a parking lot full of cars waiting to get into a venue no one wants or needs, which lines the pockets of those who do not have our city's best intentions in mind.

Thank you for your time,
Jen Whitley

Carter Frank <cfrank@portlandmaine.gov>

# Please Reject Live Nation's Venue Proposal

1 message

**Jennifer Jackson** <theartgoddess@gmail.com> Tue, Mar 25, 2025 at 2:49 PM
To: planning@portlandmaine.gov

Hello, I am writing in as I am not able to attend the meeting this afternoon at Portland City Hall, but I am in opposition of the new music venue. I lived in Portland for many years, and still live locally in Westbrook. There are enough venues in town and in the surrounding area, and that part of the city is already SUPER congested. It will take away much needed parking and we simply don't need a new venue, let alone one that is in partnership with Live Nation. We need to help support and foster the local music community and help bring in bands to the existing venues that we all love and adore.

Thank you for your time, I go to a lot of shows in the area and everyone I know is in opposition of this, so I hope the right thing will be done here.
~Jennifer Jackson
207-615-6333

PC 24

jesse hoefer <jessehoefer@gmail.com>
to planning@portlandmaine.gov

Mar 25, 2025, 10:01:11 PM (10 hours ago)

Hello,

My name is Jesse Hoefer and I am strongly opposed this potential live nation venue. The city of Portland has many great venues run by locals. There is no need to bring a corporate venue run by live nation into our city. This will not only be harmful to the local economy, it will be detrimental to the music and arts scene that is already flourishing. They claim it will create 250 jobs, but it will also take away already existing jobs. Not to mention the negative effects this venue would have on the already atrocious parking conditions.

Instead of building yet another monstrosity, why not invest into the already existing music community? Support local artists and venues.

This proposed live nation venue is, plain and simple, a very bad idea!

As an active member of the Portland music industry, I am vehemently opposed to live nation. They do not belong in our city. We do not need their venue. I urge you to spend some time and come out to an event at Genos, Blue, Space Gallety, Portland House, or the Apohadion. Just to name a few. See for yourself and experience our beautiful community before you disrupt and destroy it.

Live Nation does not belong here. We do.

Carter Frank <cfrank@portlandmaine.gov>

## Concern over large performance venue

1 message

**Jessica Hoffmann** <jesshoff12@gmail.com> Thu, Apr 24, 2025 at 10:19 AM
Reply-To: jesshoff12@gmail.com
To: planningboard@portlandmaine.gov

Dear Planning Board members
I write to you as a concerned citizen regarding the proposed plan for a new large performance venue project in Portland.

The plan to build a 3,300-seat venue in partnership with Live Nation, just across the street from Merrill Auditorium, raises serious concerns in Maine, beyond just the greater Portland area. Live Nation is a multinational corporation currently under federal investigation for anti-competitive practices that harm local venues and performers. Its presence in Portland threatens our state's vibrant, independent arts community by introducing a corporate monopoly into a space that has long thrived on local creativity and grassroots support.

I virtually attended the March 25 Planning Board workshop, and it is clear that Portland's current infrastructure, and the infrastructure proposed in this plan, is not equipped to handle the increased strain such a large development would place on the city. From traffic congestion to resource allocation, the consequences could be significant and long-lasting. Like many others, our household regularly commutes into Portland to work music gigs and to attend shows. This proposal fails to account for the reality that a significant portion of concertgoers, artists, and many of those employed in the city, live outside city limits and are not within walking distance or served by reliable public transportation. Furthermore, at the last meeting, the owners of Top of the Old Port parking lot commented they already fill to capacity when Merrill Auditorium has concerts. That doesn't even take into consideration the parking strain the city has when other events are happening at State, Cross and other smaller venues.

Maine's cultural identity is rooted in its independence. The livelihoods of countless local artists, small venue operators, and residents depend on keeping our arts community free from corporate control. I respectfully ask the Planning Board members to seriously consider the impact and harm it will cause to the city and take up the offers to experience the parking struggles Merrill already faces in high traffic times.

Sincerely,
Jessica Hoffmann
Auburn, ME 04210

Jonathan Cohen

Cohen Properties

241 US Route 1

Falmouth, Me 04105

March 25, 2025

RE: Portland Music Hall

Dear Portland Planning Board Members,

I am writing to offer my full support of the proposed Portland Music Hall project. A venue such as this will be a tremendous boost to the region's economy 12 months per year. This is a great continuing addition to the Wex Headquarters, the Roux Institute current and future buildings and campus as well as the strength and growth of Portland. It will provide additional year round business for the hotels, restaurants, art museums and tourist attractions, especially in months that are normally very slow. This venue will complement the others in town as it is a different size attracting different artists. The project is within the Entertainment Overlay District and this type of use was exactly what was envisioned for this area. As I understand this, they are not asking for any waivers and the use is by right, I strongly support passage of this project.

Thank you,

Jonathan Cohen, Cohen Properties LLC



PC 27



Justin J <justin.jcqs@gmail.com>
to planningboard@portlandmaine.gov

Mar 25, 2025, 9:09:37 PM (11 hours ago)

To the Portland Planning Board,

I am writing to express my strong opposition to the proposed Live Nation venue in Portland.

Live Nation has a well-documented history of monopolistic practices that have adversely affected local arts communities and independent venues. The U.S. Department of Justice has filed an antitrust lawsuit against Live Nation, alleging that the company has illegally monopolized markets across the live concert industry, harming competitors, artists, and consumers alike. Additionally, Live Nation's control over ticketing through its subsidiary, Ticketmaster, has led to inflated ticket prices and limited consumer choice.

Portland's cultural identity thrives on its independent spirit and vibrant local venues. Allowing Live Nation to establish the proposed venue would likely destabilize the existing arts ecosystem, potentially leading to the closure of cherished local spaces such as the State Theatre and SPACE. This would not only homogenize our arts scene but also divert revenue away from local businesses and artists, consolidating it within a corporate monopoly.

I urge you to reject this proposal to protect the integrity and diversity of Portland's arts community.

Sincerely,

Justin Jacques

Carter Frank <cfrank@portlandmaine.gov>

# Comment - Livenation venue

1 message

**Kate Istomina** <kisstomina@gmail.com> Tue, Mar 25, 2025 at 1:31 PM
Reply-To: kisstomina@gmail.com
To: planningboard@portlandmaine.gov

As a local musician and someone who truly values the charm of Portland, Maine, I am absolutely disgusted by this plan. You risk taking Portland's art and music scene, something it is famous for (ever hear of the saying "keep Portland weird"?) and eliminating any unique energy from this city. By building this venue, you risk taking business away from the original small venues that host so many different types of acts, most of which wouldn't flourish or even be invited to play a Live Nation 3,000 seat venue. You are ruining what makes our city great - its creativity, its uniqueness, the art and music that makes our city great. Screw these corporate people coming in and sucking our community dry for an extra buck - we deserve so much more and refuse to allow our community to be destroyed by capitalist, money grubbing corporations who do not invest or care about the communities they plop themselves in. Keep Portland Weird!

PC 29

Kate Klibansky <kate.klibansky@gmail.com> Mar 25, 2025, 5:12:55 PM (15 hours ago)

to planning@portlandmaine.gov

Good evening,

I am emailing to share that I, like many other music lovers in Maine, are proud of the independent venues we have and the music we are able to support there. With that, I oppose the development by Live Nation Entertainment. They have unfair consumer practices and are currently under investigation. Please consider this as feedback regarding any such proposed development.

Thank you,
Kate Klibansky

Carter Frank <cfrank@portlandmaine.gov>

# Concerns about a Live Nation venue

1 message

**Lia Horton** <liahorton@gmail.com> Tue, Mar 25, 2025 at 2:51 PM
To: planning@portlandmaine.gov

Hi folks, I live on Neal Street in Portland and I'm writing to share my concerns about the proposed Live Nation-controlled music venue. I'm not a musician, I don't own or promote for any local venues, but I am a live music fan. I spend a large chunk of my limited disposable income on concert tickets and one of the major reasons I own a home in Portland is our music scene. We punch above our weight, getting great regional and national acts in venues alongside the local music scene. I'm extremely concerned about the ways a Live Nation venue would squash the smaller locally operated music venues that make Portland special. I think there could be room for a large venue in a different location, not run by a monopoly, but this proposal seems to offer way more down sides than the potential upsides.

I cannot attend tonight's Planning Board meeting so I appreciate you taking my feedback here.

Best,

-Lia Horton

Carter Frank <cfrank@portlandmaine.gov>

# 385 Congress Street / Venue meeting public comment

1 message

**'Louis Christen' via Planning Board** <planningboard@portlandmaine.gov> Tue, Mar 25, 2025 at 12:48 PM
Reply-To: louischristen@yahoo.com
To: "planningboard@portlandmaine.gov" <planningboard@portlandmaine.gov>

Hello,

I've lived at 239 Cumberland Ave, on the corner of Pearl St, for over 10 years, and in neighborhood for almost 20. I've seen the impact of 100's, if not 1,000's of events that take place at Merrill Auditorium, which we know is across the street from this proposed project.

I know something will eventually be built on this lot and I'm on the fence whether I want to live next to a venue or housing.

I believe housing would bring some life, retail locations and parking to the neighborhood. All which is currently lacking and should be coincided by the board.

Though living next to a venue, I wouldn't have people looking into my residence from across the way and would enjoy the convenience of attending an event just a few steps away. However, unless solutions can derived, I would have to deal with the and listen to the excessive beeping and congestion outside my front door, before and after each of the proposed 100 annual events. Most of which would be later in the evening. Not to mention the neighborhood would have to deal with more street parking issues.

Like others, I have concern over the lack of parking, which is already an issue when there is only one event going on at the Merrill Auditorium. Now add another 2,000 – 3,000 guests across the street.

And let it be noted that I do appreciate the developers design to park the tour busses and tractor trailer trucks inside, which frees up street parking and reduces these vehicles idling potentially all day.

My questions and concerns are below.

If it hasn't already been calculated and disclosed, please answer the following:

How many parking spaces will be lost on Myrtle St, the current parking lot on which the venue will be built, and in the building on the pot that currently accommodates the Press Hotel valet parking?

How many spaces will be gained / lost on Cumberland Ave?

Any other parking spots being added / off site solutions?

Is the sidewalk on Cumberland Ave being narrowed or are the corners being built out?

My main concern has to do with impact on the neighborhood: What will the developers / city do to help mitigate the flow of traffic around the venue before and after each event, which is already an issue, and with a lot less attendees (see attached photos) Some of this congestion is caused by the Top of the Old Port lot and its entry process, plus Pearl Street not being wide enough to let cars

pass those trying to enter the lot. With more people trying to get to the same area / closest parking lot, this will only get worse and grid lock is already happening.

Not to mention the issues traffic cause by loading shows in and out. Loading in is more of an issue than loading out, since they are normally done during the morning / day. (see attached photos)

If this project is approved, I'd request that the city change the parking rules for a few blocks around the venue to help the residents maintain some on street resident parking. I believe this was done and is still the case around Hadlock Field, so it shouldn't be an issue here.

I'll leave my concerns of living though the potential conduction of this project for another day, and hopefully in person.

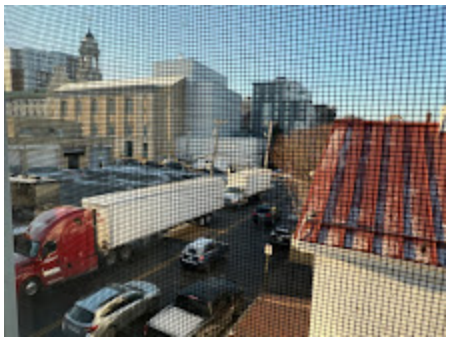
Thank you,

Louis Christen

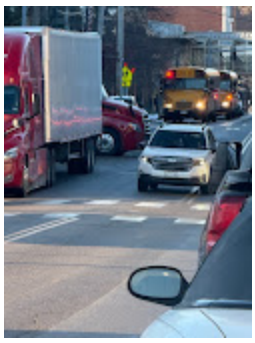
239 Cumberland Ave

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**5 attachments**



**IMG_0091.JPG**
249K



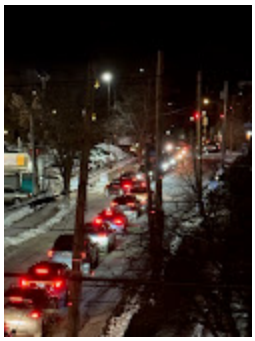
**IMG_0095.JPG**
179K



**IMG_0137.JPG**
236K



**IMG_0138.JPG**
185K



**IMG_0139.JPG**
212K

PC 32

Máire Lenihan <mclenihan13@gmail.com> Mar 25, 2025, 4:10:53 PM (16 hours ago)
to planning@portlandmaine.gov

Hello,

I'm writing today to voice my opposition to the proposed venue by Live Nation Entertainment. Portland already has many locally owned independent music venues, both small ones that promote local bands as well as large venues that bring in globally famous acts year round. The revenue from these local businesses stays local - local business owners, local commercial landlords, local employees who live and shop in the area, plus the local musicians who benefit hugely from having access to our smaller venues. Meanwhile Live Nation Entertainment is a multinational corporation and every city in which it has opened a venue subsequently experiences a loss of local music venues. This loss of independent venues results in profits being funneled away from local economies and also creates a dearth of opportunities for local performers to make a name for themselves.

Beyond the guaranteed squashing of locally-owned businesses, Live Nation Entertainment has a history of illegal business practices that make one question if it's the kind of business we want to welcome into our community. Live Nation just settled a class-action lawsuit brought by its own investors as a result of its continued violation of anti-trust laws. Meanwhile separately the Department of Justice and dozens of US states have an ongoing case against Live Nation based on the illegal monopoly created by Live Nation and its subsidiary Ticketmaster. This case alleges that Live Nation uses its ownership of Ticketmaster to inflate ticket prices, lock venues into restrictive ticketing agreements, threaten those venues with losing access to Live Nation-controlled tours should they seek to use another ticketing service, and force artists to use Live Nation to promote their tours by leveraging the venues it has locked into these ticketing agreements.

If this venue is built and Live Nation realizes a monopoly over Portland's music scene,
and let's be honest, Portland's music scene makes up the majority of Maine's music scene, I hate to think of the price gouging they will inflict upon us. In the past I have had to pay additional fees equal 30-50% of a ticket's cost for a Live Nation controlled show and have also had to pass on seeing musicians I was very excited about because the fees (which are not part of the stated price of a ticket) made shows unaffordable for me. As a Mainer, and a Portland resident of 8 years, I urge the planning board to truly consider how this multinational corporation will change the landscape of local music and local business in our community.

Sincerely,
Máire Lenihan

Carter Frank <cfrank@portlandmaine.gov>

# 3.25 workshop comments

1 message

**Myles Kelley** <myleskelley207@gmail.com> Tue, Mar 25, 2025 at 3:01 PM
Reply-To: myleskelley207@gmail.com
To: planningboard@portlandmaine.gov

Hi there,

My name is Myles. I'm a Portland resident (york st.), and someone who makes their livelihood entirely off of the local music scene here.

I would just like to use this email to enforce a message which I hope is shared by the planning board: Portland does not WANT or NEED a LNE venue in our city. This corporation doesn't support local artists, and don't serve the people of the cities they occupy. We need housing, social services, safer roads, and funding community arts. We don't want to live in disneyland.

Please do the right thing, at a time when it's not the norm, and say no to corporate greed and wild gentrification on behalf of your city.

Myles Kelley
*Teacher at Maine Academy of Modern Music*
*Keyboards for Midnight Breakfast, MKtrio*
*Bass for Primrose*

Myles Smith <mylesgsmith@me.com> Mar 25, 2025, 4:32:02 PM (16 hours ago)
to planningboard@portlandmaine.gov

Hello,
I am a Portland resident and avid music fan and supporter of things like the back Cove music festival and the series of shows at Thompson's point.

Ticketmaster is an unethical and damaging monopoly that should be broken up by the federal government, according to any reading of our antitrust laws.

This venue would compete directly for events with our city owned Merrill auditorium and our county owned Cross Arena. Will have the pricing power to compel nationally touring ask to only visit their own venue which will destroy the revenue streams of our publicly owned facilities, which pay massive dividends to our people sports and arts communities.

Do not give them an inch of access to our city. Their vertical integration model locally run venues with character and connection to the community. I do not care if they have some local investor partners. This is about a local arts scene that serves our people not the profit margins of a global monopolist corporation.

PC 35

**Nathan Katsiaficas** natekphoto@gmail.com via portlandmaine.gov 11:00 AM (2 hours ago)
to planningboard

Hello,

I am writing to express opposition to the proposed new entertainment venue joint venture between Live Nation and Mile Marker Investments. Portland is already difficult to navigate during the Summer tourism season when multiple venues have shows each night. Parking is already difficult.

We do not need to somehow come up with 1500-3,000 more parking spaces for this venue. The congestion that these venues bring on show days is real--I live near the now shuttered Maine Savings Bank Pavillion that was at Rock Row. The traffic impact we felt every show from that venue was awful. I can only imagine how bad it would be on the already congested streets around Congress St.

Please pass the 180-day pause on approving new large venues and look into the traffic issues. they are REAL.

Nicholas Reevy <nickreevy@gmail.com> Mar 25, 2025, 3:53:23 PM (16 hours ago)
to Planningboard@portlandmaine.gov

Writing this quick email to comment on the proposed 3350 seat venue in partnership with Live Nation.

As someone who has worked in the Hospitality and Nightlife industries in Portland for the past decade, and as a born and raised local:

**Live Nation should NOT be allowed to open a Venue.**

Here's a few quick thoughts as to why.
Portland has always thrived on small businesses, music venues included. LiveNation is a company that is well known to stifle and cripple independent artists as well as bleed local theatres dry in order to kill competition. So much so that the Justice Department currently has them in a lawsuit seeking to break up their monopoly.

The size of the venue doesn't make sense considering already existing infrastructure that fulfills the size they're looking at(State, Merrill, Thompson's Point, Aura, Civics Center etc.). For example, anyone who can sell out the State or Merrill in a way that would be meaningful could easily justify playing at Thompson's Point instead. Not doing so would just be an error in their management, not lack of infrastructure available in the city.

The above starts to point out why this would be a cost investment that the City doesn't need. The only people who this would be for would be Artists who are signed exclusively to live nation, who are in the midst of a lawsuit regarding their practices. This could lead to the development getting extremely murkey if the parent company is forced to change their partnerships and contracts by the Justice Department.

One more point about the cost:, it's a pretty limited appeal for the touring artists that it WOULD service. You have to consider where we are located and why more bands already DON'T come this way. Long story short, it's because Boston is so close, and is a massive travel hub to start or end at. Bands typically only make a stop in Portland if they’re already heading to Quebec, a city in a country with which we’re currently engaged in a trade dispute, a situation that is likely to persist for the duration of this Federal administration.

The costs of this proposal simply don’t justify the potential benefits, particularly given the uncertainty around the legal situation and the general negative sentiment toward Live Nation as a company. The local infrastructure is already well-equipped to handle events of this scale, and a new, larger venue wouldn't significantly alter artist routing or audience demand. Instead of attracting more visitors or concerts, it’s more likely the venue would remain underused, increasing operational costs for the city while potentially diverting attention and resources from the existing local venues that are already serving the community.

-Nick Reevy

Rebecca Turkewitz <rturkewitz@gmail.com> Mar 25, 2025, 3:39:28 PM (16 hours ago)
to planningboard@portlandmaine.gov

Dear planning board members,

I'm a high school teacher in the Portland Public Schools and have been a resident of Portland for nine years.

**I am strongly opposed to the development of the new 3,350-seat venue in partnership with Live Nation Entertainment**, which is currently under federal investigation and is widely known for its despicable business practices. Live Nation Entertainment venues contribute to local venue closures, exploit artists and performers (especially ones with smaller followings or more local ties to their communities), and funnel profits OUT of local economies.

I'm proud of and frequently enjoy Portland's local, independent arts and music scene. Locally-owned, independent venues enrich our community in ways that large corporate venues have not.

I also worry about the impact of these venues on parking in that area, which is increasingly becoming a challenge. It will change the accessibility of the area and negatively impact the culture of this city, which has so many wonderful independent businesses that I am proud to support.

This new venue and partnership is bad for Mainers, bad for the area, and bad for Portland's art and music scene. I urge you to reconsider the development of this venue, and to do what's right for this city and residents.

Thank you for considering.

Best,

Rebecca Turkewitz

PC 38



Rhiannon Bill <billrhiannon@gmail.com> Mar 25, 2025, 4:21:05 PM (16 hours ago)
to planningboard@portlandmaine.gov

To whom it may concern:

Over the past few years, I have grown to call Portland home. It perfectly blends elements of city and small town, beach and wildlife. One of my favorite aspects of Portland though is the independent music and arts scene. From first Friday to live music at the breweries to all the DIY venues old and new, I could count on seeing a show almost any night in an intimate, welcoming, and affordable setting. You get to know each other, both the audience members and the band members, and it's become a community to be proud of. This is what Portland needs more of -- not some big venue that's going to crowd the city, drive up prices, and take away from what we do best. Nobody I know that considers themselves a Portlander would be willing or able to go to a show at such a venue as you're proposing. I can appreciate trying to attract more tourists to our city, and I feel the cruise ships already bring us a good boost, but I hope you will consider showcasing Portland itself as a way to draw more people in rather than just following suit of every other major city out there. Portland is special. Besides, we already have larger venues like State Theatre and Cross Arena where I have seen some relatively big names come through and they continue to do so. If you're looking to draw more business and attraction, focus on elevating the unique features Portland has to offer such as it's big city in a small package vibe, Old Port and its historic, down by the water feel, our incredible bakeries like Norimoto and Standard, our own little art museum and all the other arts we house at Mayo Street, The Hill Arts, and Good Theatre, the surprisingly good surf and even better people who will suit you up at Blackpoint, and of course, all of our locals who make this possible and bring their dreams to life every day. Our people are musicians. They're artists. They're puppeteers. They're actors. They're dancers. They're bakers. They're chefs. Building this corporate venue, especially with such a suspect corporation as Live Nation, would be taking away from Portland more than it would give. I hope you will consider not moving forward with this proposal.

Thank you,
A Concerned Portlander

Carter Frank <cfrank@portlandmaine.gov>

# In regards to Live Nation meeting

1 message

**Little Oso** <littleosoband@gmail.com> Tue, Mar 25, 2025 at 1:25 PM
Reply-To: littleosoband@gmail.com
To: Planningboard@portlandmaine.gov

Dear Planning Board Members,

I write you a letter in regards to the plans submitted to build a 3,350-seat venue in partnership with Live Nation Entertainment. I was introduced to the city of Portland in 2012, when I came here for a wedding. During that time, I encountered a group of people entering a building on Congress st. I followed them in and entered what seemed to be something unlike I ever seen in a small city, a punk show in someone's tiny apartment. I've attended several shows in NYC, NJ, and Philly, and everything you encounter is expected in those cities. With Portland, it was unexpected and fresh. Through this experience, I learned of the city's rich local musician scene intermixed with touring artists. Ever since then, I thrived to be a part of it. Cut to 2022, my wife and I started a band here and now we're fully enriched in this scene and will do anything to protect the independent artists and venues that keep this city so amazing.

As a local musician and an avid concert-goer in the Portland music scene, I just want to say that inviting Live Nation to take part in this music scene would not only be disastrous to the independent venues and the local and touring musicians, but also to the city. Being a part of the New Jersey music scene for 15 years, I've seen what Live Nation has done to the music business in Asbury Park, NJ. It has held a stronghold on local venues reminiscent of mafia tactics from the 40s. I'm sure you're aware of Asbury Park's rich music history. With Live Nation overtaking that city, venues have had trouble staying afloat, causing most to crumble and bands have been forced to sell tickets to shows for quadruple the price to make up for the company's fees. One example would be a historic rock club called The Saint, where Bruce Springsteen had played many years ago. The Saint was a stepping stone for so many great bands and musicians throughout the years, but the venue had to shut down in 2020 because it couldn't stay afloat, due to Live Nation's imperial tactics.

Live Nation doesn't care for whatever local area they take over, just as long as the company can milk every venue dry. I've seen how venues have had to shut down because they can't afford to operate under Live Nation's grip. Portland's independent venues have attracted so many concert-goers from nearby Maine cities, which bring about business to all of the restaurants as well. With the few independent venues Portland has to offer, under Live Nation's grip, we will see those venues dwindle. And with that, less people coming into the city to support restaurants. It may seem like building a larger venue under their umbrella will be helpful to our economy, but it'll surely make it worse, as it will be the end of the independent venue. We need to put an end to monopolization of the music industry and stopping this before it becomes a catastrophe will make Portland a hero to the independent venue, because those venues are what make this city so great.

- Ricky Lorenzo of Little Oso

PC 40

**Ryan Curless** arecurless@gmail.com via portlandmaine.gov
to planningboard

Dear Members of the Planning Board,

Thank you for taking the time to read my concerns about the proposed concert venue in downtown Portland. I was at the meeting on March 25th and I am writing in opposition of the project moving forward.

Parking alone would be a major concern. The developers said that there would be something like seven or eight parking spaces outside of the building if I remember correctly, so even if only half of the venue was filled to capacity, where would the roughly 1,500 parking spaces come from? My household commutes into Portland to work and to attend concerts, shops, etc. and it is already a challenge to find parking to do any of those things, especially on nights where there are events happening at the already existing venues. It just seemed like at the meeting there were several things not completely addressed or fully thought out. At one point in response to this concern someone suggested just parking across town and taking public transit, which would just block parking in front of businesses across town. Not a fix. I think it would help to have more time to take these things into consideration, and was told that there was a proposed moratorium on large venues in Portland (Order 165- 24/25)?. Please at the very least give more time to explore this topic.

Someone in the public comment also had questions about the legality of having a concert venue constructed less than 100 feet from an already existing concert venue of similar size, and also the electrified marquee we saw in the the digital rendering. Have either of those topics been addressed?

Thank you for your time and consideration. Portland needs smart growth.

--
**Ryan G. Curless**
ryancurless.com

Carter Frank <cfrank@portlandmaine.gov>

# Don Law/LiveNation Support Letter

1 message

**'Kathleen West' via Planning Board** <planningboard@portlandmaine.gov> Thu, Apr 3, 2025 at 1:37 PM
Reply-To: kathleen.west@bostonabcd.org
To: Planningboard@portlandmaine.gov, Publiccomment@portlandmaine.gov, Sharon Scott-Chandler <Sharon.Scottchandler@bostonabcd.org>

This message was sent securely using Zix®

Hello, I have attached the signed support letter from Sharon Scott-Chandler, President and CEO of ABCD. Please feel free to reach out to her directly at the above e-mail address should you have any questions.
Thank You

This message was secured by **Zix®**.

**DonLawSupportLetter.pdf**
687K

ACTION FOR BOSTON COMMUNITY DEVELOPMENT

April 3, 2025

To Whom It May Concern:

My name is Sharon Scott-Chandler and I am the President and CEO of Action for Boston Community Development. I am sending this letter of recommendation on behalf of LiveNation and Don Law.

Action for Boston Community Development (ABCD) is the largest human services organization in New England. ABCD's outreach is far and wide, and each year impacts 100,000 residents with the tools and resources needed to transition from poverty to stability and from stability to success. ABCD assists and empowers people by providing access to resources and opportunities that foster equity in all its forms. Its initiatives cover everything from Head Start (program that prepares children for pre-school and kindergarten) to Foster Grandparents (program for the elderly that allows them to grow old with dignity) - and everything in between.

ABCD has partnered with many well-known leaders in the corporate and government sectors to develop programs for the underserved and to help us in our fundraising initiatives. It was in this capacity that I first met Don Law, with whom ABCD has had an existing professional relationship for over three decades.

Don Law is a pillar in Boston's business community and well-known as an industry leader. When ABCD first approached him many years ago, not only was he amenable to helping our cause, he was excited for Live Nation to get involved in a meaningful way in the mission of our organization. Don Law worked with ABCD on many different initiatives and programs and, over the years, he became one of our greatest champions.

In fact, Don has been so involved and such a help to our cause that we wanted to recognize his efforts, and he was awarded the Industry Recognition Award by Action for Boston Community Development in 1993. In addition to this tribute, Don agreed to chair the ABCD Friends Committee, a group of top business leaders and thinkers whose goal was to increase support of ABCD from Boston's business community. More recently, he was inducted into the ABCD Hall of Fame, the organization's highest honor.

It may be hard to believe that a man as successful and well-known as Don Law, who has such a high profile, could be so humble and reticent to accept praise and honors, but in our experience and long-standing relationship with him, this has been the case. Initially, when ABCD approached Don about awarding him with recognition of his service to our organization and the community, he was reluctant to be acknowledged, preferring to "stay behind the scenes" and

178 Tremont Street, Boston MA 02111 | **P:** 617.348.6000 | **TTY:** 617.423.9215 | **F:** 617.357.6041 | **bostonabcd.org**

**Sean K. Daughtry**, Chair; **Candice Caines-Francis**, First Vice Chair; **Marie Greig**, Vice Chair; **James Owens, Jr.**, Vice Chair; **Yvonne Jones**, Vice Chair; **Patricia Washington**, Treasurer; **Julia Hardy Cofield, Esq.**, Clerk; **Jennifer Williams, Esq.**, Assistant Clerk; **Sharon Scott-Chandler, Esq.**, President & CEO

have his good work go unacknowledged. With much prodding, Don eventually agreed to these, but it speaks volumes about his character and his quiet commitment to our work of helping the community, not for the recognition or attention.

I understand that Live Nation is now looking to expand and build a new venue in Portland, Maine. All I can say is that the Portland community would be fortunate, indeed, to have Don Law at the helm of this new development.

Sincerely,

Sharon Scott-Chandler
President and CEO

Carter Frank <cfrank@portlandmaine.gov>

# AGAINST Live Nation Entertainment's Venue

1 message

**Solie Thorncraft** <solierthorncraft@gmail.com> Tue, Mar 25, 2025 at 12:14 PM
To: planning@portlandmaine.gov

To whom it may concern,

I am writing to voice my strong opposition of Live Nation Entertainment's submitted plans that details building a 3,350 seat venue in Portland, Maine. By these plans being accepted and the venue gaining clear passage to be built, it risks crushing the beloved local music and art scene of Portland. Live Nation Entertainment is currently under federal investigation, and has broadly contributed to the closures of many smaller, local venues across the country. I have grown up with the wonderful, locally-owned venues of Portland, and they continue to a crucial place in local culture and communities. By passing these plans, it will not only show support of a widely critiqued and controversial company, but it will also risk the integrity of adored and well-utilized local venues such as Portland House of Music, The Apohadion, Space Gallery, and Geno's Rock Club, to name a few.

Thank you for your time and consideration.

Sincerely,
Solie Thorncraft

Carter Frank <cfrank@portlandmaine.gov>

# Proposed Live Nation Venue

1 message

**Tara McDonough** <improvtara@gmail.com> Tue, Mar 25, 2025 at 2:26 PM
Reply-To: improvtara@gmail.com
To: planningboard@portlandmaine.gov

I am writing to express my opposition to -- and dismay about -- the proposed Live Nation venue in Portland. This, in short, is a terrible idea.

I am a frequent attendee of events at Merrill Auditorium, Portland's 2000-seat venue that hosts the Portland Symphony and OperaMaine, Broadway tours and other world-class artists presented by Portland Ovations, the venerable Kotzschmar (one of a very small number of municipal organs left in the country), and innumerable comedians, speakers, and music acts. Artists from all over the country, and abroad, appreciate the Auditorium's beautiful design, acoustics, and size. Why do we need another venue, of comparable size, when we already have this excellent hall?

In addition, the lack of parking -- already an issue for full houses at Merrill -- will be a complete disaster for the area. Traffic along Congress Street and Cumberland Avenue when a concert lets out is already challenging. Subtracting innumerable parking spaces and adding additional cars (because let's remember, shows at Merrill Auditorium attract attendees from all around the state, the majority of whom could not use a "ride-sharing app" to travel to Portland and home again) would make what is now a small challenge an insurmountable hurdle.

I urge you to reject this Live Nation proposal. Portland doesn't need another large venue, nor does it need the accompanying headaches.

Sincerely,
Tara McDonough

Mar 25, 2025, 4:12:50 PM (16 hours ago)

tom stenquist <tstenquist@gmail.com>
to planningboard@portlandmaine.gov

Hello,
My name is Thomas Stenquist of Washington Ave in North Deering. I cannot join you tonight to voice my opposition to a Live Nation owned venture in Portland, but I need to make you aware that I think allowing a multinational company currently in antitrust litigation to choke out Portland's vibrant local scene is terrible terrible idea. This one company is singly responsible for the closure of hundreds of small local venues and for the decline of local music scenes around the country. Their anticompetitive practices are foul and antithetical to the values of Portland Maine.

I cannot find a single positive thing about letting Ticketmaster strangle more local theaters. They are the reason why I cannot enjoy many of my favorite artists in person, charging fees in the hundreds of dollars for tickets the artists have begged them to sell cheaply for all fans.

It would be a disgrace to allow this to move forward.

Thank you for your consideration and have a wonderful week

Thomas Stenquist
Washington Ave
Portland ME

9:35 AM (2 hours ago)

Zach Hurwitz <zlhurwitz@gmail.com>
to planning@portlandmaine.gov

Wants able to make the meeting yesterday, that said, Portland Maine does not need this venue, nor do we want it built by a company under federal investigation from outside of Maine.

-Zach Hurwitz

Carter Frank <cfrank@portlandmaine.gov>

# Live Nation Venue Proposal

1 message

**Zachary Rohman** <zacharyrohman@gmail.com> Tue, Mar 25, 2025 at 1:30 PM
To: planning@portlandmaine.gov

To the members of the Portland Planning Board,
I'm writing to provide comment on the development plans for a venue in partnership with Live Nation. I believe that allowing this venue to go through would be harmful for the city of Portland and the musicians and performers who have contributed to the diversity, creativity, and success of the city. While I no longer live in Portland Maine, I was born there and lived there for most of my life. I've performed both on my own and with many others including Shoestring Theater. I have performed or had friends who performed in venues such as Space Gallery, Mayo Street Arts, Genos, and more.

Live Nation is a monopoly with a history of using their leverage in both the US and abroad to punish locally owned venues, jack up ticket prices, and low-ball venue and event staff. We have seen in recent years the harms and distress caused by extreme concentration of wealth in this country, and Live Nation is a part of that. Allowing a Live Nation venue in Portland will allow them to force out smaller music venues and further deny the workers and artists of Portland the ability to make a living from their art and contribute to the community. As leaders in the Portland community, you have a chance to put your foot down and to end this practice of handing blank checks to developers that has made Portland unaffordable for so many of the residents who made the city what it is today.

In my current neighborhood of Echo Park, Los Angeles, I've learned about the wealth of local venues that they used to enjoy. Those venues have since been bullied out and shut down over time by Live Nation who now owns one of the only venues left. I'm begging you to not allow the same to occur in Portland, Maine.

Thank you for your time,
Zachary Rohman
Former Portland ME Resident

As additional evidence, I'm providing several links to news stories relevant to the harms caused by live nation:
https://www.rollingstone.com/music/music-news/more-states-doj-live-nation-lawsuit-1235082683/
https://www.cnbc.com/2023/01/25/the-live-nation-and-ticketmaster-monopoly-of-live-entertainment.html
https://www.npr.org/2024/05/23/nx-s1-4977330/live-nation-ticketmaster-sued

PC 47

# Public Comment - 385 Congress Street: Must FIRST AMEND the Master Development Plan

Inbox

**George Rheault** george.rheault@gmail.com via portlandmaine.gov 12:16 PM (8 minutes ago)
to Planning, Kevin, Matthew, jmy, Michael

As I stated at the initial workshop for this project, the underlying 385 Congress St Master Development Plan must FIRST be amended if the applicant is attempting to obtain site plan approval for a new project whose intent is to remain separate and apart from the Master Development Plan and therefore not come under its purview.

Please see attached the approval letter (with attachments) of the underlying Master Development Plan. THIS IS THE CURRENT STATUS OF THE UNDERLYING PARCEL. Therefore, TWO different ACTIVE land-use approvals cannot be applicable to the same locus AT THE SAME TIME. ONE MUST BE REMOVED BEFORE THE OTHER CAN TAKE EFFECT.

# CITY OF PORTLAND, MAINE

## PLANNING BOARD

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

August 11, 2022

Joseph Dasco
385 Congress Street LLC
383 Commercial Street
Portland, ME 04101

Marieke Thormann
Fathom Companies
80 Exchange Street
Portland, ME 04101

| | | | |
|---|---|---|---|
| **Project Name:** | 385 Congress Street | **Project ID:** | PL-001970-2022 |
| **Address:** | 385 Congress Street | **CBL:** | 012 P027001 |

**Applicant:** 385 Congress Street LLC & Fathom Companies
**Planner:** Zach Powell

Dear Joseph Dasco and Marieke Thormann:

On August 9, 2022, the Planning Board approved a Master Development Plan application for 385 Congress Street, which includes the construction of three attached buildings that include a hotel with 156 rooms, 297 condominium units, seven retail units, a restaurant, and a parking structure with a total of 337 automobile parking spaces in the B-3 Downtown Business zone. The decision is based upon the application, documents and plans as submitted. The Planning Board reviewed the proposal for conformance with the standards of the Master Development Plan Regulations, Design Manual, and Technical Manual. The Planning Board voted to approve the application with the following waivers and conditions as presented below.

### Waivers

The Planning Board voted unanimously (5-0, Smith and Stanley absent) to waive the following Land Use Code and Technical Manual Standards:

1. Land Use Code Section 7.3, Table 7-E, which requires a maximum front setback of 5 feet. The Planning Board waives Section 7.3, Table 7-E to allow for a maximum front setback of 22 feet on Congress Street, 16 feet on Cumberland Avenue, and 6 feet on Pearl Street.

2. Technical Manual Section 1.14.2, which states that the maximum permitted percentage of compact spaces for parking areas with 10 or more spaces is 20%. The Planning Board waives Section 1.14.2 to allow all of the proposed parking spaces for the portion of the site

labeled 'Lot 1' to be compact spaces and 96 (35%) of the 267 parking spaces proposed for the portion of the site labeled as 'Lot 2' and 'Lot 3' to be compact spaces.

3. Technical Manual Section 1.14.3 states that parking lot layouts shall conform to Figures I-28 thru I-32 of the Technical Manual. The Planning Board waives Section 1.14.3 to allow a parking layout for the portion of the site labeled as 'Lot 1' to have a design that does not conform to Figures I-28 thru I-32.

4. Technical Manual Section 1.14.5 requires that parking lot layouts shall provide a minimum drive aisle of 24 feet. The Planning Board waives Section 1.14.5 to allow a reduced drive aisle width of 15 feet.

## Master Development Plan Review

The Planning Board voted unanimously (5-0; Smith and Stanley absent) to find that the plan is in conformance with the master development plan standards of the Land Use Code subject to the following conditions of approval:

ONGOING/MONITORING

1. The Design Standards outlined in the City's Urban Design Review Memo dated August 2, 2022 in addition to the B-3 Downtown Business Design Standards shall guide the site plan review of all the MDP phases. The approval of the MDP does not imply approval of individual building designs and the public realm details as presented, which shall be addressed in Site Plan application and review; and

2. 24 months after issuance of a Certificate of Occupancy for either the Phase 1 hotel or Phase 2 condominium building, that the applicant shall submit a Site Plan application for the surface parking lot on the remaining Phases of the site demonstrating compliance with the City's parking lot design standards, for review and approval by the Planning Authority; and

PRIOR TO APPROVAL OF THE FIRST SITE PLAN APPLICATION

3. The applicant shall receive approval for and file with the Cumberland County Register of Deeds a subdivision of the subject property (385 Congress Street) into three lots that meet the standards of the City's Land Use Code.

4. The applicant shall receive Planning Board approval for a Traffic Movement Permit encumbering all future Major Site Plans associated with this Master Development Plan.

5. The applicant shall work with the City Arborist to evaluate the preservation of existing street trees along Congress Street.

The approval is based on the submitted plans and findings related to Master Development Plan review as contained in the Planning Board report dated August 5, 2022 for application PL-001970-2022 which is attached.

**Standard Procedures**

Note: The following standard procedures and requirements apply to all approved master development plans:

1. Separate Subdivision/Major Site Plan Approvals Required This approval establishes the general parameters to be adhered to for the development, including the supporting documentation for the general development program, massing, open space plan, and infrastructure plan. This master development plan approval shall not be construed as final authorization of the development. Approval shall confer pending proceeding status upon the development with the effect of maintaining the applicability of regulations in effect at the time of approval for as long as the master development plan approval remains valid, including permissible extensions if granted. Separate subdivision and major site plan approvals are required. Subdivision and major site plans for each phase shall be in general conformance with the master development plan.

2. Master Development Plan Amendments A minor amendment to a master development plan shall be defined as a change which is:

    A. Generally consistent with the approved master development plan.
    B. Does not impact the layout of buildings and open space.
    C. Do not propose new uses.
    D. Do not increase building ground coverage, floor area ratio, or residential density.
    E. Do not substantially change access, circulation, or infrastructure on or adjacent to the site.
    F. Do not involve new waiver requests.
    G. Do not affect any condition or requirement of the Planning Board.

    The Planning Authority shall be authorized to approve such minor amendments to a master development plan upon written application and explanation of the change(s) by the owner (or its agent) of the property. No further public hearings shall be required.

3. Master Development Plan Expiration An approved master development plan shall expire six (6) years from the date of approval unless, prior to the expiration of the master development plan, a written request for an extension is submitted to the Planning Authority. Only two (2) such extensions may be granted by the Planning Authority, and each such extension shall be limited to two (2) years from the date of expiration of the master development plan. The Planning Authority may grant an extension provided there have not been substantial changes to the underlying zoning or site plan standards since the date of the master development plan

approval that would have a substantial impact on the approval. The Planning Authority may condition the extension on an amendment of the master development plan to comply with such applicable ordinance or site plan standard changes per *Section 14.10* of the City's Land Use Code. Approved major or minor amendments to a master development plan do not alter the expiration date for the master development plan.

If there are any questions, please contact Zach Powell at 207-756-8083 or at zpowell@portlandmaine.gov.

Sincerely,



Brandon Mazer, Vice Chair

Attachments:

1. Planning Board Public Hearing Report
2. Planning Board Workshop Memo
3. August 2, 2022 Design Review Memo

# 385 Congress Street Master Development Plan
## 385 Congress Street | CBL 027 D001001
## PL-001970-2022
## Reger Dasco Properties, Applicant

| | | | |
|---|---|---|---|
| **Submitted to:** | Chair Stanley & Portland Planning Board | **Prepared By:** | Zach Powell, Senior Planner |
| **Public Hearing Date:** | August 9, 2022 | **Date:** | August 5, 2022 |

## I. INTRODUCTION

385 Congress Street LLC has submitted an application for a Master Development Plan (MDP) to facilitate the phased development of the subject property with three attached buildings that include a hotel with 156 rooms, 297 condominium units, seven retail units totaling ±11,560 square feet, a ±5,100 square foot restaurant, a passive recreation space (Amenity Deck) totaling ±19,040 square feet, and a parking structure with a total of 337 automobile spaces in the Downtown neighborhood. This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code, Master Development Plan Standards, Section 14.7. An approved Master Development Plan is valid for a period of six years, which may be extended and/or amended.



Figure 1: Rendering of the proposed condominium and staircase to the amenity deck facing northwest on Myrtle Street.

The Planning and Urban Development Department mailed 104 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the August 2, 2022 edition of the *Portland Press Herald*.

**Applicant:** Joe Dasco, Reger Dasco Properties
**Anticipated Hotel Operator:** Marieke Thormann and Robin Payne, The Fathom Companies
**Consultants:** Derek Caldwell and Daniel Riley, Sebago Technics Inc., Henry Weinberg and Dylan Dasco, CBT Architects

## II. REQUIRED REVIEWS

| Review | Applicable Standards |
|---|---|
| Master Development Plan (MDP) | Section 14.7 |
| **Submitted Waiver Requests** | **Applicable Standard** |
| Sec. 7.3 – Table 7-E: Mixed-Use Zone Dimensional Standards – to vary the front setbacks on Cumberland Avenue, Myrtle Street, and Pearl Street up to 22 feet. | Sec. 7.3 – The maximum permitted front setback from all street frontages in the B-3 zone is 5 feet. |
| Technical Standards - Sec. 14.1.2 – to construct structured parking on the portion of the site identified as Lots '2' and '3' where 96 of the total 267 spaces (±35%) will be compact parking spaces and construct structured parking on the portion of the site identified as 'Lot 1' that is 100% comprised of compact spaces. | Sec. 14.1.2 – Parking lots with greater than 10 spaces may be comprised of up to 20% compact parking spaces. |
| Technical Standards - Sec. 14.1.3 – to stripe parking spaces on the portion of the site identified as 'Lot 1' that have parallel valet parking spaces across the ends of double stacked, 90 degree compact spaces. | Sec. 14.1.3 – Parking lot layout shall conform to Figures I-28 thru I-32. |
| Technical Standards - Sec. 14.1.5 – to waive the minimum 24' drive aisle width in the garage on the portion of the site identified as 'Lot 1' to allow parallel valet parking spaces across the ends of double stacked, 90 degree compact spaces. | Sec. 14.1.5. – Vehicular access shall be provided by one or more aisles. Minimum widths of aisles are illustrated in Figures I-28 thru I-31. |

## III. PROJECT DATA

| | | | |
|---|---|---|---|
| Existing Zoning | B-3 Downtown Business, Downtown Entertainment Overlay, PAD Encouragement Area | | |
| Existing Use | Off-Street Parking (Surface and Structured) (141 spaces)<br>Storage (±3,914 SF) | | |
| Proposed Use | Condominiums | 342,050 SF (297 units) | |
| | Hotel | 69,300 SF (156 rooms) | |
| | Retail Space | 11,560 SF (7 units) | |
| | Restaurant | 5,100 SF (1 restaurant) | |
| | Structured Parking | 120,400 SF (337 spaces) | |
| | Passive Recreation Space (Amenity Deck) | 19,040 SF | |
| Property Size | 98,470 SF (2.26 acres) | | |
| | *Existing* | *Proposed* | *Net Change* |
| Building Footprint | 17,322 SF | 666,500 SF | +649,178 SF |
| Building Floor Area | 17,322 SF | 546,100 SF | +528,778 SF |
| Parking Spaces | 173 spaces | 337 spaces | +164 spaces |
| Curb Cuts | 7 (3 blocked) | 4 | -3 |
| Trees in Streetscape | 9 | 34 | +25 |

## IV. EXISTING CONDITIONS

The project site occupies the entirety of a city block that is 2.26 acres in area. The site is bounded to the north by Pearl Street, to the South by Myrtle Street, to the East by Congress Street, and to the West by Cumberland Avenue. The Comprehensive Plan, *Portland 2030*, identifies Congress Street as a priority corridor. Priority corridors are key corridors that connect major nodes and neighborhoods and therefore serve as areas that can accommodate additional mixed-use, higher density growth to take advantage of the transit benefits and services that well-designed, diverse corridors can offer. The site was previously bisected by Chapel Street, which was discontinued in 1973 (Figure 2).

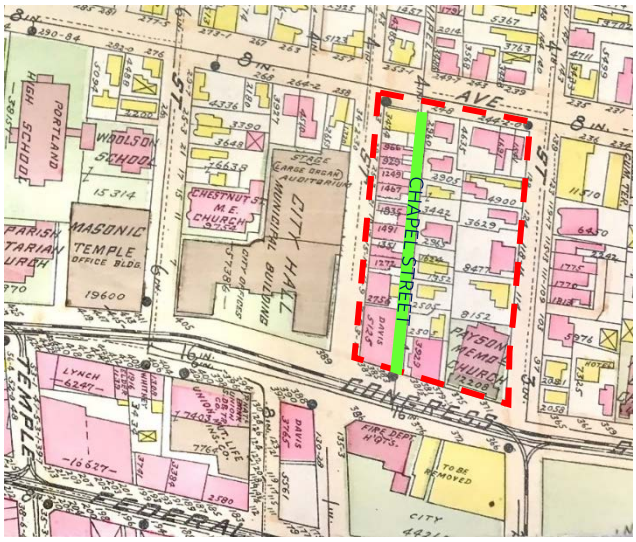


Figure 2: 1912 Sanborn Map of the subject property (outlined in red) and surrounding area. The previous bisection of the subject property by Chapel Street is shown in light green.

Previously, the site was occupied by a number of commercial and residential structures, including Payson Memorial Church. In the 1960s, a portion of the site served as the printing facilities to the Portland Press Herald. Currently, the site serves as an off-street parking (both surface and structured) for daily and monthly parking and is currently occupied by surface and structured parking, totaling 173 spaces. Additionally, the structure on the northwestern corner of the site is used for auxiliary storage. Both of the existing structures (Storage Building ±3,914 SF; Parking Structure: ±13,408 SF) are proposed to be demolished to facilitate the development of the site.

The site serves as a transitional area in a number of regards, including:

- Lots to the north with no building coverage (Top of the Old Port Parking & Lincoln Park) to lots to the south with high building coverage (City Hall, Press Hotel)
- Lower-density multi-family and smaller institutional uses from the west on Cumberland Avenue to medium-density commercial & institutional uses to the east on Congress Street
- Blocks to the west and south occupied by numerous lots to blocks to the east and north that are occupied by one lot (Central Fire Station, Top of the Old Port Parking, Lincoln Park)
- Smaller blocks and larger blocks with pedestrian access points to the south and southeast to larger blocks providing limited or no breaks for pedestrian access
- Downtown Neighborhood to Bayside Neighborhood
- Auto-centric uses & building design to the north and northeast to urban, pedestrian-centric uses to the west, south, and southeast




Figure 3: Northwest view of the subject property in 1900. Source: Maine Historical Society.




Figure 4: Western view of the subject property in 1965 showing the construction of the Portland Press Herald Printing Facility. The original alignment of Chapel Street can be seen in the portion of the site cordoned off for materials storage. Source: Maine Historical Society

The subject block and immediate area is well-served by public transit. Approximately two blocks to the southwest is the METRO PULSE at Elm Street (Downtown Transportation Center), the hub for METRO where bus routes, #2, #4, #5, #7, and the Husky Line begin and end their routes. METRO bus routes #1, #7, #8, #9A, #9B and the Biddeford Saco Old Orchard Beach Transit 60 Green line can be accessed along Congress Street within one block of the site. South Portland Bus routes 21, 24A, and 24B can be accessed along Congress Street roughly two blocks southwest of the site. METRO bus route 8 is located along Cumberland Avenue less than one block from the site.

## V. RIGHT, TITLE & INTEREST

The owner of the property is 385 Congress, LLC. The owner and applicant for the construction of the hotel (The Fathom Companies) has entered into a Purchase and Sale Agreement which serves as sufficient right-title-interest documentation for The Fathom Companies for the purpose of reviewing a master development plan application.

The submitted existing conditions survey (P.13 and P.14) indicates the property has no existing easements. As noted in the Purchase and Sale Agreement and Phasing Plan, access and utility easements will be created to facilitate access pre- and post-construction.

## VI. FINANCIAL & TECHNICAL CAPACITY

The applicants have submitted letters of financial capacity from each of their financial institutions as documentation stating that the Applicant is in good standing (Document H).

## VII. MASTER DEVELOPMENT PLAN OBJECTIVES

A Master Development Plan (MDP) is a regulatory option, applied for at the discretion of the applicant, for sites with one acre or more in cumulative lot area that's designed as a cohesive and integral development program consisting of multiple buildings and associated site improvements built in phases over an extended timeframe (Section 14.7).

An approved MDP establishes parameters to be adhered to for the full development, including the supporting documentation for residential density, general types of uses, building coverage, open space plans, parking and circulation, and infrastructure systems such as stormwater management. MDPs may be developed concurrently with site plans and/or subdivisions, or independently. Approval does not constitute an authorization for development, but it does maintain the applicability of regulations in effect at the time of the approval for as long as the MDP approval remains valid. MDP submission requirements are deliberately not as detailed as site plan and subdivision requirements to allow for some flexibility in the final buildout of a large, phased project. Site plan applications, and any other required approvals are required before any development on the site can proceed, as outlined by the City's Land Use Code.

As stated in Sections 14.3.2.B.- of the City's Land Use Code *a Master Development Plan approval, including an approval of waivers, establishes the general parameters for the development, including the general development program, massing, open space plan, and infrastructure plan. A Master Development Plan approval shall not be construed as final authorization of the development. Approval shall confer pending proceeding status upon the development in effect at the time of approval for as long as the Master Development Plan approval remains valid, including permissible extensions if granted. Subsequent site plan approvals shall be required.*



Figure 5: Rendering of the amenity deck facing west towards Condominium C.

MDP's are intended to guide the development over the life of the development and the various phases. The MDP is a basic building block, which is intended to inform future Site Plan applications. All Major Site Plan applications for each phase shall be in general conformance with the Master Development Plan.

## VIII. JUNE 14 PLANNING BOARD WORKSHOP

The Planning Board held a workshop on June 14, 2022 that served as an introduction to the project and focused on site and building design, phasing, and access management. A complete overview of the June 14, 2022 meeting materials can be found in the archived agenda at the following link:

https://portlandme.civicclerk.com/web/Home.aspx

At the June 14, 2022 Planning Board workshop the Applicant presented updated application materials to address Staff design recommendations relating to decreasing the number of vehicular access points and increasing pedestrian porosity at the ground level and continuing the Congress Street wall with a contextual front setback and expanded sidewalk. The Board was generally supportive of the incorporation of the requested changes and the overall project.

Going forward, the Board was interested in seeing a more fully developed phasing plan that addressed site and building design and infrastructure improvements on- and off-site, with particular interest in phasing related to the amenity deck. Additionally, the Board stressed the importance of the building design being

contextual and not resulting in negative visual and/or shadow impacts on the surrounding area, particularly on Cumberland Avenue and City Hall.

## IX. REVISED MASTER DEVELOPMENT PLAN

As submitted in March 2022, the MDP consisted of a phasing diagram with four separate phases to be constructed over a six-year timeline and the potential for some of the phases to be constructed simultaneously. The chart below outlines the previous and current proposed phases and is followed by more detailed descriptions of each phase.

| Previous Phase | Current Phase/s | Description of Phase/s |
|---|---|---|
| Phase 1B | Phases 0 & 1 | Demolition of existing two structures and construction of Hotel and structured parking on 'Lot 1' |
| Phase 1 | Phase 2 or Phase 1 Alt. | Construction of Condominium A and structured parking on 'Lot 2' |
| Phase 2A | Phase 3 | Construction of Condominium B and Levels 0-2 of Condominium C, including structured parking on 'Lot 3' |
| Phase 2B | Phase 4 | Completion of Condominium C. |

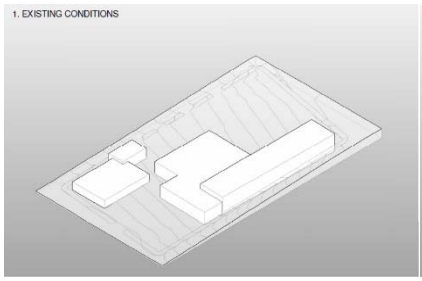
### Revised Phasing Plan

At the June 14, 2022 Workshop, the Applicant presented some of the proposed changes to the design of the building and the site. Larger changes to the site include:

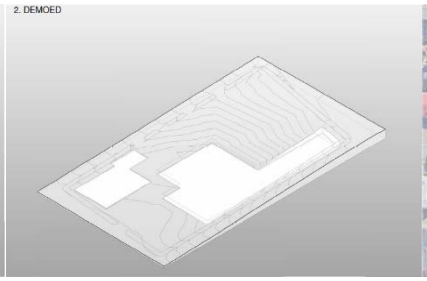
- Removal of pocket park on Congress Street and conversion to linear park.
- Expansion of sidewalk width along Congress Street and Cumberland Avenue
- Access to the amenity deck from street level on Congress and Myrtle Streets
- Modifying design of the amenity deck to reduce barriers to successful construction and programming
- Reduction in the number of curb cuts from 7 to 4 by collocating garage entrances with loading and trash storage operations, and adding vehicular ingress/egress mid-block on Cumberland Avenue
- Reduction in height of the condominium buildings and number of overall condominium units due to the maximum permitted floor area and lot coverage above 125 feet.
- Reduction in the square footage dedicated to the condominiums, hotel, restaurants, and structured parking
- Increase in the number of retail units from 4 to 7 and increase in the total square footage by +4,860 square feet that wrap around each of the corners of the project site.

The Applicant has expanded the phasing diagram into a plan that provides additional specificity relating to on- and off-site improvements (e.g. utilities, sidewalks), easements, how gaps longer than 24 months will result in design modifications and additional improvements (e.g., installing surface parking lot screening), and how site access will be handled in regards to the amenity deck and structured parking.

**Phase 0**: Demolition of the existing two structures and backfill of the building fronting Pearl Street. In the event that the hotel is constructed first, the portion of the former printing building on Lot 2 will be backfilled to facilitate access to the lower level of parking for the hotel.




Phase 0 Existing Conditions

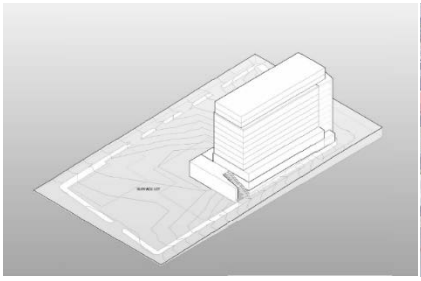



*Phase 0 Proposed Demolition*




*Phase 0 Aerial Image*

**Phase 1**: Construction of a ±157,600 square foot, 12-story building with a 156-room hotel, 9 condominium units, a ±5,100 square foot restaurant, ±660 square feet of retail, and 70 enclosed parking spaces. The Myrtle Street staircase and semi-public portion of the amenity deck is also included in this phase, with public access restricted at Myrtle Street until the public portion of the amenity deck for Condo A is completed. Curb extensions, crosswalk improvements, and decorative streetlighting are proposed along the frontage of Lot 1, with additional curb extension & crosswalk improvements proposed at Pearl & Congress Street as part of the proposed traffic signal relocation.



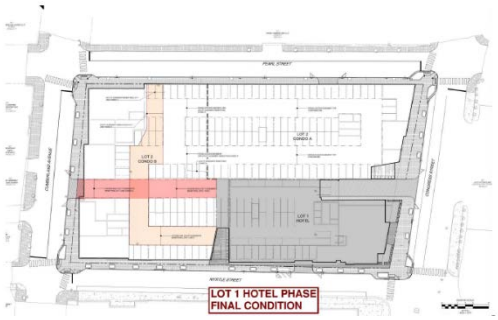
Phase 1 Photosimulation




*Phase 1 Ground Floor Plan*

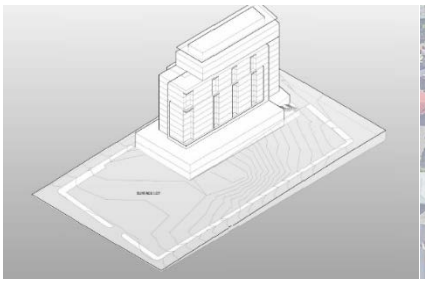



*Phase 1 Podium Plan*




Phase 1 Easement Plan, with utility easements in tan and access easements in red.

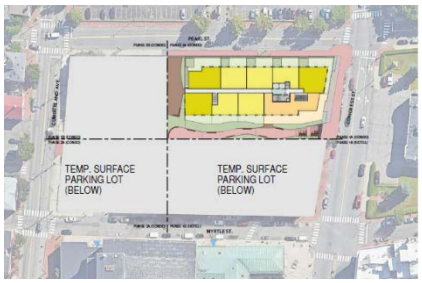
**Phase 2 or Phase 1 Alt.:** Construction of a ±239,450 square foot, 14-story building with 110 condominium units, ±4,000 square feet of retail and 148 enclosed parking spaces. The Congress Street staircase and the eastern public portion of the amenity deck will be constructed, with public access restricted until Phase 1 is constructed. Curb extensions and improvements, crosswalks, and decorative streetlighting along the frontages of Condo A are also included in this phase. Phase 1 Alt is provided as a scenario in the event that the hotel is not constructed first, in which case Phase 1 would be the second phase constructed.



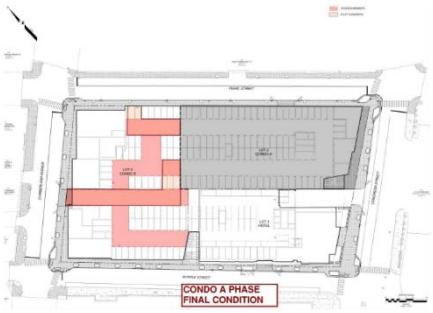
Phase 2 Photosimulation




*Phase 2 Ground Floor Plan*

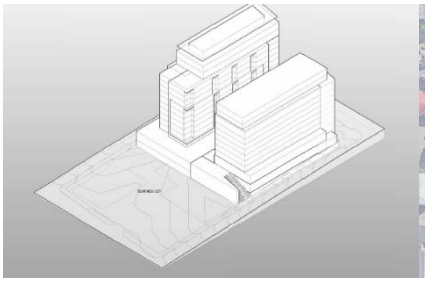



*Phase 2 Podium Plan*

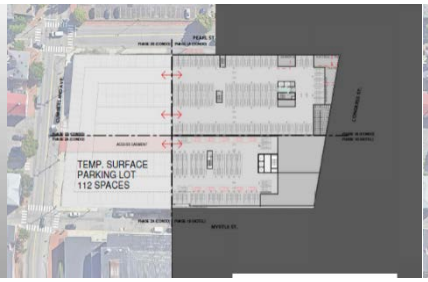



Phase 2 Easement Plan, with utility easements
in tan and access easements in red.

**Phase 1 Complete:** At the Completion of Phase 1 and Phase 1 Alt, the amenity deck will be open to the public at Congress and Myrtle Streets. On the western portion of Lot 2, the remainder of the site will be used for temporary surface parking with 112 spaces and access points to the lower garage levels.



Phase 1 Complete Photosimulation



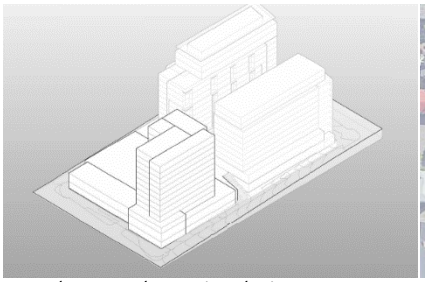

*Phase 1 Complete Lower Garage Plan*




*Phase 1 Complete Podium Plan*

**Phase 3:** Construction of a ±180,050 square foot, 13-story building with 97 condominium units, 4 retail units totaling ±6,900 square feet, and 130 enclosed parking spaces. Phase 3 involves the completion of Condominium B and Levels 0-2 of Condominium C. Landscaping and final improvements to the podium will not be made until Phase 4 is completed, with a temporary roof structure installed in between Phase 3 and Phase 4. The purpose of the temporary roof structures is to provide cover over the footprint for the future Condominium C.

Curb extensions and improvements, crosswalks, and decorative streetlighting along portions of Cumberland Avenue & Myrtle Street fronted by Condo B are also included. Brick sidewalks are proposed to be installed along the frontages of Condo B in this phase, with the frontages along Condo C to remain bituminous sidewalks for up to 24 months after the completion of Phase 3 or the start of Condo C construction, whichever is first.



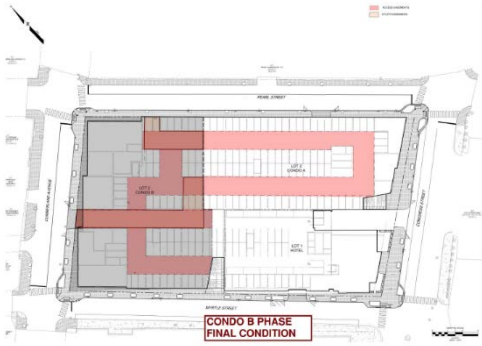
Phase 3 Photosimulation



*Phase 3 Lower Garage Plan*

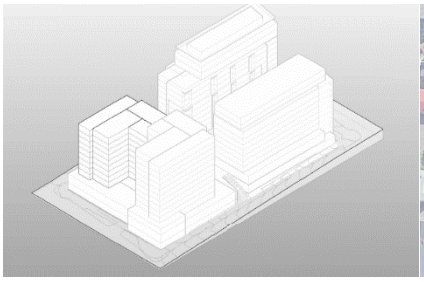



*Phase 3 Podium Plan*




Phase 3 Easement Plan, with utility easements in tan and access easements in red.

**Phase 4:** Construction of a ±89,200 square foot, 11-story addition on the northwestern portion of Lot 2 with 81 condominium units. Brick sidewalks will be completed along the frontages of Condominium C, and the remaining portion of the amenity deck will be landscaped & open to the public.



Phase 4 Photosimulation



*Phase 4 Lower Garage Plan*



*Phase 4 Podium Plan*

Overall, the expansion of the phasing diagram into a plan has successfully provided more clarity to how utility improvements and easements will be handled.

## VI. ZONING ANALYSIS

The site is encompassed by the B-3 Downtown Business Zone, the Pedestrian Activities District (PAD) encouragement area, and the Downtown Entertainment Overlay Zone.

The purpose statement for the B-3 zone includes the following relevant to the proposal:

- *Enhance and promote the orderly expansion of retail and service businesses downtown, satisfying the related needs of the city's resident, working and visitor populations;*
- *Encourage increased housing opportunity downtown for a diverse residential population;*
- *Enhance the pedestrian environment through the encouragement of intensive mixed-use activities, through the enhancement and maintenance of public and private open space, and through the enlivenment and increased attractiveness of the street environment;*
- *To encourage excellence in urban design;*
- *In the PAD Overlay Zone, to create continuity of pedestrian-oriented uses along streets where such uses predominate and along streets which, over time, will establish and maintain a strong retail and pedestrian-oriented use pattern.*

The zoning dimensional requirements are intentionally permissive in this urban downtown zone – in most cases the requirements are intended to create dense, taller buildings that fill the site and maintain a street wall line. Regarding height for this block, there is a 90 foot maximum street wall height along Pearl Street, 50 foot maximum street wall height along Congress and Myrtle Streets, and a maximum building height of 150 feet as per the Downtown Height Overlay map. Compliance with B-3 dimensional standards is shown in the table below. As submitted, the Master Development Plan is consistent with zoning, including the B-3 zone purpose statement, uses, and dimensional standards, and the Downtown Height Overlay Map. A waiver request to exceed the maximum permitted front setback of five feet has been submitted by the applicant to accommodate a wider sidewalk and plaza space along Congress Street, Pearl Street, and Cumberland Avenue which is discussed on Page 12.

| Standard | Required | Proposed |
|---|---|---|
| Minimum street frontage | 15 feet | 1315 feet |
| Maximum front setback | 5 feet | 8-11 feet (Waiver Request Submitted) |
| Maximum length of undifferentiated blank wall | 30 feet | Complies. Longest length is 30 feet. |
| Maximum Floor Area | 15,000 square feet for each floor above 125 feet | Complies. Largest proposed floor area is 10,500 square feet. |
| Maximum Structure Height | 150 feet, with 90 foot maximum street wall height on Pearl Street and 50 foot maximum on Congress and Myrtle Streets | 150 feet with street wall heights ranging from 20-38 feet |
| Maximum Lot Coverage | 25% of lot area for portions of structures exceeding 125 feet in height | Complies. Largest proposed lot coverage is 10,500 square feet. |

Each future site plan and subdivision will be evaluated for conformance with zoning, site plan, and subdivision standards requirements as well as undergoing design review under the B-3 Downtown Urban Design Guidelines which will include an advisory Historic Preservation review.

Downtown Urban Design Guidelines & Pedestrian Activities District (PAD) Encouragement Area: The site is required to comply with the Downtown Urban Design Guidelines. Additionally, the Congress Street frontage falls within the Pedestrian Activities District (PAD) encouragement area. This overlay zone, is intended to encourage ground floor uses that activate pedestrian spaces, creating a safe and vibrant pedestrian environment in Portland's downtown. Buildings located within the encouragement area are required to be designed and constructed to be reasonably capable of being converted to accommodate uses permitted in the PAD overlay zone and all sidewalk areas and open space shall complement the general pattern of the downtown pedestrian environment.

The Applicant has incorporated staff recommendations to expand the proposed sidewalk along Congress Street, added an entrance on Congress Street for the hotel, and increase the number of retail units that wrap around corners of the site. The Applicant has also expanded the sidewalk along Cumberland Avenue, which will similarly improve the pedestrian experience on the site.

Waiver Request

The Applicant has submitted a waiver request, to have front setbacks greater than 5 feet on Congress Street (22 feet), Cumberland Avenue (16 feet), and Pearl Street (6 feet).

Proposed Front Setback

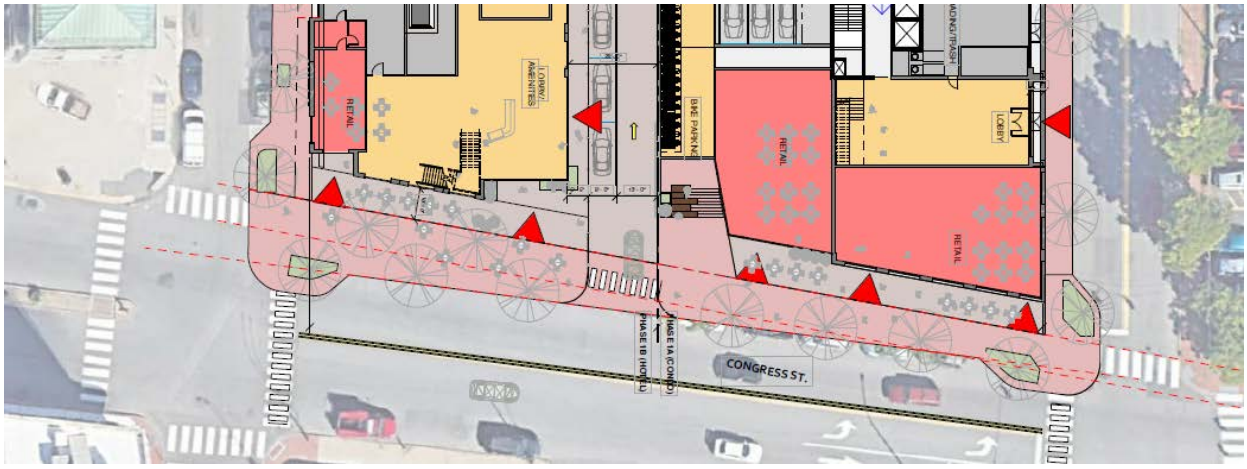



Figure 6: Rendered floor plans at street level on Congress Street showing the proposed sidewalk expansion.

§(b)(1)(e)(2) of the Design Manual identifies the review standards for the Planning Board to permit an increased setback beyond street build-to lines. The following list includes the standards of §(b)(1)(e)(2) along with staff review of the compliance with these standards:

i. **Provides substantial and viable publicly accessibly open space or other amenity at the street level that supports and reinforces pedestrian activity and interest. Such amenities may include without limitation plazas, outdoor eating spaces and cafes, or wider sidewalk circulation areas in locations of substantial pedestrian congestion.**

*Complies. The requested increased setbacks facilitate expanded sidewalk areas on all three frontages to avoid conflicts with utility connections and establish a contextual setback with City Hall on Congress Street and Merrill Auditorium on Cumberland Avenue. By increasing the setback area along*

*Congress Street, the applicant is able to construct a wider sidewalk that would establish a linear plaza space capable of accommodating pedestrian amenities including seating, outdoor eating spaces/café tables, enhanced landscaping and tree canopy. Furthermore, the setback along Congress Street enhances the visual connection between the site and City Hall plaza and supports the existing street wall alignment by aligning with the northern building wing of City Hall. Similarly, increasing the setback area along Cumberland Avenue would allow for a wider sidewalk capable of accommodating pedestrian amenities that may support the proposed retail spaces and enhances the visual connection with Merrill Auditorium.*

ii. Does not substantially detract from the prevailing street wall character by introducing such additional setback at critical building locations such as prominent form-defining corners, or create a sense of discontinuity in particularly consistent or continuous settings.

*Complies. As mentioned above, the requested waiver would facilitate the strengthening of the Congress street wall by permitting a contextual setback at Congress & Myrtle Street and Cumberland & Myrtle Street, with the angular Congress Street setback respectfully transitioning to Pearl Street that reflects the current design of Congress Street.*

iii. Does not detract from existing publicly accessible open space by creating an excessive amount of open space in one (1) area or by diminishing the viability or liveliness of that existing open space.

*Complies. Based on recommendations from Staff, the Applicant transitioned a proposed pocket park on Congress Street into a linear park that improves the connection between existing open spaces of City Hall Plaza and Lincoln Park and provides viable opportunities for seating and events that can support uses on-site and in the surrounding neighborhood, while also creating additional space for an enhanced street tree canopy. Along Cumberland Avenue, an expanded sidewalk provides viable opportunities for seating and events that can support the proposed ground floor retail spaces.*

iv. The area of setback is of high quality and character of design and of acceptable orientation to solar access and wind impacts as to be attractive to pedestrian activity.

*Complies. The proposed setback areas allow for an expanded and improved brick sidewalks. The expanded sidewalks will function as an attractive improvement for pedestrian activity and provide visual connections to City Hall Plaza and Merrill Auditorium.*

Based on the compliance with these review standards, Staff recommends approval of the proposed waiver.

Parking Design Waivers

The next three waivers relate to parking exemptions for the two proposed parking areas.

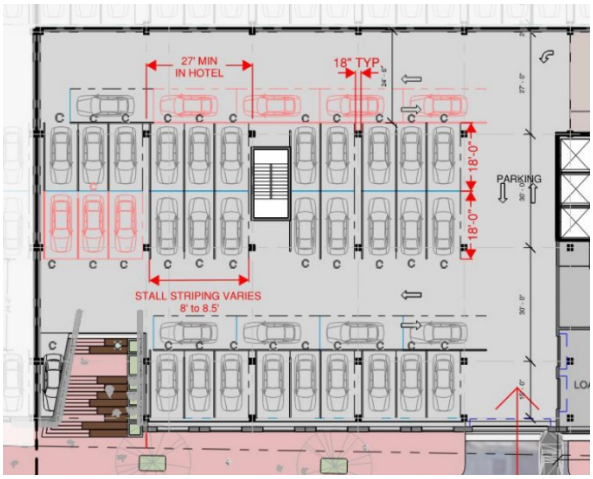



Figure 7: Parking Lot Plan for 'Lot 1' at Congress Street level. The Plan proposes that all spaces be compact spaces due to the structural columns denoted with black squares and to allow for narrower aisle widths & configuration not shown in the Technical Manual for the valet operations.

**Technical Manual Waiver – Sec. 1.14.2 – Permitted Percentage of Compact Parking Spaces**

The Technical Manual states that parking spaces shall meet the following dimensional requirements:

- Standard parking space: 9 feet wide by 18 feet long
- Compact parking space: 8 feet wide by 15 feet long
- Motorcycle/motorized scooter parking space: 4 feet wide by 8 feet long

with the allowance that parking lots with greater than 10 spaces may be comprised of up to 20% compact parking spaces. The Applicant has requested that all of the proposed spaces for the portion of the site identified as 'Lot 1' (Hotel) be compact. The two levels of parking on 'Lot 1' would be solely accessed by valets.

The Applicant has also included in this request a proposed increase in the number of compact spaces on the portions of the site identified as Lots '2' and '3' to 96 spaces of the total 267 spaces (±35%).

Consulting Traffic Engineer Tom Errico has provided the following comments in support of the waiver:

> *The applicant is requesting a wavier as it relates to the number of compact parking spaces for the project. Given that many of the parked vehicles will be low turnover and some spaces will only have the width reduced to between 8' and 8'6" due to structural column constraints, I support the requested waiver.*

**Technical Manual Waivers – Sec. 1.14.3 & 1.14.5– Parking Lot Layout & Drive Aisle Width**

Sec. 1.14.3 requires that parking lot layouts shall conform to Figures I-28 thru I-32. Additionally, Sec. 1.14.5 states that vehicular access shall be provided by one or more aisles with minimum widths of aisles depicted in Figures I-28 thru I-31. The Applicant has requested a waiver of these standards for the two levels of structured parking for 'Lot 1' (Hotel). The proposed parking includes a combination of 90 degree stalls, parallel parking spaces, and double parking. In between the 90 degree and parallel parking spaces in the northern stalls of the garage, there is a proposed 15' aisle width. In between the two southern rows of 90 degree parking stalls, stacked parallel parking is proposed and a 15' aisle width as well.

The Consulting Traffic Engineer has provided the following comments in support of these waivers:

> *The applicant is requesting a waiver for parking aisle width for the parking of valet vehicles in the aisle, thus reducing the effective width for maneuvering. Given that all vehicles in the hotel parking*

*lot areas are valet managed and not self-parked, I support this waiver. I would note that vehicles shall not encroach into the driveway to and from Myrtle Street.*

## VII. TRAFFIC MOVEMENT PERMIT

Currently, the Applicant is in the process of revising the proposed methodology for trip generation estimates to use a separate residential land use code and high turnover sit-down restaurant for the retail uses, instead of the originally proposed LUC 221 (Mid-Rise Residential w/ First Floor Commercial).

Based on the current status of the TMP application review, the TMP will be reviewed and approved prior to the first site plan approval for the project.

## VIII. STAFF REVIEW

### A. Master Development Plan Review Standards Section 14.7

Section 14.7 of the City's Land Use Code establishes standards under which Master Development Plan applications must be reviewed. Per this section, Master Development Plans shall adhere to the following requirements:

#### Section 14.7.1. In general

*a. Designed to integrate with the surrounding context with respect to land use, architecture, open space and pedestrian networks, vehicular access and circulation, off-site public facilities and all other infrastructure.*

Staff Comment: The proposed uses of the site for multi-family housing, hotel, retail, and structured parking are similar & compatible with the surrounding area. As part of the initial review stage, larger design topics relating to open space and pedestrian networks, relationship with neighboring architecture, and vehicular access and circulation were identified by City Staff.

The Applicant has submitted revised plans that improve the integration with neighboring City Hall & Cumberland Avenue to better reflect the existing street wall and building form. Additionally, shadow studies and renderings along Congress Street and Cumberland Avenue confirm that the proposed design will not result in negative visual impacts on adjacent open spaces of City Hall Plaza and Lincoln Park (Documents U and V).

Open space and pedestrian improvements have also been made to provide more usable and accessible spaces through an expanded sidewalk/linear park along Congress Street and increased accessibility to the proposed amenity deck through street level staircases at Congress Street & Myrtle Avenue.

The submitted design has reduced the total number of curb cuts on the block from seven to four by collocating garage entrances with loading and trash operations and adding vehicular ingress/egress mid-block on Cumberland Avenue and shifted valet drop-off operations off Congress Street to reduce negative impacts on the surrounding area.

The applicant has requested a waiver to reduce the minimum number of parking spaces for the condominium developments on Lots 2 and 3 from one parking space per dwelling unit to 0.9 parking spaces per dwelling unit. Staff reviewed the parking reduction waiver request and finds this waiver is not necessary given that the Land Use Code provides reductions that do not require the approval of a

formal waiver. The applicant is within a quarter mile of fixed route transit and therefore is not required to provide parking if they chose to provide a TDM plan for the residential component as stated in Table 19-B, or the Planning Board may establish an off-street parking requirement that is below the zoning requirement of one parking space per dwelling unit based on a parking study or finding of unique conditions that result in a lesser parking demand.

The updated design includes an expanded sidewalk along Congress Street, which will strengthen the connection between two off-site public facilities (City Hall Plaza and Lincoln Park). The preliminary utility designs submitted for the project integrate with existing utilities and proposed signal improvements on Pearl Street and the burial of overhead utilities on Pearl Street.

Based on the submitted application materials the proposed MDP is designed to integrate with the surrounding context.

***b. Consistent with the objectives of this ordinance, consistent with the City's Comprehensive Plan, and consistent with City Council-approved master plans and facility plans for off-premise infrastructure.***

Staff Comment: The submitted MDP is consistent with City Council-approved master plans by:

- Improving transportation access to arts and cultural venues throughout the City by enhancing the connection to Merrill Auditorium via the proposed amenity deck and street level staircases (**Arts District Plan, 1996**), and
- Proposing the construction of dense housing in Downtown and pedestrian enhancements such as curb extensions and expanded sidewalks to promote walkability and traffic calming (**Peninsula Transit Plan, 2009**).
- Providing infill development within a transit-oriented location with pedestrian-oriented streets to make walking more inviting, and connection to bus routes, bike networks, and other mobility options easier to access to other parts of the city. Providing residential density as well as employment and job density that can support and drive transit ridership as well as walk to work opportunities **(One Climate Future, 2021)**.

The Comprehensive Plan, *Portland's Plan 2030* goals and policies (state and local) relevant to the proposed master development plan are included below. The master development plan aligns with these vision statements and goals by infilling an underdeveloped site primarily used for automobile parking located at the heart of Portland's walkable downtown, proximate to some of the tallest structures in the city, with residential units, commercial uses, and publicly accessible open spaces and pedestrian connections that better reflect the downtown location.

The scale of the proposed buildings facilitate an increase in dwelling units within a walking and transit-oriented site. Along with increasing the viability of downtown, the proposed infill project potentially reduces the need for new construction in green field or outlying areas and dependency on single occupancy vehicles, which promotes more sustainable development practices.

In addition, the expanded sidewalk area along Congress Street would serve as a positive connection between adjacent open space sites (City Hall and Lincoln Park), the proposed amenity deck and retail units wrapping the corners of the site provide site permeability to enhance pedestrian connections, and overall there is an increase in the number of recreational opportunities within close proximity to the Bayside and Downtown neighborhoods.

### Vision Statements

- Sustainable: 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.
- Sustainable: Portland will grow in order to sustain our community, infrastructure, and economy.
- Dynamic: Portland will plan for a built environment that encourages an active citizenry.
- Connected: We will enable meaningful access to the natural world and recreational opportunities as a central component of community health.

### Land Use

- **Reinforce the Center:** Though Portland's commercial and entrepreneurial activity takes place throughout the city, downtown Portland remains at the center of the region's arts and cultural, economic, and civic health, and Portland's Plan embraces the principle that downtown should continue to be a predominant locus of activity for the broader region.

### Environment

- Adopt sustainable land use and transportation policies that support connectivity, walkable neighborhoods, and multi-modal transportation.
    - Continue to develop land use policies which support complete neighborhoods.

### An Enduring City – Historic Preservation

- 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.

### A Livable City: 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.
- Encourage quality, sustainable design in new housing development.
    - Remove housing barriers
    - Leverage underused properties

### An Active City – Recreation & Open Space

- Strengthen connections between open spaces
    - Ensure Equity
    - Improve Safety, Visibility, and Accessibility
    - Incorporate Multiple Functions
    - Connect the Chain

### An Accessible City – 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.

- Enhance the pedestrian realm

Future Land Use

- Complete Neighborhoods
- Reinforce the Center

*Natural features and open space*

*a. Developed so as to locate buildings and improvements in a manner that considers existing topography, provides usable open space, preserves significant natural features as defined in Subsection 14.6.2, and preserves existing trees to the maximum extent possible.*

Staff Comment: The proposed development considers the existing change in topography from Congress Street to Cumberland Avenue by giving each frontage a distinct design that does not prioritize one frontage over the other. Additionally, the change in grade has allowed for the Applicant to include underground parking towards the Congress Street frontage, which allows for more active lobby space and retail units on the corners of the project site.

Expanded sidewalks and the amenity deck will serve as open spaces for tenants, hotel guests, and the public, and enhance connections between existing open spaces of Lincoln Park and City Hall Plaza. The property is currently entirely developed, with minimal landscaping around the perimeter and no significant natural features. The MDP contemplates eliminating all of the existing landscaping and proposes the planting of 34 street trees, which will be an overall increase of 25 trees in the streetscape. Staff is recommending that the existing street trees along Congress Street be re-evaluated for preservation by the applicant and the City Arborist as part of future Site Plan submissions.

*b. Include provisions for the ownership and maintenance of usable open space as appropriate.*

Staff Comment: The proposed amenity deck will span three parcels post-subdivision. Based on feedback from Planning Staff and the Board, the design of the amenity deck has been updated so that the portions of the amenity deck for Phase 1 and Phase 1Alt. can be used before both phases of construction are complete. The proposed access staircases will be open to the general public after both phases of construction are completed. The Applicants have stated that portions of the amenity deck on Lot 1 will be owned and maintained by the Hotel operator and portions of the amenity deck on Lots 2 and 3, will be owned and maintained by a shared owner.

*Historic Preservation*

*a. Developed as so to conform with standards for designated landmarks or for properties within designated historic districts or historic landscape districts as found in Article 17.*

Staff Comment: Not applicable. The site is not a designated landmark or located within a historic district or historic landscape district.

*b. When proposed adjacent to or within one hundred (100) feet of designated landmark, historic district, or historic landscape, the master development plan shall be developed so as to be*

*generally compatible with the major character-defining elements of the landmark or portion of the district in the immediate vicinity of the proposed development.*

Staff Comment: The site is located within 100 feet of the Congress Street Historic District and Portland City Hall, an individually designated landmark prompting a Historic Preservation advisory review. Staff has provided initial design comments to the Applicant in a previous design review memo (Attachment #3).

Staff note that the site is an excellent location for a creative contemporary design and that any future building designs consider the detailed architectural design relationship in the context of City Hall and the existing buildings along Congress Street many of which share common elements of a unified massing broken up through layered rhythms of regular fenestration and ornamentation, and prominent entrances along Congress Street. The proposed development includes contextual setbacks to ensure buildings are compatible with City Hall. The site offers an opportunity to extend the activity of Congress Street to the east with active ground floors and the creation of a linear plaza by setting the building back from Congress Street an additional 10 feet from the property line to align with City Hall's northern building wing and provide a visual connection to City Hall plaza. The majority of the site will include a one or two story street wall before stepping back and rising to the maximum building height. Subsequent site plan applications will include additional advisory reviews related to more specific elements (e.g., materiality) of the buildings.

*Infrastructure*

*a. Designed with sizing of street and other infrastructure systems to accommodate the overall service demand of the plan.*

Staff Comment: The proposed development will be serviced by public water, sanitary sewer, electric, natural gas and telecommunications. As part of the application, a new 8" water main supporting the condominium units in Phases 3 and 4 is proposed to run under Pearl Street.

Regarding stormwater management, the applicant has provided details of proposed improvements for each phase to service the overall development. This concept is to be refined and designed with more detail as part of each individual phase. The proposal qualifies as a redevelopment under MaineDEP Chapter 500, and is required to treat 50% of impervious surface. Two subsurface storage and treatment systems are proposed, with one system serving the hotel for Phase 1 and the second serving the condominium and retail uses in Phases 1 Alt-4. At this time the systems will either utilize a subsurface sand filter or storm filter system, with both being identified/approved as a Maine DEP stormwater best practice. Based on initial calculations, the system is anticipated to treat and detain 50 to 66% of the project's developed area.

The submitted application materials state that more detailed utility plans will be submitted upon submission of each separate major site plan application. Based on a request from City reviewers for more detailed documentation on ownership, easements, and level of compliance between phases, the Applicant submitted a detailed phasing plan that provides this information. City reviewers (Department of Public Works & the Consulting Traffic Engineer) have noted areas for future review and analysis in the subsequent site plan reviews. These comments have been included in Attachments 8 and 9.

*b. Designed to create a street grid pattern that reflects average city block sizes of the surrounding neighborhood.*

Staff Comment: The submitted MDP retains the existing city block size of 1,315 feet, which is reflected in the neighboring context of sites that occupy whole City blocks. Through updates to the design of the project, the Applicant has included a publicly accessible pedestrian connection through the site via the amenity deck and included retail units that wrap around corners to increase the porosity of the site for pedestrians, which also reflects the nearby context. Based on these design considerations, the proposed project reflects the average city block size of the surrounding neighborhood.

*Design*

*a. Designed to create a cohesive identity through building scale, massing, and articulation; use of quality exterior materials and architectural detailing at pedestrian scale; consistency of design and materials for streetscape and pedestrian amenities; framing of outdoor open space and linkages; a clear conveyance of the function and significance of various buildings, entrances, and features; and to generally comply with design and development standards of the zone in which it is located.*

Staff Comment: A Design Review was prepared by Urban Designer Sean King on August 2, 2022 detailing the compliance of the submitted application with the MDP design standards (Attachment 5). Based on the review it was determined that the MDP has created a cohesive identity through the inclusion of a podium design with ground floor retail at the base and stepbacks that have established vertical scale for the towers while reducing the building heights of Condominiums B & C to reflect the residential character of Cumberland Avenue.

Quality exterior materials have been demonstrated through the inclusion of building entry canopies, storefront windows, structured parking screening and signage, with further review upon submission of Major Site Plan applications.

A consistency in streetscape and pedestrian amenities has been provided by providing a linear park that continues the expanded pedestrian amenity provided at the adjacent City Hall, distinguishing pedestrian and vehicular zones through differing surface materials, and delineates public vs. private space on the amenity deck through grade separation.
The inclusion of expanded sidewalks, ground-floor retail, and amenity deck help to frame outdoor open spaces and linkages to open spaces on and off-site. The Design Review memo recommends requirements for continuity in materials, amenities and connectivity in the expansion of the amenity deck between phases and shall be considered by the applicant in future Site Plan applications. Under future site plan reviews, the Applicant should consider how street furniture, such as permanent outdoor seating, can be incorporated within the expanded sidewalk along Congress Street.

The function and significance of buildings, entrances and features has been demonstrated through the differing design of the hotel and condominium buildings, structured parking screening, and differing projections/recessions for balconies that denote private access to the amenity deck area.

Through the submission of the waiver request for increased front setbacks and future staff review in subsequent site plan applications, the MDP meets the relevant MDP standards related to design. Additional design review against the B-3 design standards will be required in future site plan submittals.

## IX. NEIGHBORHOOD MEETING & PUBLIC COMMENT

As of the writing of this memorandum, two written public comments have been received (Attachment 10). These comments pertain to concerns about traffic circulation around the site and the support of street trees & new landscaping as a component of the proposed project. The applicant held a Neighborhood Meeting on May 23, 2022 and three members of the public attended (Attachments 11 and 12). Questions raised at the Neighborhood Meeting addressed the following topics:

- Project application materials including historic photos of the site and whether the proposed project will incorporate historic site elements (e.g., restoration of Chapel Street, design elements from Payson Memorial Church)
- The proposed number and location of parking spaces and whether the parking levels have the ability to be retrofitted for commercial or residential uses
- Levels of access to the amenity deck and activation of the streetscape

## X. STAFF RECOMMENDATION

Subject to the proposed motions and condition of approval listed below, Planning Department staff recommends that the Planning Board approve application #PL-001970-2022 for a Master Development Plan at the subject property.

## XI. PROPOSED MOTIONS

### 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 held on August 9, 2022 for application #PL-001970-2022 relevant to the Master Development 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. Maximum Front Setback
   The Planning Board [finds/does not find] based upon the Planning Staff's review that extraordinary conditions exist or undue hardship may result from strict compliance with Section 7.3, Table 7-E of the Land Use Code which requires a maximum front setback of 5 feet, that 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/does not waive] Land Use Code Section 7.3, Table 7-E to allow a maximum front setback of 22 feet on Congress Street, 16 feet on Cumberland Avenue , and 6 feet on Pearl Street.

2. Maximum Percentage of Compact Parking Spaces
   The Planning Board [finds/does not find] based upon the Consulting Traffic Engineer's Review, that extraordinary conditions exist or undue hardship may result from strict compliance with

Technical Manual Section 1.14.2 which states that the maximum permitted percentage of compact spaces for parking areas with 10 or more spaces is 20%, that 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/does not waive] Technical Manual Section 1.14.2 to allow all of the proposed parking spaces for the portion of the site labeled 'Lot 1' to be compact spaces and 96 (±35%) of the 267 parking spaces proposed for the portion of the site labeled as 'Lot 2' and 'Lot 3' to be compact spaces.

3. Parking Lot Layout

The Planning Board [finds/does not find] based upon the Consulting Traffic Engineer's Review, that extraordinary conditions exist or undue hardship may result from strict compliance with Technical Manual Section 1.14.3 which states that parking lot layouts shall conform to Figures I-28 thru I-32, that 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/does not waive] Technical Manual Section 1.14.3 to allow a parking layout for the portion of the site labeled as 'Lot 1' to have a design that does not conform to Figures I-28 thru I-32.

4. Parking Lot Drive Aisle Width

The Planning Board [finds/does not find] based upon the Consulting Traffic Engineer's Review, that extraordinary conditions exist or undue hardship may result from strict compliance with Technical Manual Section 1.14.5 which requires parking lot layouts provide a minimum drive aisle of 24 feet, that 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/does not waive] Technical Manual Section 1.14.3 to allow a reduced drive aisle width of 15 feet.

B. MASTER DEVELOPMENT PLAN REVIEW

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 August 9, 2022 for application #PL-001970-2022 relevant to the Master Development Plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board [finds/does not find] that the plan is in conformance with the Master Development Plan standards of the Land Use Code subject to the following conditions of approval:

1. The Design Standards outlined in the City's Urban Design Review Memo dated August 2, 2022 in addition to the B-3 Downtown Business Design Standards shall guide the site plan review of all the MDP phases. The approval of the MDP does not imply approval of individual building designs and the public realm details as presented, which shall be addressed in Site Plan application and review; and

PRIOR TO APPROVAL OF THE FIRST SITE PLAN APPLICATION

2. The applicant shall receive approval for and file with the Cumberland County Register of Deeds a subdivision of the subject property (385 Congress Street) into three lots that meet the standards of the City's Land Use Code.

3. The applicant shall receive Planning Board approval for a Traffic Movement Permit encumbering all future Major Site Plans associated with this Master Development Plan.

4. The applicant shall work with the City Arborist to evaluate the preservation of existing street trees along Congress Street.

## XII. ATTACHMENTS

Staff Attachments

1. City Staff Comment Letter (June 23, 2022)
2. City Staff Comment Letter (July 26, 2022)
3. City Staff Design Recommendations Memorandum
4. City Staff Design Recommendations Presentation
5. City Staff Design Review Memorandum (August 2, 2022)
6. TMP Scoping Meeting Notes (May 18, 2022)
7. Comments on Proposed Trip Generation Methodology (July 20, 2022)
8. Status Updates – Transportation Review (August 4,2022)
9. Department of Public Works Comments (August 4, 2022)
10. Public Comment
    a. PC1: Aurelia C Scott
    b. PC2: Avery Yale Kamila
11. May 23, 2022 MDP Neighborhood Meeting Notice
12. May 23, 2022 MDP Neighborhood Meeting Minutes

Applicant's Documents

A. Cover Letter and Description
B. Master Development Plan Checklist
C. Right Title and Interest
D. Evidence of State/Federal Approvals
E. Zoning Analysis Table
F. Assessment of Compliance
G. Waiver Table
H. Financial Capacity
I. Technical Capacity
J. Master Development Context and Building Design
K. Natural Features
L. Views and Historic Features
M. Public Safety
N. TMP Application and Sections 1-6
O. Transportation Assessment
P. Trip Generation Methodology Memorandum (June 28, 2022)
Q. Utilities
R. Masterplan Stormwater Narrative
S. Preliminary Geotechnical Report (March 3, 2017)
T. Exploration Summary Memo (February 8, 2022)
U. Valet Operations Narrative (July 25, 2022)
V. View Studies (August 1, 2022)
W. Shadow Study (July 31, 2022)

Plans

P1. Cover Sheet
P2. General Notes and Legend
P3. Site Plan – Street Level
P4. Grading Plan – Street Level
P5. Utility Plan – Street Level
P6. Schedules
P7. Landscape Plan – Street Level
P8. Landscape Plan – Level 2
P9. On-Street Parking Comparison Plan
P10. Easement Plan Level 0 Interim
P11. Easement Plan Level 0
P12. Easement Plan Level 1
P13. Existing Conditions Plan 1
P14. Existing Conditions Plan 2
P15. Floor Plan – Level 0
P16. Floor Plan – Level 1
P17. Floor Plan – Level 2
P18. Floor Plan – Levels 3-8
P19. Floor Plan – Levels 9-10
P20. Floor Plan – Level 11 (Level 10 Hotel)
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P22. Floor Plan – Level 13 (Level 12 Hotel)
P23. Floor Plan – Penthouse Level
P24. Building Sections
P25. Perspective View from Congress & Myrtle
P26. Perspective View from Congress & Pearl
P27. Perspective View from Cumberland & Myrtle
P28. Perspective View from Cumberland & Pearl
P29. Phasing Plan -Summary
P30. Phasing Plan –Phase 0
P31. Phasing Plan –Phase 1 (1 of 3)
P32. Phasing Plan –Phase 1 (2 of 3)
P33. Phasing Plan –Phase 1 (3 of 3)
P34. Phasing Plan –Phase 2 (Phase 1 Alt.) (1 of 3)
P35. Phasing Plan –Phase 2 (Phase 1 Alt.) (2 of 3)
P36. Phasing Plan –Phase 2 (Phase 1 Alt.) (3 of 3)
P37. Phasing Plan – Phase 1 & 2 Complete
P38. Phasing Plan – Phase 3 (1 of 3)
P39. Phasing Plan – Phase 3 (2 of 3)
P40. Phasing Plan – Phase 3 (3 of 3)
P41. Phasing Plan – Phase 4 (1 of 2)
P42. Phasing Plan – Phase 4 (2 of 2)

Memorandum
Planning and Urban Development Department

| | |
|---|---|
| **To:** | Chair Stanley & Members of the Planning Board |
| **From:** | Zach Powell, Senior Planner |
| **Date:** | June 10, 2022 |
| **Re:** | 385 Congress Street Master Development Plan |
| **Project ID:** | PL-001970-2022 |
| **CBL:** | 027 D001001 |
| **Meeting Date:** | June 14, 2022 |

## I. INTRODUCTION

385 Congress Street LLC has submitted an application for a Master Development Plan (MDP) and Traffic Movement Permit (TMP) to facilitate the phased development of the subject property with three, 12-story attached buildings that include a hotel with 152 rooms, 312 condominium units, four retail units totaling ±6,700 square feet, two restaurants totaling ±9,144 square feet, two passive recreation spaces (Amenity Deck and Pocket Park) totaling ±20,313 square feet, and three parking structures with a total of 361 automobile spaces . This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code, Master Development Plan Standards, Section 14.7. An approved Master Development Plan is valid for a period of six years, which may be extended and/or amended.



Figure 1: Photo of the site showing the former Portland Press Herald Printing Facility and current surface parking facing north at Congress & Myrtle Street.

The application is also subject to review under the Downtown Urban Design Guidelines and an advisory historic preservation review based on the site being within 100 feet of the Congress Street Historic District and City Hall, which is an individually designated landmark (Section 14.7.3.B). While not yet submitted, future major site plan applications and a subdivision application to subdivide the parcel into three lots are anticipated.

The June 14, 2022 Planning Board Workshop will be the first workshop on the MDP and will primarily focus on establishing the Board's purview and role in the review and focus on the site layout, building design and access management and traffic circulation.

The Planning and Urban Development Department mailed 104 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the June 4, 2022 edition of the *Portland Press Herald*. As of the writing of this memorandum, two written public comments have been received (Attachment 6). These comments pertain to concerns about traffic circulation around the site and the support of street trees & new landscaping as a component of the proposed project.

The applicant held a Neighborhood Meeting on May 23, 2022 and three members of the public attended (Attachments 4 and 5). Questions raised at the Neighborhood Meeting addressed the following topics:

- Project application materials including historic photos of the site and whether the proposed project will incorporate historic site elements (e.g., restoration of Chapel Street, design elements from Payson Memorial Church)
- The proposed number and location of parking spaces and whether the parking levels have the ability to be retrofitted for commercial or residential uses
- Levels of access to the amenity deck and activation of the streetscape

**Applicant:** Joe Dasco, Reger Dasco Properties
**Anticipated Hotel Operator:** Marieke Thormann and Robin Payne, The Fathom Companies
**Consultants:** Derek Caldwell and Daniel Riley, Sebago Technics Inc.
Henry Weinberg and Dylan Dasco, CBT Architects

## II. REQUIRED REVIEWS

| Review | Applicable Standards |
|---|---|
| Master Development Plan (MDP) | Section 14.7 |
| Traffic Movement Permit | Section 1.1 of the City of Portland Technical Manual |
| Historic Preservation Board Advisory Review | Section 14.7.3.B |
| **Submitted Waiver Request** | **Applicable Standard** |
| Sec. 7.3 – Table 7-E: Mixed-Use Zone Dimensional Standards – to vary the front setbacks on Cumberland Avenue, Myrtle Street, and Pearl Street up to 10 feet.<br><br>**Staff Recommendation:** Staff have not yet formalized a recommendation on this waiver request. | Sec. 7.3 – The maximum permitted front setback from all street frontages in the B-3 zone is 5 feet. |

Master Development Plan Framework

A Master Development Plan (MDP) is a regulatory option, applied for at the discretion of the applicant, for sites with one acre or more in cumulative lot area that's designed as a cohesive and integral development program consisting of multiple buildings and associated site improvements built in phases over an extended timeframe (Section 14.7). An approved MDP establishes parameters to be adhered to for the full development, including total residential units, types of uses, lot coverage, open space, stormwater management, infrastructure, traffic, parking, site layout and circulation. MDPs may be developed concurrently with site plans and/or subdivisions, or independently. Approval does not constitute an authorization for development, but it does maintain the applicability of regulations in effect at the time of the approval for as long as the MDP approval remains valid. MDP submission requirements are deliberately not as detailed as site plan and subdivision requirements to allow for some flexibility in the final buildout of a large, phased project. Site plan applications, and any other required approvals are required before any development on the site can proceed, as outlined by the City's Land Use Code:

As stated in Sections 14.3.2.B.- of the City's Land Use Code *a Master Development Plan approval, including an approval of waivers, establishes the general parameters for the development, including the general*

*development program, massing, open space plan, and infrastructure plan. A Master Development Plan approval shall not be construed as final authorization of the development. Approval shall confer pending proceeding status upon the development in effect at the time of approval for as long as the Master Development Plan approval remains valid, including permissible extensions if granted. Subsequent site plan approvals shall be required.*

## III. PROJECT DATA

| | | | |
|---|---|---|---|
| Existing Zoning | B-3 Downtown Business, Downtown Entertainment Overlay, PAD Encouragement Area | | |
| Existing Use | Off-Street Parking (Surface and Structured) (141 spaces)<br>Storage (±3,914 SF) | | |
| Proposed Use | Condominiums | 357,200 SF (312 units) | |
| | Hotel | 80,000 SF (152 rooms) | |
| | Retail Space | 6,700 SF (4 units) | |
| | Restaurant | 9,144 SF (2 restaurants) | |
| | Structured Parking | 133,700 SF (361 spaces) | |
| | Passive Recreation Space | 20,313 SF (Amenity Deck & Pocket Park) | |
| Property Size | 98,470 SF (2.26 acres) | | |
| | *Existing* | *Proposed* | *Net Change* |
| Building Footprint | 17,322 SF | 730,000 SF | +712,678 SF |
| Building Floor Area | 17,322 SF | 730,000 SF | +712,678 SF |
| Impervious Surface Area | 97,744 SF | Not Stated | Unable to Calculate at this Time |
| Parking Spaces | 173 spaces | 361 spaces | +188 spaces |
| Bicycle Parking Spaces | 0 spaces | Not Stated | Unable to Calculate at this Time |
| Curb Cuts | 7 (3 blocked) | 8 | +1 |
| Trees in Streetscape | 9 (3 street trees) | 34 (27 street trees) | +25 (+24 street trees) |

## IV. EXISTING CONDITIONS AND SITE CONTEXT

The project site occupies the entirety of a city block that is 2.26 acres in area. The site is bounded to the north by Pearl Street, to the South by Myrtle Street, to the East by Congress Street, and to the West by Cumberland Avenue. The Comprehensive Plan, *Portland 2030*, identifies Congress Street as a priority corridor. The site was previously bisected by Chapel Street, which was discontinued in 1973 (Figure 2).

Previously, the site was occupied by a number of commercial and residential structures, including Payson Memorial Church. In the 1960s, a portion of the site served as the printing facilities to the Portland Press Herald. Currently, the site serves as an off-street parking (both surface and structured) for daily and monthly parking and is currently occupied by surface and structured parking, totaling 173 spaces. Additionally, the structure on the northwestern corner of the site is used for auxiliary storage. Both of the existing structures (Storage Building ±3,914 SF; Parking Structure: ±13,408 SF) are proposed to be demolished to facilitate the development of the site.

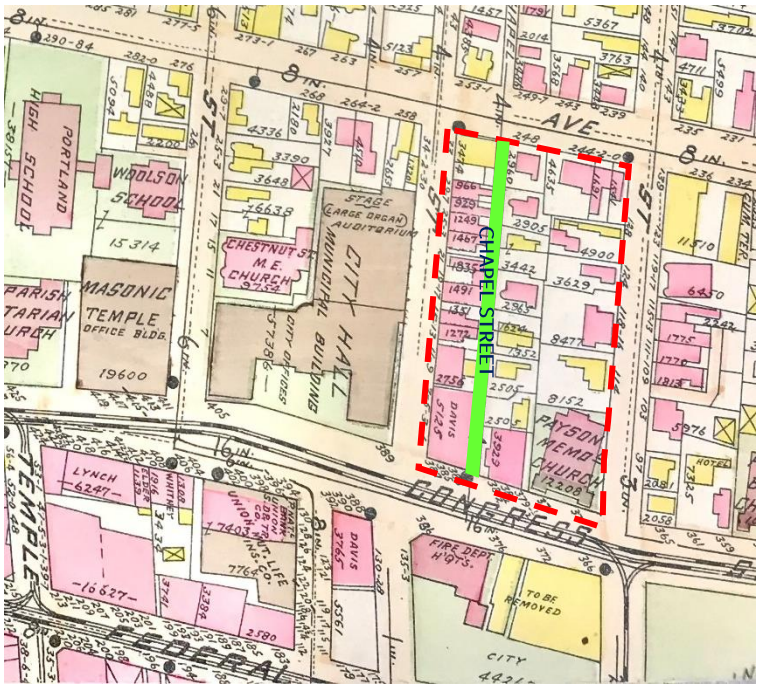



Figure 2: 1912 Sanborn Map of the subject property (outlined in red) and surrounding area. The previous bisection of the subject property by Chapel Street is shown in light green.



Figure 3: Northwest view of the subject property in 1900. Source: Maine Historical Society.




Figure 4: Western view of the subject property in 1965 showing the construction of the Portland Press Herald Printing Facility. The original alignment of Chapel Street can be seen in the portion of the site cordoned off for materials storage. Source: Maine Historical Society

The site serves as a transitional area in a number of regards, including:

- Lots to the north with no building coverage (Top of the Old Port Parking & Lincoln Park) to lots to the south with high building coverage (City Hall, Press Hotel)
- Lower-density multi-family and smaller institutional uses from the west on Cumberland Avenue to medium-density commercial & institutional uses to the east on Congress Street
- Blocks to the west and south occupied by numerous lots to blocks to the east and north that are occupied by one lot (Central Fire Station, Top of the Old Port Parking, Lincoln Park)
- Smaller blocks and larger blocks with pedestrian access points to the south and southeast to larger blocks providing limited or no breaks for pedestrian access
- Downtown Neighborhood to Bayside Neighborhood
- Auto-centric uses & building design to the north and northeast to urban, pedestrian-centric uses to the west, south, and southeast

The subject block and immediate area is well-served by public transit. Approximately two blocks to the southwest is the METRO PULSE at Elm Street (Downtown Transportation Center), the hub for METRO where bus routes, #2, #4, #5, #7, and the Husky Line begin and end their routes. METRO bus routes #1, #7, #8, #9A, #9B and the Biddeford Saco Old Orchard Beach Transit 60 Green line can be accessed along Congress Street within one block of the site. South Portland Bus routes 21, 24A, and 24B can be accessed along Congress Street roughly two blocks southwest of the site. METRO bus route 8 is located along Cumberland Avenue less than one block from the site.

## V. PROPOSED MASTER DEVELOPMENT PLAN PROGRAM

The proposal now under consideration is a mixed-use development, with residential, hotel, retail, and restaurant uses, served by structured parking. The site would also include two bicycle parking vestibules at mid-block points on Myrtle Street and Pearl Street and two passive recreation spaces. The proposed recreation spaces are a ±5,969 square foot, publicly accessible pocket park at street level fronting Congress Street, and a ±14,344 square foot private amenity deck for condominium residents and hotel guests on the top of the podium level.

Immediately adjacent to the pocket park, the Applicant is proposing valet operations for the hotel off of Congress Street with off-street queuing for four vehicles in the driveway. The driveway is proposed to primarily be used as a one-way driveway into the structured parking, but would have the width for bi-directional traffic. The Applicant has stated that there is a need to allow for this given that Myrtle Street has scheduled street closures for events held at Merrill Auditorium every year. City Staff have calculated that Myrtle Street closes approximately 25 times a year and generally not for extended periods of time. Additionally, the submitted design for both parking levels include forms of ingress and egress on Pearl Street.

Other proposed changes to the site include:

- The relocation of curb cuts (**Shown in Yellow**) on the site and expansion of actively used curb cuts from 4 to 8 (Please note that there are 7 existing curb cuts with 3 that are blocked by guard rails or chained off).

- Removal of left turn lane on the eastbound approach of Pearl Street into Top of the Old Port Parking Lot and restriping of lanes to accommodate 11 on-street parking spaces (**Outlined in Red** – **Figure 6**) on the southern side of the street.
- Removal of the existing 9 trees in the streetscape and planting of 34 new trees (**Shown in Green**) in the streetscape (27 street trees)

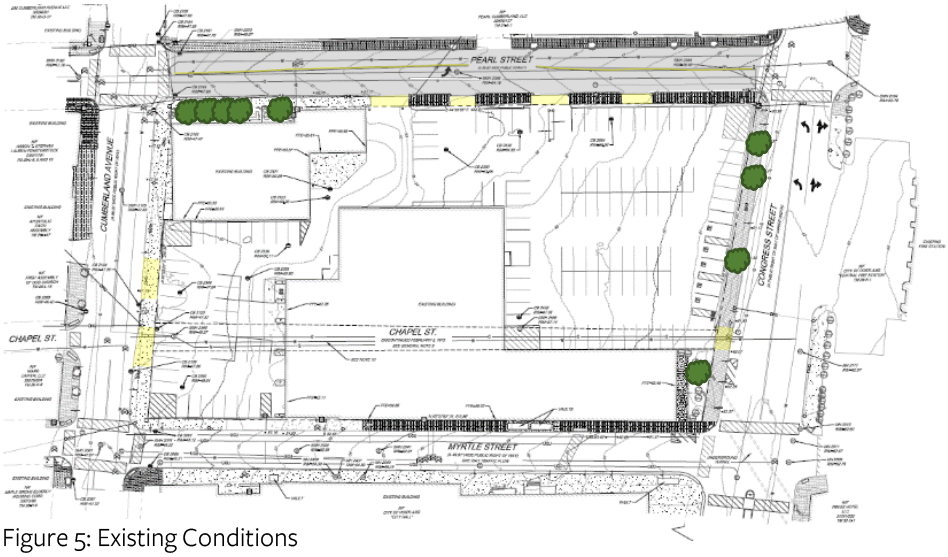



Figure 5: Existing Conditions

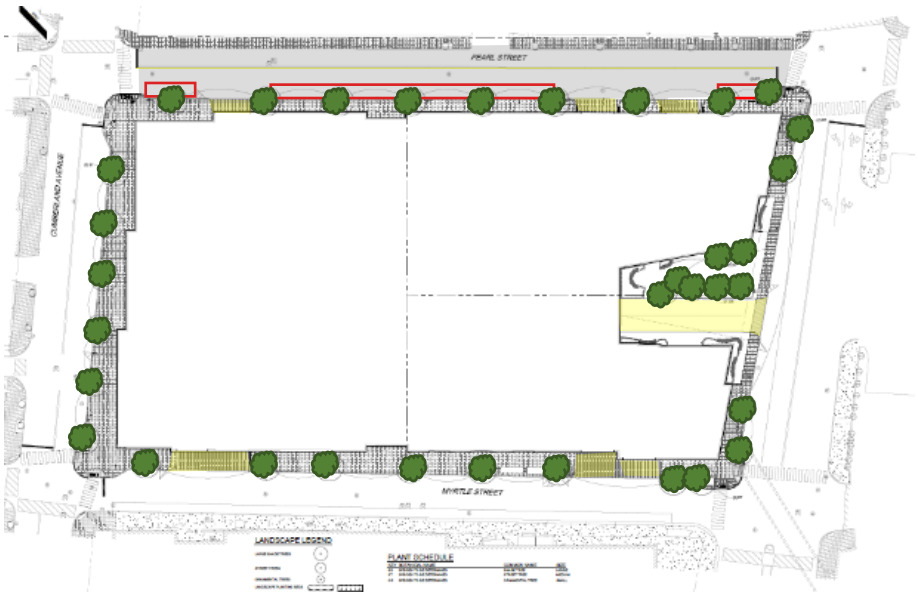



Figure 6: Proposed Streetscape Improvements

## A. Phase Components

The development would be constructed in up to four separate phases.

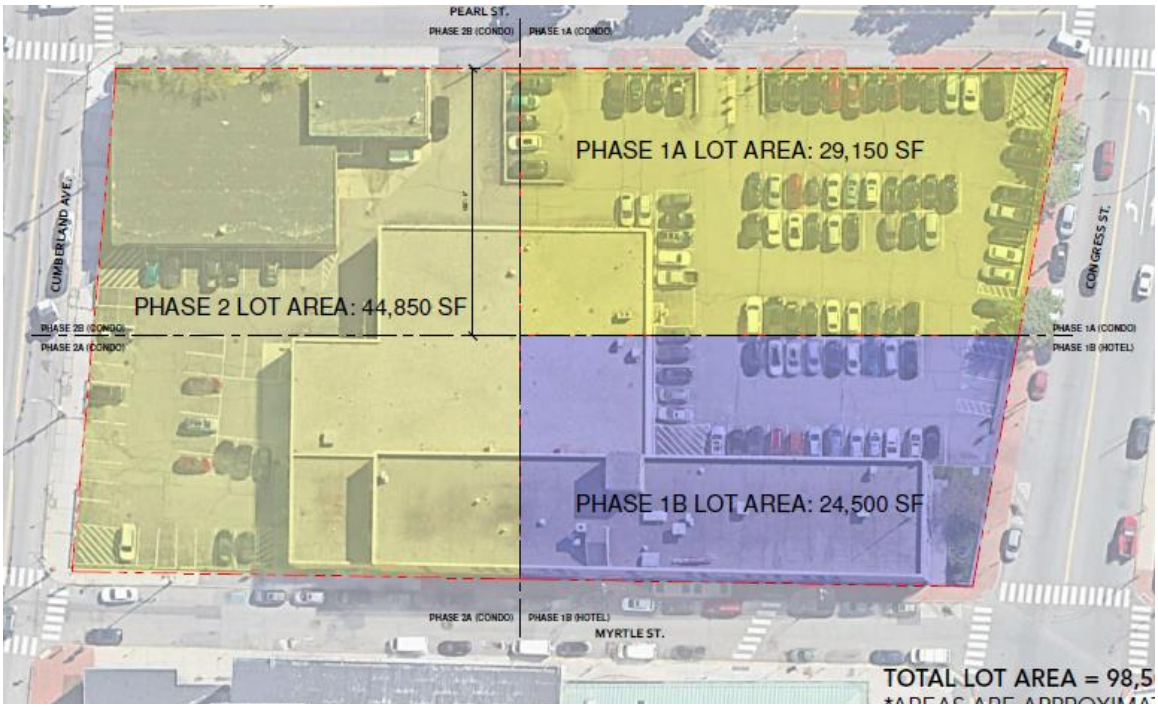
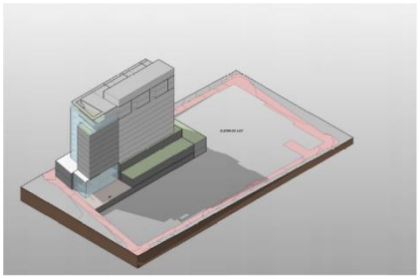
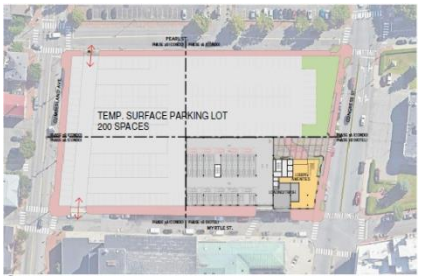


Figure 7: Submitted Phasing Plan, with the dashed quadrants noting the proposed phasing lines

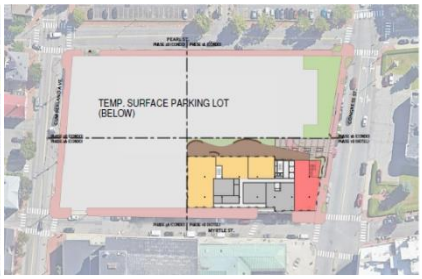
**Phase 1 (Listed in Application Documents as Phase 1B):** ±180,000 square foot, 14-story building with a 152-room hotel, 9 condominium units, two restaurants totaling 9,144 square feet, and 70 enclosed parking spaces. As part of Phase 1, the majority of the other three quadrants will be utilized for surface parking with 200 spaces and an interim park space will be established at the corner of Congress and Pearl Streets since the proposed pocket park would not be accessible until construction is complete in the second phase.



Phase 1 Photosimulation

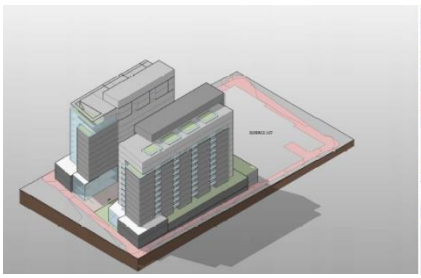



*Phase 1 Ground Floor Plan*

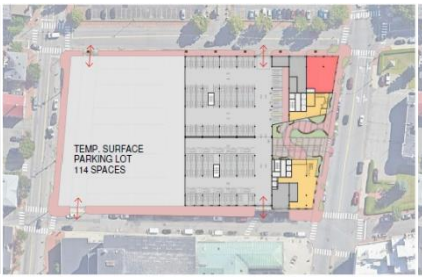



*Phase 1 Podium Plan*

**Phase 2 (Listed in Application Documents as Phase 1A):** ±245,000 square foot, 14-story building with 110 condominium units, a ± 2,500 square foot retail unit, and 126 enclosed parking spaces. Similar to Phase 1, half of the project site will be utilized for surface parking with 114 spaces. The interim park space established in Phase 1 will be removed and the proposed pocket park will be opened once a Certificate of Occupancy has been received. In the submitted application materials, the Applicant stated that Phase 1 and 2 may occur concurrently, but has provided diagrams in the event that they are phased.



Phase 2 Photosimulation

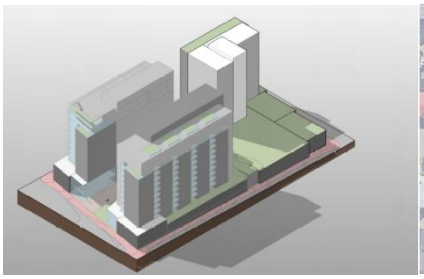



*Phase 2 Ground Floor Plan*




*Phase 2 Podium Plan*

**Phase 3 (Listed in Application Documents as Phase 2A):** ±192,200 square foot, 13-story building with 94 condominium units, three retail units totaling ±4,200 square feet, and 165 enclosed parking spaces. In the submitted application materials, the Applicant stated that Phase 3 may occur concurrently with Phase 4, but has provided diagrams in the event that they are phased.



Phase 3 Photosimulation

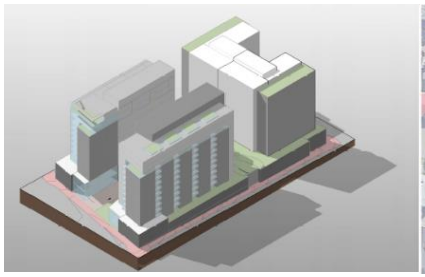


*Phase 3 Ground Floor Plan*




*Phase 3 Podium Plan*

**Phase 4 (Listed in Application Documents as Phase 2B):** A ±97,700 square foot, 12-story addition with 99 condominium units.



Phase 4 Photosimulation



*Phase 4 Ground Floor Plan*



*Phase 4 Podium Plan*

## VI. ZONING ANALYSIS

The site is encompassed by the B-3 Downtown Business Zone, the Pedestrian Activities District (PAD) encouragement area, and the Downtown Entertainment Overlay Zone.

The purpose statement for the B-3 zone includes the following relevant to the proposal:

- *Enhance and promote the orderly expansion of retail and service businesses downtown, satisfying the related needs of the city's resident, working and visitor populations;*
- *Encourage increased housing opportunity downtown for a diverse residential population;*
- *Enhance the pedestrian environment through the encouragement of intensive mixed-use activities, through the enhancement and maintenance of public and private open space, and through the enlivenment and increased attractiveness of the street environment;*
- *To encourage excellence in urban design;*
- *In the PAD Overlay zone, to create continuity of pedestrian-oriented uses along streets where such uses predominate and along streets which, over time, will establish and maintain a strong retail and pedestrian-oriented use pattern.*

The zoning dimensional requirements are intentionally permissive in this urban downtown zone – in most cases the requirements are intended to create dense, taller buildings that fill the site and maintain a street wall line. Regarding height for this block, there is a 90 foot maximum street wall height along Pearl Street, 50 foot maximum street wall height along and a maximum building height of 150 feet as per the Downtown Height Overlay map.

As submitted, the Master Development Plan does not comply with all of the zoning requirements of the B-3 zone. While the submitted application meets the minimum street frontage requirements and maximum length of undifferentiated blank wall space along all of the publicly accessible ways, the proposed design is seeking a waiver of the maximum permitted front setback. In addition, the proposal currently exceeds the maximum floor area for floors above 125 feet, and maximum lot coverage for portions of structures exceeding 125 feet in height. Further, staff is requesting confirmation that the proposed rooftop mechanical areas that extend to a height of 163 feet from grade are not used for human occupancy. Compliance with B-3 dimensional standards is shown in the table below. Each future site plan and subdivision (if applicable) will be evaluated for conformance with zoning, site plan, and subdivision standards requirements as well as undergoing advisory Historic Preservation review.

| Standard | Required | Proposed |
|---|---|---|
| Minimum street frontage | 15 feet | 1315 feet |
| Maximum front setback | 5 feet | 10 feet |
| Maximum length of undifferentiated blank wall | 30 feet | < 5 feet |
| Maximum Floor Area | 15,000 square feet for each floor above 125 feet | ±17,203 square feet for Level 12 in Phase 2 Building |
| Maximum Structure Height | 150 feet, with 90 foot maximum street wall height on Pearl Street and 50 foot maximum on Congress and Myrtle Streets | 143 feet – 149 feet with street wall heights ranging from 30-37 feet |
| Maximum Lot Coverage | 25% of lot area for portions of structures exceeding 125 feet in height | ±45,370 square feet (46% of current lot area) (Based on the anticipated subdivision, lot coverages would still exceed the maximum permitted (Lot 1: 50.4%; Lot 2: 54%; Lot 3: 38%)) |

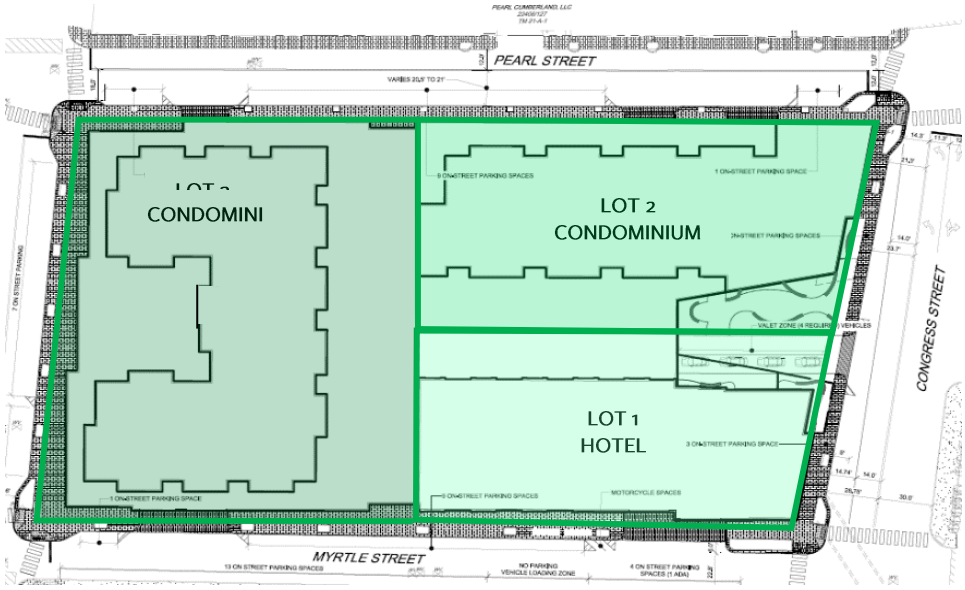



Figure 8: Anticipated Subdivision of Subject Property into Three Lots with proposed lot lines outlined in green.

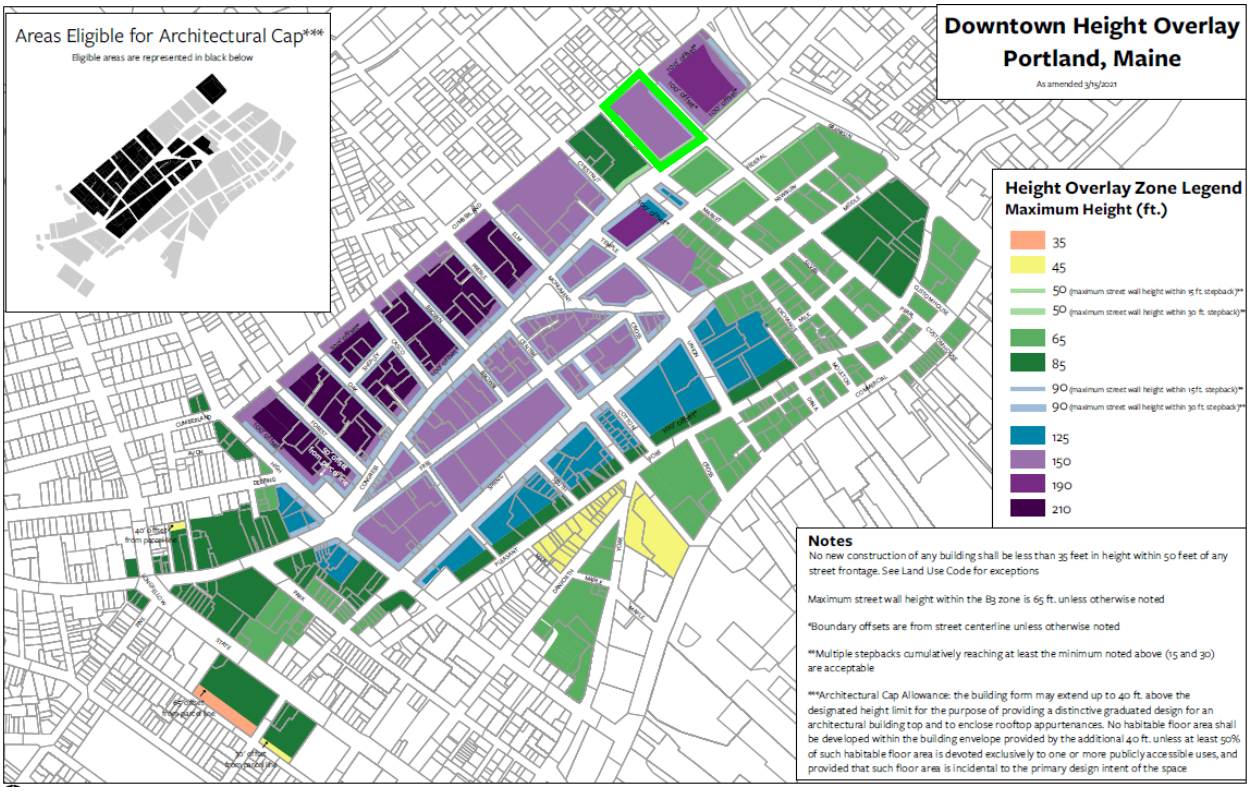


Figure 9: Downtown height overlay map. Project site is outlined in green. The maximum street wall height on Pearl Street is 90 feet and the maximum street wall height for Myrtle and Congress Streets is 50 feet.

Waiver Request

As mentioned above, the Applicant has submitted a waiver request to have front setbacks up to 10 feet on Myrtle Street, Pearl Street, and Cumberland to facilitate a 10 foot distance from overhead power lines on Cumberland Avenue and to accommodate proposed streetscape improvements on Pearl and Myrtle Street. Additionally, the proposed development includes an 89-foot front setback on Congress Street for the proposed pocket park.

The list of proposed uses are all permitted uses within the B-3 zone: multi-family residential, hotel, structured off-street parking, restaurants, and parks. Surface off-street parking, which already exists on a significant portion of the site and is proposed to be temporarily expanded on the northwestern portion of the site, is a conditional use.

Pedestrian Activities District (PAD):

The Congress Street frontage falls within the Pedestrian Activities District (PAD) encouragement area. This overlay zone, is intended to encourage ground floor uses that activate pedestrian spaces, creating a safe and vibrant pedestrian environment in Portland's downtown. Buildings located within the encouragement area are required to be designed and constructed to be reasonably capable of being converted to accommodate uses permitted in the PAD overlay zone and all sidewalk areas and open space shall complement the general pattern of the downtown pedestrian environment. City Staff has prepared a memorandum and presentation (Attachments 1 and 2) relating to the design of the streetscape and ingress, that more fully discusses how the proposed site interrelates with the Downtown context.

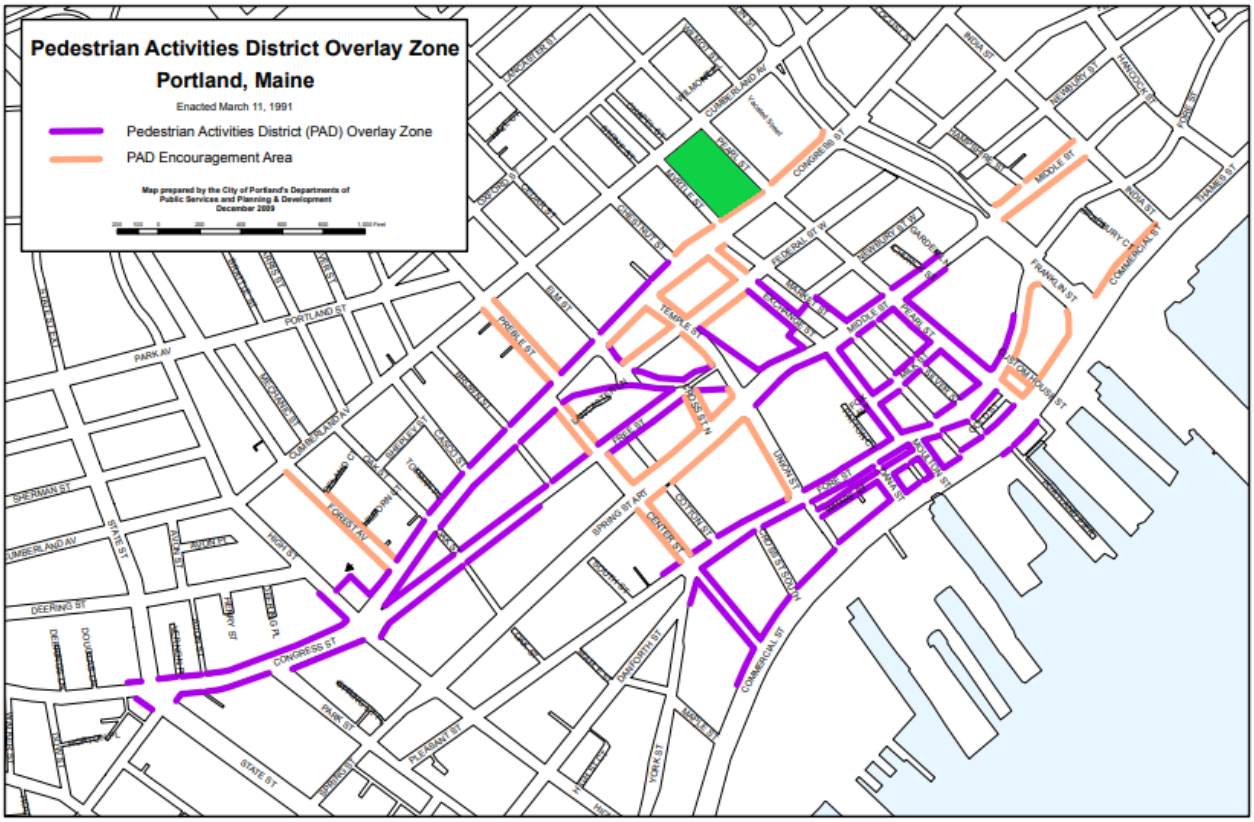



Figure 10: Pedestrian Activities District Map, with Project Site Shown in Green

## VII. STAFF REVIEW

### A. Master Development Plan Review Standards Section 14.7

Section 14.7 of the City's Land Use Code establishes standards under which Master Development Plan applications must be reviewed. Per this section, Master Development Plans shall adhere to the following requirements:

In general

a. *Designed to integrate with the surrounding context with respect to land use, architecture, open space and pedestrian networks, vehicular access and circulation, off-site public facilities and all other infrastructure.*

Staff Comment: As part of the initial review stage, larger design topics relating to open space and pedestrian networks, relationship with neighboring architecture, and vehicular access and circulation have been identified by City Staff as continuing discussion topics. Recommended design solutions to address these issues have been included in a memorandum to the Applicant (Attachment 1).

MDP submission requirements state that an application must include information on impacts to view and historic features. While the application references adjacent building heights and the fact that the site is adjacent to the Congress Street Historic District, the submitted application materials do not demonstrate how the application will not result in negative visual/shadow impacts on neighboring historic resources and landmarks (e.g., City Hall & Lincoln Park). Such information should be included as part of any follow-up submission.

The proposed project generates traffic volumes that require a Traffic Movement Permit. The Applicant has submitted a Traffic Movement Permit application and the Scoping Meeting was held on May 17, 2022. It is anticipated that future Planning Board workshops will focus on traffic, and provide opportunity for the Applicant to further address staff comments related to traffic.

A summary of the items discussed at the TMP Scoping Meeting is included as Attachment 3.

*b. Consistent with the objectives of this ordinance, consistent with the City's Comprehensive Plan, and consistent with City Council-approved master plans and facility plans for off-premise infrastructure.*

Staff Comment: Staff is requesting that the Applicant provide a written narrative describing the project's consistency with the Comprehensive Plan and city approved master plans.

The Comprehensive Plan goals and policies (state and local) relevant to the proposed master development plan are included below. The master development plan aligns with these vision statements and goals by infilling an underdeveloped site primarily used for automobile parking located at the heart of Portland's walkable downtown, proximate to some of the tallest structures in the city, with residential units, commercial uses, and publicly accessible open spaces and pedestrian connections that better reflect the downtown location.

The increase in height allows for an increase in dwelling units within a walking and transit-oriented site. Along with increasing the viability of downtown, the proposed infill project potentially reduces new construction in green field or outlying areas, which promotes more sustainable development practices.

In addition, anticipated updated project documents include a publicly accessible amenity deck in the center of the site that would serve as a positive connection between adjacent open space sites (City Hall and Lincoln Park), provide site permeability to enhance pedestrian connections, and increase the number of recreational opportunities within close proximity to the Bayside Neighborhood.

Vision Statements

- Sustainable: 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.
- Sustainable: Portland will grow in order to sustain our community, infrastructure, and economy.
- Dynamic: Portland will plan for a built environment that encourages an active citizenry.

- Connected: We will enable meaningful access to the natural world and recreational opportunities as a central component of community health.

Land Use

- **Reinforce the Center:** Though Portland's commercial and entrepreneurial activity takes place throughout the city, downtown Portland remains at the center of the region's arts and cultural, economic, and civic health, and Portland's Plan embraces the principle that downtown should continue to be a predominant locus of activity for the broader region.

Environment

- Adopt sustainable land use and transportation policies that support connectivity, walkable neighborhoods, and multi-modal transportation.
    - Continue to develop land use policies which support complete neighborhoods.

An Enduring City – Historic Preservation

- 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.

A Livable City: 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.
- Encourage quality, sustainable design in new housing development.
    - Remove housing barriers
    - Leverage underused properties

An Active City – Recreation & Open Space

- Strengthen connections between open spaces
    - Ensure Equity
    - Improve Safety, Visibility, and Accessibility
    - Incorporate Multiple Functions
    - Connect the Chain

An Accessible City – 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.
    - Enhance the pedestrian realm

Future Land Use

- Complete Neighborhoods

- Reinforce the Center

*Natural features and open space*

a. *Developed so as to locate buildings and improvements in a manner that considers existing topography, provides usable open space, preserves significant natural features as defined in Subsection 14.6.2, and preserves existing trees to the maximum extent possible.*

Staff Comment: The proposed design of the site has taken some steps to incorporate the grade change from Congress Street to Cumberland Avenue. However, open questions relating to the phasing of the site, screening of the on-site parking, functioning of the pocket park, and the ability to retrofit the parking levels, are some of the larger streetscape and site activation topics that merit further discussion and clarification.

The property is entirely developed, with minimal landscaping around the perimeter and no significant natural features. The MDP eliminates all of the existing landscaping and proposes the creation of a publicly-accessible pocket park at street level, planting of street trees around the perimeter of the site, and the establishment of a private amenity deck for residents and hotel guests. City Staff has sent a memorandum and presentation to the Applicant recommending the conversion of the proposed pocket park to a linear park along the Congress Street frontage to align with other City standards, to better support and connect existing adjacent open spaces such as City Hall Plaza and Lincoln Park, and utilize a design that better activates the streetscape for future commercial tenants, hotel guests, and events.

b. *Include provisions for the ownership and maintenance of usable open space as appropriate.*

Staff Comment: The applicant has verbally indicated that the passive recreation facilities will be maintained by the Applicant, but has not included any provisions to support these statements. At this point, maintenance mechanisms and delineated ownership for proposed stormwater infrastructure, such as easements and or/written agreements, have not been provided and may evolve throughout the course of the MDP review and subsequent major site plan reviews and subdivision review. Staff is requesting any draft or finalized documents be provided for review and that the supporting narratives be submitted to address maintenance responsibilities between the Applicant and the hotel operator, identify any changes in agreements based on future subdivisions of the lot, and how the phasing will change any approach to ownership and maintenance of the open spaces.

*Historic Preservation*

a. *Developed as so to conform with standards for designated landmarks or for properties within designated historic districts or historic landscape districts as found in Article 17.*

Staff Comment: Not applicable. The site is not a designated landmark or located within a historic district or historic landscape district.

b. *When proposed adjacent to or within one hundred (100) feet of designated landmark, historic district, or historic landscape, the master development plan shall be developed so as to be*

*generally compatible with the major character-defining elements of the landmark or portion of the district in the immediate vicinity of the proposed development.*

Staff Comment: The site is located within 100 feet of the Congress Street Historic District and Portland City Hall, an individually designated landmark, therefore the MDP will require a Historic Preservation advisory review. Staff has provided initial design comments, and will seek feedback from the Planning Board before further historic preservation review.

*Infrastructure*

a. *Designed with sizing of street and other infrastructure systems to accommodate the overall service demand of the plan.*

Staff Comment: The proposed development will be serviced by public water, sanitary sewer, electric, natural gas and telecommunications. As part of the application, a new 8" water main supporting the condominium units in Phases 3 and 4 is proposed to run under Pearl Street.

Regarding stormwater improvements, the applicant has developed a general concept plan to service the overall development. This concept is to be refined and designed with more detail as part of each individual phase. The proposal qualifies as a redevelopment under Maine DEP Chapter 500, and is required to treat 50% of impervious surface. Two subsurface storage and treatment systems are proposed, with one system serving the hotel for Phase 1 and the second serving the condominium and retail uses in Phases 2-4. At this time the systems will either utilize a subsurface sand filter or storm filter system, with both being identified/approved as a Maine DEP stormwater best practice. Based on initial calculations, the system is anticipated to treat and detain 50 to 66% of the project's developed area.

The submitted application materials state that more detailed utility plans will be submitted upon submission of each separate major site plan application. City reviewers have requested more detailed documentation to better understand the interrelationship of the phases, including issues relating to the order and completion of phasing, as well as ownership and maintenance since systems are proposed to cross proposed parcel boundaries.

b. *Designed to create a street grid pattern that reflects average city block sizes of the surrounding neighborhood.*

Staff Comment: The submitted MDP retains the existing city block size of 1,315 feet and does not propose pedestrian connections through the site at street level. As noted earlier in this memorandum, the site is located in a transitional location between large sites that occupy full City blocks and limited or no pedestrian connections and blocks that are smaller in scale or provide breaks for pedestrian connections. While there is context that supports the retention of the existing block size, City standards in the Design Manual and Subdivision Standards recommend a shift towards a more pedestrian-scale site layout.
In the submitted Staff Design Recommendations Memorandum (Attachment 1), a street/woonerf connection or connections is proposed to resolve a number of these conflicts with City standards, allow for a more pedestrian-centered building design, and potentially improve traffic circulation in and

around the site. City Staff recommends that the Applicant update the Application materials to include one or more street/woonerf connections that bisect the site, either from Congress Street to Cumberland Avenue and/or from Myrtle to Pearl Street.

*Design*

a. ***Designed to create a cohesive identity through building scale, massing, and articulation; use of quality exterior materials and architectural detailing at pedestrian scale; consistency of design and materials for streetscape and pedestrian amenities; framing of outdoor open space and linkages; a clear conveyance of the function and significance of various buildings, entrances, and features; and to generally comply with design and development standards of the zone in which it is located.***

Staff Comment: An initial design review was completed on May 27, 2022, conducted by Sean King, Urban Designer, Rob Wiener, Historic Preservation Compliance Coordinator, Kevin Kraft, Deputy Director of Planning and Urban Development, and Zach Powell, Senior Planner. A memorandum and presentation (Attachments 1 and 2) identifying larger site and building design issues and design recommendations was prepared and offered the following recommendations:

- Convert the Proposed Pocket Park into a Linear Park: City Staff recommend converting the proposed pocket park on Congress Street into a linear park. The proposed shift would enable the project to comply with the contextual front setback with City Hall required by the Design Manual, serve as a space that better activates the Congress streetscape, connects existing open spaces at City Hall Plaza and Lincoln Park.

  Two options were suggested, with the first retaining the proposed driveway or accommodating a new street/woonerf connection from Congress Street to Cumberland Avenue, and the second presents the concept without a driveway, street, or woonerf mid-block.

Option 1



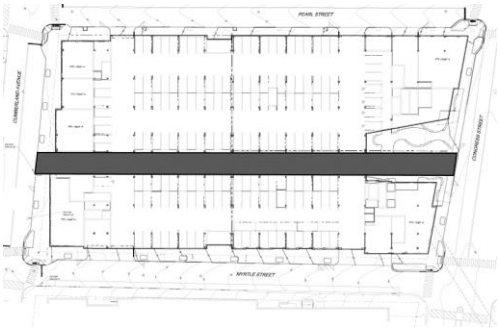
Option 2



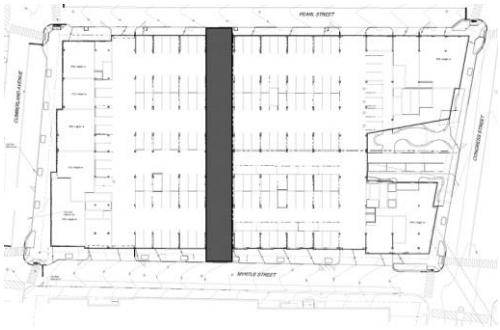
- Establish Street/Woonerf On-Site: As mentioned in the previous review standard, one or more street/woonerf connections on-site are recommended to comply with subdivision review standards and shift towards a more pedestrian-friendly, urban design.

  Along with these issues, creation of a street or woonerf would also address concerns raised by City Staff about the proposed valet queuing spilling into Congress Street, reducing potential vehicular conflicts for on-site loading operations and the adjacent Central Fire Station, and better comply with transportation standards (i.e., number of driveways, driveway widths, distances of driveways from intersections) in the City's Technical Manual.

  The graphics below show two potential options, with the first connecting Congress Street to Cumberland Avenue and the second option connecting Myrtle Street to Pearl Street.



Option 1 – Connection from Congress Street to Cumberland Avenue



Option 2 – Connection from Myrtle Street to Pearl Street

  Upon a preliminary review of the application materials against the B-3 Design Standards by the City's Urban Designer, additional comments related to the design of the site included:

  - Increased permeability into the site along Myrtle Street, Cumberland Avenue, and Pearl Street to support street activation and connections

- Distinguishing the lower floor building façade to reinforce prevailing pattern and proportions of adjacent buildings along each frontage, particularly along Cumberland Avenue
- Additional information relating to the proposed signage for building uses and materiality of the façade and screening devices for the structured parking and rooftop appurtenances/mechanical equipment to confirm consistency in design in and around the site

Based on these larger comments and suggestions, future Planning Board workshops will discuss and speak to the site's compliance with this review standard.

## VIII. NEXT STEPS

Staff is looking for initial feedback on the overall concept as it relates to:

- Site and building design,
- Access management, and
- Streetscape design.

Based upon feedback from the TMP Scoping Meeting, the applicant should compile data as requested and resubmit an updated application. Once that information is available, staff will coordinate with the applicant and Planning Board to schedule a second workshop.

## IX. ATTACHMENTS

Staff Attachments

1. City Staff Design Recommendations Memorandum
2. City Staff Design Recommendations Presentation
3. TMP Scoping Meeting Notes
4. May 23, 2022 MDP Neighborhood Meeting Notice
5. May 23, 2022 MDP Neighborhood Meeting Minutes
6. Public Comment
    a. PC1: Aurelia C Scott
    b. PC2: Avery Yale Kamila

Applicant's Documents

A. Cover Letter and Description
B. Master Development Plan Checklist
C. Right Title and Interest
D. Evidence of State/Federal Approvals
E. Zoning Analysis Table
F. Assessment of Compliance
G. Waiver Table
H. Financial Capacity
I. Technical Capacity
J. Master Development Context and Building Design
K. Natural Features
L. Views and Historic Features

M. Public Safety
N. TMP Application and Sections 1-6
O. Transportation Assessment
P. Utilities
Q. Masterplan Stormwater Narrative

Plans

P1. Cover Sheet
P2. General Notes and Legend
P3. Site Plan – Street Level
P4. Grading Plan – Street Level
P5. Utility Plan – Street Level
P6. Schedules
P7. Landscape Plan – Street Level
P8. Landscape Plan – Level 2
P9. On-Street Parking Comparison Plan
P10. Building Sections
P11. Floor Plan – Level 0
P12. Floor Plan – Level 1
P13. Floor Plan – Level 2
P14. Floor Plan – Levels 3-6
P15. Floor Plan – Levels 7-11
P16. Floor Plan – Level 12 (Level 11 Hotel)
P17. Floor Plan – Level 13 (Level 12 Hotel)
P18. Floor Plan – Penthouse Level
P19. Perspective View from Congress & Myrtle
P20. Perspective View from Congress & Pearl
P21. Perspective View from Cumberland & Myrtle
P22. Perspective View from Cumberland & Pearl
P23. Phasing Diagram -1
P24. Phasing Diagram -1A
P25. Phasing Diagram -1B
P26. Phasing Diagram -2A
P27. Phasing Diagram -2B

| | |
|---|---|
| **Subject:** | 385 Congress Street – Master Development Plan |
| **Zone:** | B3 |
| **Date of Review:** | Tuesday, August 2, 2022 |
| **Reviewer(s):** | Sean King (Urban Designer), Zachary Powell (Senior Planner), Kevin Kraft (Deputy Director) |
| **Project ID:** | PL-001970-2022 |

## I. INTRODUCTION

The project at 385 Congress Street is subject to the Master Development Plan Review Standards, Land Use Code section 14.7.5 Design. The project is also within 100' of a historic district and included an advisory historic preservation design review.

The proposed Master Development Plan for a mixed-use hotel and condominium is only reviewed according to the Master Development Plan criteria. The project will be subject to future staff design review subject to the design standards of the City of Portland *Design Manual* – ***[b] B-3 Downtown Business Zone, Appendix 1***. Staff recommend the MDP approval include design guidelines that will apply to all subsequent site plan applications.

Based on the revised submission from August 1, 2022 and Planning Board comments, staff have the following comments as well as recommended Design Standards to apply to future Site Plan applications.

## II. DESIGN REVIEW COMMENTS:

The project at 385 Congress Street shall meet the following standards of ***Master Development Plan Review Standards, Land Use Code Section 14.7.5 Design.***

### *A. Creation of a cohesive identity.*

***A master development plan shall be designed to create a cohesive identity through building scale, massing, and articulation;***

Staff comment: The proposed development program includes a hotel and condominium units to occupy the entirety of the 385 Congress Street site, bordered by Congress Street, Cumberland Avenue, Pearl and Myrtle Streets. The proposed development intends to create a cohesive identity through building scale with a 1-2 story podium level continuous at the ground-level to activate and address the neighboring context and adjacent structures, notably City Hall, a hotel with ground floor retail, residential buildings and a place of assembly. The massing defined with stepbacks for the proposed towers of the hotel and multi-phased condominium units establishes vertical scale while reducing building height towards the residential character of Cumberland Avenue. The composition and articulation of the building facades shall maintain the master development plan

approach to activate the street frontage along the ground-floor with storefronts windows materials for screening, and rhythm of fenestration; the towers shall maintain a regular rhythm of vertically proportioned windows and sculpt massing to reduce the scale with façade composition in response to the street and mid-block "no build zone" that includes the amenity terrace and site access points.

*Use of quality exterior material and architectural detailing at pedestrian scale;*

Staff comment: The materials proposed meet this standard that provides pedestrian scaled façade composition through building entry canopies, storefront windows, fenestration screening materials at garage facades and signage. Each phase of site plan review shall include further details for materiality, color, articulation and quality.

*Consistency of design and materials for streetscape and pedestrian amenities;*

Staff comment: The proposed master development plan includes activation of streetscape and pedestrian amenities along highly traversed roadways. At Congress Street, the linear park creates an expansion of the public realm to allow for trees and tree wells, lighting, outdoor seating and brick sidewalk for pedestrian access. There is a delineation of surface material for pedestrian vs. vehicular that shall be maintained. The creation of the level 2 amenity terrace includes a unique approach to create public vs private zones that shall be suddenly delineated by changes in grade to accommodate sufficient soil depth for the tree planters, along with acute materiality. Street level pedestrian public access through monumental stairs to incorporate bench terrace seating, planters and greenscreens from Congress Street and Myrtle Street shall be maintained.

*Framing of outdoor open space and linkages;*

Staff comment: The proposed master development plan creates layers of outdoor open space and linkages to include the Congress Street linear park, Myrtle Street-scape, Cumberland Avenue active street, Pearl Street residential lobby and level 2 amenity terrace to reinforce public activation along the surrounding streets of the site. Each phase of site plan review shall include the adjoining open space as a continuation that shall utilize similarity of material, pedestrian amenities, and pedestrian connectivity. Under future site plan reviews, the Applicant should consider how street furniture, such as permanent outdoor seating, can be incorporated within the expanded sidewalk along Congress Street.

*A clear conveyance of the function and significance of various buildings, entrances, and features;*

Staff comment: The hotel in Phase 1 is differentiated from the condominium units primarily through the façade composition along Congress / Myrtle Street corner with a glass façade, regularity of fenestration for the hotel rooms and deeply recessed building entries with unobstructed glass along Congress Street. The condominium units, shown as three phases are primarily distinguished from the hotel by the storefront windows for the retail program and large fenestrations along the garage façade which shall be screened with high quality material to create an activated façade. Along with the retail program, the development shall incorporate MDP design standards for signage to be reviewed at each phase of site plan review. Additionally, the

condominium buildings include balconies projections and recessions into the façade composition that reinforces private access to open space.

*And to generally comply with design and development standards of the zone in which it is located.* – Met. In addition to the MDP review standards, the application will be reviewed under the B-3 design guidelines.

*Proposed MDP Design Standards (to be applied to subsequent Site Plan applications)*

- Materials
  - Congress Street – Material placement, detail, and articulation should emphasize the established historic Congress Street patterns of massing, proportions, and façade composition regulating lines and building base. The ground floors will consider pedestrian comfort and scale, especially in the placement of doors, windows, canopies, and details in the materials and articulation. The hotel, in order to stand apart in character and use, will have a more contemporary expression but will continue the base and regulating lines found along Congress Street.

  - Quality Exterior Materials includes the detailing, articulation, transition, durability, and visual interest of the materials, not only their selection and placement. These aspects will be reviewed with special attention to the ground floors and areas most visible to pedestrians.

  - Façade composition - In Site Plan review the design shall provide depth, articulation, visual interest, and quality transitions. Historic buildings in the surrounding context should be considered precedent examples, especially on Congress Street.

  - Cumberland Avenue - The condominium buildings along Cumberland Avenue should have a cohesive visual relationship in materiality, window type and pattern, and articulation elements that activate the ground-floor. The massing and function of the podium base along Cumberland shall be pedestrian scaled that responds to the surrounding neighborhood context.

- Streetscape design
  - Congress Street / Cumberland Avenue – Establish active uses fronting the street. The sidewalk should be as wide as possible to accommodate street trees, tree wells, permanent outdoor seating, lighting and other pedestrian amenities in the furnishing zone. Planters or landscape areas should not be placed between the sidewalk and the building, with the exception of recessed building entries and/or access points. Final design shall be coordinated with City staff, especially to ensure viability of street trees and ease of maintenance.

  - Interior Passages – Internal passages should employ CPTED principles as a best practice to make spaces that are safe, active, and inviting. Material selection and design should indicate private or public access. Design shall be legible and intuitive for pedestrians and cars, especially for wayfinding.

- Signage – Signage shall be integrated into the building design and respond to the storefront façade at the ground level and be pedestrian scaled, especially along the Congress Street historic district. Final design shall be coordinated with City staff.

**'Andres Llorente' via Planning Board** <planningboard@portlandmaine.gov> Fri, Jan 24, 3:13 PM (4 days ago)

to planningboard

Planning board of Portland Maine,

Please don't approve a plan to build some unnecessary Ticketmaster/Live Nation event venue near Portland City Hall. In my opinion it is insane that you are even considering the proposal. However, given the fact that the planning board didn't block the disrespectful plans of an unproven soccer venture with such a terrible name that their management must be equally awful, I feel you need to hear as much public opinion as possible.

Everyone on the planet hates the nefarious monopoly that is Ticketmaster. Just today I walked to my local theater, the beloved State Theater, in order to evade the price gouging policies of Ticketmaster online. Did you know that there is an historic 1,800 seat venue in downtown Portland; the State Theater was not once, but twice lovingly restored by the community in the last 30 years and would certainly suffer with the introduction of a corporate invader. Is that what the planning board wants? Is it your intention to let a historic fixture in the community that supports other smaller venues in the city languish so the city can get some short term benefit from a faceless greedy entity? Their lawyers will surely find ways to avoid paying anything other than nominal taxes.

A venue so close to City Hall also competes with the 1,900 seat Merrill Auditorium, and therefore the city itself. That doesn't seem like a very good idea. Imagine the parking and crowd problems in the event of a two-event side by side night. We are not a community with great public transportation; the entire downtown would be overrun and paralyzed.

It wasn't too long ago that taxpayers ponied up for a renovation of the Cumberland County Civic Center (whose name was sacrificed to an insurance company) and here we are considering handing over valuable land and city resources to a developer with a terrible reputation.

Your focus should be on as much affordable housing as possible, infill housing to increase density, free transportation, cycling/walking/alternative transportation green links, and park space including carbon-sink, green areas. That's city planning for the future, not an ugly stadium (we have one of those already). A plaza, a park, and an innovative and sustainable public housing project...yes. Concession to Ticketmaster/Live Nation that they are the good guys...absolutely not.

I suggest concentrating on structures the city desperately needs, and not those it definitely does not, for example a 3,000 seat venue nestled between two others of nearly 2,000 and an arena for 6,000.

It's a terrible idea in case you haven't figured that out by now.

Andres Llorente
Portland, ME

PC2

**'nathaniel.kraft' via Planning and Urban Development** <planning@portlandmain… 3:13 PM (1 minute ago)
to planning@portlandmaine.gov

Dear esteemed members of the City of Portland Planning Board,

My name is Nathaniel Kraft. I've been a resident of Portland since 2012. I have not often engaged in city politics directly. I'm emailing because I feel very strongly about this issue, and how it will directly impact our community in the city of Portland.

During the time we have lived here, my family and I have attended countless live performances at The State, Port City Music, Portland House of Music, Thompson's Point, Blue, Merrill Auditorium, and Cross Insurance Arena. I've attended so many live music events that its now hard for me to remember them all.

One of the reasons my family moved to Portland, ME, in 2012 is that it was a historic city that had seemingly escaped the homogenization, gentrification, and corporate hollowing-out that we had seen taking place in so many major cities over the past several decades. We fell in love with this community and its people. Among the characteristics we fell in love with was the thriving art scene, INCLUDING the music scene that had been nurtured and grown, lovingly, by local businesses.

To this day, going to The State, and the other local venues, feels like a magical experience to me and my family. I treasure and value what the owners and operators of these venues have created here in this special place. While at the State, I often marvel at its history, and how it was successfully resurrected in the 2000s to become the local landmark we know and love today. I chuckle at its seedy history, and take in its architecture while waiting for a band to take the stage.

When I read a Press Herald article on March 3rd, about the giant, monopolistic company Live Nation aspiring to create a music venue in Portland, I became both distraught, and incredibly angry.

Live Nation Entertainment, as you know, also owns and operates Ticketmaster. According to Wikipedia, "It promotes, operates and manages ticket sales for live entertainment internationally. It also owns and operates entertainment venues AND manages the careers of music artists."

Live Nation Entertainment, in plain language, constitutes a massive monopoly in the performing arts industry. In major cities, they often control ticketing, venues, promotion, AND MANAGEMENT of artists that perform at THEIR venues. In addition to this structural monopoly that they have constructed with little challenge over the past few decades -- they ALSO have monetized the secondary sales market of event tickets, making seeing popular artists in large cities prohibitively expensive to many fans, while turning an appreciation of the arts into an exercise in class warfare and capitalistic competition.

I very, VERY strongly believe that allowing Live Nation to build a 3,000+ seat venue will HARM Portland for years to come. It is yet another large corporation swooping in like a vampire to suck the blood from this city which was built up for decades by small businesses, artists, chefs, visionaries, and long-time residents.

They are not local. They are greed incarnate. They will absolutely cannibalize our beloved arts and music scene. They will capitalize on the hard work put in for many years by local music venues and promoters. They will be yet another step away from the character and culture of this city that Mainers and tourists love, and another step towards American corporate homogenization. Further, they will make downtown Portland even harder to visit and navigate for residents of the city and Cumberland County.

I adamantly believe that their tickets will be more expensive that those of local venues, and they will use their monopoly power to steal artists away from venues like Merrill, The State, Thompson's, and the Cross Insurance Area, all of which already seat 1000 - 9000 fans. They will very likely cause at least some of these venues -- local landmarks, local bulwarks of our unique city culture -- to close their doors permanently.

They will make being a fan of live performances in Portland more expensive for our residents. While they will create some jobs,

they will also funnel lots of money OUT of Portland, and Maine, out and away to the corporate monolith of Live Nation and its shareholders all over the world.

I hope you'll take my thoughts into consideration. Portland does not need Live Nation; and Live Nation will only harm the beauty and charm of this city, and it will harm local businesses; businesses that have stood by Portland through all its ups and downs.

Please let me know if there's anything else I can offer in terms of action or feedback on this topic.

Thank you for your time and consideration.

Sincerely,
Nathaniel Kraft
Nason's Corner neighborhood, District 3
Portland, Maine

**Jon Petruschke** jonpetruschke@gmail.com via portlandmaine.gov Thu, Mar 6, 9:59 PM (10 hours ago)
to planningboard

Hello Planning Board Members,

I am writing to express my strong opposition to Live Nation Ticketmaster's venue proposal in Portland. I have been a resident of Portland since 2002 and I am a small business owner.
I am afraid of the impact Live Nation Ticketmaster's proposed venue would have on Portland's economy and our vibrant arts scene. Tourism is so important for Maine, and Portland's arts scene is part of the draw.

Please keep our venues locally-owned. Do not approve Mile Marker Investments' proposal.

Thank you!

Sincerely,
Jon Petruschke
**Professional Therapy Services**

CREATIVEPORTLANDME

84 Free Street | Portland, ME 04101 | 207-370-4784 | info@creativeportland.com

**Executive Committee**
**Creative Portland Board of Directors**
**Statement of Concern re: LIVE NATION proposal**

Creative Portland is the City of Portland's official arts agency. Our mission is to support the creative economy through the arts and to nurture the local arts ecosystem by promoting Portland's cultural assets and artistic talents. Our programs and initiatives welcome all by providing resources and by forging partnerships and building community.

The current LIVE NATION venue proposal under the Planning Board's consideration, is a concern to our arts community who fear that a large monopoly operating in town might cause the shuttering of several arts organizations who currently showcase local & visiting artists and who operate music and performing arts venues. Although Creative Portland works hard to cultivate patronage through programs such as the Creative Portland app, we are concerned that our cherished local arts organizations like State Theatre, Portland Ovations and Portland Symphony would be in jeopardy if they were forced to compete with Live Nation's venue (working title: Portland Music Hall) to be built across the street from Merrill Auditorium.

Any questions, please do not hesitate to contact our Executive Committee or contact our Executive Director Dinah Minot at 207-370-4784.

Herb Ivy, President
Kate Anker, Immediate Past President
Clare E. Hannan, Vice President
Dawn Reshen-Doty, Treasurer
Matt Schwach, Secretary
Dinah Minot, Assistant Secretary (dinah@creativeportland.com)

Creative Portland Board of Directors:
*Kate Anker (Immediate Past President), Kirstie Archambault, David Brenerman,Tae Chong, Lucy Comaskey, Gib Foltz, Eliza Ginn, Lindsay Hancock, Clare E. Hannan (Vice President), Herb Ivy (President), Dinah Minot (Assistant Secretary), Zsofia McMullin, Daniel Minter, Councilor Regina Phillips (ex officio), Dawn Reshen-Doty (Treasurer), Matt Schwach (Secretary), and Greg Watson (ex officio)*

*Creative Portland's tax ID number is 27-0843775. Please retain this letter as proof of your tax-deductible contribution. For tax purposes, it will serve as a receipt for your gift.*

**Aurelia C Scott** rekacs2556@gmail.com via portlandmaine.gov Mon, Mar 17, 12:02 PM (2 days ago)
to planningboard

PC5

Hello,

I am writing to oppose the construction of a 65,340 square foot entertainment venue at 385 Congress Street. It is far too large a venue to have within a block of Merrill Auditorium, and in a downtown area where traffic is already tight. When there are events at Merrill, traffic is slow to stopped for blocks around. While the developers say that most people will not drive in, that simply cannot be true. Also, the crowds and noise associated with the category of performers anticipated by the developers would have a deleterious effect on the residential neighborhood closely surrounding the planned development. Additionally, the developers have no real connection to or appreciation of Portland, as evidenced by the proposed design, which has the look of a cookie-cutter suburban multiplex.

I do wish that the Planning Board would begin to reward inventive, forward-looking architecture to address Portland's real needs (à la some new Scandinavian inner-city developments).

In conclusion, I strongly oppose the proposed construction.

Respectfully,
Aurelia C. Scott

Carter Frank <cfrank@portlandmaine.gov>

# Re: Portland Music Hall

1 message

**Geoff Bowley** <geoff@bowleybuilders.com> Thu, Mar 20, 2025 at 7:41 AM
Reply-To: geoff@bowleybuilders.com
To: planningboard@portlandmaine.gov

Good Morning,

This email is in regards to the current application before the board scheduled for review on Tuesday, March 25th.

My family and I are native to Southern Maine and are in strong support of this project, the economic benefits it will provide to Portland and Maine in general, as well as its added contribution to the Arts, Culture, and Music environment of our State.

Please give this project the strong consideration it deserves.

Sincerely,
Geoff Bowley

PC7

**Geoff Bowley** geoff@bowleybuilders.com via portlandmaine.gov 7:41 AM (1 hour ago)
to planningboard

Good Morning,

This email is in regards to the current application before the board scheduled for review on Tuesday, March 25th.

My family and I are native to Southern Maine and are in strong support of this project, the economic benefits it will provide to Portland and Maine in general, as well as its added contribution to the Arts, Culture, and Music environment of our State.

Please give this project the strong consideration it deserves.

Sincerely,
Geoff Bowley

PC8

From: **Thomas Blackburn** <tblackburn1948@gmail.com>
Date: Thu, Mar 20, 2025 at 5:06 PM
Subject: comments regarding the proposed music venue at 385 Congress St PL-003179-2024
To: <citymanager@portlandmaine.gov>

Good afternoon
I am reaching out to you because I find the access to make comments concerning this pending project scheduled for review on Tuesday March 25, 2025 very difficult on the Portland Website. Therefore I am directing this to you our City Manager. I request that this email be forwarded to the Planing Board so it can be part of the record.

I am a senior citizen and a long time resident of Portland. I live on Hanover Street, relatively close to this project. I am also part of a music rehearsal venue who rents to over 300 musicians performing in 80 bands.

Portland has an active music scene that hires many of the musicians who rehearse at our facility. The concern of many is the continued viability of these smaller clubs.

Unfortunately, Mile Marker has selected as its partner Live Nation an organization well known for predatory business practices. Despite all of the assurances Live Nation and its representative Don Law have offered There is a major concern that the presence of a 3300 seat venue with Live Nation as a business partner will stifle the vibrant music scene in Portland. I realize it is probably beyond the authority of the Planning Board to address this issue. However, if this project is approved the potential demise of Portland's music component of our creative economy. will rest upon your shoulders.

While, I don't have any suggested solutions, perhaps the much smarter members of the planning board or it's staff.can find a way to mitigate the impacts mentioned herein and shared by hundreds of others involved in Portland's music community

Another concern is Parking. I note that no parking is required for this project other than a couple of semi truck loading areas. It is unfortunate that the City Council has adopted a vision of the city that assumes parking will resolve itself as residents use alternative transportation. That may become true in the distant future. It is short sighted for the present .

Hanover Street, while only 5 blocks away is continually challenged by finding parking spaces especially in the winter months.We have to engage in a continuous game of musical chairs with Cars.

Thank you.
Thomas Blackburn
207-232-8328

Aurelia C Scott <rekacs2556@gmail.com> Mar 17, 2025, 12:02:56 PM (2 days ago)
to planningboard@portlandmaine.gov

Hello,

I am writing to oppose the construction of a 65,340 square foot entertainment venue at 385 Congress Street. It is far too large a venue to have within a block of Merrill Auditorium, and in a downtown area where traffic is already tight. When there are events at Merrill, traffic is slow to stopped for blocks around. While the developers say that most people will not drive in, that simply cannot be true. Also, the crowds and noise associated with the category of performers anticipated by the developers would have a deleterious effect on the residential neighborhood closely surrounding the planned development. Additionally, the developers have no real connection to or appreciation of Portland, as evidenced by the proposed design, which has the look of a cookie-cutter suburban multiplex.

I do wish that the Planning Board would begin to reward inventive, forward-looking architecture to address Portland's real needs (à la some new Scandinavian inner-city developments).

In conclusion, I strongly oppose the proposed construction.

Respectfully,
Aurelia C. Scott

Graham Winick <gwinick@gmail.com> Mar 20, 2025, 10:24:58 PM (10 hours ago)
to planningboard@portlandmaine.gov

To whom it may concern.

I am writing in support of the proposed 3300 seat Portland Music Hall. I have worked in the fields of culture, entertainment and tourism for the past 30 years, mostly in the public sector in South Florida. We have seen how public investment in the arts and the creation of cultural venues has spurred neighborhood revitalization and growth, improved quality of life for residents, and became motivating factors for major increases in tourism, helping change the perception of seasonal visitation for our area. The social impact of the arts is also critical, as investment in the arts has proven to improve student testing and develop job skills that are more in demand, as well as support needed programs for the senior population. My eldest daughter is a recent transplant to Portland, Maine, and adding venues like this to the already terrific cultural arts and entertainment community there will certainly encourage me and my family to visit her and your wonderful city regularly.

Graham Winick
305-608-4704

Jenn Haas <jhaas10@outlook.com> Mar 20, 2025, 7:32:27 PM (13 hours ago)

to planningboard@portlandmaine.gov

Hello,
As a resident of Maine, I would like to express my support for the proposed Portland music hall. This would be a wonderful additional to the performing arts scene in the region as well as bring economic support to the city in the form of job and entertainment (restaurants, hotels, and stores).

Regards,
Jennifer Haas

George Rheault <george.rheault@gmail.com> 10:19 AM (1 minute ago)

to Planning Board, jmy, Matthew Grooms, kkraft

Please note that opponents of the LIVENATION performance center proposal should ask themselves where they were about a year ago when an age-restricted affordable housing complex was being considered by the Planning Board for this same site (a/k/a 244 Cumberland Avenue).

Both the Planning Board and the planning staff sounded very UNenthusiastic and were not AT ALL encouraging towards the housing idea.

No surprise the applicant never came back to try to get the project approved. The housing applicant apparently knew where things were headed. Was LIVENATION already whispering in everyone's ears back then?

It will be interesting to see how the two projects for the same site get approached by the Planning Board.

Will the Planning Board and planning staff give the LIVENATION proposal the same level of scrutiny (including on similar issues like design) as the affordable housing complex?

The meeting packet for the housing proposal can be found here. The relevant meeting video begins shortly after the 1 hour 11 minute mark.
https://portlandme.portal.civicclerk.com/event/6419/overview

PC13

**George Rheault**

to Planning, me, Kevin, Matthew

Please see attached a Boston Globe article from December 2024 discussing the announcement of LIVENATION's new proposal for a Portland, Maine venue.

Per the article (see excerpt below), the co-developer of the venue appears to have had discussions with various "insiders" in 2024 and claimed that the proposal had received encouragement to proceed from such insiders including from the neighborhood association (presumably the Bayside Neighborhood Association but it may also have been Portland Downtown, both of which may lay claim to this "turf").

Those who were approached by the co-developer and/or by LIVENATION should reveal when they first heard of the idea and when they had actual discussions with the development team about the details.

Also, when did the Planning Department have initial meetings with the development team? When EXACTLY was the official "pre-application" meeting for this project?

The public deserves to have a detailed sense of when this project was first being pitched to those in Portland and how it bubbled up from there and who was included AND excluded from those initial discussions.

> Pending approval by city planners, Goldenfarb's firm plans to begin construction next fall and open for business in late 2027. Mile Marker has already discussed the proposal with city officials, including Portland Mayor Mark Dion and economic development director Greg Watson, as well as the chamber of commerce and the neighborhood association.
>
> "We're getting a really strong response in a positive way," Goldenfarb said Friday.

# Portland may be getting a big new concert venue

**By** Mark Shanahan Globe Staff, Updated December 20, 2024, 3:58 p.m.




Rendering of the proposed new concert venue in downtown Portland, Maine. LEONARDO RUBEN MERLOS

A Maine-based investment firm is teaming with Live Nation on a proposed new concert venue in downtown Portland.

Mile Marker Investments announced Friday it wants to build a 3,300-seat "state-of-the-art theater" at the edge of the arts district in Maine's largest city.

The new 66,000-square-foot venue, which will tentatively be called the Portland Music Hall, is expected to host at least 125 concerts, comedy shows, and other events per year, and create more than 250 full-time jobs, according to the developer. It would be built on Cumberland Avenue, on property adjacent to Portland City Hall that is now occupied by a vacant printing-press building and a parking lot.

"Portland has an incredible history of live entertainment, amazing restaurants, shops, hotels, and cultural centers," Todd Goldenfarb, a principal in Mile Marker Investments, said in a statement. "We are so happy to enhance that reputation and create more opportunities to see live acts here."

Pending approval by city planners, Goldenfarb's firm plans to begin construction next fall and open for business in late 2027. Mile Marker has already discussed the proposal with city officials, including Portland Mayor Mark Dion and economic development director Greg Watson, as well as the chamber of commerce and the neighborhood association.

"We're getting a really strong response in a positive way," Goldenfarb said Friday.

Currently, Portland's concert stages include the Cross Insurance Arena (formerly the Cumberland County Civic Center), which can accommodate crowds of about 9,000; the historic State Theatre, which has a capacity of about 1,900; and the city-run Merrill Auditorium, which is comparable in size to the State Theatre. (Larger outdoor concerts are held at Thompson's Point.)

Mile Marker Investments said the new venue will have excellent acoustics and sightlines, a "classic marquee," and a "retro-inspired" lobby. By teaming with the behemoth ticketing and concert-promotion company Live Nation, Mile Marker hopes to attract top-tier artists.

Don Law, Live Nation's representative in New England, predicts the new concert venue will have a positive economic impact on Portland and Southern Maine.

"We see it time and again when a venue opens: a new option means more shows, for more fans, generating more activity downtown. It is especially impactful for restaurants and hotels," Law said in a statement.

Goldenfarb said the venue's proposed size and design are modeled closely on the MGM Music Hall, which opened next to Fenway Park two years ago.

"Working with [Law] and his team, their feeling is that a lot of the shows that go to MGM and want to go to Portland will be able to now," Goldenfarb said.

Mile Marker Investments was involved in the development of the Longfellow Hotel in Portland; commercial properties in South Portland and Austin, Texas; and residential developments in Austin and Miami Beach.

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Mark Shanahan can be reached at mark.shanahan@globe.com. Follow him @MarkAShanahan.

Show 15 comments

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Carter Frank <cfrank@portlandmaine.gov>

## Opposition to Live Nation's new venue in Portland. "NO " to monopolizing Portland,Maine.

1 message

**Kathryn "Kap" Wallingford** <kap333@gmail.com>
Reply-To: kap333@gmail.com
To: planningboard@portlandmaine.gov

Fri, Mar 21, 2025 at 4:12 PM

Dear Planning Board,
I thank you for your dedication to Portland, Maine. I too am an elected Board Trustee in Freeport. (serving for three years.) For me listening to my constituents in order to make a decision that supports all taxpayers is essential.

I want to be concise don't approve live nation to develop Our beautiful Portland. You have the power and the privilege to stop this bulldozer from coming in!

The decision to consider Live Nation & their new venue will reduce the need for the City of Portland's own facilities. - Cross Arena, Merrill Auditorium, the Expo. Other facilities: State Theater, Thompson's Point, Maine State Pier, House of Music as well Aura.

The " new" jobs would not counteract the jobs that would be lost in these particular facilities. Many of these jobs are long-term employed City personnel - generational in fact.

The Live Nation conglomerate has an illegal monopoly on the entertainment industry, as well as on tickets. (They own Ticketmaster). For instance, when you buy $100 ticket you pay an additional $25-$35 for live nation give the consumer the opportunity to see the show. There are no box offices anymore live nation has eliminated this option. Live music is no longer affordable in Boston due to their greed.

In Portland we still can buy tickets without additional fees in person at the State Theater- for Thompson's point, Portland House of music and some shows at Cross Arena & Merrill auditorium. NON-live-nation shows are Predominantly, 40% less in cost. * From what I've researched, the artist don't get the majority of those fees that live nation takes - live nation does.

Lastly, please review that Live Nation is under investigation. It’s not a good group of people. It’s not a good corporation.

https://www.justice.gov/archives/opa/pr/justice-department-sues-live-nation-ticketmaster-monopolizing-markets-across-live-concert

# Justice Department Sues Live Nation-Ticketmaster for Monopolizing Markets Across the Live Concert Industry

Thursday, May 23, 2024

> **For Immediate Release**
>
> Office of Public Affairs

Thank you for your time.

Kathryn "Kap" Wallingford,
Freeport Sewer District, Trustee and Vice Treasurer

Carter Frank <cfrank@portlandmaine.gov>

# Portland Music Hall

1 message

**'Vanessa Kendrick' via Planning Board** <planningboard@portlandmaine.gov> Sun, Mar 23, 2025 at 3:42 PM
Reply-To: vanessakendrick@yahoo.com
To: planningboard@portlandmaine.gov

Dear Planning Board,

I feel Portland Music Hall is a great idea. It is an honor to see the city of Portland grow and become a premiere destination for arts and culture. I believe that if you build it they will come!

Thank you,
Vanessa Chandler
Sent from my iPhone

Kenmore Association, Inc.

March 23, 2025

Re: MGM Music Hall

Dear Members of the Planning Board:

I am writing as the President of the Kenmore Association, an organization made up of small and large businesses in the Fenway/Kenmore area of Boston, to hopefully impress upon you the positive impacts the MGM Music Hall has on the neighborhood. The wide variety of concerts, performing arts, educational and civic events that take place at this venue serve to activate our streets and bring so many more people to our neighborhood which then drives new business to restaurants, retail shops and hotels all year round. It is hard to express how significant of an economic increase this venue has had on the surrounding area.

I would also like to take this opportunity to note that in addition to the economic benefits the venue itself brings their staff, management and ownership are also an important asset to the community. Since moving in to the neighborhood they have looked for and found ways to interact with the community that benefit the entire area. We feel very fortunate to have them in our neighborhood.

Thank you for the opportunity to express our support for this wonderful venue.

Sincerely,

Pamela G. Beale, President

Carter Frank <cfrank@portlandmaine.gov>

# Fwd: letter

1 message

**Garrett Harker** <harker@gmail.com> Mon, Mar 24, 2025 at 11:11 AM
Reply-To: harker@gmail.com
To: planningboard@portlandmaine.gov

> Regarding proposed LiveNation venue please see attached.

Thank you

**Garrett Harker Letter of Support.pdf**
41K

**To whom it may concern,**

This letter is to provide enthusiastic support for a new music venue in the city of Portland, ME from the perspective of a small business owner in the restaurant industry in Boston.

Our restaurants, Eastern Standard, Standard Italian, and Equal Measure are within a 15 minute walk from MGM Live and House of Blues in the Fenway neighborhood. We benefit greatly from the flow of patrons between our restaurants and the venues. The quality of the patrons is exceptional, locals who are excited for a night out to see their favorite artists. The rhythm of the activity is particularly beneficial to our staff and businesses, bringing guests in during the shoulder times earlier and later. Driving business during the shoulder times is crucial to a healthy restaurant. With out the concert activity, we would not be able to survive with one seating at a 7pm prime time. The concerts often drive traffic on non weekend nights, also essential.

In addition to the concerts, the venues often host civic minded events such as the Mayor's State of the City address recently, and many premier non-profit events. On those nights, the restaurants enjoy a little sliver of the spotlight in front of high profile Bostonians, clientele we might not be in front of naturally.

A music venue with the level of quality delivered routinely by Live Nation will be a great economic driver for the Portland hospitality industry. I encourage your wholehearted support of this venture.

**Sincerely,**

**Garrett Harker**

**Proprietor**

775 Beacon St, Boston MA 02215 | (617) 530 1590 | easternstandardboston.com

Carter Frank <cfrank@portlandmaine.gov>

# Support for MGM Proposal in ME

1 message

**'Sharon Durkan' via Planning Board** <planningboard@portlandmaine.gov> Mon, Mar 24, 2025 at 11:17 AM
Reply-To: sharon.durkan@boston.gov
To: planningboard@portlandmaine.gov

Dear Members of the Portland Planning Board,

I hope this message finds you well. As the Boston City Councilor for District 8, I'm writing to share my experience with MGM Music Hall here in Boston!

Please find my attached letter outlining how the MGM Music Hall at Fenway has served as a strong community and cultural partner here. I believe Portland would benefit greatly from a similar venue that brings people together with civic engagement and the arts.

Thank you for your consideration, and please don't hesitate to reach out if I can be of further assistance or reference.

Warmly,



Sharon Durkan
Boston City Councilor, District 8

617-635-4225

*Please note that emails sent to and from this account are public records, and may also be read by members of my staff.*

**Durkan - Support - MGM in Portland, ME.pdf**
574K

**SHARON DURKAN**
**OFFICE OF BOSTON CITY COUNCILOR, DISTRICT 8**

March 24, 2025

Portland Planning Board
389 Congress St, 4th Floor
Portland, ME 04101

**Re: MGM Proposal in Portland, ME**

Dear Portland Planning Board,

I write in strong support of the proposed MGM Music Hall in Portland. As the Boston City Councilor for District 8, which includes the Fenway neighborhood—home to the MGM Music Hall at Fenway—I've seen firsthand how this venue has become a valuable cultural and civic partner.

MGM Music Hall at Fenway is far more than a performance space. It is a hub of community activity and engagement. The venue regularly hosts events of civic importance, including Mayor Wu's State of the City address, and consistently opens its doors to meaningful cultural programming that reflects and celebrates our city's diversity. Live Nation has proven to be a responsive, collaborative partner, one that understands the importance of addressing quality-of-life concerns for nearby residents and businesses. Their team communicates transparently, adapts as needed, and works with city leadership to ensure the venue is an asset to the neighborhood.

Portland is known for its vibrant arts and culture scene. A venue of this caliber would not only fill a current gap in indoor performance space but would also serve as an anchor for economic and cultural vitality. If my experience in Boston is any indication, the addition of an MGM Music Hall will strengthen Portland's position as a leading city for arts and community.

Thank you for the opportunity to offer my perspective. I hope you will consider this proposal favorably.

Warmly,

Sharon Durkan
Boston City Councilor, District 8

DISTRICT 8 COUNCILOR, SHARON DURKAN
BOSTON CITY HALL, ONE CITY HALL SQUARE, BOSTON
617-635-4225 | SHARON.DURKAN@BOSTON.GOV

Carter Frank <cfrank@portlandmaine.gov>

# Portland Music Hall

1 message

**Tony DeLois** <tony@stayuncommon.com> Mon, Mar 24, 2025 at 2:17 PM
Reply-To: tony@stayuncommon.com
To: "planningboard@portlandmaine.gov" <planningboard@portlandmaine.gov>

Portland Planning Board,

Good afternoon and I hope all is well. I am writing a letter to you in support of the Portland Music Hall project. As a hotel operator, we are consistently looking for new ways to draw people to Portland from November to May, a time during which all businesses suffer the most. Now that we collect and remit payments to Visit Portland to help market the city during the off season, we are all tasked with thinking of ideas that would bring people to the city during this time. Portland Music Hall is a perfect example of how we can grow our off-season visitation and help our local businesses do more than just skirt by another off season without having to thinking about closing its doors. Given the developers on this project are hitting all the land use requirements to build on this site, I am in full support of Portland Music Hall moving forward.

Thank you,

Tony

**Tony DeLois**
CHIEF OPERATING OFFICER

uncommon hospitality

**TEL:** 207.747.8177
**EMAIL:** tony@stayuncommon.com
**WEB:** stayuncommon.com

**LONGFELLOW HOTEL | THE FRANCIS HOTEL**
**THE ADMIRAL'S INN | THE COLONIAL INN**

FIND US ON SOCIAL MEDIA:

PC 20

March 24, 2025

To Whom It May Concern,

On behalf of Meet Boston, I'm writing this letter as an attestation to the positive economic impact that MGM Music Hall at Fenway has generated for Boston and its area businesses. Since opening in the late summer of 2022, MGM Music Hall has ushered in a new era for live events and entertainment in the Fenway neighborhood. An area once dependent on warmer weather events such as ballgames and summer concerts has been able to flourish year-round since MGM Music Hall opened its doors.

The restaurants, breweries and attractions in the area have greatly benefited from this over the past few years. Time Out Market Boston was able to recover from the pandemic thanks in part to the entertainment corridor that has emerged on Lansdowne Street, with MGM Music Hall serving as an anchor venue to that experience. Restaurants and bars along Boylston Street and Brookline Avenue, as well as in Kenmore Square, have seen an influx of new patrons because of the programming at MGM.

MGM Music Hall at Fenway has allowed the city to bring in more diverse acts in all seasons, occupying a footprint that is very popular with an eclectic range of artists and genres and their associated fanbases. Premier events such as the Earthshot Prize have identified MGM Music Hall as a venue befitting the prestige that their event carries across the globe. And locally, Mayor Michelle Wu has delivered all three of her State of the City addresses at this location.

Again, it is my pleasure to recognize and attest to the significant impact that MGM Music Hall at Fenway has delivered for our destination, as both a cultural venue and also a place where important conversations are convened.

Sincerely,

Martha J. Sheridan
President & CEO

Carter Frank <cfrank@portlandmaine.gov>

# MGM Support Letter

1 message

**'Dave O'Donnell' via Planning Board** <planningboard@portlandmaine.gov> Mon, Mar 24, 2025 at 2:36 PM
Reply-To: dodonnell@meetboston.com
To: "Planningboard@portlandmaine.gov" <Planningboard@portlandmaine.gov>
Cc: "Martha J. Sheridan" <msheridan@meetboston.com>

Good afternoon,

Please find attached a letter of support for MGM from Meet Boston.

Dave

**Dave O'Donnell**
Vice President, Strategic Communications
dodonnell@meetboston.com
O 617-867-8214
M 617-710-0603
Meet BOSTON | meetboston.com

**MJS MGM Letter of Support.docx**
412K

Amelia Clancy <clancyamelia@yahoo.com> Mar 24, 2025, 8:32:02 PM (11 hours ago)
to planning@portlandmaine.gov

Hello,
I am writing to oppose the development of a 3,350-seat venue in partnership with Live Nation Entertainment on Congress Ave in Portland.

I am concerned about the negative impact this could have on the community. Musicians and venues will suffer, unfortunately no matter how amazing we know they are, no one can compete with a company worth 29 billion dollars. Please stop selling our Portland to the highest bidder. Local musicians and artists report many negative experiences with LiveNation and its subsidiary, TicketMaster. Additionally, Ticketmaster is inflating ticket prices, has increasingly high fees, and supports ticket scalping. The company just had to settle an antitrust lawsuit. This is not the kind of company we want to do business with and will not support the type of growth we want to see in Portland.

Please prioritize what steps need to be taken to upkeep current public housing and develop single family low to middle income family housing solutions.

Thank you,
Amelia Clancy
60 Walton st
Portland, ME

Sean Samarov <seansamarov@protonmail.com> Mar 24, 2025, 8:42:10 PM (11 hours ago)
to planning@portlandmaine.gov

Hello,

I'm writing to express my opposition to the proposed music venue to be built in Portland. Portland has a rich music community with some incredible talent, and it's a privilege to be surrounded by so much artistic expression, as a musician myself.

You're well aware that Portland has many music venues already that have brought some amazing international performances to our city. I understand the sentiment that this venue would further cement Portland as a musical destination, while increasing tourism economic activity. The problems with this are several -

1, We do not need the additional capacity. The venues we have are supporting major acts as-is without issue. Major acts are booking our existing venues without issue or substantial delay.
2, We lack the infrastructure to support such a venue. Parking and transit are limited as it is. As a downtown resident, I already have a hard time when major acts come through town (I spent 45 minutes trying to find a parking spot near my apartment on the night of the recent Kevin Hart show). Introducing another venue would only unnecessarily increase frustrations for event-goers and residents alike.
3, LiveNation is, without exaggeration, an abusive and unethical company that preys on musicians, fans and venues alike and you'd be hard-pressed to find a single person who has anything nice to say about them. For just a few examples, I suggest you look into their encouragement of scalping, their outrageous overhead compared to what they pay the performing artists, and their monopolistic and anti-competitive behavior that puts independent venues (potentially **including** the ones that make the Portland music scene great to begin with) out of business.

On the surface, this seems like a good direction and would encourage growth and culture in the city, but the affects will turn out to be adverse and destructive. I agree with the sentiment of this letter to the Press Herald - Stop trying to turn Portland into Boston
I very seriously hope you reconsider this matter and do not allow the construction of this venue.

Regards,

Sean Samarov
Portland-based Musician and Engineer

PC 23

Gretta Buckley <gretta.buckley35@gmail.com> Mar 24, 2025, 9:26:32 PM (11 hours ago)
to planning@portlandmaine.gov

Hello,

My name is Gretta Buckley and I am a former longtime resident of Portland, ME (currently resident of South Portland) and have been working for State Theatre and Thompson's Point for the last eight years. I am writing to advocate against the development of a 3,500 seat venue in partnership with Live Nation. Now more than ever it is important to invest in our local economies and a partnership with a large corporation like this does not support the city of Portland in any way.

First of all, a venue of this size is not needed. In this city we have a variety of venues large and small including but not limited to - Merrill Auditorium (city building) = 1,900, State Theatre = 1,800, Thompson's Point = 2,500-6,500 (summertime), Cross Insurance Arena (county building) = 3,000-6,200 for concerts. A venue like this one will take away from these long standing Portland institutions.

Secondly, the cities infrastructure cannot support a venue of this size, as we do not have parking to support. When I am not working at State Theatre, I work for commonspace supporting unhoused neighbors in finding affordable housing. We should be prioritizing more affordable housing, not large corporate venues which will reduce access to live music by jacking prices for concerts.

For these reasons and so many more, this is not the move our city should make. Please take the voices of those of us working in music industry currently into heart when making your decisions. Thank you.

~Gretta

Nathan Katsiaficas <njkatsia@gmail.com> Mar 24, 2025, 8:59:30 PM (11 hours ago)
to planningboard@portlandmaine.gov

Good Evening,

I am unable to make it to tomorrow's workshop, but as a Portland native and active photographer in our local music scene, I wanted to take the chance to voice my opposition to this new venue.

Portland has a long history of locally and regionally-owned venues. We have wonderful options for folks to catch live entertainment at venues of varying sizes. Post-Covid, there has been an explosion of local shows at smaller venues like Blue, Apohadion, Space, Oxbow, Bayside Bowl, and elsewhere, as there has been a similar surge in shows at State, Merrill, Thompson's Point, Cross Insurance Arena, and Aura. There are nights where folks can choose between >10 different venues all with live music or comedy on a given night.

WE DO NOT NEED ANOTHER VENUE. What we need is more support for the local spots and DIY venues from the City of Portland. This new venue would further increase parking difficulties, and will directly take shows from Merrill Auditorium, State, Cross, Aura, and elsewhere in Southern Maine. Portland already has an arena that can accomodate shows of this capacity--if their booking arrangements lock them out of some of the Live Nation tours--that's on Live Nation and not on us to remedy. Bangor and Boston offer plenty of variety for the big name tours that Live Nation is trying to sell folks on this venue with.

Please don't approve this venue--Portland's arts scene is thriving, there are better ways to take care of it than selling the soul of our scene to Live Nation. If you want to help our art scene, give grants to small venues, bring back festivals like Old Port fest that celebrate the music scene, and invest in building more housing so that artists can continue to afford to live here.

Thank you,

**Nathan Katsiaficas**

Maxwell Ledoux <maxledoux731@gmail.com> Mar 24, 2025, 9:54:24 PM (10 hours ago)
to planningboard@portlandmaine.gov

Dear members of the Portland Planning Board, my name is Max Ledoux; I am a lifetime resident of Old Orchard Beach and I wanted to voice my opposition to the proposed permit submitted by Portland Music Holdings, LLC.

I have grown up visiting Portland and enjoying its music venues as both a performer and audience member. From Merrill Hall to the State Theater, I believe the local ownership of these venues brings a distinct character and allure to visiting and living in Portland.

Bringing a venue this size, owned by a monopolistic ticket company under federal investigation for violating trust laws, will do no good for Portland and its community of artists.

In addition to concerns with affect on local character, smothering local venues, and parking availability, I believe that this is a deliberate act by LiveNation and Mile Marker Investments to take control of a flourishing market that has proved to be stable and profitable.

Please don’t let corporate greed ruin Portland’s independent music scene. Thank you for your time and I plan on attending the meeting virtually.

Max Ledoux

Stella Del Tergo <stella_deltergo@emerson.edu> Mar 24, 2025, 11:58:27 PM (8 hours ago)
to planningboard@portlandmaine.gov

Hello!

I have just been made aware of the proposed development of a new music venue in town. At first, this sounds incredibly exciting, as an avid fan of Portland's concert scene. Unfortunately, the proposed development is in partnership Live Nation Entertainment. I am writing to express deep concern that this development would be misaligned with Portland's character.

You are likely aware of recent nationwide controversy, as well as lawsuits, surrounding Ticket Master, the parent company of Live Nation Entertainment. In short, Ticket Master facilitated ticket scalping, overcharged customers with hidden fees which they pocketed, and decreased the customer experience overall. Many musicians even pledged not to sell tickets on Ticket Master going forward, which often meant avoiding venues in direct partnership, like the one proposed.

Additionally, many of Portland's venues currently either operate their own in house purchasing softwares, or utilize PortTix.com, a locally owned box office website. This is a unique dynamic, one which perfectly encapsulates Portland's heart and character. It has also meant that portland has been able to host amazing musicians, whilst keeping the economic profits at home, rather then with Ticket Master's executives.

I urge the planning board not to allow this new development, in the interest of all involved in Portland's beautiful music scene. Thank you for your time.

Stella Del Tergo

Hi Planning Board,

I am writing to express my highest support for the music venue project. I have worked in and lived in or around Portland for the past 10 years and feel the project would be a wonderful addition to our already vibrant arts community. Additionally, I expect it would be a driver of significant driver of business for the city in a time when many businesses are still trying to adjust to a post covid landscape.

I hope you come to the same conclusion and look forward to welcoming the new venue soon.

Best,
Eben Jose

Carter Frank <cfrank@portlandmaine.gov>

# Against the Approval of a Corporation Owned Music Venue

1 message

**Melody Cropley** <melody.cropley@gmail.com> Tue, Mar 25, 2025 at 8:44 AM
To: planning@portlandmaine.gov

Hello,

I am writing to express my disapproval of a proposal to build a large music venue in partnership with the multinational company Live Nation. The music scene in Portland is built on local venues and local musicians, the approval of such a venue would result in the closure of beloved local music venues and far fewer opportunities for local musicians. In essence, it would be responsible for the death of the local music scene, something Portland is known for and something locals take tremendous pride in.

Please consider the people of the Portland area and reject this proposal.

Thank you,
Melody Cropley

Carter Frank <cfrank@portlandmaine.gov>

# Live Nation Proposal

1 message

**Edith Sherburne** <ESherburne@greaterportlandhealth.org> Tue, Mar 25, 2025 at 9:02 AM
Reply-To: esherburne@greaterportlandhealth.org
To: "planningboard@portlandmaine.gov" <planningboard@portlandmaine.gov>

Good morning,

I will not be able to attend the planning meeting this evening to discuss the proposed Live Nation music venue, however I would like to share my thoughts as a community member and ask for your consideration in denying and stopping the proposal.

Live Nation is a company that has little interest in preserving local and community focused live music and entertainment. They open new venues strategically placed between larger venues they run as a way to funnel more business toward their larger venues. They control access to performers and will undercut artists as a way to capitalize on their already accumulating mass wealth, without any intention of using said funds to support the local art scene. Live Nation is being boycotted and is under investigation for failing to disclose critical information about potential antitrust investigations and regulatory challenges. The lawsuit, filed by the U.S Department of Justice and numerous state Attorneys General, particularly targeted the company's alleged anti-competitive behaviors, including claims of retaliatory actions against venues that did not use Ticketmaster. On Friday, 03/21/2025-- less than one week ago, Live Nation proposed a settlement in this case for $20 million dollars. Twenty Million Dollars is not an amount of money to laugh at, and yet, twenty million dollars only recovers about **3%** of the maximum estimated damages in this case-- totaling **$743 million.** Live Nation continues to bring in unfathomable amounts of money for the average person, the average Mainer... yet they are only willing to settle for 3% of the damages they've caused?

I am not originally a Mainer; I moved to Maine from NYS a few years ago and have truly found my home here. I love this community and this city. I love the opportunity for artists and musicians to celebrate their independence and to be showered with love and admiration as they grow. Live Nation is not interested in Portland for our culture, community, arts, or talent. They are interested in Portland as a means to an end-- a way to make more money-- money they will not put back into or invest in our community. Portland is a community for the people who live here, not the big businesses who want to take advantage of that.

Please consider this email my formal request to deny the proposed Live Nation music venue, for the sake of Portland and all of us who have a home here.

Best,
Edith Sherburne

**Edith Sherburne, LMSW-cc** (she/her/hers)

**Licensed Master Social Worker**

**Greater Portland Health**

100 Brickhill Ave., South Portland, ME 04106

esherburne@greaterportandhealth.org




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Carter Frank <cfrank@portlandmaine.gov>

# Live Nation Proposal

1 message

**Allie Liberatore** <amlib46@gmail.com> Tue, Mar 25, 2025 at 8:44 AM
Reply-To: amlib46@gmail.com
To: planningboard@portlandmaine.gov

Hello,

I am a Portland resident who loves the local music and arts scene. Portland's independent and local venues enrich our community and allow our local artists to thrive. We are lucky enough to be a short distance from Boston that attracts all of the large artists with corporate venues. The summer concert series at Thompson's Point brings in plenty of larger artists to satisfy our neighbors. Allowing Live Nation to open a venue in Portland will only hurt our artists that rely heavily on our tight knit community.

I've seen the arguments that this will help local businesses and restaurants, but Portland already has a thriving tourist industry. The negative effects that this will bring to the arts community outweighs any minor improvements it may bring to other businesses. Not to mention the parking issues that this venue would create in a city that already struggles with parking.

I am unable to make it to the workshop to discuss these issues so I hope this email finds you well and it is truly taken into consideration.

Thank you,
Allecia Liberatore

Carter Frank <cfrank@portlandmaine.gov>

# No to LiveNation venue

1 message

**Phuc Tran** <phucskywalker@gmail.com> Tue, Mar 25, 2025 at 9:30 AM
To: planning@portlandmaine.gov

Hi, planning board:

I hope you will deny the plans for a LiveNation venue on Congress Street. The impact on the traffic and residents will be horrendous and will outweigh whatever dubious benefits it claims to bring.

We have a thriving live music scene here already—let's support what we have and ensure that our existing venues can weather the coming economic turmoil rather than add to the burdens of the city's congestion and parking woes.

Respectfully,

Phuc Tran
Portland

--
(he/him/his)

---

***CRANKY*** available now at all your booksellers!

***SIGH, GONE*** in paperback available at your favorite bookseller

www.phucskywalker.com

Carter Frank <cfrank@portlandmaine.gov>

# Objection to planned entertainment venue

1 message

**Tina Schneider** <tina.schneider@maine.edu> Tue, Mar 25, 2025 at 10:00 AM
Reply-To: tina.schneider@maine.edu
To: planningboard@portlandmaine.gov

This is to express my vehement objection to the planned entertainment. venue on Congress Street. There are grossly inadequate plans for parking to accommodate the 3000+ people the facility could host. The city cannot keep allowing development that does not provide for parking. Although I know the hope is that we will move away from being car-dependent, the fact of the matter is that most people here still use and need their cars. It would be an incredible imposition on those who work or live downtown to allow this development to go forward.

Thank you.

Sincerely, Tina Schneider (162 Edwards Street, Portland)

PC 33

Amelia Cutler <accutler@gmail.com> 10:32 AM (21 minutes ago)

to planningboard@portlandmaine.gov

Hello,

I would like to voice my opposition to allowing a Live Nation venue in Portland. Live Nation is bad for artists, bad for small venues, and has been driving ticket prices up for years. We have a great ecosystem of small venues here in Portland; we do not need or want the corporate, non-local, predatory involvement of a Live Nation venue. Please say NO to Live Nation.

Thanks,
Amelia Cutler
Scarborough, ME

Carter Frank <cfrank@portlandmaine.gov>

# No Live Nation Entertainment

1 message

**Aidan Mcpherson** <mcphersonaidan@gmail.com> Tue, Mar 25, 2025 at 10:54 AM
Reply-To: mcphersonaidan@gmail.com
To: planningboard@portlandmaine.gov

To the folks at Portland City Hall,

Live Nation Entertainment was sued last year by the Justice Department for antitrust violations. Paying out $20 million, Live Nation Entertainment was found guilty of misleading investors about their non-competitve practices: charging inflated fees, needlessly bundling services, and bullying venues that chose ticketing vendors other than Ticketmaster. This is the same Live Nation Entertainment that flopped during the Taylor Swift ticket sales, enraging fans and investors alike.
Portland has no shortage of eager and exciting local venues, nor does it have any lack of musical artists. To snub both our businesses and artists would be shameful. More than that, a Live Nation Entertainment venue would funnel local money out of Portland. Instead of tickets paying towards the local venue and artists, the price and fees are swimming away to investors and corporate entities elsewhere.
There's really no good reason to bring Live Nation Entertainment to Portland. We've got plenty of local venues for our artists that people enjoy going to and being a part of. To me, the last thing we need is some huge, ugly, impersonal venue that's going to charge inflated ticket prices and threaten our businesses. Keep Maine local. Keep Maine great.

With hope,
Aidan McPherson

Carter Frank <cfrank@portlandmaine.gov>

# Planning Board meeting tonight

1 message

**Tim Sweeton** <tim.sweeton@gmail.com> Tue, Mar 25, 2025 at 10:54 AM
Reply-To: tim.sweeton@gmail.com
To: planningboard@portlandmaine.gov

Good Morning,

My name is Tim Sweeton, I'm a resident of district 5 in Portland. I'm writing to express my opposition to the proposed new music venue in Portland.

I'm coming to you as a live music fan, but more importantly a resident of Portland, a downtown worker, and someone who wants to maintain the integrity of Portland. I spoke at the City Council meeting last week and asked the councilors a specific question, and I ask the same of you: Is this necessary? Is it worth adding more traffic to an already uncomfortable traffic situation on the peninsula (especially in the summer)? Is it worth bringing 3,300 more people to the peninsula on a Friday night in July when there is a show at Merrill, a cruise ship in port, a show at Portland House of Music, and when our restaurants and hotels are already full? We have so many venues as it is, and Live Nation's priority is and always will be to squash the competition so they can continue their monopoly by owning the venues, the artists, the booking agents, and the ticketing company. It's been shown time and time again what they do - within 5 years of opening, there will be no more Merrill Auditorium (where my tax dollars have paid to maintain and upgrade the venue), no more State Theatre, no more Portland House of Music, no more Thompson's Point, etc. It's a slippery, downhill slope that we're heading down if this goes through.

I also asked the councilors last week, and I'd like to ask the same of you: Why is there no WalMart downtown? Why no McDonalds? From an outsider's point of view, I'd like to think it's because the city doesn't want a monopolistic corporation to come in and put every mom and pop shop and quick service restaurant out of business. Am I far off here? If that is the case, then why allow Live Nation? They are the WalMart of venue owners, and while they may make it look good in a proposal, please don't get caught up in that.

With nowhere to park, no realistic way to control the influx of traffic, and especially ZERO need for this in town, I'd like to respectfully ask that you take a step back, do some very good research, and then decide if this is what Portland needs. Once you do, I'm confident that you'll see what it seems like lots of others in Portland see: this is unnecessary, and will do nothing but add to our woes of no parking, bad traffic, and no housing (where are all of these people who Live Nation claims they'll pay $20/hr live? We all know there is no place within 30 minutes of Portland they can afford!)

Thank you for your time.

Respectfully,

Tim Sweeton

Summit St, Portland 04103

Carter Frank <cfrank@portlandmaine.gov>

# Live Nations is a parasite!

1 message

**JamieB** <jamie.a.beals@gmail.com> Tue, Mar 25, 2025 at 10:37 AM
To: planning@portlandmaine.gov

Hello,

Please please reconsider plans for this overly large venue for the top of the old port spot. Portland doesn't need this and it will eventually push smaller local venues out of business. We also already have no place to park - even if it has underground parking, this will make it worse.

Stop this trash company from setting up shop in Portland.

Thank you,
Jamie Beals
Portland resident
04101

Carter Frank <cfrank@portlandmaine.gov>

# Live Nation Venue

1 message

**grace bedwell** <tarnanstrich@gmail.com> Tue, Mar 25, 2025 at 11:08 AM
To: planning@portlandmaine.gov

Hello,

I am a musician who lives in Portland, and I am writing this email to OPPOSE the Live Nation venue. As developers are always looking for investment opportunities to turn into wealth (which will not trickle down to local and regional performers), the smaller venues and artists are contributing their time, energy, and often their own money to build community, accessibility, and freedom of expression. If Portland wants to be seen as a city which values and builds its reputation as a haven for artists, you need to be on the side of the artists. What you do to show opposition to culture, art, and community, is make resources available to scam corporations that have been sued by the government. The Lawsuit "alleges that Live Nation-Ticketmaster unlawfully exercises its monopoly power in violation of Section 2 of the Sherman Act " as per the Justice Department website.

.
Thank you,
Grace Bedwell

Carter Frank <cfrank@portlandmaine.gov>

# Opposition to Proposed LiveNation Concert Venue

1 message

**Natalie Bolea** <natalie.bolea01@gmail.com> Tue, Mar 25, 2025 at 11:09 AM
Reply-To: natalie.bolea01@gmail.com
To: planningboard@portlandmaine.gov

To whom it may concern,
Hello. I am writing to you today to voice my opposition to the proposed LiveNation concert venue.
Portland's local, independent music scene is one that I, as well as a large number of my friends and colleagues, are extremely proud to be a part of. Independently owned music venues, as well as local arts presenters, enrich and provide for our community in ways that large corporate venues cannot. LiveNation is a multinational corporation that is currently under federal investigation. Across the country, this corporation has contributed to closures of local venues, local performers losing opportunities, and profits being funneled out of local economies. I, and many others, do not want this happening to the Portland music and arts scene. Please, please, hear our concerns for the independent venues, artists, and everyone who would be affected by this unnecessary development. Please put the people of Portland, the talented artists and bands who keep the local scene alive, and the wonderful local venues, before massive corporations who only care about squeezing as much money as they can out of the aforementioned folks. I am adamantly against this development, and I hope that the concerns of this project will speak louder than the dollar signs surrounding it. Thank you for your time.

Natalie Bolea

Carter Frank <cfrank@portlandmaine.gov>

# Live Nation Venue march 25 2025

1 message

**Meredith Connor** <meredithconnor00@gmail.com> Tue, Mar 25, 2025 at 11:24 AM
Reply-To: meredithconnor00@gmail.com
To: planningboard@portlandmaine.gov

I hope this letter finds you well. I am writing to express my strong concerns regarding the proposed development of a new Live Nation venue in our city. While I understand the potential benefits such a venue could bring, I believe it is important to consider the broader and long-term negative impacts of allowing a corporation like Live Nation to establish a presence in our community.

Here are several reasons why I believe this venue is not in the best interest of our city:

1. **Corporate Monopoly and Lack of Local Control**: Live Nation, as a large corporate entity, has a history of dominating the live music and entertainment industry. This stifles local talent, independent promoters, and smaller venues, ultimately leading to a homogenized cultural experience that prioritizes profit over diversity and artistic expression. The city's cultural scene could suffer when corporate interests dictate what events are held and who gets to perform.

2. **Negative Economic Impact**: While a new venue may bring in short-term profits, evidence suggests that large corporations like Live Nation often take the majority of the profits out of the local economy. Local businesses, such as restaurants, shops, and hotels, may see less benefit than expected, as the major revenues generated from these events often go to corporate pockets rather than staying within the community.

3. **Noise and Traffic Disruption**: A large venue operated by Live Nation could significantly disrupt the surrounding area. Live concerts often bring in large crowds, resulting in increased noise levels late into the night, and creating major traffic congestion that could affect local residents, businesses, and public services. This type of disruption can lower the quality of life for nearby residents and pose challenges for law enforcement and emergency services.

4. **Environmental Impact**: The construction and operation of a large entertainment venue can also contribute to environmental degradation. From increased waste generation to the carbon footprint of events, a new Live Nation venue could negatively impact our city’s sustainability goals. The extensive infrastructure required to support the venue may also contribute to overdevelopment, decreasing green spaces and exacerbating urban sprawl.

5. **Prioritizing Profit Over Community Well-being**: Live Nation's track record of prioritizing profits over the needs of the community raises concerns. Issues such as high ticket prices, lack of affordable entry points for local residents, and a general disregard for the long-term cultural impact of their venues point to a focus on corporate interests rather than fostering an authentic, diverse, and accessible entertainment scene for all residents.

I urge the city planning department to carefully reconsider the approval of this venue. Instead, we should be supporting independent and locally owned spaces that can provide a wider range of cultural, musical, and social experiences for our community without the monopolistic influence of large corporations like Live Nation.

Thank you for your time and consideration. I hope you will take these concerns into account when making your decision

# PORTLAND MUSIC HALL

244 CUMBERLAND AVE
LOT 3 385 CONGRESS STREET SUBDIVISION
PORTLAND, MAINE

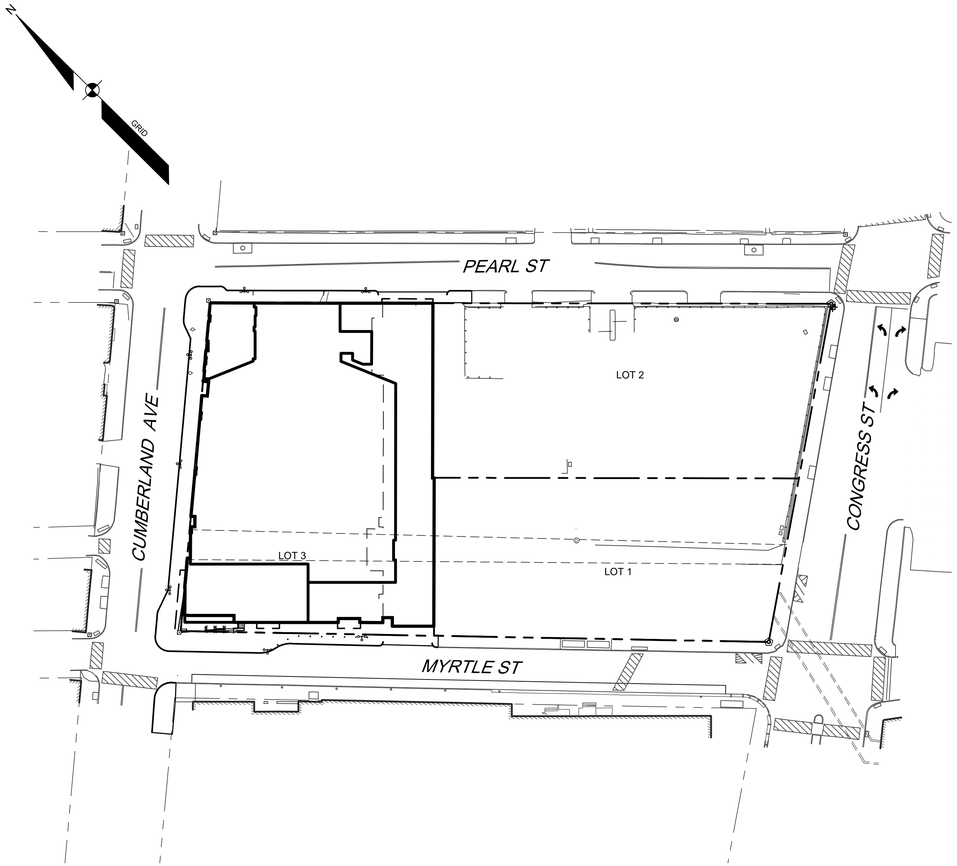

APPLICANT:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

ENGINEER/SURVEYOR/
LANDSCAPE ARCHITECT:

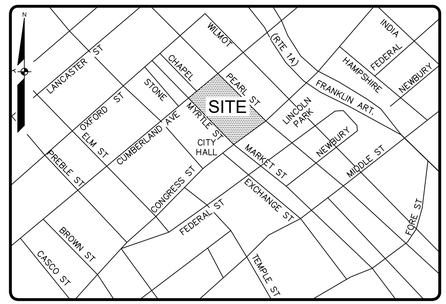
SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

PROJECT ARCHITECT:

D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.
1310 BROADWAY
SOMERVILLE, MA 02144


GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 INCH = 50 FT.




LOCATION MAP NTS

## SHEET INDEX


| SHEET NO. | SHEET TITLE |
|---|---|
| G-001 | COVER SHEET |
| G-002 | GENERAL NOTES LEGEND AND ABBREVIATIONS |
| C-002 | DEMOLITION PLAN |
| C-100 | OVERALL SITE PLAN |
| C-101 | SITE PLAN - STREET LEVEL |
| C-200 | OVERALL GRADING PLAN |
| C-201 | GRADING PLAN - STREET LEVEL |
| C-300 | UTILITY PLAN |
| C-301 | PEARL STREET PLAN AND PROFILE |
| C-302 | UTILITY SCHEDULES |
| C-401 | LANDSCAPE PLAN |
| C-500 | EROSION CONTROL NOTES |
| C-501 | DETAILS |
| C-502 | DETAILS |
| C-503 | DETAILS |
| C-504 | DETAILS |
| C-505 | DETAILS |
| C-506 | DETAILS |
| 1 OF 2 | EXISTING CONDITIONS |
| 2 OF 2 | EXISTING CONDITIONS - TABLES |
| 1 OF 1 | SUBDIVISION PLAN |


TAX MAP 27 LOT D003

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16877
STATE OF MAINE · REGISTERED PROFESSIONAL ENGINEER · CHRISTOPHER P. TAYLOR No. 16877 · LICENSED · 12/19/2024

| REV. | BY: | DATE: | STATUS: |
|---|---|---|---|
| A | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |


THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.



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75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100


COVER SHEET
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS I, L.C.
2270 JTRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 50' |
| PROJECT | 19371-05 |

SHEET G-001

\\sd-fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 C.dwg - 12/20/2024 8:23 AM - CHRIS TAYLOR

19371-05 C.dwg - TAB:G-001 COVER SHEET SIZE D

## LEGEND

| EXISTING | | PROPOSED |
|---|---|---|
| | PROPERTY LINE/R.O.W. | |
| | ABUTTER LINE/R.O.W. | |
| | DEED LINE/R.O.W. | |
| | TIE LINE | |
| | SETBACK | |
| | EASEMENT | |
| | BUFFER | |
| | FLOODPLAIN | |
| | FLOODWAY | |
| | CENTERLINE | |
| | MONUMENT | |
| | IRON PIPE/ROD | |
| | DRILL HOLE | |
| C1/L1 | DEED CALL | |
| C1/L1 | CURVE/LINE NO. | C1/L1 |
| | SOILS | |
| | ZONE LINE | |
| | ZONE LINE ON PL | |
| BENCHMARK DESCRIPTION WITH ELEVATION | BENCHMARK | |
| | SURVEY CONTROL | |
| TP-1 | TEST PIT | |
| MW-1 | MONITORING WELL | |
| B-1 | BORING | |
| | BUILDING | |
| | DECK/STEPS/ OVERHANG | |
| | EDGE WETLAND | |
| | WETLANDS | |
| | UPLANDS | |
| | STREAM | |
| | LEDGE | |
| | EDGE PAVEMENT | |
| | PAVEMENT SAWCUT | |
| | EDGE CONCRETE | |
| | PAVEMENT PAINT | |
| | EDGE GRAVEL | |
| | CURB LINE | |
| | EDGE OF WATER | |
| | TREELINE | |
| 120 118 | CONTOURS | 120 |
| ×120.00 | SPOT GRADE | +120.00 |
| | CHAIN LINK FENCE | |
| X | BARB WIRE FENCE | X |
| | STOCKADE FENCE | |
| | GUARD RAIL | |
| | STONE WALL | |
| | RETAINING WALL | |
| | DECIDUOUS TREE | |
| | CONIFEROUS TREE | |
| | BOLLARD | |
| | SIGN | |
| | RAILROAD | |
| G | GAS | G |
| | GAS GATE VALVE | |
| GM | GAS METER | |
| G | GAS MANHOLE | |
| W | WATER | W |
| | WATER GATE VALVE | |
| | WATER SHUT OFF | |
| | HYDRANT | |
| W | WATER MANHOLE | |
| W | WELL | W |
| S | SANITARY SEWER | S |
| FM | FORCE MAIN | FM |
| S | SANITARY MANHOLE | |
| SD | STORM DRAIN | SD |
| UD | UNDER DRAIN | UD |
| D | DRAINAGE MANHOLE | |
| | CATCH BASIN | |
| OHU | OVERHEAD UTILITY | OHU |
| UGU | UNDERGROUND UTILITY | UGU |
| T | TRANSFORMER PAD | T |
| E | ELECTRICAL MANHOLE | E |
| EM | ELECTRIC METER | |
| H | HVAC UNIT | |
| T | TELEPHONE MANHOLE | |
| | LIGHT POLE | |
| | UTILITY POLE | |
| | GUY WIRE | |
| | DRAINAGE DITCH | |
| | EROSION CONTROL BLANKET | |
| | FILTER BARRIER | FB |
| | RIPRAP | |
| | CHECK DAM | |
| | INLET PROTECTION | |
| | BOULDER | |
| | STREAM | |

## LANDSCAPE LEGEND

- MULCH LINE
- STREET TREES
- SHRUBS
- LANDSCAPE PLANTING BEDS
- CITY SIDEWALK BRICK
- DRIVEWAY BRICK
- BENCHES

## STRIPING LEGEND

- SINGLE WHITE LANE LINE
- DOUBLE YELLOW CENTERLINE
- WHITE CROSSWALK STRIPING
- WHITE STOP BAR STRIPING
- WHITE NO PARKING STRIPING

## GENERAL NOTES

1. THE RECORD OWNER OF THE PARCEL IS 385 CONGRESS LLC BY DEED DATED OCTOBER 20, 2017 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 34401, PAGE 214.
2. THE PROPERTY IS SHOWN AS A PORTION OF LOT D003 ON THE CITY OF PORTLAND TAX MAP 27 AND IS LOCATED IN THE B3 DOWNTOWN BUSINESS DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE B3 DISTRICT ARE AS FOLLOWS:

| | |
|---|---|
| BUILD-TO ZONE: | 0-5 FEET |
| BUILD-TO PERCENTAGE: | 100% |
| BUILDING LENGTH AS A PERCENTAGE OF STREET FRONTAGE (MIN): | |
| LOTS UP TO 50 FT IN FRONTAGE: | 80% |
| LOTS GREATER THAN 50 FT IN FRONTAGE: | 60% |
| BLANK WALK AREA (MAX): | 25% |
| STRUCTURE HEIGHT | SEE CITY OF PORTLAND HEIGHT MAP |
| LOT AREA (MIN): | N/A |
| STREET FRONTAGE (MIN): | N/A |
| GROSS FLOOR AREA (MAX): | N/A |
| REAR SETBACK (MIN): | N/A |
| INTERIOR SIDE SETBACK (MIN): | N/A |
| LANDSCAPED OPEN SPACE RATIO (MIN) | N/A |

* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION, INCLUDING BUILDING STEP-BACK REQUIREMENTS.

4. TOTAL AREA OF PARCEL IS APPROXIMATELY 0.45 ACRES.
5. THE BOUNDARY IS BASED ON PLAN REFERENCE 6F. TOPOGRAPHIC INFORMATION SHOWN HEREON. SEBAGO TECHNICS INC, UPDATED RECORDS RESEARCH FROM 2009 TO DATE REGARDING THE BOUNDARY INFORMATION.
6. IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. OCTOBER , 2019.
7. PLAN REFERENCES:
8. PLAN OF CITY BUILDING LOT, PORTLAND, ME, DATED AUGUST 1908 BY THE CITY OF PORTLAND ENGINEER, AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   A. PORTLAND DEPARTMENT OF PUBLIC WORKS STREET WORKSHEETS AND BLUESHEETS FOR STREETS BOUNDING THE LOCUS PARCEL AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   B. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, DATED JULY 1964 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 663/2.
   C. NEW MECHANICAL BUILDING, GUY GANNETT PUBLISHING COMPANY, PORTLAND, ME, TUNNEL PLAN AND SECTIONS BY LOCKWOOD, GREENE ENGINEERS, INC, REVISED THROUGH MAY 12, 1965 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 203/2.
   D. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, REVISED THROUGH FEBRUARY 6, 1973 AND ON FILE WITH OWEN HASKELL INC.
   E. ALTA/ACSM LAND TITLE SURVEY OF CONGRESS STREET SITE, 385 CONGRESS STREET, PORTLAND, ME DATED JULY 1, 2009 BY SEBAGO TECHNICS INC, PROJECT NUMBER 09235.
   F. F. ALTA/NSPS LAND TITLE SURVEY OF CONGRESS/PEARL BLOCK CONGRESS STREET AND PEARL STREET , PORTLAND, ME DATED FEBRUARY 11, 2022 BY SEBAGO TECHNICS, INC. FOR FATHOM COMPANIES PROJECT NUMBER 19371-02
   G. SUBDIVISION PLAN OF 385 CONGRESS STREET MADE FOR 385 CONGRESS STREE, LLC DATED JANUARY 11, 2023 BY SEBAGO TECHNICS, INC. PROJECT NUMBER 19371 AND RECORDED IN THE CUMBERLAND COUNTY REGISTREY OF DEEDS IN PLAN BOOK 223 PAGE 32.
9. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NGVD29 PER CITY STANDARDS AS VERIFIED BY A UNITED STATES COAST & GEODETIC SURVEY BRASS DISK LOCATED IN A GRANITE BLOCK OF THE CITY HALL BUILDING HAVING A PUBLISHED ELEVATION OF 69.66' (NAVD88 68.95')
10. THE CITY OF PORTLAND DISCONTINUED THAT PORTION OF CHAPEL STREET ''RUNNING FROM CONGRESS STREET TO CUMBERLAND STREET" BY ORDER OF CITY COUNCIL ON FEBRUARY 5, 1973 AND RECORDED AT THE CITY OF PORTLAND RECORDS IN VOLUME 89, PAGE 61. PUBLIC AND PRIVATE RIGHTS MAY EXIST FOR PUBLIC HIGHWAY AND UTILITIES THAT STILL LIE WITHIN THE LIMITS OF CHAPEL STREET. SEBAGO TECHNICS, INC. SUGGEST LEGAL COUNSEL BE SOUGHT TO CLARIFY THE INTEREST OF OTHERS IN THESE RIGHTS.
11. PURSUANT TO A CONVERSATION BETWEEN SEBAGO TECHNICS, INC. AND THE PORTLAND WATER DISTRICT, THE WATER LINE SHOWN AS BEING LOCATED IN THE DISCONTINUED PORTION OF CHAPEL STREET HAS BEEN REMOVED AND NO LONGER EXISTS.
12. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
13. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 230051 0013 B, HAVING AN EFFECTIVE DATE OF JULY 17 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF AREAS OF MINIMAL FLOODING.
14. BENCHMARK: BM-1EASTERLY BOLT AT BASE OF UTILITY POLE ELEVATION: 61.55 (NGVD29)
15. PRIOR TO ISSUANCE OF A BUILDING PERMIT FOR ANY PHASE OF THE SUBDIVISION A PERFORMANCE GUARANTEE MUST BE SUBMITTED TO AND APPROVED BY THE CITY OF PORTLAND.
16. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
17. CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIM OR HERSELF WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK AND SHALL MAKE PROVISIONS AS TO THE COST THEREOF. CONTRACTOR SHALL BE RESPONSIBLE FOR FAMILIARIZING HIM OR HERSELF WITH ALL CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS AND CONFIRMING THAT THE WORK MAY BE ACCOMPLISHED AS SHOWN PRIOR TO PROCEEDING WITH CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO THE COMMENCEMENT OF WORK.
18. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
19. PROVIDE ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND OWNER'S REQUIREMENTS UNLESS SPECIFICALLY OTHERWISE INDICATED OR WHERE LOCAL CODES OR REGULATIONS TAKE PRECEDENCE.
20. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO FABRICATION AND ERECTION OF ANY MATERIAL. ANY UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ATTENTION OF THE ENGINEER.
21. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
22. CONTRACTOR SHALL INCORPORATE PROVISIONS AS NECESSARY IN CONSTRUCTION TO PROTECT EXISTING STRUCTURES, PHYSICAL FEATURES, AND MAINTAIN SITE STABILITY DURING CONSTRUCTION. CONTRACTOR SHALL RESTORE ALL AREAS TO ORIGINAL CONDITION AND AS DIRECTED BY DESIGN DRAWINGS.
23. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
24. THE CONTRACTOR IS HEREBY CAUTIONED THAT ALL SITE FEATURES SHOWN HEREON ARE BASED ON FIELD OBSERVATIONS BY THE SURVEYOR AND BY INFORMATION PROVIDED BY UTILITY COMPANIES. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR SHALL CONTACT DIG SAFE (811) AT LEAST THREE (3) BUT NOT MORE THAN THIRTY (30) DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION TO VERIFY HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES.
25. CONTRACTOR SHALL BE AWARE THAT DIG SAFE ONLY NOTIFIES ITS "MEMBER" UTILITIES ABOUT THE DIG. WHEN NOTIFIED, DIG SAFE WILL ADVISE CONTRACTOR OF MEMBER UTILITIES IN THE AREA. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND CONTACTING NON-MEMBER UTILITIES DIRECTLY. NON-MEMBER UTILITIES MAY INCLUDE TOWN OR CITY WATER AND SEWER DISTRICTS AND SMALL LOCAL UTILITIES, AS WELL AS USG PUBLIC WORKS SYSTEMS.
26. CONTRACTORS SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE REQUIREMENTS OF 23 MRSA 3360-A. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH THE APPROPRIATE UTILITIES TO OBTAIN AUTHORIZATION PRIOR TO RELOCATION OF ANY EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THESE PLANS. IF A UTILITY CONFLICT ARISES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER, THE MUNICIPALITY AND APPROPRIATE UTILITY COMPANY PRIOR TO PROCEEDING WITH ANY RELOCATION.
27. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
28. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
29. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
30. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.
31. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKMANSHIP IN CONNECTION WITH THE CONTRACT WORK. THE CONTRACTOR SHALL REPLACE OR REPAIR AS DIRECTED BY THE OWNER ALL SUCH DAMAGED OR DEFECTIVE MATERIALS WHICH APPEAR WITHIN A PERIOD OF ONE YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION.
32. ALL WORK PERFORMED BY THE GENERAL CONTRACTOR AND/OR TRADE SUBCONTRACTOR SHALL CONFORM TO THE REQUIREMENTS OF LOCAL, STATE OR FEDERAL LAWS, AS WELL AS ANY OTHER GOVERNING REQUIREMENTS, WHETHER OR NOT SPECIFIED ON THE DRAWINGS.
33. WHERE THE TERMS "APPROVED EQUAL", "OTHER APPROVED", "EQUAL TO", "ACCEPTABLE" OR OTHER GENERAL QUALIFYING TERMS ARE USED IN THESE NOTES, IT SHALL BE UNDERSTOOD THAT REFERENCE IS MADE TO THE RULING AND JUDGEMENT OF SEBAGO TECHNICS, INC.
34. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
35. THE CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
36. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
37. DETAILS ARE INTENDED TO SHOW END RESULT OF DESIGN. ANY MODIFICATION TO SUIT FIELD DIMENSION AND CONDITION SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY WORK.
38. BEFORE THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REMOVE ALL EQUIPMENT AND MATERIALS, REPAIR OR REPLACE PRIVATE OR PUBLIC PROPERTY WHICH MAY HAVE BEEN DAMAGED OR DESTROYED DURING CONSTRUCTION. CLEAN THE AREAS WITHIN AND ADJACENT TO THE PROJECT WHICH HAVE BEEN OBSTRUCTED BY HIS/HER OPERATIONS, AND LEAVE THE PROJECT AREA NEAT AND PRESENTABLE.
39. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING FLOW THROUGH THE EXISTING CLOSED STORM DRAINAGE SYSTEM DURING CONSTRUCTION AND SHALL SUBMIT A WORK PLAN FOR APPROVAL BY THE DESIGN ENGINEER.

## GRADING & EROSION NOTES

1. SIDESLOPES SHALL NOT BE STEEPER THAN 3:1 (H:V) EXCEPT AS OTHERWISE IDENTIFIED ON THIS PLAN. ALL SIDESLOPES STEEPER THAN 3:1 (H: V) SHALL BE LINED WITH EROSION CONTROL BLANKET, OR ADDITIONAL MEASURES AS INDICATED.
2. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMPS" MANUAL PUBLISHED BY BUREAU OF LAND AND WATER QUALITY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
3. ALL AREAS DISTURBED DURING CONSTRUCTION AND NOT RESTORED WITH IMPERVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE LOAM AND SEED PER DETAIL.
4. SEE UTILITY DRAWINGS FOR PIPE AND STRUCTURE DATA TABLES.

## CONSTRUCTION PLAN

1. PROVIDE EROSION CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
2. GRADING AND CLEARING LIMITS SHALL NOT ENCROACH ON ADJACENT PROPERTIES UNLESS NOTED OTHERWISE ON THE PLANS.
3. OPEN AREAS SHALL BE LIMITED TO AREAS BEING WORKED IN. THE AREA STRIPPED OF EXISTING VEGETATION AT ANY GIVEN TIME SHALL BE MINIMIZED AND BE PHASED WHERE PRACTICAL SO THAT AREAS ARE REVEGETATED AND PERMANENTLY STABILIZED BEFORE ADDITIONAL AREAS ARE STRIPPED OF EXISTING VEGETATION. STABILIZE CONSTRUCTION AREAS BY USE OF RIPRAP, SEED, MULCH, OR OTHER GROUND COVER WITHIN ONE WEEK FROM THE TIME IT WAS ACTIVELY WORKED. SURFACES SHALL BE STABILIZED PRIOR TO DIRECTING STORMWATER RUNOFF TOWARD STORMWATER BMPS. PLEASE REFER TO DRAINAGE PLANS FOR WATERSHED AREAS.

## LANDSCAPE NOTES

1. PLANT QUANTITIES SHOWN ON PLANT LISTS ARE FOR CONVENIENCE TO THE CONTRACTOR ONLY. THE CONTRACTOR IS RESPONSIBLE FOR ALL PLANT MATERIAL INSTALLATION AS SHOWN ON PLANS.
2. SIZE AND GRADING STANDARDS OF PLANT MATERIALS SHALL CONFORM TO THE LATEST EDITION OF "U.S.A. STANDARD FOR NURSERY STOCK," BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
3. ALL PLANT MATERIAL SHALL BE FREE FROM INSECTS AND DISEASE.
4. ALL PLANTING SHALL BE DONE IN ACCORDANCE WITH ACCEPTABLE HORTICULTURAL PRACTICES. THIS IS TO INCLUDE PROPER PLANTING MIX, PLANT BED AND TREE PIT PREPARATION, PRUNING, STAKING OR GUYING, WRAPPING, SPRAYING, FERTILIZATION, PLANTING AND ADEQUATE MAINTENANCE UNTIL ACCEPTANCE BY THE OWNER.
5. PLANT MATERIAL SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR BY THE CONTRACTOR AND A PERIOD OF TWO YEARS THEREAFTER BY THE OWNER FROM DATE OF INSTALLATION. DURING THE ONE YEAR GUARANTEE PERIOD, DEAD PLANT MATERIAL SHALL BE REPLACED AT NO COST TO THE OWNER. AT THE END OF THE ONE YEAR PERIOD, THE CONTRACTOR SHALL OBTAIN FINAL ACCEPTANCE FROM THE OWNER.
6. ALL GRASS, OTHER VEGETATION AND DEBRIS SHALL BE REMOVED FROM ALL PLANTING AREAS PRIOR TO PLANTING.
7. EXISTING TREES TO BE PRESERVED WILL BE PROTECTED DURING CONSTRUCTION AND SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
8. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE PRESENCE OF THE UNDERGROUND UTILITIES AND SHALL VERIFY THE EXISTENCE AND LOCATION OF SAME BEFORE COMMENCING ANY DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, PAVING, WALKS, CURBING, ETC. DAMAGED IN PERFORMANCE OF THIS JOB AT NO ADDITIONAL COST TO THE OWNER.
9. ALL SHRUB BEDS SHALL BE MULCHED WITH 3" CLEAN SHREDDED DARK BROWN BARK MULCH.
10. THE CONTRACTOR SHALL PROVIDE 4" LOAM FOR ALL AREAS TO BE SODDED OR SEEDED. PLANTING AREAS SHALL RECEIVE 12" ROLLED THICKNESS OF LOAM. THE LANDSCAPE CONTRACTOR SHALL COORDINATE SUBGRADE PREPARATION WITH THE GENERAL CONTRACTOR PRIOR TO PLACING LOAM.
11. ANY DEVIATION FROM THE LANDSCAPE PLAN, INCLUDING PLANT LOCATION, SELECTION, SIZE, QUANTITY OR CONDITION SHALL BE REVIEWED AND APPROVED BY THE OWNER AND LANDSCAPE ARCHITECT (AND MUNICIPAL AUTHORITY, IF APPLICABLE) PRIOR TO INSTALLATION ON SITE.
12. WHERE INDICATED ON PLAN, PLANTING SOIL MIXTURE FOR PERENNIAL AND ANNUAL FLOWER BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPHAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WELL-ROTTED OR DEHYDRATED MANURE OR COMPOST. ROTOTILL BEDS TO A DEPTH OF 8 INCHES.
13. DURING CLEANING OF SITE AND PRIOR TO TREE AND SHRUB INSTALLATION, CONTRACTOR SHALL REMOVE INVASIVE PLANTS. AREAS WHERE INVASIVE PLANTS ARE REMOVED AND NO OTHER PLANTING IS PROPOSED, AREA SHALL BE LOAM AND SEEDED.

## UTILITY NOTES

1. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION. PROTECT EXISTING ONSITE SEWER PIPE AND ADJUST MANHOLE RIMS TO GRADE WHERE APPLICABLE.
2. ALL GRAVITY CONDUIT PIPES SHALL BE INSTALLED USING A PIPE LASER AND TARGET SYSTEM THROUGH THE PIPE. ON PIPE RUNS 50 FEET OR LESS, THE CONTRACTOR SHALL REQUEST ENGINEER'S APPROVAL TO USE OR NOT USE A GROUND LASER.
3. MAINTAIN MINIMUM 5'-6" OF COVER ABOVE TOP OF WATER SERVICE PIPE.
4. MAINTAIN MINIMUM 10 FEET HORIZONTAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES. MAINTAIN MINIMUM 18 INCHES VERTICAL SEPARATION BETWEEN WATER SERVICES AND OTHER UTILITIES.
5. LOWER OR RAISE WATER SERVICES AS REQUIRED TO MAINTAIN MINIMUM 12 INCH VERTICAL SEPARATION FROM OTHER UTILITIES. WATER SERVICES CROSSING SEWERS SHALL MAINTAIN 12 INCH MINIMUM SEPARATION BETWEEN THE BOTTOM OF WATER LINE AND TOP OF SEWER UNLESS NOTED OTHERWISE ON THE PLANS.
6. PIPE:
   - SEWER PIPE SHALL BE SDR 35 PVC OR APPROVED EQUAL.
   - FORCEMAIN PIPE SHALL BE DR-11 HDPE OR APPROVED EQUAL.
   - STORMDRAIN SHALL BE ADS N-12 DUAL WALL HDPE PIPE WITH SMOOTH-WALLED INTERIOR OR APPROVED EQUAL UNLESS NOTED OTHERWISE ON THE UTILITY PLANS.
   - WATER PIPE AND FITTINGS SHALL CONFORM TO PORTLAND WATER DISTRICT WATER PIPING SPECIFICATIONS. MAIN WATER SERVICE PIPE SHALL BE DUCTILE IRON, CLASS 52 PUSH-ON PIPE MEETING THE REQUIREMENTS OF AWWA/ANSI C-111/A21.11 (LATEST REVISION). PIPE SHALL BE CEMENT-LINED AWWA/ANSI C104/A21.4 WITH LINING TWICE THE THICKNESS SPECIFIED, AND COATED TWICE WITH A BITUMINOUS SEAL COATING. PROVIDE THRUST BLOCKS AT ALL WATER SERVICE BENDS.
7. COORDINATE FOUNDATION UNDERDRAIN LOCATIONS WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
8. COORDINATE GREASE INTERCEPTOR LOCATIONS WITH ARCHITECTURAL & PLUMBING DRAWINGS.
9. COORDINATE UTILITY INVERTS AT BUILDING WITH ARCHITECTURAL, STRUCTURAL AND PLUMBING DRAWINGS.
10. COORDINATE LOCATION OF SEWER, WATER, GAS, FOUNDATION DRAINS AND ROOF DRAIN INVERTS AT THE BUILDING WITH ARCHITECTURAL DRAWINGS.
11. WATER SERVICE ENTRANCE DESIGNS TO INCLUDE METERS AND BACKFLOW PREVENTERS TO MEET ALL STANDARDS AND REQUIREMENTS OF THE PORTLAND WATER DISTRICT.
12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY GRADE CHANGES THAT WILL IMPACT STORM DRAINAGE INFRASTRUCTURE OR OTHER UTILITIES.
13. UTILITIES WITHIN 5 FEET FROM FACE OF BUILDING ARE COORDINATED ON RELEVANT M.E.P. DRAWINGS. CONTRACTOR SHALL COORDINATE INVERTS, CONNECTIONS AND MATERIALS WITH ALL DRAWINGS.
14. CONTRACTOR SHALL FURNISH AND INSTALL TRENCHING, MATERIALS AND BACKFILL FOR ALL UTILITIES. ELECTRICAL AND TELECOMDATA PROVIDERS WILL PULL PRIMARY SERVICE TO TRANSFORMER AND PANEL. CONTRACTOR RESPONSIBLE FOR TIMING AND COORDINATION WITH UTILITIES AND DRAWINGS. COORDINATE WITH ELECTRICAL DRAWINGS FOR CONDUIT SCHEDULE, TYPE AND SIZES.
15. COORDINATE ALL WATER RELATED WORK WITH PORTLAND WATER DISTRICT.
16. UTILITY CONTACTS:

ELECTRIC:
CENTRAL MAINE POWER (CMP)
JAMIE COUGH, ENERGY SERVICES ADVISOR
(207) 629-1489
ACCOUNT#

WATER:
PORTLAND WATER DISTRICT
ROBERT BARTELS, ENGINEER
(207) 774-5961

TELECOMMUNICATIONS
FAIRPOINT
PATRICK MORRISON
(207) 535-4271

NATURAL GAS
UNITL
TBD

## UTILITY DEMOLITION NOTES

1. PROTECT EXISTING BOUNDARY LINE MONUMENTATION. IF DISTURBED, EXISTING MONUMENTATION TO BE RESET BY A PROFESSIONAL LAND SURVEYOR.
2. DEMOLITION OF UTILITIES REQUIRING TREE REMOVAL SHALL BE COORDINATED WITH THE OWNER AND IN ACCORDANCE WITH PROJECT PLANS.
3. UTILITY DEMOLITION SHALL BE COMPLETED IN COORDINATION WITH NEW INFRASTRUCTURE. CONTRACTOR SHALL ENSURE EXISTING SURFACE DRAINAGE IS MAINTAINED DURING CONSTRUCTION.
4. EXISTING SEWER AND STORM DRAINAGE INFRASTRUCTURE TO REMAIN ACTIVE DURING CONSTRUCTION AND UPON COMPLETION OF PROJECT. DEMOLITION/CONSTRUCTION ACTIVITIES SHALL NOT INTERFERE OR IMPEDE EXISTING FLOWS. CONTRACTOR SHALL PROVIDE BYPASS PUMPING AS REQUIRED DURING SEWER AND STORM DEMOLITION AND NEW CONSTRUCTION. DAMAGE TO EXISTING SEWER INFRASTRUCTURE SHALL BE REPAIRED BY CONTRACTOR AT THEIR EXPENSE.
5. PROTECT EXISTING UTILITIES NOT CALLED OUT TO BE REMOVED DURING CONSTRUCTION.
6. DEMOLITION SHOWN IS FOR MAJOR SITE ELEMENTS TO BE DEMOLISHED. OTHER MINOR DEMOLITION MAY BE REQUIRED AS PART OF CONSTRUCTION AND SHALL BE CONSIDERED INCIDENTAL TO THE COST OF CONSTRUCTION. COORDINATE ALL DEMOLITION WORK WITH SITE AND BUILDING DRAWINGS.
7. PRIOR TO ANY DEMOLITION, THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF DEMOLITION PLANS TO THE OWNER. THIS PLAN SHALL DEPICT LOCATIONS OF PROPOSED TERMINATIONS AND ANY TEMPORARY SERVICES THAT WILL BE NEEDED.
8. CONTRACTOR REQUIRED TO CONFIRM/MAINTAIN BENCHMARKS. IF IMPACTED CONTRACTOR IS RESPONSIBLE FOR NOTIFICATION/RELOCATION AND COORDINATION WITH PROJECT TEAM.

## TYPICAL ABBREVIATIONS

| | |
|---|---|
| AC | ACRE |
| AFG | ABOVE FINISH GRADE |
| APPROX. | APPROXIMATELY |
| BC | BOTTOM OF CURB |
| BCC | BITUMINOUS CONCRETE CURB |
| BIT | BITUMINOUS |
| BLDG | BUILDING |
| BW | BOTTOM OF WALL |
| CB | CATCH BASIN |
| CONC | CONCRETE |
| CONT | CONTINUOUS |
| DI | DUCTILE IRON |
| DIA | DIAMETER |
| DMH | DRAIN MANHOLE |
| E.W. | EACH WAY |
| ELEV | ELEVATION |
| FFE | FINISH FLOOR ELEVATION |
| FIN. GR. | FINISH GRADE |
| FTG | FOOTING |
| HDPE | HIGH DENSITY POLYETHYLENE |
| HGT | HEIGHT |
| HMA | HOT MIX ASPHALT |
| INV | INVERT |
| L/A | LANDSCAPE AREA |
| LF | LINEAR FEET |
| OC | ON CENTER |
| PVC | POLYVINYL CHLORIDE |
| PWD | PORTLAND WATER DISTRICT |
| R | RADIUS |
| R.O.W. | RIGHT OF WAY |
| S.F. | SQUARE FEET |
| SCH | SCHEDULE |
| SCSC | SLIPFORM CONCRETE SLOPED CURB |
| SCVC | SLIPFORM CONCRETE VERTICAL CURB |
| SD | STORM DRAIN |
| SGC | SLOPED GRANITE CURB |
| SMH | SEWER MANHOLE SPECS SPECIFICATIONS |
| SS | SANITARY SEWER |
| SSGC | SALAVAGED SLOPED GRANITE CURB |
| SVGC | SALAVAGED VERTICAL GRANITE CURB |
| TC | TOP OF CURB |
| TW | TOP OF WALL |
| TYP | TYPICAL |
| VGC | VERTICAL GRANITE CURB |
| VIF | VERIFY IN FIELD |

## BICYCLE PARKING SUMMARY

THEATERS AND PERFORMANCE HALLS:
26 REQUIRED BICYCLE PARKING
1 PER 2,500 SF OF FLOOR AREA
26 ACTUAL BICYCLE PARKING SPACES PROVIDED

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16677 — LICENSED PROFESSIONAL ENGINEER — 12/19/2024

| REV.: | BY: | DATE: | STATUS: |
|---|---|---|---|
| A | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS INC

SEBAGO TECHNICS
WWW.SEB

## DEMOLITION KEY

S1. SAWCUT PAVEMENT
S2. REMOVE ASPHALT PAVEMENT
S3. REMOVE BRICK PAVERS / SALVAGE FOR RE-USE
S4. REMOVE CONCRETE PAVEMENT
S5. REMOVE STREET TREE
S6. REMOVE EXISTING GUARDRAIL
S7. EXISTING GRANITE CURBING TO REMAIN
S8. REMOVE GRANITE CURB / SALVAGE FOR RE-USE
S9. REMOVE STREET SIGN
S10. REMOVE CONCRETE RETAINING WALL
S11. VEHICLE GUARDRAIL AND FENCING TO REMAIN
S12. CONCRETE PAVEMENT TO REMAIN
S13. ASPHALT PAVEMENT TO REMAIN
S14. REMOVE TACTILE WARNING PANEL
S15. ADA TACTILE WARNING PANEL TO REMAIN
S16. SEAL COAT OVER EXISTING PAINT STRIPING
S17. BRICK PAVERS TO REMAIN
S18. REMOVE EXISTING BUILDING
S19. REMOVE EXISTING CHAIN LINK FENCE
S20. REMOVE EXISTING BOLLARD
S21. EXISTING BOLLARD TO REMAIN
S22. EXISTING STREET TREE TO REMAIN
SS1. EXISTING SANITARY MANHOLE TO REMAIN
SS2. REMOVE EXISTING SANITARY SEWER, CAP AND ABANDON AT MANHOLE
SS3. SANITARY SEWER TO REMAIN
SS4. REMOVE EXISTING SANITARY MANHOLE
SS5. REMOVE EXISTING SANITARY SEWER

D1. EXISTING CATCH BASIN TO REMAIN
D2. REMOVE EXISTING STORM DRAIN
D3. EXISTING STORM DRAIN TO REMAIN
D4. REMOVE EXISTING CATCH BASIN
D5. REMOVE EXISTING DRAIN MANHOLE
D6. EXISTING DRAIN MANHOLE TO REMAIN
D7. REMAINING EXISTING STORM DRAIN. CAP AND ABANDON AT CATCH BASIN.
E1. ELECTRICAL MANHOLE TO REMAIN
E2. REMOVE UTILITY POLE
E3. REMOVE OVERHEAD UTILITY
E4. ELECTRICAL VAULT TO REMAIN
E5. REMOVE EXISTING ELECTRICAL VAULT
E6. REMOVE ELECTRICAL/TELECOM SERVICES
E7. RELOCATE EXISTING OVERHEAD UTILITIES AND REMOVE POLE
E8. NOT USED
E9. NOT USED
G1. REMOVE EXISTING GAS MAIN, COORDINATE WITH GAS COMPANY
G2. REMOVE GAS SERVICE, COORDINATE WITH GAS COMPANY
L1. EXISTING STREET LIGHTING TO REMAIN
L2. REMOVE STREET LIGHT AND BASE
L3. UNDERGROUND LIGHTING CONDUIT TO REMAIN
W1. FIRE HYDRANT TO REMAIN
W2. REMOVE EXISTING HYDRANT
W3. REMOVE WATER SERVICE
W4. REMOVE EXISTING VALVE

## DEMOLITION NOTES

1. CONTRACTOR SHALL NOTIFY DIGSAFE FOR UTILITY LOCATIONS PRIOR TO EXCAVATION.
2. EXISTING MATERIALS TO BE SALVAGED AND RE-USED SHALL BE STORED AND PROTECTED DURING CONSTRUCTION.
3. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE TO ALL APPLICABLE CODES AND REGULATIONS.
4. REMOVE ALL BUILDING FOOTINGS, ELECTRICAL AND MISCELLANEOUS MATERIALS.

PEARL STREET
(A 49.50' WIDE PUBLIC STREET)

CUMBERLAND AVENUE
(A 66.00' WIDE PUBLIC RIGHT OF WAY)

CONGRESS STREET
(A PUBLIC RIGHT OF WAY OF VARIED WIDTH)

MYRTLE STREET
(A 46.67' WIDE PUBLIC RIGHT OF WAY)
ONE WAY TRAFFIC FLOW

BLUE LEADERS TO PINK ENDS HERE

INCLINE WITH QUESTION MARK

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16677
REGISTERED PROFESSIONAL ENGINEER
04/08/2025

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite A
South Portland, ME 04106
Tel. 207-200-2100

DEMOLITION PLAN
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET C-002

19371-05 DEMO.dwg, TAB:C-002 DEMOLITION PLAN

\\st_fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 DEMO.dwg - 4/9/2025 10:04 AM - CHRIS TAYLOR

## ON STREET PARKING SCHEDULE

1. PARKING SIGNS MEETING CITY OF PORTLAND STANDARDS SHALL BE INSTALLED AT THE LOCATIONS INDICATED. SIGNAGE PROVIDED SHALL BE REVIEWED AND APPROVED BY THE CITY PARKING DIRECTOR. THE PARKING SCHEDULE SHALL BE AS NOTED BELOW UNLESS OTHERWISE APPROVED BY THE PLANNING AUTHORITY.

   A. SPACES ON MYRTLE STREET SHALL BE 30 MINUTE TIME LIMIT PARKING.

   B. SPACES ON CUMBERLAND AVENUE BETWEEN MYRTLE STREET AND PEARL STREET SHALL BE 2 HOUR TIME LIMIT PARKING

   C. SPACES ON PEARL STREET BETWEEN CUMBERLAND AVENUE AND CONGRESS STREET SHALL BE 2 HOUR TIME LIMIT PARKING

## LIGHTING FIXTURES LEGEND

A — CITY OF PORTLAND STANDARD STREET LIGHT- TECHNICAL STANDARDS FIGURE X-5F SEE DETAILS, COLOR GREEN
TOP LUMINAIRE: HOLOPHANE ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2X2-BDHF13-200CMC
LOWER LUMINAIRES: (2) HOLOPHANE PEDESTRIAN ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2X2-BDHF13-200CMC

B — CITY OF PORTLAND STANDARD STREET LIGHT- TECHNICAL STANDARDS FIGURE X-5B SEE DETAILS, COLOR GREEN
LOWER LUMINAIRES: (2) HOLOPHANE PEDESTRIAN ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2x2-BDHF13-200CMC

REFER TO CITY OF PORTLAND TECHNICAL STANDARDS SECTION 8 MUNICIPAL STREET LIGHTING STANDARDS FOR SPECIFICATIONS

## SITE PLAN KEY NOTES

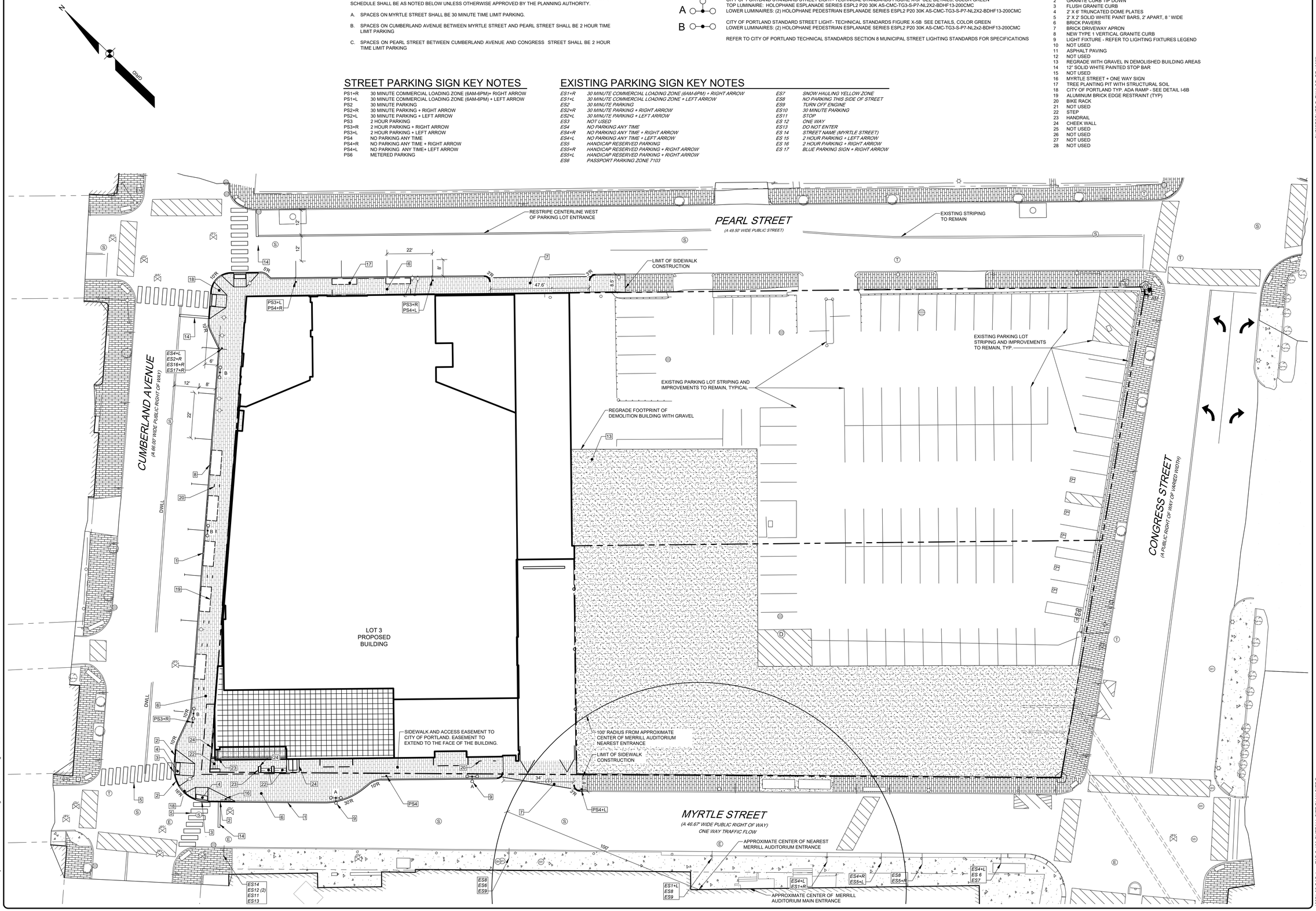
1 RESET SALVAGED GRANITE CURB
2 GRANITE CURB TIP DOWN
3 FLUSH GRANITE CURB
4 2' X 6' TRUNCATED DOME PLATES
5 2' X 2' SOLID WHITE PAINT BARS, 2' APART, 8 ' WIDE
6 BRICK PAVERS
7 BRICK DRIVEWAY APRON
8 NEW TYPE 1 VERTICAL GRANITE CURB
9 LIGHT FIXTURE - REFER TO LIGHTING FIXTURES LEGEND
10 NOT USED
11 ASPHALT PAVING
12 NOT USED
13 REGRADE WITH GRAVEL IN DEMOLISHED BUILDING AREAS
14 12" SOLID WHITE PAINTED STOP BAR
15 NOT USED
16 MYRTLE STREET + ONE WAY SIGN
17 TREE PLANTING PIT WITH STRUCTURAL SOIL
18 CITY OF PORTLAND TYP. ADA RAMP - SEE DETAIL I-6B
19 ALUMINUM BRICK EDGE RESTRAINT (TYP)
20 BIKE RACK
21 NOT USED
22 STEP
23 HANDRAIL
24 CHEEK WALL
25 NOT USED
26 NOT USED
27 NOT USED
28 NOT USED

## STREET PARKING SIGN KEY NOTES

| | |
|---|---|
| PS1+R | 30 MINUTE COMMERCIAL LOADING ZONE (6AM-6PM)+ RIGHT ARROW |
| PS1+L | 30 MINUTE COMMERCIAL LOADING ZONE (6AM-6PM) + LEFT ARROW |
| PS2 | 30 MINUTE PARKING |
| PS2+R | 30 MINUTE PARKING + RIGHT ARROW |
| PS2+L | 30 MINUTE PARKING + LEFT ARROW |
| PS3 | 2 HOUR PARKING |
| PS3+R | 2 HOUR PARKING + RIGHT ARROW |
| PS3+L | 2 HOUR PARKING + LEFT ARROW |
| PS4 | NO PARKING ANY TIME |
| PS4+R | NO PARKING ANY TIME + RIGHT ARROW |
| PS4+L | NO PARKING ANY TIME+ LEFT ARROW |
| PS6 | METERED PARKING |

## EXISTING PARKING SIGN KEY NOTES

| | |
|---|---|
| *ES1+R* | *30 MINUTE COMMERCIAL LOADING ZONE (6AM-6PM) + RIGHT ARROW* |
| *ES1+L* | *30 MINUTE COMMERCIAL LOADING ZONE + LEFT ARROW* |
| *ES2* | *30 MINUTE PARKING* |
| *ES2+R* | *30 MINUTE PARKING + RIGHT ARROW* |
| *ES2+L* | *30 MINUTE PARKING + LEFT ARROW* |
| *ES3* | *NOT USED* |
| *ES4* | *NO PARKING ANY TIME* |
| *ES4+R* | *NO PARKING ANY TIME + RIGHT ARROW* |
| *ES4+L* | *NO PARKING ANY TIME + LEFT ARROW* |
| *ES5* | *HANDICAP RESERVED PARKING* |
| *ES5+R* | *HANDICAP RESERVED PARKING + RIGHT ARROW* |
| *ES5+L* | *HANDICAP RESERVED PARKING + RIGHT ARROW* |
| *ES6* | *PASSPORT PARKING ZONE 7103* |
| *ES7* | *SNOW HAULING YELLOW ZONE* |
| *ES8* | *NO PARKING THIS SIDE OF STREET* |
| *ES9* | *TURN OFF ENGINE* |
| *ES10* | *30 MINUTE PARKING* |
| *ES11* | *STOP* |
| *ES 12* | *ONE WAY* |
| *ES13* | *DO NOT ENTER* |
| *ES 14* | *STREET NAME (MYRTLE STREET)* |
| *ES 15* | *2 HOUR PARKING + LEFT ARROW* |
| *ES 16* | *2 HOUR PARKING + RIGHT ARROW* |
| *ES 17* | *BLUE PARKING SIGN + RIGHT ARROW* |




NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16877

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16877 — REGISTERED PROFESSIONAL ENGINEER — 04/08/2025

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS PERFORMED BY OTHERS, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

OVERALL SITE PLAN
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC

RECORD OWNER:
355 CONGRESS, LLC
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET C-100

\\st-fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 OAS.dwg - 4/8/2025 10:04 AM - CHRIS TAYLOR

19371-05 OAS.dwg - TAB:C-100 OVERALL SITE PLAN SIZE:D

## LIGHTING FIXTURES LEGEND

SEE SHEET C-100 FOR LIGHTING FIXTURE LEGEND

## SITE PLAN KEY NOTES

| | |
|---|---|
| 1 | RESET SALVAGED GRANITE CURB |
| 2 | GRANITE CURB TIP DOWN |
| 3 | FLUSH GRANITE CURB |
| 4 | 2' X 6' TRUNCATED DOME PLATES |
| 5 | 2' X 2' SOLID WHITE PAINT BARS, 2' APART, 8 ' WIDE |
| 6 | BRICK PAVERS |
| 7 | BRICK DRIVEWAY APRON |
| 8 | NEW TYPE 1 VERTICAL GRANITE CURB |
| 9 | LIGHT FIXTURE - REFER TO LIGHTING FIXTURES LEGEND |
| 10 | NOT USED |
| 11 | ASPHALT PAVING |
| 12 | NOT USED |
| 13 | REGRADE WITH GRAVEL IN DEMOLISHED BUILDING AREAS |
| 14 | 12" SOLID WHITE PAINTED STOP BAR |
| 15 | NOT USED |
| 16 | MYRTLE STREET + ONE WAY SIGN |
| 17 | TREE PLANTING PIT WITH STRUCTURAL SOIL |
| 18 | CITY OF PORTLAND TYP. ADA RAMP - SEE DETAIL I-6B |
| 19 | ALUMINUM BRICK EDGE RESTRAINT (TYP) |
| 20 | BIKE RACK |
| 21 | NOT USED |
| 22 | GRANITE STEP |
| 23 | HANDRAIL |
| 24 | CHEEK WALL |
| 25 | COMMERCIAL DRIVEWAY CURB RETURN |
| 26 | TRENCH DRAIN |
| 27 | NOT USED |
| 28 | NOT USED |

CUMBERLAND AVENUE
(A 66.00' WIDE PUBLIC RIGHT OF WAY)

MYRTLE STREET
(A 46.6'± WIDE PUBLIC RIGHT OF WAY)
ONE WAY TRAFFIC FLOW

8' EXISTING PARKING

GRAPHIC SCALE
10 0 5 10 20
(IN FEET)
1 INCH = 10 FT.

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16677
LICENSED PROFESSIONAL ENGINEER
12/08/2025

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# SITE PLAN - STREET LEVEL

OF:

# PORTLAND MUSIC HALL

244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS LLC
2220 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 10' |
| PROJECT | 19371-05 |

SHEET C-101

\\st-fs01\data\Projects\19005\19371-05\DWG\Design\19371-05 S.dwg - 4/9/2025 10:04 AM - CHRIS TAYLOR

19371-05 S.dwg, TAB:C-101 SITE PLAN - STREET LEVEL

CUMBERLAND AVENUE
(A 66.00' WIDE PUBLIC RIGHT OF WAY)

MYRTLE STREET
(A 46.67' WIDE PUBLIC RIGHT OF WAY)
ONE WAY TRAFFIC FLOW

CATCH BASIN INLET PROTECTION TO REMAIN IN PLACE POST CONSTRUCTION

CATCH BASIN INLET PROTECTION, TYP.

STABILIED CONSTRUCTION ENTRANCE, SEE DETAIL

OIL GRIT SEPARATOR

SMH-01

SMH-02

OHU

SD

PROJECT BENCHMARK
USC&G BRASS DISK SET IN GRANITE STEP
DESIGNATION: TIDAL 38 STA 84
STAMPED "1919/38"
NAVD 88 ELEVATION = 68.95'
NGVD29 ELEVATION = 69.66'

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16877
REGISTERED PROFESSIONAL ENGINEER
04/08/2025

| REV. | BY: | DATE: | STATUS: |
|---|---|---|---|
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| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

OVERALL GRADING PLAN
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
365 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET C-200

\\at-fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 OAG.dwg - 4/8/2025 10:05 AM - CHRIS TAYLOR

19371-05 OAG.dwg, TAB C-200 OVERALL GRADING PLAN

CUMBERLAND AVENUE
(A 66.00' WIDE PUBLIC RIGHT OF WAY)

MYRTLE STREET
(A 46.67' WIDE PUBLIC RIGHT OF WAY)
ONE WAY TRAFFIC FLOW

FIRST FLOOR
FFE = 49.33

STAGE
FFE = 53.33

SLOT DRAIN

TRENCH DRAIN

TIP DOWN - TYP.

CATCH BASIN INLET PROTECTION, TYP.

CATCH BASIN INLET PROTECTION TO
REMAIN IN PLACE POST CONSTRUCTION

OIL_GRIT SEPARATOR

STABILIED CONSTRUCTION ENTRANCE, SEE DETAIL

BELOW STAGE CMU
STRUCTURE &
SPEAKER ENCLOSURE

GRAPHIC SCALE
10 0 0 10 20
(IN FEET)
1 INCH = 10 FT.

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16677
LICENSED PROFESSIONAL ENGINEER
04/08/2025

| REV. | BY: | DATE: | STATUS |
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75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

GRADING PLAN - STREET LEVEL
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
365 CONGRESS LL C
2730 TRANSIT ROAD
WEST SENECA, NY 14224

RECORD OWNER:
375 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 10' |
| PROJECT | 19371-05 |

SHEET C-201

\\ad.fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 GAG.dwg - 4/9/2025 10:05 AM - CHRIS TAYLOR

19371-05 GAG.dwg, TAB:C-201 GRADING PLAN - STREET LEVEL

## LIGHTING FIXTURES LEGEND

A
B

CITY OF PORTLAND STANDARD STREET LIGHT- TECHNICAL STANDARDS FIGURES X-5B AND FIGURE X-5F SEE DETAILS, COLOR GREEN

X-5F:
TOP LUMINAIRE: HOLOPHANE ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2X2-BDHF13-200CMC
LOWER LUMINAIRES: (2) HOLOPHANE PEDESTRIAN ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2x2-BDHF13-200CMC
X-5B:
LOWER LUMINAIRES: (2) HOLOPHANE PEDESTRIAN ESPLANADE SERIES ESPL2 P20 30K AS-CMC-TG3-S-P7-NL2x2-BDHF13-200CMC

REFER TO CITY OF PORTLAND TECHNICAL STANDARDS SECTION 8 MUNICIPAL STREET LIGHTING STANDARDS FOR SPECIFICATIONS

## UTILITY PLAN KEY NOTES

ELECTRICAL:
E1 6' X 12' SUBMERSIBLE TRANSFORMER
E2 NOT USED
E3 NOT USED
E4 EXISTING OVERHEAD ELECTRIC LINE TO REMAIN WITH ALLEY ARMS
E5 6' X 12' ELECTRICAL MANHOLE

GAS:
G1 TAP EXISTING NATURAL GAS MAIN
G2 NEW NATURAL GAS SERVICE
G3 NATURAL GAS METER

GRID

CB 2155
RIM=47.85

CB 2166
RIM=47.62

CB 2164
RIM=47.59

CB 2161
RIM=47.76

ELECTRICAL MANHOLE 1852

SMH-2223
RIM: 48.67
INV. IN: 39.72 15" RCP
INV. OUT: 39.62 18" RCP

CUT OUT AND INSTALL NEW BLOWOFF. BLOWOFF TO BE 6' FROM SERVICE TO REMAIN. THRUST BLOCK TO BEAR AGAINST UNDISTURBED EARTH.

ELECTRICAL MANHOLE 1850

GAS MAIN ABANDONED IN PEARL STREET FROM CUMBERLAND AVENUE TO CONGRESS STREET IN OCTOBER 2018 PER DISCUSSION WITH UNITIL. CONTRACTOR TO VERIFY WITH UNITIL PRIOR TO CONSTRUCTION

8" SLEEVE
8" GATE VALVE

8"X6" SWIVEL TEE AND VALVE

REMOVE EXISTING GATE VALVE AND BOX

RENEW WATER MAIN WITH 8" D.I., SHUTDOWN REQUIRED, COORDINATE WITH PWD.

INV. IN=41.06

EX S-4

EX S-4 (2)

SD-1

SD-2

SD-3

DMH-1

DMH-2

DMH-3

2" STUB

RETIRE SV27P535 6" FIRE SERVICE

CAP AND ABANDON EXISTING STORM DRAIN CONNECTION

30" DIA. RISER

CMP POLE #19

CMP POLE #18

CMP POLE #17

CMP POLE #16

CB 2438
RIM=54.65
BRICK STRUCTURE
WATER LINE=51.92
CASCO TRAP COVERING PIPE 4 O'CLOCK
SUMP=51.73

CB 2564
RIM=56.92

CB 2330
RIM=53.95
BRICK STRUCTURE
4" VIT CLAY INV. OUT 2 O'CLOCK=50.24
SUMP=48.15

CB-3

ROOF DRAIN RISER WITH CLEANOUT, DOWN FROM ABOVE (ASSUMED LOCATION)

CONTECH SUBSURFACE DETENTION, THREE ROWS OF 48" CMP

FLOOR TRENCH DRAIN

INV. IN=45.45

10" SD
L=39'
S=12.0%

INV. OUT = 50.33

TRENCH DRAIN

CB 2448
RIM=57.06

DMH 2566
RIM=57.14

PINK LINE WITH QUESTION MARK

BM 1

CUMBERLAND AVENUE

CONGRESS STREET

MYRTLE STREET

INV. IN=43.60

CB-2

SD-1.2

4" DOMESTIC SERVICE
8" FIRE PROTECTION SERVICE

TAPPING SLEEVE AND VALVE

OVERHEAD ELECTRIC TO REMAIN WITH ALLEY ARMS

CB 2393
RIM=48.40

INSTALL INSERTION VALVE, MUELLER OR TEAM

CB-5

SD-5

SMH-02

OPTION 2: STREET LIGHTING CONNECTION TO NEW UTILITY POLE WITH NEW RISER, METER, AND JUNCTION BOX. CONNECTION TO UTILITY POLE TO BE COORDINATED WITH CMP.

8" SLEEVE
8"X6" SWIVEL TEE AND VALVE

INSTALL NEW HYDRANT

SLOT DRAIN

RENEW WATER MAIN WITH 8" D.I., SHUTDOWN REQUIRED, COORDINATE WITH PWD.

REMOVE VALVE AND HYDRANT

SD-4.1

DMH-4

SD-4

CB-4

6" PVC GREASE TRAP SERVICE, INV. OUT=44.95

6" PVC DOMESTIC SERVICE, INV. OUT=45.10

S-02.3

S-02.1

S-04

S-03

S-01

GREASE TRAP

OIL_GRIT SEPARATOR

OPTION 1: STREET LIGHTING CONNECTION TO FUTURE HOTEL STREET LIGHTING ON MYRTLE STREET.

SMH-01

CB 2065
RIM=48.21

CB 2087
RIM=47.32

ELECTRICAL MANHOLE 1841

8" CI 1965

ELECTRICAL MANHOLE 184

EXISTING 4-500 CONDUITS

NETWORK TRANSFORMER 184T VAULT

103+14
103+00
102+00
101+00
100+00

8" CI 1895

---

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16877
REGISTERED PROFESSIONAL ENGINEER
04/08/2025

| REV. | BY | DATE | STATUS |
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South Portland, ME 04106
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UTILITY PLAN
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
365 CONGRESS, L.L.C.
2230 J TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
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| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

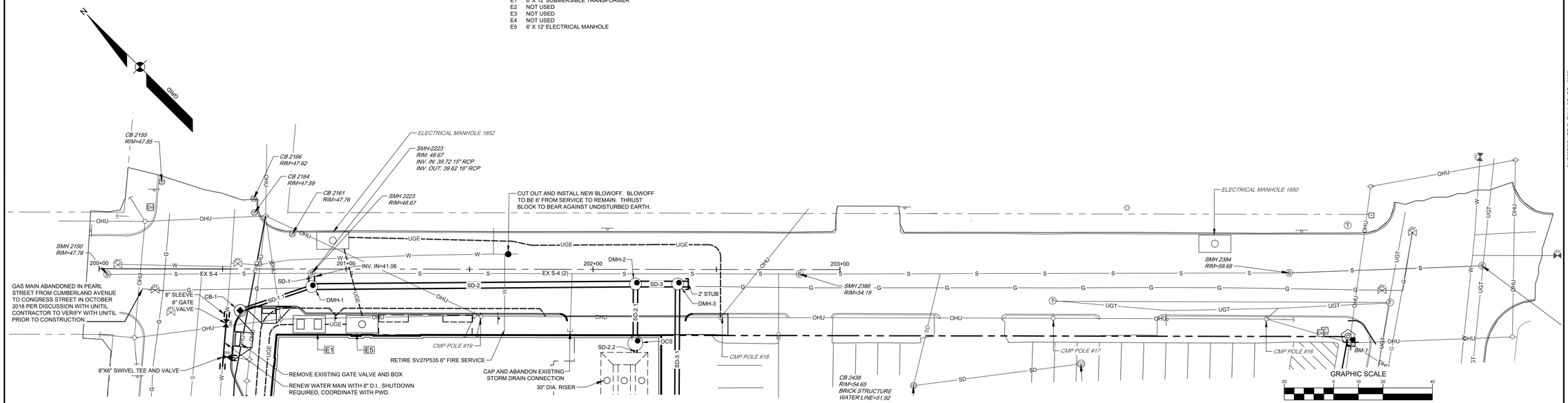
SHEET C-300

\\st-fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 U.dwg - 4/8/2025 10:05 AM - CHRIS TAYLOR

19371-05 U.dwg - TAB:C-300 UTILITY PLAN

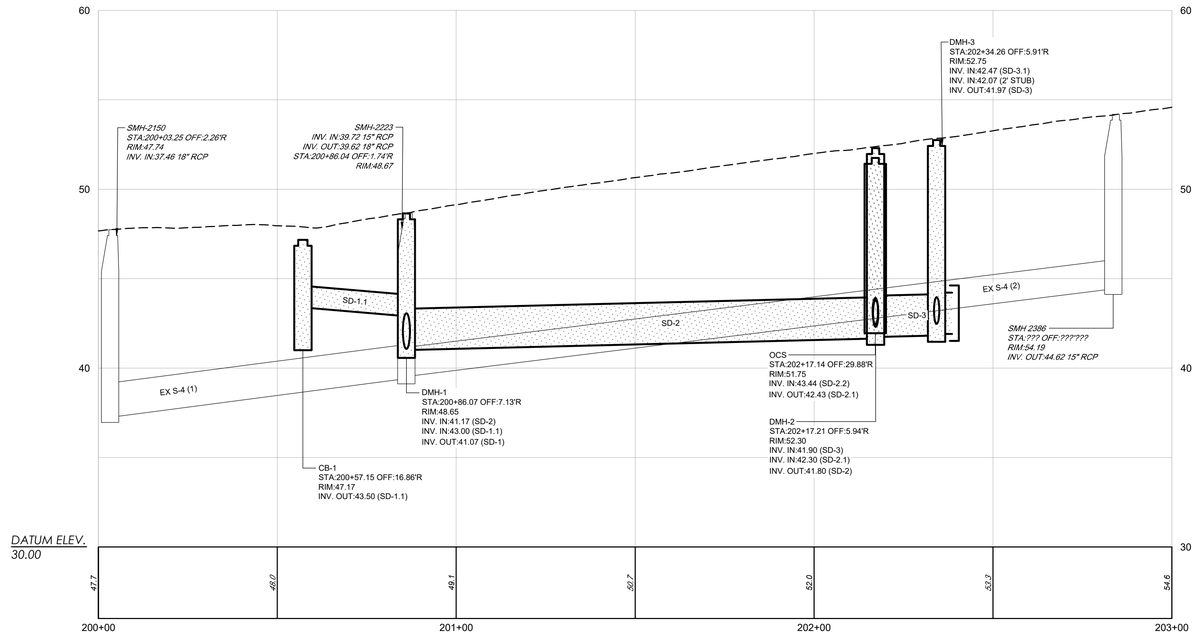
## UTILITY PLAN KEY NOTES

ELECTRICAL:
E1 6' X 12' SUBMERSIBLE TRANSFORMER
E2 NOT USED
E3 NOT USED
E4 NOT USED
E5 6' X 12' ELECTRICAL MANHOLE




## PEARL STREET PLAN:

SCALE:
1"=20' H




## PEARL ST UTILITY PROFILE

SCALE:
1" = 20' H
1" = 4' V

NOTES:

1. DEPTH OF EXISTING ELECTRICAL, COMMUNICATION, AND GAS UTILITIES ARE UNKNOWN. CONTRACTOR SHALL VERIFY DEPTHS PRIOR TO CONSTRUCTION. ANY CONFLICTS SHALL BE COMMUNICATED TO ENGINEER.

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16877

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16877
LICENSED PROFESSIONAL ENGINEER
04/08/2025

| REV. | BY | DATE: | STATUS |
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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

PEARL STREET PLAN AND PROFILE
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
375 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
365 CONGRESS I, C
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | AS NOTED |
| PROJECT | 19371-05 |

SHEET C-301

\\sebfs01\data\Projects\19000\19371-05\DWG\Design\19371-05 U.dwg - 4/8/2025 10:05 AM - CHRIS TAYLOR

19371-05 U.dwg, TAB:C-301 PEARL STREET PLAN AND PROFILE

## STRUCTURE TABLE

| POINT # | STRUCTURE TYPE | RIM EL. | INV. | INV. EL. | SIZE | TYPE | LOCATION (N=12) | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 2041 | SMH | 54.78 | IN | 49.43 | 12 | VIT CLAY | 3 | |
| | | | IN | 49.49 | 4 | VIT CLAY | 6 | |
| | | | IN | 46.39 | 10 | VIT CLAY | 4 | |
| | | | IN | 45.56 | UNK | UNK | 5 | FULL OF SEDIMENT |
| | | | OUT | 45.34 | UNK | UNK | 11 | FULL OF SEDIMENT |
| | | | SHELF | 45.81 | | | | |
| 2048 | SMH | 52.54 | IN | 42.99 | 18 | VIT CLAY | 4 | |
| | | | IN | 35.70 | UNK | UNK | 4 | |
| | | | IN | 36.23 | 8 | VIT CLAY | 3 | |
| | | | IN | 26.54 | UNK | UNK | 7 | TOP OF PIPE |
| | | | IN | 25.79 | UNK | UNK | 4 | |
| | | | OUT | 25.69 | UNK | UNK | 4 | |
| 2061 | CBR | 48.09 | OUT | 44.12 | 8 | PVC | 7 | HOOD |
| | | | SUMP | 42.12 | | | | |
| 2065 | CBR | 48.25 | IN | 44.81 | 8 | VIT CLAY | 8 | |
| | | | OUT | 44.71 | 8 | UNK | 2 | |
| | | | SUMP | 40.71 | | | | |
| 2076 | SMH | 48.19 | IN | 41.34 | 12 | VIT CLAY | 3 | |
| | | | IN | 25.03 | UNK | UNK | 4 | |
| | | | OUT | 24.99 | UNK | UNK | 10 | |
| 2081 | SMH | 47.90 | IN | 38.77 | 18 | VIT CLAY | 4 | |
| | | | IN | 24.67 | 18 | VIT CLAY | 4 | |
| | | | OUT | 24.67 | 18 | VIT CLAY | 10 | |
| | | | SHELF | 25.77 | | | | |
| 2106 | CBR | 47.27 | OUT | 43.46 | UNK | UNK | 10 | HOOD |
| | | | SUMP | 40.26 | | | | |
| 2124 | CBR | 47.00 | IN | 44.75 | 12 | VIT CLAY | 6 | |
| | | | OUT | 47.05 | 0 | NONE | NONE | NO OUT VISIBLE |
| | | | SUMP | 40.05 | | | | |
| 2126 | SMH | 47.80 | IN | 39.41 | 12 | VIT CLAY | 8 | |
| | | | OUT | 39.32 | 12 | VIT CLAY | 2 | |
| | | | SHELF | 40.03 | | | | |
| 2143 | CBR | 47.40 | OUT | 45.27 | 10 | VIT CLAY | 3 | |
| | | | SUMP | 45.17 | | | | |
| 2145 | CBR | 47.95 | IN | 44.48 | 8 | VIT CLAY | 9 | |
| | | | OUT | 43.78 | 12 | VIT CLAY | 12 | |
| | | | SUMP | 42.98 | | | | |
| 2150 | MH | 47.77 | IN | 37.46 | 18 | VIT CLAY | 4 | |
| | | | OUT | 37.21 | 18 | VIT CLAY | 10 | |
| | | | SHELF | 38.11 | | | | |
| 2161 | CBR | 47.77 | OUT | 43.36 | 12 | UNK | 8 | |
| | | | SUMP | 40.76 | | | | |
| 2164 | CBR | 47.54 | IN | 44.26 | 8 | VIT CLAY | 4 | |
| | | | IN | 44.19 | 8 | VIT CLAY | 2 | |
| | | | OUT | 43.49 | 12 | UNK | 9 | |
| | | | SUMP | 40.09 | | | | |
| 2166 | CBR | 47.59 | OUT | 44.42 | 8 | VIT CLAY | 8 | |
| | | | SUMP | 44.02 | | | | |
| 2223 | SMH | 48.67 | IN | 39.72 | 15 | VIT CLAY | 4 | |
| | | | OUT | 39.62 | 15 | VIT CLAY | 10 | |
| | | | SHELF | 40.77 | | | | |
| 2386 | SMH | 54.12 | IN | 44.67 | 15 | VIT CLAY | 4 | |
| | | | OUT | 44.62 | 15 | VIT CLAY | 10 | |
| | | | SHELF | 45.69 | | | | |

## STORM DRAIN STRUCTURE DATA

| STRUCTURE | RIM | INV. IN | INV. OUT: | DIAM. |
|---|---|---|---|---|
| CB-1 | 47.17 | | 43.50 (SD-1.1) | 48" |
| CB-2 | 47.40 | | 43.90 (SD-1.2) | 48" |
| CB-3 | 51.90 | | 42.80 (SD-3.1) | 48" |
| CB-4 | 50.45 | | 47.00 (SD-4) | 48" |
| CB-5 | 47.03 | | 43.50 (SD-5) | 48" |
| DMH-1 | 48.65 | 41.17 (SD-2)<br>43.00 (SD-1.1) | 41.07 (SD-1) | 48" |
| DMH-2 | 52.30 | 41.90 (SD-3)<br>42.30 (SD-2.1) | 41.80 (SD-2) | 48" |
| DMH-3 | 52.75 | 42.47 (SD-3.1)<br>42.07 (2' STUB) | 41.97 (SD-3) | 48" |
| DMH-4 | 48.90 | 44.20 (SD-4)<br>45.50 (SD-4.1) | 44.12 (RECONNECT EXISTING) | 48" |
| OCS | 51.75 | 43.44 (SD-2.2) | 42.43 (SD-2.1) | 60" |

## STORM DRAIN PIPE DATA

| NAME | SIZE | LENGTH | SLOPE |
|---|---|---|---|
| SD-1 | 24" | 2' | 0.49% |
| SD-1.1 | 12" | 27' | 1.88% |
| SD-1.2 | 12" | 16' | 1.82% |
| SD-2 | 24" | 127' | 0.50% |
| SD-2.1 | 18" | 19' | 0.67% |
| SD-2.2 | 12" | 1' | 0.79% |
| SD-3 | 24" | 13' | 0.54% |
| SD-3.1 | 18" | 57' | 0.58% |
| SD-4 | 8" | 64' | 4.35% |
| SD-4.1 | 8" | 17' | 2.95% |
| SD-5 | 8" | 12' | 4.02% |

## SANITARY SEWER STRUCTURE DATA

| STRUCTURE | RIM | INV. IN | INV. OUT: | DIAM. |
|---|---|---|---|---|
| OIL_GRIT SEPARATOR | 56.80 | 45.50 (DECK DRAIN) | 45.00 (S-04) | 48" |
| SMH-01 | 53.25 | 44.75 (S-02.1)<br>44.75 (S-03)<br>44.75 (S-04) | 44.60 (S-01) | 48" |

## SANITARY SEWER PIPE DATA

| NAME | SIZE | LENGTH | SLOPE |
|---|---|---|---|
| S-01 | 6" | 25' | 1.20% |
| S-02.1 | 6" | 11' | 1.86% |
| S-02.2 | 6" | 10' | 4.56% |
| S-03 | 6" | 19' | 1.30% |
| S-04 | 6" | 16' | 1.54% |

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16877

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16877 — REGISTERED PROFESSIONAL ENGINEER — 04/08/2025

| REV.: | BY: | DATE: | STATUS: |
|---|---|---|---|
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS PROPOSED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

UTILITY SCHEDULES

OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC

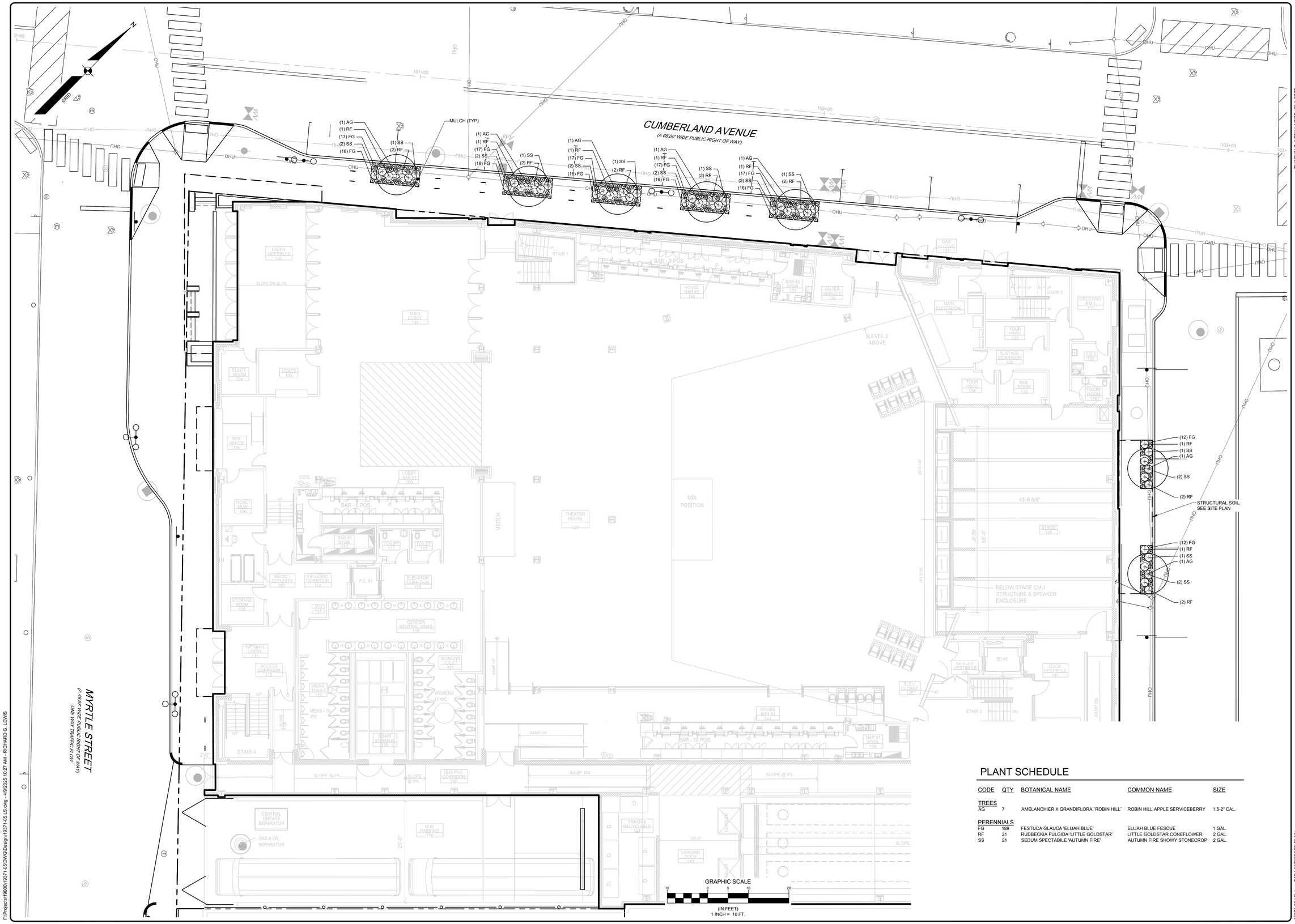
RECORD OWNER:
365 CONGRESS I, C
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | N.T.S. |
| PROJECT | 19371-04 |

SHEET C-302

19371-05 U.dwg, TAB:C-302 UTILITY SCHEDULES

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## PLANT SCHEDULE

| CODE | QTY | BOTANICAL NAME | COMMON NAME | SIZE |
|---|---|---|---|---|
| TREES | | | | |
| AG | 7 | AMELANCHIER X GRANDIFLORA 'ROBIN HILL' | ROBIN HILL APPLE SERVICEBERRY | 1.5-2" CAL. |
| PERENNIALS | | | | |
| FG | 189 | FESTUCA GLAUCA 'ELIJAH BLUE' | ELIJAH BLUE FESCUE | 1 GAL. |
| RF | 21 | RUDBECKIA FULGIDA 'LITTLE GOLDSTAR' | LITTLE GOLDSTAR CONEFLOWER | 2 GAL. |
| SS | 21 | SEDUM SPECTABILE 'AUTUMN FIRE' | AUTUMN FIRE SHOWY STONECROP | 2 GAL. |

NOT FOR CONSTRUCTION

REGISTERED LANDSCAPE ARCHITECT
THARYN S. NEIN-LARGE
No. 756
STATE OF MAINE

THARYN S. NEIN-LARGE, RLA 5267

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

LANDSCAPE PLAN
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
365 CONGRESS, LLC
2200 JTRANSIT ROAD
WEST SENECA, NY 14224

RECORD OWNER:
375 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 10' |
| PROJECT | 19371-05 |

SHEET C-401

F:\Projects\19000\19371-05\DWG\Design\19371-05 LS.dwg - 4/9/2025 10:27 AM - RICHARD G. LEWIS

19371-05 LS.dwg, TAB:LANDSCAPE PLAN

# EROSION CONTROL MEASURES

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD, SUCH AS ACTIVE EXCAVATION AND ACTIVE GRADING. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS ACTIVELY OCCURRING OR CAN BE MULCHED IN THE SAME DAY. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN SEVEN (7) DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100 FEET OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES
THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. DISTURBED AREAS ADJACENT TO NATURAL RESOURCES THAT ARE NOT GRADED WITHIN SEVEN (7) DAYS SHALL BE MULCHED. ALSO, AREAS, WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSED WATERWAYS AND ON SLOPES GREATER THAN 33%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES).
TYPES OF MULCH:

HAY OR STRAW: SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).

EROSION CONTROL MIX: SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.

EROSION CONTROL BLANKET: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADIENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO THE STOCKPILE.

3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1 OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4 OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL NOT BE INSTALLED ADJACENT TO WETLAND. INSTALL PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETERIORATION OF THE BINDINGS. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

EROSION CONTROL MIX: SHALL NOT BE USED ADJACENT TO WETLANDS. INSTALL PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDEP BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER. EROSION CONTROL MIX BERMS SHALL NOT BE USED AT THE BOTTOM OF STEEP SLOPES (>8%) OR SLOPES WITH FLOWING WATER.

CONTINUOUS CONTAINED BERM: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

5. TEMPORARY CHECK DAMS:

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS ARE TO BE PLACED WITHIN DITCHES/ SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS SHALL BE 2 FEET HIGH. TEMPORARY CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALE ARE ESTABLISHED WITH AT LEAST 90% OF VIGOROUS PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

STONE CHECK DAMS: STONE DAMS SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAT THE OUTER EDGES.

HAY BALE CHECK DAMS: BALES SHALL BE WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. HAY BALES SHALL BE PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAT THE OUTER EDGES.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S RECOMMENDATIONS.

6. STORMDRAIN INLET PROTECTION:

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEPT TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. THE TERM "SWEEP" IS UNDERSTOOD TO MEAN REMOVAL AND RECOVERY OF TRACKED SEDIMENT WITH A STREET SWEEPER, NOT BRUSHING THE MATERIAL INTO SWALES OR STRUCTURES WITH A MECHANICAL BROOM. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE. IF OFFSITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NOT LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS.

TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDBED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUALS FOR CONTRACTORS AND ENGINEERS, LATEST REVISION. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOAMED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR, PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDBED PREPARATION:

A. FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.

B. SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

| ITEM | APPLICATION RATE |
|---|---|
| 10-20-20 FERTILIZER (N-P205-K20 OR EQUAL) | 18.4 LBS./1,000 S.F. |
| GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE) | 138 LBS./1,000 S.F. |

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDBED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.

APPLICATION OF SEED:

A. SEEDING: SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (CONSERVATION MIX)

| SEED TYPE | APPLICATION RATE |
|---|---|
| FESCUE, FAWN | 0.34 LBS/1,000 S.F. (15 LBS/ACRE) |
| BIRDS FOOT TREFOIL, VARIETY NOT STATED | 0.28 LBS/1,000 S.F. (12 LBS/ACRE) |
| ANNUAL RYEGRASS | 0.18 LBS/1,000 S.F. (8 LBS/ACRE) |
| TIMOTHY, CLIMAX | 0.18 LBS/1,000 S.F. (8 LBS/ACRE) |
| ALSIKE CLOVER | 0.11 LBS/1,000 S.F. (5 LBS/ACRE) |
| REDTOP | 0.05 LBS/1,000 S.F. (2 LBS/ACRE) |
| TOTAL | 1.14 LBS/1,000 S.F. (50 LBS/ACRE) |

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 2016 OR LATEST REVISION.

B. HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

C. MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SODDING:
FOLLOWING SEEDBED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN. WHERE FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN. IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOD CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (6.67H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

A. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C.) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D.) OF THIS STANDARD.
B. STABILIZE THE SLOPE WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. 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 WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
C. STABILIZE THE SLOPE WITH WOOD WASTE COMPOST -- THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE CONTRACTOR WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
D. STABILIZE THE SLOPE WITH STONE RIPRAP -- THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SOILS -- BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

A. STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 15, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C.) OF THIS STANDARD.
B. STABILIZE THE SOIL WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR 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.
C. STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15 THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

1. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, AND AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS NO LATER THAN THE END OF THE NEXT WORKDAY, TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN WITHIN SEVEN (7) DAYS.

2. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

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.

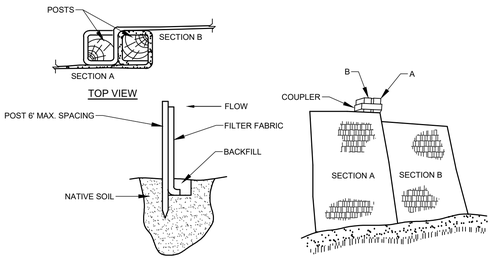
2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS 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.

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 INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

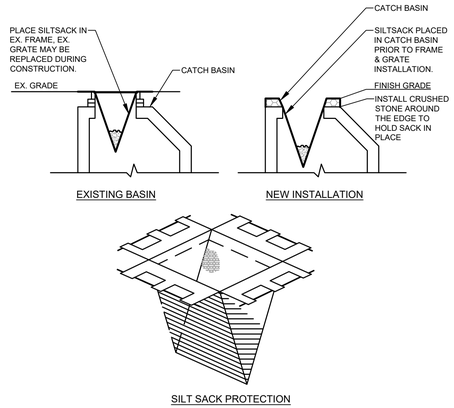
6. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:
A. DISCHARGES FROM FIREFIGHTING ACTIVITY;
B. FIRE HYDRANT FLUSHINGS;
C. VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICL




INSTALLATION:

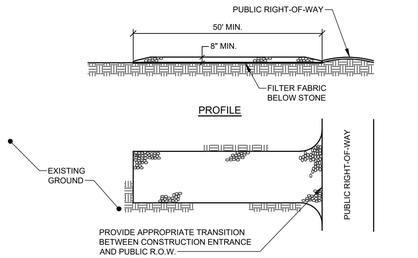
1. EXCAVATE A 6"x 6" TRENCH ALONG THE LINE OF PLACEMENT FOR THE FILTER BARRIER.
2. UNROLL A SECTION AT A TIME AND POSITION THE POSTS AGAINST THE BACK (DOWNSTREAM) WALL OF THE TRENCH.
3. DRIVE POSTS INTO THE GROUND UNTIL APPROXIMATELY 2" OF FABRIC IS LYING ON THE TRENCH BOTTOM.
4. LAY THE TOE-IN FLAP OF FABRIC ONTO THE UNDISTURBED BOTTOM OF THE TRENCH, BACKFILL THE TRENCH AND TAMP THE SOIL. TOE-IN CAN ALSO BE ACCOMPLISHED BY LAYING THE FABRIC FLAP ON UNDISTURBED GROUND AND PILING AND TAMPING FILL AT THE BASE, BUT MUST BE ACCOMPANIED BY AN INTERCEPTION DITCH.
5. JOIN SECTION AS SHOWN ABOVE.
6. BARRIER SHALL BE MIRAFI SILT FENCE OR EQUAL.

## FILTER BARRIER
NOT TO SCALE




NOTES:
PRIOR TO FINAL GRADING AND PAVING OPERATIONS BEGIN A CATCH BASIN INSERT (SUCH AS A SILT SACK OR A DANDY BAG II) MUST BE INSTALLED IN EACH BASIN PER MANUFACTURES INSTRUCTIONS. HAY BALES SHOULD BE REMOVED ONCE INSERTS ARE INSTALLED.

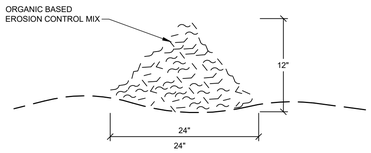
## CATCH BASIN PROTECTION DETAIL (FOR PAVED AREAS)
NOT TO SCALE




NOTES:

1. STONE SIZE- AASHTO DESIGNATION M43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
2. LENGTH- AS SHOWN ON PLANS, MIN. 50 FEET.
3. THICKNESS- NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
5. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

## STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE




COMPOSITION:

EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, 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.

INSTALLATION:

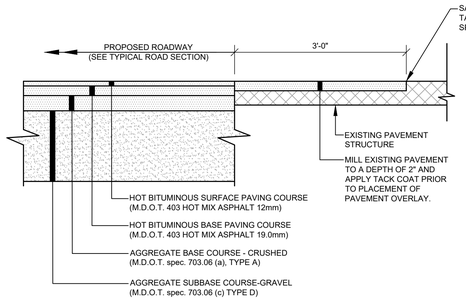
1. THE BARRIER MUST BE PLACED ACROSS THE SLOPE, ALONG THE CONTOUR.

2. EXISTING GROUND SHALL BE PREPARED SUCH THAT THE BARRIER MAY LIE NEARLY FLAT ALONG THE GROUND TO AVOID THE CREATION OF VOIDS AND BRIDGES IN ORDER TO MINIMIZE THE POTENTIAL OF WASH OUTS UNDER THE BARRIER

3. THE BARRIER SHALL BE A MINIMUM OF 1 FOOT HIGH (AS MEASURED ON THE UPHILL SIDE) AND 2 FEET WIDE FOR SLOPES LESS THAN 5% IN GRADE AND SHALL BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF.

4. EROSION CONTROL MIX CAN BE INSTALLED WHERE SILT FENCE IS ILLUSTRATED ON THE DESIGN PLANS IN AREAS EXCEPT IN, BUT NOT LIMITED TO, THE FOLLOWING AREAS: WETLAND AREAS, AT POINTS OF CONCENTRATED FLOW, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS AND AT THE BOTTOM OF STEEP SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM.

## EROSION CONTROL MIX BERM
NOT TO SCALE




## PAVEMENT JOINT
NOT TO SCALE

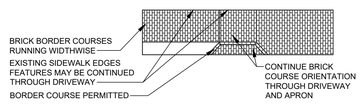



BRICKS TO BE USED:

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 PAVER; SUPPLIED BY GAGNE AND SONS.
SPECIFICATION NUMBER: "VERMONT BACKER BRICK",
ITEM NUMBER # VBBB

## BRICK DRIVEWAY APRON WITH BITUMINOUS BASE
NOT TO SCALE

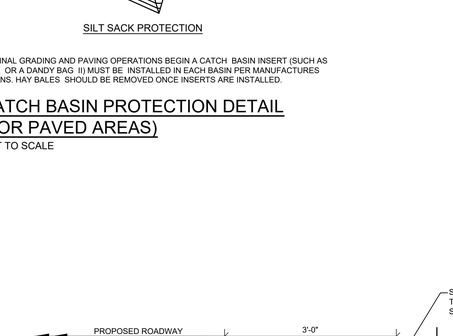



BRICK ORIENTATION DETAIL



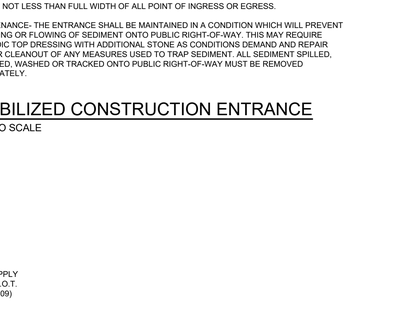

NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

## TYPICAL PAVED PARKING SECTION
NOT TO SCALE



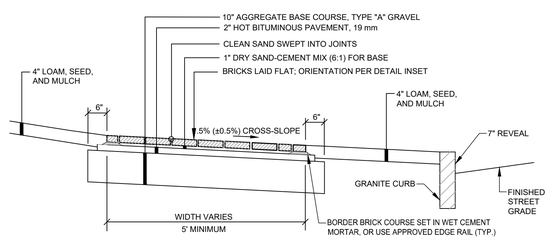

NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

## TYPICAL ROADWAY SECTION - MYRTLE & PEARL STREET
NOT TO SCALE




NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 95% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.

## TYPICAL ROADWAY SECTION - CONGRESS STREET & CUMBERLAND AVENUE
NOT TO SCALE




BRICKS TO BE USED:

NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVER BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA, OR APPROVED EQUAL.. LACHANCE ITEM # 193623, PINE HALL PATHWAY PAVER BRICK, OR APPROVED EQUAL..

REPAIR /MAINTENANCE TO EXISTING BRICK SIDEWALKS:
VERMONT PAVER; SUPPLIED BY GAGNE AND SONS.
SPECIFICATION NUMBER:
"VERMONT BACKER BRICK",
ITEM NUMBER # VBBB,
OR APPROVED EQUAL

## BRICK SIDEWALK WITH BITUMINOUS BASE
NOT TO SCALE

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16677 — REGISTERED PROFESSIONAL ENGINEER — 04/08/2025

| REV.: | BY: | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
75 John Roberts Rd.
Suite A
South Portland, ME 04106
Tel: 207-200-2100
WWW.SEBAGOTECHNICS.COM

DETAILS
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

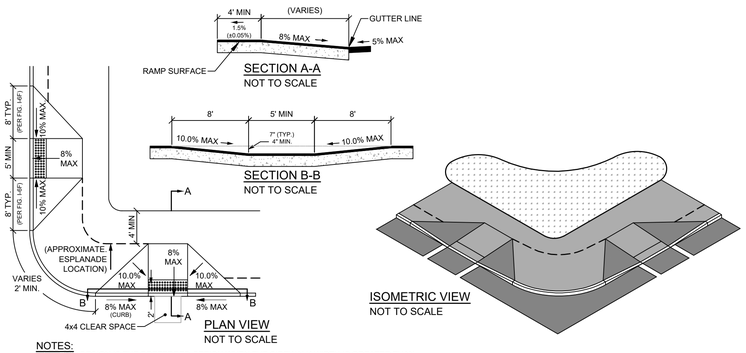
RECORD OWNER:
3ES CONGRESS LLC
2270 CHANIST ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | N.T.S. |
| PROJECT | 19371-05 |

SHEET C-501

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19371-05 D.dwg TAB:C-501 DETAILS

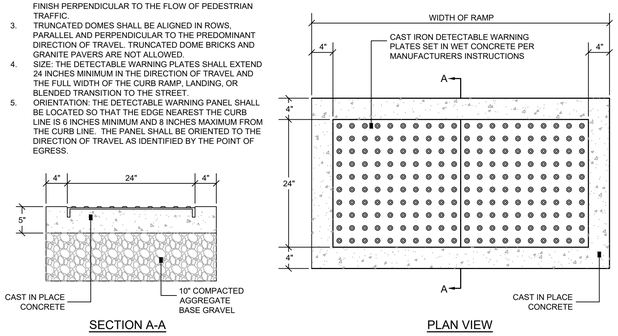



NOTES:
1. THIS DESIGN IS THE PREFERRED OPTION WHEN THE SIDEWALK WIDTH IS GREATER THAN 6.5'. USE OTHER OPTIONS ONLY WHEN REQUIRED BY DESIGN CONSTRAINTS.
2. A MINIMUM CURB REVEAL OF 4" IS REQUIRED AT THE APEX OF THE CURB RADIUS.
3. MINIMUM TERMINAL CURB LENGTH SHALL BE 4 FEET.
4. SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY.

## PERPENDICULAR ADA RAMP - SIDEWALK WIDTH GREATER THAN 6.5' WIDE WITH OR WITHOUT ESPLANADE

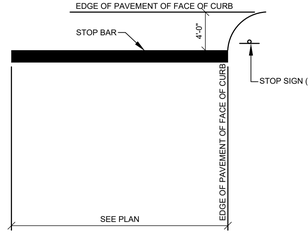
NOT TO SCALE

NOTE:
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.




## SIDEWALK RAMP DETECTABLE WARNING PANEL

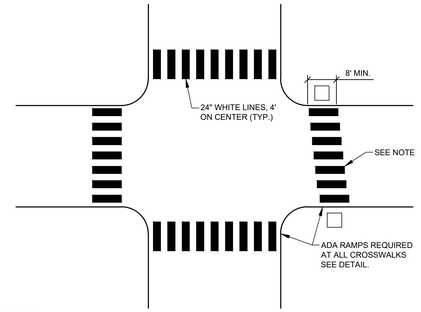
NOT TO SCALE




NOTE:
1. WORDS AND ARROWS FOR DRIVEWAYS SHALL BE APPLIED ACCORDING TO REQUIREMENTS AS OUTLINED IN SECTION 3B OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
2. THESE WORDS AND BAR ARE TO BE PAINTED REFLECTIVE WHITE.

## STOP BAR

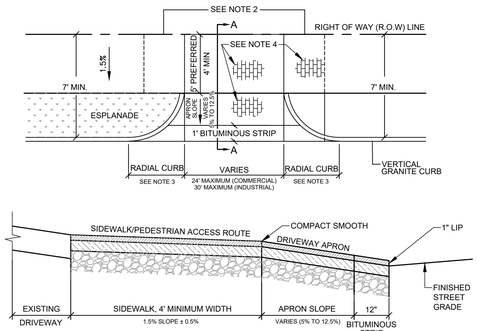
NOT TO SCALE




NOTES:
1. CROSSWALK BLOCKS SHALL BE STAGGERED AND REMAIN PARALLEL TO THE ROADWAY CENTERLINE AT SKEWED CROSSING LOCATIONS.
2. CROSSWALK MARKINGS LOCATED ON ARTERIAL STREETS SHALL BE APPLIED WITH A THERMOPLASTIC MATERIAL (OR APPROVED EQUAL) MEETING ALL MANUFACTURER AND MUTCD REQUIREMENTS.
3. THE ESTABLISHMENT PERIOD FOR CROSSWALK MARKINGS SHALL BE BASED ON MANUFACTURER'S SPECIFICATIONS AND SHALL AT A MINIMUM MEET MAINE DOT STANDARD SPECIFICATION 627.07 ESTABLISHMENT PERIOD REQUIREMENTS.

## CROSSWALK MARKINGS

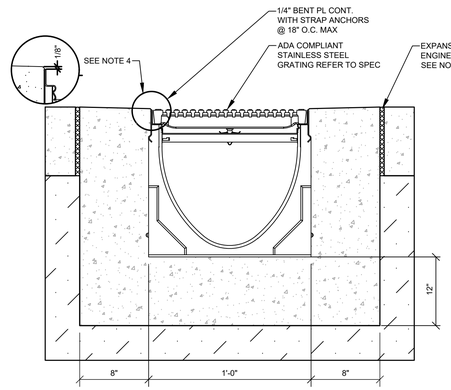
NOT TO SCALE




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. BRICK IN DRIVEWAY APRONS, WHERE APPLICABLE, SHALL BE ORIENTED IN THE SAME WAY AS THE ADJACENT BRICK SIDEWALK..

## COMMERCIAL DRIVEWAY CURB RETURN

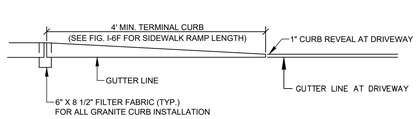
NOT TO SCALE



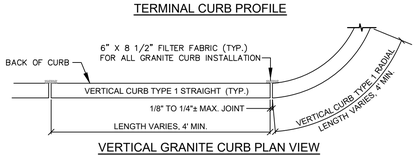

NOTES:
1. IT IS NECESSARY TO ENSURE MINIMUM DIMENSIONS SHOWN ARE SUITABLE FOR EXISTING GROUND CONDITIONS.
2. MINIMUM CONCRETE STRENGTH OF 4,000 PSI IS RECOMMENDED. CONCRETE SHOULD BE VIBRATED TO ELIMINATE AIR POCKETS.
3. EXPANSION AND CONTRACTION CONTROL JOINTS AND REINFORCEMENT ARE RECOMMENDED TO PROTECT CHANNEL AND CONCRETE SURROUND.
4. THE FINISHED LEVEL OF THE CONCRETE SURROUND MUST BE APPROX. 1/8" [3mm] ABOVE THE TOP OF THE CHANNEL EDGE.
5. REFER TO ACO'S LATEST INSTALLATION INSTRUCTIONS FOR FURTHER DETAILS.

## TRENCH DRAIN - K300 KLASSIKDRAIN

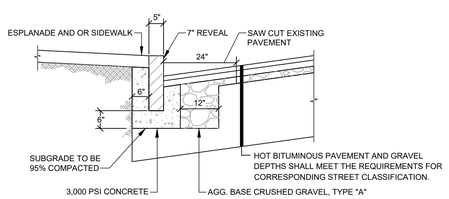
NOT TO SCALE




## TERMINAL CURB PROFILE




## VERTICAL GRANITE CURB PLAN VIEW

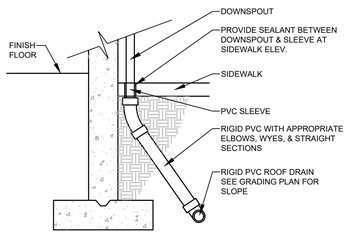



## VERTICAL GRANITE CURB CROSS SECTION

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

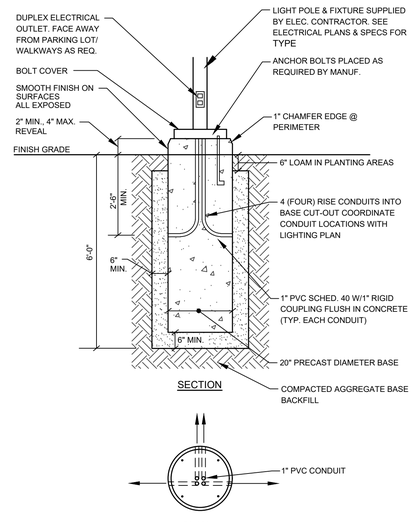
NOT TO SCALE




NOTE:
1. SEE PLANS FOR DOWNSPOUT AND ROOF DRAIN LEADER SIZES..

## ROOF DRAIN CONNECTOR

NOT TO SCALE




NOTES:
1. CONCRETE f'c=5000 psi. @ 28 DAYS WITH STEEL REINFORCEMENT.
2. CONDUIT AND ANCHOR BOLTS PLACED AS REQUIRED PROVIDED BY ELECTRICAL CONSTRACTOR.
3. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.

## STANDARD LIGHT POLE BASE

NOT TO SCALE

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16677 — REGISTERED PROFESSIONAL ENGINEER — 04/08/2025

| REV. | BY | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, ADDITIONS OR OTHER USE SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

DETAILS
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS, LLC
2220 CANANDAIGUA ROAD
WEST SENECA, NY 14224

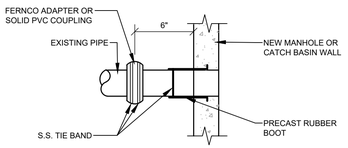
SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
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South Portland, ME 04106
Tel. 207-200-2100

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | N.T.S. |
| PROJECT | 19371-05 |

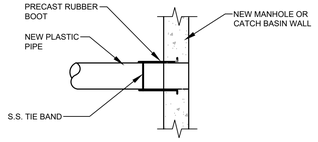
SHEET C-502

19371-05 D.dwg, TAB:C-502 DETAILS

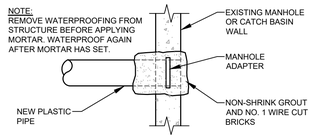
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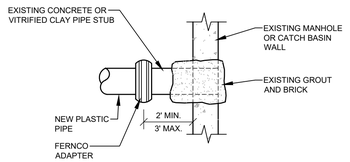

METHOD 1- EXISTING PIPE INTO NEW STRUCTURE




METHOD 2- NEW CONSTRUCTION




METHOD 3- NEW PIPE INTO EXISTING STRUCTURE

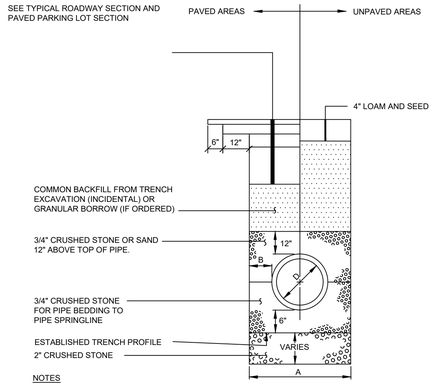



METHOD 4- NEW PIPE INTO EXISTING STRUCTURE STUB

NOTE:
1. REMOVE WATERPROOFING FROM STRUCTURE BEFORE APPLYING MORTAR. WATERPROOF AGAIN AFTER MORTAR HAS SET.

2. EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION. IF PIPE DIAMETER IS SO LARGE THAT CORE DRILLING IS PROHIBITED, THE CONTRACTOR MAY SAW CUT THE STRUCTURE TO CREATE PIPE OPENING. THE NEW OPENING MUST THEN BE SEALED AND WATERTIGHT BOTH INSIDE AND OUTSIDE THE STRUCTURE.

## PLASTIC PIPE CONNECTIONS
NOT TO SCALE



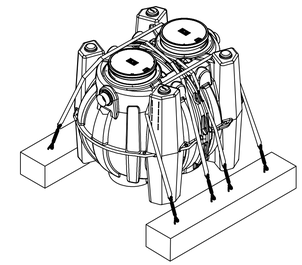

NOTES
1. ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
2. IN PAVED AREAS, DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT SHALL MATCH THE GREATER OF EXISTING CONDITIONS OR THE REQUIREMENTS FOR THE CORRESPONDING STREET CLASSIFICATION.
3. DIMENSION "B" SHALL BE SUFFICIENT TO ALLOW CRUSHED 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 |

NOTES:
DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.

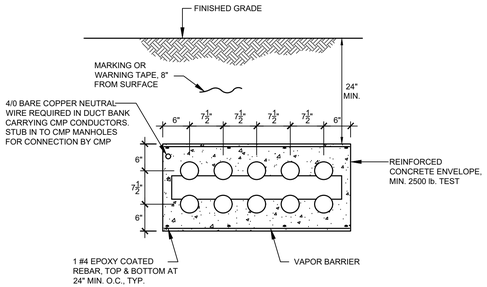
ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.

## TYPICAL PIPE TRENCH INSTALLATION
NOT TO SCALE

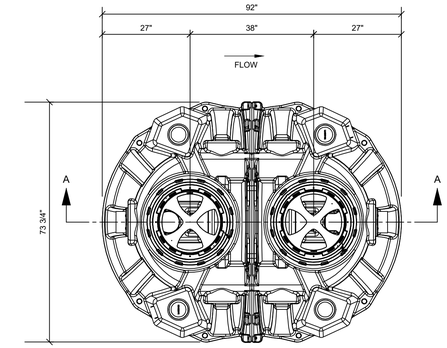


NOTES:
1. IF THE INSTALLATION IS IN A HIGH WATER TABLE OR AT RISK AREA, THE GB-1000 MUST BE INSTALLED WITH SCHIER MODEL AK3 ANCHOR KIT (WITH DEADMAN ANCHORS BY OTHERS).

## ANTI-FLOTATION ANCHOR KIT
NOT TO SCALE



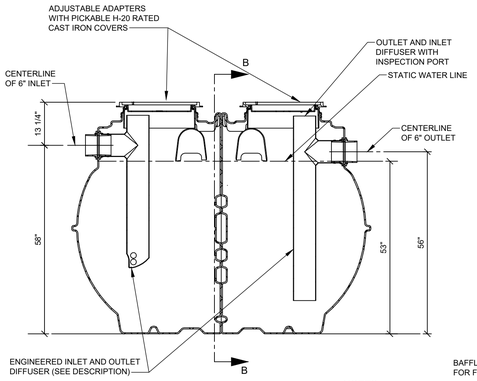

## TYPICAL DUCT BANK CROSS-SECTION
NOT TO SCALE



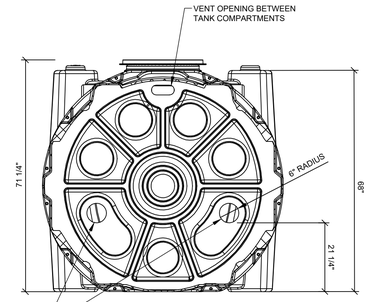

TOP VIEW
(COVERS REMOVED FOR CLARITY)



ISOMETRIC VIEW




SECTION A-A



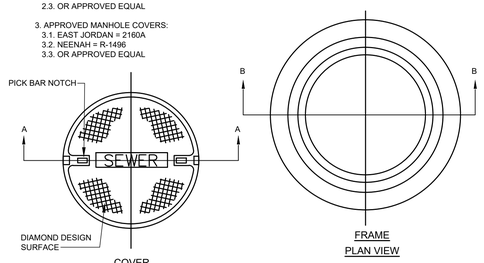

SECTION B-B

NOTES:
1. EXCAVATE HOLE AT LEAST 18" LARGER THAN INTERCEPTOR ON ALL SIDES AND 12" DEEPER THAN TANK BOTTOM. LAY A LEVEL OF WELL-PACKED, CRUSHED AGGREGATE (APPROXIMATELY 3/4" SIZE ROCK OR SAND, WITH NO FINES) IN THE BASE OF HOLE.

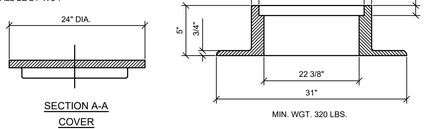
## GB-1000 GREASE INTERCEPTOR
NOT TO SCALE

NOTE:
1. MANHOLE CHANNELS REQUIRING CHANGE OF ALIGNMENT, TO BE BUILT ON SMOOTH RADIUS. IF SIDE PIPES ENTER, CHANNEL TO BE SHAPED TO RECEIVE ADDED SIDE FLOW.

2. STORMWATER MANHOLE COVERS ARE TO BE MARKED "DRAIN". SANITARY MANHOLE COVERS ARE TO BE MARKED "SEWER".




NOTE:
ALL SANITARY AND STORMWATER/DRAIN MANHOLE COVERS SHALL BE 24" X 5".

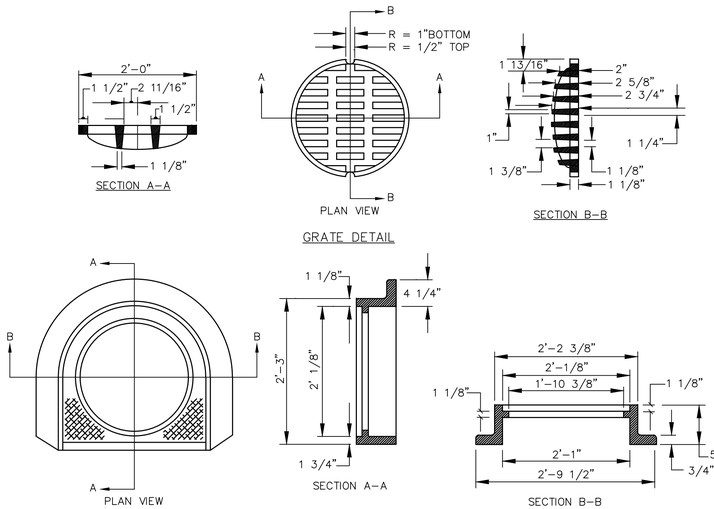



## CAST IRON MANHOLE FRAME AND COVER
NOT TO SCALE

NOTE:
1. ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/DRAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.

2. APPROVED MANHOLE FRAMES:
2.1. EAST JORDAN = 1690Z
2.2. NEENAH = R-1496
2.3. OR APPROVED EQUAL

3. APPROVED MANHOLE COVERS:
3.1. EAST JORDAN = 2160A
3.2. NEENAH = R-1496
3.3. OR APPROVED EQUAL

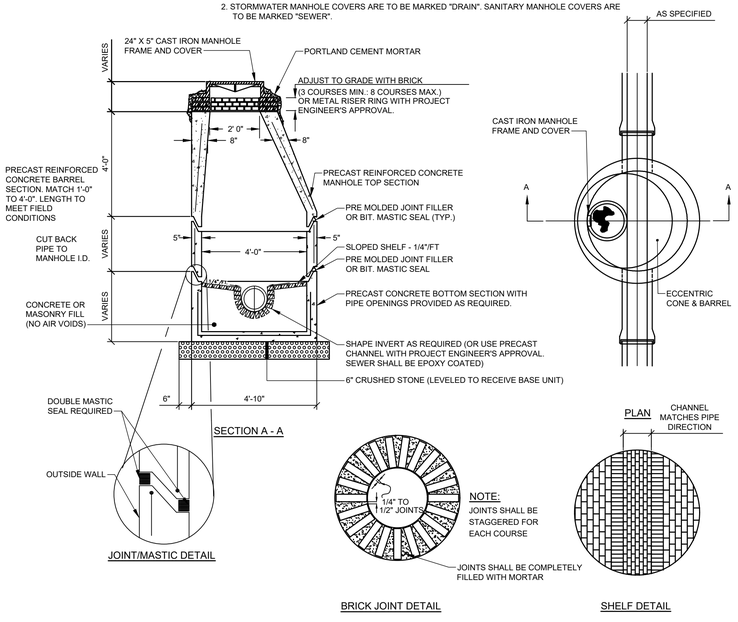



FRAME DETAIL

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

## CATCH BASIN FRAME & GRATE
NOT TO SCALE




NOTE:
JOINTS SHALL BE STAGGERED FOR EACH COURSE

## PRECAST CONCRETE MANHOLE
NOT TO SCALE

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677

STATE OF MAINE
CHRISTOPHER P. TAYLOR
No. 16677
REGISTERED PROFESSIONAL ENGINEER
10/08/2025

| REV. | BY | DATE: | STATUS |
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DETAILS
OF:
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244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS, L.L.C.
2000 TRANSFER DAD
WEST SENECA, NY 14224

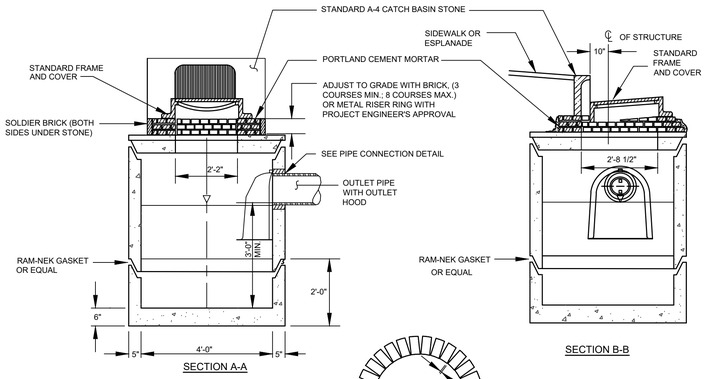
SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

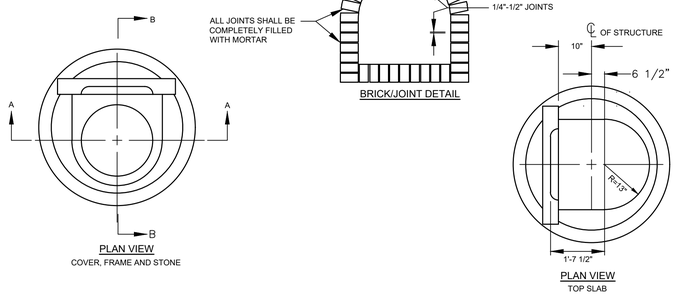
| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | N.T.S. |
| PROJECT | 19371-05 |

SHEET C-503

19371-05 D-dwg, TAB C-503 DETAILS

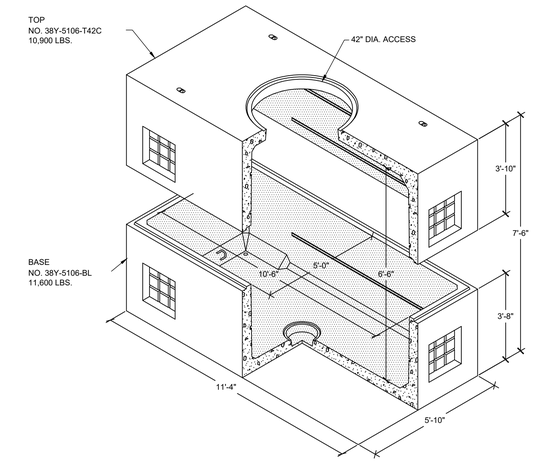
\\sf-fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 D.dwg - 4/9/2025 10:06 AM - CHRIS TAYLOR

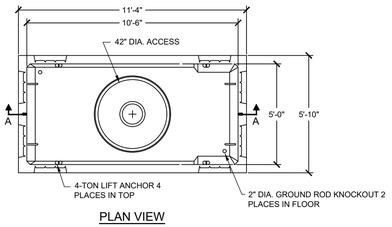


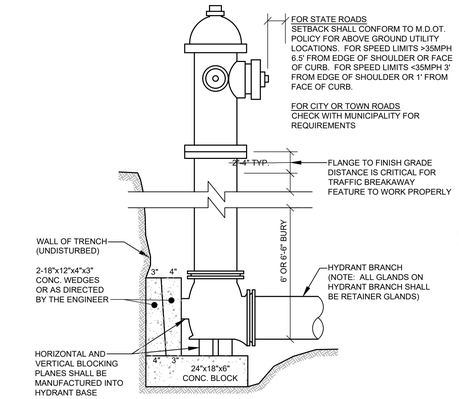

## PRECAST CONCRETE CATCH BASIN - TYPE "E"

NOT TO SCALE



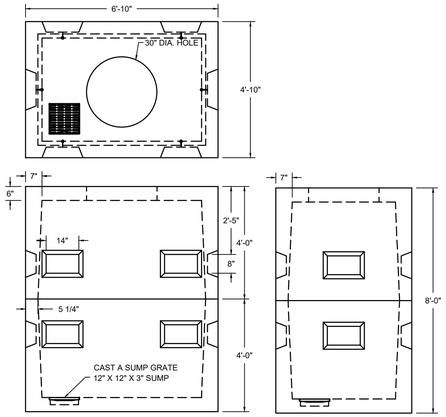




PLAN VIEW




## HYDRANT INSTALLATION

NOT TO SCALE

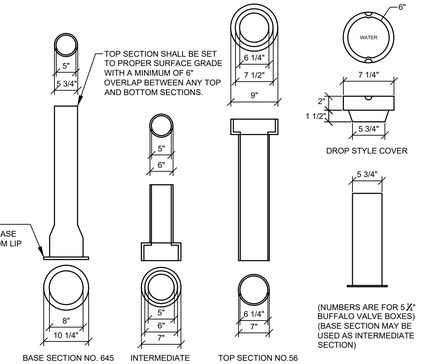



NOTES:

1. FURNISH AND INSTALL 32" DIA X 6" H-20 RATED FRAME AND MANHOLE COVER LETTERED "COMMUNICATIONS".
2. FURNISH AND INSTALL RISER RINGS AND MASONRY TO ACHIEVE REQUIRED DEPTH AND ALLOW FOR FUTURE ADJUSTMENT TO GRADE.
3. CONCRETE TO BE 5,000 PSI AT 28 DAYS.
4. VAULT TO BE RATED FOR H-20 LOADING.

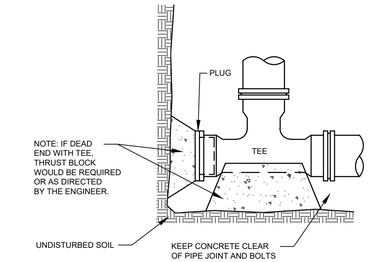
## TELECOMMUNICATION MANHOLE

NOT TO SCALE



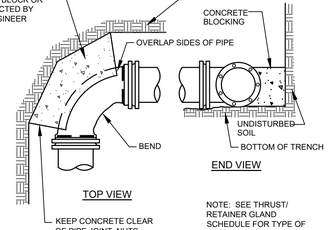

## VALVE BOX & COVER

NOT TO SCALE



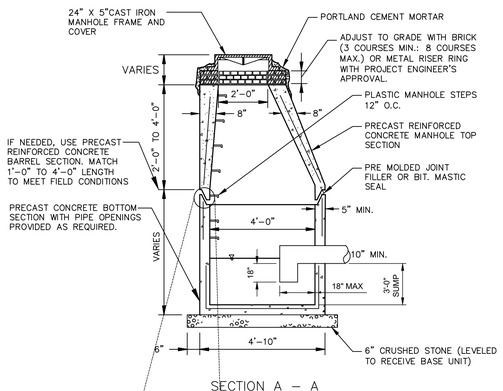

## STANDARD TEE BLOCKING

NOT TO SCALE




## STANDARD BEND BLOCKING

NOT TO SCALE

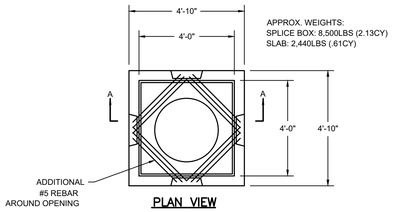


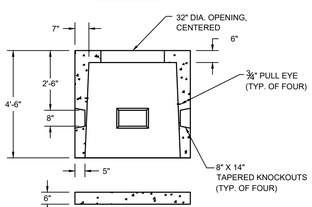

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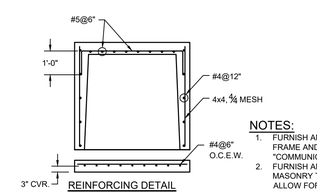
1. FOR USE IN PARTIALLY OR TOTALLY ENCLOSED PARKING GARAGES, AUTOMOTIVE REPAIR FACILITIES OR ANY OTHER PROPOSED STRUCTURE WHERE DEEMED APPROPRIATE BY THE CITY ENGINEER.
2. DISCHARGE SHALL BE TO SANITARY SEWER.
3. A VENT PIPE MAY BE REQUIRED THAT HAS A VERTICAL OUTLET OFF TO THE SIDE OF THE STRUCTURE.
4. 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

NOT TO SCALE



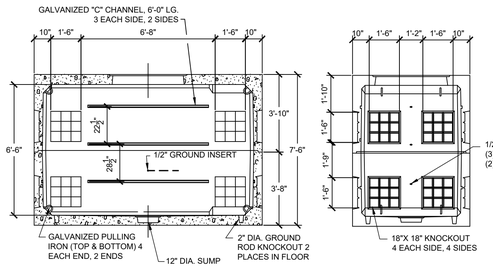




NOTES:

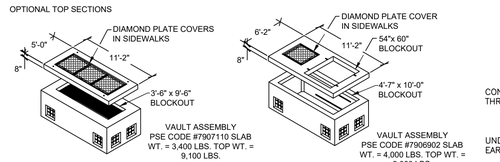
1. FURNISH AND INSTALL 32" DIA X 6" H-20 RATED FRAME AND MANHOLE COVER LETTERED "COMMUNICATIONS".
2. FURNISH AND INSTALL RISER RINGS AND MASONRY TO ACHIEVE REQUIRED DEPTH AND ALLOW FOR FUTURE ADJUSTMENT TO GRADE.
3. CONCRETE TO BE 5,000 PSI AT 28 DAYS.
4. VAULT TO BE RATED FOR H-20 LOADING.
5. REINFORCING STEEL TO BE GRADE 60, BLACK.

## 4x4 UTILITY SPLICE BOX

NOT TO SCALE




OPTIONAL TOP SECTIONS

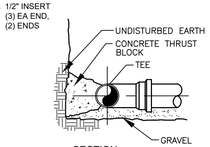



NOTE:

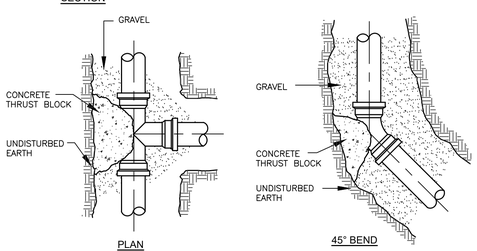
1. FURNISH AND INSTALL 42" FRAME, MANHOLE COVER PER CMP STANDARDS.
2. FURNISH AND INSTALL RISER RINGS AND MASONRY TO ACHIEVE REQUIRED DEPTH AND ALLOW FOR FUTURE ADJUSTMENT TO GRADE.
3. BASIS OF DESIGN IS 3GY MANHOLE BY OLD CASTLE PRECAST MANHOLES SHALL MEET UTILITY OWNERS SPECIFICATIONS.
4. INSTALL GROUNDING RODS OR GROUNDING GRID, SEE ELECTRICAL PLANS & SPECIFICATIONS FOR GROUNDING REQUIREMENTS.

## ELECTRICAL MANHOLE

NOT TO SCALE




| CONCRETE THRUST BLOCK SIZE REQUIREMENTS | | | | |
|---|---|---|---|---|
| | | SQ. FT. OF BEARING ON UNDISTURBED SOIL | | |
| FITTINGS | | 90° BENDS | 45° BENDS | TEES AND PLUGS |
| PIPE SIZE | 6" | 4.0 | 2.0 | 3.0 |
| | 8" | 8.0 | 4.0 | 6.0 |
| | 12" | 15 | 10 | 10 |




## TEE AND BEND DETAIL

NOT TO SCALE

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16677

STATE OF MAINE — CHRISTOPHER P. TAYLOR — No. 16677 — LICENSED PROFESSIONAL ENGINEER — 12/19/2024

| REV. | BY: | DATE: | STATUS: |
|---|---|---|---|
| A | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS PROVIDED FOR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

DETAILS

OF:

PORTLAND MUSIC HALL

244 CUMBERLAND AVE

PORTLAND, MAINE

FOR:

PORTLAND MUSIC HOLDINGS, LLC

325 N. MAPLE DRIVE

BEVERLY HILLS, CA 90210

RECORD OWNER:

SECONDSTREET, LLC

250 TRANSIT ROAD

WEST SENECA, NY 14224

SEBAGO TECHNICS

75 John Roberts Rd.

Suite 1A

South Portland, ME 04106

Tel. 207-200-2100

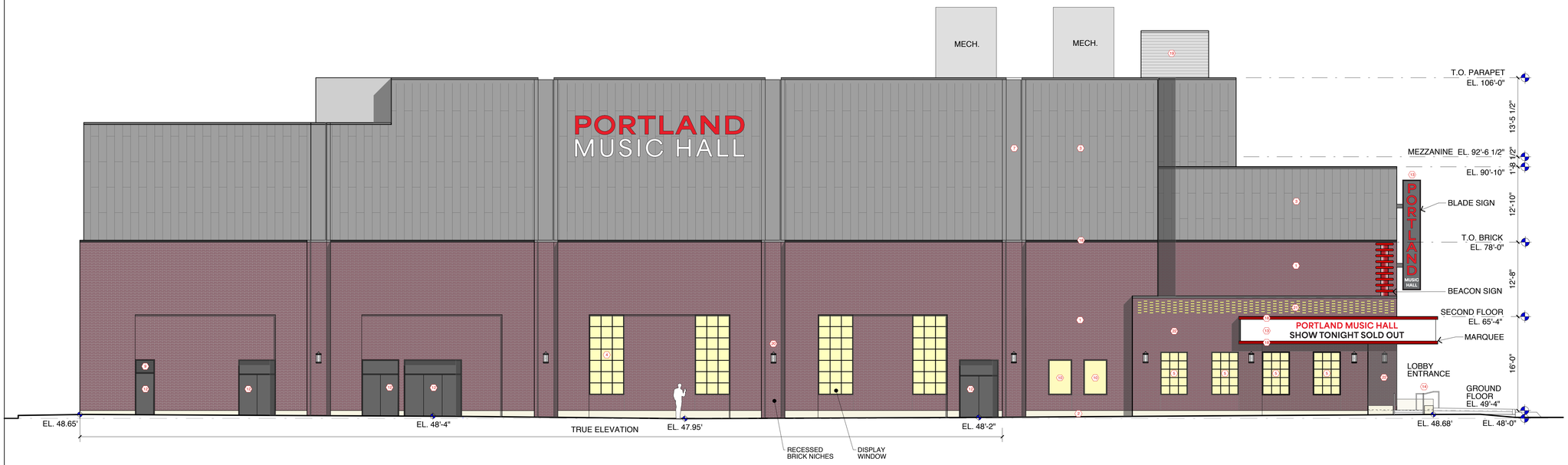
WWW.SEBAGOTECHNICS.COM

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | N.T.S. |
| PROJECT | 19371-05 |

SHEET C-504

\\st-fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 D.dwg - 12/20/2024 8:28 AM - CHRIS TAYLOR

19371-05 D.dwg - TAB:C-504 DETAILS




1 **CUMBERLAND AVENUE - NORTH ELEVATION**

SCALE: 1/8" = 1'-0"

## MATERIAL LEGEND

1. FACE BRICK
2. PRECAST
3. STANDING SEAM METAL PANEL
4. ALUMINUM WINDOW
5. ALUMINUM STOREFRONT WITH DIVIDED LITES
6. TRANSLUCENT PANELS
7. ACM METAL PANEL / PROFILE
8. ALUM. / GLASS DOORS & FRAME
9. PAINTED LOUVER
10. OUT-SWING ALUMINUM DISPLAY WINDOW
11. TICKET BOX WINDOW
12. H.M. DOOR & FRAME
13. MARQUEE OR BLADE LED SIGN
14. STAINLESS STEEL RAILING
15. OVERHEAD ROLL-UP DOORS, PAINTED
16. PAINTED CMU
17. METAL CANOPY
18. SHEET METAL FLASHING PROFILE
19. CORRUGATED METAL PANEL
20. DECORATIVE WALL SCONCE
21. PERFORATED BRICK PARAPET
22. ARTICULATED BRICK
23. METAL GATE
24. PAINTED CIP CONCRETE
25. SCREENWALL




2 **MYRTLE STREET - WEST ELEVATION**

SCALE: 1/8" = 1'-0"



# PORTLAND MUSIC HALL
PORTLAND , MAINE


Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**VANNUCCI**
99 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
1 BELMONT AVE, SUITE 1500
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
25217 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES**
60-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**WISS, JANNEY, ELSTNER ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 500
BOSTON, MA 02210

Specifications:
**SPECMASTERS**
175 MAIN STREET
BOXFORD, MA 01921


D'AQ ARCHITECTS

SEAL:

REVISIONS:

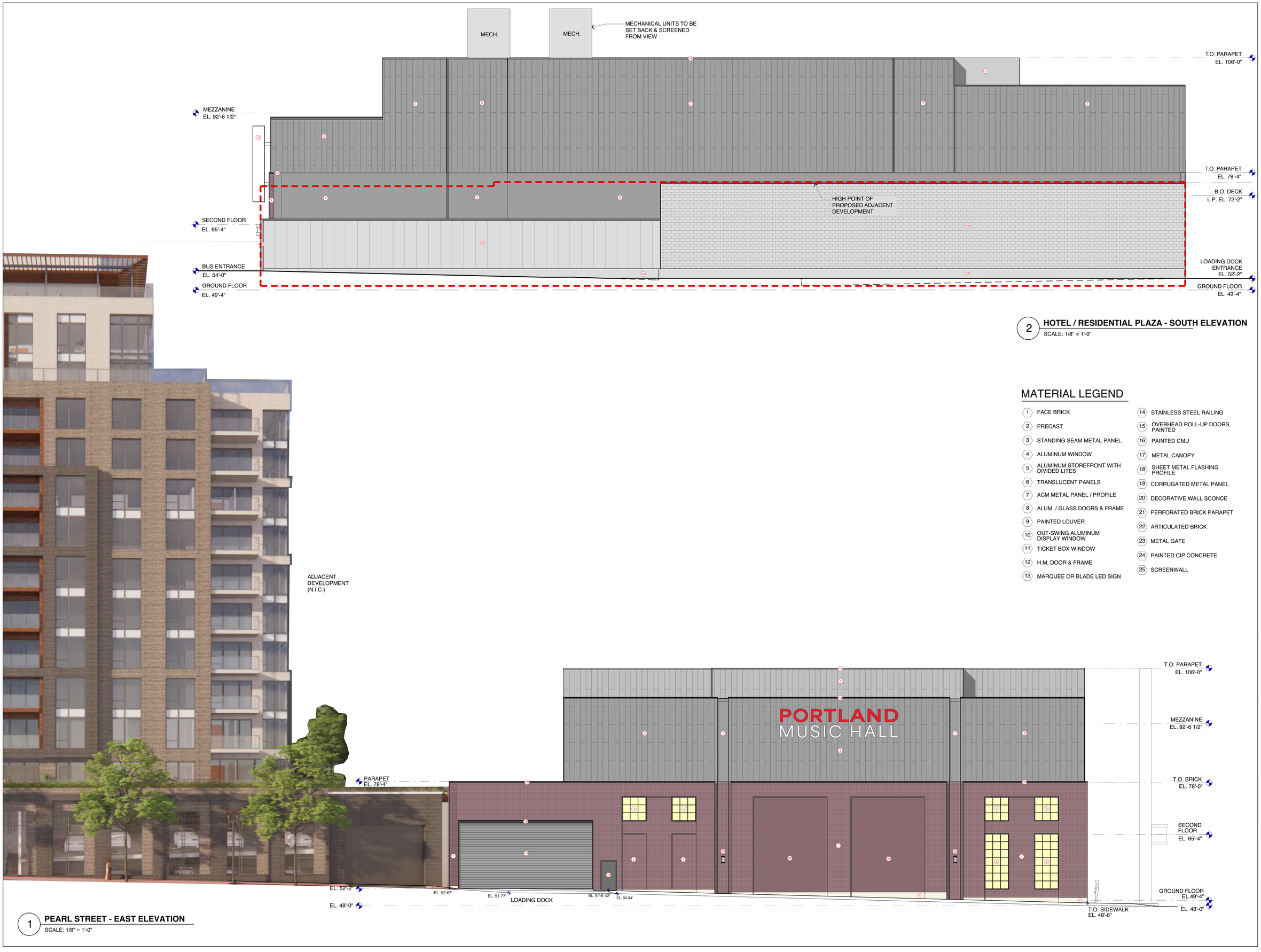
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|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 3/25/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

## NORTH & WEST ELEVATIONS

SCALE: As Noted.
SHEET #:

**A3.1**




## 2 HOTEL / RESIDENTIAL PLAZA - SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



ADJACENT DEVELOPMENT (N.I.C.)




## 1 PEARL STREET - EAST ELEVATION

SCALE: 1/8" = 1'-0"

## MATERIAL LEGEND

1. FACE BRICK
2. PRECAST
3. STANDING SEAM METAL PANEL
4. ALUMINUM WINDOW
5. ALUMINUM STOREFRONT WITH DIVIDED LITES
6. TRANSLUCENT PANELS
7. ACM METAL PANEL / PROFILE
8. ALUM. / GLASS DOORS & FRAME
9. PAINTED LOUVER
10. OUT-SWING ALUMINUM DISPLAY WINDOW
11. TICKET BOX WINDOW
12. H.M. DOOR & FRAME
13. MARQUEE OR BLADE LED SIGN
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20. DECORATIVE WALL SCONCE
21. PERFORATED BRICK PARAPET
22. ARTICULATED BRICK
23. METAL GATE
24. PAINTED CIP CONCRETE
25. SCREENWALL

# PORTLAND MUSIC HALL
PORTLAND , MAINE


Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**BVH INC.**
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
1156 15TH STREET, SUITE 1500
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
25217 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES**
65-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**RDH BUILDING SCIENCE ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 320
BOSTON, MA 02210

Specifications:
**WIL-SPEC LLC**
375 MAIN STREET
BOXFORD, MA 01921


D'AQ ARCHITECTS

SEAL:

REVISIONS:

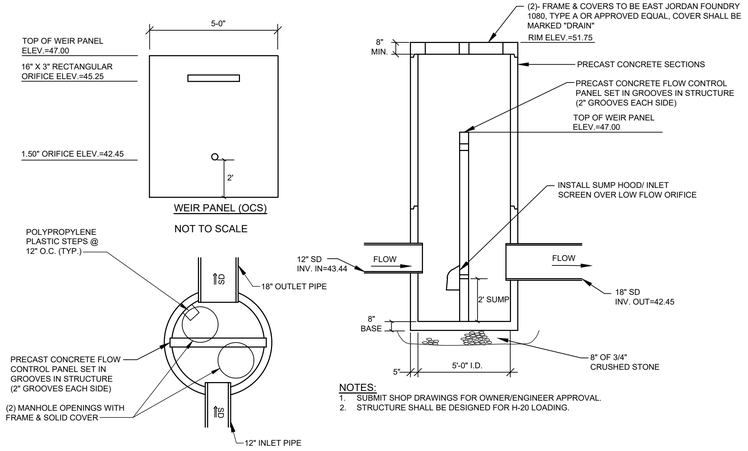
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|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 3/25/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**EAST & SOUTH ELEVATIONS**

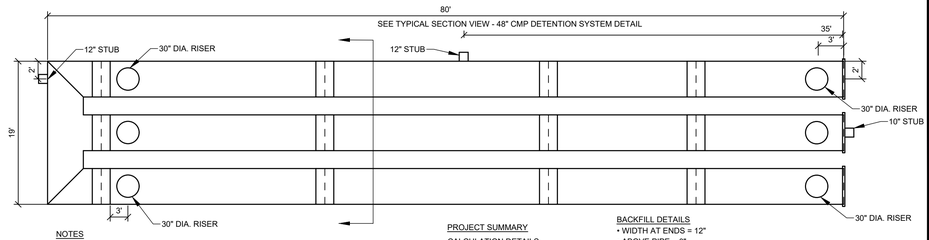
SCALE: As Noted.
SHEET #:

**A3.2**




NOTES:
1. SUBMIT SHOP DRAWINGS FOR OWNER/ENGINEER APPROVAL.
2. STRUCTURE SHALL BE DESIGNED FOR H-20 LOADING.

## OUTLET CONTROL STRUCTURE (OCS-1)
NOT TO SCALE




NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

PROJECT SUMMARY

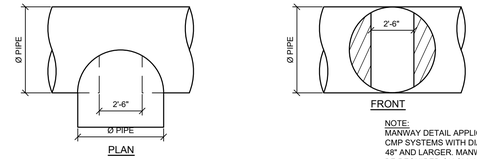
CALCULATION DETAILS
- LOADING = HS20/HS25
- APPROX. LINEAR FOOTAGE = 240 LF

STORAGE SUMMARY
- PIPE STORAGE VOLUME = 3,016 CF
- BACKFILL STORAGE VOLUME = 0 CF
- TOTAL STORAGE PROVIDED = 3,016 CF

BACKFILL DETAILS
- WIDTH AT ENDS = 12"
- ABOVE PIPE = 0"
- WIDTH AT SIDES = 12"
- BELOW PIPE = 0"

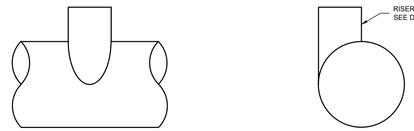
PIPE DETAILS
- DIAMETER = 48"
- CORRUGATION = 2 2/3x1/2
- GAGE = 16
- COATING = ALT2
- WALL TYPE = SOLID
- BARREL SPACING = 24"

## CONTECH 48" CMP DETENTION SYSTEM
NOT TO SCALE




NOTE:
MANWAY DETAIL APPLICABLE FOR CMP SYSTEMS WITH DIAMETERS 48" AND LARGER. MANWAYS MAY BE REQUIRED ON SMALLER SYSTEMS DEPENDING ON ACTUAL SITE SPECIFIC CONDITIONS.

## TYPICAL MANWAY DETAIL
NOT TO SCALE

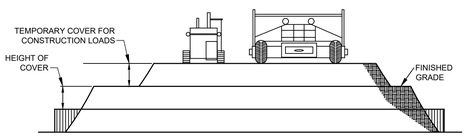



ELEVATION

END

NOTE:
LADDERS ARE OPTIONAL AND ARE NOT REQUIRED FOR ALL SYSTEMS.

## TYPICAL RISER DETAIL
NOT TO SCALE

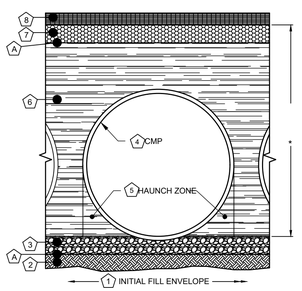



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

| PIPE SPAN, INCHES | AXLE LOADS (kips) | | | |
|---|---|---|---|---|
| | 18-50 | 50-75 | 75-110 | 110-150 |
| | MINIMUM COVER (FT) | | | |
| 12-42 | 2.0 | 2.5 | 3.0 | 3.0 |
| 48-72 | 3.0 | 3.0 | 3.5 | 4.0 |
| 78-120 | 3.0 | 3.5 | 4.0 | 4.0 |
| 126-144 | 3.5 | 4.0 | 4.5 | 4.5 |

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.




| | DETENTION SYSTEMS - CMP DETENTION / CMP DRAINAGE | | |
|---|---|---|---|
| | Material Location | Description | Material Designation | Designation |
| 8 | Rigid or Flexible Pavement (if applicable) | | | |
| 7 | Road Base (if applicable) | | | |
| A | Geotextile Layer | Non-Woven Geotextile | CONTECH C-40 or C-45 | Engineer Decision for consideration to prevent soil migration into varying soil types |
| 6 | Backfill | Well graded granular material which may contain small amounts of silt or clay. | AASHTO M 145- A-1, A-2, A-3 | Placed in 8" +/- loose lifts and compacted to 90% Standard Proctor Per AASHTO T 99 |
| 3 | Bedding Stone | Well graded granular bedding material w/maximum particle size of 3" | AASHTO M43 - 3,357,4,467, 5, 56, 57 | Engineer to determine if bedding is required. Pipe may be placed on the trench bottom of a relatively loose, native suitable well-graded & granular material. For Arch pipes it is recommended to be shaped to a relatively flat bottom or fine-grade the foundation to a slight v-shape. Unsuitable material should be over-excavated and re-placed with a 4"-6" layer of well graded & granular stone per the material designation. See AASHTO 26.3.8.1 / 26.5.3 Bedding info. |
| A | Geotextile Layer | Non-Woven Geotextile | CONTECH C-40 or C-45 | Engineer Decision for consideration to prevent soil migration into varying soil types |
| * | *Note: Backfill using controlled low-strength material (CLSM, "flash fill" or "flowable fill") when the spacing between the pipes will not allow for placement and adequate compaction of the backfill.* | | | |

1 MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEERING JUDGEMENT

FOUNDATION/BEDDING PREPARATION

2 PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND BROUGHT BACK TO THE GRADE WITH A FILL MATERIAL AS APPROVED BY THE ENGINEER.

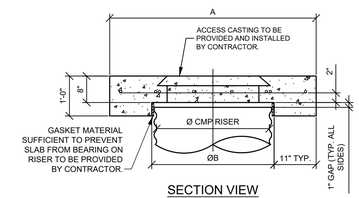
3 HAUNCH ZONE MATERIAL SHALL BE PLACED AND UNIFORMALLY COMPACTED WITHOUT SOFT SPOTS.

BACKFILL

WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHALL BE ADVANCED ALONG THE LENGTH OF THE DETENTION SYSTEM AT THE SAME RATE TO AVOID DIFFERENTIAL LOADING ON THE PIPE.

OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.

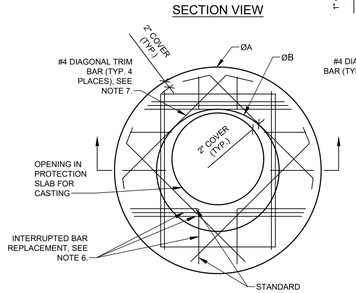
## TYPICAL SECTION VIEW - 48" CMP DETENTION SYSTEM
NOT TO SCALE



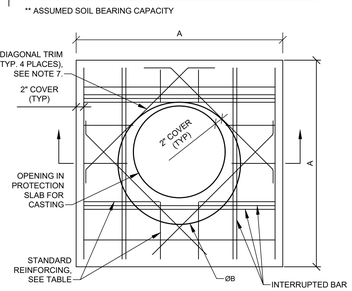

## SECTION VIEW

| REINFORCING TABLE | | | | |
|---|---|---|---|---|
| Ø CMP RISER | A | Ø B | REINFORCING | **BEARING PRESSURE (PSF) |
| 24" | Ø 4'<br>4'X4' | 26" | #5 @ 12" OCEW<br>#5 @ 12" OCEW | 2,410<br>1,780 |
| 30" | Ø 4'-6"<br>4'-6" X 4'-6" | 32" | #5 @ 12" OCEW<br>#5 @ 12" OCEW | 2,120<br>1,530 |
| 36" | Ø 5'<br>5' X 5' | 38" | #5 @ 10" OCEW<br>#5 @ 10" OCEW | 1,890<br>1,350 |
| 42" | Ø 5'-6"<br>5'-6" X 5'-6" | 44" | #5 @ 10" OCEW<br>#5 @ 9" OCEW | 1,720<br>1,210 |
| 48" | Ø 6'<br>6' X 6' | 50" | #5 @ 9" OCEW<br>#5 @ 8" OCEW | 1,600<br>1,100 |

** ASSUMED SOIL BEARING CAPACITY




## ROUND OPTION PLAN VIEW




## SQUARE OPTION PLAN VIEW

NOTES:
1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 3,500 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERING, BINGHAMTON, NY.

## MANHOLE CAP DETAIL
NOT TO SCALE

SPECIFICATION FOR DESIGNED DETENTION SYSTEM:

SCOPE
THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE DESIGNED DETENTION SYSTEM DETAILED IN THE PROJECT PLANS.

MATERIAL
THE MATERIAL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-274 OR ASTM A-92.

THE GALVANIZED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-218 OR ASTM A-929.

THE POLYMER COATED STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-246 OR ASTM A-742.

THE ALUMINUM COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M-197 OR ASTM B-744.

CONSTRUCTION LOADS
CONSTRUCTION LOADS MAY BE HIGHER THAN FINAL LOADS. FOLLOW THE MANUFACTURER'S OR NCSPA GUIDELINES.

NOTE:
THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

PIPE
THE PIPE SHALL BE MANUFACTURED IN ACCORDANCE TO THE APPLICABLE REQUIREMENTS LISTED BELOW:

ALUMINIZED TYPE 2: AASHTO M-36 OR ASTM A-760

GALVANIZED: AASHTO M-36 OR ASTM A-760

POLYMER COATED: AASHTO M-245 OR ASTM A-762

ALUMINUM: AASHTO M-196 OR ASTM B-745

HANDLING AND ASSEMBLY
SHALL BE IN ACCORDANCE WITH NCSPS (NATIONAL CORRUGATED STEEL PIPE ASSOCIATION) FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL. SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR ALUMINUM PIPE.

INSTALLATION
SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II DIVISION II OR ASTM A-798 (FOR ALUMINIZED TYPE 2, GALVANIZED OR POLYMER COATED STEEL) OR ASTM B-788 (FOR ALUMINUM PIPE) AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

## CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677

STATE OF MAINE CHRISTOPHER P. TAYLOR No. 16677 LICENSED PROFESSIONAL ENGINEER 04/08/2025

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AS INDICATED ON OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

DETAILS
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
SELECTIONSETTLEMENTS.C
2720 TRANSIT'S DAD
WEST SENECA, WY 14224

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | N.T.S. |
| PROJECT | 19371-05 |

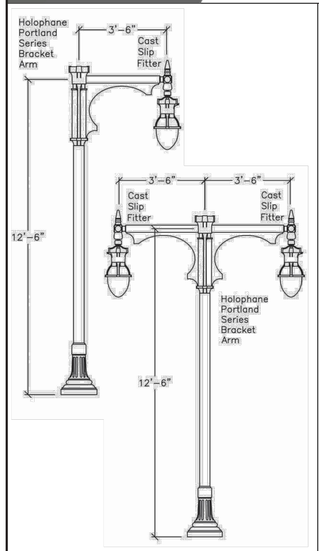
SHEET C-505

\\st-fs01\data\Projects\19000\19371-05\DWG\Design\19371-05 D.dwg - 4/9/2025 10:18 AM - CHRIS TAYLOR

19371-05 D.dwg, TAB:C-505 DETAILS

PORTLAND | me

**Street & Sidewalk Lighting**
**DECORATIVE LIGHT - DOWNTOWN**




**LUMINAIRE**
Holophane Esplanade LED II
Model:
ESL2-P20S-30K-AS-CMC-TG3-S-P7-NL2X2-BHDF13-200CMC

Cast aluminum housing with stainless steel hardware. Dropped refractor shall be thermal resistant borosilicate glass. Internal reflector and prismatic diffuser shall provide an IES Type IV distribution pattern. Luminaire shall include an integral ballast with modular wiring connectors and multi-volatage taps. Provide an internal receptacle type photocell control. LED 3000K color temperature

**BRACKET ARM**
Holophane Portland Series (custom)
Model PD42CA-RAL6012

Portland Series steel crossarm with a post-top fitting for a 3-1/2" by 8" tenon.

**SLIP FITTER**
Holophane
Model :WLLF200SCA-RAL6012
2-3/8" O.D. with swivel cast fitter.

**LIGHTING POLE AND BASE**
Holophane North Yorkshire Cast Steel
Model NY-S-13-FTB-P13-ABG-RAL6012

Cast steel pole, smooth 5" diameter shaft with integrated base rated for a 90mph wind load with a 1.3 gust factor. Provide four hot-dipped galvanized steel L-type anchor bolts. Lighting pole shall be hot dip galvanized prior to powder coat paint.

**DIMENSIONS**
Overall Height = 12' 6"
Bracket Arm Length = 3' 6"
Base Diameter = 17"

**FINISH**
Dark Green: RAL-6012 (custom)

**APPLICATION**
Sidewalk lighting or pedestrian lighting areas

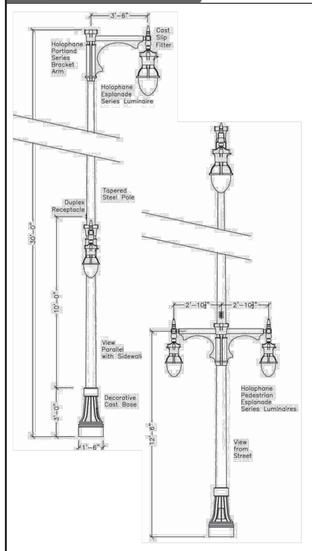
Spacing:
One side: 60' - 80'on center
Alternating sides: 100' - 175' on center

Single-arm fixture placed in furnishing zone with luminaire oriented over sidewalk. Double-arm fixture placed with bracket arms parallel to sidewalk. If sidewalk space is limited, Planning Authority may approve lights within private property or attached to building.

| Date: **March, 2019** | **CITY OF PORTLAND, MAINE** TECHNICAL MANUAL | **MUNICIPAL STREET LIGHTING STANDARDS** SECTION 8 | Figure: **X-5B** |
|---|---|---|---|
| Revised Date: | **DOWNTOWN PED 1** | | |

PORTLAND | me

**Street & Sidewalk Lighting**
**DECORATIVE LIGHT - DOWNTOWN**




**LUMINAIRE**
Holophane Esplanade LED II
Model:
ESL2-P20S-30K-AS-CMC-TG3-S-P7-NL2X2-BHDF13-200CMC

Cast aluminum housing with stainless steel hardware. Dropped refractor shall be thermal resistant borosilicate glass. Internal reflector and prismatic diffuser shall provide an IES Type IV distribution pattern. Luminaire shall include an integral ballast with modular wiring connectors and multi-volatage taps. Provide an internal receptacle type photocell control. LED 3000K color temperature

**BRACKET ARM**
Holophane Portland Series steel (custom)
Top Bracket Arm: Steel crossarm with a post-top fitting for a 3 1/2" by 8" tenon
Model: PD42-CA-RAL6012
Lower Bracket Arm: Steel dual crossarm
Model: PD69-CA-RAL6012

**SLIP FITTER**
Holophane
Model: WLLF200S-CA-RAL6012
2-3/8" O.D. with swivel cast fitter.

**LIGHTING POLE**
Holophane
Model: PM-18-CSB-CA-RAL6012

Tapered steel pole smooth shaft rated for a 90mph wind load with a 1.3 gust factor. Provide four hot-dipped galvanized steel L-type anchor bolts. Lighting pole shall be hot dip galvanized prior to powder coat paint.

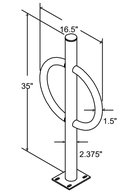
**DECORATIVE BASE**
Holophane
Model: PM18CSB-CA-RAL6012
Decorative clamshell cast aluminum base. Hardware shall be stainless steel.

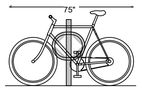
**DIMENSIONS**
Overall Height = 30' 0"
Upper Bracket Arm Length = 3' 6"
Lower Bracket Arm Length = 2' 10 1/2"
Base Diameter = 18"

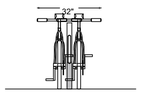
**FINISH**
Dark Green: RAL-6012 (custom)

**APPLICATION**
Street/pedestrian lighting combination.
Spacing:
One side: 90' - 100' on center
Alternating sides: 175' - 225' on center
Double-arm bracket arms parallel to sidewalk.

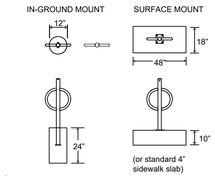
| Date: **March, 2019** | **CITY OF PORTLAND, MAINE** TECHNICAL MANUAL | **MUNICIPAL STREET LIGHTING STANDARDS** SECTION 10 | Figure: **X-5F** |
|---|---|---|---|
| Revised Date: | **DOWNTOWN COMBO** | | |



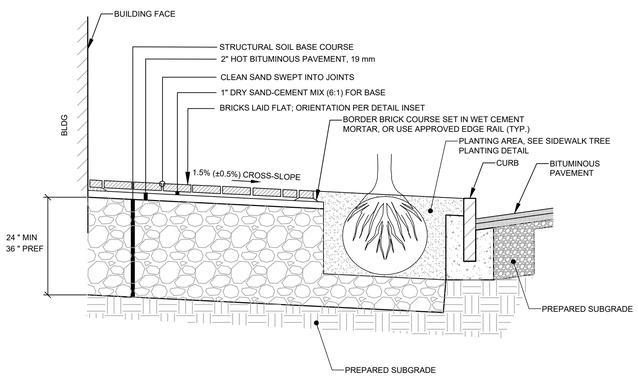




| | |
|---|---|
| CAPACITY | 2 BIKES |
| MATERIALS | CENTERBEAM: 2" SCHEDULE 40 PIPE (2.375" OD)<br>RING: 1.5" OD 11 GAUGE TUBE |
| FINISHES | ☐ GALVANIZED<br>AN AFTER FABRICATION HOT DIPPED GALVANIZED FINISH IS OUR STANDARD OPTION.<br>☐ POWDER COAT<br>OUR POWDER COAT FINISH ASSURES A HIGH LEVEL OF ADHESION AND DURABILITY BY FOLLOWING THESE STEPS:<br>1. WASH WITH CAL CLEAN 947 PREMIUM ALKALINE CLEANER/ DEGREASER AND TREAT WITH ADVANTECH P610A ZIRCONIUM FOR CORROSION REDUCTION AND PAINT ADHESION<br>2. EPOXY PRIMER ELECTROSTATICALLY APPLIED<br>3. FINAL THICK TGIC POLYESTER POWDER COAT<br>☐ STAINLESS<br>STAINLESS STEEL: 304 GRADE STAINLESS STEEL MATERIAL IN A SATIN FINISH, HIGH POLISHED SHINE, OR POWDER COAT OVER UNPOLISHED STAINLESS.<br>☐ SATIN FINISH (#4) - BRUSHED (OUR STANDARD)<br>☐ ELECTROPOLISHED - HIGH POLISHED SHINE<br>☐ POWDER COAT OVER UNPOLISHED STAINLESS |
| MOUNT OPTIONS | ☐ SURFACE<br>FOOT MOUNT HAS A 5" X 6" X .25" FOOT WITH FOUR ANCHORS PER FOOT. SPECIFY FOOT MOUNT FOR THIS OPTION.<br>TAMPER-RESISTANT FASTENERS AVAILABLE UPON REQUEST<br>☐ IN-GROUND<br>IN-GROUND MOUNT IS EMBEDDED INTO CONCRETE BASE. SPECIFIY IN-GROUND MOUNT FOR THIS OPTION |




## BIKE RACK
NOT TO SCALE

©2024




## TREE PLANTING PIT WITH STRUCTURAL SOIL BASE
NOT TO SCALE

## STRUCTURAL SOIL SPECIFICATION

1.1 CLAY LOAM

A. SOIL TO PRODUCE CU-STRUCTURAL SOIL®/ SHALL BE A "LOAM" WITH A MINIMUM CLAY CONTENT OF 20% OR A "CLAY LOAM" BASED ON THE "USDA CLASSIFICATION SYSTEM" AS DETERMINED BY MECHANICAL ANALYSIS (ASTM D-422) AND IT SHALL BE OF UNIFORM COMPOSITION, WITHOUT ADMIXTURE OF SUBSOIL. IT SHALL BE FREE OF STONES, LUMPS, PLANTS AND THEIR ROOTS, DEBRIS AND OTHER EXTRANEOUS MATTER. IT SHALL NOT CONTAIN TOXIC SUBSTANCES HARMFUL TO PLANT GROWTH. CLAY LOAM SHALL CONTAIN NOT LESS THAN 2% OR MORE THAN 6% ORGANIC MATTER AS DETERMINED BY THE LOSS ON IGNITION OF OVEN-DRIED SAMPLES. TEST SAMPLES SHALL BE OVEN-DRIED TO A CONSTANT WEIGHT AT A TEMPERATURE OF 230 DEGREES F., PLUS OR MINUS 9 DEGREES.
B. MECHANICAL ANALYSIS FOR THE LOAM OR CLAY LOAM SHALL BE AS FOLLOWS:

| TEXTURAL CLASS | % OF TOTAL WEIGHT |
|---|---|
| GRAVEL | LESS THAN 5% |
| SAND | 20-50% |
| SILT | 20-45% |
| CLAY | 20-40% |

C. CHEMICAL ANALYSIS: MEET, OR BE AMENDED TO MEET THE FOLLOWING CRITERIA:
1. PH BETWEEN 5.5 TO 6.5 WHEN USING LIMESTONE, UP TO 7.2 WHEN USING GRANITE OR OTHER NON-LIMESTONE CRUSHED STONE.
2. PERCENT ORGANIC MATTER 2% - 6% BY DRY WEIGHT
3. ADEQUATE NUTRIENT LEVELS
4. SOLUBLE SALT LESS THAN 1.5 MMHO/CM
5. CATION EXCHANGE CAPACITY (CEC) GREATER THAN 10
6. CARBON/NITROGEN RATIO LESS THAN 33:1
D. LOAM OR CLAY LOAM SHALL NOT COME FROM USDA - CLASSIFIED PRIME FARMLAND.

1.1 CRUSHED STONE

A. THE SIZE OF THE CRUSHED STONE SHALL BE 0.75 INCHES TO 1.5 INCHES ALLOWING FOR UP TO 10% BEING GREATER THAN 1.5 INCHES, AND UP TO 10% LESS THAN 0.75 INCHES.
B. ACCEPTABLE AGGREGATE DIMENSIONS WILL NOT EXCEED 2.5:1.0 FOR ANY TWO DIMENSIONS.
C. MINIMUM 90% WITH TWO OR MORE FRACTURED FACES.
D. RESULTS OF AGGREGATE SOUNDNESS LOSS TEST SHALL NOT EXCEED 18%.
E. LOSSES FROM LA ABRASION TESTS SHALL NOT EXCEED 40%.

1.2 HYDROGEL

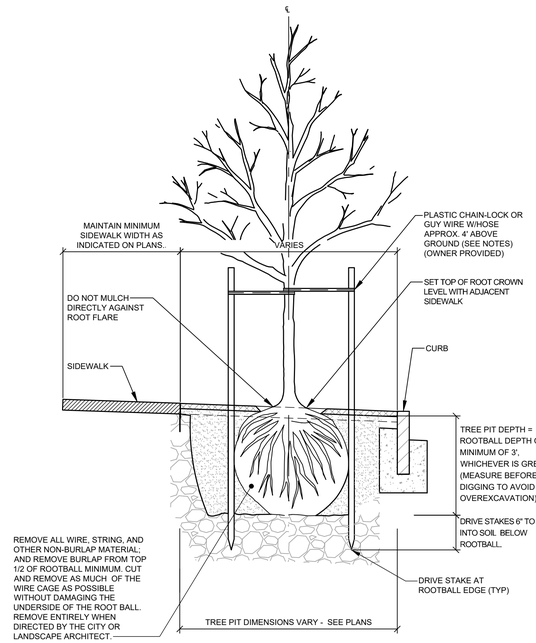
A. HYDROGEL SHALL BE A COATED POTASSIUM PROPENOATE-PROPENAMIDE COPOLYMER (GELSCAPE® /HYDROGEL TACKIFIER) AS MANUFACTURED BY AMEREQ, INC. 800-832-8788.

1.1 CU-STRUCTURAL SOIL®

A. A UNIFORMLY BLENDED URBAN TREE MIXTURE OF CRUSHED STONE, CLAY LOAM AND GELSCAPE®/ HYDROGEL TACKIFIER, AS PRODUCED BY AN AMEREQ-LICENSED COMPANY, MIXED IN THE FOLLOWING PROPORTION:

| MATERIAL | UNIT OF WEIGHT |
|---|---|
| SPECIFIED CRUSHED STONE | 100 UNITS DRY WEIGHT |
| SPECIFIED CLAY LOAM | 20 - 25 UNITS (TO ACHIEVE MINIMUM CBR OF 50) |
| GELSCAPE®/ HYDROGEL TACKIFIER | 0.035 UNITS DRY WEIGHT |

ASTM D698/AASHTO T-99 OPTIMUM MOISTURE




## SIDEWALK TREE PLANTING DETAIL
NOT TO SCALE

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR PE 16677
STATE OF MAINE REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER P. TAYLOR
No. 16677
04/08/2025

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

DETAILS
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS LLC
2270 CRANBERRY ROAD
WEST SENECA, NY 14224

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | N.T.S. |
| PROJECT | 19371-05 |

SHEET C-506

19371-05 D.dwg, TAB:C-506 DETAILS

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# GENERAL NOTES:

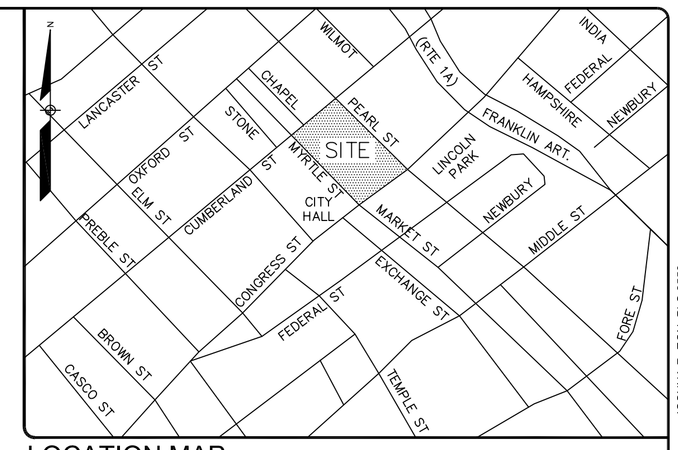
1. THE RECORD OWNER OF THE PARCEL IS 385 CONGRESS LLC BY DEED DATED OCTOBER 20, 2017 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 34401, PAGE 214.
2. THE PROPERTY IS SHOWN AS LOT 1 ON THE CITY OF PORTLAND TAX MAP 27 AND IS LOCATED IN THE B3 DOWNTOWN BUSINESS DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE B3 DISTRICT ARE AS FOLLOWS:

| | |
|---|---|
| MINIMUM LOT SIZE: | N/A |
| MINIMUM STREET FRONTAGE: | 15 FEET |
| MINIMUM FRONT YARD: | N/A |
| MINIMUM SIDE YARD: | N/A |
| MINIMUM REAR YARD: | N/A |
| MAXIMUM BUILDING HEIGHT: | 150 FEET |
| MAXIMUM LOT COVERAGE: | 100% |

* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.

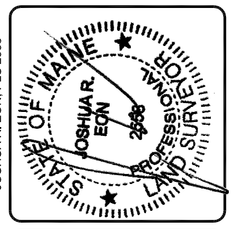
4. TOTAL AREA OF PARCEL IS APPROXIMATELY 2.26 ACRES.
5. THE BOUNDARY IS BASED ON PLAN REFERENCE 6F. TOPOGRAPHIC INFORMATION SHOWN HEREON. SEBAGO TECHNICS INC. UPDATED RECORDS RESEARCH FROM 2009 TO DATE REGARDING THE BOUNDARY INFORMATION.
6. IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNICS, INC. OCTOBER , 2019.
7. PLAN REFERENCES:
   - A. PLAN OF CITY BUILDING LOT, PORTLAND, ME, DATED AUGUST 1908 BY THE CITY OF PORTLAND ENGINEER, AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   - B. PORTLAND DEPARTMENT OF PUBLIC WORKS STREET WORKSHEETS AND BLUESHEETS FOR STREETS BOUNDING THE LOCUS PARCEL AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   - C. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, DATED JULY 1964 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 663/2.
   - D. NEW MECHANICAL BUILDING, GUY GANNETT PUBLISHING COMPANY, PORTLAND, ME, TUNNEL PLAN AND SECTIONS BY LOCKWOOD, GREENE ENGINEERS, INC, REVISED THROUGH MAY 12, 1965 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 203/2.
   - E. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, REVISED THROUGH FEBRUARY 6, 1973 AND ON FILE WITH OWEN HASKELL INC.
   - F. ALTA/ACSM LAND TITLE SURVEY OF CONGRESS STREET SITE, 385 CONGRESS STREET, PORTLAND, ME DATED JULY 1, 2009 BY SEBAGO TECHNICS INC, PROJECT NUMBER 09235.
8. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NGVD29 PER CITY STANDARDS AS VERIFIED BY A UNITED STATES COAST & GEODETIC SURVEY BRASS DISK LOCATED IN A GRANITE BLOCK OF THE CITY HALL BUILDING HAVING A PUBLISHED ELEVATION OF 69.66' (NAVD88 68.95')
9. THE CITY OF PORTLAND DISCONTINUED THAT PORTION OF CHAPEL STREET ''RUNNING FROM CONGRESS STREET TO CUMBERLAND STREET'' BY ORDER OF CITY COUNCIL ON FEBRUARY 5, 1973 AND RECORDED AT THE CITY OF PORTLAND RECORDS IN VOLUME 89, PAGE 61, PUBLIC AND PRIVATE RIGHTS MAY EXIST FOR PUBLIC HIGHWAY AND UTILITIES THAT STILL LIE WITHIN THE LIMITS OF CHAPEL STREET. SEBAGO TECHNICS, INC. SUGGEST LEGAL COUNSEL BE SOUGHT TO CLARIFY THE INTEREST OF OTHERS IN THESE RIGHTS.
10. PURSUANT TO A CONVERSATION BETWEEN SEBAGO TECHNICS, INC. AND THE PORTLAND WATER DISTRICT, THE WATER LINE SHOWN AS BEING LOCATED IN THE DISCONTINUED PORTION OF CHAPEL STREET HAS BEEN REMOVED AND NO LONGER EXISTS.
11. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
12. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 230051 0013 B, HAVING AN EFFECTIVE DATE OF JULY 17 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF AREAS OF MINIMAL FLOODING.
13. BENCHMARK:

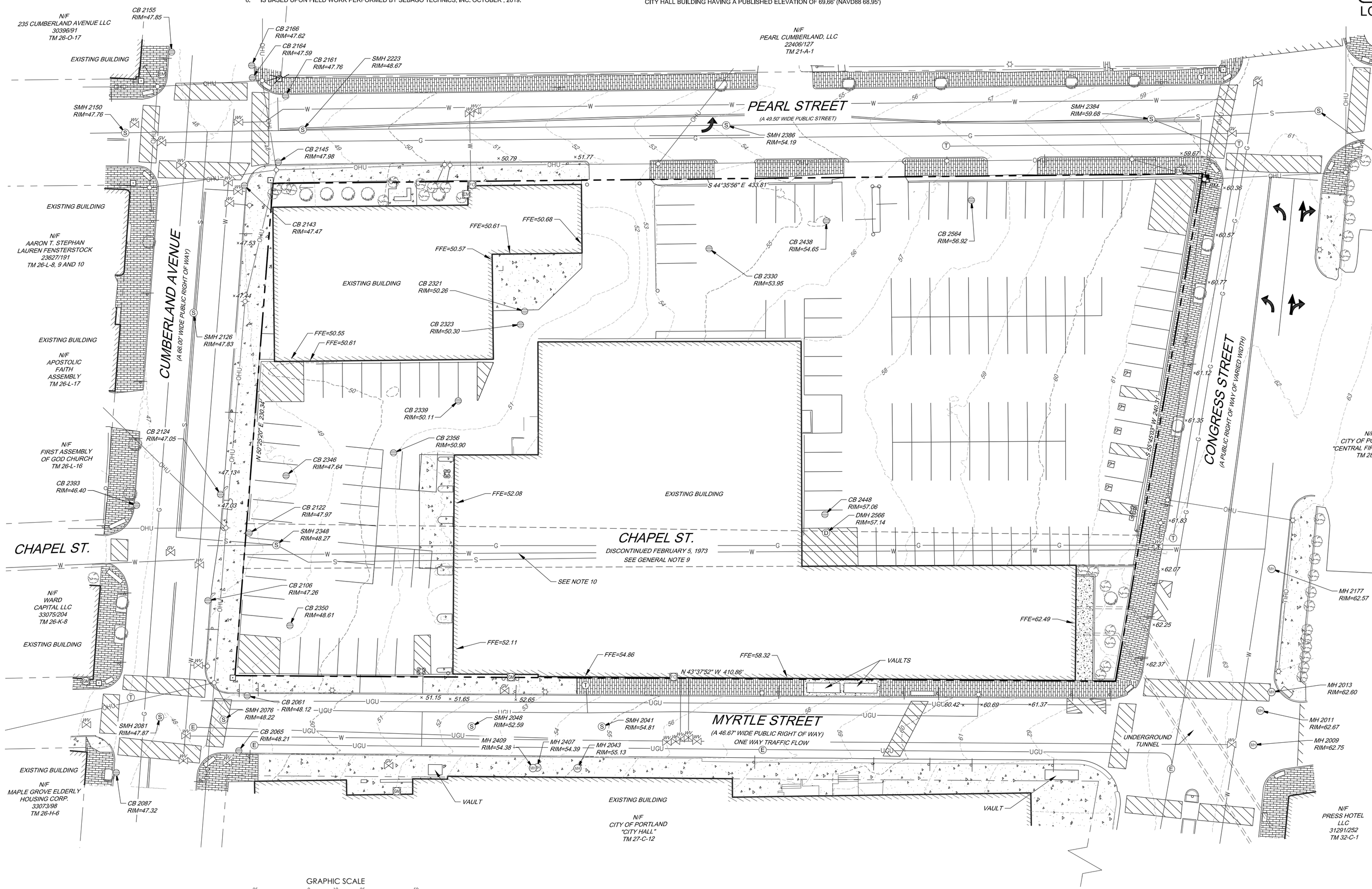
    BM-1 EASTERLY BOLT AT BASE OF UTILITY POLE ELEVATION: 61.55 (NGVD29)




LOCATION MAP N.T.S.

JOSHUA R. EON, PLS 2558




## LEGEND

EXISTING

- PROPERTY LINE/R.O.W.
- ABUTTER LINE/R.O.W.
- DEED LINE/R.O.W.
- N/F NOW OR FORMERLY
- BUILDING
- DECK/STEPS/ OVERHANG
- EDGE PAVEMENT
- EDGE CONCRETE
- PAVEMENT PAINT
- CURB LINE
- 120 118 CONTOURS
- DECIDUOUS TREE
- SHRUB
- BOLLARD
- SIGN
- G GAS
- GAS GATE VALVE
- GAS METER
- W WATER
- WATER GATE VALVE
- HYDRANT
- S SANITARY SEWER
- SANITARY MANHOLE
- UNKNOWN MANHOLE
- D DRAINAGE MANHOLE
- CATCH BASIN
- OHU OVERHEAD UTILITY
- UGU UNDERGROUND UTILITY
- E ELECTRICAL MANHOLE
- ELECTRIC METER
- COMMUNICATIONS BOX
- T TELEPHONE MANHOLE
- LIGHT POLE
- UTILITY POLE
- GUY WIRE
- BM-1 BENCHMARK
- FIRE DEPARTMENT HOOKUP
- GRANITE MONUMENT

GRAPHIC SCALE

25 0 12 25 50

(IN FEET)
1 INCH = 25 FT.

*PROJECT BENCHMARK*
USC&G BRASS DISK SET IN GRANITE STEP.
DESIGNATION: TIDAL 38 STA 84
STAMPED ''1919/38''
NAVD 88 ELEVATION = 68.95'
NGVD29 ELEVATION = 69.66'

## SURVEYOR'S STATEMENT

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT WAS DONE IN ACCORDANCE WITH CHAPTER 90, PART 1 (PROFESSIONAL STANDARDS OF PRACTICE) AND PART 2 (TECHNICAL STANDARDS OF PRACTICE) OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

JOSHUA R. EON, PLS 2558 12/16/2019

| REV: | BY: | DATE: | STATUS: |
|---|---|---|---|
| A. | JRE | 12/16/2019 | ISSUED TO CLIENT FOR REVIEW |
| B. | JRE | 1/09/2020 | CORRECTED SPACE AND BULK CRITERIA PER PM REQUEST |
| C. | JRE | 1/20/2020 | MINOR DRAFTING REVISIONS PER PM REQUEST |
| D. | JRE | 2/7/2020 | MINOR DRAFTING REVISIONS PER PM REQUEST, ADDED NOTE 9 |
| E. | JRE | 2/10/2020 | ADDED NOTE 10 |
| F. | JRE | 2/20/2020 | ADDED STRUCTURE INFO AND MINOR DRAFTING REVISIONS |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC., ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

EXISTING CONDITIONS PLAN
OF:
CONGRESS / PEARL BLOCK
CONGRESS STREET AND PEARL STREET
PORTLAND, MAINE 04101
FOR RECORD OWNER:
385 CONGRESS STREET, LLC.
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | - |
| DRAWN | RHS/TSL |
| CHECKED | JRE/CDM |
| DATE | 12/16/19 |
| SCALE | 1" = 25' |
| PROJECT | 19371 |

SHEET 1 OF 2

19371EC.dwg, TABEC1

CUMBERLAND AVENUE

223'-6 1/2"

MERRILL AUDITORIUM

MYRTLE STREET

PEARL STREET

174'-4 3/4"

155'-9"

MAIN ENTRANCE

SIDEWALK EXTENSION

VIP PREMIUM ENTRANCE

PROPERTY LINE

BI-FOLD GATE

BUS ENTRANCE

SERVICE ENTRANCE

SCREEN WALL AT EL. 66'-8"

PROPOSED PARKING GARAGE (NIC)

ENTRY VESTIBULE 100

MAIN LOBBY 102

ELECT. ROOM 104

COATS 103

BOX OFFICE 105

TICKET MGR. 106

STANDING 153 CAPACITY

BI-FOLD PARTITION WITH EGRESS DOORS

LOBBY BAR #1 109

BAR - 6 POS

BAR #1 STOR. 110

TOILET 111

TOILET 112

MEDIC / SECURITY 107

VIP LOBBY CORRIDOR 114

P.E. #1

ELEVATOR CORRIDOR 113

STORAGE ROOM 108

JAN 117

GENDER NEUTRAL SINKS 118

VIP VINYL LOBBY 115

ACCESS CORRIDOR 116

MENS TOILET 119

MENS - 19 WC

CHAIR STORAGE 120

WOMENS TOILET 121

WOMENS 17 WC

STAIR 4

BUS PKG. CORRIDOR 146

CENTRAL GREASE SEPARATOR

GAS & OIL SEPARATOR

CMU TO EL. 54'-0" W/ SCREEN WALL ABOVE

SLOPE @ +/- 3.14%

BUS PARKING 147

MERCH

THEATER HOUSE 122

MIX POSITION

STAIR 1

BAR - 9 POS

HOUSE BAR #2 125

BAR #2 STOR 126

WATER SERVICE 127

MAIN ELECTRICAL 128

LEVEL 2 ABOVE

TOUR PROD. 129

TOILET ROOM 130

STORAGE ROOM 131

GAS 132

STAIR 2

T/S 1 133

N. STAGE CORRIDOR 135

TOUR PROD. 137

MDF ROOM 136

DRESSING RM 1 134

43'-6 5/8"

STAGE 138

46'-0"

55'-4"

HOUSE BAR #1 123

BAR - 10 POS

BAR #1 STOR. 124

RAMP UP

RAMP DN

SE ELEV. VESTIBULE 140

SE #2

ELEV. CLOSET 141

STAIR 3

ELECTRICAL PANELS

DOCK VESTIBULE 139

ROLL-DOWN DOOR

HOLDING 142

TRASH & RECYCLABLE 145

LOADING DOCK 144

LEVELER

20'-0"

24'-0"

SLOPE @ 2.05%

LOADING BAYS 1 & 2 143

SLOPE @ 5%

SLOPE UP

7'-0"

2'-5"

North

0 2' 4' 8' 16'



# PORTLAND MUSIC HALL

PORTLAND , MAINE

Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**VANDEMOER**
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
8 PENN CENTER, SUITE 1902
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
25017 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES**
69-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**WISS, JANNEY, ELSTNER ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 500
BOSTON, MA 02210

Specifications:
**VITA MAIN STREET**
176 MAIN STREET
BOXFORD, MA 01921

SEAL:

REVISIONS:

| | |
|---|---|
| 12/18/24 | PLANNING SUB. |
| 3/25/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

## GROUND LEVEL 1 PLAN

SCALE: As Noted.
SHEET #:

**A2.1**

# PORTLAND MUSIC HALL
PORTLAND , MAINE

223'-6 1/2"
34'-1"
CANOPY
BEACON SIGN
44'-4"
CANOPY
7'-0"
CANOPY
174'-4 3/4"
BLADE SIGN
PREMIUM TERRACE
1,738 sf
EL. 65'-4"
ROOF
(OPTIONAL EVENT
SPACE)
JAN 201
TOILET 202
TOILET 203
TOILET 204
STOR 205
TOILET 206
TOILET 207
R.R. CORR. 200
STAIR 1
UP
DN
EL. 71'-1 5/8"
EL. 65'-4"
STAFF CHECK IN 208
STORAGE ROOM 209
PLATFORM #2
MEZZANINE LEVEL ABOVE
PREMIUM SEATING 212
PLATFORM #3
BAR -4 POS
VINYL BAR #4 210
VINYL LOUNGE 211
EL. 65'-4"
EL. 66'-3"
BOX SEATS
PLATFORM #1
EL. 68'-3"
EL. 65'-4"
EL. 62'-1 3/4"
EL. 61'-1"
OFFICE CORRIDOR 242
EL. 65'-4"
TOILET ROOM 243
ROOF ACCESS 239
DN
STAIR 2
OPEN OFFICES 240
OFFICE WORK SPACE 241
GROUP OFF. 4 235
OFFICE 1 236
OFFICE 2 237
OFFICE 3 238
OPEN BELOW
OPEN BELOW
ELECT. ROOM 219
WATER HEATERS 218
ELEV. CLOSET 217
PE #1
ELEVATOR #1 LOBBY 216
BAR #4 STOR 213
TOILET 215
FAMILY TOILET 214
WEST BOH CORRIDOR 220
IDF ROOM 221
LIQUOR STORAGE 223
STAIR 5
UP
GENDER NEUTRAL SINKS 224
PLATFORM #4
CANOPY
STAIR 4
DN
EL. 65'-4"
UP
EL. 58'-11 1/2"
2'-5"
EL. 71'-1 1/2"
UP
CENTRAL KITCHEN 222
LAYOUT PER PARAMOUNT CATERING KITCHEN
MENS TOILET 225
MENS - 7 WC
WOMENS TOILET 226
WOMENS - 8 WC
SERVICE BAR 227
EL. 65'-4"
UP
RAMP
RAMP
EL. 67'-8"
PLATFORM #5
INDUSTRY BOX
EL. 65'-4"
ELEVATOR #2 LOBBY 234
SE #2
LARGE SUITE
DRESSING RM 2 231
DN
UP
STAIR 3
EL. 65'-4"
DN
T/S 2 232
ARTIST CORRIDOR 233
MEDIUM SUITE
DRESSING RM 3 230
T/S 4 227
MEDIUM SUITE
DRESSING RM 4 228
T/S 3 229
OPEN AIR BUS PARKING BELOW
TRASH ROOM ROOF
OPEN BELOW
155'-9"
225'-7"
North
0 2' 4' 8' 16'

Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**BVH INC.**
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
8 PENN CENTER, SUITE 1902
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
25217 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES**
60-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**RDH BUILDING SCIENCE ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 320
BOSTON, MA 02210

Specifications:
**WIL-SPEC LLC**
375 MAIN STREET
BOXFORD, MA 01921

D'AGOSTINO IZZO QUIRK ARCHITECTS

SEAL:

REVISIONS:

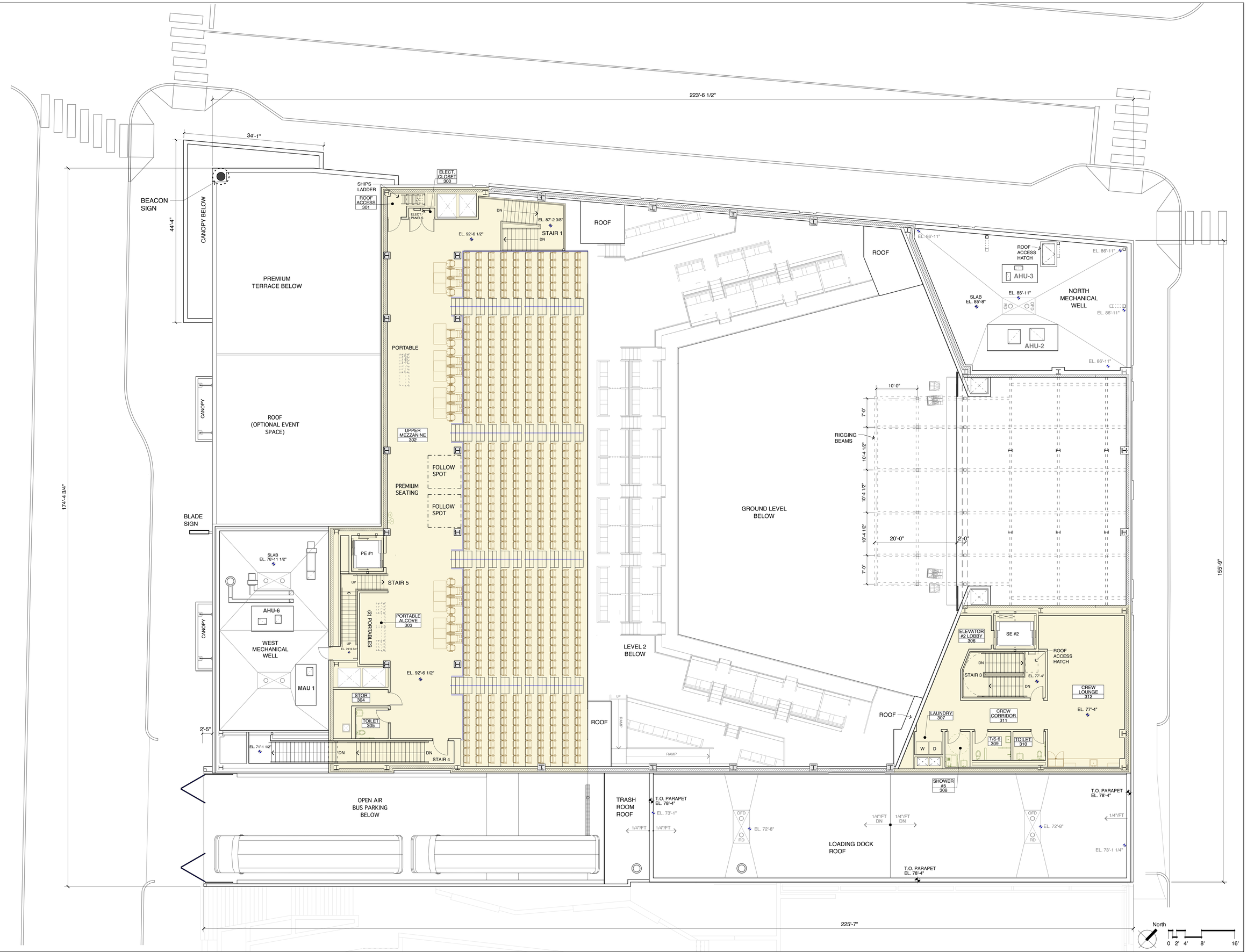
| | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 3/25/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**LEVEL 2 PLAN**

SCALE: As Noted.
SHEET #:

**A2.2**




# PORTLAND MUSIC HALL

PORTLAND , MAINE

Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK, ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**VANNUCCI**
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
8 PENN CENTER, SUITE 1902
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
25017 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES, INC.**
65 E COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**WISS, JANNEY, ELSTNER ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 300
BOSTON, MA 02210

Specifications:
**WS.SPEC LLC**
375 MAIN STREET
BOXFORD, MA 01921

DAIQ ARCHITECTS

SEAL:

| REVISIONS: | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 3/25/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

## MEZZANINE LEVEL PLAN

SCALE: As Noted.
SHEET #:

**A2.3**

CUMBERLAND AVENUE

223'-6 1/2"

MERRILL AUDITORIUM

MYRTLE STREET →

PEARL STREET

155'-9"

133'-10"

174'-4 3/4"

22'-0" SETBACK

34'-1"

BEACON SIGN

44'-4"

CANOPY BELOW

PREMIUM TERRACE BELOW

ROOF ACCESS HATCH

T.O. PARAPET EL. 106'-0"

28'-6"

OFD

RD

28'-10"

EL. 104'-0 1/2" T.O. SLAB

AHU-1-1

ROOF (OPTIONAL EVENT SPACE)

CANOPY

1/4"/FT

T.O. PARAPET EL. 106'-0"

EL. 103'-8 1/8" T.O. SLAB

4'-7 5/8"

BLADE SIGN

T.O. PARAPET EL. 90'-10"

AHU-6

WEST MECHANICAL WELL

MAU 1

SCUP.

STAIR ROOF

SCUPPER & DOWNSPOUT ELEVATOR PENTHOUSE

T.O. PARAPET EL. 106'-0"

20'-0"

10'-4"

AHU-1-2

AHU-1-3

41'-0"

17'-6"

EL. 104'-2 11/16" T.O. SLAB

EL. 103'-8 1/8" T.O. SLAB

OPEN AIR BUS PARKING BELOW

TRASH ROOM ROOF

T.O. PARAPET EL. 74'-8"

EL. 73'-1"

EL. 104'-8" T.O. SLAB

EL. 104'-0" L.P.

EL. 103'-10 1/4" T.O. SLAB

T.O. PARAPET EL. 106'-0"

EL. 72'-8"

1/4"/FT DN

LOADING DOCK ROOF BELOW

T.O. PARAPET EL. 74'-8"

EL. 104'-7 1/2" T.O. SLAB

EL. 98'-6" T.O. SLAB

T.O. PARAPET EL. 106'-0"

EL. 86'-11"

T.O. SCREEN WALL EL. 98'-10"

ROOF ACCESS HATCH

AHU-3

NORTH MECHANICAL WELL

AHU-2

T.O. PARAPET EL. 99'-0"

SMOKE EXHAUST

SCUP.

EL. 97'-8 5/8" T.O. SLAB

T.O. PARAPET EL. 99'-0"

SMOKE EXHAUST

T.O. PARAPET EL. 98'-10"

EL. 90'-2"

ELEVATOR PENTHOUSE ROOF

ROOF ACCESS HATCH

SCUPPER & DOWNSPOUT

SLAB EL. 89'-4"

AHU-4

T.O. SCREEN WALL EL. 99'-0"

T.O. PARAPET EL. 78'-4"

EL. 73'-1 1/4"

225'-7"

North

0 2' 4' 8' 16'

# PORTLAND MUSIC HALL

PORTLAND , MAINE

Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
75 JOHN ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**BECKER**
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
8 PENN CENTER, SUITE 1902
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
2527 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES**
65 E COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**RDH BUILDING SCIENCE ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 300
BOSTON, MA 02210

Specifications:
**WIL-SPEC LLC**
370 MAIN STREET
BOXFORD, MA 01921

D'AGOSTINO IZZO QUIRK ARCHITECTS

SEAL:

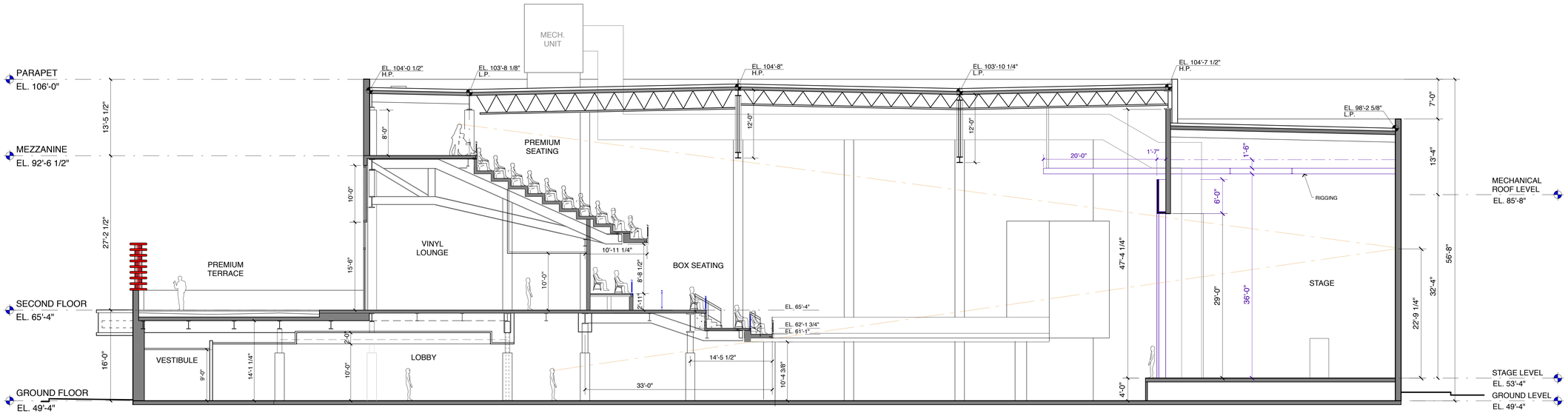
| REVISIONS: | | |
|---|---|---|
| | 12/18/24 | PLANNING SUB. |
| | 3/25/25 | REV PLANNING SUB. |

DAIQ PROJECT #: 24003
DRAWING TITLE:

## ROOF PLAN

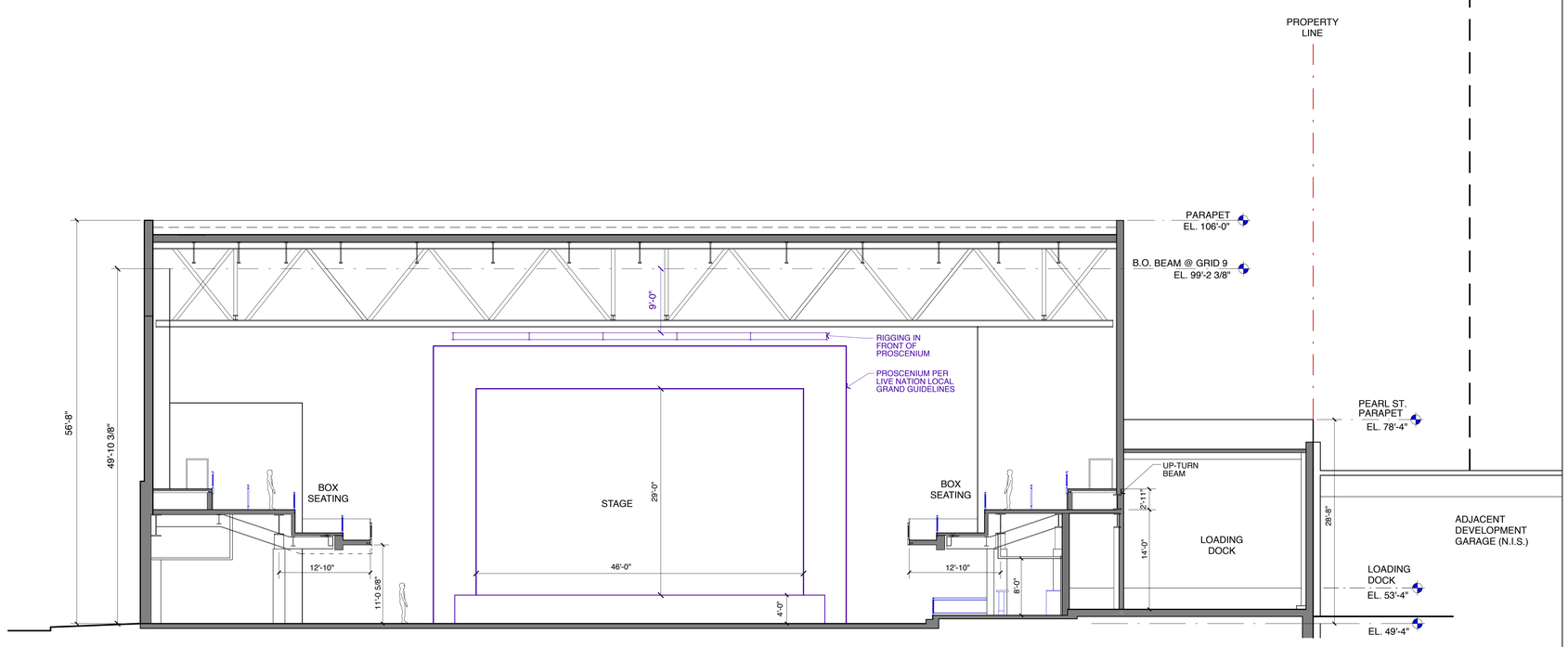
SCALE: As Noted.
SHEET #:

**A2.4**




1 **NORTH-SOUTH SECTION**

SCALE: 1/8" = 1'-0"




2 **EAST-WEST SECTION**

SCALE: 1/8" = 1'-0"

# PORTLAND MUSIC HALL
PORTLAND , MAINE


Owner:
**PORTLAND MUSIC HOLDINGS**

Project Architect:
**D'AGOSTINO IZZO QUIRK ARCHITECTS, INC.**
1310 BROADWAY
SOMERVILLE, MA 02144

Structural Engineer:
**McNAMARA SALVIA, INC.**
160 FEDERAL STREET
BOSTON, MA 02210

Civil Engineer & Landscape Architecture:
**SEBAGO**
ONE ROBY ROBERTS ROAD, SUITE 4A
SOUTH PORTLAND, ME 04106

MEP Engineers:
**BVH INC.**
88 BLACK FALCON AVENUE, SUITE 210
BOSTON, MA 02210

Life Safety & Fire Protection Consultant:
**HOWE ENGINEERS**
101 LONGWATER CIR #203
NORWELL, MA 02061

Acoustical Consultant:
**METROPOLITAN ACOUSTICS**
1 BELMONT AVE, SUITE 1900
PHILADELPHIA, PA 19103

Lighting Consultants:
**VISUAL TERRAIN, INC.**
25017 AVENUE TIBBITTS
SANTA CLARITA, CA 91355

Vertical Transportation Consultant:
**LERCH BATES**
60-B COMMERCIAL WHARF
EAST BOSTON, MA 02110

Exterior Envelope Consultant:
**WISS, JANNEY, ELSTNER ASSOCIATES, INC.**
311 SUMMER STREET, SUITE 300
BOSTON, MA 02210

Geo-Engineers:
**HALEY WARD LLC**
370 MAIN STREET
BOXFORD, MA 01921


D'AQ ARCHITECTS

SEAL:

REVISIONS:

| | 3/25/25 | REV. PLANNING SUB |
|---|---|---|
| | | |

DAIQ PROJECT #: 24003
DRAWING TITLE:

**BUILDING SECTIONS**

SCALE: As Noted.
SHEET #:

**A3.3**

## STRUCTURE TABLE

| POINT # | STRUCTURE TYPE | RIM EL. | INV. | INV. EL. | SIZE | TYPE | LOCATION (N=12) | COMMENTS |
|---|---|---|---|---|---|---|---|---|
| 2041 | SMH | 54.78 | IN | 49.43 | 12 | VIT CLAY | 3 | |
| | | | IN | 49.49 | 4 | VIT CLAY | 6 | |
| | | | IN | 46.39 | 10 | VIT CLAY | 4 | |
| | | | IN | 45.56 | UNK | UNK | 5 | FULL OF SEDIMENT |
| | | | OUT | 45.34 | UNK | UNK | 11 | FULL OF SEDIMENT |
| | | | SHELF | 45.81 | | | | |
| 2048 | SMH | 52.54 | IN | 43.04 | 18 | VIT CLAY | 5 | |
| | | | IN | 35.36 | UNK | UNK | 5 | |
| | | | IN | 36.34 | 10 | PVC | 3 | |
| | | | IN | 36.39 | UNK | STEEL | 4 | TOP OF PIPE |
| 2061 | CBR | 48.09 | OUT | 44.12 | 8 | PVC | 7 | HOOD |
| | | | SUMP | 42.12 | | | | |
| 2065 | CBR | 48.25 | IN | 44.81 | 8 | VIT CLAY | 8 | |
| | | | OUT | 44.71 | 8 | UNK | 2 | |
| | | | SUMP | 40.71 | | | | |
| 2076 | SMH | 48.19 | IN | 41.31 | 12 | VIT CLAY | 4 | |
| | | | IN | 40.94 | 8 | VIT CLAY | 8 | |
| | | | IN | 48.22 | 0 | NONE | NONE | 2 INVERTS & SHELF FURTHER THAN 25' |
| 2081 | SMH | 47.90 | IN | 38.77 | 18 | VIT CLAY | 4 | |
| | | | IN | 24.67 | 18 | VIT CLAY | 4 | |
| | | | OUT | 24.67 | 18 | VIT CLAY | 10 | |
| | | | SHELF | 25.77 | | | | |
| 2106 | CBR | 47.27 | OUT | 43.46 | UNK | UNK | 10 | HOOD |
| | | | SUMP | 40.26 | | | | |
| 2124 | CBR | 47.00 | IN | 44.75 | 12 | VIT CLAY | 6 | |
| | | | OUT | 47.05 | 0 | NONE | NONE | NO OUT VISIBLE |
| | | | SUMP | 40.05 | | | | |
| 2126 | SMH | 47.80 | IN | 39.41 | 12 | VIT CLAY | 8 | |
| | | | OUT | 39.32 | 12 | VIT CLAY | 2 | |
| | | | SHELF | 40.03 | | | | |
| 2143 | CBR | 47.40 | OUT | 45.27 | 10 | VIT CLAY | 3 | |
| | | | SUMP | 45.17 | | | | |
| 2145 | CBR | 47.95 | IN | 44.48 | 8 | VIT CLAY | 9 | |
| | | | OUT | 43.78 | 12 | VIT CLAY | 12 | |
| | | | SUMP | 42.98 | | | | |
| 2150 | MH | 47.77 | IN | 37.46 | 18 | VIT CLAY | 4 | |
| | | | OUT | 37.21 | 18 | VIT CLAY | 10 | |
| | | | SHELF | 38.11 | | | | |
| 2161 | CBR | 47.77 | OUT | 43.36 | 12 | UNK | 8 | |
| | | | SUMP | 40.76 | | | | |
| 2164 | CBR | 47.54 | IN | 44.26 | 8 | VIT CLAY | 4 | |
| | | | IN | 44.19 | 8 | VIT CLAY | 2 | |
| | | | OUT | 43.49 | 12 | UNK | 9 | |
| | | | SUMP | 40.09 | | | | |
| 2166 | CBR | 47.59 | OUT | 44.42 | 8 | VIT CLAY | 8 | |
| | | | SUMP | 44.02 | | | | |
| 2223 | SMH | 48.67 | IN | 39.72 | 15 | VIT CLAY | 4 | |
| | | | OUT | 39.62 | 15 | VIT CLAY | 10 | |
| | | | SHELF | 40.77 | | | | |
| 2386 | SMH | 54.12 | IN | 44.67 | 15 | VIT CLAY | 4 | |
| | | | OUT | 44.62 | 15 | VIT CLAY | 10 | |
| | | | SHELF | 45.69 | | | | |

JOSHUA R. EON, PLS 2558

STATE OF MAINE
JOSHUA R. EON
2558
PROFESSIONAL LAND SURVEYOR

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| E. | JRE | 2/10/2020 | ADDED NOTE 10 |
| D. | JRE | 2/7/2020 | MINOR DRAFTING REVISIONS PER PM REQUEST, ADDED NOTE 9 |
| C. | JRE | 1/20/2020 | MINOR DRAFTING REVISIONS PER PM REQUEST |
| B. | JRE | 1/08/2020 | CORRECTED SPACE AND BULK CRITERIA PER PM REQUEST |
| A. | JRE | 12/16/2019 | ISSUED TO CLIENT FOR REVIEW |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

STRUCTURE TABLE
OF:
CONGRESS / PEARL BLOCK
CONGRESS STREET AND PEARL STREET
PORTLAND, MAINE 04101
FOR RECORD OWNER:
385 CONGRESS STREET, LLC.
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | - |
| DRAWN | RHS/TSL |
| CHECKED | JRE/CDM |
| DATE | 12/16/19 |
| SCALE | 1" = 25' |
| PROJECT | 19371 |

19371EC.dwg, TAB:EC2

SHEET 2 OF 2

# PORTLAND MUSIC VENUE

## SCHEMATIC DESIGN

### SHEET INDEX


12/20/2024 - SD PHOTOMETRICS

LT-001 - COVER SHEET
LT-002 - LIGHTING GENERAL NOTES
LT-003 - CAD FIXTURE SCHEDULE
LT-004 - FUNCTIONAL RISER BLOCK DIAGRAM
LT-005 - PHOTOMETRICS

LT-110 - GROUND LEVEL 1 OVERALL PLAN
LT-111 - GROUND LEVEL 1 NW SECTOR PLAN
LT-112 - GROUND LEVEL 1 SW SECTOR PLAN
LT-113 - GROUND LEVEL 1 NE SECTOR PLAN
LT-114 - GROUND LEVEL 1 SE SECTOR PLAN

LT-120 - LEVEL 2 OVERALL PLAN
LT-121 - LEVEL 2 NW SECTOR PLAN
LT-122 - LEVEL 2 SW SECTOR PLAN
LT-123 - LEVEL 2 NE SECTOR PLAN
LT-124 - LEVEL 2 SE SECTOR PLAN

LT-130 - MEZZANINE LEVEL OVERALL PLAN
LT-131 - MEZZANINE LEVEL NW SECTOR PLAN
LT-132 - MEZZANINE LEVEL SW SECTOR PLAN
LT-133 - MEZZANINE LEVEL NE SECTOR PLAN
LT-134 - MEZZANINE LEVEL SE SECTOR PLAN

LT-140 - ROOF OVERALL PLAN
LT-141 - ROOF NW SECTOR PLAN
LT-142 - ROOF SW SECTOR PLAN
LT-143 - ROOF NE SECTOR PLAN
LT-144 - ROOF SE SECTOR PLAN

LT-210 - GROUND LEVEL 1 OVERALL RCP
LT-211 - GROUND LEVEL 1 NW SECTOR RCP
LT-212 - GROUND LEVEL 1 SW SECTOR RCP
LT-213 - GROUND LEVEL 1 NE SECTOR RCP
LT-214 - GROUND LEVEL 1 SE SECTOR RCP

LT-220 - LEVEL 2 OVERALL RCP
LT-221 - LEVEL 2 NW SECTOR RCP
LT-222 - LEVEL 2 SW SECTOR RCP
LT-223 - LEVEL 2 NE SECTOR RCP
LT-224 - LEVEL 2 SE SECTOR RCP

LT-230 - MEZZANINE LEVEL OVERALL RCP
LT-231 - MEZZANINE LEVEL NW SECTOR RCP
LT-232 - MEZZANINE LEVEL SW SECTOR RCP
LT-233 - MEZZANINE LEVEL NE SECTOR RCP
LT-234 - MEZZANINE LEVEL SE SECTOR RCP

LT-401 - NORTH & WEST EXTERIOR ELEVATIONS
LT-402 - EAST & SOUTH EXTERIOR ELEVATIONS


### EQUIPMENT AND CONTROL DEVICE SYMBOL LEGEND

ADJUSTABLE ACCENT
COLD CATHODE
DOWNLIGHT
LUMINAIRE SHOWN IN ELEVATION
FAN WITH LIGHT KIT
FLOOD DIRECTIONAL
FLOOD DIRECTIONAL WITH DUPLEX
SPOT DIRECTIONAL
SPOT DIRECTIONAL WITH DUPLEX
IN-GRADE
JUNCTION BOX - SURFACE MOUNT
JUNCTION BOX - WALL MOUNT
LAMP POST
LINEAR (CONTINUOUS)
MOVING LIGHT
MULTI-HEAD ADJUSTABLE
NEON
PENDANT MOUNT
POWER SUPPLY
FIBER OPTIC ILLUMINATOR
WINDOW BOX
SCENICALLY INTEGRATED / SPECIAL
PENDANT MOUNT LINEAR
SURFACE MOUNT LINEAR
RECESSED MOUNT LINEAR
STEP LIGHT
SURFACE MOUNT
TRACK
TRACK HEAD
UNDERWATER - RECESSED MOUNT
UNDERWATER - SURFACE MOUNT
UNDERWATER - NICHE MOUNT
WALL WASH
WALL MOUNT
WALL MOUNT WITH DUPLEX
DIMMING AND CONTROL RACK

### EQUIPMENT TYPE DESCRIPTION

| TYPE | DESCRIPTION |
|---|---|
| A | SURFACE CEILING MOUNT |
| B | WALL MOUNT |
| C | PENDANT / SUSPENDED |
| D | RECESSED OR SEMI-RECESSED CEILING MOUNT |
| F | FIBER OPTIC SYSTEM |
| G | GROUND MOUNT |
| H | SCENICALLY INTEGRATED / SCENERY MOUNT |
| J | JUNCTION BOX |
| K | STEPLIGHT |
| L | LINEAR (NON-CONTINUOUS) |
| M | CONTINUOUS / FLEXIBLE / FESTOON |
| N | ACCENT / FLOODLIGHT |
| P | POLE / LAMPPOST / BOLLARD / PEDESTAL MOUNT |
| Q | DIMMING / CONTROL EQUIPMENT |
| R | POWER SUPPLIES (REMOTE) |
| S | THEATRICAL |
| T | TRACK AND TRACK MOUNTED FIXTURES |
| U | UNDERWATER |
| V | SPECIALTY / FANS / LUMINOUS PANELS |
| W | IN GROUND / BURIAL MOUNT |
| X | PORTABLE - TABLE / FLOOR / SHELF - MAY REQUIRE ELECTRICAL OUTLET |
| Y | DECORATIVE SPECIFIED BY OTHERS |
| Z | CUSTOM AND HIGHLY THEMED - NO SUBSTITUTIONS |

### DECORATIVE EQUIPMENT SYMBOL LEGEND

DECORATIVE ELEVATION
DECORATIVE SURFACE MOUNT
DECORATIVE PENDANT
DECORATIVE WALL MOUNT
DECORATIVE WALL MOUNT WITH DUPLEX

### EQUIPMENT AND DEVICE KEY

TYPE
UNIT
EQUIPMENT TYPE
UNIT NUMBER

### SWITCH AND OUTLET PLUG-BOX KEY

| SYMBOL | DESCRIPTION |
|---|---|
| $ | SWITCH - (ADD DESIGNATOR FOR DIMMER / OCCUPANCY SENSOR) |
| $3 | SWITCH - 3 WAY |
| $C | SWITCH - CONTROL SYSTEM BUTTON STATION |
| $3D | SWITCH - 3 WAY DIMMER |
| $2D | SWITCH - 2 WAY DIMMER |
| $D | SWITCH - DIMMER |
| $K | SWITCH - KEYED |
| | DATA JACK (PROGRAMMING PORT) |
| S | SENSOR (MOTION, DAYLIGHT ETC.) |


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REVISIONS

| NO. | DATE | DESCRIPTION |
|---|---|---|
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| | | |

DATE: DATE

DRAWN BY: INITIALS

JOB NAME:

PORTLAND MUSIC HALL

PORTLAND, MAINE

RELEASE TITLE:

SCHEMATIC DESIGN

LIGHTING DESIGNER:
MICHAEL MAHLUM

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

LT-001

PROJECT NUMBER: 2432

PLOT DATE: 12/16/2024 4:37 PM

| Type | Photo | Line Drawing | Equipment | | | | | Source | | | | | Accessories | | | | Total Specification Wattage | Notes |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Description | Mounting | Total Watts | Volt | Manufacturer: Catalog # | Type | Qty | Manufacturer: Catalog # | Control Protocol | Power Supply | Type | Total Watts | Voltage | Manufacturer: Catalog # | | Atypical Mounting Requirements |
| B71 |  |  | WALL MOUNT FIXED WITH ONE (1) LED LIGHTING SOURCE, 4122 DELIVERED LUMENS, 3000K COLOR ENGINE, 80 + CRI AND INTEGRAL DRIVER. SHOULD OPERATE ON 120V-277V VOLTAGE AND BE SUPPLIED WITH A 0-10V CONTROL OPTION AND INCLUDE A MINIMUM 10-YEAR WARRANTY. TO HAVE BLACK FINISH. TO BE RATED FOR IP65 OR EQUIVALENT. SHOULD BE UL LISTED FOR WET USE OR AN APPROVED EQUIVALENT. | WALL | 30.5 | 120V-277V | RAB: SLM 26W-3000K-0-10V | LED | 1 | LED INCLUDED | 0-10V | INTEGRAL | | | | | 30.5 | |
| B91 |  |  | DECORATIVE WALL MOUNT FIXED SCONCE WITH ONE (1) LED LIGHTING SOURCE, 4000 DELIVERED LUMENS, 3000K COLOR ENGINE, 80+ CRI AND INTEGRAL DRIVER. SCONCE SHOULD OPERATE ON 120-277 VOLTAGE AND BE SUPPLIED WITH A 0-10V CONTROL OPTION AND INCLUDE A MINIMUM 5-YEAR WARRANTY. SCONCE TO HAVE ARCHITECTURAL BRONZE FINISH. | WALL | 40 | 120-277 | EVERGREEN LIGHTING: POM1340L-AB 3000K | LED | 1 | LED INCLUDED | 0-10V | INTEGRAL | | | | | 40 | COORDINATION DIMMING OPTION WITH MANUFACTURER. |
| D53A |  |  | RECESSED MOUNT FIXED WITH ONE (1) LED LIGHTING SOURCE, 2700 DELIVERED LUMENS, 3000K COLOR ENGINE, 90+ CRI, 24° OPTIC. SHOULD OPERATE ON 120-277 VOLTAGE AND BE SUPPLIED WITH A 0-10V CONTROL OPTION DOWN TO .01% AND INCLUDE A MINIMUM 5-YEAR WARRANTY WITH A 50,000 HOUR ANTICIPATED LIFE. TO HAVE CLEAR SPECULAR FINISH. SHOULD BE UL LISTED FOR WET USE OR AN APPROVED EQUIVALENT. | RECESSED | 25 | 120-277 | ACLULUX: AX4 D 27LM 30K 90CRI 24D EZB NVOLT 4DP CS SF WET | LED | 1 | LED INCLUDED | 0-10V | N/A | | | | | 25 | |
| D54A |  |  | RECESSED MOUNT FIXED WITH ONE (1) LED LIGHTING SOURCE, 2700 DELIVERED LUMENS, 3000K COLOR ENGINE, 90+ CRI, 30° OPTIC. SHOULD OPERATE ON 120-277 VOLTAGE AND BE SUPPLIED WITH A 0-10V CONTROL OPTION DOWN TO .01% AND INCLUDE A MINIMUM 5-YEAR WARRANTY WITH A 50,000 HOUR ANTICIPATED LIFE. TO HAVE CLEAR SPECULAR FINISH. SHOULD BE UL LISTED FOR DAMP USE OR AN APPROVED EQUIVALENT. | RECESSED | 25 | 120-277 | ACLULUX: AX4 D 27LM 30K 90CRI 30D EZB NVOLT 4DP CS SF WET | LED | 1 | LED INCLUDED | 0-10V | N/A | | | | | 25 | |
| L71A |  |  | SURFACE MOUNT ADJUSTABLE WITH ONE (1) LED LIGHTING SOURCE, 555 DELIVERED LUMENS, RGBA COLOR ENGINE, 30°X60° OPTIC AND REMOTE DRIVER. SHOULD OPERATE ON 100-277 VOLTAGE AND BE SUPPLIED WITH A DMX CONTROL OPTION. CONTRACTOR TO PROVIDE AND INSTALL REMOTE DRIVER IN LOCATION SHOWN IN PLANS OR RECOMMEND ALTERNATE LOCATION, TO BE APPROVED BY DESIGNER OR SYSTEM INTEGRATOR, WHILE CONFORMING TO MANUFACTURER'S RECOMMEND INSTALLATION DOCUMENTATION. TO BE RATED FOR IP66 OR EQUIVALENT. SHOULD BE UL LISTED FOR WET USE OR AN APPROVED EQUIVALENT. | SURFACE | 8.4 | 100-277 | COLOR KINETICS: 423-000036-17 | LED | 1 | LED INCLUDED | DMX | REMOTE | DATA ENABLER PRO, 3/4 IN / 1/2 IN NPT U. S. TRADE SIZE CONDUIT) | | | COLOR KINETICS: 106-000004 -00 | 8.4 | |
| | | | | | | | | | | | | | GRAZE COMPACT POWERCORE JUMPER CABLE, 1 FT, UL | | | COLOR KINETICS: 108-000073 -00 | | |
| | | | | | | | | | | | | | GRAZE COMPACT POWERCORE LEADER CABLE, 10 FT, UL | | | COLOR KINETICS: 108-000074 -00 | | |
| L71 |  |  | SURFACE MOUNT ADJUSTABLE WITH ONE (1) LED LIGHTING SOURCE, 2220 DELIVERED LUMENS, RGBA COLOR ENGINE, 30°X60° OPTIC AND REMOTE DRIVER. SHOULD OPERATE ON 100-277 VOLTAGE AND BE SUPPLIED WITH A DMX CONTROL OPTION. CONTRACTOR TO PROVIDE AND INSTALL REMOTE DRIVER IN LOCATION SHOWN IN PLANS OR RECOMMEND ALTERNATE LOCATION, TO BE APPROVED BY DESIGNER OR SYSTEM INTEGRATOR, WHILE CONFORMING TO MANUFACTURER'S RECOMMEND INSTALLATION DOCUMENTATION. TO BE RATED FOR IP66 OR EQUIVALENT. SHOULD BE UL LISTED FOR WET USE OR AN APPROVED EQUIVALENT. | SURFACE | 33.2 | 100-277 | COLOR KINETICS: 423-000036-29 | LED | 1 | LED INCLUDED | DMX | REMOTE | DATA ENABLER PRO, 3/4 IN / 1/2 IN NPT U. S. TRADE SIZE CONDUIT) | | | COLOR KINETICS: 106-000004 -00 | 33.2 | |
| | | | | | | | | | | | | | GRAZE COMPACT POWERCORE JUMPER CABLE, 1 FT, UL | | | COLOR KINETICS: 108-000073 -00 | | |
| | | | | | | | | | | | | | GRAZE COMPACT POWERCORE LEADER CABLE, 10 FT, UL | | | COLOR KINETICS: 108-000074 -00 | | |


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REVISIONS

| NO. | DATE | DESCRIPTION |
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DATE: DATE

DRAWN BY: INITIALS

JOB NAME:

# PORTLAND MUSIC HALL

PORTLAND, MAINE

RELEASE TITLE:

SCHEMATIC DESIGN

LIGHTING DESIGNER:
MICHAEL MAHLUM

SHEET TITLE:

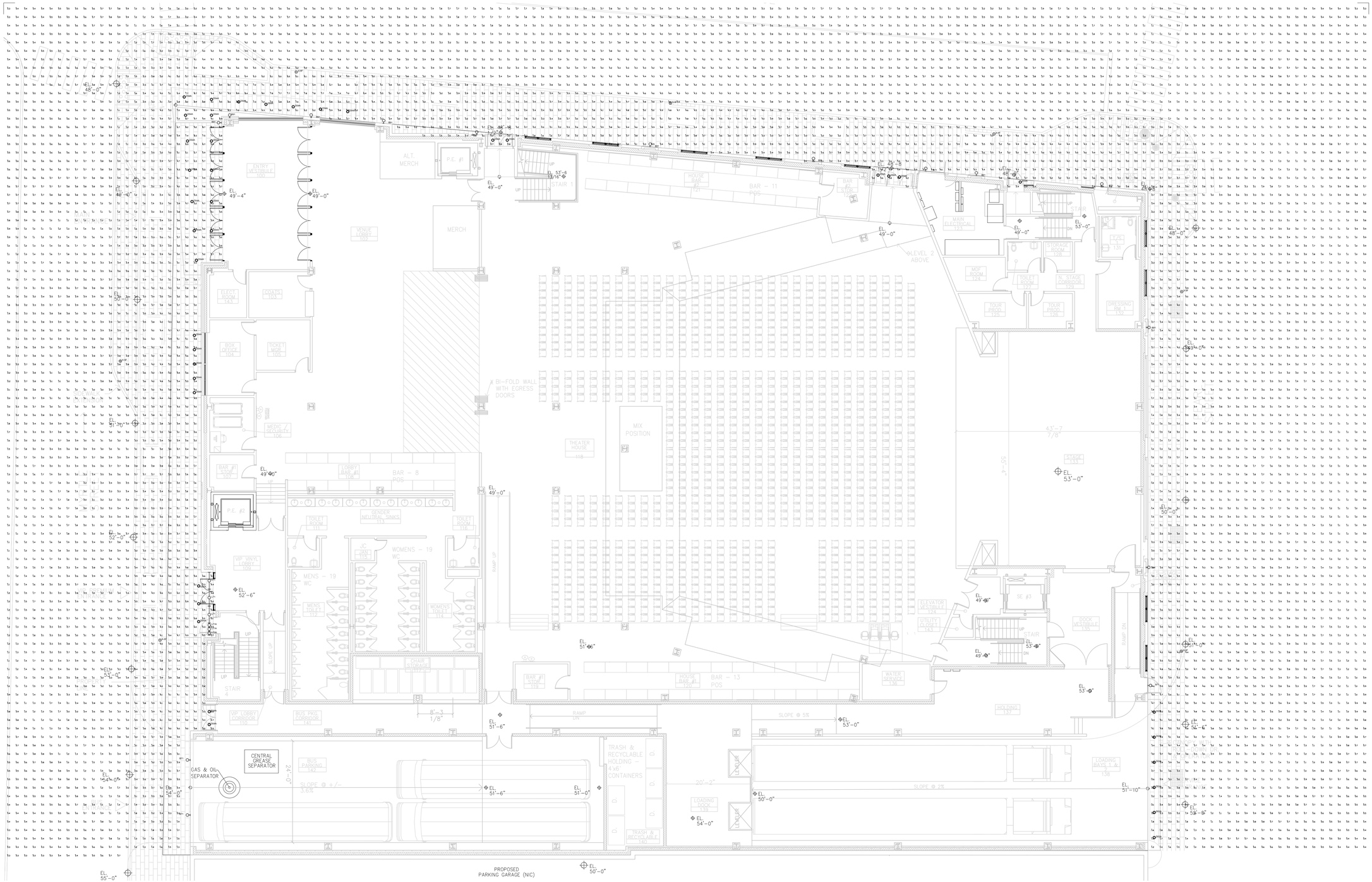
## CAD FIXTURE SCHEDULE

SHEET NUMBER:

# LT-003

PROJECT NUMBER: 2432

PLOT DATE: 12/16/2024 4:38 PM




1 PHOTOMETRICS

SCALE: 3/32" = 1'-0"

PLOT DATE: 12/16/2024 4:37 PM

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REVISIONS

| NO. | DATE | DESCRIPTION |
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DATE: DATE

DRAWN BY: INITIALS

JOB NAME:

# PORTLAND MUSIC HALL

PORTLAND, MAINE

RELEASE TITLE:

SCHEMATIC DESIGN

LIGHTING DESIGNER:
MICHAEL MAHLUM

SHEET TITLE:

PHOTOMETRICS

SHEET NUMBER:

LT-005

PROJECT NUMBER: 2432

## GENERAL NOTES:

1. THE RECORD OWNER OF THE PARCEL IS 385 CONGRESS LLC BY DEED DATED OCTOBER 20, 2017 AND RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 34401, PAGE 214.
2. THE PROPERTY IS SHOWN AS LOT 1 ON THE CITY OF PORTLAND TAX MAP 27 AND IS LOCATED IN THE B3 DOWNTOWN BUSINESS DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE B3 DISTRICT ARE AS FOLLOWS:

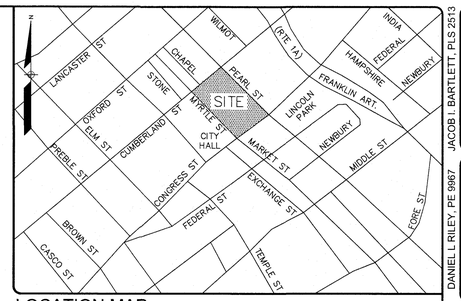
| | |
|---|---|
| MINIMUM LOT SIZE: | N/A |
| MINIMUM STREET FRONTAGE: | 15 FEET |
| MINIMUM FRONT YARD: | N/A |
| MINIMUM SIDE YARD: | N/A |
| MINIMUM REAR YARD: | N/A |
| MAXIMUM BUILDING HEIGHT: | 150 FEET |
| MAXIMUM LOT COVERAGE: | 100% |

* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.

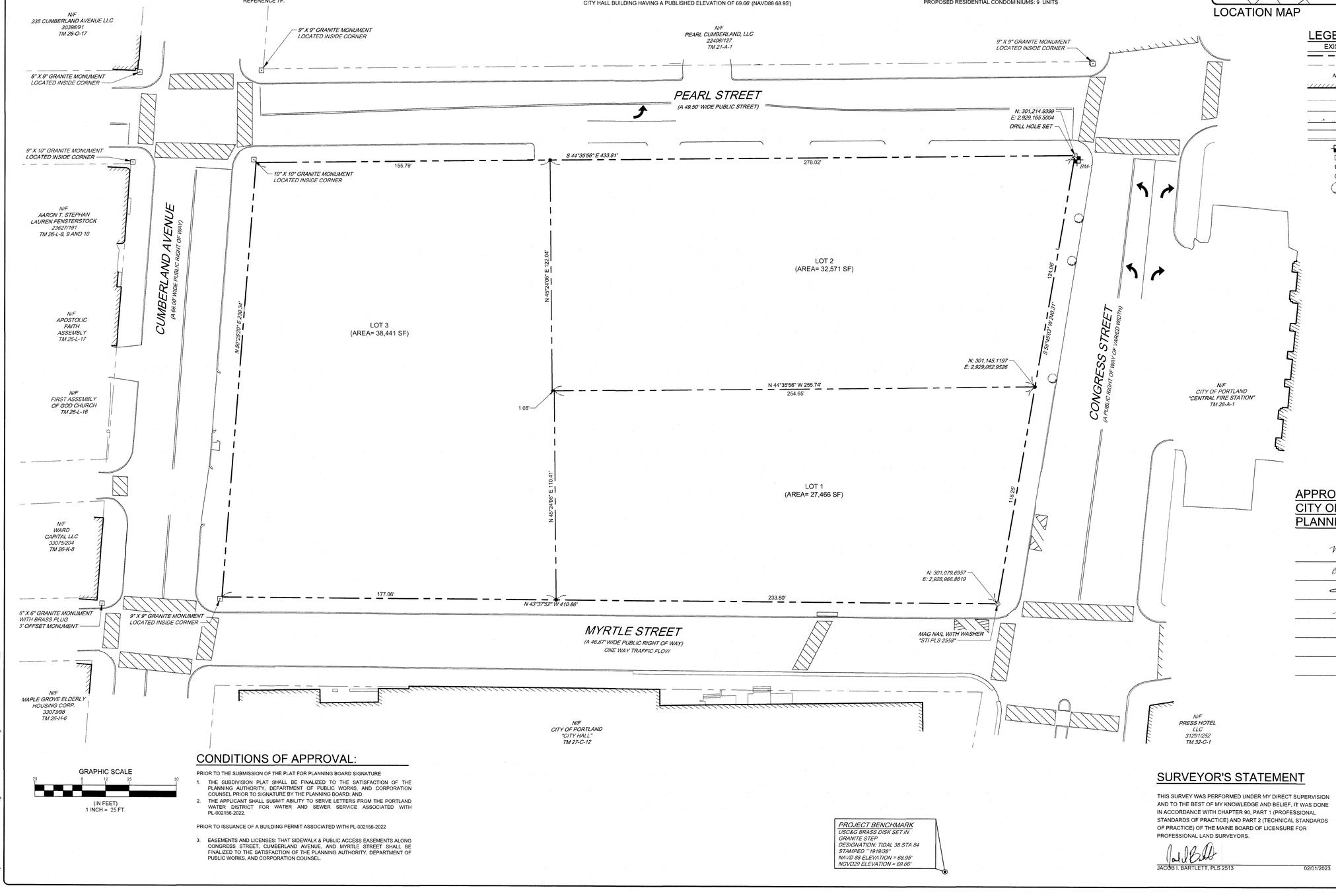
4. TOTAL AREA OF PARCEL IS APPROXIMATELY 2.26 ACRES.
5. THE BOUNDARY IS BASED ON PLAN REFERENCE 7F. SEBAGO TECHNICS INC. UPDATED RECORDS RESEARCH FROM 2099 TO DATE REGARDING THE BOUNDARY INFORMATION.
6. IMPROVEMENTS ON THE SITE ARE NOT SHOWN HEREON. FOR SITE INFORMATION SEE PLAN REFERENCE 7F.
7. PLAN REFERENCES:
   A. PLAN OF CITY BUILDING LOT, PORTLAND, ME, DATED AUGUST 1908 BY THE CITY OF PORTLAND ENGINEER, AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   B. PORTLAND DEPARTMENT OF PUBLIC WORKS STREET WORKSHEETS AND BLUESHEETS FOR STREETS BOUNDING THE LOCUS PARCEL AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 159/5.
   C. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, DATED JULY 1964 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 663/2.
   D. NEW MECHANICAL BUILDING, GUY GANNETT PUBLISHING COMPANY, PORTLAND, ME, TUNNEL PLAN AND SECTIONS BY LOCKWOOD, GREENE ENGINEERS, INC, REVISED THROUGH MAY 12, 1965 AND ON FILE WITH THE PORTLAND DEPARTMENT OF PUBLIC WORKS AS 203/2.
   E. PLAN OF PROPERTY IN PORTLAND, ME. MADE FOR GUY GANNETT PUBLISHING PUBLISHING CO. BY H.I. & E.C. JORDAN - SURVEYORS, REVISED THROUGH FEBRUARY 6, 1973 AND ON FILE WITH OWEN HASKELL INC.
   F. ALTA/ACSM LAND TITLE SURVEY OF CONGRESS STREET SITE, 385 CONGRESS STREET, PORTLAND, ME DATED JULY 1, 2009 BY SEBAGO TECHNICS INC, PROJECT NUMBER 09235.
8. PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NGVD29 PER CITY STANDARDS AS VERIFIED BY A UNITED STATES COAST & GEODETIC SURVEY BRASS DISK LOCATED IN A GRANITE BLOCK OF THE CITY HALL BUILDING HAVING A PUBLISHED ELEVATION OF 69.66' (NAVD88 68.95')
8. THE CITY OF PORTLAND DISCONTINUED THAT PORTION OF CHAPEL STREET THAT FORMERLY RAN TROUGH THE SURVEYED PREMISES INCLUDING ALL UTILITY RIGHTS THEREIN '' RUNNING FROM CONGRESS STREET TO CUMBERLAND STREET" BY ORDER OF CITY COUNCIL ON FEBRUARY 5, 1973 AND RECORDED AT THE CITY OF PORTLAND RECORDS IN VOLUME 89, PAGE 61.
9. PURSUANT TO A CONVERSATION BETWEEN SEBAGO TECHNICS, INC. AND THE PORTLAND WATER DISTRICT, THE WATER LINE SHOWN AS BEING LOCATED IN THE DISCONTINUED PORTION OF CHAPEL STREET HAS BEEN REMOVED AND NO LONGER EXISTS.
10. UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CI/ASCE 38-02. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES WITHIN THE PROJECT AREA PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
11. THE LOCUS PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 230051 0013 B, HAVING AN EFFECTIVE DATE OF JULY 17 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE C, AREAS OF AREAS OF MINIMAL FLOODING.
12. BENCHMARK:

    BM-1 EASTERLY BOLT AT BASE OF UTILITY POLE ELEVATION: 61.55 (NGVD29)
13. PROPOSED UNITS LOT 1:

    PROPOSED HOTEL : 156 ROOMS
    PROPOSED RESIDENTIAL CONDOMINIUMS: 9 UNITS




LOCATION MAP N.T.S.




## LEGEND

| EXISTING | PROPOSED |
|---|---|
| PROPERTY LINE/R.O.W. | |
| ABUTTER LINE/R.O.W. | |
| N/F NOW OR FORMERLY | |
| BUILDING | |
| DECK/STEPS/ OVERHANG | |
| EDGE PAVEMENT | |
| EDGE CONCRETE | |
| PAVEMENT PAINT | |
| CURB LINE | |
| BM-1 BENCHMARK | |
| GRANITE MONUMENT | ■ |
| IRON PIPE/ROD | • |
| DRILL HOLE | ◉ |
| DECIDUOUS TREE | |

GRAPHIC SCALE
25 0 12 25 50
(IN FEET)
1 INCH = 25 FT.

## CONDITIONS OF APPROVAL:

PRIOR TO THE SUBMISSION OF THE PLAT FOR PLANNING BOARD SIGNATURE

1. THE SUBDIVISION PLAT SHALL BE FINALIZED TO THE SATISFACTION OF THE PLANNING AUTHORITY, DEPARTMENT OF PUBLIC WORKS, AND CORPORATION COUNSEL PRIOR TO SIGNATURE BY THE PLANNING BOARD; AND
2. THE APPLICANT SHALL SUBMIT ABILITY TO SERVE LETTERS FROM THE PORTLAND WATER DISTRICT FOR WATER AND SEWER SERVICE ASSOCIATED WITH PL-002156-2022.

PRIOR TO ISSUANCE OF A BUILDING PERMIT ASSOCIATED WITH PL-002156-2022

3. EASEMENTS AND LICENSES: THAT SIDEWALK & PUBLIC ACCESS EASEMENTS ALONG CONGRESS STREET, CUMBERLAND AVENUE, AND MYRTLE STREET SHALL BE FINALIZED TO THE SATISFACTION OF THE PLANNING AUTHORITY, DEPARTMENT OF PUBLIC WORKS, AND CORPORATION COUNSEL.

*PROJECT BENCHMARK*
*USC&G BRASS DISK SET IN GRANITE STEP*
*DESIGNATION: TIDAL 38 STA 84*
*STAMPED "1919/38"*
*NAVD 88 ELEVATION = 68.95'*
*NGVD29 ELEVATION = 69.66'*

## APPROVAL- CITY OF PORTLAND PLANNING BOARD

January 24, 2023 DATE

CHAIRPERSON

IN ACCORDANCE WITH TITLE 33 MRSA §652, SECTION 3, THE PROFESSIONAL SIGNATURE BELOW WILL BE ADDED AFTER THE PLANNING BOARD HAS SIGNED, AS AN ORIGINAL SIGNATURE, FOR RECORDING STANDARDS.

## SURVEYOR'S STATEMENT

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT WAS DONE IN ACCORDANCE WITH CHAPTER 90, PART 1 (PROFESSIONAL STANDARDS OF PRACTICE) AND PART 2 (TECHNICAL STANDARDS OF PRACTICE) OF THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS.

JACOB I. BARTLETT, PLS 2513 02/01/2023

STATE OF MAINE, CUMBERLAND COUNTY SS, REGISTRY OF DEEDS

RECEIVED February 15 20 23
AT 9 H 10 M A M AND
RECORDED IN
PLAN BOOK 223 PAGE 32
ATTEST: REGISTER

DANIEL L RILEY, PE 9967 JACOB I. BARTLETT, PLS 2513

| REV.: | BY: | DATE: | STATUS: |
|---|---|---|---|
| C | DLR | 01/11/2023 | SUBMITTED FOR SUBDIVISION APPROVAL |
| B | DLR | 12/02/2022 | SUBMITTED FOR SUBDIVISION APPROVAL |
| A | DLR | 11/18/2022 | SUBMITTED FOR SUBDIVISION APPROVAL |

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS INC.

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel: 207-200-2100

SUBDIVISION PLAN
OF:
385 CONGRESS STREET
CONGRESS STREET AND PEARL STREET
PORTLAND, MAINE
FOR:
385 CONGRESS STREET LLC
2730 SENECA ROAD
WEST SENECA, NY 14224

RECORD OWNER:
385 CONGRESS LLC
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | DAB |
| CHECKED | DLR |
| DATE | 12/02/2022 |
| SCALE | 1" = 25' |
| PROJECT | 19371 |

SHEET 1 OF 1

F:\Projects\1900\019371\DWG\Design\Lot 2\19371 - SB - P2.dwg - 1/31/2023 2:07 PM - DAN RILEY

19371 - SB - P2.dwg, TAB:1 OF 1 SUBDIVISION PLAN

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY: | DATE: | STATUS |
|---|---|---|---|
| B. | CPT | 04/09/2025 | ISSUED FOR RESPONSE TO COMMENT |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

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SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 1A
South Portland, ME 04106
Tel. 207-200-2100

# OVERALL SITE W/ HOTEL EXHIBIT

OF:

## PORTLAND MUSIC HALL

244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

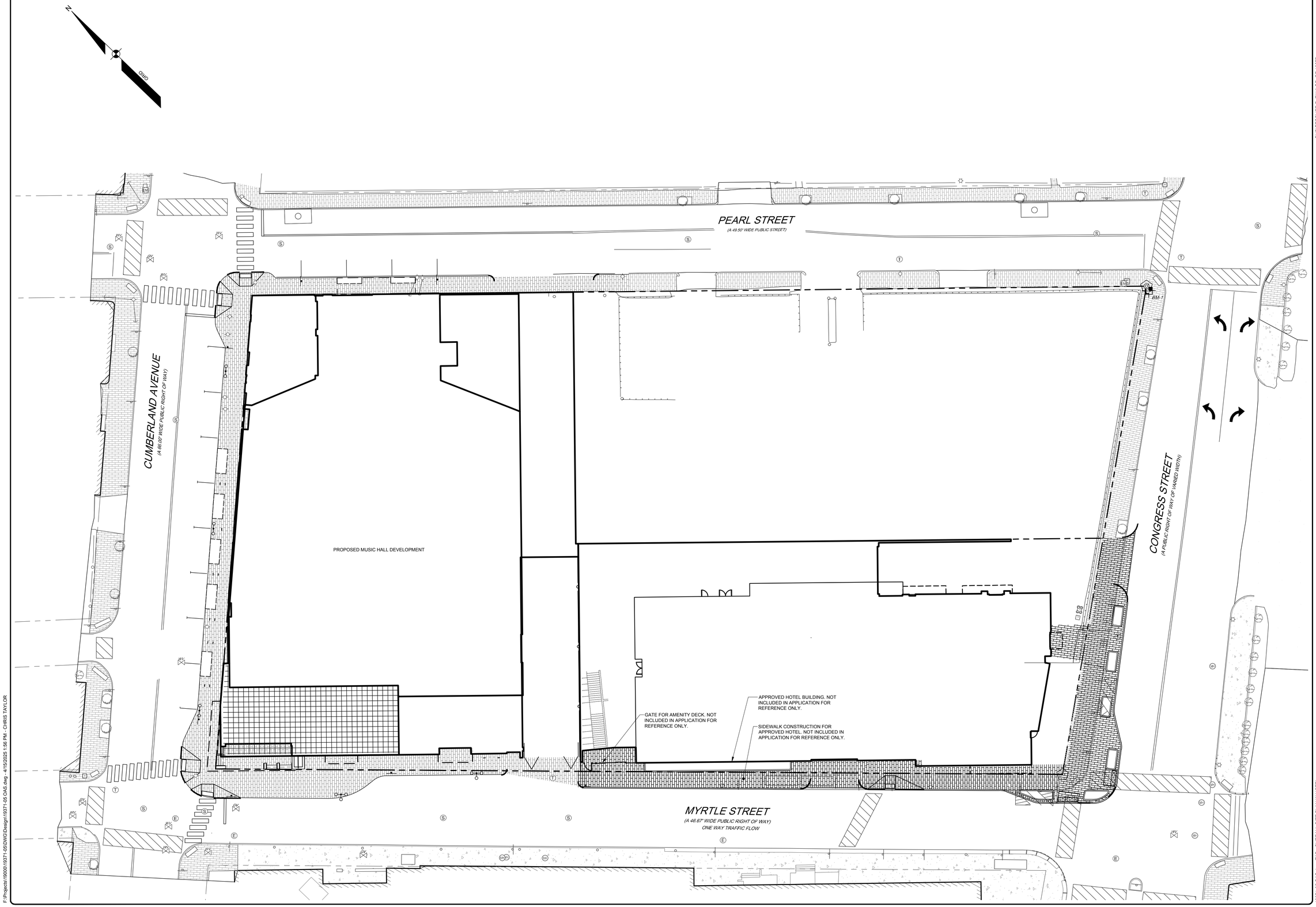
RECORD OWNER:
385 CONGRESS, LLC
2730 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET EX-1

F:\Projects\19000\19371-05\DWG\Design\19371-05 OAS .dwg - 4/9/2025 10:47 AM - CHRIS TAYLOR

19371-05 OAS.dwg, TAB - OVERALL SITE PLAN W HOTEL




NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY | DATE | STATUS |
|---|---|---|---|
| B. | CPT | 04/09/2025 | ISSUED FOR RESPONSE TO COMMENT |
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |

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SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite A
South Portland, ME 04106
Tel. 207-200-2100

# OVERALL SITE W/ HOTEL EXHIBIT

OF:

## PORTLAND MUSIC HALL

244 CUMBERLAND AVE
PORTLAND, MAINE

FOR:

PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS LLC
270 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET EX-1

F:\Projects\19000\19371-05\DWG\Design\19371-05 OAS.dwg - 4/15/2025, 1:55 PM - CHRIS TAYLOR

19371-05 OAS.dwg, TAB - OVERALL SITE PLAN W HOTEL


PORTLAND
MUSIC HALL
PORTLAND MUSIC HALL
PRESENTS
THE PIXIES
PORTLAND MUSIC HALL
SHOW TONIGHT SOLD OUT
PORTLAND MUSIC HALL
SHOW TONIGHT SOLD OUT
BOX OFFICE
TONIGHT
DO NOT
ENTER


Portland
Music Hall
PORTLAND
MUSIC HALL

CITY OF PORTLAND LAND USE CODE SECTION 8.2.3 DISPERSAL REQUIREMENTS:
A BUSINESS WITH AN ENTERTAINMENT LICENSE AS REQUIRED OR AUTHORIZED BY CHAPTER 4, SECTION 4-51(A) OF THE CITY OF PORTLAND CODE OF ORDINANCES WITHIN THE DOWNTOWN ENTERTAINMENT OVERLAY ZONE MAY NOT BE LOCATED WITHIN 100 FEET OF ANOTHER BUSINESS WITH AN ENTERTAINMENT LICENSE, AS MEASURED ALONG OR ACROSS PUBLIC WAYS FROM THE MAIN ENTRANCE OR ENTRANCES OF EACH.

ALL DISTANCES ARE MEASURED FROM THE APPROXIMATE CENTER OF THE ENTRANCE DOOR.

N

GRID

PEARL STREET
(A 49.50' WIDE PUBLIC STREET)

CUMBERLAND AVENUE
(A 66.00' WIDE PUBLIC RIGHT OF WAY)

(11) 9'X18' PARKING SPACES

CONGRESS STREET
(A PUBLIC RIGHT OF WAY OF VARIED WIDTH)

BUS PARKING

N/F
FATHOM CONGRESS., LLC
BK 35952 PG 249
TM 27-D-001

PORTLAND MUSIC HALL MAIN ENTRANCE.
BOX OFFICE
VIP ENTRANCE

MYRTLE STREET
(A 46.67' WIDE PUBLIC RIGHT OF WAY)
ONE WAY TRAFFIC FLOW

100'

MERRILL AUDITORIUM REHEARSAL ENTRANCE

100' RADIUS FROM APPROXIMATE CENTER OF MERRILL AUDITORIUM NEAREST ENTRANCE

N/F
CITY OF PORTLAND
"CITY HALL"
TM 27-C-12

APPROXIMATE CENTER OF MERRILL AUDITORIUM MAIN ENTRANCE

APPROXIMATE CENTER OF NEAREST MERRILL AUDITORIUM ENTRANCE

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

NOT FOR CONSTRUCTION

CHRISTOPHER P. TAYLOR, PE 16877

| REV. | BY | DATE: | STATUS: |
|---|---|---|---|
| A. | CPT | 12/19/2024 | ISSUED FOR MAJOR SITE PLAN APPLICATION |
| B. | CPT | 04/08/2025 | ISSUED FOR RESPONSE TO COMMENT |

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South Portland, ME 04106
Tel. 207-200-2100

ENTERTAINMENT OVERLAY ZONE EXHIBIT
OF:
PORTLAND MUSIC HALL
244 CUMBERLAND AVE
PORTLAND, MAINE
FOR:
PORTLAND MUSIC HOLDINGS, LLC
325 N. MAPLE DRIVE
BEVERLY HILLS, CA 90210

RECORD OWNER:
385 CONGRESS LLC
2720 TRANSIT ROAD
WEST SENECA, NY 14224

| | |
|---|---|
| DESIGNED | DJS |
| DRAWN | MRS |
| CHECKED | DLR |
| DATE | 06/27/2024 |
| SCALE | 1" = 20' |
| PROJECT | 19371-05 |

SHEET EX-2

\\ST-FS01\data\Projects\19000\19371-05\DWG\Design\19371-05 OAS.dwg - 4/21/2025 10:44 AM - RICHARD G. LEWIS

19371-05 OAS.dwg, TAB:EX-2 ENTERTAINMENT OVERLAY ZONE EXHIBIT