

CITY OF PORTLAND, MAINE

PLANNING BOARD



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

AGENDA PORTLAND PLANNING BOARD MEETING

The Planning Board will hold a remote meeting on **Tuesday, July 12, 2022, 4:30 p.m.** This meeting will take place remotely using Zoom pursuant to the Remote Meeting Policy adopted by the Planning Board and as authorized under 1 M.R.S. 403-B because of the existence of an emergency or urgent issue that requires the committee to meet by remote methods. Allow your computer to install the free Zoom app to get the best meeting experience.

If you are not able to attend live, a recording will be available following the meeting. For public comment, you will need to use the "raise your hand" feature. To raise your hand via the telephone, please hit *9. You will be unmuted by the host when it is time for public comment.

For more information on how to access the meeting remotely and how to give public comment, please go to <http://www.portlandmaine.gov/remotEPUD> Public comments will be taken for each item on the agenda during the estimated allotted time and written comments should be submitted to planningboard@portlandmaine.gov.

Please note that the placement of each item on the agenda is subject to change. Please check the Agenda & Minutes Center prior to the meeting for the item start time.

ZOOM MEETING INSTRUCTIONS

You are invited to a Zoom webinar.

When: Jul 12, 2022 04:30 PM Eastern Time (US and Canada)

Topic: Planning Board Workshop and Public Hearing 7/12/2022

Please click the link below to join the webinar:

<https://portlandmaine-gov.zoom.us/j/84262119018>

Or One tap mobile :

US: +13017158592,,84262119018# or +13126266799,,84262119018#

Or Telephone:

Dial(for higher quality, dial a number based on your current location):

US: +1 301 715 8592 or +1 312 626 6799 or +1 929 205 6099 or +1 253 215 8782 or +1 346 248 7799 or +1 669 900 6833

Webinar ID: 842 6211 9018

International numbers available: <https://portlandmaine-gov.zoom.us/j/kdV3iyD8Y>

WORKSHOP - 4:30 PM

- i. Major Site Plan; 73 Powsland Street; STJ, Inc., Applicant. (estimated time 4:30 – 5:30 p.m.) The Planning Board will hold a remote workshop to consider the development of four duplex units (two units per building) and one detached single-family home, with the development totaling nine dwelling units, along with associated site improvements. The assemblage of land totals 29,000 square feet in size and is zoned B-5 Urban Commercial.

PUBLIC HEARING - 5:30 PM

1. ROLL CALL AND DECLARATION OF QUORUM

2. COMMUNICATION AND REPORTS

3. REPORT OF ATTENDANCE AT THE MEETING HELD ON JUNE 28, 2022

Afternoon Workshop

Executive Session: All Present.

50 County Way: All Present.

Evening Hearing

102 State Street: Barker, Mazer, Murphy, Silk, Smith, and Stanley present; Chann absent.

300 Rand Road/1190 Brighton Avenue: Barker, Murphy, Silk, Smith, and Stanley present; Chann absent, Mazer recused.

4. REPORTS OF DECISIONS AT THE MEETING HELD ON JUNE 28, 2022

i. Executive Session – Corporation Counsel

Mazer moved and Silk seconded a motion to enter Executive Session. Vote 6-0, Silk absent.

Mazer moved and Chann seconded a motion to exit Executive Session. Vote 7-0.

ii. Subdivision Application; 102 State Street; NewHeight Redfern, LLC., Applicant. Mazer moved and Silk seconded a motion to approve the subdivision with one condition of approval. Vote 6-0, Chann absent.

iii. Subdivision and Subdivision Amendment; 300 Rand Road/1190 Brighton Avenue; Dirigo Center Developers, LLC., Applicant. Silk moved and Smith seconded a motion to approve the subdivision for 300 Rand Road with one condition of approval. Vote 5-0, Chann absent, Mazer recused. Silk moved and Smith seconded a motion to approve the subdivision amendment for 1190 Brighton Avenue with one condition of approval. Vote 5-0, Chann absent, Mazer recused.

5. NEW BUSINESS

i. Major Site Plan; 26 E. Oxford Street; 26 Oxford, LLC., Applicant. (estimated time 5:30 – 6:30 p.m.) The Planning Board will hold a remote public hearing to consider the development of a four-story, six-unit residential building at 26 East Oxford Street. The subject property is 4,720 square feet in size and is zoned R-6 Residential.

ii. Conditional Use; 1498 Westbrook Street; Stroudwater Christian Church, Applicant. (estimated time 6:30 p.m.) The Planning Board will hold a remote public hearing to consider the siting of a 1,900 square foot modular single-family building at 1498 Westbrook Street for use as a food pantry. The subject property is 4.7 acres in size and is zoned R-2 and R-3 Residential.

Memorandum
Planning and Urban Development Department



To: Chair Stanley & Members of the Planning Board
From: Charles Tetelman
Date: July 8, 2022
Re: 73 Powsland Street
Project ID: PL-0001808-2021
CBL: 190 K015001, 190 K009001, 190 K010001
Meeting Date: July 12, 2022

I. INTRODUCTION

STJ Inc. has submitted a Major Site Plan Application to facilitate the development of five buildings including four duplexes and one single-family home (totaling ~6,900 square feet) at 73 Powsland Street in the Libbytown neighborhood. This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code Site Plan Standards, Section 14.1.



Figure 1: Site Rendering

The Planning and Urban Development Department mailed 80 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the July 2, 2022 and July 5, 2022 editions of the *Portland Press Herald*.

Applicant: STJ, Inc. (Mark Curtis)
Applicant: Sebago Technics (Henry Hess)
Representatives: Ryan Senatore Architecture, LLC (Ryan Senatore)

II. REQUIRED REVIEWS

<i>Review</i>	<i>Applicable Standards</i>
Site Plan	Section 14.6
Design Review	Section (i) Two-Family

<i>Waiver Requests</i>	<i>Applicable Standards</i>
------------------------	-----------------------------

Waiver to Allow Discharging Directly into a non-Major River segment	Technical Manual Section 5. III
---	---------------------------------

III. PROJECT DATA

Existing Zoning	B-5 Urban Commercial
Property Size	29,000 square feet
Existing Use	Undeveloped
Proposed Use	Residential

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	0	6,900 square feet	+6,900 square feet
Impervious Surface Area		20,200 square feet	
Parking Spaces	0	9	+9
Bicycle Parking Spaces	0	0	

IV. EXISTING CONDITIONS AND SURROUNDING AREA

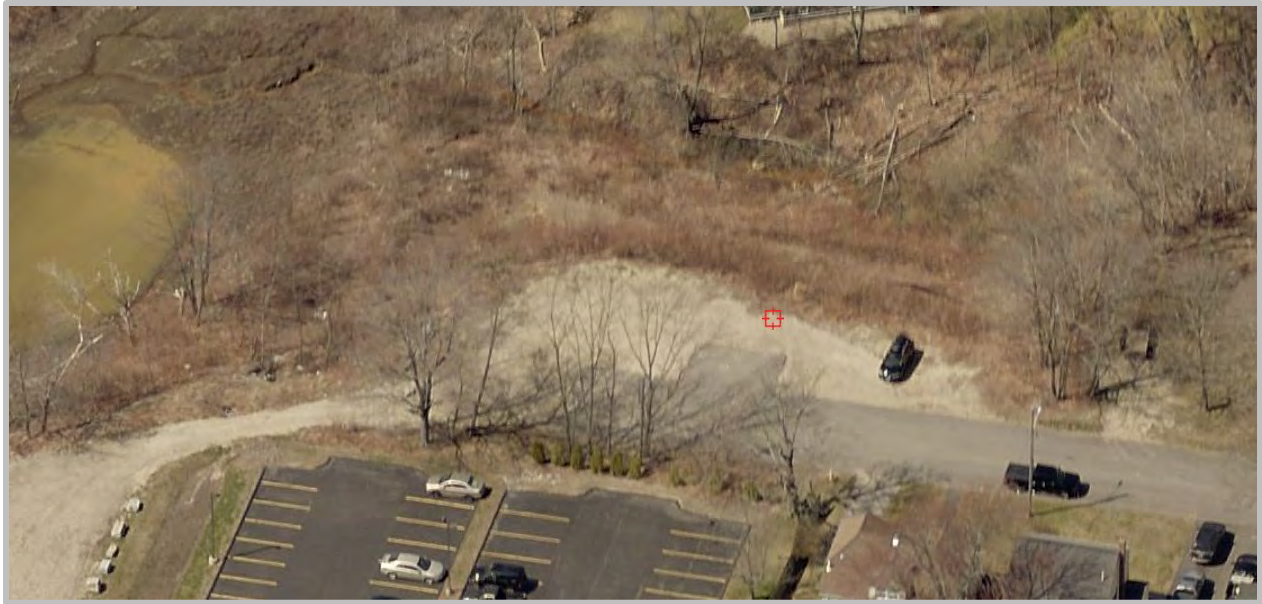


Figure 2: Aerial Image of Site

The proposed development consists of six lots located at the end of Powsland Street. Currently, these lots are undeveloped and the street does not extend to the end of the lots; the Powsland Street ROW extends across the wetland area to the utility lines. The parcels associated with the development are addressed 65-73 and 93. The location of the proposed project is within the B-5 Urban Commercial zone. The character of Powsland Street is predominantly small-to-mid scale residential consisting mostly of single-family residential homes with some mixed-use buildings at the corner of Powsland and Congress streets.

Powsland connects to the western portion of Congress Street proximate to Interstate 295. Congress Street is identified as a priority corridor in the City's Comprehensive Plan and includes sidewalks, established street trees, and a variety of building types and uses including commercial, and residential. The proposed development is near the Portland Transportation Center and Thompson's Point. The Portland

Transportation Center is within walking distance and provides access to the Amtrak Downeaster line and the Concord Coach Bus Station. Additionally, METRO Routes 9A, 9B, and 5 run along Congress Street and Routes B and 1 connect at the Portland Transportation Center.

V. PROPOSED DEVELOPMENT

The applicant is proposing to construct five buildings (approximately 1,380 square feet each) including four residential duplexes and one single-family residential building, totaling 9 units. The four duplexes will have a driveway for each unit (each parcel will have two driveways and curb cuts) and the single-family lot will have one driveway. The design and architecture of each building is in line with the surrounding context of residential homes along Powsland Street and are subject to the design standards in the *City of Portland Design Manual* Section (i) Two-family buildings.

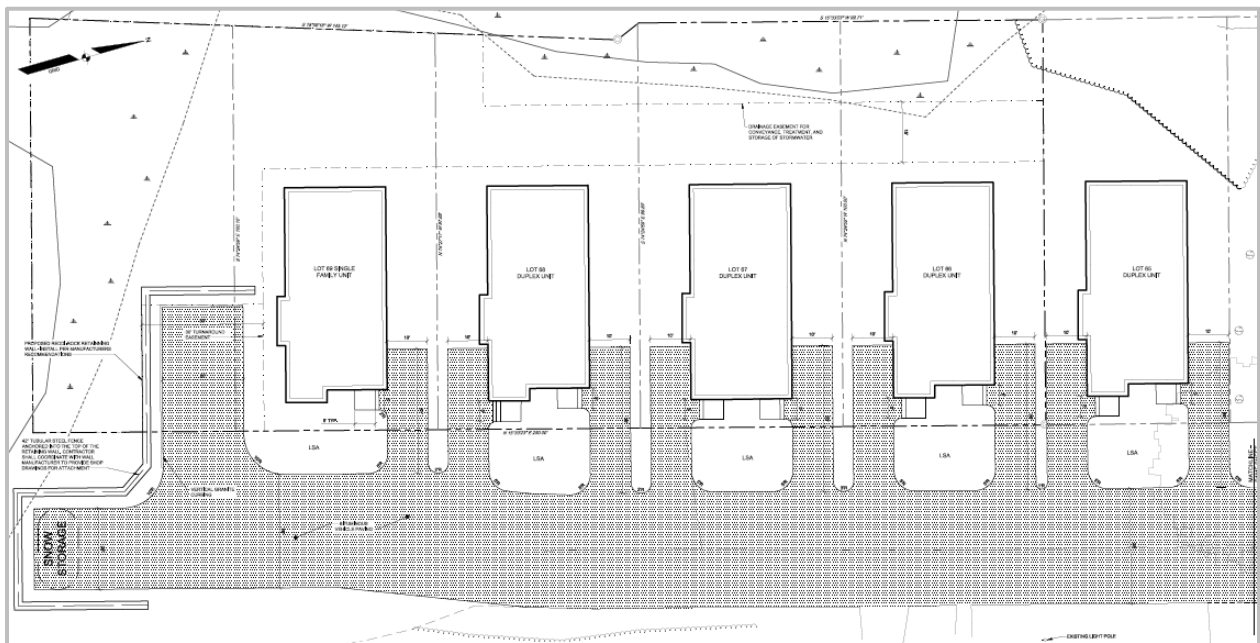


Figure 3: Site Plan Layout (Original Submission)

Additionally, the applicant is proposing to extend Powsland Street (approximately 3,300 square feet) along the ROW just beyond the single-family building. As originally proposed, the street extension would end in a right turn-around required for emergency services and vehicle navigation. Because this turn-around abuts an existing wetland, a significant amount of erosion control and a substantial retaining wall (165 linear feet) would be required. During review, the Department of Public Works recommended seeking alternative layouts to avoid the construction of a large retaining wall. The applicant has provided a preliminary sketch for an alternative layout (Plan 17) showing a left turn into an abutting Central Maine Power owned lot – potentially eliminating the need for a retaining wall and providing a future connection to Sewall from Powsland along Hooper Street.

As the project is creating 20,200 square feet of impervious surfaces and 37,803 square feet of developed area, it is subject to MaineDEP Chapter 500 stormwater management standards, and the applicant intends to use Focal Point and R-Tanks to meet water quality and water quantity standards consistent with DEP stormwater best management practices (BMPs). The onsite BMPs would prevent runoff into the surrounding wetland area and adjacent properties. City Staff will need to further review these systems in order to confirm there will be no adverse impact on the wetlands or abutting properties. These would be

located near the single-family residential building on the southwest (plan left) portion of the development site.

The proposed project includes ten street trees to be planted along Powsland Street.

VI. RIGHT, TITLE, & INTEREST

The applicant has submitted a deed recorded at the Cumberland County Registry of Deeds dated January 15, 2007 that demonstrate that the applicant, STJ Inc., is the current owner of the properties associated with the proposed development at 73 Powsland Street (Attachment C).

VII. FINANCIAL & TECHNICAL CAPACITY

The applicant has submitted a letter of financial capability from Gorham Savings Bank dated October 5, 2021 that demonstrates the applicant has financial capacity for the proposed development (Attachment H).

The applicant has submitted information about their agent, Sebago Technics, explaining their experience, credentials, and prior projects as it relates to this application (Attachment I). The applicant and applicant representatives have demonstrated technical capacity to undergo and complete the proposed project.

VIII. ZONING ANALYSIS

The proposed development is located within the B-5 Urban Commercial zone and is being reviewed under the B-5 Urban Commercial Zone standards and dimensional requirements (Table 7-E) shown below:

Dimensional Requirement	Required	Proposed
Lot Size	None	29,000 square feet
Front Yard	None	17-20 feet
Side Yard	None	12 feet
Height (max.)	65 feet	35 feet
Off-Street Parking	1 per unit	2 per unit

Per Table 19-A off-street parking minimums, single-, two-, or multi-family units are required to provide one parking space per dwelling unit. However, no off-street parking is required in the B-5 zone (Table 19-B Categorical exceptions to off-street parking minimums).

IX. SITE PLAN REVIEW STANDARDS (Section 14.6)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's Site Plan Ordinance, Section 14.6. Staff comments are below.

1. Transportation Standards (Section 14.6.1)

A. Impact on surrounding street systems

As a nine-unit development, the incremental traffic impact from the proposed project is expected to be minimal. The applicant has provided a trip generation analysis (Attachment J) showing that the proposed development would generate 68 daily trips and does not require a traffic study, and the Consulting Traffic Engineer concurs with this finding.

The applicant will need to receive permission from DPW for a pavement moratorium repair in order to connect to utility systems required for the site plan along Powsland Street.

B. Access and circulation

The original submission included a right hammerhead turn-around at the end of Powsland Street. Due to the need for a substantial retaining wall, the City requested that the applicant find alternative layouts

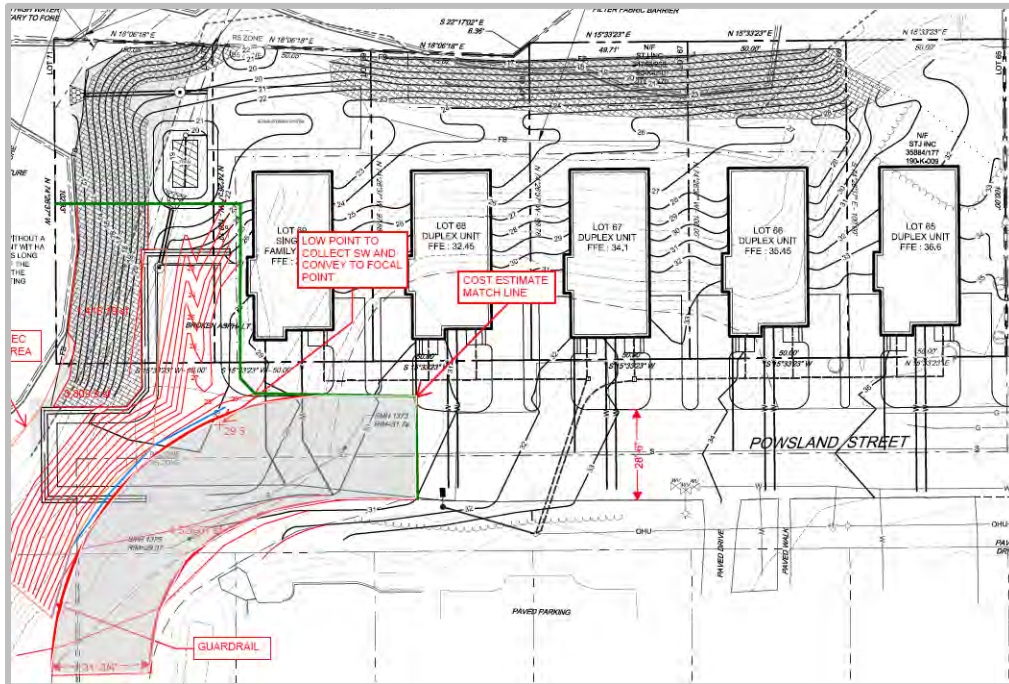


Figure 4: Alternative Layout Sketch

to support a dead-end turn around. After coordinating with Central Maine Power (located on the abutting parcel), the applicant has submitted a preliminary plan with a left hammerhead turn-around without a retaining wall. The Department of Public Works will need to confirm that this layout meets acceptable standards once updated plans are submitted following the Workshop. After the workshop, the applicant will need to work with City Staff and Central Maine Power to determine what forms of easements and agreements will be needed.

C. Public transit access

All residential development consisting of 20 or more dwelling units shall provide a transit shelter adjacent to or within the public right-of-way along its frontage if the development is proposed along an existing public transit route. As the proposed project is less than 20 units and is not located along a transit route, this standard is not applicable.

D. Parking

The applicant is providing two parking spaces per unit with one driveway per unit as well. As the applicant is proposing two driveways per lot, they will need to submit a waiver for exceeding the maximum number of driveways on each lot. Technical Manual Section 1.7.1 allows a maximum of one driveway per lot. However, the applicant has noted that similar driveway layouts currently exist on Powsland Street and are seeking the Planning Board's feedback before providing updated waiver requests.

E. Transportation demand management (TDM)

As a residential project a TDM plan is not required as part of this application.

2. Environmental Quality Standards (Section 14.6.2)

A. Preservation of significant natural features

The property is located within a developed area and there are no endangered or threatened trees, plants, habitats, or moderate and high value waterfowl and wading habitats on site.

The applicant has filed and provided documentation showing a Tier 1 Natural Resources Protection Act (NRPA) Permit with MaineDEP (Attachment D) for the 4,351 square feet of wetland impacts. The amount of disturbed area due to development may change with updated street turnaround layouts.

B. Landscape preservation

The applicant will be clearing two maple trees on site. There is no additional landscaping to be preserved on site.

C. Site landscaping and buffers

The applicant has provided a landscaping plan (Plan 6) showing ten street trees and additional landscaping near the stormwater BMPs in the rear of the site.

D. Water quality/storm water management/erosion control

Sebago Technics has provided a Stormwater Management Plan in accordance with MaineDEP Chapter 500 Stormwater standards, with a FocalPoint system and R-Tanks to be employed as stormwater BMPs. As proposed, the Department of Public Works is not supportive of maintaining the R-Tank Stormwater System on private property and the City normally does not assume ownership or long-term maintenance responsibility for these improvements. Additionally, DPW will require any treatment or infrastructure at the end of Powsland to be designed so as to allow a future connection to Sewall Street via Hooper Street.

City Staff are requesting a downstream capacity evaluation (discharge study) to identify impacts on the surrounding Ms4 system; alternative site design schemes, should they be pursued, may mitigate the need for this.

3. Public Infrastructure and Community Safety Standards (Section 14.6.3)

A. Consistency with City Master Plans



Figure 5: From Portland's Comprehensive Plan

The proposed project is in keeping with the stated goals of Portland Plan 2030 regarding housing and the policy of creating complete neighborhoods.

Livable City: Housing – local goals met by this project:

- 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.

A Healthy City: Environment – local goals met by this project:

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

B. Public safety and fire prevention

Life Safety has not provided feedback on this project. The applicant submitted a Portland Fire Department Site Review Fire Department Checklist (Attachment J). Additionally, the applicant has included adequate access for emergency vehicles including a hammerhead turnaround for vehicles.

The applicant has incorporated a variety of Crime Prevention through Environmental Design (CPTED) standards through natural surveillance. The layout of the site, with residential units built in close proximity, creates a secure neighborhood that allows for passive oversight of the surroundings.

C. Availability and capacity of public utilities

The applicant has reached out to all utility providers and requested ability to serve letters to be provided to the City once received. The applicant is providing underground electrical service to buildings on site. DPW will need to confirm the proposed underground electric utility design.

The applicant has provided an Ability to Serve letter regarding water and sewer service from the Portland Water District (Attachment J).

4. Site Design Standards (Section 14.6.4)

A. Massing, ventilation, and wind impact

Given the location of the development site, the typologies chosen, and the surrounding built environment, the proposed building will not create massing, ventilation, or wind impacts to adjoining structures or abutting public spaces. The proposed buildings are significantly below the maximum height permitted in the B-5 zone and are similar in context and scale to nearby residential buildings.

B. Shadows

There are no publicly accessible open spaces or areas that will be affected by shadows from the proposed development.

C. Snow and ice loading

The applicant will need to provide updated site plans that correctly label snow storage areas on site.

D. View corridors

The project is not located along any designated view corridors; not applicable.

E. Historic resources

The proposed development is not located in or near any designated historic districts, landscapes, or landmarks; not applicable.

F. Exterior lighting

No onsite light fixtures are currently proposed. Lighting will be affixed to the residential buildings. No photometric plan has been submitted as part of this application.

G. Noise and vibration

The noise and vibration standards are not applicable to the proposed development.

H. Signage and wayfinding

The signage and wayfinding standards are not applicable to the proposed development.

I. Zoning-related design standards

The proposed development is required to comply with the *City of Portland Design Manual*/Section (i) for Two-Family structures. City Staff have provided two design review memos to the applicant (Attachments 1 + 2) noting the applicant needs to identify open space on site and update the landscaping plan according to Design Review comments.

X. PUBLIC COMMENT

The Planning & Urban Development Department has received six public comments regarding the proposed development at 73 Powsland Street (PC 1-6). The comments include concerns regarding impact of development on surrounding wetlands and stormwater runoff onto abutting properties. These individuals

believe development will adversely impact the surrounding area and the applicant has not provided enough information demonstrating otherwise.

XI. NEXT STEPS

1. Address staff comments related to design, identifying open space on site
2. Work with City Staff on Final Layout for Hammerhead Turn
3. Update Online Submissions (consolidate documents)
4. Address additional comments from the Planning Board.
5. Submit Updated Waiver Requests
6. Prepare final plan submission and updated site plan with dimensions
7. Neighborhood Meeting will need to be held.
8. Schedule and hold Planning Board public hearing.

XII. ATTACHMENTS

MEMO ATTACHMENTS

1. Design Review – Preliminary
2. Design Review – Second Round
3. Staff Review – Preliminary Comments
4. Staff Review – Second Comments

APPLICANT SUBMITTAL

- A. Major Site Plan Application Checklist
- B. Cover Letter
- C. Right, Title, and Interest
- D. Evidence of State or Federal Permits
- E. Zoning Analysis and Assessment
- F. Easements and Covenants
- G. Waivers.
- H. Financial Capacity
- I. Technical Capacity
- J. Conformance with Land Use Code
- K. Comment Response Letter 2.17.22
- L. Lighting Plan
- M. SWM Report 2022-03-14
- N. SWP

PLANS

- Plan 1. Cover Sheet
- Plan 2. Notes and Legend
- Plan 3. Site Plan
- Plan 4. Overall Grading and Utility Plan
- Plan 5. Grading and Utility Plan
- Plan 6. Landscape Plan
- Plan 7. Erosion Control Notes
- Plan 8. Details 1
- Plan 9. Details 2

Plan 10. Details 3
Plan 11. Details 4
Plan 12. EC Plan
Plan 13. SWP Pre
Plan 14 SWP Post
Plan 15. 1902 Plat
Plan 16. Elevations
Plan 17. Preliminary Alternative Layout

PUBLIC COMMENT

PC1. Dale Holman
PC2. Dale Holman
PC3. Dale Holman.
PC4. Harlan Baker
PC5. Dale Holman
PC6. Scott Rheault

CITY OF PORTLAND
Planning & Urban Development Department

MAJOR SITE PLAN
GENERAL DOCUMENT AND DRAWINGS CHECKLIST

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

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

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

GENERAL APPLICATION DOCUMENTS

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

MAJOR SITE PLAN STANDARDS AND SUBMISSION CHECKLIST

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

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

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

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

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

MAJOR SITE PLAN DRAWINGS CHECKLIST

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

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

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

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

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

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

Existing Conditions Plan with the following:

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

Proposed Site Plan with the following:

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

• Location of solid waste management receptacles • Location of all proposed HVAC and mechanical equipment, including proposed screening, where applicable • Location of proposed easements and rights-of-way, including dimensions • Please utilize color-coding and/or hatches and shading to delineate changes between the pre and post development condition as needed
UTILITY PLAN including:
• Proposed electrical infrastructure • Location, sizing and directional flows of all proposed sewer and stormwater infrastructure • Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site • Electric utility infrastructure
GRADING AND DRAINAGE PLAN including:
• Proposed grades • Proposed stormwater management measures meeting Technical Manual (Section 5) standards • Any proposed alteration of a watercourse or wetlands • Any groundwater protection measures • Proposed buffers and preservation measures for wetlands or significant natural features
LANDSCAPE PLAN including:
• Existing vegetation to be preserved and preservation measures • Proposed landscaping, screening, and street trees, including caliper widths for trees • Planting schedule, including street trees
ARCHITECTURAL PLANS AND RENDERINGS including:
• Exterior building elevations, color renderings, illustrations of all sides • Axonometric and street-level views for structures greater than three stories in height • Provide context drawings, if applicable (Design Manual, page 1) • Floor plans
CONSTRUCTION MANAGEMENT PLAN including:
• Specifics on traffic control, sidewalk sheds, and pedestrian rerouting • Include a drawing and written narrative
OTHER
• Details and cross-sections, as necessary

CITY OF PORTLAND
Planning & Urban Development Department

MAJOR SITE PLAN
GENERAL DOCUMENT AND DRAWINGS CHECKLIST

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

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

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

GENERAL APPLICATION DOCUMENTS

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

MAJOR SITE PLAN STANDARDS AND SUBMISSION CHECKLIST

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

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

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

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

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

MAJOR SITE PLAN DRAWINGS CHECKLIST

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

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

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

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

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

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

Existing Conditions Plan with the following:

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

Proposed Site Plan with the following:

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

• Location of solid waste management receptacles • Location of all proposed HVAC and mechanical equipment, including proposed screening, where applicable • Location of proposed easements and rights-of-way, including dimensions • Please utilize color-coding and/or hatches and shading to delineate changes between the pre and post development condition as needed
UTILITY PLAN including:
• Proposed electrical infrastructure • Location, sizing and directional flows of all proposed sewer and stormwater infrastructure • Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site • Electric utility infrastructure
GRADING AND DRAINAGE PLAN including:
• Proposed grades • Proposed stormwater management measures meeting Technical Manual (Section 5) standards • Any proposed alteration of a watercourse or wetlands • Any groundwater protection measures • Proposed buffers and preservation measures for wetlands or significant natural features
LANDSCAPE PLAN including:
• Existing vegetation to be preserved and preservation measures • Proposed landscaping, screening, and street trees, including caliper widths for trees • Planting schedule, including street trees
ARCHITECTURAL PLANS AND RENDERINGS including:
• Exterior building elevations, color renderings, illustrations of all sides • Axonometric and street-level views for structures greater than three stories in height • Provide context drawings, if applicable (Design Manual, page 1) • Floor plans
CONSTRUCTION MANAGEMENT PLAN including:
• Specifics on traffic control, sidewalk sheds, and pedestrian rerouting • Include a drawing and written narrative
OTHER
• Details and cross-sections, as necessary



07360-01

October 13, 2021

City of Portland Planning & Urban Development
389 Congress Street, 4th Floor
Portland, Maine 04101

Major Site Plan – Single-Family and Duplex Site Development
Powland Street Development
73 Powland Street Portland

Dear James Rather:

On behalf of Mark Curtis and STJ Inc, we have assembled the following Major Site Plan Application for review of (5) new buildings on Powland Street on existing lots of record per deed reference Book 24766 PG 258 within the B-5 zone.

The project is proposing (5) building units, (4) duplex, and (1) single-family home for a total of 9 residential units on existing lots of record. Each building is currently proposed as a 2-story building. Due to the steep slopes and soil conditions, each building has been located towards the front of the property and shall have a daylight basement. A review of the existing residential streetscape of Powland street shows a multitude of single-family, duplex, and apartments, and the development of single-family and duplex-style housing shall fit in with the character of the existing streetscape.

As part of the project, water and sewer are proposed to come from the existing infrastructure within Powland Street. Power is proposed to come from existing overhead poles and drop underground to transformers that shall service each unit. As part of the project, the applicant is proposing the extend and repave a portion of Powland street to service the new units and provide a hammerhead turnaround for vehicles that does not exist today. Additionally, there are existing street lights along Powland street that provide a level of safe lighting for the street. All lighting for each unit shall come from façade lighting on each unit, similar to the existing homes and residential units along Powland street. No photometric plan is proposed as a part of this application.

Stormwater for the project is proposed in the form of a focal point system that will treat and detain the runoff from the proposed impervious surfaces as well as portions of Powland street. The peak rates of the proposed condition shall not exceed the existing condition. In today's existing condition, there is no treatment of runoff from Powland street. Runoff currently collects in a depression adjacent to the property (abutting the railroad). As part of the project, the

applicant shall be replacing the existing culvert and outlet control structure that flows under the railroad (with permission from the railroad). MDEP has provided a letter of determination that will allow for the replacement and enlargement of the existing culvert so long as the invert of the culvert remains at the same elevation. In its current condition, the culvert and outlet control do not function to their full capacity due to being filled with debris and waste over time. This project shall provide improved conditions of City stormwater infrastructure and treatment of runoff from Powsland Street. As part of the improvements to the site, a small portion of wetlands shall be impacted. Permitting for the wetland impacts has been filed with MDEP and approvals shall be forwarded to the City when received. The total amount of wetland impact is 4,351SF.

The landscape for each lot shall be in the form of loam and seed on the slopes with a conservation seed mix along the swale to the rear. Additionally, (1) street tree has been located for each building. Traffic has been reviewed and a memorandum has been provided stating the peak rates of the AM and PM hours that do not exceed the threshold for any TMP or further traffic studies. Please see the attached memorandum for additional information.

In Closure, we look forward to working with the City and Planning staff through the permitting for the proposed new buildings and associated site improvements. Please contact me if you have any questions or require further information.

Sincerely,
SEBAGO TECHNICS, INC.

A handwritten signature in black ink, appearing to read "Henry Hess.", is written over a light gray rectangular background.

Henry A. Hess., RLA
Project Manager
Maine Licensed Landscape Architect.

HAH:hah

enc.

cc: Mark Curtis – STJ Inc.

03: Right, Title, or Interest

The subject property is being developed by applicant, STJ Inc who are the current owner of the property

The record owner of the parcel is STJ Inc by deed recorded at the Cumberland County Registry of Deeds in Book 24766, page 258 and 259, see a copy, this section.

QUITCLAIM DEED

KNOW ALL PERSONS BY THESE PRESENTS, that the **Portland Water District**, a quasi- municipal corporation organized and existing under the laws of the State of Maine, with a mailing address of 225 Douglass Street, Portland, Maine 04104-3553 in consideration of one dollar (\$1.00) and other valuable consideration paid by STJ, Inc., with a mailing address of 939 Parker Farm Road, Buxton, Maine, the receipt whereof is hereby acknowledged, does hereby remise, release, bargain, sell and convey and forever quitclaim with quitclaim covenants, to the said STJ, Inc., its successors and assigns, a certain lot or parcel of land described in Schedule A, attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, the said Portland Water District has hereunto caused this instrument to be signed by Ronald Miller, its duly authorized General Manager, this 15th day of January, 2007.

PORTLAND WATER DISTRICT

By: Ronald Miller
Ronald Miller
General Manager

Donna M. Katsifias
Witness

STATE OF MAINE
CUMBERLAND, ss.

January 15, 2007

Personally appeared the above-named Ronald Miller in his capacity as the General Manager of the Portland Water District, and acknowledged the foregoing instrument to be his free act and deed and the free act and deed of the Portland Water District.

Before me,

Donna M. Katsifias
Notary Public/Attorney at Law

Donna M. Katsifias
Printed Name

SCHEDULE A

A certain lot or parcel of land situated on Powsland Street in the City of Portland, County of Cumberland and State of Maine, bounded and described as follows:

Being lots 66,67,68,69 and 70 as appear on a plan of land of Martin Curran, Jr., recorded in the Cumberland County Registry of Deeds in Plan Book 9, Page 121.

Being the same premises conveyed to this Grantor by Deed and recorded on December 18, 1968 in the Cumberland County Registry of Deeds in Book 3069 Page 815.

Received
Recorded Register of Deeds
Jan 18, 2007 01:36:36P
Cumberland County
Pamela E. Lovley

CONTRACT FOR THE SALE OF COMMERCIAL REAL ESTATE

RECEIVED from Gregory J. Scott or his assigns/nominees (hereinafter called "Purchaser"), this ____ day of August, 2020, the sum of [REDACTED] deposit toward purchase and sale of certain real estate owned by AKA, LLC, a Maine limited liability company (hereinafter called the "Seller") with a place of business at 368 Spurwink Road, Cape Elizabeth, Maine and described as follows:

Land located at 97 McAlister Road, Portland, Maine, which is approximately 11 acres including a 10,000 SF building and two building envelope sites, and being more fully described at the Cumberland County Registry of Deeds in Book 33096, Page 249 as well as on the City of Portland's Tax Assessors Maps as Map 319-A10, Lot 320-A-1 and upon the terms and conditions indicated below.

1. **PERSONAL PROPERTY:** The following items of personal property are included in this sale (if applicable): all personal property located on the premises, including signs, trade fixtures, and improvements
2. **PURCHASE PRICE:** The total Purchase Price is \$ [REDACTED] with payment made as follows:

Earnest money to be delivered to Seller within 2 days of the Effective Date:

\$ [REDACTED]

Additional Earnest money to be delivered to Seller at the expiration of the due diligence time frame referenced in Section 10 below:

\$ [REDACTED]

The earnest money deposits referenced above shall be non-refundable at the expiration of the due diligence periods referenced in Sections 4, 10 and 11, provided that, if Seller defaults on its obligations under the Contract (including the obligation to convey the Property to Purchaser on the Closing Date), the earnest money deposits shall be refunded to Purchaser, as provided for in Section 14 below. The earnest money deposits shall be applied to the Purchaser Price at Closing, or otherwise disbursed in accordance with this Contract.

Balance due at closing:

\$ [REDACTED]

3. **EARNEST MONEY/ACCEPTANCE:** Seller shall hold the earnest money in a non-interest bearing account and act as escrow agent until closing. This offer shall be valid until _____, 2020 at 5pm.
4. **TITLE:** Within thirty (30) days of the Effective Date (the "Title Review Period"), Purchaser shall notify Seller in writing (the "Title Objection Notice") of any matters affecting title to the property that are objectionable to Purchaser in Purchaser's sole discretion ("Title Defects"). Purchaser shall be deemed to have waived the right to object to any matter affecting title as of the Effective Date, except for any mortgage, tax lien, mechanics' lien, judgment lien, or other liens encumbering the property (for which no objection is required), if Purchaser fails to specifically identify such matters in the Title Objection Notice (each matter not objected to being a "Permitted Encumbrance"). Within seven (7) days of Seller's receipt of the Title Objection Notice, Seller shall notify Purchaser in writing whether or not Seller elects to cure any of the matters identified in the Title Objection Notice. If Seller elects to cure certain Title Defects, Seller shall use good faith efforts to cure such Title Defects and shall have a period of not more than thirty (30) days after notice of Seller's election within which to cure any such Title Defects (the "Title Cure Period"), and the Closing Date shall be extended until five (5) days after the expiration of the Title Cure Period. Seller agrees that, after the Effective Date, it shall not permit or suffer encumbrance of the property with any liens, easements, leases or other encumbrances without Purchaser's prior written consent, except that Purchaser shall not unreasonably withhold or delay its consent to new leases. On or before the Closing Date, Seller shall remove at its sole cost any such matters affecting the title to the property suffered or created by or consented to by Seller after the Effective Date that are not approved in writing by Purchaser. If Seller elects not to cure any Title Defects or if Title Defects which Seller elects to cure are not cured within the Title Cure Period, then Purchaser shall elect, by written notice to Seller on or before the Closing Date, as the same may be extended, either (i) to accept title to the property subject to such uncured Title Defects without reduction of the purchase price and without any liability on the part of Seller therefor, in which case such Title Defects shall be Permitted Encumbrances, or (ii) to terminate this Contract, whereupon the earnest money immediately shall be returned to Purchaser and neither party shall have any further obligations under this Contract.
5. **DEED:** In return for payment in full of the purchase price, Seller shall convey the Property on or before ~~October 30~~ September 30, 2020. Subject to Purchaser's completion of its Due Diligence and Financing, Seller may elect what day the Closing occurs by giving Purchaser 14 days' prior written notice of the Closing Date. Property to be conveyed to Purchaser by Maine Statutory Short-Form Quit Claim Deed with Covenant (the "Deed"), and the parties agree to execute and deliver on the Closing Date such other documents that are customary and/or reasonably necessary to complete the conveyance including a bill of sale and assignment of leases and lease subordination agreements from tenants. It is a condition to Purchaser's obligations hereunder that title to the property shall be free and clear of all liens and encumbrances except for the following matters and otherwise in compliance with the requirements of this

Contract: (i) zoning restrictions and land use laws and regulations and permits and approvals issued pursuant thereto; (ii) current taxes and assessments attributable to periods from and after the Closing, which Purchaser shall be liable to pay; (iii) leases and occupancies disclosed to Purchaser pursuant to Section 11 below; and (iv) any Permitted Encumbrance.

6. **LEASES/TENANT SECURITY DEPOSITS:** Seller agrees at closing to transfer to Purchaser, by proper assignment thereof, all Seller's rights under the current lease to the building on the property and any and all security deposits held by Seller pursuant to said lease.
7. **POSSESSION/OCCUPANCY:** Possession/occupancy of property shall be given to Purchaser on the Closing Date subject only to the leases and tenancies disclosed to Purchaser pursuant to Section 11 below, unless otherwise agreed by both parties in writing.
8. **RISK OF LOSS:** Until transfer of title, the risk of loss or damage to the property by fire or otherwise is assumed by Seller unless otherwise agreed in writing. The property shall at closing be in substantially the same condition as of the Effective Date, excepting reasonable use and wear. If the property is materially damaged or destroyed prior to closing, Purchaser may either terminate this Contract and be refunded the earnest money deposit, or close this transaction and accept the property in its as-is condition together with an assignment of the Seller's right to any insurance proceeds relating thereto.
9. **PRORATIONS:** The following items shall be prorated as of the Closing Date:
 - a. Real Estate Taxes and stormwater assessments based on the municipality's tax year. Seller is responsible for any unpaid taxes and stormwater assessments for prior years and/or billing periods.
 - b. Prepaid parking expenses
 - c. Metered utilities, such as water and sewer, shall be paid by the Seller through the date of closing.
 - d. Purchaser and Seller shall each pay one-half of the transfer tax as required by the laws of the State of Maine.
 - e. Rents, estimated monthly common area maintenance charges, estimated monthly property tax payments, and all other additional revenue received by Seller pursuant to leases of the property
10. **DUE DILIGENCE:** Purchaser is advised to seek information from professionals regarding any specific issue of concern. The Seller does not make any representations or warranties regarding the condition, permitted use or value of Seller's real or personal property. Purchaser's obligation to close under this Contract is conditioned upon Purchaser's satisfaction with its investigations of the property, which may without limitation include building inspection, survey, environmental assessment, engineering studies, wetlands or soils studies, zoning compliance or feasibility, code compliance, and any and all other studies, test or inspections deemed necessary by Purchaser all within forty five (45) days of the Effective Date.

Purchaser has been informed that the Property requires only a level 2 approval from the City of Portland to construct the buildings on the Property, and that DEP and Army Corp permits are complete and final. Purchaser shall have forty-five (45) days from the Effective Date to confirm that permits are available for Purchaser's development plans.

All investigations will be done by professionals chosen and paid for by Purchaser. If the result of any investigation is unsatisfactory to Purchaser, Purchaser may declare this Contract null and void by notifying Seller in writing within the specified number of days set forth above, and said earnest money shall be returned to Purchaser. If Purchaser does not notify Seller that Purchaser's investigations are unsatisfactory within the time period set forth above, this contingency is waived by Purchaser. In the absence of any investigations(s) mentioned above, Purchaser is relying completely upon Purchaser's own opinion as to the condition of the property. Purchaser agrees to restore any disturbance to the property caused by Purchaser's investigations, and Purchaser agrees to indemnify and hold Seller harmless for any claims, damages, losses or costs, including without limitation reasonable attorneys' fees, incurred or suffered by Seller as a result of Purchaser's investigations of the property, which indemnification obligation shall survive termination or closing under this Contract.

11. **REVIEW OF LEASES:** Seller represents: (a) that below is a complete list of all tenants occupying the property under leases or other tenancy arrangements or agreements (the "Leases"), (b) that the Leases are in full force and effect, (c) that to Seller's knowledge, all tenants under the Leases are in full compliance therewith and (d) that Seller is not in violation of its obligations under the Leases. Seller agrees to provide Purchaser within five (5) days of the Effective Date of this Contract complete copies of all Leases, including any amendments, and income and expense information concerning the property. In the event Seller does not deliver all material within five (5) days, the following 45-day review period will be extended by the number of additional days it takes Seller to deliver all such materials. Purchaser shall have forty five (45) days from the date Purchaser has been provided all Leases and income and expense information to review same, and if the result of the review is unsatisfactory to Purchaser, Purchaser may declare the Contract terminated and the earnest money shall be immediately refunded to Purchaser and thereafter neither party shall have any further obligation under this Contract. Seller represents and warrants that income and expense information provided to Purchaser will be true, accurate and complete in all material respects when given. Seller shall obtain a tenant estoppel certificate and a subordination, non-disturbance and attornment agreement in form reasonably satisfactory to Purchaser and/or Purchaser's lender for each Lease within ten (10) days from delivery of forms therefor. Between the Effective Date and the closing, Seller shall not modify.

voluntarily terminate or enter into new leases or tenancy arrangements or agreements and shall obtain Purchaser's written consent to any modification or termination of Leases and to any new lease that Seller proposes to enter into with respect to the property. Purchaser's consent not to be unreasonably withheld, conditioned or delayed. At the closing, Seller shall deliver written notice to the tenants and occupants of the property of the transfer of the property, and of the tenants' security deposits, to Purchaser. List tenants:

See attached rent roll (Exhibit B).

12. **FINANCING:** Notwithstanding anything to the contrary contained in this Contract, Purchaser's obligation to close hereunder is conditioned upon Purchaser's obtaining within thirty (30) days from the Effective Date of this Contract (the "Commitment Date") a written commitment (the "Commitment") from a lender for a mortgage on terms reasonably acceptable to Purchaser. In the event the Purchaser is unable to obtain the Commitment and Purchaser notifies Seller thereof by the Commitment Date, then Seller shall immediately return the earnest money to Purchaser, this Contract shall terminate, and neither party shall be under any further obligation under this Contract. It shall be a further condition of Purchaser's obligation to close hereunder that the Commitment shall not lapse, be terminated and/or withdrawn by the lender prior to the Closing Date, including but not limited to the property failing to appraise at or above the Purchase Price. In the event the Commitment shall lapse, be terminated and/or withdrawn by Purchaser's lender for any reason (other than at the request of Purchaser) at any time prior to the Closing Date, Purchaser shall within five (5) days of Purchaser's receipt of notice of lapse, termination and/or withdrawal notify Seller of same, and upon such notification Purchaser may, at Purchaser's option, elect to terminate this Contract and thereafter the earnest money immediately shall be returned to Purchaser and neither party shall have any further obligation under this Contract. If Purchaser does not timely notify Seller that it has failed to obtain the Commitment or that the Commitment has lapsed, terminated and/or been withdrawn, then this Contract shall remain in full force and effect and the financing contingency shall be deemed waived. Purchaser's obligations hereunder are also contingent upon the Property appraising at or above the Purchase Price.

13. **AGENCY DISCLOSURE:** Purchaser and Seller acknowledge that they have not retained a broker for this transaction. If a broker (including Phil O'Hearn) is due a commission, the commission shall be paid by the Buyer. (Selling Agent and Listing Agent are referred to elsewhere herein as "Licensees").
14. **DEFAULT:** If the sale of the property as contemplated hereunder is not consummated solely by reason of Purchaser's default hereunder, provided that Seller is then ready, willing and able to consummate the sale of the property as contemplated by this Contract and provided further that all conditions to Purchaser's obligation to consummate such purchase have been satisfied or waived by Purchaser, Seller shall be entitled to terminate this Contract and receive the earnest money as full and complete liquidated damages for the breach of this Contract, it being agreed between the parties that the actual damages to Seller in the event of such breach are difficult to ascertain and/or prove and the earnest money is a reasonable estimate and forecast of such actual damages. The parties acknowledge that the payment of the earnest money is not intended as a forfeiture or penalty, but is intended to constitute liquidated damages to Seller. If the sale of the property as contemplated hereunder is not consummated solely by reason of Seller's default hereunder, provided that Purchaser is then ready, willing and able to consummate the sale of the property as contemplated by this Contract, Purchaser shall be entitled to terminate this Contract and receive the return of the earnest money as full and complete liquidated damages for the breach of this Contract, it being agreed between the parties that the actual damages to Purchaser in the event of such breach are difficult to ascertain and/or prove and the earnest money is a reasonable estimate and forecast of such actual damages. The parties acknowledge that the payment of the earnest money is not intended as a forfeiture or penalty, but is intended to constitute liquidated damages to Purchaser. In the event of an undisputed default by either party, the Escrow Agent may deliver the earnest money to the party entitled to it under this Contract, with written notice to both parties pursuant to Chapter 400 of the Maine Real Estate Commission regulations.
15. **MEDIATION:** Any dispute or claim arising out of or relating to this Contract or the property addressed in this Contract shall be submitted to mediation in accordance with the Maine Residential Real Estate Mediation Rules of the Maine Association of Dispute Resolution Professionals or its successor organization. This clause shall survive the closing of this transaction.
16. **PRIOR STATEMENTS:** This Contract sets forth the entire agreement between the parties, and there are no other representations, agreements or understandings with respect to the subject matter of this Contract. This Contract shall be construed according to the laws of the State of Maine.

17. HEIRS/ASSIGNS: This Contract shall extend to and be obligatory upon heirs, personal representatives, successors, and assigns of Seller and assigns of Purchaser. The Purchaser may assign its rights and obligations under this Agreement to its affiliate.
18. COUNTERPARTS: This Contract may be signed on any number of identical counterparts, including telefax copies and electronically transmitted copies with the same binding effect as if all of the signatures were on one instrument.
19. EFFECTIVE DATE: This Contract is a binding contract when signed by both Seller and Purchaser and when that fact has been communicated to all parties or to their agents. Time is of the essence of this Contract. Seller or Licensees are given permission by the parties to complete the Effective Date blank below with the date of the last signature of the parties, and that date shall be the Effective Date for all purposes under this Contract, and if that blank is not completed, then the Effective Date shall be the date of the last signature of the parties. Except as expressly set forth to the contrary in this Contract, the use of the term "days" in this Contract, including all addenda made a part hereof, shall mean calendar days. Deadlines in this Contract, including all addenda, expressed as "within x days" or the like shall be counted from the Effective Date, unless another starting date is expressly set forth, beginning with the first day after the Effective Date, or such other established starting date, and ending at 5:00 pm, Eastern Time, on the last day counted.
20. CONFIDENTIALITY: Purchaser and Seller authorize the disclosure of the information herein to the real estate licensees, attorneys, lenders, appraisers, inspectors, investigators and others involved in the transaction necessary for the purpose of closing this transaction. Purchaser and Seller authorize the lender and/or closing agent preparing the closing statement to release a copy of the closing statement to the parties and their licensees prior to, at and after the closing. Otherwise, this transaction shall be kept confidential by the parties.
21. A copy of this Contract is to be received by all parties and, by signature, receipt of a copy is hereby acknowledged. If not fully understood, consult an attorney.
22. Seller acknowledges that the laws of the State of Maine provide that every buyer of real property located in Maine must withhold a withholding tax equal to 2 1/2 % of the consideration unless Seller furnishes to Purchaser a certificate by the Seller stating, under penalty of perjury, that Seller is a resident of the State of Maine or the transfer is otherwise exempt from withholding.
23. ADDENDA: This Contract has addenda containing additional terms and conditions. Yes ☒ No ☐.
24. CONDITIONS: In the event that either the Seller or Purchaser are involved in an IRS 1031 Like-Kind tax deferred exchange or similar tax related transaction, all parties agree to cooperate provided that (i) there are no additional costs, obligations, or fundamental changes within the guidelines of this Contract, (ii) the documents are in form and substance reasonably satisfactory to the party not requesting the exchange, (iii) the Closing Date is not postponed, and (iv) the party requesting the exchange reimburses the other party, at the closing, for all out-of-pocket costs and expenses incurred by such other party in connection with its cooperation.

The parties agree that none of the above are collateral agreements. It is the intent of the parties that except as expressly set forth in this Contract, all covenants, representations, statements and obligations of both parties herein shall not survive closing.

 9-11-2020
Gregory J. Scott

Seller accepts and agrees to the terms and conditions set forth in this Contract.

Signed this 10th day of September, 2020

AKA, LLC

By: 
Signature

 masita c
Name/Title, thereunto duly authorized
AKA, LLC

04: Evidence of State or Federal Permits

Due to wetland impacts associated with the improvements, a Tier 1 NRPA has been filed for 4,351 SF of wetland impacts.

The proposed development will disturb less than one acre of land, will create less than one acre of impervious area. No additional permitting is required through the Maine Department of Environmental Protection.

The property qualifies for an NRPA exemption based on the determination provided by the Maine Department of Environmental Protection. The project received a letter of determination from the Maine Department of Environmental Protection that determined the adjacent drainage is not a river, stream or brook as defined by the Natural Resources Protection Act (NRPA) and qualifies for the 4300 SF NRPA alteration exemption for any work that shall occur to improve the outdated and poorly functioning outlet control structure and culvert.

Attached is a copy of the 2004 determination by MDEP.

CITY OF PORTLAND, MAINE

PLANNING BOARD

Lee Lowry III, Chair
Kevin Beal, Vice Chair
John Anton
Michael Patterson
David Silk
Janice E. Tevanian
Shalom Odokara

June 16, 2005

Mr. Ken Porter
Rio Tierra, LLC
655 Riverside Street
Portland, ME 04103

RE: Lot 6 McAllister Farm Subdivision and Site Plan
ID# 2005-0001, CBL# 319-A-001

Dear Mr. Porter:

On May 10, 2005 the Portland Planning Board voted unanimously on the following motions regarding the Lot 6 McAllister Farm subdivision:

1. That the Planning Board does waive the Technical Standards, which requires "if the estimated post-development peak rate of stormwater runoff from the affected land is calculated to be greater than the pre-development runoff peak rate, in any watershed within the boundaries of the affected land during any phase of development, then a detention basin should be designed and constructed to maintain pre-development runoff peak rates from the site", due to the fact that the drainage is flowing towards the Presumpscot River.
2. That the Planning Board does approve the subdivision amendment to the McAllister Farm Subdivision Plan.
3. That the plan was in conformance with the Subdivision Review Ordinance of the City Land Use Code with the following conditions:
 - i. that the applicant comply with the Traffic Engineer's memo dated May 6, 2005, with the exception that (vis-à-vis) the applicant be allowed to phase his contribution to the Riverside Intersection upgrade at a rate of \$5,000 per building to be paid prior to the issuance of a building permit.
 - ii. that the wastewater generation from Lot 6 shall be limited to the flows as defined in their current capacity letter request for sanitary flows and not be eligible to use these facilities for any high volume production discharge. In the event the City adopts an amendment to the Westbrook/Portland inter-local agreement, the applicant shall connect and discharge to the Westbrook system. And if the McAllister Farm Subdivision is at some point

sewered by the City of Portland, Lot 6 shall be connected into the new sewer constructed to accommodate the subdivision.

- iii. that the applicant address Woodard & Curran's comments in the May 5, 2005 memo to be reviewed and approved by staff.
 - iv. that the applicant provide evidence of conformance for stormwater quality measures to determine that they provide adequate means to remove TSS (total suspended solids) from the stormwater in a manner consistent with the MDEP Stormwater Best Management Practices.
4. That the plan is in conformance with the site plan standards of the land use code with the following conditions:
- i. that the applicant staff with building elevations for Buildings Two and Three, for review and approval, prior to issuance of building permits for Buildings Two and Three.
 - ii. that the applicant comply with the Traffic Engineer's memo dated May 6, 2005 subject to the amendment that the applicant contribute \$15,000 to the Riverside Intersection upgrades, per building, prior to the issuance of the building permit.

The approval is based on the submitted plan and the findings related to site plan review standards as contained in Planning Board #31-05, which is attached.

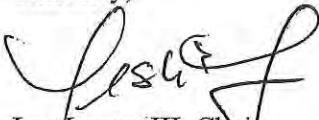
Please note the following provisions and requirements for all subdivision approvals:

1. Mylar copies of the construction drawing for the subdivision must be submitted to the Public Works Department prior to the release of the plat. Where submission drawings are available in electronic form, the applicant shall submit any available electronic AutoCAD files (*.dwg), release 14 or greater, with seven (7) sets of the final plans.
2. A performance guarantee covering the site improvements as well as an inspection fee payment of 2.0% of the guarantee amount must be submitted to and approved by the Planning Division and Public works prior to the recording of the subdivision plat. The subdivision approval is valid for three (3) years.
3. A defect guarantee, consisting of 10% of the performance guarantee, must be posted before the performance guarantee will be released.
4. Prior to construction, a pre-construction meeting shall be held at the project site with the contractor, development review coordinator, Public Work's representative and owner to review the construction schedule and critical aspects of the site work. At that time, the site/building contractor shall provide three (3) copies of a detailed construction schedule to the attending City representatives. It shall be the contractor's responsibility to arrange a mutually agreeable time for the pre-construction meeting.
5. If work will occur within the public right-of-way such as utilities, curb, sidewalk and driveway construction, a street opening permit(s) is required for your site. Please contact Carol Merritt at 874-8300, ext. 8828. (Only excavators licensed by the City of Portland are eligible.)

6. The Development Review Coordinator must be notified five (5) working days prior to date required for final site inspection. The Development Review Coordinator can be reached at the Planning Department at 874-8632. Please make allowances for completion of site plan requirements determined to be incomplete or defective during the inspection. This is essential as all site plan requirements must be completed and approved by the Development Review Coordinator prior to issuance of a Certificate of Occupancy. Please schedule any property closing with these requirements in mind.

If there are any questions regarding the Board's actions, please contact Kandice Talbot at 874-8901.

Sincerely,



Lee Lowry III, Chair
Portland Planning Board

cc: Lee D. Urban, Planning and Development Department Director
Alexander Jaegerman, Planning Division Director
Sarah Hopkins, Development Review Services Manager
Kandice Talbot, Planner
Jay Reynolds, Development Review Coordinator
Marge Schmuckal, Zoning Administrator
Inspections Division
Michael Bobinsky, Public Works Director
Traffic Division
Eric Labelle, City Engineer
Jeff Tarling, City Arborist
Penny Littell, Associate Corporation Counsel
Fire Prevention
Assessor's Office
Approval Letter File



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

DEPARTMENT ORDER

IN THE MATTER OF

RIO-TIERRA, L. L. C.
Portland, Cumberland County
OFFICE/WAREHOUSE BUILDINGS
L-22207-TE-A-N (approval)

) NATURAL RESOURCES PROTECTION
) TIER TWO WETLAND ALTERATION
) WATER QUALITY CERTIFICATION
) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act, the Department of Environmental Protection has considered the application of RIO-TIERRA, L. L. C. with the supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. History of Project: In Department Order #L-14644-26-A-N, dated September 16, 1987, the Department approved the construction of a warehouse on Lot 4 of McAllister Farm Subdivision. Several minor modifications to Lot 4 were approved in subsequent Department orders. The applicant is acquiring Lot 6 of McAllister Farm Subdivision and is proposing to develop the property as described below.

B. Summary: The applicant proposes to construct three 10,000-square foot office/warehouse buildings and associated parking, driveways, and utility connections. The proposed project will result in the alteration of 42,430 square feet of freshwater wetland and is shown on a set of plans, the first of which is entitled "McAllister Farm Subdivision – Lot 6 Master Plan," prepared by Mohr and Seredin, dated January 18, 2005, and last revised March 28, 2005. The project site is located on the west side of Riverside Street in the City of Portland.

C. Current Use of the Site: The site is currently undeveloped but was cleared for development approximately 20 years ago, at which time a culvert and gravel road were installed. The lot is also bisected by a Portland Water District water main.

2. EROSION CONTROL:

The applicant submitted a Grading, Drainage, and Erosion Control Plan, dated March 3, 2005, as Sheet L3.1 of the set of plans referenced in Finding 1. The plan was reviewed by an engineer from the Division of Watershed Management of the Bureau of Land and Water Quality (BLWQ), who stated that it meets Department standards for erosion control.

3. WETLANDS AND WATERBODIES PROTECTION RULES:

The applicant proposes to fill approximately 42,430 square feet of scrub shrub and wet meadow wetland to construct the commercial buildings and associated improvements. The Department's Wetlands and Waterbodies Protection Rules, Chapter 310, require that the applicant meet the following standards:

a. Avoidance. No activity may be permitted if there is a practicable alternative to the project that would be less damaging to the environment. The applicant submitted an alternatives analysis for the proposed project completed by Mohr and Seredin, dated January 18, 2005. Six parcels of land were evaluated over a three-year period. Because of the scarcity of suitably-zoned land in the greater Portland area, a majority of the parcels had significant wetlands and other environmental constraints on site.

The applicant submitted information regarding the proposed uses and tenants for the facilities to be constructed, including letters of intent to enter into lease agreements with the applicant signed by prospective tenants. This information demonstrates that the types of uses are specific and require certain size buildings, parking, and loading areas that will necessitate the filling of the wetlands.

b. Minimal Alteration. The amount of wetland to be altered must be kept to the minimum amount necessary for meeting the overall purpose of the project. The applicant presented three on-site alternative building plans for the project site and demonstrated that the proposed alternative represents the plan that will alter the least amount of wetland. By constructing three separate buildings, the applicant will be able to avoid impacting other stream-associated wetlands and floodplain. The proposed layout also provides for an undisturbed 200-foot wide buffer to the Presumpscot River as required by Department Order #L-14644-26-A-N.

c. Compensation. In accordance with Chapter 310, Section 5(c), compensation is required to achieve the goal of no net loss of wetland functions and values. The applicant submitted a functional assessment of the wetland to be altered. Principal functions of the wetland to be altered were identified as wildlife habitat, sediment/toxicant retention, and nutrient removal.

To compensate for these functional losses, the applicant proposes to create four new wetland areas that will total approximately 32,393 square feet of new wet meadow and scrub shrub wetlands. Additionally, plantings will be installed in existing wetland areas to enhance their functions and values. The applicant also identified four areas on site that are exhibiting erosion problems that will be regraded as necessary and stabilized with conservation seed mix, riprap and geotextile fabric where appropriate. Details of the compensation are presented in a document entitled "Wetland Compensation Plan for Lot 6 – McAllister Farm Subdivision," dated March 1, 2005, and on Sheet L3.1 of the set of plans referenced in Finding 1, entitled "Lot 6 – McAllister Farm Subdivision – Phase 2: Grading, Drainage, Erosion Control Plan," last revised March 28, 2005.

The applicant proposes to place restrictive covenants on all of the created and enhanced wetland areas, and additional land on site for a total of 6.06 acres. The applicant submitted draft restrictive language that will be attached to the deed for lot 6. Prior to construction, the applicant must have the restrictive language recorded at the Cumberland County Registry of Deeds and submit a copy of the recorded deed to the Department.

The proposed compensation plan states that the compensation areas will be constructed concurrently with project construction, and includes post-construction monitoring of the created and enhanced wetlands. The site will be inspected and reports will be submitted to the Department at least annually for a minimum period of five years. Criteria for success are outlined in the compensation plan.

The Department finds that the applicant has avoided and minimized wetland impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project.

4. OTHER CONSIDERATIONS:

The Department did not identify any other issues involving existing scenic, aesthetic, or navigational uses, habitat or fisheries, the natural transfer of soil, natural flow of water, water quality, or flooding.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Sections 480-A et seq. and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life provided the recorded deed is submitted, and monitoring is performed, as described in Finding 3.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in Title 38 M.R.S.A. Section 480-P.

THEREFORE, the Department APPROVES the above-noted application of RIO-TIERRA, L. L. C. to fill freshwater wetland in conjunction with the development of an office/warehouse complex as described in Finding 1, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

1. Standard Conditions of Approval, a copy attached.
2. The applicant shall take all necessary measures to ensure that its activities or those of its agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.
3. Prior to construction, the applicant shall have the restrictive language discussed in Finding 3 recorded at the Cumberland County Registry of Deeds and submit a copy of the recorded deed to the Department.
4. The applicant shall perform post-construction monitoring of the created and enhanced wetlands as outlined in the compensation plan submitted with the application. The site shall be inspected and reports shall be submitted to the Department at least annually for a minimum period of five years.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED AT AUGUSTA, MAINE, THIS 1ST DAY OF APRIL, 2005.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

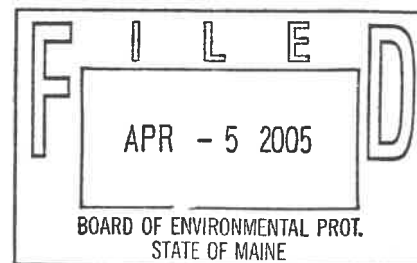
By:


DAWN R. GALLAGHER, COMMISSIONER

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application February 3, 2005
Date of application acceptance February 7, 2005

Date filed with Board of Environmental Protection
MR/ATS53927/L22207AN





ZONING ANALYSIS Relevant Zone(s) B-5

All Projects:

	Required	Proposed
Lot Size	NA	29,000 SF
Area Per Dwelling Unit	NA	
Minimum Street Frontage	NA	50 ft
Front Yard Minimum	NA	20 ft and 17 ft
Front Yard Maximum	NA	
Rear Yard	NA	39 ft
Yard Right	NA	12 ft
Yard Left	NA	12 ft
Side Street Setback	NA	N/A
Step Back	NA	N/A
Maximum Lot Coverage	NA	25%
Minimum Lot Coverage	NA	N/A
Maximum Height	65 FT	35'
Open Space	NA	
Maximum Impervious Area	N/A	
Pavement Setback	N/A	
Floor Area Ratio	N/A	
Off Street Parking Spaces	1/ UNIT	2/ PER UNIT
Loading Bays	N/A	N/A
Other 1	N/A	N/A
Other 2	N/A	N/A
Other 3	N/A	N/A

Planned Residential Unit Developments (PRUD) Requirements

	Required	Proposed
Minimum Lot Size	2 ac.	N/A
Minimum Lot Area per Dwelling	3,000 SF	N/A
Maximum # Units per Building	12 ft	N/A
Maximum Building Length	140 ft	N/A
Maximum Accessory Building Length	60 ft	N/A
Minimum Setbacks	25 ft	N/A
Minimum Building Separation		N/A
Minimum Open Space	300 SF/D.U.	N/A`

Affordable Housing Density Bonuses (if applicable)

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

05: Zoning Assessment

The subject property is located within the B-5 Zoning District. Please refer to the required Zoning Analysis Table enclosed in this section.

06: Existing and/or Proposed Easements or Covenants

There are no proposed easements associated with the current proposed site plan improvements.

DECLARATION OF COVENANTS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS AND RESTRICTIONS is made this 22nd day of June, 2005, by Rio Tierra LLC, 655 Riverside Street, Portland, Cumberland County, Maine, 04103, (herein referred to as the "Declarant"), pursuant to a permit received from the Maine Department of Environmental Protection under the Natural Resources Protection Act, Tier 2 Wetland Alteration Permit, Project number L-22207-TE-A-N, dated April 1, 2005 (hereinafter referred to as "Order"), relating to preservation of approximately 6.06 acres of land on Lot 6 at the McAlister Farm Subdivision in Portland, ME.

RECITALS

WHEREAS, the Declarant holds title to certain real property situated in Portland, Maine described in a deed from Martin Rist and Bonnie Brunet, Trustees of the Rist Brunet Family Trust u/d/t dated March 27, 1997 to Rio-Tierra, LLC, dated June 22, 2005, and recorded in Book 22786 Page 95 at the Cumberland County Registry of Deeds, herein referred to as the "property"; and

WHEREAS, Declarant desires to place certain deed covenants, under the terms and conditions herein, over a portion of said real property (hereinafter referred to as the "Covenant Area") described as follows:

A portion of Lot 6 of the McAlister Farm Subdivision more specifically shown on the attached Exhibit A; Plan of Easement Areas, Lot 6, dated February 28, 2005.

WHEREAS, pursuant to the Natural Resources Protection Act, Title 38 M.R.S.A. Section 480-A et seq. and Chapter 310 of regulations promulgated by the Maine Department of Environmental Protection (the "Wetland Protection Rules"), Declarant has agreed, in satisfaction of paragraph c. Compensation, located under the Wetlands and Waterbodies Protection Rules, and more specifically being the second paragraph thereunder, of the Order, to impose certain covenants and restrictions on the Covenant Area as more particularly set forth herein and has agreed to such covenants and agreements may be enforced by the Maine Department of Environmental Protection (hereinafter the "MDEP"), or any successor in interest.

NOW, THEREFORE, the Declarant hereby declares that the Covenant Area is and shall forever be held, transferred, sold, conveyed, occupied and maintained subject to the conditions and restrictions set forth herein. The Covenants and Restrictions shall run with the Covenant Area and shall be binding on all parties having any right, title or interest in and to the Covenant Area, or any portion thereof, and their heirs, personal representatives, successors, and assigns. Any present or future owner or occupant of the Covenant Area or any portion thereof, by the acceptance of a deed of conveyance of all or part of the Covenant Area or an instrument conveying any interest therein, whether or not the deed or instrument shall so express, shall be deemed to have accepted the Covenant Area subject to the Covenants and Restrictions and shall agree to be bound by, to comply with and to be subject to each and every one of the Covenants and Restrictions hereinafter set forth.

1. Restrictions Covenant Area. Unless the owner of the Covenant Area, or any successors or assigns, obtains the prior written approval of the MDEP, the Covenant Area shall remain undeveloped in perpetuity.
 - a. No soil, loam, peat, sand, gravel, concrete, rock or other mineral substance, refuse, rash, vehicle bodies or parts, rubbish, debris, junk waste, pollutants or

other fill material will be placed, stored or dumped on the Covenant Area, nor shall the topography be altered or manipulated in any way;

- b. no trees, grasses, shrubs, vines or other vegetation shall be cut, destroyed, or sprayed with biocides shall be allowed, and clearing will be allowed for the maintenance of any existing path or trail, and dead wood which is leaning or fallen may be removed if it presents a safety hazard along a path or trail.
- c. no ditches shall be dug, and no draining of the Covenant Area shall take place, and no pumping or any other removal of water shall occur on the Covenant Area, nor shall the manipulation or alteration of natural water courses or hydrology occur;
- d. no building, sign fence, utilities, utility pole, or other temporary or permanent structure will be constructed, placed or permitted to remain on the Covenant Area.
- e. no trucks, cars, dirt bikes, ATVs, bulldozers, backhoes, or other motorized vehicles or mechanical equipment shall be permitted on the Covenant Area, and
- f. no wildlife shall be taken, killed, harmed or removed from the Covenant Area. Enforcement of this restriction is the sole responsibility of the Declarant.

Any activity on or use of the Covenant Area inconsistent with the purpose of these Covenants and Restrictions is prohibited. Prior to undertaking any changes in the use of the Covenant Area, the Declarant, its successors and assigns, shall consult with the MDEP regarding the proposed changes to determine the effect of such changes on the conservation values of the Covenant Area. The MDEP shall have the right to approve such changes in use if such uses do not impair or impede the conservation values of the Covenant Area or the purpose of the Covenant and Restrictions.

- 2. Enforcement. The MDEP may enforce any of the Covenants and Restrictions set forth in Section 1 above. Any future alterations of the Covenant Area must receive the prior approval in writing from the MDEP.
- 3. Binding Effect. The restrictions set forth herein shall be binding on any present or future owner of the Covenant Area. If the Covenant Area is at any time owned by more than one owner, each owner shall be bound by the foregoing restrictions but only to the extent that any of the Covenant Area is included within such owner's property.
- 4. Amendment. Any provision contained in this Declaration may be amended or revoked only by the recording of a written instrument or instruments specifying the amendment or the revocation signed by the owner or owners of the Covenant Area and by the MDEP (or any successor thereto).
- 5. Effective Provisions of Declaration. Each provision of this Declaration, and any agreement, promise, covenant and undertaking to comply with each provision of this Declaration, shall be deemed a land use restriction running with the land as a burden and upon the title to the Covenant Area.
- 6. Severability. Invalidity or unenforceability of any provision of this Declaration in whole or in part shall not affect the validity or enforceability of any other provision or any valid and enforceable part of a provision of this Declaration.

7. Governing Law. This Declaration shall be governed by and interpreted in accordance with the laws of the State of Maine.

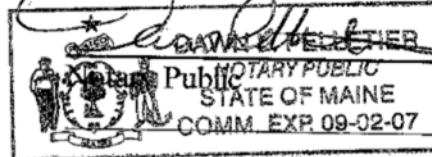
RIO TIERRA, LLC

By: [Signature]
Kendall R. Porter
Its: Manager

STATE OF MAINE
Cumberland County, ss

6/22, 2005.

Personally appeared before me the above named Kendall R. Porter, Manager, Rio-Tierra 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 Rio Tierra, LLC.



F:\Projects\566-Porter\correspondence\DEP\covenant.doc

07: Waiver Requests

No new waivers are requested at this time.

Standard to be Waived: Cite Ordinance or Technical Manual Standard	Cite Standard Language: Cite specific language of applicable Ordinance or Technical Manual Standard	Waiver Being Sought: Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	Justification for Waiver: Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Technical manual Section 5.III and %.IV (By reference MDEP Chapter 500.4.F.3(a))	Developments as specified under Section II Applicability in Portland must comply with the most recent version of the Maine Department of Environmental Protection (Maine DEP) Chapter 500 Rules for Stormwater Management(http://www.maine.gov/dep/land/stormwater/storm.html), including	A waiver of the Chapter 500 flooding standard waiver was included in the 2005 development approvals. We request that this waiver be continued for the Building 2 pad site approval	The stormwater management plan approved for the site in 2005 included a waiver of the flooding standard based on the location of the site adjacent to the Presumpscot River and through the creation of conservation areas/buffers on the site.
	but not limited to the standards for Urban Impaired Stream, Basic, General, and Flooding Standards for the suitability, design, installation, and maintenance of systems to comply with the General and Flooding Standards are provided in Volume III of the Maine Stormwater Best Management Practices Manual.		No constructed flood control was required in the approved plan for the Building 2 site in the 2005 approval.
	The Department may allow a waiver for a project discharging directly into a river that is not a major river segment if the Department determines that the increase in peak flow from the site will not significantly affect the peak flow of the river or result in unreasonable adverse impact on any wetlands.		The proposed design adds stormwater quality BMPs that are in addition to the approved 2005 plan requirements, meeting the Chapter 500 General Standards and providing a measure additional flood control that was not required in the 2005 approvals.

R E P O R T

August 26, 2014
07-1254 S

Explorations and Preliminary Geotechnical Services

Proposed Apartment Building
Powsland Street
Portland, Maine

PREPARED FOR:

Avesta Housing
Attention: Drew Wing
307 Cumberland Avenue
Portland, Maine 04101

PREPARED BY:

S. W. Cole Engineering, Inc.
286 Portland Road
Gray, Maine 04039
T: 207-657-2866



S.W.COLE
ENGINEERING, INC.

- *Geotechnical Engineering*
- *Construction Materials Testing*
- *GeoEnvironmental Services*
- *Ecological Services*

www.swcole.com

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 Scope and Purpose	1
1.2 Site and Proposed Construction	1
2.0 EXPLORATIONS	2
2.1 Explorations	2
2.2 Testing	2
3.0 SITE AND SUBSURFACE CONDITIONS	2
3.1 Surficial	2
3.2 Soil and Bedrock	3
3.3 Groundwater	4
4.0 CONCLUSIONS AND RECOMMENDATIONS	4
5.0 CLOSURE	5

Attachment A	Limitations
Sheet 1	Exploration Location Plan
Sheets 2 - 7	Exploration Logs
Sheet 8	Key to the Notes and Symbols Used on Exploration Logs

07-1254 S

August 26, 2014

Avesta Housing
Attention: Drew Wing
307 Cumberland Avenue
Portland, Maine 04101

Subject: Explorations and Preliminary Geotechnical Services
Proposed Apartment Building
Powsland Street
Portland, Maine

Dear Drew:

In accordance with our Proposal, dated August 1, 2014, we have completed subsurface explorations for the subject project. This report summarizes our findings and preliminary geotechnical recommendations and its contents are subject to the limitations set forth in Attachment A.

1.0 INTRODUCTION

1.1 Scope and Purpose

The purpose of our services was to obtain subsurface information at the site in order to develop preliminary geotechnical recommendations relative to foundations and earthwork associated with the proposed construction. Our scope of services included three test boring explorations, a geotechnical assessment of the subsurface findings and preparation of this report.

1.2 Site and Proposed Construction

The site is located on the west side of the dead end of Powsland Street in Portland, Maine. We understand development plans call for construction of a 25 to 35 unit apartment building with below grade parking. We understand the building will be rectangular shaped and will measure approximately 50 by 150 in plan dimensions. We anticipate the first floor elevation along Powsland Street will be at approximately

elevation 34 feet with below grade parking at approximately elevation 22 feet. We understand the below grade parking will be serviced by an access drive on the south end of the building that ramps down from Powsland Street. We anticipate the building will be lightly loaded and the below grade parking will be asphalt paving. Proposed and existing site features are shown on the "Exploration Location Plan" attached as Sheet 1.

2.0 EXPLORATIONS

2.1 Explorations

Three test borings (B-1 through B-3) were made at the site on August 12, 2014 by Great Works Test Boring, Inc. of Rollinsford, New Hampshire working under subcontract to S. W. Cole Engineering, Inc. (S.W.COLE). The exploration locations were selected and established in the field by S. W. Cole Engineering, Inc. (S.W.COLE) based on measurements from existing site features.

The approximate exploration locations are shown on the "Exploration Location Plan" attached as Sheet 1. Logs of the explorations are attached as Sheets 2 through 7. The elevations shown on the logs were estimated based on topographic information shown on Sheet 1. A key to the notes and symbols used on the logs is attached as Sheet 8.

2.2 Testing

The borings were made using a combination of hollow stem auger, cased wash-boring and rod probe exploration techniques. The soils were sampled in the borings at 2 to 5 foot intervals using Standard Penetration Test (SPT) methods. Pocket Penetrometer Tests (PPT) were performed where stiffer clay soils were encountered. Vane Shear Testing (VST) was performed in softer clay soils encountered in boring B-1. Soil samples obtained from the explorations were visually classified in the field and laboratory using Modified Burmister Methods.

3.0 SITE AND SUBSURFACE CONDITIONS

3.1 Surficial

The site consists of a vacant lot which has been apparently filled over the years. The site generally slopes down to the west away from Powsland Street, from about elevation 34 feet at edge of pavement down to about elevation 18 feet (project datum). The site is

overgrown and numerous piles of various yard waste and random debris are visible on the ground surface. A small channel of flowing water is present along the western periphery (downhill side) of the site.

3.2 Soil and Bedrock

The borings generally encountered a soils profile consisting of uncontrolled fill overlying relic shore deposits and organic soils, overlying glaciomarine clay overlying refusal surfaces (probable bedrock). The principal soils encountered are summarized below; refer to the attached logs for more detailed descriptions of the subsurface findings.

Uncontrolled Fill: The borings encountered uncontrolled fill consisting of loose to medium dense sand with varying portions of silt, gravel, cobbles, organics and miscellaneous debris, such as ash, clinker, brick, porcelain, wood and glass. The uncontrolled fill extended to depths varying from 2 to 17 feet, being thinnest at boring B-1.

Relic Shore Deposits and Organic Soils: Underlying the uncontrolled fill, borings B-1 and B-2 encountered relic shore deposits and organic soils. Boring B-1 encountered loose layered silts and sands with organics extending to a depth of about 16 feet, overlying an approximate 3-foot thickness of fibrous peat. Boring B-2 encountered loose to medium dense, layered, silts, sands, and gravels to a depth of about 25.5 feet. Roots and organics were encountered in some of the layers in B-2.

Glaciomarine Clay: Underlying the uncontrolled fill, relic shore deposits and organic soils, the borings encountered glaciomarine clay. The glaciomarine clay generally consisted of a stiffer layer of brown to brown-gray silty clay, transitioning to a relatively thicker layer of softer gray clay. The clay extended to depths varying from about 53 to 62 feet. VST performed in the silty clay indicated in-situ undrained shear strengths of 0.6 to 0.7 ksf. An approximate 4 foot thick layer of granular soils was encountered at the bottom of the clay in boring B-1.

Refusal Surfaces: Refusal surfaces (probable bedrock) were encountered at the borings at depths varying from about 58 to 62.7 feet. Based on the topographic information shown on Sheet 1, the elevation of the refusal surface varies from about elevation -31 to -39 feet.

3.3 Groundwater

Saturated soils were encountered at borings B-1, B-2, and B-3 at depths of about 4, 17, and 15 feet, respectively (approximate elevation 14 to 16 feet). Groundwater likely perches within the uncontrolled fills and on top of the silty and clayey soils encountered at the site. We anticipate that groundwater is likely influenced water levels in the nearby Fore River Estuary. It should be anticipated that groundwater levels will fluctuate, particularly following periods of snowmelt and precipitation and in response to changes in site use. Long term groundwater information is not available.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the subsurface findings, the site has soil limitations requiring pile supported foundations, geotextiles for pavement subgrade reinforcements, a methane collection and venting system and proper disposal of uncontrolled fills with ash and debris. We offer the following geotechnical recommendations for preliminary design consideration:

- The uncontrolled fill, peat, and organic soils are unsuitable for support of the proposed building. Overexcavation of the unsuitable soils is not considered feasible due to site terrain, depth of unsuitable soils depth of excavation and shallow groundwater.
- We recommend the proposed building derive support from steel H-piles with cast tips driven to end bearing on bedrock. For preliminary planning, we recommend design consider use of 50 ksi steel HP 10x42 piles with an allowable axial capacity of 80 kips or 50 ksi steel HP 12x53 piles with an allowable axial capacity of 110 kips. We can assist with final pile size selection and evaluation during the design phase of the project.
- Use of a conventional asphalt pavement section for the below-grade parking area and access ramp appears feasible. However, we anticipate several feet of the existing uncontrolled fill and organic soils will need to be overexcavated and replaced with Structural Fill overlying a geotextile fabric or grid to provide a stable pavement subgrade.
- Braced sheeting or a temporary easement for sloped excavations will be needed along Powsland Street and adjacent property to the north for excavation support

during foundation construction.

- The presence of peat beneath the site will require a methane collection and venting system below the lowest level of the building. The methane collection system should be vented above the roofline away from ignition sources and air intakes for the building.
- Excavation work will encounter wet uncontrolled fills with miscellaneous debris. The on-site soils are unsuitable for reuse during construction. Imported Structural Fill, Crushed Stone, and pavement gravels will be needed for construction.
- The ash and debris encountered in the uncontrolled fills may have premium disposal costs. We recommend that test pit explorations be performed to characterize the uncontrolled fills for proper disposal off-site.
- The 25-year Air Freezing Index for the Portland, Maine area is about 1,250-Fahrenheit degree-days, which corresponds to a frost penetration depth on the order of 4.5 feet. Based on the subsurface findings, we interpret the site soils to correspond to Seismic Soil Site Class E according to 2009 IBC.

5.0 CLOSURE

It has been a pleasure to be of assistance to you with this phase of your project. We look forward to working with you as design progresses and during the construction.

Sincerely,

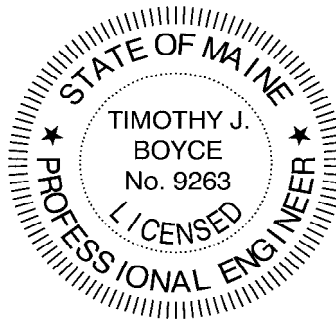
S. W. Cole Engineering, Inc.

Evan M. Walker, P.E.
Geotechnical Engineer



Timothy J. Boyce, P.E.
Senior Geotechnical Engineer

EMW:tjb



Attachment A Limitations

This report has been prepared for the exclusive use of Avesta Housing for specific application to the proposed Apartment Building on Powsland Street in Portland, Maine. S. W. Cole Engineering, Inc. (S.W.COLE) has endeavored to conduct the work in accordance with generally accepted soil and foundation engineering practices. No warranty, expressed or implied, is made.

The soil profiles described in the report are intended to convey general trends in subsurface conditions. The boundaries between strata are approximate and are based upon interpretation of exploration data and samples.

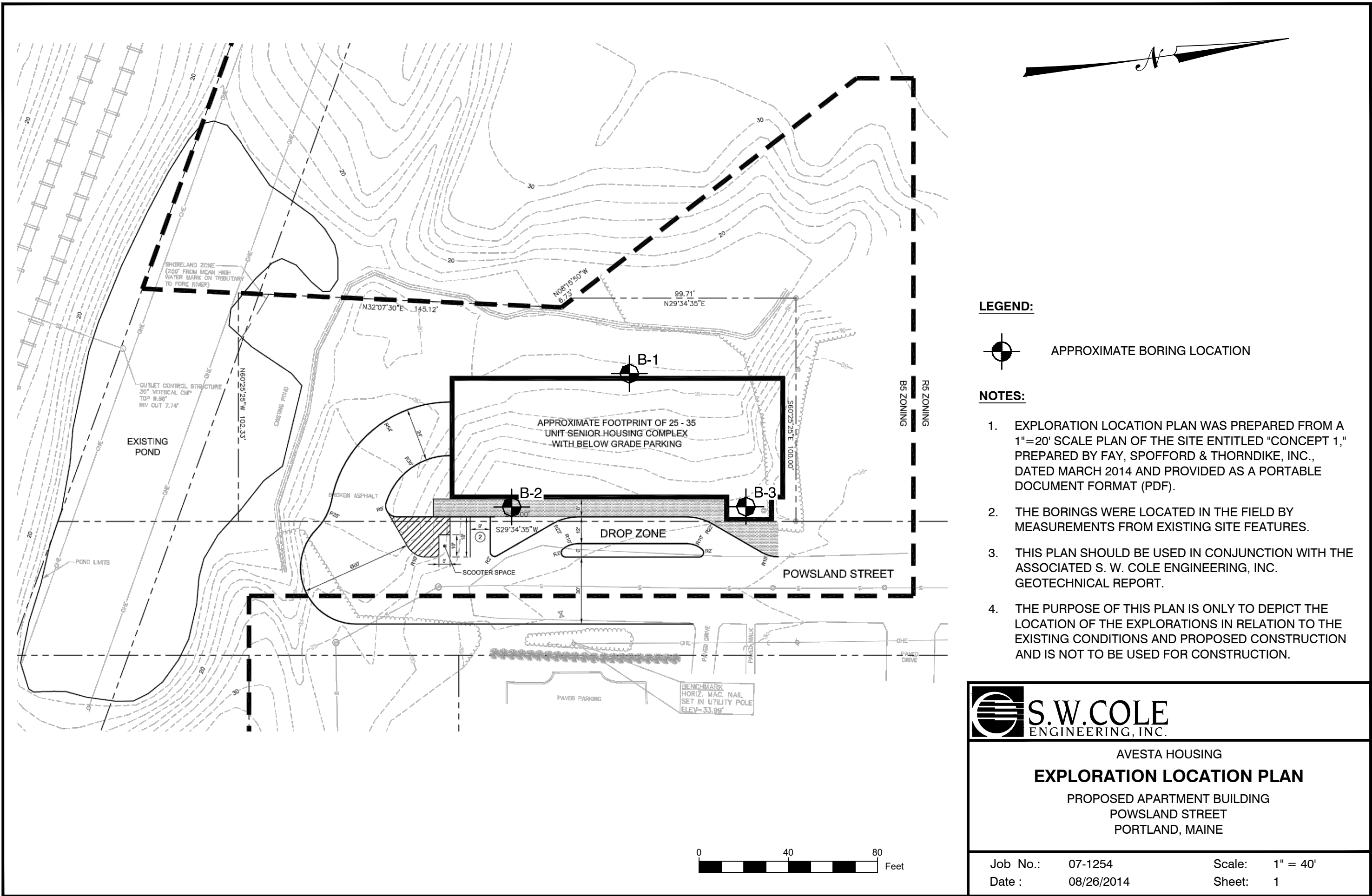
The analyses performed during this investigation and recommendations presented in this report are based in part upon the data obtained from subsurface explorations made at the site. Variations in subsurface conditions may occur between explorations and may not become evident until construction. If variations in subsurface conditions become evident after submission of this report, it will be necessary to evaluate their nature and to review the recommendations of this report.

Observations have been made during exploration work to assess site groundwater levels. Fluctuations in water levels will occur due to variations in rainfall, temperature, and other factors.

S.W.COLE's scope of work has not included the investigation, detection, or prevention of any Biological Pollutants at the project site or in any existing or proposed structure at the site. The term "Biological Pollutants" includes, but is not limited to, molds, fungi, spores, bacteria, and viruses, and the byproducts of any such biological organisms.

Recommendations contained in this report are based substantially upon information provided by others regarding the proposed project. In the event that any changes are made in the design, nature, or location of the proposed project, S.W.COLE should review such changes as they relate to analyses associated with this report. Recommendations contained in this report shall not be considered valid unless the changes are reviewed by S.W.COLE.

R:\2007\07-1254\CAD\Drawings\07-1254 Sheet 1 ELP.dwg, 8/26/2014 1:53:03 PM, 1:1, CEM, S.W. Cole Engineering, Inc.





BORING NO.:	B-1
SHEET:	1 OF 2
PROJECT NO.:	07-1254
DATE START:	8/12/2014
DATE FINISH:	8/12/2014
ELEVATION:	19' +/-
SWC REP.:	E. WALKER

PROJECT:	PROPOSED APARTMENT BUILDING			
CLIENT :	AVESTA HOUSING			
LOCATION:	POWSLAND STREET, PORTLAND, MAINE			
DRILLING FIRM:	GREAT WORKS TEST BORING, INC.		DRILLER:	JEFF LEE
	TYPE	SIZE I.D.	HAMMER WT.	HAMMER FALL
CASING:	HW	4"	HYD PUSH	
SAMPLER:	SS	1 3/8"	140 LBS.	30"
CORE BARREL:				

SOILS SATURATED BELOW 4' +/-

[illegible]

SAMPLES:	SOIL CLASSIFIED BY:	
D = SPLIT SPOON		DRILLER - VISUALLY
C = 3" SHELBY TUBE	X	SOIL TECH. - VISUALLY
U = 3.5" SHELBY TUBE		LABORATORY TEST

REMARKS: CONTINUED...

STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.: **B-1**



BORING NO.:	B-1
SHEET:	2 OF 2
PROJECT NO.:	07-1254
DATE START:	8/12/2014
DATE FINISH:	8/12/2014
ELEVATION:	19' +/-
SWC REP.:	E. WALKER

PROJECT:	PROPOSED APARTMENT BUILDING			
CLIENT :	AVESTA HOUSING			
LOCATION:	POWSLAND STREET, PORTLAND, MAINE			
DRILLING FIRM:	GREAT WORKS TEST BORING, INC.		DRILLER:	JEFF LEE
	TYPE	SIZE I.D.	HAMMER WT.	HAMMER FALL
CASING:	HW	4"	HYD PUSH	
SAMPLER:	SS	1 3/8"	140 LBS.	30"
CORE BARREL:				

SOILS MOIST @ SURFACE
SOILS SATURATED BELOW 4' +/-

[illegible]

SAMPLES:	SOIL CLASSIFIED BY:	
D = SPLIT SPOON		DRILLER - VISUALLY
C = 3" SHELBY TUBE	X	SOIL TECH. - VISUALLY
U = 3.5" SHELBY TUBE		LABORATORY TEST

REMARKS:

STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.: **B-1**



BORING LOG

BORING NO.: **B-2**
 SHEET: 1 OF 2
 PROJECT NO.: 07-1254
 DATE START: 8/12/2014
 DATE FINISH: 8/12/2014
 ELEVATION: 31' +/-
 SWC REP.: E. WALKER

PROJECT: PROPOSED APARTMENT BUILDING
 CLIENT : AVESTA HOUSING
 LOCATION: POWSLAND STREET, PORTLAND, MAINE
 DRILLING FIRM: GREAT WORKS TEST BORING, INC. DRILLER: JEFF LEE
 TYPE SIZE I.D. HAMMER WT. HAMMER FALL
 CASING: HSA 2 1/4"
 SAMPLER: SS 1 3/8" 140 LBS. 30"
 CORE BARREL:

WATER LEVEL INFORMATION
 SOILS DAMP @ SURFACE, WET BELOW 15' +/-.
 SATURATED BELOW 17' +/-

CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24		
	1D	24"	16"	2.0'	2	6	8	7		BROWN AND GRAY-BROWN SILTY SAND, TRACE GRAVEL WITH COBBLES ASH, BRICK, AND ORGANICS (FILL) WITH CLAYEY LAYERS @ 3D ~ MEDIUM DENSE TO LOOSE ~
	2D	24"	18"	4.0'	5	5	5	4		
	3D	24"	14"	7.0'	3	3	4	3		
	4D	24"	16"	9.0'	4	3	4	3	10.0'	
	5D	24"	14"	12.0'	4	4	4	3		
	6D	24"	16"	14.0'	3	4	4	4	15.0'	BROWN TO BLACK SILTY SAND, SOME GRAVEL WITH TRACE ASH AND CLINKER (FILL) ~ LOOSE ~
	7D	24"	12"	17.0'	4	4	6	11	17.0'	BROWN TO GRAY SILTY SAND, TRACE GRAVEL WITH GLASS AND BRICK (FILL) ~ LOOSE ~
	8D	24"	4"	19.0'	10	6	2	2	20.0'	DARK BROWN SILTY SAND WITH TRACE ORGANICS ~ LOOSE ~
	9D	24"	14"	22.0'	18	13	11	17	21.8'	DARK BROWN SILTY SANDY GRAVEL WITH ROOTLETS ~ MEDIUM DENSE ~
									22.0'	GRAY CLAYEY SILT WITH ROOTS
									25.0'	BROWN SILTY SANDY GRAVEL WITH COBBLES ~ MEDIUM DENSE ~
									25.5'	BROWN SILT, TRACE SAND ~ MEDIUM DENSE ~
	10D	24"	12"	27.0'	8	18	18	22		GRAY SILT, TRACE SAND AND CLAY ~ DENSE ~
									30.0'	
	11D	24"	22"	32.0'	4	4	5	4		BROWN-GRAY SILTY CLAY WITH SILT SEAMS $q_p = 1.5$ KSF BEGIN ROD PROBE @ 32' ADVANCE ROD PROBE BY HYDRAULIC PUSH PROBABLE GRAY SILTY CLAY

SAMPLES: SOIL CLASSIFIED BY:
 D = SPLIT SPOON
 C = 3" SHELBY TUBE
 U = 3.5" SHELBY TUBE
 DRILLER - VISUALLY
 SOIL TECH. - VISUALLY
 LABORATORY TEST

REMARKS: CONTINUED...
 STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.

BORING NO.: **B-2**



BORING LOG

PROJECT: PROPOSED APARTMENT BUILDING
CLIENT: AVESTA HOUSING
LOCATION: POWSLAND STREET, PORTLAND, MAINE
DRILLING FIRM: GREAT WORKS TEST BORING, INC. DRILLER: JEFF LEE
TYPE SIZE I.D. HAMMER WT. HAMMER FALL
CASING: HSA 2 1/4"
SAMPLER: SS 1 3/8" 140 LBS. 30"
CORE BARREL:

BORING NO.: B-2
SHEET: 2 OF 2
PROJECT NO.: 07-1254
DATE START: 8/12/2014
DATE FINISH: 8/12/2014
ELEVATION: 31' +/-
SWC REP.: E. WALKER

WATER LEVEL INFORMATION
SOILS DAMP @ SURFACE, WET BELOW 15' +/-.
SATURATED BELOW 17' +/-

CASING BLOWS PER FOOT	SAMPLE				SAMPLER BLOWS PER 6"				DEPTH	STRATA & TEST DATA
	NO.	PEN.	REC.	DEPTH @ BOT	0-6	6-12	12-18	18-24		
										PROBABLE GRAY SILTY CLAY ADVANCE ROD PROBE BY HYDRAULIC PUSH
									62.0'	ROD PROBE HYDRAULIC PUSH REFUSAL @ 62' - SWITCH TO 140 LB. HAMMER
									62.7'	50 BLOWS FOR 8" - PROBABLE WEATHERED BEDROCK
										REFUSAL @ 62.7' (PROBABLE BEDROCK)

SAMPLES: SOIL CLASSIFIED BY:
D = SPLIT SPOON
C = 3" SHELBY TUBE
U = 3.5" SHELBY TUBE
DRILLER - VISUALLY
SOIL TECH. - VISUALLY
LABORATORY TEST

REMARKS:
STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.
BORING NO.: B-2



BORING NO.:	B-3
SHEET:	1 OF 2
PROJECT NO.:	07-1254
DATE START:	8/12/2014
DATE FINISH:	8/12/2014
ELEVATION:	31' +/-
SWC REP.:	E. WALKER

WATER LEVEL INFORMATION
SOILS DAMP @ SURFACE
SOILS SATURATED BELOW 15' +/-

SAMPLES:		SOIL CLASSIFIED BY:		REMARKS:		CONTINUED...	
D = SPLIT SPOON		X	DRILLER - VISUALLY		STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL.		
C = 3" SHELBY TUBE			SOIL TECH. - VISUALLY				
U = 3.5" SHELBY TUBE			LABORATORY TEST				
				BORING NO.:		B-3	



BORING NO.:	B-3
SHEET:	2 OF 2
PROJECT NO.:	07-1254
DATE START:	8/12/2014
DATE FINISH:	8/12/2014
ELEVATION:	31' +/-
SWC REP.:	E. WALKER

WATER LEVEL INFORMATION
SOILS DAMP @ SURFACE
SOILS SATURATED BELOW 15' +/-

Page 68

KEY TO THE NOTES & SYMBOLS

Test Boring and Test Pit Explorations

All stratification lines represent the approximate boundary between soil types and the transition may be gradual.

Key to Symbols Used:

w	-	water content, percent (dry weight basis)
q _u	-	unconfined compressive strength, kips/sq. ft. - laboratory test
S _v	-	field vane shear strength, kips/sq. ft.
L _v	-	lab vane shear strength, kips/sq. ft.
q _p	-	unconfined compressive strength, kips/sq. ft. – pocket penetrometer test
O	-	organic content, percent (dry weight basis)
W _L	-	liquid limit - Atterberg test
W _P	-	plastic limit - Atterberg test
WOH	-	advance by weight of hammer
WOM	-	advance by weight of man
WOR	-	advance by weight of rods
HYD	-	advance by force of hydraulic piston on drill
RQD	-	Rock Quality Designator - an index of the quality of a rock mass.
γ _T	-	total soil weight
γ _B	-	buoyant soil weight

Description of Proportions:

Trace:	0 to 5%
Some:	5 to 12%
"Y"	12 to 35%
And	35+%
With	Undifferentiated

Description of Stratified Soils

Parting:	0 to 1/16" thickness
Seam:	1/16" to 1/2" thickness
Layer:	½" to 12" thickness
Varved:	Alternating seams or layers
Occasional:	one or less per foot of thickness
Frequent:	more than one per foot of thickness

REFUSAL: Test Boring Explorations - Refusal depth indicates that depth at which, in the drill foreman's opinion, sufficient resistance to the advance of the casing, auger, probe rod or sampler was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

REFUSAL: Test Pit Explorations - Refusal depth indicates that depth at which sufficient resistance to the advance of the backhoe bucket was encountered to render further advance impossible or impracticable by the procedures and equipment being used.

Although refusal may indicate the encountering of the bedrock surface, it may indicate the striking of large cobbles, boulders, very dense or cemented soil, or other buried natural or man-made objects or it may indicate the encountering of a harder zone after penetrating a considerable depth through a weathered or disintegrated zone of the bedrock.

08: Financial Capability

A letter of financial capability from Gorham Savings Bank dated October 5, 2021 is enclosed in this section stating that the applicant has the financial capacity to complete the proposed project. Please see the attached letter.

09: TECHNICAL CAPABILITY

STJ Inc is well experienced in civil construction contracting. Mr. Curtis and his firm have the technical capability to manage a construction project of the scale proposed.

Sebago Technics: The applicant has retained Sebago Technics, Inc., a multi-disciplinary consulting engineering firm, to assist in all aspects of the proposed site development.



What Sets Us Apart?

Approach

Our approach to project delivery provides a single point of contact, responsive scheduling and cost efficiency.

Reputation

Sebago Technics is recognized as a firm that excels in the permitting of projects through experienced knowledge and excellent reputation.

Ownership

100% Employee ownership results in improved responsiveness, commitment and accountability throughout the organization.

Quality

Our designs, graphics and plans are subject to rigorous quality standards and review which results in clear, effective documents.

Innovation

Sebago Technics' design professionals employ the latest engineering and technological methods to develop practical, cost-effective solutions.

Results

Sebago Technics' resources and experience combined with our project team approach provide the capacity to meet client needs and deliver results.

Founded in 1981, Sebago Technics, Inc. is a consulting firm of more than forty design professionals and technical staff providing services throughout New England. From the start, our business plan was simple: "to provide quality, cost-effective civil engineering services that are responsive to a customer's goals, schedule and budget."

Our One Company capabilities and resources provide clients with experience and solutions to respond to their planning, permitting and design needs. Guided by integrity, experience and teamwork we understand that we can only succeed when quality, responsive and cost-effective service is provided to our customers.

General Services

- Land Surveying
- Site and Civil Engineering
- Transportation/Traffic Engineering
- Landscape Architecture
- Environmental Engineering
- Natural Resources and Soils Science
- Permitting (Local/State/Federal)
- Construction Services

Licensed & Certified Professionals

- Professional Engineers
- Certified Flood Plain Manager
- Certified Wetland Scientist
- DOT Project Administrators
- LEED Accredited Professionals
- Professional Land Surveyors

- Registered Landscape Architects
- Licensed Soil Scientist
- Subsurface Disposal Systems Designers
- Erosion Control, Sedimentation & Stormwater Inspectors
- Professional Traffic Operations Engineer

DANIEL L. RILEY, PE, CFM

Vice President, Engineering



Mr. Riley joined Sebago Technics, Inc. (STI) in August of 2001. Mr. Riley now serves as Vice President of Engineering with over 29 years of experience in the civil engineering field on projects for the private sector, as well as federal and municipal clients. He has a diverse background in civil engineering, municipal infrastructure and site design, permitting including institutional, commercial and residential development.

He is experienced and well versed in presenting complex, controversial and publicly sensitive issues to a variety of audiences. Mr. Riley's project management and technical experience involves a range of municipal and private sector projects. He has been directly involved in South Portland's significant CSO facility plan implementation and infrastructure projects including leading the design, planning and presentations to the public and City Council.

Mr. Riley has developed an outstanding relationship with permitting agencies in Southern Maine, the South Portland Planning Board and City Council. Prior to joining Sebago Technics, Mr. Riley worked as a professional engineer in Colorado specializing in water resources engineering. In that role, he managed projects for federal and municipal clients, including stormwater master planning studies and floodplain analysis and delineation projects. He has also assisted communities with the implementation of Stormwater Management Utilities.

EXPERIENCE



General Engineering Services Contract – City of South Portland, ME: Mr. Riley has been the Contract Manager and Lead Engineer for Sebago Technics' General Engineering Services Contract with the City of South Portland. In that role, he is responsible for coordinating the firm's services and providing engineering support for City Departments including Planning and Development, Bus/Transportation and Waterfront, Public Works, and Parks and Recreation. He has been directly responsible for the management of projects related to the City's CSO Facility Plan and related sewer and water resource projects.

- Thornton Heights-Pleasantdale Sewer Separation
- Greenbelt Trunk Line SWMM Modeling and Replacement Design
- Sawyer Street Culvert Replacement
- Willard Beach Outfall Replacement
- Trout Brook Culvert Study
- Public Works Facility, Preliminary Design through bond vote
- Knightville Sewer Separation Phase 1 and Phase 2 and Mill Creek Transit Hub
- Mussey Street Sewer Trunkline Replacement & Mussey Street/Pine Street Sewer Separation

Combined Sewer Separation Projects – City of Portland, ME: Mr. Riley has been the Project Manager for several of Sebago Technics' Sewer Separation contracts with the City of Portland since 2010. Notable relevant projects include:

- Fall Brook Watershed Study-City of Portland Public Services Department
- Woodford Street and Melrose Street: Design and Inspection Services 2016-2017
- Forest Avenue, Deering Street and Ocean Avenue: Design and Inspection Services 2017-2018
- Mackworth-Ocean and Walnut Street: Design Services 2018-2019 for construction in 2020-2021

EDUCATION



Villanova University, Villanova, PA
Bachelor of Science, Civil Engineering
1991

REGISTRATIONS

Professional Engineer:
Maine #9967
Colorado: #32176

Certified Floodplain Manager
#32249

MEMBERSHIPS

Chi Epsilon, National Civil Engineering
Honor Society

Association of State Floodplain
Managers (ASFPM)



AARON C. HUNTER, PE

Project Engineer



Mr. Hunter joined Sebago Technics in May, 2014. Aaron graduated from the University of Maine with a degree in Civil Engineering. Upon graduation, Aaron joined Sebago as a Civil Engineer. In 2015 he left Sebago to relocate to Florida. While in Florida he worked as a Project Engineer for a multi-disciplinary consulting firm serving residential, commercial and municipal clients. Aaron is a Licensed Civil Engineer with over 5 years of project experience in the private and municipal sectors in Florida and Maine. He was involved in all aspects of roadway and site design, permitting, plan preparation, stormwater analyses and construction administration. Mr. Hunter excels at communication, organization and is dedicated to completing projects on time and under budget.

EXPERIENCE



South Portland Public Works Facility – South Portland, ME: CAD support, hydrologic modeling and design, state and city permitting applications, and cost estimating. The project included the design of a new public works and transfer station facility.

Fort Hill Subdivision – Gorham, ME: Major expansion of existing subdivision. Work includes roadway, infrastructure and hydrologic modeling, engineering and design.

Chick Property Recreation Fields – Gorham, ME: Hydrologic modeling and design for recreation fields.

Anderson Street & Morse Street Reconstruction Projects – Portland, ME: Construction Inspection Support.

Westbrook Combined Services Facility – Westbrook, ME: Engineering and design, hydrologic modeling, state and city permitting applications and cost estimating for a new combined services facility for the City of Westbrook.

Transfer Station & Marine Ramp – Great Diamond Island, ME: CAD support, state and city permitting applications and cost estimating. The project included a new marine ramp and transfer station for the City of Portland and Great Diamond Island residents.

Northeast Air Fixed Based Operator – Portland, ME: Engineering and design, hydrologic modeling, state and city permitting applications. The project included expansion of the existing Northeast Air Hangar and Terminal along with a new parking lot at the Portland International Jetport.

Concord Coach Lines Bus Station – Auburn, ME: Engineering and design, hydrologic modeling, state and city permitting applications. The project included the design of a new Concord Coach Lines Bus Station.

Thorton Heights Phase II Reconstruction Project – South Portland, ME: Field representative/engineer for the Portland Water District working alongside the contractor to successfully install, pressure test, chlorinate and activate new watermain in the Thornton Heights sector of South Portland.

EDUCATION



B.S., Civil Engineering,
University of Maine, Orono
2014

REGISTRATIONS

Professional Engineer: Maine #16326
Florida #86606

CERTIFICATIONS

Maintenance and Inspection of
Stormwater Best Management
Practices No#: 100

MEMBERSHIPS

American Society of Civil Engineers

American Public Works Association



HENRY A. HESS, RLA

Landscape Architect



Henry Hess joined Sebago Technics, Inc. (STI) in August of 2018. He is a Registered Landscape Architect in Maine and brought with him versatile skills in graphic presentation and land planning. Since joining Sebago Technics, Mr. Hess has been involved in master planning, site analysis and design, conceptual design, site design and layout, planting design, and has been a support designer on larger projects. Since becoming a Maine licensed Landscape Architect, Henry has begun to manage his own projects with Sebago Technics. His efforts in site design and landscape architecture result in a consistent level of successful sites and landscapes that provide diversity for cities and towns in Maine.

EXPERIENCE



L.L. Bean Campus Design – Freeport, ME: Provided design for site including conceptual design, creating planting and site plans for pedestrian plazas and vehicle arrival and circulation within the campus. Also provided graphic renderings and imagery.

Scott Dyer Road Improvements – Cape Elizabeth, ME: Lead Landscape Architect for impacts created by the road improvements to Scott Dyer Road in Cape Elizabeth. Mitigated impacts of road improvements due to road widening by working directly with Town planning department and residents to create new landscape buffers and revegetate areas along Scott Dyer Road.

Maine Medical Building – Portland, ME: Analyzed arrival and circulation for ADA accessibility on-site. Designed and permitted site plan to retrofit existing site to create ADA accessible pedestrian circulation and ADA vehicular parking.

Penbay Medical Campus – Maine Coast: Visited and evaluated medical campuses up and down the Maine coast for ADA compliance. Created written report on ADA compliance and provided design solutions for ADA accessibility at each site.

Piper Shores: Maine Life Care Retirement Facility – Scarborough, ME: As part of the design team, provided conceptual renderings and landscape exhibits for the site. As the project progressed to construction documents, Mr. Hess took on the site design, grading and detailed review of the plans.

Sable Oaks Master Plan – South Portland, ME: Provided landscape architecture support for the Sable Oaks master plan/zone change amendments. Henry worked as a part of the team at Sebago Technics, in coordination with Tex Hauser at South Portland, to provide detailed site analysis, and ordinance review in order to amend zoning within Sable Oaks.

Lewiston Fire Station – Lewiston, ME: Oversaw the site design and layout, including the location of sidewalks and pedestrian circulation, parking, street trees, on-site landscape and selection of site materials for the new fire station.

Bowdoin College Apartments – Brunswick, ME: Developed a site plan for courtyards and parking.

Summer Commons: Senior Care Facility - Sanford, ME: Developed site and planting plans for the 10-acre site. Provided additional graphic support for the project.

EDUCATION



Accredited Bachelors of Science
Landscape Architecture
University of Massachusetts - Amherst, MA
2011

Associates in Applied Science
Horticultural Technology
University of New Hampshire - Durham, NH
2008

REGISTRATIONS

Registered Landscape Architect:
Maine #4841



10: Transportation Analysis – Traffic Impact (14-526(a)1)

- Provisions for pedestrian, bicycle, vehicle, and loading circulation and incremental volume of traffic impacts.
 1. The proposed project shall generate 68 Daily trips. The project shall generate 5 AM Peak Hour trips and 6 PM peak hour trips according the traffic memorandum provided by Sebago Technics traffic engineer and as such shall not require further traffic study.
- Traffic Impact Study (Technical Manual, Section 1), if applicable.
 1. Not applicable. Per the Technical Manual, the proposed project does not meet the criteria requiring a Traffic Impact Study. The project creates less than 25 passenger car equivalents in the peak hour and is not located on an arterial, within ½ mile of a high crash location, and is not to the best of our knowledge, within ¼ mile of an intersection identified in a previous study as a failing intersection.

11: Access and Circulation (14-526(a)2a)

- Access and internal circulation, addressing ADA access

The new duplex and single family homes buildings provide for ADA accessibility as required. It complies with the standards outlined in Section 1 of the Technical Manual addressing ADA access. No changes to internal circulation are proposed.

- Access and egress impacts on traffic flows

The site was designed to avoid conflicts with the existing turning movements and traffic flows. Please see the site plan.

- Description and use of drive-up features, if applicable.

Not applicable. There are no existing or proposed public drive-up features on the site.

12: Loading and Servicing (14-526 (a) 2 b)

- Load and servicing needs, route and travel way geometrics for deliveries
- Turning templates for delivery vehicles, if applicable
 - (i) The site allows for the safe turning and backing needs of the applicant and does not impede site access, vehicle circulation, pedestrian movement, or affect the parking required by ordinance. Reference is made to the attached site plans. A Hammerhead is provided per the city standard detail for turn around.

13: Sidewalks (14-526 (a) 2 c)

- Sidewalks and condition along street frontages and internal walkways
No public sidewalks are proposed as part of the proposed site layout. We note that Powsland Street does have public sidewalks, and the closest public sidewalks are located along Congress Street at its intersection with Powsland Street.

Internal walkways to each unit are shown on the enclosed site plans.

- Engineered details for ADA ramps and public sidewalk details meeting sidewalk materials policy and ADA ramp construction details as applicable (Technical Manual, Section 1)

Not applicable. No public sidewalks or ADA ramps are proposed.

14: Off-Street Parking: Vehicle & Motorcycle/Scooter (14-526 (a) 4 a and c)

- Expected parking demand, proposed parking supply, ADA parking, and applicable Zoning Requirements

The parking required for the development based on the proposed use is as follows:

Singe-, two, or multi-family units @ 1 space per dwelling unit = 9 spaces

Total required = 9 spaces

Total provided = 9 Spaces

- Address Technical Manual standards (Section 1) for curb cut separation and parking lot layout and locate on site plan

Not applicable.

15: Bicycle Parking (14-526 (a) 4 b)

- Address bicycle parking requirements and identify locations on-site

Not applicable.

16: Snow Storage (14-526 (a) 4 d)

- Management plan for snow removal and locate snow storage areas on plan

Areas for snow removal have been called out on the site plans.

17: Traffic Design Management (TDM) (14-526(a)5)

- Develop TDM with Trip Reduction Targets and Strategies

Not applicable. The project does not meet the types of development required to implement a TDM Plan.

18: Preservation of Significant Natural Features (14-526 (b) 1), if applicable

- Trees, plants, habitats listed on State or Federal list of endangered or threatened

No trees, plants, habitats from a State or Federal list were observed during onsite investigations.

- High and moderate value waterfowl and wading habitat
Not applicable.

- Aquifers on Casco Bay Islands
Not applicable.

- Waterbodies (including wetlands, watercourses, significant vernal pools, and floodplains)
All water bodies are shown on the appended existing conditions and site plans.

- Proposed preservation areas and protection measures
A Tier 1 NRPA has been filed for the 4,351 SF of wetland impacts to the site.

- Documentation from environmental consultants' determinations from applicable state agencies

The project received a letter of determination from the Maine Department of Environmental Protection that determined the adjacent drainage is not a river, stream or brook as defined by the Natural Resources Protection Act (NRPA) and qualifies for the 4300 SF NRPA alteration exemption.

19: Landscaping and Landscape Preservation (14-526 (b) 2a)

- Preservation of trees and preservation within required zoning setbacks (Technical Manual, Section 4)
Two 12" maples are being cleared to develop the site. There are no other trees available to preserve on the project site.
- Protection measures of existing vegetation during construction
Vegetation will be protected during site construction in accordance with the tree preservation standards found in Section 4 of the Technical Manual.
- Protection measures within Shoreland Zone, if applicable.
The project site is not located in the Shoreland Zone.

20: Site Landscaping (14-526 (b) 2 b)

- Screening and buffering of service areas and between non-residential and residential uses
Not applicable.
- Planting plans with plant schedule and sizes (Technical Manual, Section 4)
New plantings are proposed for the site per the Technical Manual, Section 4.
Proposed plant material is keyed to a table that includes sizes, as required. (1)
street tree is located per building.

21: Parking Lot Landscaping (14-526 (b) 2 b ii), if applicable

- Landscaped islands within parking areas (Technical Manual, Section 4)

Not applicable. No parking lot islands are proposed.

22: Street Trees (14-526 (b) 2 B iii)

- Existing Heritage or Feature Trees on site and measures to preserve

Not applicable. Site does not have Heritage or Feature trees to be preserved.

- Identify street trees on the plan meeting the site plan and Technical Manual standards (Section 4) or identify alternative measures, if applicable

Street trees are proposed on the landscape plans. Please see attached plan set.

23: Water Quality, Stormwater Management and Erosion Control (14-526 (b) 3 a)

Please refer to the Stormwater Management Plan by Sebago Technics, Inc. developed in accordance with Maine DEP Chapter 500-Stormwater standards that is included in this section.

24: Consistency with City Master Plans (14-526 (c) 1)

- Identify consistency with master plans

A formal Master Plan for this section of the City is not available. The proposed new buildings are developed to fit in with the surround neighborhood in aesthetics and character. The project is consistent with the adjacent uses and will not create an eyesore or diminish the neighborhood characteristics nor will the proposed site development include features that will burden the City's resources.

- Proposed easements, rights and improvements to connect or continue off-premises public infrastructure, as applicable

Connections are limited to extension of existing/available public services as shown on the enclosed Site Plans.



**PORTLAND FIRE DEPARTMENT
SITE REVIEW
FIRE DEPARTMENT CHECKLIST**



07360-01

A separate drawing[s] shall be provided as part of the site plan application for the Portland Fire Department's review.

1. Name, address, telephone number of applicant Mark Curtis, 207-839-2442
2. STJ Inc., 939 Parker Farm Road Buxton, ME 040931
3. Name address, telephone number of architect/designer: RYAN SENATORE ARCHITECTURE 207-650-6414
500 Congress Street #2 Portland, Maine 04101
4. Proposed uses of any structures [NFPA and IBC classification]
5. Structures shall be residential buildings
6. Square footage of all structures [total and per story] 6,250 SF, two-story structures
7. Elevation of all structures Preliminary design thoughts include a building height of xx' +/-
8. Proposed fire protection of all structures
 - **As of September 16, 2010 all new construction of one and two family homes are required to be sprinkled in compliance with NFPA 13D. This is required by City Code. (NFPA 101 2009 ed.)**
9. Hydrant locations There is a Fire hydrant located within 500' of the project on Powsland Street.
10. Water main[s] size and location 2" domestic extending from 2" main in entry drive
11. Access to all structures [min. 2 sides] Yes.
12. A code summary shall be included referencing NFPA 1 and all fire department. Technical standards. To be submitted under separate cover.

Some structures may require Fire flows using annex H of NFPA 1

25: PUBLIC SAFETY AND CRIME PREVENTION (14-526(c))

Address Crime Prevention through Environmental Design (CPTED) (Technical Manual, Section 3)

Natural Surveillance: The site design allows formal and non-formal natural surveillance increasing the safety of users and deterring possible offenders. The proximity of the existing building on the site and the internal access enables occupants and visitors to observe movement and activities on the site during the day and night. A mechanical surveillance system is not proposed as part of this project.

Mechanical Access Control: Not applicable. Mechanical access controls are not proposed.

Emergency vehicle access

2.b. There is adequate access to the site for emergency vehicles. Please see the plan set that includes a City standard hammerhead turnaround for vehicles.

Address consistency with public safety standards (Technical Manual, Section 3)

The site design complies with the applicable sections of the Technical Design Manual in the following manner:

Fire Hydrant Standard: There is an existing active hydrant within 500' of the project on Powlsland Street.

Site Access Standards: Fire Department vehicles can directly access the site via Powlsland Street.

Street Numbers: The assigned street numbers will be placed on the new buildings as required by the City of Portland.

Submit a code summary referring NFPA 1 and all Fire Department standards (Technical Manual, Section 3)-Fire Checklist.

Please see the attached Fire Department Checklist. this section.

26: AVAILABILITY AND ADEQUACY OF PUBLIC UTILITIES (14-526 (c) 3)
Technical Manual, Sections 2 & 9

Electrical services, including providing underground services

Underground electrical service will be provided to the buildings on site from two transformers that will pull from a pole on the east side of Powsland street. Reference is made to the attached Utilities Plan.

Identify existing and proposed connections for public utilities and required public utility upgrades

See the enclosed plan set for proposed utility connections.

Water service will be provided by Portland Water District by connecting to the existing public water main in Powsland Street.

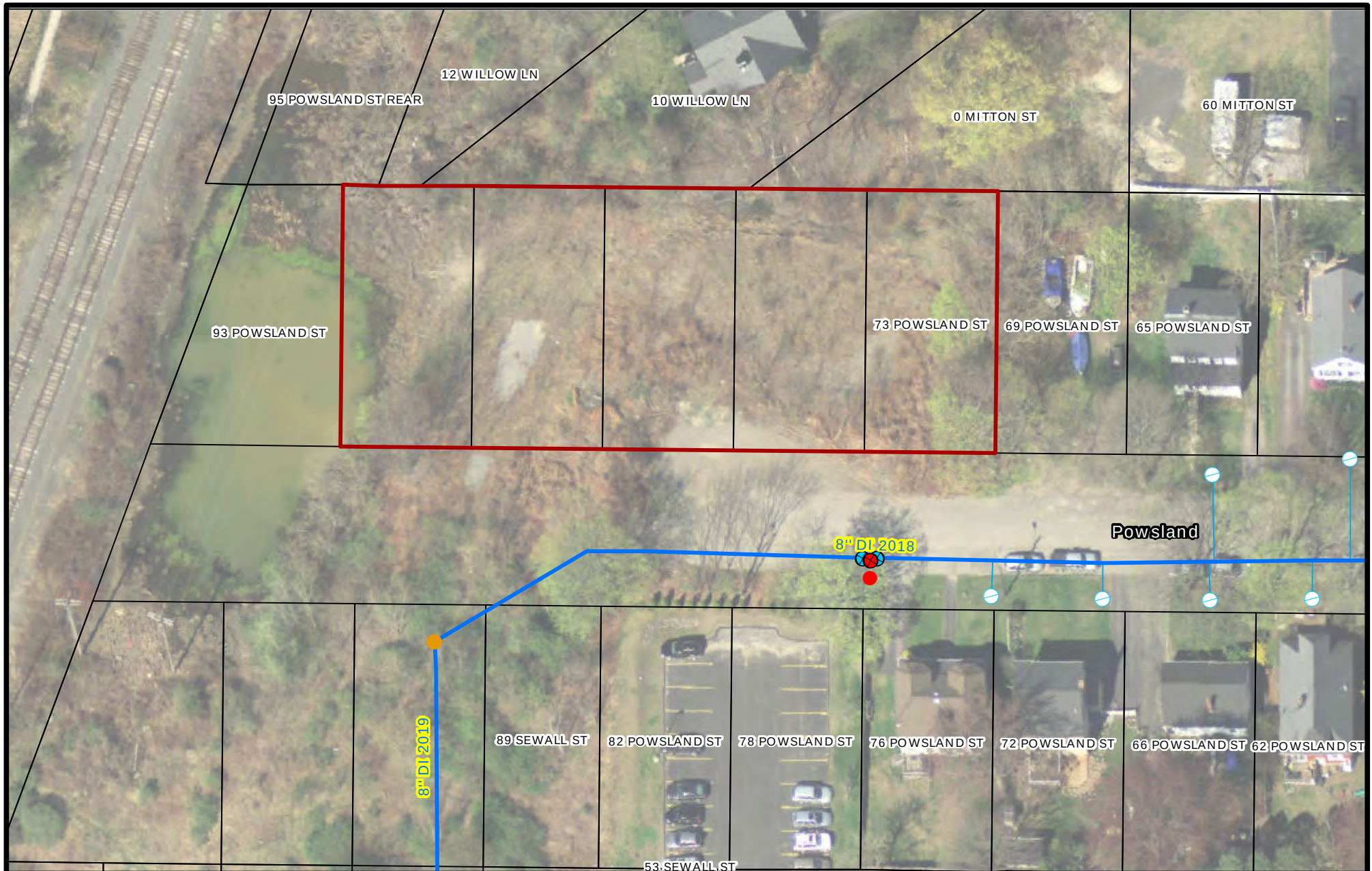
There are no existing utilities extending to the site. All design and connections will be reviewed by and coordinated directly with the utility companies.

Sewer line connections are required if there is a main within 200 feet

All buildings on site will be connecting to the public sewer main that exists within Powsland Street. Reference is made in the attached Utility Plan.

Written evidence of the ability to serve from utility companies, as applicable

Please refer to the ability/capacity to serve correspondence regarding water and sewer service from the Portland Water District.



Powsland Street

Portland

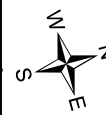


PORTLAND WATER DISTRICT
225 Douglass Street
Portland, ME 04104

Scale 0 12.5 25 50 75 100 Feet 1 inch = 50 feet

Legend

- | | | |
|----------------|-----------------------|--------------------|
| ● Connection | ⊕ Combined Service | ● Private Hydrants |
| ● Air Valve | ● Attribute Change | → Gravity |
| ● Blow Off | ● Hydrant Control | → Force |
| ● By Pass | ● Fire Service | ● Manhole |
| ● Distribution | ▲ Reducer | ● CSO |
| ● Transmission | ● Hydrant | |
| ● Meter Pits | — Shallow Water Main | |
| | — Deep Water Main | |
| | — Proposed Water Main | |



Disclaimer: This map is suitable for preliminary study and analysis and is based on PWD record information. PWD is not liable for any damages whatsoever resulting from inaccurate data or from errors made in the location and marking of its infrastructure.

Drawn By: BSJ

Scale: As Noted

Date: June 15, 2021

27: MASSING, VENTILATION AND WIND IMPACT (14-526(d) 1)

- Wind and ventilation impacts on adjoining structures and/or adjacent public spaces. Wind study, if applicable
The proposed building will not result in health or safety problems due to a reduction in ventilation to adjoining structures or adjacent public spaces. A wind study is not applicable to this site development.
- Bulk, location or height impacts on adjoining structures
The bulk, location, and height of the proposed buildings will not minimize the value or utility of neighboring structures. The proposed development is consistent in size and scale and use with neighboring properties and is an allowed use in the district.
- Identify and locate HVAC equipment and venting away from public spaces and residential properties
HVAC equipment will not be utilized.
- Identify screening and manufacturing specifications for noise, if applicable
Not applicable.

28: SHADOWS (14-526 9d), if applicable

Shadow analysis of impacts on publicly accessible open space (Technical Manual, Section 11)

Not applicable. There are no publicly accessible open spaces areas that will be affected by shadows from the proposed new building.

29: SNOW AND ICE LOADING (14-526 (d) 3)

Building design to prevent snow and ice from loading or falling onto adjacent properties or public ways

Not applicable. The proposed new building is not located adjacent to a public way or in close proximity to adjacent properties where snow or ice is of concern.

30: VIEW CORRIDORS (14-526 (d)4)

Protection of designated view corridors (Portland Design Manual, Appendix 1)

Not applicable. The site is not located in a view corridor as identified in the City of Portland Downtown Vision View Corridor Protection Plan, Portland Design Manual, Appendix 1.

31: HISTORIC RESOURCES (14-526(d) 5)

Identify developments within Historic Districts or affecting Designated Landmarks

Certificate of Appropriateness or other evidence

Identify Developments within 100 feet of Historic Districts of affecting Designated Landmarks. Advisory HP review may be required

Address preservation and documentation of Archaeological Resources

Per review of available City information, the proposed new buildings on site are not located in a City Historic District and will not affect a designated landmark.

32: EXTERIOR LIGHTING (14-526 (d) 6)

Cut sheets of on-site light fixtures and any architectural or specialty lights (Technical Manual, Section 12)

Not applicable. No onsite light fixtures proposed. Lighting for the building units shall be residential lighting attached to the buildings. No Photometric plan is submitted as a part of this application.

Engineered details for any lights proposed in street right-of-way (Technical Manual, Section 10)

No additional lights are proposed in a street right-of-way.

33: NOISE AND VIBRATION (14-526(d)7)

Evidence of noise levels for equipment, such as equipment specifications, to demonstrate consistency with zoning requirements

(i), (ii) Not Applicable.

34: SIGNAGE AND WAYFINDING (14-526(d)8), if applicable

Signage plan showing the location, dimensions, height, and setback of all existing and proposed signs. Signs in Historic Districts are reviewed by Historic Preservation staff

All signage shall meet applicable requirements of Division 22 of the City Code, in addition to:

- (i) Historic Preservation: Not applicable
- (ii) Commercial Signage and Directional Traffic Signage: Not applicable
- (iii) On-site directional traffic signage: Not applicable; no new internal directional signage is proposed.
- (iv) Waiver criteria: Not applicable, no signage waivers requested.

35: ZONE RELATED STANDARDS (14-526(d) 5)

The buildings on 65-73, 93 Powsland Street are subject to zone B-5 related standards, including design standards by zone, and neighborhood context.

Preliminary building floor plans and elevation drawings are attached to this application.



April 14, 2022
07360-01

Planning and Urban Development Department
City Hall – 4th Floor, 389 Congress Street
Portland, Maine 04103

Response to Preliminary Comments on 2/15/22
73 Powsland Street

Sean King:

Zoning:

1. *Please show shoreland zone line on the plan. The 250' setback needs to be measured from the upland edge of the coastal wetland or the annual highest tide, whichever is closest to the property. The plan should show the location of the edge of the shoreland to the 250' mark on the property. The plan should also state the square footage of the area within the Shoreland Zone and include any trees or existing vegetation within this area.*

Response: Acknowledged. Please see the revised Site Plan (Sheet 3 of 11). There is approximately 1,958 S.F. of area within the project site that is in the shoreland zone.

2. *For any development or land use activities within 250 feet of the Shoreland Zone, please respond with narrative to how the proposal is addressing any applicable Shoreland Zone standards under City Code Chapter 14, Section 11.4.*

Response: Acknowledged. Please see the attached Shoreland Zone Narrative.

Transportation:

1. *In general hammerhead turnarounds are not recommended, and the retaining wall is not something Public Works generally supports in the Public ROW. Public Works would prefer to see a street connection with Powsland Street connecting to Sewall Street.*

Response: Building a connection from Powsland Street to Sewall Street would substantially increase project cost that would deem the project not feasible. The applicant prefers to use the hammerhead turnaround that complies with the City of Portland Technical Manual Standards. The retaining wall is necessary to avoid further impacts to the wetland and to limit work within the CMP easement. The proposed hammerhead turnaround with retaining wall provides a design that meets the City Standards, as well as a way to convey and treat stormwater that is currently running off into the wetlands untreated. Furthermore, the Land between Sewall and Powsland Street is owned by CMP and further easement documentation to cross, use, and pave CMP

property is required. The applicant would prefer to limit the number of permissions required to build the project.

2. *Please note the street width.*

Response: Please see the revised Site Plan (Sheet 3 of 11). Dimensions have been added to the street for clarity.

3. *Please clearly label on the site plan where new paving begins and label which portions of the roadway that are being repaved.*

Response: Please see the revised Site Plan (Sheet 3 of 11). Callouts for the sawcut lines and pavement have been added.

4. *A written request to repave a street under moratorium should be submitted, and permission to pave during moratorium must be granted Public Works (Powsland St was recently paved in 2019 and currently under a 5-year moratorium). Please address request to Chris Branch, Director of Public Works, and Planning Staff will forward this to Public Works for consideration.*

Response: Please see the attached moratorium memo.

5. *If no sidewalk or curb is proposed, please submit a waiver request for not providing a sidewalk and curb providing the eligibility of how the project meets the criteria listed under City Code Chapter 14, Section 14.6.1.B.3.c and d.*

Response: A waiver request is being submitted to not require sidewalk or curbing. Please see attached waiver request.

6. *The current driveway separation will necessitate a waiver to Technical Manual Section 1.7.1. Please submit a written request citing this section and justification as a basis for granting a waiver.*

Response: A waiver request is being submitted to not require 20-foot driveway separations. Please see attached waiver request for additional information.

7. *Please show snow storage areas on the plan or note how snow removal will occur and parties responsible. (Note: Snow storage areas may not encroach on areas designed to meet minimum parking requirements or on pedestrian walkways and shall not be located where they would adversely impact the functionality of stormwater management systems. Landscaping also should also not be negatively impacted)*

Response: Please see the revised Site Plan (Sheet 3 of 11). Snow storage areas have been delineated on the plans.

Landscape Preservation / Landscaping:

1. Please indicate any tree removals or areas where vegetation is being removed as well as showing any appropriate tree protection measures taken for any existing trees/vegetation to be preserved on site.

Response: Please see the revised Landscape Plan (Sheet 6 of 11).

2. The project is required to provide 10 street trees (Per Sec. 4 of Technical Manual: 2 required trees for a single family, and 1 tree per unit for multifamily). If site constraints prevent the project from planting the required, please submit a request to be considered for an alternative (ex. tree fund financial contribution (\$400 per tree) for each tree not planted, or proposing trees planted within 20 feet of the street frontage where visible from the street may also be considered to address street tree requirement).

Response: Acknowledged. Please see the revised Landscape Plan (Sheet 6 of 11). 10 street trees have been located on plans.

3. Please clarify if transformers are above ground if so, please also provide adequate screening. Per City Code Section 14.6.2.C.2.a ground-mounted utility structures must be screened from view from public sidewalks, streets and adjacent properties by dense evergreen landscaping, fencing, architectural screening products, masonry walls, building walls, or a combination thereof.

Response: Transformers are intended to be above ground. Please see the revised Landscape Plan (Sheet 6 of 11) providing vegetative screening.

4. Per City Code Section. 14.6.2.C.2.c. "All residential development shall provide and/or preserve evergreen vegetated buffers where necessary to buffer the development from detrimental impacts of existing surrounding development." Please update plan to meet this standard, and also see design comments regarding open space for more information.

Response: There will be no detrimental impact from the existing surrounding developments to the North and West as they are residential and undeveloped undisturbed land. Please see the updated Landscape Plan showing vegetated buffer to the South of the project providing screening from the railroad tracks. In addition, there is screening in an area that shall help to screen the adjacent neighbors to the West.

5. On the existing conditions plan, please note the two 12" maples that are being cleared to develop the site.

Response: Acknowledged. Please see the revised Landscape Plan (Sheet 6 of 11).

Utility:

1. Please submit the attached Wastewater Capacity Application to Brad Roland brad@portlandmaine.gov in Public Works to confirm sufficient capacity to handle wastewater.

Response: Please see the attached Wastewater Capacity Authorization.

2. Please provide an ability serve letter from the Portland Water District for the project.

Response: Please see the attached Ability to Serve Letter.

Parking:

1. Please denote the parking space areas on plan. (Note: a standard parking space is 9'x18').

Response: Please see the revised Site Plan (Sheet 3 of 11).

Street Lighting:

1. The project is subject to meeting street lighting standards (Technical Manual Sec 10.2). Town and Country pole lighting fixtures are required for a local street, please update plans to show at least one new pole street lighting which should start approximately 130 feet from the nearest/existing cobrahead fixture. (Please note the distance to nearest existing street light) Public Works continues to review the proposed street design so additional lighting may potentially be determined necessary. Please see attached detail for the required X-1 fixture type.

Response: The nearest existing street light is across the street from the lot line that divides lot 65 and 66. Please see the revised Grading and Utility Plan (Sheet 5 of 11) showing the proposed street light location.

Site Lighting:

1. Please provide a lighting plan or request waiver for providing a lighting plan. Staff recommend providing a lighting plan. Regardless, please provide cutsheets of any lighting fixtures proposed, indicating the models intended. (Note: please ensure these fixtures are full cutoff and do not exceed 3000k CCT).

Response: Please see the attached photometric lighting plan from Swaney Lighting.

Stormwater:

1. The stormwater management plan was not attached, please submit.

Response: Please see the attached Stormwater Management Report and Stormwater Management Plans.

2. *The waiver request for the flooding standard appears to have an incorrect reference. The stormwater management plan should provide more information to support the waiver request.*

Response: We did not request a waiver for the flooding standard. Please refer to page 5 of the attached Stormwater Management Report.

3. *The stormwater report should also provide more information on the stormwater treatment requirements – treatment of the new roadway per Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 will be required, and it is not clear from the plan how this is being accomplished.*

Response: Please refer to the attached Stormwater Management Report. Treatment requirements per the city manual and DEP are included in the Stormwater Management Report pages 5-6. The roadway runoff is being conveyed to the catch basin shown on the Grading and Utility Plan that then conveys the runoff into the Focal Point Treatment System.

4. *The application notes a NRPA permit has been filed for wetland impacts. The grading plan should clearly delineate the wetland impact area. No erosion control plan was provided, or a plan in the set that includes locations of erosion control. This plan should also account for the wetlands proximity with appropriate measures (i.e. double row of sediment barrier).*

Response: Although originally stated that an NRPA application was filed, this project qualifies for the 4,300 SF NRPA alteration exemption. Therefore, no NRPA application was filed. Please see the Grading and Utility Plan sheet 5 of 11 showing wetland impacts and necessary erosion control measures.

5. *The documents note that a NRPA exemption was issued in 2004. This was not provided, please submit this documentation to confirm the project's right to replace of the existing culvert under the railroad tracks.*

Response: Please see the attached Field Determination Form from MDEP issued in 2014. The document states that the culvert may be replaced without a permit from the Department as long as it is replaced at the same elevation as the existing culvert. The document also states the existing culvert is 12 inches in diameter and may be replaced without a permit from the Department with a larger diameter culvert as long as the bottom elevation of the replacement culvert is at the same elevation as the existing culvert.

6. *Please provide any updates on the NRPA filed for wetland impacts. Please forward to the City when received.*

Response: Although originally stated that an NRPA application was filed, this project qualifies for the 4,300 SF NRPA alteration exemption. Therefore, no NRPA application was filed. Please see the revised Grading and Utility Plan (Sheet 5 of 11) for the wetland impact area.

7. *Please clarify the amount of wetland that might be filled. Please also provide more information on how the wetland was delineated.*

Response: The proposed amount of wetland area to be filled is approximately 3,919 SF. Please see the revised Grading and Utility Plan (Sheet 5 of 11) for the wetland impact area. For wetland delineation information please refer to Note 4, on Notes and Legend Plan (Sheet 2 of 11).

Design:

1. *The residential quality of the neighborhood can be described as incremental infill that reflects a variety of architectural style and periods that does not capture a singular precedent. The uniformity of the proposed two-family (duplex) architectural style deviates from the residential neighborhood pattern, consider further exterior design variation for greater positive visual interest through façade material, roof type and/or differential façade variation. Facade materials to be indicated on architectural elevations. The proposed hipped roof form is not the dominant roof form present throughout the surrounding neighborhood, and where evident there is the inclusion of a dormer window or other roof projections to additional opportunities for air and light into upper floor. Consider further variation in roof form as an opportunity for greater positive visual interests that responds to the variety reflected in the surrounding residential neighborhood character.*

Response: Please see the attached architectural plans displaying a variety of building façades, and roof types that conform to the variation of design in the City of Portland Two-family design standards.

2. *Identify open space functions to 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. Include additional vegetated screening to buffer adjacent properties at side and rear yard, with special consideration for vegetation at top of proposed slope in rear to screen steep grades proposed and views from adjacent rear properties.*

Response: Lot space is limited due to steep slopes and does not allow for more open space than what has been provided. Additional buffering and landscape has been added to provide a vegetated screen between the railroad and a neighbor to the West.

3. *Provide architectural floor plans to identify window arrangement specific to proposed interior living spaces. Provide allocation of sufficient storage areas within basement, attic space or other interior space.*

Response: Please see the attached architectural plans for window locations and appropriate basement storage locations.

4. *The proposed development landscape plan shall include proposed landscaping to properly screen vehicles from adjacent properties.*

Response: Landscaping in the form of 8 shrubs has been added to the plans that shall screen vehicles in the driveway from the adjacent parcel to the North of the project. Please see the revised Landscape Plan (Sheet 6 of 11).

General:

1. *Please provide documentation for the right title and interest for lot 190 K009. The deed provided appears to only cover lots 190 K010 thru 014.*

Response: Please see attached Deed for Lot 190 K009.

2. *Several documents provided, the contract for the sale of commercial real estate dated August 2020 for, DEP letter from 2005, Planning Board Approval from 2005, and a Declaration of Covenants and Restrictions, don't appear to pertain to the property being applied for, please resubmit any other relevant documents for the application such as past applicable approvals, easements, and restrictions on the property.*

Response: Please see the requested documents attached to this comment response. Hammerhead turnaround easement lines and drainage easement lines have been delineated on the Site Plan. We request that the easement descriptions be a condition of approval prior to construction, Easement documentation is currently being written and will be forwarded to the City for review prior to construction/ building permits.

3. *Please confirm that the project has obtained the necessary permission from CMP or that the project will not conflict with the existing CMP easement (which is shown on survey), or if corrective easement if needed. Please also provide a copy of the existing easement for documentation purposes, and show any easement areas on the plan.*

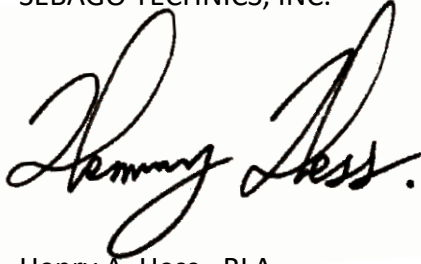
Response: The project is not intended to conflict with the existing CMP easement. Please see the revised Overall Grading and Utility plan (Sheet 4 of 11) showing the CMP easement lines.

4. *The financial capability letter described was not attached. Please submit demonstration of financial capability.*

Response: Please see the attached financial capacity letter.

Upon your review of our responses, please contact me if you have any questions.

Sincerely,
SEBAGO TECHNICS, INC.

A handwritten signature in black ink, reading "Henry A. Hess." with a period at the end. The signature is fluid and cursive.

Henry A. Hess., RLA
Project Manager
Maine Licensed Landscape Architect.

HAH:jsh

Memorandum

To: City of Portland Planning and Urban Development Department

From: Henry Hess, R.L.A., Sebago Technics

Date: April 13, 2022

Subject: Shoreland Zone Narrative in Response to City Comment
73 Powsland Street
Portland, Maine

We have prepared this statement to address this projects compliance with the Shoreland Zone standards for the 1,958 SF portion of the project site located within the Shoreland Zone. All standards for the Shoreland zone are either being met, do not apply to this project based on the nature of the proposed work, or do not apply because the project site is located within the B-5 Zone.

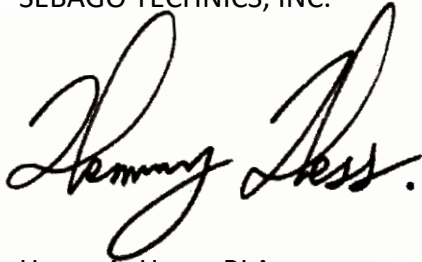
The proposed improvements within the Shoreland zone include filling 1,958 SF of wetlands grading and compacting, the installation of an outlet control structure, outlet pipe, and rip rap apron, as well as the replacement of an existing failing culvert underneath the railroad that has been causing unnecessary flooding between the project site and railroad during intense rainfall events. All of these proposed improvements comply with the B-5 and Shoreland zone standards.

The proposed project complies with the Shoreland Zone stormwater requirements as the stormwater treatment system has been designed in compliance with the City of Portland Technical Manual. Please refer to the Stormwater Management Report page 3 addressing the project's compliance with the City Standards for the General and Flooding Standard, as well as MDEP standards.

The proposed project complies to the Shoreland zone erosion and sedimentation control requirements as the erosion and sedimentation control plan proposed is in accordance with the Maine Erosion and Sediment Control Handbook for Construction: Best Management Practices. The erosion and sedimentation control measures taken include a double row filter barrier along the edge of the proposed improvements and erosion control fabric on all slopes steeper than 3:1. Please refer to the Erosion Control Notes on sheet 7 of 14 in the plan set and to the Grading and Utility plan for the erosion and sediment control measures used on sheet 5 of 14.

The soils on site have been determined to be suitable to build upon through conducting geotechnical borings. There will be coordination with the contractor to ensure the use of proper fill material that is suitable for the project. Please see attached Geotechnical Report.

Sincerely,
SEBAGO TECHNICS, INC.

A handwritten signature in black ink, reading "Henry A. Hess.", is displayed on a light gray rectangular background.

Henry A. Hess., RLA
Project Manager
Maine Licensed Landscape Architect.

HAH:jsh

Memorandum

To: Chris Branch, Director of Public Works

From: Henry Hess, R.L.A., Sebago Technics

Date: April 13, 2022

Subject: Request to Repave Under Moratorium in Response to City Comment
73 Powsland Street
Portland, Maine

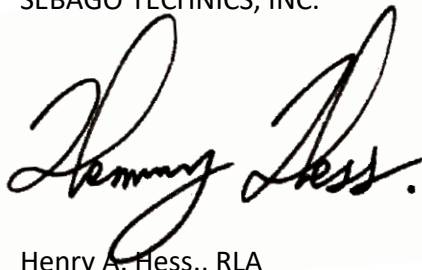
Chris,

On behalf of the applicant STJ Inc., we are pleased to submit this request to repave the end of Powsland Street currently under the existing 5-year moratorium. The roadway work will extend from the beginning limit of work (proposed saw cut line) to the end of the road. STJ Inc. is proposing to repave 185 feet of Powsland Street plus extend the road and pave another 125 feet to the proposed hammerhead turnaround. We understand the purpose of a moratorium is to preserve the condition of the roadway, and due to the expected number of saw cuts and patch work for utility connections for the proposed buildings we are of the belief that the roadway condition will be preferable if repaved entirely.

Attached you will find the proposed Overall Grading and Utility Plan showing the existing edge of pavement at the end of Powsland Street, proposed saw cut line / start of new pavement, and the proposed utility connections where trench work would be necessary.

We hope we have provided sufficient information for the ability to repave under moratorium. In the interim, if you or staff have comments on this request or require additional information, please contact me.

Sincerely,
SEBAGO TECHNICS, INC.



Henry A. Hess., RLA
Project Manager
Maine Licensed Landscape Architect.

HAH:jsh

April 13, 2022
07360-01

Planning and Urban Development Department
City Hall – 4th Floor, 389 Congress Street
Portland, Maine 04103

Sidewalk and Curbing Waiver Request Article 14 Section 6.1
73 Powsland Street Portland ME 04103

To Whom It May Concern,

On behalf of the applicant STJ Inc., I am pleased to submit this waiver request for the Minor Site Plan Application for the Powsland Street Project. The applicant would like to request a waiver from site plan review standards 14.6.1.B.3.c and d.

“All Development shall provide curb and sidewalks along all frontages, installed to specifications as described in the transportation systems and street design standards of the technical manual.”

The applicant is requesting the waiver for sidewalks along all frontages due to meeting at least (2) of the waiver criteria as listed in Chapter 14, section 14.6.1.B.3.c. Descriptions of those criteria and how they are met are listed below.

- i. *There is no reasonable expectation for pedestrian usage coming from, going to, and traversing the site.*
 - a. The Powsland street project is located at the very end of the street where there will not be pedestrian traffic other than from the residents in the proposed homes.
- ii. *There is no sidewalk in existence or expected within 1000 feet and the construction of sidewalks does not contribute to the development of pedestrian-oriented infrastructure.*
 - a. Currently, no sidewalk runs the length of Powsland Street on the project side. Therefore, the creation of a sidewalk in front of this project will not contribute to the development of pedestrian-oriented infrastructure.
- iii. The street has been repaved recently and no sidewalks were installed during the recent reconstruction /paving of Powsland St.

The applicant is also requesting the waiver for curbing along all frontages due to meeting at least (2) of the waiver criteria as listed in Chapter 14, section 14.6.1.B.3.d. Descriptions of those criteria and how they are met are listed below.

- i. *The street has been rehabilitated without curbing in the last 60 months.*
 - a. Powsland St was recently paved in 2019 and no curbing was installed.
- ii. *Runoff from the development site or within the street does not require curbing for stormwater management.*

- a. The way the road and proposed development are graded, curbing is not necessary to convey stormwater to the proposed stormwater treatment system. Currently, there is no stormwater management for Powsland street, the new stormwater infrastructure shall be a significant improvement to the existing condition.

We hope we have provided sufficient information for a waiver of the sidewalk and curb development along the entire frontage of Powsland street as requested above. In the interim, if you or staff have comments on this waiver request or require additional information, please contact me.

Sincerely,
SEBAGO TECHNICS, INC.

A handwritten signature in black ink, reading "Henry A. Hess." with a stylized, cursive script.

Henry A. Hess., RLA
Project Manager
Maine Licensed Landscape Architect.

HAH:jsh

April 13, 2022
07360-01

Planning and Urban Development Department
City Hall – 4th Floor, 389 Congress Street
Portland, Maine 04103

Driveway Separation Waiver Request Technical Manual 1.7.1
73 Powsland Street Portland ME 04103

To Whom It May Concern,

On behalf of the applicant STJ Inc., we are pleased to submit this waiver request for the Site Plan Application for the Powsland Street Project. The applicant would like to request a waiver from site plan review standard Technical Manual Section 1.7.1 .

“Location of driveway: A driveway shall be located on the lot in a manner to provide a minimum distance of twenty (20) ft spacing between it and adjacent driveways.”

The applicant is requesting the waiver from the minimum driveway separation between adjacent driveways. There is not sufficient lot frontage to maintain a 20-foot separation between adjacent driveways while maintaining the minimum required driveway dimension of 10 feet in width, as well as maintaining the minimum required parking for each unit.

We hope we have provided sufficient information for a waiver from the driveway separation standard. In the interim, if you or staff have comments on this waiver request or require additional information, please contact me.

Sincerely,
SEBAGO TECHNICS, INC.



Henry A. Hess., RLA
Project Manager
Maine Licensed Landscape Architect.

HAH:jsh



CITY OF PORTLAND
Department of Public Works
Christopher C. Branch, P.E., Director

Date: October 25, 2021

Re: Wastewater Capacity Authorization

Address: 65-73 and 93 Powsland Avenue

Applicant: STJ Inc (with Sebago Technics serving as design consultant)

Planner: TBD

Anticipated Wastewater Flow:

Estimate of Anticipated Design Flows				
Development	Unit Size	Number of Units	Gallons per Day per Unit	Total Gallons per Day
Existing flow to be removed				
Vacant				0
Proposed flow				
Multiple Family Dwelling Units	2-Bedroom	8	180	1440
Multiple Family Dwelling Units	4-Bedroom	1	360	360
Net Change				+ 1800
*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.

You are reminded that the sewers you are proposing to connect into convey both sanitary and stormwater (Combined Sewer) and therefore a backflow preventer is suggested.

If the City can be of further assistance, please contact me at all 874-8840 or brad@portlandmaine.gov

Sincerely,

Bradley A. Roland, P.E.
Senior Project Engineer

212 Canco Road, Ste B • Portland, ME 04103 • 207-874-8801

cbranch@portlandmaine.gov • www.portlandmaine.gov



March 1, 2022

Jake Hunnewell, E.I.
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, ME 04106

Re: ~69, ~71, ~73, ~75, ~77, ~79, ~81, ~83, & ~85 Powsland Street, PO
Ability to Serve with PWD Water

Dear Mr. Hunnewell:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on October 1, 2021. Based on the information provided, we can confirm that the District will be able to serve the proposed project as further described in this letter. **Please note that this letter constitutes approval of the water system as currently designed and is valid for eighteen (18) months after the date of issue. Any changes affecting the approved water system will require further review and approval by PWD.**

Conditions of Service

The following conditions of service apply:

- Nine (9) new 1-inch domestic services with 5/8-inch meter may be installed from the water main in Powsland Street. Please note that only one meter and one bill will be associated to each domestic service line. The services should enter through the property's frontage on Powsland Street at least 10-feet from any side property lines. An approved non-testable dual check backflow prevention device must be installed on each service line directly after the meter prior to service activation.
- It is the District's understanding that each unit in the development will be served with a NFPA 13D life safety sprinkler system supplied by a tank and pump system. Direct connection between the sprinkler system and the unit's domestic service is not permitted as part of this approval.
- The Portland Water District does not have record of any other existing infrastructure in public roads and recommends a survey and test pitting be performed by the development team prior to construction. Any conflicts that arise during construction are at the risk of the developer and may result in job shutdown until new plans are submitted by the developer and reviewed and approved by PWD.

Prior to construction, the owner or contractor will need to complete a Service Application and pay all necessary fees for each proposed service. When the project is ready for construction, an Application for each service can be requested by contacting the MEANS Group at MEANS@pwd.org or 207-774-5961 ext. 3199. Once a completed Application has been submitted with payment, please allow seven (7) days for processing.



Existing Site Service

According to District records, the project site does not currently have existing water service.

Water System Characteristics

According to District records, there is an 8-inch diameter ductile iron water main in Powsland Street and a public fire hydrant located approximately 60 feet from the site. The most recent static pressure reading was 100 psi on January 5, 2021.

Public Fire Protection

The installation of new public hydrants to be accepted into the District water system will most likely not be required. It is your responsibility to contact the Portland Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

Domestic Water Needs

The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project. Based on the high water pressure in this area, we recommend that you consider the installation of pressure reducing devices that comply with state plumbing codes.

Private Fire Protection Water Needs

You have indicated that this project will not require water service to provide private fire protection to the site.

Should you disagree with this determination, you may request a review by the District's Internal Review Team. Your request for review must be in writing and state the reason for your disagreement with the determination. The request must be sent to MEANS@PWD.org or mailed to 225 Douglass Street, Portland Maine, 04104 c/o MEANS. The Internal Review Team will undertake review as requested within 2 weeks of receipt of a request for review.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District

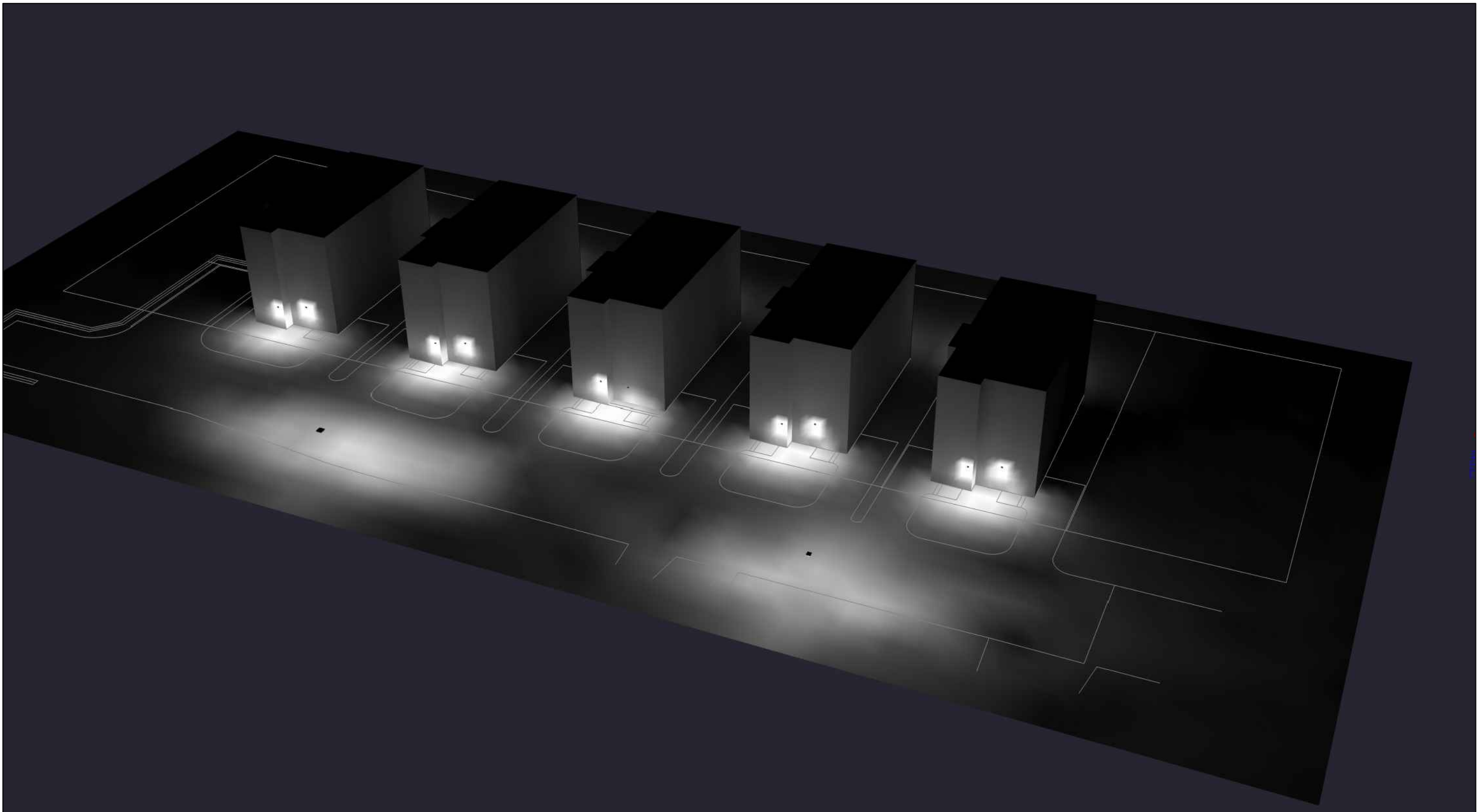
A handwritten signature in black ink, appearing to read 'Robert A. Bartels', written in a cursive style.

Robert A. Bartels, P.E.
Senior Project Engineer



Luminaire Schedule							
Symbol	Qty	Label	Mounting Height	LLF	Lum. Lumens	Lum. Watts	Description
+	1	EX	12' - 0" AFG	0.900	5300	56	EPTT01_06DA30 (Existing)
-	1	T3	12' - 0" AFG	0.900	4800	55	TRA30-AC-24NB-55-3K-UNV-DIR3
⌬	15	WP	7' - 0" AFG	0.900	1424	10	SG1-10-3K-PCU

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Overall Area	Illuminance	Fc	0.28	11.6	0.0	N.A.	N.A.
Paved Area	Illuminance	Fc	0.54	3.4	0.0	N.A.	N.A.



1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO HUBBELL LIGHTING. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.

2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.

3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

TITLE:

POWSLAND DEVELOPMENT
PORTLAND, ME
SITE PHOTOMETRIC PLAN

REVISED FROM DRAWING NUMBER(S):
R1: 03/30/22
R2: 04/07/22
R3: 04/11/22

Hubbell Lighting, Inc.
701 MILLENNIUM BLVD.
GREENVILLE, SC 29607

DN BY:
DHK
REV BY:
DHK
QUOTE:
N/A

DATE:
03/29/22
DATE:
04/11/22

CHK BY:
N/A
SCALE:
AS NOTED
DRAWING / DESIGN NO.:
2229444R3

Page 122



DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF LAND AND WATER QUALITY

4/15/2014

FIELD DETERMINATION FORM

CONTACT ID 10,270

CONTACT

SETH PARKER
AVESTA HOUSING
307 CUMBERLAND AVE.
PORTLAND, ME 04101
2075537777

PROPERTY OWNER

MARK CURTIS
STJ, INC
939 PARKER FARM RD
BUXTON, ME 04093

STAFF KALINICH, JEFFREY

DIRECTIONS

Congress Street to Powsland Street to the end.

SITE TOWN PORTLAND
MAP LOT

MEMO

Jeff Kalinich met Seth Parker, Steve Bushy and Jim Logan at the parcel for a resource determination. It was determined that the drainage is not a river, stream or brook as defined by the Natural Resources Protection Act (NRPA). It was determined that the parcel contains freshwater wetland as defined by the NRPA. The Department does not have adjacency jurisdiction to this wetland and the wetland qualifies for the 4300 square foot NRPA alteration exemption. A culvert under the railroad tracks drains this wetland beyond the tracks to a coastal wetland. The culvert may be replaced without a permit from the Department as long as it is replaced at the same elevation as the existing culvert. The existing culvert is twelve inches in diameter and may be replaced without a permit from the Department with a larger diameter culvert as long as the bottom elevation of the replacement culvert is at the same elevation as the existing culvert. Changing the elevation of the existing culvert with a replacement culvert will require an individual NRPA permit. Erosion control devices must be installed and maintained on the project site during any soil disturbance activity. A Stormwater Management Law PBR or Maine Construction General Permit "NOI" and "NOT" must be filed with the Department if more than 1 acre of area is going to be disturbed on the project site at any given time during construction.

NAME: _____

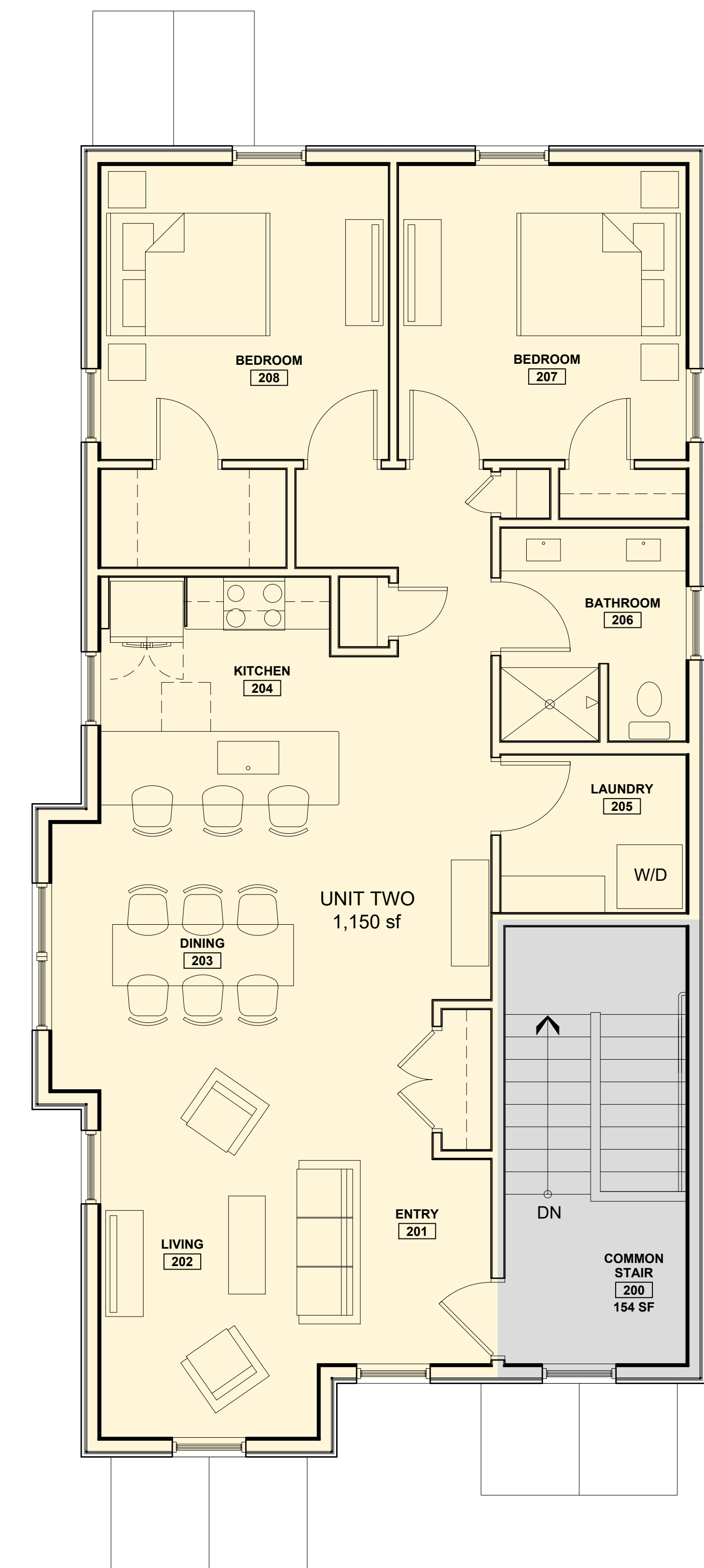
RECEIVED 3/31/2014

SITE VISIT 4/8/2014

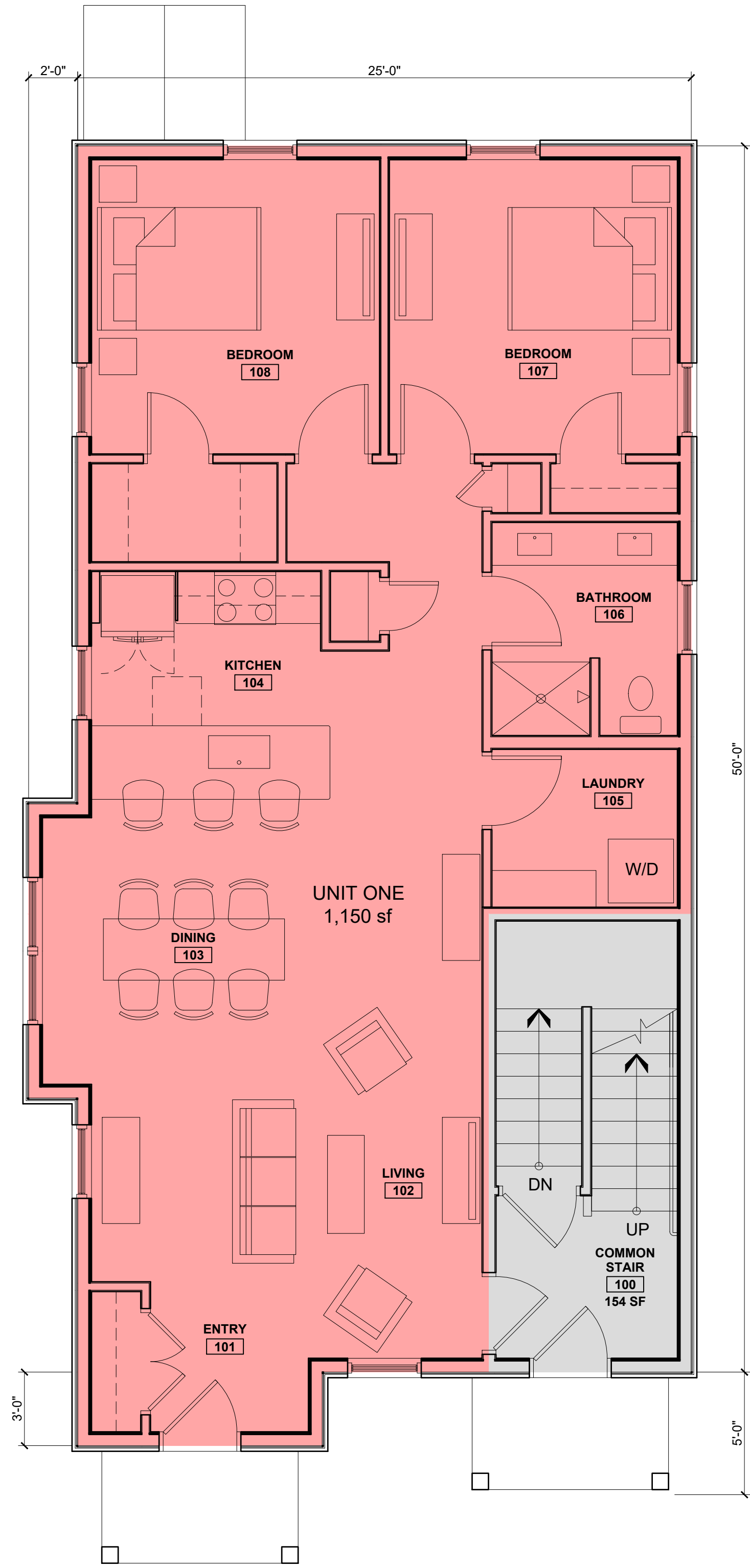
COMPLETED

4/15/2014

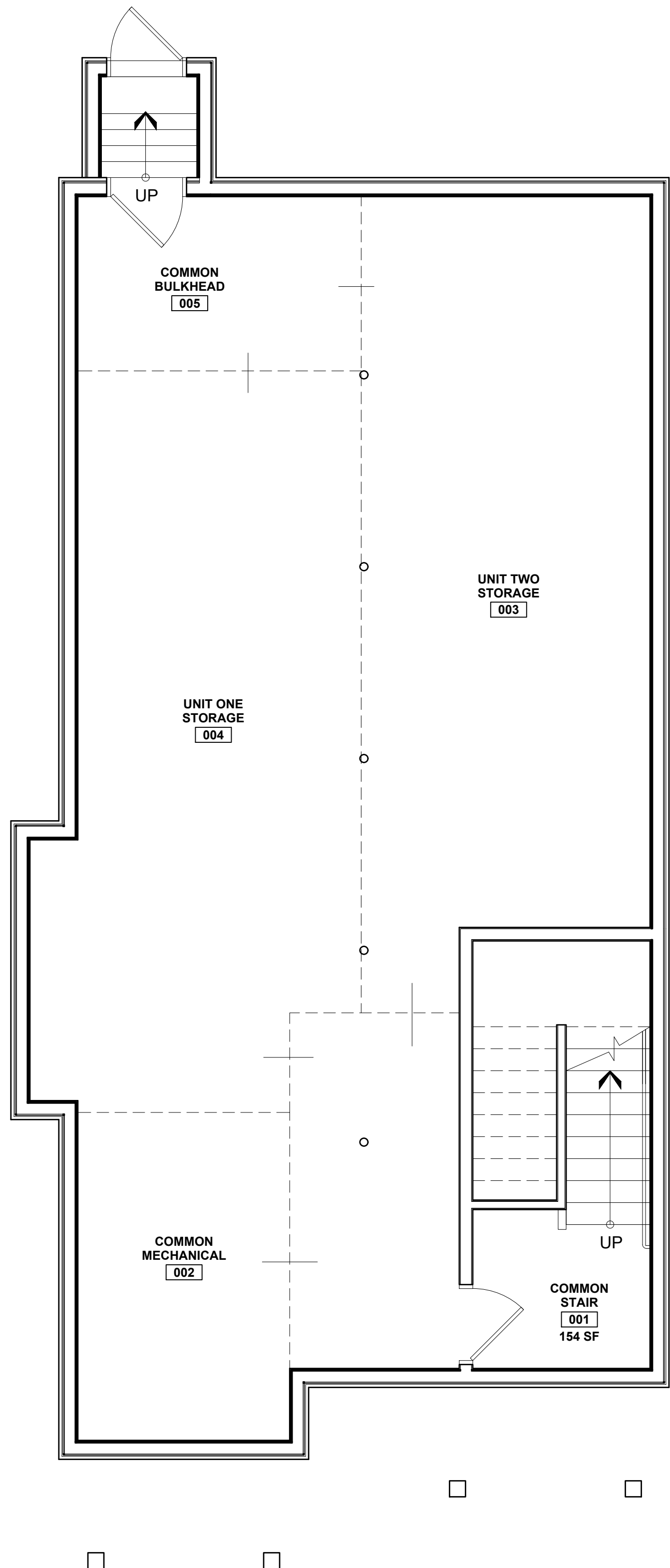
DUPLEX - BUILDINGS B,D,E



3 SECOND FLOOR PLAN
1/4" = 1'-0"



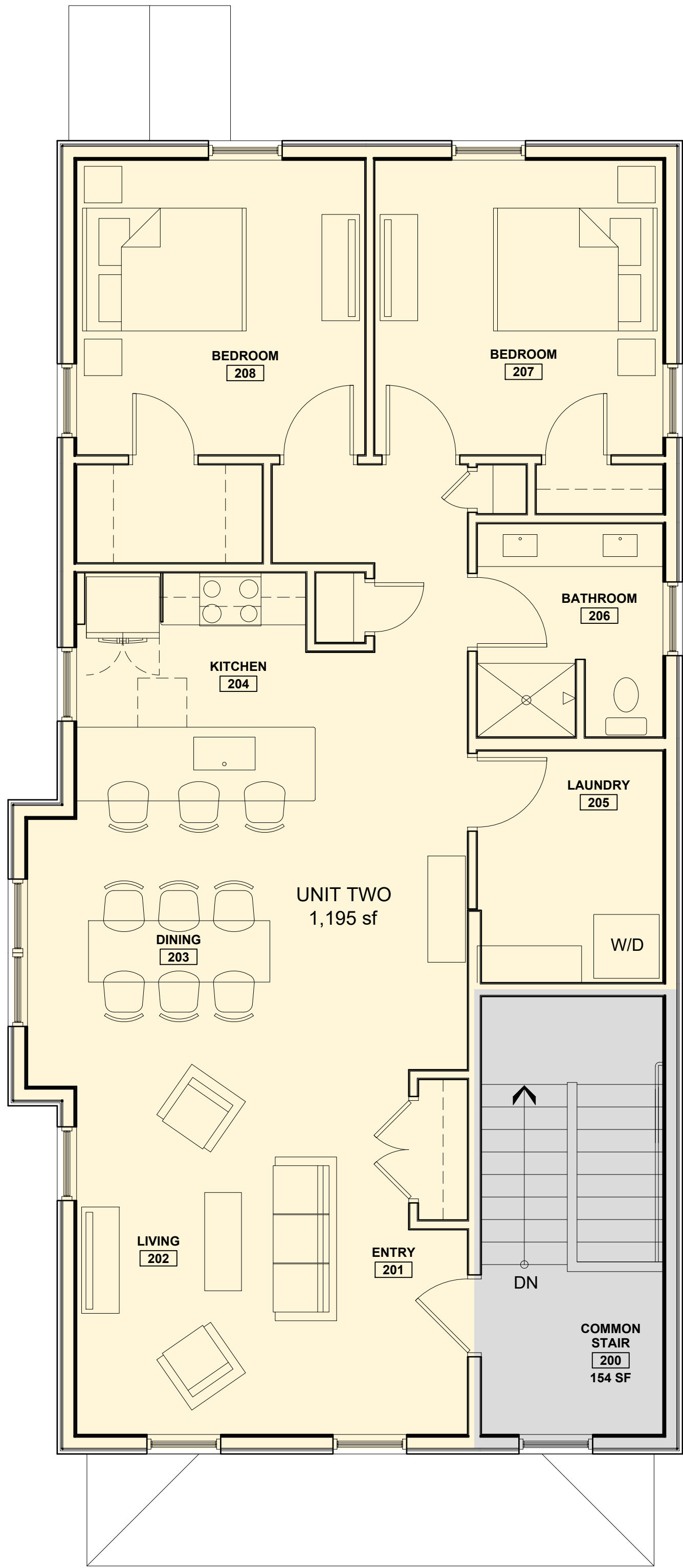
2 FIRST FLOOR PLAN
1/4" = 1'-0"



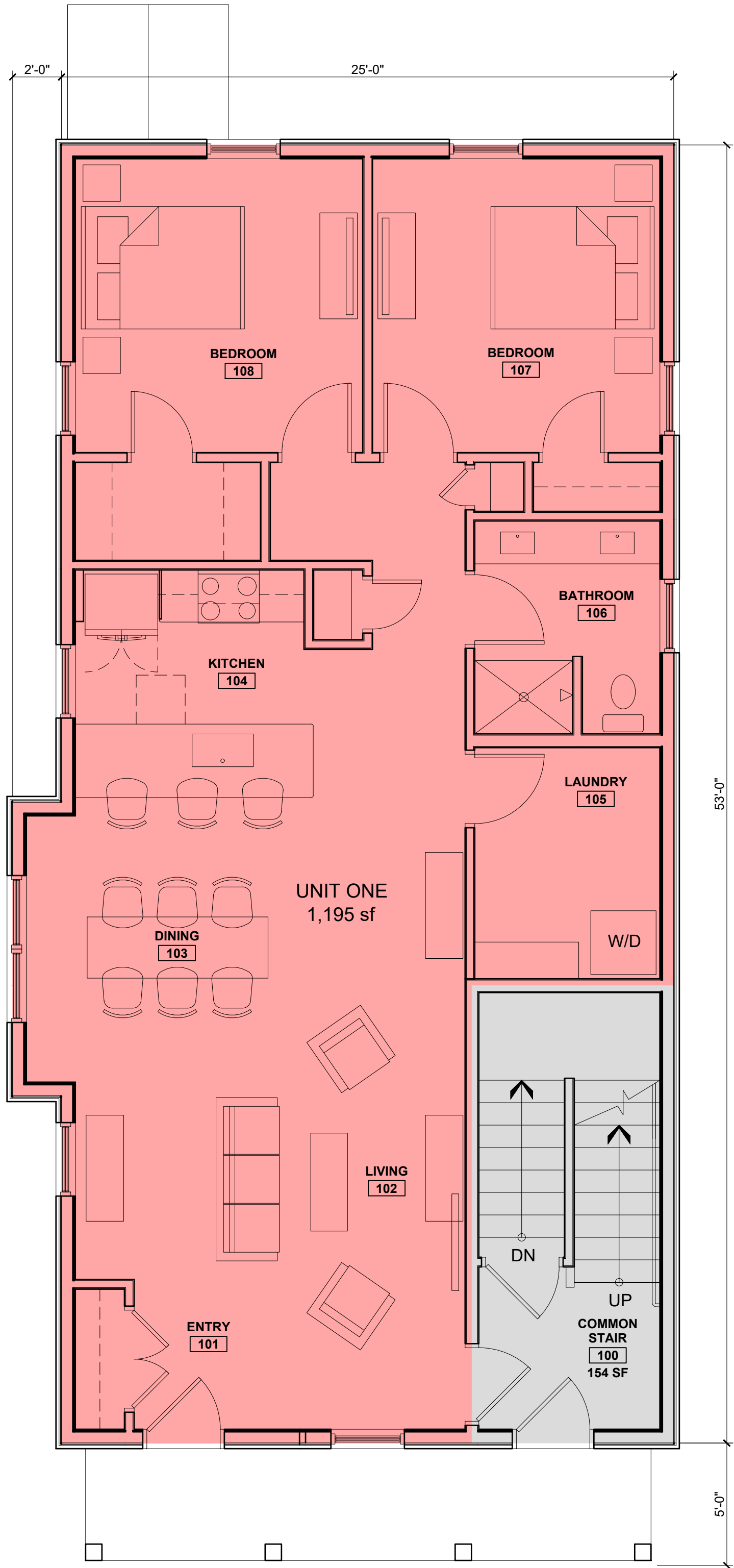
1 BASEMENT PLAN
1/4" = 1'-0"

PROGRESS PRINT ONLY
Not for Construction

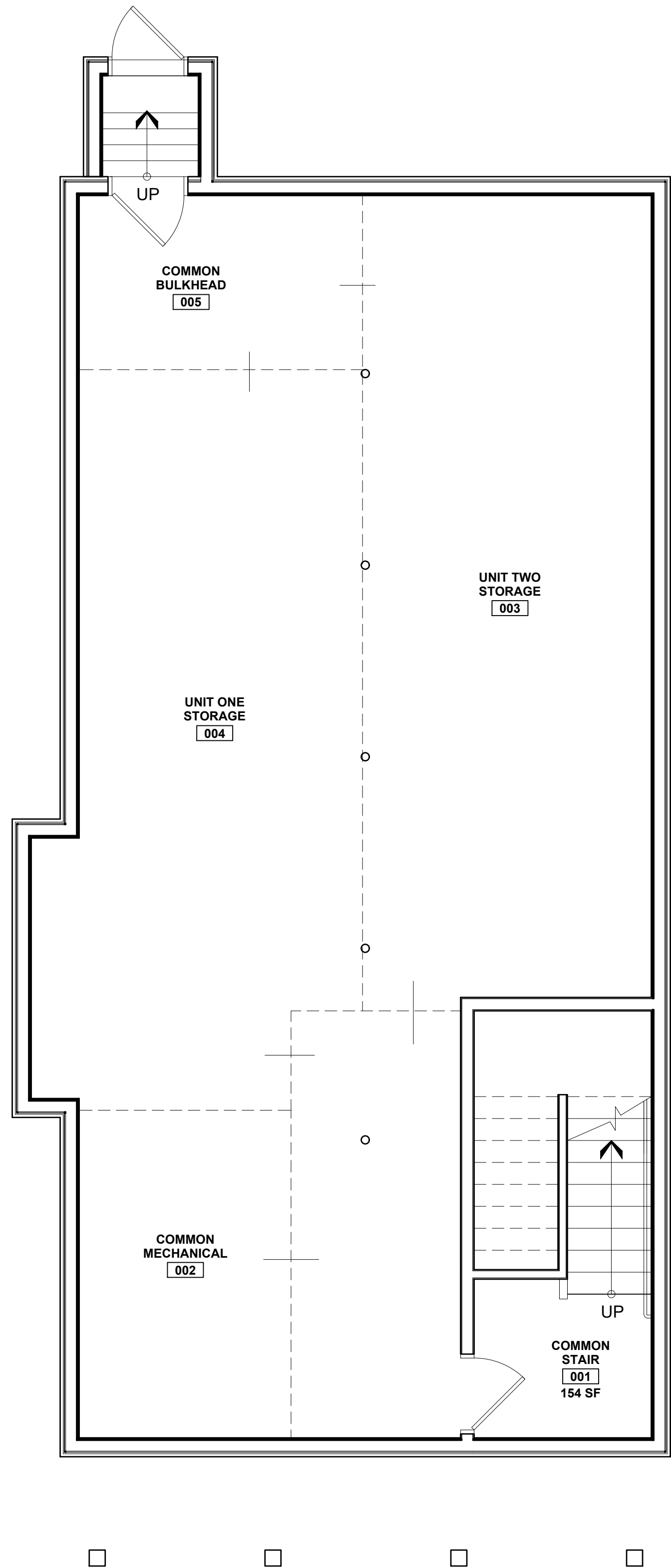
DUPLEX - BUILDING C



3 SECOND FLOOR PLAN
1/4" = 1'-0"



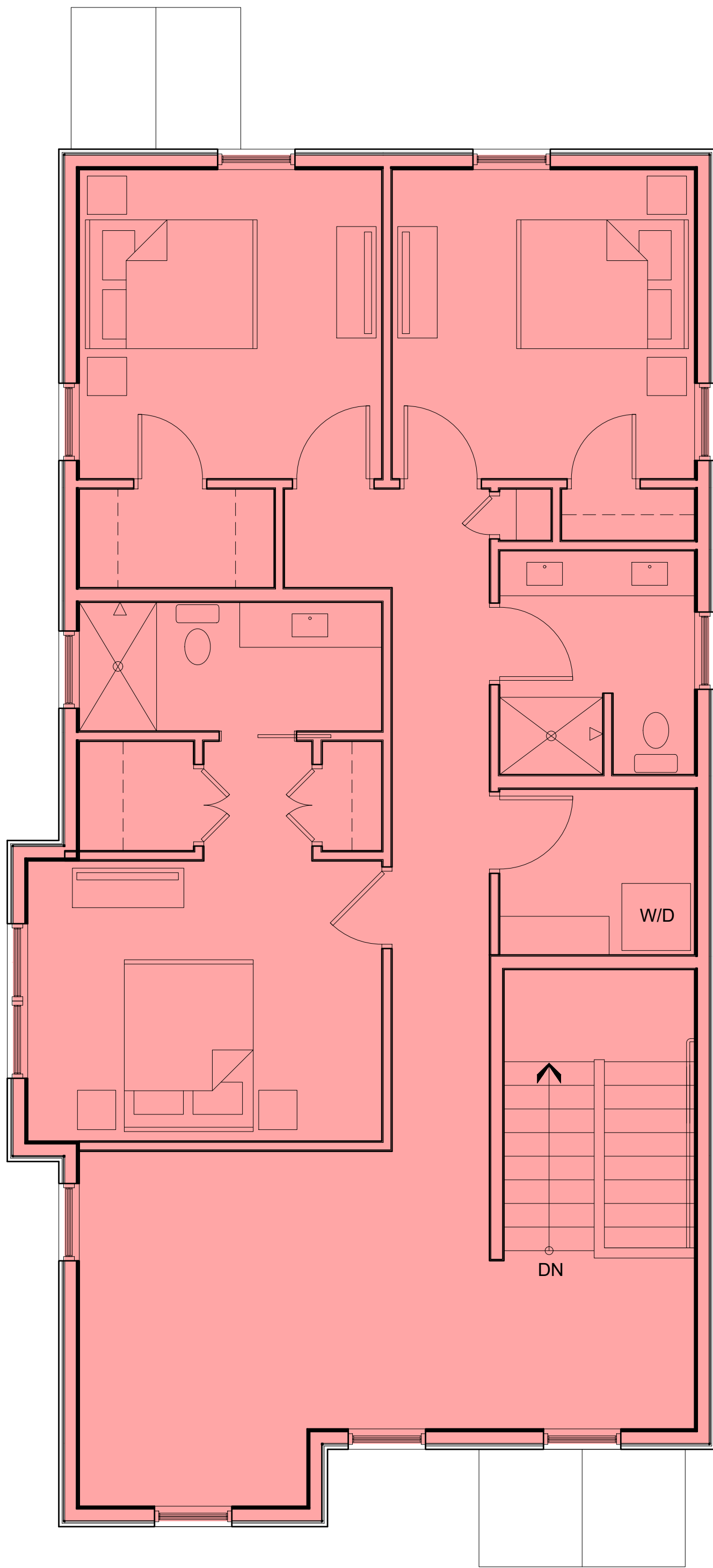
2 FIRST FLOOR PLAN
1/4" = 1'-0"



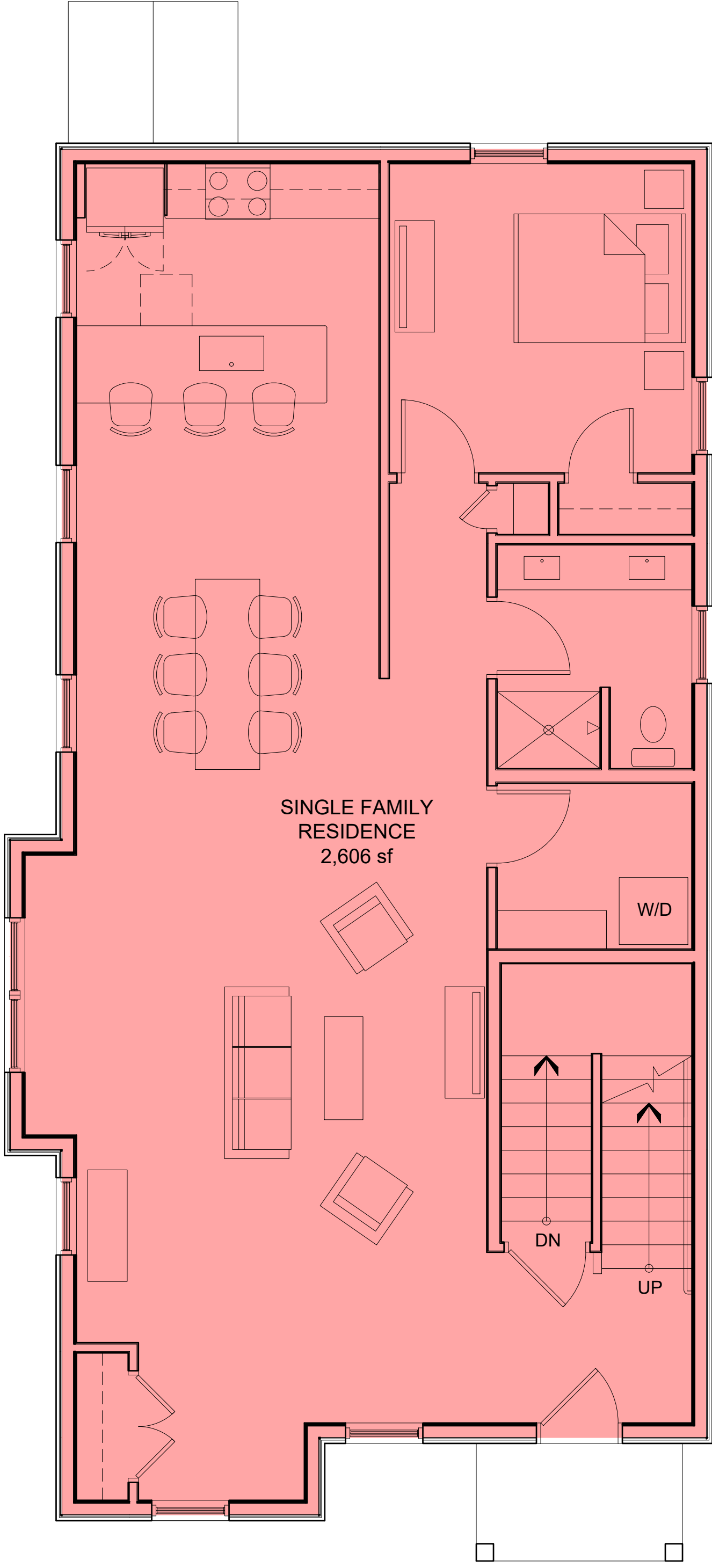
1 BASEMENT PLAN
1/8" = 1'-0"

PROGRESS PRINT ONLY
Not for Construction

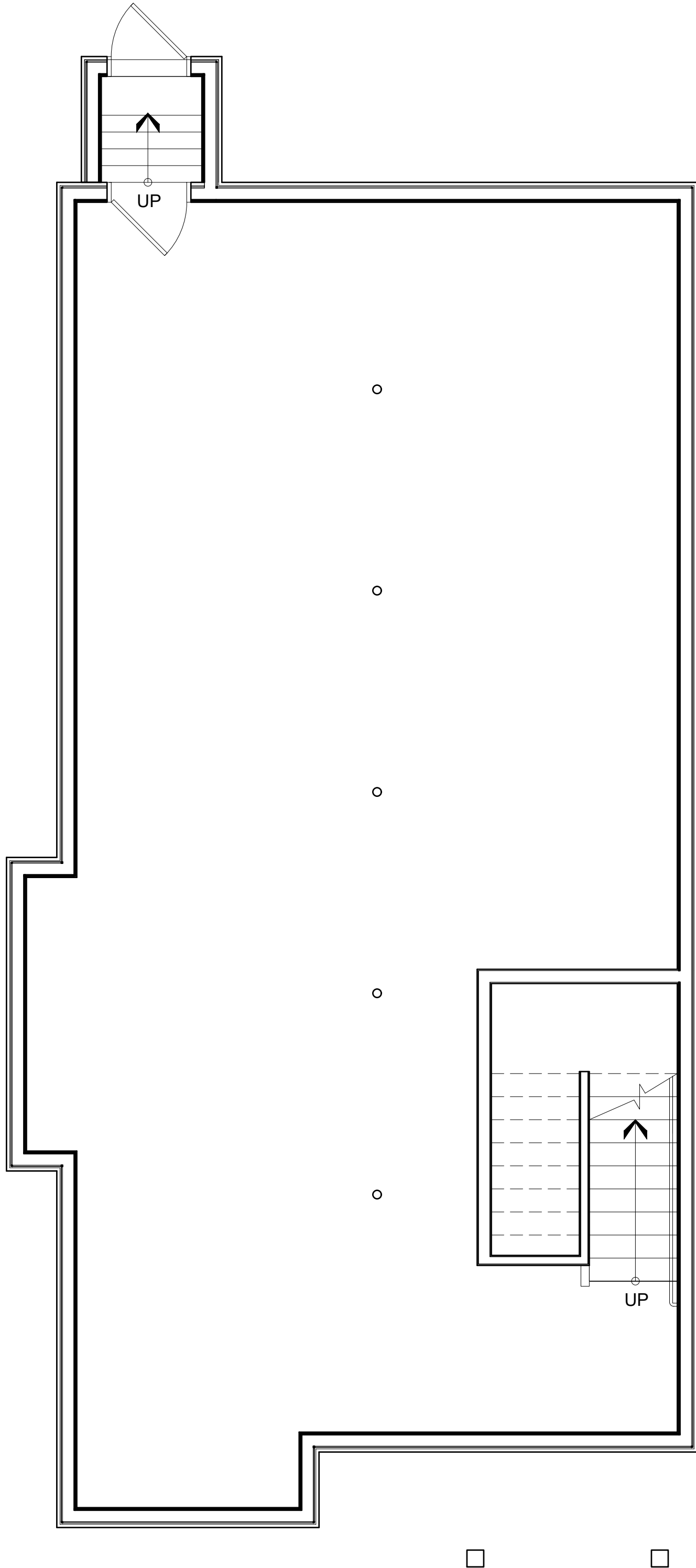
SINGLE FAMILY - BUILDING A



3 SECOND FLOOR PLAN
1/4" = 1'-0"



2 FIRST FLOOR PLAN
1/4" = 1'-0"



1 BASEMENT PLAN
1/4" = 1'-0"

PROGRESS PRINT ONLY
Not for Construction

POWSLAND STREET RESIDENTIAL

PORTLAND, MAINE

03-14-22



2 VIEW SOUTH DOWN POWSLAND STREET



1 VIEW NORTH UP POWSLAND STREET

PROGRESS PRINT ONLY
Not for Construction

RYAN SENATORE ARCHITECTURE

POWSLAND STREET RESIDENTIAL

PORTLAND, MAINE

03-14-22



1 POWSLAND STREET ELEVATION
NOT TO SCALE

PROGRESS PRINT ONLY
Not for Construction

RYAN SENATORE ARCHITECTURE

MAINE REAL ESTATE TAX-Paid

DLN: 1001940067685

DEED OF SALE BY PERSONAL REPRESENTATIVE

PETER H. KOENIG, of 125 Ash Swamp Road, in the City of Scarborough, County of Cumberland, and State of Maine, duly appointed and acting personal representative of the Estate of Dorothy Ann Koenig, deceased, whose Will was duly admitted to probate in the Probate Court for Cumberland County, Maine (Docket No. 2019-0551), not having given notice to persons succeeding to an interest in the real property described below at least ten (10) days prior, as such notice was not required under the terms of decedent's Will, by the power conferred by the Probate Code, and every other power, for consideration paid grants to STJ, INC., a Maine Corporation, with a mailing address of 939 Parker Farm Road, Buxton, ME 04093, the real property in Portland, Cumberland County, Maine, described as follows:

A certain lot or parcel of land, with buildings thereon, situated on the westerly side of Powsland Street, in said City of Portland, and being lots numbered 64 & 65 as shown on Plan of Sunnyside, recorded in Cumberland County Registry of Deeds, in Plan Book 9, Page 121, to which plan reference is hereby made for a more particular description.

For Decedent's title reference see Deed of Delores B. Speed, formerly Delores B. Ritchot, to John E. Koenig and Dorothy A. Koenig as joint tenants dated October 15, 1969 and recorded on October 17, 1969, in the Cumberland County Registry of Deeds in Book 3106, Page 80. John E. Koenig died in May 1991, leaving his wife Dorothy A. Koenig as surviving joint owner.

IN WITNESS WHEREOF, the said Peter H. Koenig in his capacity as Personal Representative of the Estate of Dorothy A. Koenig, has caused this instrument to be executed.

Witness my hand and seal this 13 day of August, 2019.

ESTATE OF DOROTHY A. KOENIG

BY:

Peter H. Koenig
Peter K. Koenig, Personal Representative

Witness:

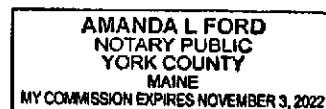
STATE OF MAINE

COUNTY OF CUMBERLAND

Then personally appeared before me the above named Peter H. Koenig in said capacity as Personal Representative of the Estate of Dorothy A. Koenig and acknowledged the foregoing instrument to be his free act and deed in said capacity.

Amanda L. Ford
Notary Public:

My Commission Expires: _____





October 5, 2021

City of Portland
City Planning Department
389 Congress Street
Portland, ME 04101

RE: S J T, Inc.-Powsland Street Project

Ladies and Gentlemen:

I am writing to inform you that Gorham Savings Bank has been doing business with S J T, Inc. for over 30 years. They have handled their entire banking relationship in a fully satisfactory manner. Based on the company's history with the Bank, they have exhibited the financial capacity to complete the proposed project on Powsland Street, Portland, Maine.

If you should need further information, please call me at 222-1498.

Sincerely,

A handwritten signature in blue ink, appearing to read "F. Proctor", with a stylized flourish at the end.

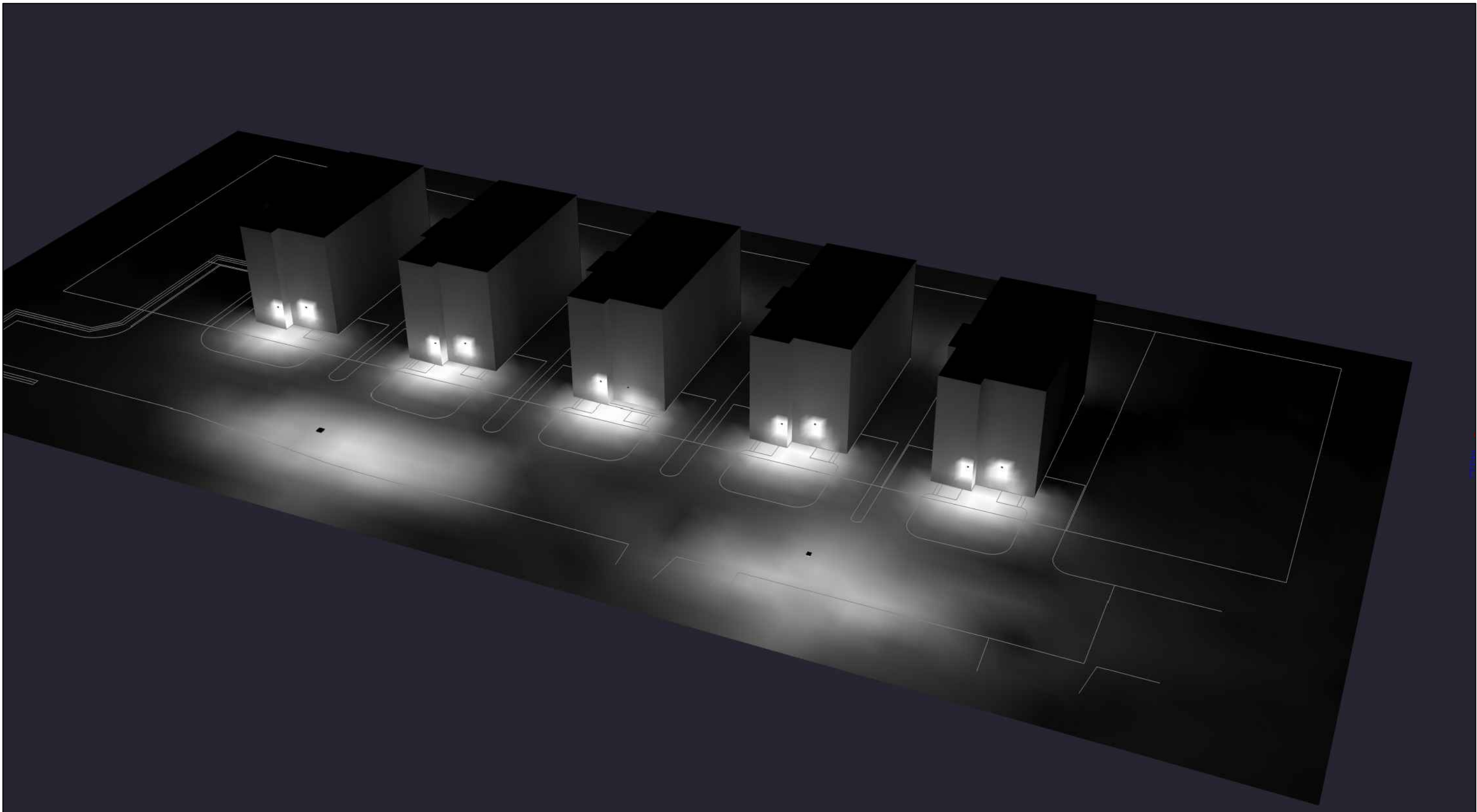
Frederick G. Proctor
Vice President



Luminaire Schedule							
Symbol	Qty	Label	Mounting Height	LLF	Lum. Lumens	Lum. Watts	Description
+	1	EX	12' - 0" AFG	0.900	5300	56	EPTT01_06DA30 (Existing)
-	1	T3	12' - 0" AFG	0.900	4800	55	TRA30-AC-24NB-55-3K-UNV-DIR3
⌬	15	WP	7' - 0" AFG	0.900	1424	10	SG1-10-3K-PCU

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Overall Area	Illuminance	Fc	0.28	11.6	0.0	N.A.	N.A.
Paved Area	Illuminance	Fc	0.54	3.4	0.0	N.A.	N.A.

Att. L



1. THIS LIGHTING DESIGN IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO HUBBELL LIGHTING. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.

2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.

3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

TITLE:

POWSLAND DEVELOPMENT
PORTLAND, ME
SITE PHOTOMETRIC PLAN

REVISED FROM DRAWING NUMBER(S):

R1: 03/30/22
R2: 04/07/22
R3: 04/11/22



Hubbell Lighting, Inc.
701 MILLENNIUM BLVD.
GREENVILLE, SC 29607

DN BY:
DHK
REV BY:
DHK
QUOTE:
N/A

DATE:
03/29/22
DATE:
04/11/22

CHK BY:
N/A
SCALE:
AS NOTED

DRAWING / DESIGN NO:
2229444R3

Page 131

STORMWATER MANAGEMENT REPORT

For POWSLAND STREET PORTLAND, ME

Prepared for:

STJ, INC
P.O. Box 58
Gorham, ME 04038

Prepared by:

Sebago Technics, Inc.
75 John Roberts Rd, Suite 4A
South Portland, ME 04106

March, 2022

Table of Contents

Contents

1. Introduction.....	1
2. Existing Conditions	1
3. Soils.....	1
4. Proposed Site Improvements.....	2
5. Existing Conditions Model.....	2
6. Proposed Conditions Model.....	2
7. Stormwater Management.....	3
Basic Standard - Chapter 500, Section 4(B)	3
General Standard - Chapter 500, Section 4(C).....	3
Flooding Standard - Chapter 500, Section 4(F).....	3
8. Summary.....	5

Appendices

Appendix 1:	Stormwater Quality Calculations
Appendix 2A:	Hydrologic Modeling– Existing Conditions (HydroCAD)Summary
Appendix 2B:	Hydrologic Modeling – Proposed Conditions (HydroCAD) Summary
Appendix 3:	Inspection, Maintenance and Housekeeping Plan
Appendix 4:	Subsurface Investigations
Appendix 5:	Stormwater Management Plans

**STORMWATER MANAGEMENT REPORT
POWSLAND STREET
PORTLAND, ME**

1. Introduction

This Stormwater Management Plan Report has been prepared to present analyses performed to address the potential impacts associated with the project due to proposed modification in stormwater runoff characteristics and land cover changes. The stormwater management controls that are outlined in this report have been designed to suit the proposed development and to comply with applicable regulatory requirements.

2. Existing Conditions

The project site consists of undeveloped land that was previously owned by the Portland Water District, located on the west side of Powsland Street in Portland. The site is approximately 0.67 acres in size and it is bounded by wetlands to the south and west. Train tracks on the south side of the southern wetlands provide a barrier for the watershed analyzed. Slopes on the site range from 2-55% in some areas.

The site is tributary to a small pond in the wetland area to the South that discharges through a culvert underneath the train tracks leading into the Fore River. According to Chapter 502 of the Maine Department of Environmental Protection (MDEP) regulations, the Fore River is not listed as an Urban Impaired Stream.

The development area of the site is not located in an identified flood zone per the FEMA Flood Insurance Rate Map for the City of Portland, Community Panel 2300510006B with an effective date of 1986.

3. Soils

Soil characteristics were obtained from the USDA Web Soil Survey. The Hydrologic Groups (HSG) of the soils is classified by Technical Release TR-55 of the Soil Conservation Service as follows:

Soil Map Symbol	Soil Name	Slope (%)	HSG
BgB	Nicholville	0-8	C
BuB	Lamoine	3-8	C/D

Hydrologic Soil Group boundaries are delineated on the Stormwater Management Plans. A copy of the Class D Medium Intensity Soil Survey is included as Appendix 4.

4. Proposed Site Improvements

The proposed development will consist of five 1,380 SF residential buildings, approximately 3,300 SF road extension with a turnaround, and an approximately 165 foot long retaining wall. The project will result in the creation of 20,200 SF of impervious area and 37,803 SF of developed area.

5. Existing Conditions Model

The existing conditions watershed plan consists of five (5) subcatchments labeled 1S thru 5S in the HydroCAD model. One location was identified as a Point of Analysis (POA) for comparing peak runoff rates. POA-1 is a culvert outlet on the south side of the train tracks connecting the pond in the wetland (1P) to the Fore River. All of the subcatchments contribute runoff to this study point with an overall runoff area of approximately 2.56 acres.

6. Proposed Conditions Model

The proposed conditions watershed plan consists of the same overall area approximately 2.56 acres.

POA-1: Subcatchment 4S does not change. Subcatchments 1.1S and 1.2S are broken up from 1S. Subcatchment 5S loses area to 1.1S which represents the roadway and attributing grassed area. Subcatchment 3S loses area to 1.1S and 1.2S which represents the roof area and landscaped area on the west side of the buildings. Subcatchment 2S gains area from 1S by the grading done onsite.

Subcatchments 2S, 3S, 4S, and 5S are directly tributary to 1P which discharges to POA-1. Subcatchments 1.1S and 1.2S are directly tributary to the Focal Point treatment system (1FP) which then discharges to the R-Tank storage system (1RT) under the Focal Point system. From 1RT flow is then conveyed into 1P and then to POA-1.

The Best Management Practices used (Focal point and R-Tanks) have been designed and sized in accordance with DEP BMP standards contained within Chapter 500 and the BMP Manual. Sizing calculations can be found in Appendix 1.

7. Stormwater Management

Basic Standard - Chapter 500, Section 4(B)

Since the project will disturb more than one (1) acre of land area, MDEP Basic Standards apply, 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 3) 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)

Although the project will not create more than one (1) acre of impervious surface, since the project is a new development classified as a minor site plan and will create more than 1,000 SF of impervious surface, under Section 5 of the City of Portland's technical manual, MDEP General Standards must be met. This requires a project's stormwater management system to include treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. The General Standards require treatment of no less than 95% of the site's created impervious area and no less than 80% of the site's created developed area (landscaped area and impervious area combined). To mitigate the changes in hydrologic patterns due to the development of this project, a Focal Point media filter and a subsurface R-Tank storage system has been implemented into the stormwater management infrastructure. Filtration BMPs are very effective at removing a wide range of pollutants through the use of organic soil filter media.

BMP sizing and treatment calculations are provided as Appendix 1.

Through the use of the aforementioned BMPs, 100% of new impervious area and 96.03% of new developed area will be receiving treatment. This meets the requirements for the Maine DEP General Standards.

Flooding Standard - Chapter 500, Section 4(F)

Since the project is a new development classified as a minor site plan and will create more than 1,000 SF of impervious surface, under Section 5 of the City of Portland's technical manual, MDEP Flooding Standards must be met. 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. As such, 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.

Runoff curve numbers were determined for each of the subcatchments by measuring the area of each hydrologic soil group within each type of land cover. The type of land cover was determined based on survey data, field reconnaissance and aerial photography. Times of concentration were determined from site topographic maps in accordance with SCS procedures.

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 SE are listed in the table below.

Storm Frequency Precipitation (in./24 hr) Cumberland County SE	
2-year	3.10
10-year	4.60
25-year	5.80

The following table presents the results of the peak runoff calculations at POA-1 for the existing and proposed conditions.

Peak Runoff Rate Summary Table			
Analysis Point	Storm Event	Existing Conditions (cfs)	Proposed Conditions (cfs)
POA-1	2-year	1.7	1.7
	10-year	3.4	3.4
	25-year	3.6	3.6

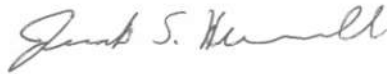
The HydroCAD Data output sheets from this analysis are appended to this report (Appendix 2) along with the Stormwater Management Plans (Appendix 5). The model predicts that the peak runoff rates in the proposed condition at Points of Analysis 1 are matching existing conditions runoff rates for the 2, 10, and 25-year storm events with implementation of the proposed stormwater management practices.

8. Summary

The proposed development has been designed to manage stormwater runoff through Best Management Practices approved by MDEP. Stormwater BMP's provide treatment to 100% (95% required) of impervious areas, and 96.03% (80% required) of the total developed area. Runoff discharging from the site will be matching existing conditions for the 2, 10, and 25-year storm events at the Point of Analysis. Additionally, erosion and sedimentation controls along with associated maintenance and housekeeping procedures have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

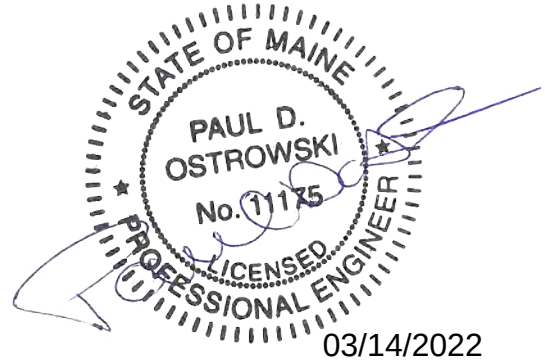
Prepared by:

SEBAGO TECHNICS, INC.



Jake S. Hunnewell, E.I.
Civil Engineer

JSH



Paul D. Ostrowski, P.E.
Senior Project Engineer

PDO

Appendix 1

Stormwater Quality Calculations

Table 1: MDEP GENERAL STANDARD CALCULATIONS

Job #

AREA ID	WATERSHED SIZE (S.F.)	EXISTING ONSITE IMPERVIOUS AREA TO REMAIN (S.F.)	NEW ONSITE IMPERVIOUS AREA (S.F.)	EXISTING ONSITE LANDSCAPED AREA TO REMAIN (S.F.)	NEW ONSITE LANDSCAPED AREA (S.F.)	NET NEW DEVELOPED AREA (S.F.)	NET EXISTING DEVELOPED AREAS (S.F.)	TREATMENT PROVIDED?	IMPERVIOUS AREA TREATED (S.F.)	LANDSCAPED AREA TREATED (S.F.)	DEVELOPED AREA TREATED (S.F.)	TREATMENT BMP
1.1S	14,582		9,920		4,662	14,582	0	YES	9,920	4,662	14,582	FP1
1.2S	21,721		10,280		11,441	21,721	0	YES	10,280	11,441	21,721	FP1
2S	30,232				1,000	1,000	0	NO	0	0	0	
3S	6,291				500	500	0	NO	0	0	0	
4S	16,435					0	0	NO	0	0	0	
5S	22,207					0	0	NO	0	0	0	
TOTAL (S.F.)	111,468	0	20,200	0	17,603	37,803	0		20,200	16,103	36,303	

TOTAL NEW IMPERVIOUS AREA (S.F.)	20,200	37,803
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT (S.F.)	20,200	36,303
% OF IMPERVIOUS AREA RECEIVING TREATMENT	100.00%	96.03%

SEBAGO TECHNICS, INC.

75 John Roberts Road Suite 4A

South Portland, Maine 04106

Tel. (207) 200-2100

JOB

SHEET NO.

1

OF

1

CALCULATED BY

DATE

FILE NAME

07360-01 WQC.xlsx

PRNT DATE

3/14/2022

FOCALPOINT, ACF ENVIRONMENTAL

Task:		Size Focal Point treatment system pursuant to the General Standards, Section 4.C of Chapter 500.													
References	1. Letter from Maine Department of Environmental Protection, Director-Bureau of Land Resources to Stormwater Systems ACF-Convergent Water Technologies Alliance, Dated May 16, 2016 indicating FocalPoint biofiltration meets requirements of the General Standards for Treatment.														
	Per Reference 1 above, the system must be sized to meet:														
	a.	"entire volume of a 0.96 inch Type III 24-hour storm is treated prior to activation of the bypass/overflow"													
	b.	"surface area....must be a minimum of 174 s.f. per 1 acres of impervious area treated (26s.f. per 0.15 acres)"													
	c.	"treatment flow rate for the Stormtech Isolator Row is the projected one year peak flow rate for the drainage area feeding the Isolator Row"													
		Flow rates:													
		Stormtech SC-310	0.10	cfs/chamber											
		Stormtech SC-740	0.20	cfs/chamber											
		Stormtech DC-780	0.20	cfs/chamber											
		Stormtech MC-3500	0.30	cfs/chamber											
		Cultech 150XLHD	0.185	cfs/chamber											
		Cultech 330XLHD	0.227	cfs/chamber											
Tributary to FocalPoint System			FP1												
	Landscaped Area		16,103.00	SF											
	Impervious Area		20,200.00	SF											
Minimum Surface Area of FocalPoint:															
	Required	26 s.f. per 0.15 acres of impervious area													
	Total Impervious Area		20,200.00	SF			0.46	AC							
						X	174.00	SF/ACRE							
		Required Minimum Surface Area					80.7	SF							
		Provided Surface Area					120.0	SF							
Treatment Volume															
	Required	(0.4" X Landscaped + 1.0" X Impervious)													
	Landscaped Area		16,103.00	SF	Volume		536.8								
	Impervious Area		20,200.00	SF	Volume		1,683.3								
	Treatment Volume Required						2,220.1	CF	0.051	AF					
	must discharge in 24-48 hours														

07360-01 Post SW 2*Type III 24-hr WQC Rainfall=1.64"*

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 1

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1.1S: Roadway areaRunoff Area=14,582 sf 68.03% Impervious Runoff Depth=0.86"
Flow Length=306' Tc=6.0 min CN=91 Runoff=0.3 cfs 1,040 cf**Subcatchment1.2S: Grassed / Roof area**Runoff Area=21,721 sf 47.33% Impervious Runoff Depth=0.63"
Flow Length=262' Tc=6.0 min CN=87 Runoff=0.4 cfs 1,148 cf**Pond 1FP: FocalPoint 1**Peak Elev=19.84' Storage=208 cf Inflow=0.7 cfs 2,188 cf
Primary=0.3 cfs 2,128 cf Secondary=0.1 cfs 59 cf Outflow=0.4 cfs 2,186 cf**Pond 1RT: 1RT**Peak Elev=14.76' Storage=1,142 cf Inflow=0.4 cfs 2,186 cf
Outflow=0.1 cfs 2,012 cf**Total Runoff Area = 36,303 sf Runoff Volume = 2,188 cf Average Runoff Depth = 0.72"**
44.36% Pervious = 16,103 sf 55.64% Impervious = 20,200 sf

07360-01 Post SW 2

Prepared by Sebago Technics, Inc.

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr WQC Rainfall=1.64"

Printed 3/14/2022

Page 2

Summary for Subcatchment 1.1S: Roadway area

Runoff = 0.3 cfs @ 12.09 hrs, Volume= 1,040 cf, Depth= 0.86"

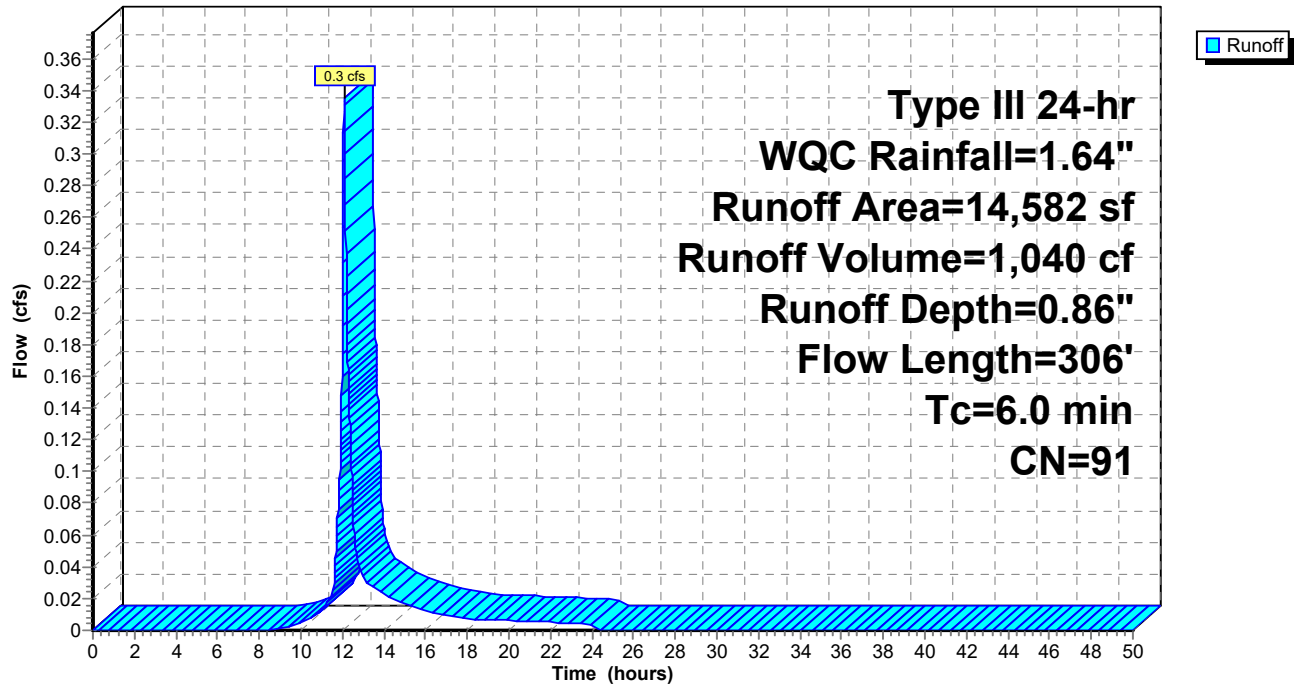
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr WQC Rainfall=1.64"

	Area (sf)	CN	Description
*	9,920	98	Pavement
	2,004	80	>75% Grass cover, Good, HSG D
	2,658	74	>75% Grass cover, Good, HSG C
	14,582	91	Weighted Average
	4,662		31.97% Pervious Area
	9,920		68.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	17	0.0280	1.09		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
0.4	79	0.0212	2.96		Shallow Concentrated Flow, B-C
					Paved Kv= 20.3 fps
0.7	162	0.0370	3.90		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
0.3	48	0.0188	2.78		Shallow Concentrated Flow, D-E
					Paved Kv= 20.3 fps
4.3					Direct Entry,
6.0	306	Total			

Subcatchment 1.1S: Roadway area

Hydrograph



07360-01 Post SW 2

Prepared by Sebago Technics, Inc.

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr WQC Rainfall=1.64"

Printed 3/14/2022

Page 4

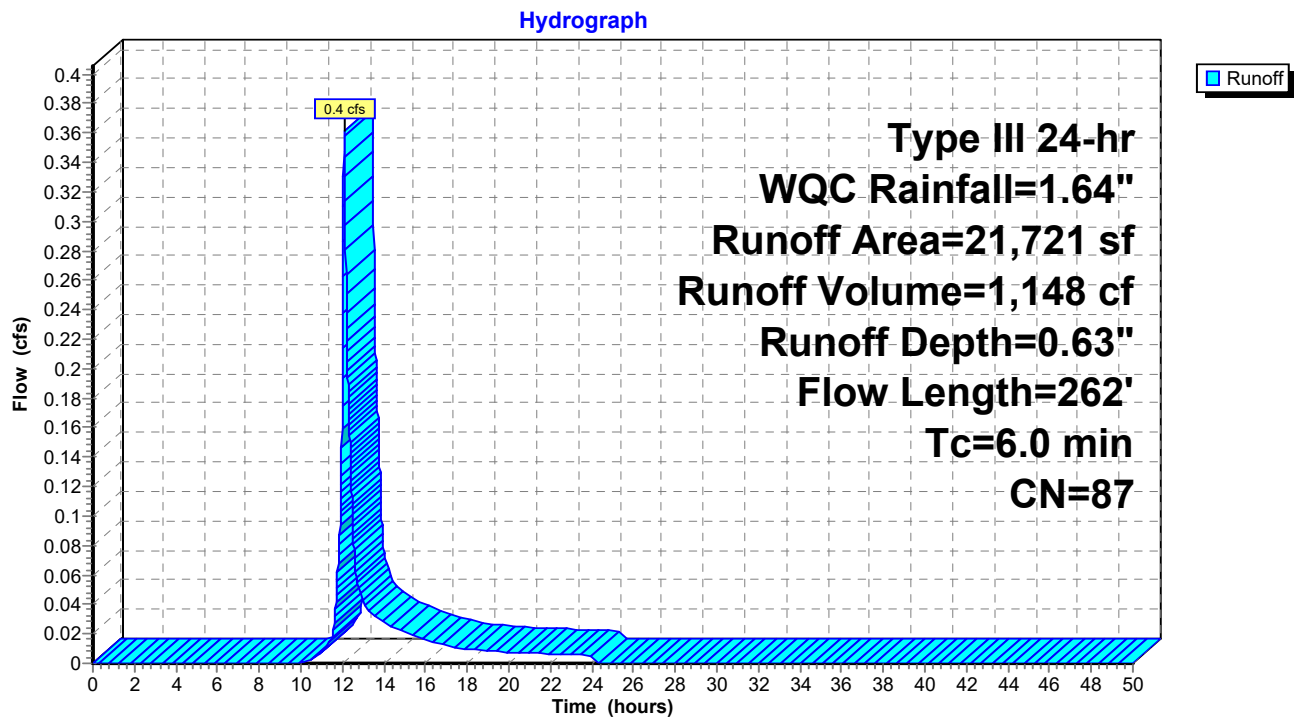
Summary for Subcatchment 1.2S: Grassed / Roof area

Runoff = 0.4 cfs @ 12.09 hrs, Volume= 1,148 cf, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr WQC Rainfall=1.64"

Area (sf)	CN	Description
7,582	80	>75% Grass cover, Good, HSG D
3,859	74	>75% Grass cover, Good, HSG C
* 10,280	98	Roof / Driveways
21,721	87	Weighted Average
11,441		52.67% Pervious Area
10,280		47.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6	33	0.0606	0.21		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.10"
0.1	12	0.0833	2.02		Shallow Concentrated Flow, B-C
					Short Grass Pasture Kv= 7.0 fps
0.0	9	0.2222	3.30		Shallow Concentrated Flow, C-D
					Short Grass Pasture Kv= 7.0 fps
2.5	194	0.0348	1.31		Shallow Concentrated Flow, D-E
					Short Grass Pasture Kv= 7.0 fps
0.1	14	0.1607	2.81		Shallow Concentrated Flow, E-F
					Short Grass Pasture Kv= 7.0 fps
0.7					Direct Entry,
6.0	262	Total			

Subcatchment 1.2S: Grassed / Roof area

Summary for Pond 1FP: FocalPoint 1

behind units 22 and 23

Inflow Area = 36,303 sf, 55.64% Impervious, Inflow Depth = 0.72" for WQC event
 Inflow = 0.7 cfs @ 12.09 hrs, Volume= 2,188 cf
 Outflow = 0.4 cfs @ 12.20 hrs, Volume= 2,186 cf, Atten= 39%, Lag= 6.7 min
 Primary = 0.3 cfs @ 11.97 hrs, Volume= 2,128 cf
 Secondary = 0.1 cfs @ 12.20 hrs, Volume= 59 cf

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 19.84' @ 12.20 hrs Surf.Area= 120 sf Storage= 208 cf

Plug-Flow detention time= 3.5 min calculated for 2,186 cf (100% of inflow)
 Center-of-Mass det. time= 3.1 min (844.2 - 841.1)

Volume	Invert	Avail.Storage	Storage Description
#1	16.75'	54 cf	8.00'W x 15.00'L x 2.25'H FocalPoint 270 cf Overall x 20.0% Voids
#2	19.00'	613 cf	Custom Stage Data (Prismatic) Listed below (Recalc) -Impervious
		667 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
19.00	120	0	0
20.00	269	195	195
21.00	568	419	613

Device	Routing	Invert	Outlet Devices
#1	Primary	16.00'	6.0" Round Culvert L= 4.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 16.00' / 15.95' S= 0.0125' /' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#2	Device 1	16.75'	100.000 in/hr Exfiltration over Surface area
#3	Secondary	19.80'	18.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

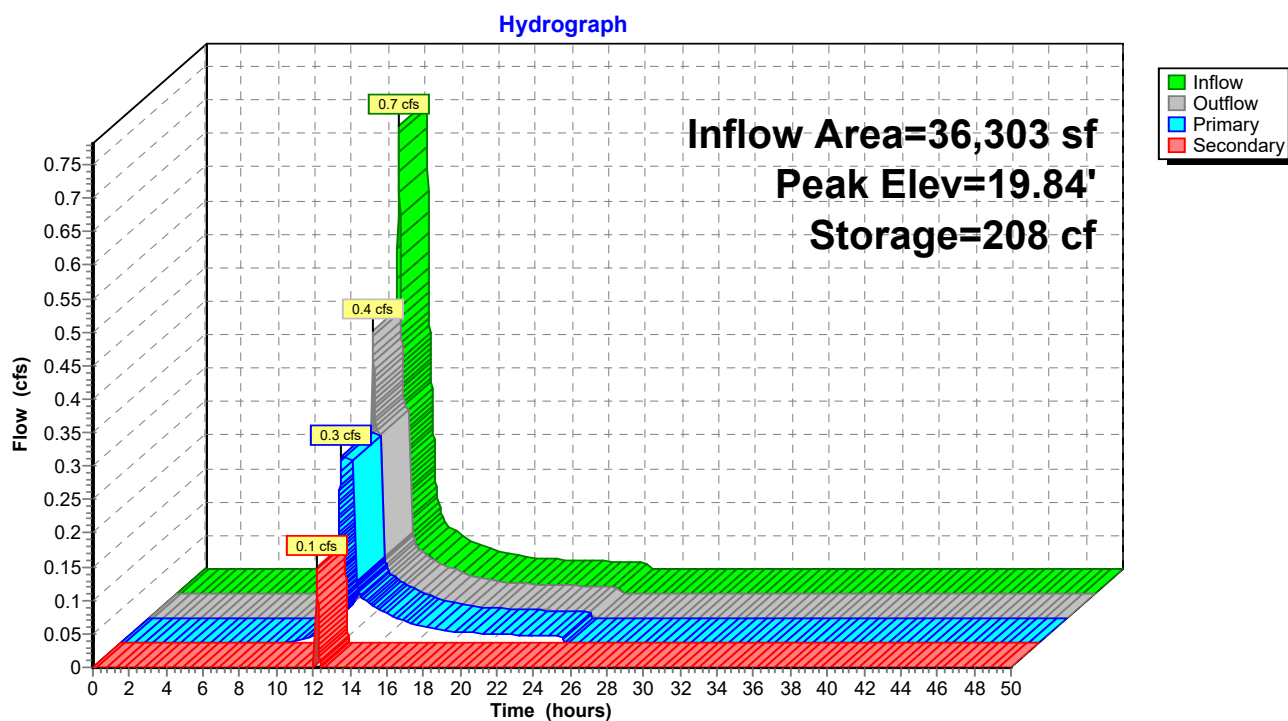
Primary OutFlow Max=0.3 cfs @ 11.97 hrs HW=16.80' (Free Discharge)

↑ **1=Culvert** (Passes 0.3 cfs of 0.7 cfs potential flow)

↑ **2=Exfiltration** (Exfiltration Controls 0.3 cfs)

Secondary OutFlow Max=0.1 cfs @ 12.20 hrs HW=19.84' (Free Discharge)

↑ **3=Orifice/Grate** (Weir Controls 0.1 cfs @ 0.68 fps)

Pond 1FP: FocalPoint 1

07360-01 Post SW 2

Type III 24-hr WQC Rainfall=1.64"

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 8

Summary for Pond 1RT: 1RT

Inflow Area = 36,303 sf, 55.64% Impervious, Inflow Depth = 0.72" for WQC event
 Inflow = 0.4 cfs @ 12.20 hrs, Volume= 2,186 cf
 Outflow = 0.1 cfs @ 13.45 hrs, Volume= 2,012 cf, Atten= 86%, Lag= 74.7 min
 Primary = 0.1 cfs @ 13.45 hrs, Volume= 2,012 cf

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 14.76' @ 13.45 hrs Surf.Area= 959 sf Storage= 1,142 cf

Plug-Flow detention time= 388.4 min calculated for 2,011 cf (92% of inflow)
 Center-of-Mass det. time= 348.4 min (1,192.6 - 844.2)

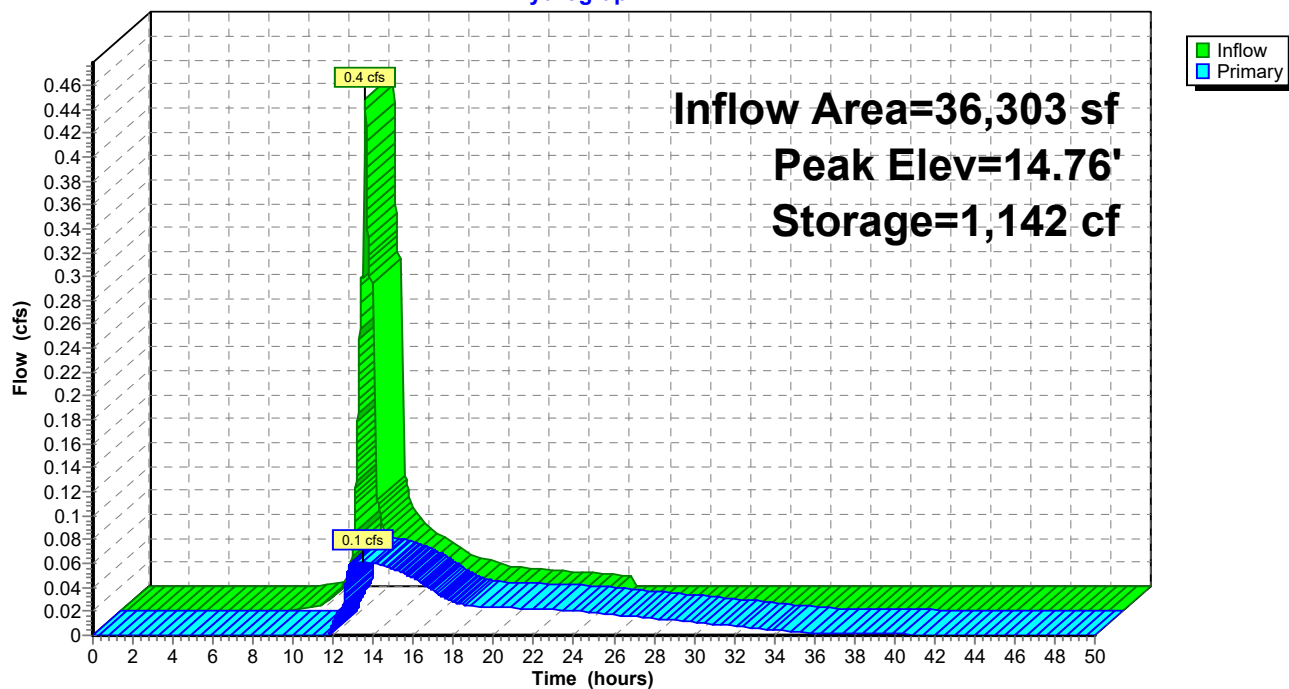
Volume	Invert	Avail.Storage	Storage Description
#1A	13.15'	702 cf	19.75'W x 48.57'L x 3.42'H Field A 3,276 cf Overall - 1,520 cf Embedded = 1,756 cf x 40.0% Voids
#2A	13.40'	1,444 cf	ACF R-Tank HD 1.5 x 228 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 228 Chambers in 12 Rows
			2,146 cf Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	13.40'	12.0" Round Culvert L= 36.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 13.40' / 12.75' S= 0.0181 ' / Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	13.50'	1.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	15.50'	4.0' long x 2.00' rise Sharp-Crested Vee/Trap Weir Cv= 2.62 (C= 3.28)
#4	Device 1	14.40'	1.5" Vert. Orifice/Grate C= 0.600

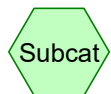
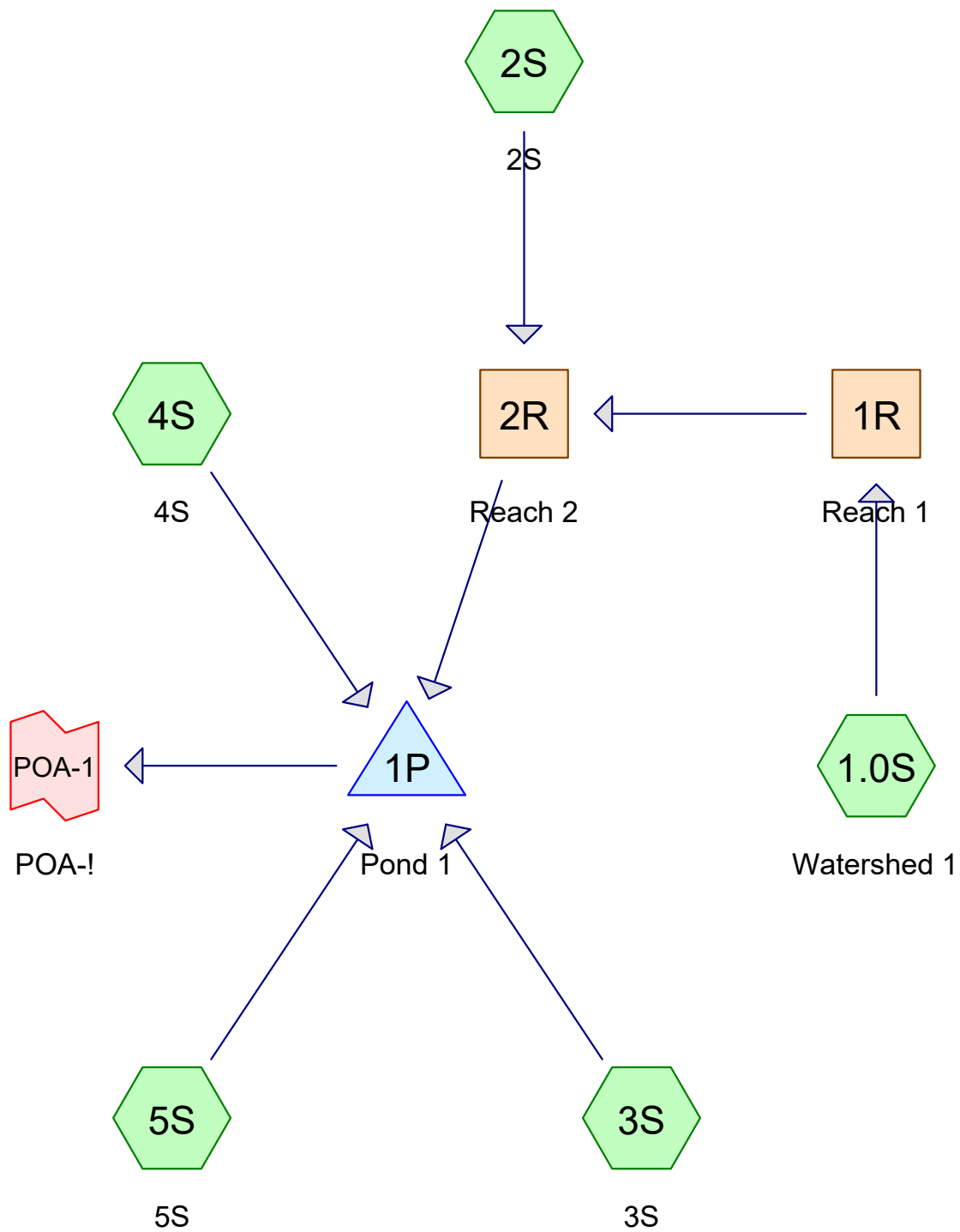
Primary OutFlow Max=0.1 cfs @ 13.45 hrs HW=14.76' (Free Discharge)

- 1=Culvert (Passes 0.1 cfs of 3.5 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.0 cfs @ 5.31 fps)
- 3=Sharp-Crested Vee/Trap Weir (Controls 0.0 cfs)
- 4=Orifice/Grate (Orifice Controls 0.0 cfs @ 2.62 fps)

Pond 1RT: 1RT**Hydrograph**

Appendix 2A

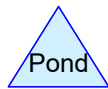
Existing Conditions HydroCAD Summary



Subcat



Reach



Pond



Link

Routing Diagram for 07360-01 Pre SW
 Prepared by Sebago Technics, Inc., Printed 9/27/2021
 HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

07360-01 Pre SW

Prepared by Sebago Technics, Inc.

Printed 9/27/2021

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
1,493	74	>75% Grass cover, Good, HSG C (3S)
6,984	65	Brush, Good, HSG C (1.0S, 2S)
91,737	73	Brush, Good, HSG D (1.0S, 2S, 3S, 4S, 5S)
4,525	98	Existing Gravel (1.0S)
2,525	98	Existing Pavement (1.0S)
1,355	98	Gravel (3S)
2,849	98	Pavement (3S)
111,468	75	TOTAL AREA

07360-01 Pre SW

Prepared by Sebago Technics, Inc.

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 25-YR Rainfall=5.80"

Printed 9/27/2021

Page 3

Summary for Subcatchment 1.0S: Watershed 1

Runoff = 2.5 cfs @ 12.09 hrs, Volume= 7,791 cf, Depth= 3.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

	Area (sf)	CN	Description
*	2,525	98	Existing Pavement
*	4,525	98	Existing Gravel
	14,895	73	Brush, Good, HSG D
	5,528	65	Brush, Good, HSG C
	27,473	78	Weighted Average
	20,423		74.34% Pervious Area
	7,050		25.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	52	0.0380	1.54		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
0.2	30	0.3000	2.74		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
0.5	52	0.1250	1.77		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
4.7					Direct Entry,
6.0	134	Total			

Summary for Subcatchment 2S: 2S

Runoff = 1.3 cfs @ 12.29 hrs, Volume= 6,223 cf, Depth= 2.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

	Area (sf)	CN	Description
	24,089	73	Brush, Good, HSG D
	1,456	65	Brush, Good, HSG C
	25,545	73	Weighted Average
	25,545		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	41	0.0317	0.04		Sheet Flow, A-B
					Woods: Dense underbrush n= 0.800 P2= 3.10"
0.4	55	0.2545	2.52		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
5.4	200	0.0150	0.61		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
21.3	296	Total			

07360-01 Pre SW

Prepared by Sebago Technics, Inc.

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 25-YR Rainfall=5.80"

Printed 9/27/2021

Page 4

Summary for Subcatchment 3S: 3S

Runoff = 1.6 cfs @ 12.14 hrs, Volume= 5,558 cf, Depth= 3.40"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
13,904	73	Brush, Good, HSG D
* 1,355	98	Gravel
* 2,849	98	Pavement
1,493	74	>75% Grass cover, Good, HSG C
19,601	78	Weighted Average
15,397		78.55% Pervious Area
4,204		21.45% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.0	48	0.0417	0.09		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
0.1	20	0.2500	2.50		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
0.7	50	0.0600	1.22		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
0.1	15	0.6667	4.08		Shallow Concentrated Flow, D-E
					Woodland Kv= 5.0 fps
0.1	13	0.2307	2.40		Shallow Concentrated Flow, E-F
					Woodland Kv= 5.0 fps
10.0	146	Total			

Summary for Subcatchment 4S: 4S

Runoff = 1.0 cfs @ 12.19 hrs, Volume= 4,004 cf, Depth= 2.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
16,435	73	Brush, Good, HSG D
16,435		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.4	45	0.0667	0.06		Sheet Flow, A-B
					Woods: Dense underbrush n= 0.800 P2= 3.10"
0.1	28	0.5000	3.54		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
1.2	81	0.0500	1.12		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
13.7	154	Total			

Summary for Subcatchment 5S: 5S

Runoff = 1.4 cfs @ 12.19 hrs, Volume= 5,461 cf, Depth= 2.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.80"

Area (sf)	CN	Description
22,414	73	Brush, Good, HSG D
22,414		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	58	0.0430	0.09		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
0.3	41	0.2900	2.69		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
2.5	120	0.0250	0.79		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
13.2	219	Total			

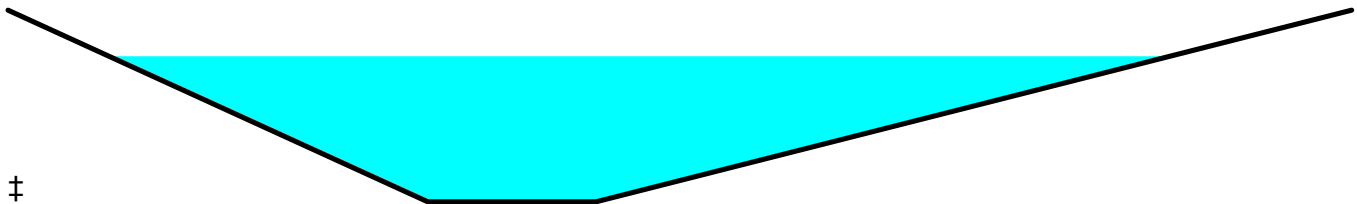
Summary for Reach 1R: Reach 1

Inflow Area = 27,473 sf, 25.66% Impervious, Inflow Depth = 3.40" for 25-YR event
Inflow = 2.5 cfs @ 12.09 hrs, Volume= 7,791 cf
Outflow = 1.4 cfs @ 12.21 hrs, Volume= 7,790 cf, Atten= 43%, Lag= 7.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.21 fps, Min. Travel Time= 17.4 min
Avg. Velocity = 0.05 fps, Avg. Travel Time= 75.0 min

Peak Storage= 1,495 cf @ 12.21 hrs
Average Depth at Peak Storage= 0.38'
Bank-Full Depth= 0.50' Flow Area= 11.3 sf, Capacity= 2.7 cfs

5.00' x 0.50' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 25.0 45.0 ' Top Width= 40.00'
Length= 215.0' Slope= 0.0233 '
Inlet Invert= 16.50', Outlet Invert= 11.50'



Summary for Reach 2R: Reach 2

Inflow Area = 53,018 sf, 13.30% Impervious, Inflow Depth = 3.17" for 25-YR event
 Inflow = 2.7 cfs @ 12.27 hrs, Volume= 14,014 cf
 Outflow = 2.7 cfs @ 12.29 hrs, Volume= 14,014 cf, Atten= 0%, Lag= 1.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.87 fps, Min. Travel Time= 1.8 min
 Avg. Velocity = 0.21 fps, Avg. Travel Time= 7.5 min

Peak Storage= 293 cf @ 12.29 hrs
 Average Depth at Peak Storage= 0.27'
 Bank-Full Depth= 0.50' Flow Area= 8.8 sf, Capacity= 11.0 cfs

5.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
 Side Slope Z-value= 25.0 ' Top Width= 30.00'
 Length= 95.0' Slope= 0.0368 '
 Inlet Invert= 15.00', Outlet Invert= 11.50'

**Summary for Pond 1P: Pond 1**

Inflow Area = 111,468 sf, 10.10% Impervious, Inflow Depth = 3.13" for 25-YR event
 Inflow = 6.2 cfs @ 12.19 hrs, Volume= 29,037 cf
 Outflow = 3.6 cfs @ 12.52 hrs, Volume= 28,138 cf, Atten= 43%, Lag= 19.8 min
 Primary = 3.6 cfs @ 12.52 hrs, Volume= 28,138 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 10.75' @ 12.52 hrs Surf.Area= 6,088 sf Storage= 4,137 cf

Plug-Flow detention time= 32.5 min calculated for 28,132 cf (97% of inflow)
 Center-of-Mass det. time= 14.5 min (856.8 - 842.3)

Volume	Invert	Avail.Storage	Storage Description
#1	9.00'	5,850 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
9.00	400	0	0
10.00	1,900	1,150	1,150
11.00	7,500	4,700	5,850

Device	Routing	Invert	Outlet Devices
#1	Primary	7.74'	12.0" Round Culvert L= 113.0' CMP, projecting, no headwall, Ke= 0.900

07360-01 Pre SW

Type III 24-hr 25-YR Rainfall=5.80"

Prepared by Sebago Technics, Inc.

Printed 9/27/2021

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 7

Inlet / Outlet Invert= 7.74' / 4.98' S= 0.0244 '/' Cc= 0.900
n= 0.025 Corrugated metal, Flow Area= 0.79 sf
#2 Device 1 9.86' **30.0" Horiz. Orifice/Grate** C= 0.600
Limited to weir flow at low heads

Primary OutFlow Max=3.6 cfs @ 12.52 hrs HW=10.75' TW=0.00' (Dynamic Tailwater)↑ **1=Culvert** (Barrel Controls 3.6 cfs @ 4.52 fps)↑ **2=Orifice/Grate** (Passes 3.6 cfs of 21.5 cfs potential flow)**Summary for Link POA-1: POA-1**

Inflow Area = 111,468 sf, 10.10% Impervious, Inflow Depth = 3.03" for 25-YR event
Inflow = 3.6 cfs @ 12.52 hrs, Volume= 28,138 cf
Primary = 3.6 cfs @ 12.52 hrs, Volume= 28,138 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs

07360-01 Pre SW*Type III 24-hr 2-YR Rainfall=3.10"*

Prepared by Sebago Technics, Inc.

Printed 9/27/2021

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 8

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 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

Subcatchment1.0S: Watershed 1	Runoff Area=27,473 sf 25.66% Impervious Runoff Depth=1.20" Flow Length=134' Tc=6.0 min CN=78 Runoff=0.9 cfs 2,749 cf
Subcatchment2S: 2S	Runoff Area=25,545 sf 0.00% Impervious Runoff Depth=0.92" Flow Length=296' Tc=21.3 min CN=73 Runoff=0.4 cfs 1,957 cf
Subcatchment3S: 3S	Runoff Area=19,601 sf 21.45% Impervious Runoff Depth=1.20" Flow Length=146' Tc=10.0 min CN=78 Runoff=0.5 cfs 1,961 cf
Subcatchment4S: 4S	Runoff Area=16,435 sf 0.00% Impervious Runoff Depth=0.92" Flow Length=154' Tc=13.7 min CN=73 Runoff=0.3 cfs 1,259 cf
Subcatchment5S: 5S	Runoff Area=22,414 sf 0.00% Impervious Runoff Depth=0.92" Flow Length=219' Tc=13.2 min CN=73 Runoff=0.4 cfs 1,717 cf
Reach 1R: Reach 1	Avg. Flow Depth=0.22' Max Vel=0.15 fps Inflow=0.9 cfs 2,749 cf n=0.400 L=215.0' S=0.0233 '/' Capacity=2.7 cfs Outflow=0.4 cfs 2,749 cf
Reach 2R: Reach 2	Avg. Flow Depth=0.15' Max Vel=0.63 fps Inflow=0.8 cfs 4,706 cf n=0.100 L=95.0' S=0.0368 '/' Capacity=11.0 cfs Outflow=0.8 cfs 4,706 cf
Pond 1P: Pond 1	Peak Elev=10.03' Storage=1,203 cf Inflow=1.8 cfs 9,644 cf Outflow=1.7 cfs 8,745 cf
Link POA-1: POA-1	Inflow=1.7 cfs 8,745 cf Primary=1.7 cfs 8,745 cf

Total Runoff Area = 111,468 sf Runoff Volume = 9,644 cf Average Runoff Depth = 1.04"
89.90% Pervious = 100,214 sf 10.10% Impervious = 11,254 sf

07360-01 Pre SW

Type III 24-hr 10-YR Rainfall=4.60"

Prepared by Sebago Technics, Inc.

Printed 9/27/2021

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 9

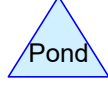
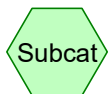
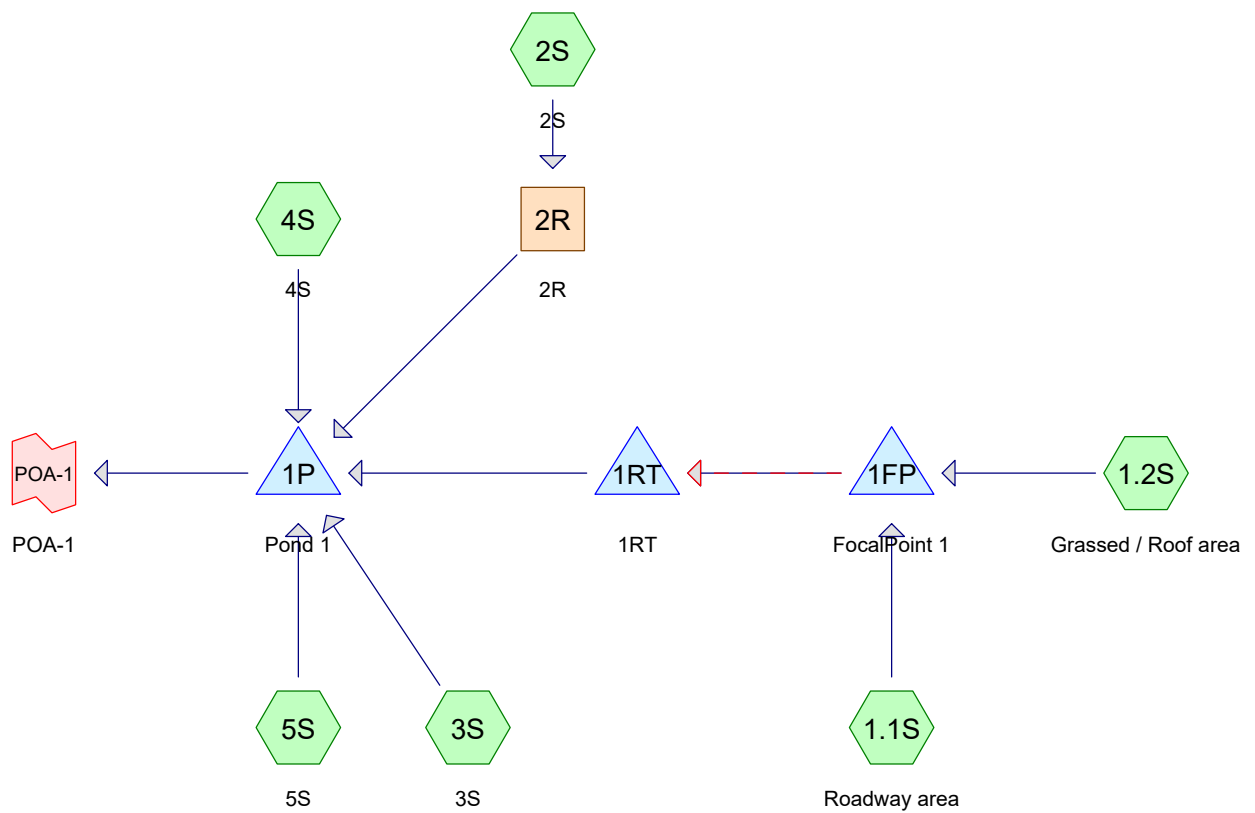
Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1.0S: Watershed 1	Runoff Area=27,473 sf 25.66% Impervious Runoff Depth=2.38" Flow Length=134' Tc=6.0 min CN=78 Runoff=1.8 cfs 5,439 cf
Subcatchment2S: 2S	Runoff Area=25,545 sf 0.00% Impervious Runoff Depth=1.97" Flow Length=296' Tc=21.3 min CN=73 Runoff=0.9 cfs 4,197 cf
Subcatchment3S: 3S	Runoff Area=19,601 sf 21.45% Impervious Runoff Depth=2.38" Flow Length=146' Tc=10.0 min CN=78 Runoff=1.1 cfs 3,880 cf
Subcatchment4S: 4S	Runoff Area=16,435 sf 0.00% Impervious Runoff Depth=1.97" Flow Length=154' Tc=13.7 min CN=73 Runoff=0.7 cfs 2,700 cf
Subcatchment5S: 5S	Runoff Area=22,414 sf 0.00% Impervious Runoff Depth=1.97" Flow Length=219' Tc=13.2 min CN=73 Runoff=0.9 cfs 3,682 cf
Reach 1R: Reach 1	Avg. Flow Depth=0.32' Max Vel=0.19 fps Inflow=1.8 cfs 5,439 cf n=0.400 L=215.0' S=0.0233 '/' Capacity=2.7 cfs Outflow=0.9 cfs 5,439 cf
Reach 2R: Reach 2	Avg. Flow Depth=0.22' Max Vel=0.78 fps Inflow=1.8 cfs 9,635 cf n=0.100 L=95.0' S=0.0368 '/' Capacity=11.0 cfs Outflow=1.8 cfs 9,635 cf
Pond 1P: Pond 1	Peak Elev=10.26' Storage=1,842 cf Inflow=4.1 cfs 19,898 cf Outflow=3.4 cfs 18,999 cf
Link POA-1: POA-1	Inflow=3.4 cfs 18,999 cf Primary=3.4 cfs 18,999 cf

Total Runoff Area = 111,468 sf Runoff Volume = 19,898 cf Average Runoff Depth = 2.14"
89.90% Pervious = 100,214 sf 10.10% Impervious = 11,254 sf

Appendix 2B

Proposed Conditions HydroCAD Summary



Routing Diagram for 07360-01 Post SW 2
 Prepared by Sebago Technics, Inc., Printed 3/14/2022
 HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

07360-01 Post SW 2

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 2

Area Listing (selected nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
6,517	74	>75% Grass cover, Good, HSG C (1.1S, 1.2S)
9,586	80	>75% Grass cover, Good, HSG D (1.1S, 1.2S)
1,968	65	Brush, Good, HSG C (2S)
73,197	73	Brush, Good, HSG D (2S, 3S, 4S, 5S)
9,920	98	Pavement (1.1S)
10,280	98	Roof / Driveways (1.2S)
111,468	78	TOTAL AREA

07360-01 Post SW 2

Prepared by Sebago Technics, Inc.

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Type III 24-hr 25-yr Rainfall=5.80"

Printed 3/14/2022

Page 3

Summary for Subcatchment 1.1S: Roadway area

Runoff = 1.8 cfs @ 12.08 hrs, Volume= 5,786 cf, Depth= 4.76"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
*	9,920	98	Pavement
	2,004	80	>75% Grass cover, Good, HSG D
	2,658	74	>75% Grass cover, Good, HSG C
	14,582	91	Weighted Average
	4,662		31.97% Pervious Area
	9,920		68.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.3	17	0.0280	1.09		Sheet Flow, A-B
					Smooth surfaces n= 0.011 P2= 3.10"
0.4	79	0.0212	2.96		Shallow Concentrated Flow, B-C
					Paved Kv= 20.3 fps
0.7	162	0.0370	3.90		Shallow Concentrated Flow, C-D
					Paved Kv= 20.3 fps
0.3	48	0.0188	2.78		Shallow Concentrated Flow, D-E
					Paved Kv= 20.3 fps
4.3					Direct Entry,
6.0	306	Total			

Summary for Subcatchment 1.2S: Grassed / Roof area

Runoff = 2.5 cfs @ 12.09 hrs, Volume= 7,831 cf, Depth= 4.33"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

	Area (sf)	CN	Description
	7,582	80	>75% Grass cover, Good, HSG D
	3,859	74	>75% Grass cover, Good, HSG C
*	10,280	98	Roof / Driveways
	21,721	87	Weighted Average
	11,441		52.67% Pervious Area
	10,280		47.33% Impervious Area

07360-01 Post SW 2

Type III 24-hr 25-yr Rainfall=5.80"

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 4

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.6	33	0.0606	0.21		Sheet Flow, A-B
					Grass: Short n= 0.150 P2= 3.10"
0.1	12	0.0833	2.02		Shallow Concentrated Flow, B-C
					Short Grass Pasture Kv= 7.0 fps
0.0	9	0.2222	3.30		Shallow Concentrated Flow, C-D
					Short Grass Pasture Kv= 7.0 fps
2.5	194	0.0348	1.31		Shallow Concentrated Flow, D-E
					Short Grass Pasture Kv= 7.0 fps
0.1	14	0.1607	2.81		Shallow Concentrated Flow, E-F
					Short Grass Pasture Kv= 7.0 fps
0.7					Direct Entry,
6.0	262	Total			

Summary for Subcatchment 2S: 2S

Runoff = 1.5 cfs @ 12.29 hrs, Volume= 7,131 cf, Depth= 2.83"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
28,264	73	Brush, Good, HSG D
1,968	65	Brush, Good, HSG C
30,232	72	Weighted Average
30,232		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
15.5	41	0.0317	0.04		Sheet Flow, A-B
					Woods: Dense underbrush n= 0.800 P2= 3.10"
0.4	55	0.2545	2.52		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
5.4	200	0.0150	0.61		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
21.3	296	Total			

Summary for Subcatchment 3S: 3S

Runoff = 0.5 cfs @ 12.09 hrs, Volume= 1,533 cf, Depth= 2.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
6,291	73	Brush, Good, HSG D
6,291		100.00% Pervious Area

07360-01 Post SW 2

Type III 24-hr 25-yr Rainfall=5.80"

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 5

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

Summary for Subcatchment 4S: 4S

Runoff = 1.0 cfs @ 12.19 hrs, Volume= 4,004 cf, Depth= 2.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
16,435	73	Brush, Good, HSG D
16,435		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.4	45	0.0667	0.06		Sheet Flow, A-B
					Woods: Dense underbrush n= 0.800 P2= 3.10"
0.1	28	0.5000	3.54		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
1.2	81	0.0500	1.12		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
13.7	154	Total			

Summary for Subcatchment 5S: 5S

Runoff = 1.4 cfs @ 12.19 hrs, Volume= 5,410 cf, Depth= 2.92"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-yr Rainfall=5.80"

Area (sf)	CN	Description
22,207	73	Brush, Good, HSG D
22,207		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.4	58	0.0430	0.09		Sheet Flow, A-B
					Woods: Light underbrush n= 0.400 P2= 3.10"
0.3	41	0.2900	2.69		Shallow Concentrated Flow, B-C
					Woodland Kv= 5.0 fps
2.5	120	0.0250	0.79		Shallow Concentrated Flow, C-D
					Woodland Kv= 5.0 fps
13.2	219	Total			

07360-01 Post SW 2

Type III 24-hr 25-yr Rainfall=5.80"

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 6

Summary for Reach 2R: 2R

Inflow Area = 30,232 sf, 0.00% Impervious, Inflow Depth = 2.83" for 25-yr event
 Inflow = 1.5 cfs @ 12.29 hrs, Volume= 7,131 cf
 Outflow = 1.4 cfs @ 12.52 hrs, Volume= 7,131 cf, Atten= 9%, Lag= 13.7 min

Routing by Stor-Ind+Trans method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Max. Velocity= 0.21 fps, Min. Travel Time= 7.6 min
 Avg. Velocity = 0.06 fps, Avg. Travel Time= 26.2 min

Peak Storage= 622 cf @ 12.40 hrs
 Average Depth at Peak Storage= 0.42'
 Bank-Full Depth= 0.50' Flow Area= 8.8 sf, Capacity= 2.0 cfs

5.00' x 0.50' deep channel, n= 0.400 Sheet flow: Woods+light brush
 Side Slope Z-value= 25.0 ' ' Top Width= 30.00'
 Length= 95.0' Slope= 0.0200 ' '
 Inlet Invert= 14.00', Outlet Invert= 12.10'

**Summary for Pond 1FP: FocalPoint 1**

Inflow Area = 36,303 sf, 55.64% Impervious, Inflow Depth = 4.50" for 25-yr event
 Inflow = 4.2 cfs @ 12.09 hrs, Volume= 13,617 cf
 Outflow = 4.2 cfs @ 12.09 hrs, Volume= 13,616 cf, Atten= 0%, Lag= 0.4 min
 Primary = 0.3 cfs @ 11.14 hrs, Volume= 8,082 cf
 Secondary = 3.9 cfs @ 12.09 hrs, Volume= 5,534 cf

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs / 2
 Peak Elev= 20.20' @ 12.09 hrs Surf.Area= 120 sf Storage= 309 cf

Plug-Flow detention time= 2.8 min calculated for 13,616 cf (100% of inflow)
 Center-of-Mass det. time= 2.7 min (792.7 - 790.0)

Volume	Invert	Avail.Storage	Storage Description
#1	16.75'	54 cf	8.00'W x 15.00'L x 2.25'H FocalPoint
			270 cf Overall x 20.0% Voids
#2	19.00'	613 cf	Custom Stage Data (Prismatic) Listed below (Recalc) -Impervious
		667 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
19.00	120	0	0
20.00	269	195	195
21.00	568	419	613

07360-01 Post SW 2

Type III 24-hr 25-yr Rainfall=5.80"

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 7

Device	Routing	Invert	Outlet Devices
#1	Primary	16.00'	6.0" Round Culvert L= 4.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 16.00' / 15.95' S= 0.0125 '/' Cc= 0.900 n= 0.012, Flow Area= 0.20 sf
#2	Device 1	16.75'	100.000 in/hr Exfiltration over Surface area
#3	Secondary	19.80'	18.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.3 cfs @ 11.14 hrs HW=16.79' (Free Discharge)↑ **1=Culvert** (Passes 0.3 cfs of 0.7 cfs potential flow)↑ **2=Exfiltration** (Exfiltration Controls 0.3 cfs)**Secondary OutFlow** Max=3.9 cfs @ 12.09 hrs HW=20.20' (Free Discharge)↑ **3=Orifice/Grate** (Weir Controls 3.9 cfs @ 2.07 fps)**Summary for Pond 1P: Pond 1**

Inflow Area = 111,468 sf, 18.12% Impervious, Inflow Depth = 3.39" for 25-yr event
 Inflow = 6.9 cfs @ 12.12 hrs, Volume= 31,516 cf
 Outflow = 3.6 cfs @ 12.51 hrs, Volume= 30,617 cf, Atten= 49%, Lag= 23.4 min
 Primary = 3.6 cfs @ 12.51 hrs, Volume= 30,617 cf

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 10.77' @ 12.51 hrs Surf.Area= 6,200 sf Storage= 4,260 cf

Plug-Flow detention time= 41.9 min calculated for 30,611 cf (97% of inflow)
 Center-of-Mass det. time= 15.0 min (891.9 - 876.9)

Volume	Invert	Avail.Storage	Storage Description
#1	9.00'	13,350 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
9.00	400	0	0
10.00	1,900	1,150	1,150
11.00	7,500	4,700	5,850
12.00	7,500	7,500	13,350

Device	Routing	Invert	Outlet Devices
#1	Primary	7.74'	12.0" Round Culvert L= 113.0' CMP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 7.74' / 4.98' S= 0.0244 '/' Cc= 0.900 n= 0.025 Corrugated metal, Flow Area= 0.79 sf
#2	Device 1	9.86'	30.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.6 cfs @ 12.51 hrs HW=10.77' (Free Discharge)↑ **1=Culvert** (Barrel Controls 3.6 cfs @ 4.53 fps)↑ **2=Orifice/Grate** (Passes 3.6 cfs of 22.2 cfs potential flow)

07360-01 Post SW 2

Type III 24-hr 25-yr Rainfall=5.80"

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 8

Summary for Pond 1RT: 1RT

Inflow Area = 36,303 sf, 55.64% Impervious, Inflow Depth = 4.50" for 25-yr event
 Inflow = 4.2 cfs @ 12.09 hrs, Volume= 13,616 cf
 Outflow = 4.2 cfs @ 12.10 hrs, Volume= 13,438 cf, Atten= 0%, Lag= 0.5 min
 Primary = 4.2 cfs @ 12.10 hrs, Volume= 13,438 cf

Routing by Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
 Peak Elev= 15.96' @ 12.10 hrs Surf.Area= 959 sf Storage= 1,914 cf

Plug-Flow detention time= 127.4 min calculated for 13,438 cf (99% of inflow)
 Center-of-Mass det. time= 119.3 min (912.0 - 792.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	13.15'	702 cf	19.75'W x 48.57'L x 3.42'H Field A 3,276 cf Overall - 1,520 cf Embedded = 1,756 cf x 40.0% Voids
#2A	13.40'	1,444 cf	ACF R-Tank HD 1.5 x 228 Inside #1 Inside= 15.7"W x 26.0"H => 2.70 sf x 2.35'L = 6.3 cf Outside= 15.7"W x 26.0"H => 2.84 sf x 2.35'L = 6.7 cf 228 Chambers in 12 Rows
		2,146 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	13.40'	12.0" Round Culvert L= 36.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 13.40' / 12.75' S= 0.0181 ' / Cc= 0.900 n= 0.012, Flow Area= 0.79 sf
#2	Device 1	13.50'	1.0" Vert. Orifice/Grate C= 0.600
#3	Device 1	15.50'	4.0' long x 2.00' rise Sharp-Crested Vee/Trap Weir Cv= 2.62 (C= 3.28)
#4	Device 1	14.40'	1.5" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=4.2 cfs @ 12.10 hrs HW=15.96' (Free Discharge)

1=Culvert (Passes 4.2 cfs of 5.4 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.0 cfs @ 7.49 fps)
 3=Sharp-Crested Vee/Trap Weir (Weir Controls 4.1 cfs @ 2.22 fps)
 4=Orifice/Grate (Orifice Controls 0.1 cfs @ 5.89 fps)

Summary for Link POA-1: POA-1

Inflow Area = 111,468 sf, 18.12% Impervious, Inflow Depth = 3.30" for 25-yr event
 Inflow = 3.6 cfs @ 12.51 hrs, Volume= 30,617 cf
 Primary = 3.6 cfs @ 12.51 hrs, Volume= 30,617 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs

07360-01 Post SW 2*Type III 24-hr 2-yr Rainfall=3.10"*

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 9

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1.1S: Roadway area Runoff Area=14,582 sf 68.03% Impervious Runoff Depth=2.16"
 Flow Length=306' Tc=6.0 min CN=91 Runoff=0.8 cfs 2,630 cf

Subcatchment1.2S: Grassed / Roof area Runoff Area=21,721 sf 47.33% Impervious Runoff Depth=1.83"
 Flow Length=262' Tc=6.0 min CN=87 Runoff=1.1 cfs 3,306 cf

Subcatchment2S: 2S Runoff Area=30,232 sf 0.00% Impervious Runoff Depth=0.87"
 Flow Length=296' Tc=21.3 min CN=72 Runoff=0.4 cfs 2,187 cf

Subcatchment3S: 3S Runoff Area=6,291 sf 0.00% Impervious Runoff Depth=0.92"
 Tc=6.0 min CN=73 Runoff=0.1 cfs 482 cf

Subcatchment4S: 4S Runoff Area=16,435 sf 0.00% Impervious Runoff Depth=0.92"
 Flow Length=154' Tc=13.7 min CN=73 Runoff=0.3 cfs 1,259 cf

Subcatchment5S: 5S Runoff Area=22,207 sf 0.00% Impervious Runoff Depth=0.92"
 Flow Length=219' Tc=13.2 min CN=73 Runoff=0.4 cfs 1,702 cf

Reach 2R: 2R Avg. Flow Depth=0.23' Max Vel=0.15 fps Inflow=0.4 cfs 2,187 cf
 n=0.400 L=95.0' S=0.0200 '/' Capacity=2.0 cfs Outflow=0.4 cfs 2,187 cf

Pond 1FP: FocalPoint 1 Peak Elev=20.02' Storage=255 cf Inflow=1.9 cfs 5,937 cf
 Primary=0.3 cfs 4,342 cf Secondary=1.6 cfs 1,595 cf Outflow=1.9 cfs 5,937 cf

Pond 1P: Pond 1 Peak Elev=10.02' Storage=1,197 cf Inflow=2.4 cfs 11,391 cf
 Outflow=1.7 cfs 10,492 cf

Pond 1RT: 1RT Peak Elev=15.73' Storage=1,826 cf Inflow=1.9 cfs 5,937 cf
 Outflow=1.6 cfs 5,761 cf

Link POA-1: POA-1 Inflow=1.7 cfs 10,492 cf
 Primary=1.7 cfs 10,492 cf

Total Runoff Area = 111,468 sf Runoff Volume = 11,567 cf Average Runoff Depth = 1.25"
81.88% Pervious = 91,268 sf 18.12% Impervious = 20,200 sf

07360-01 Post SW 2

Type III 24-hr 10-yr Rainfall=4.60"

Prepared by Sebago Technics, Inc.

Printed 3/14/2022

HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Page 10

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1.1S: Roadway area Runoff Area=14,582 sf 68.03% Impervious Runoff Depth=3.59"
 Flow Length=306' Tc=6.0 min CN=91 Runoff=1.4 cfs 4,368 cf

Subcatchment1.2S: Grassed / Roof area Runoff Area=21,721 sf 47.33% Impervious Runoff Depth=3.19"
 Flow Length=262' Tc=6.0 min CN=87 Runoff=1.8 cfs 5,778 cf

Subcatchment2S: 2S Runoff Area=30,232 sf 0.00% Impervious Runoff Depth=1.89"
 Flow Length=296' Tc=21.3 min CN=72 Runoff=1.0 cfs 4,773 cf

Subcatchment3S: 3S Runoff Area=6,291 sf 0.00% Impervious Runoff Depth=1.97"
 Tc=6.0 min CN=73 Runoff=0.3 cfs 1,034 cf

Subcatchment4S: 4S Runoff Area=16,435 sf 0.00% Impervious Runoff Depth=1.97"
 Flow Length=154' Tc=13.7 min CN=73 Runoff=0.7 cfs 2,700 cf

Subcatchment5S: 5S Runoff Area=22,207 sf 0.00% Impervious Runoff Depth=1.97"
 Flow Length=219' Tc=13.2 min CN=73 Runoff=0.9 cfs 3,648 cf

Reach 2R: 2R Avg. Flow Depth=0.35' Max Vel=0.19 fps Inflow=1.0 cfs 4,773 cf
 n=0.400 L=95.0' S=0.0200 '/' Capacity=2.0 cfs Outflow=0.9 cfs 4,773 cf

Pond 1FP: FocalPoint 1 Peak Elev=20.13' Storage=286 cf Inflow=3.2 cfs 10,146 cf
 Primary=0.3 cfs 6,514 cf Secondary=2.9 cfs 3,633 cf Outflow=3.2 cfs 10,146 cf

Pond 1P: Pond 1 Peak Elev=10.33' Storage=2,098 cf Inflow=4.9 cfs 22,125 cf
 Outflow=3.4 cfs 21,226 cf

Pond 1RT: 1RT Peak Elev=15.88' Storage=1,883 cf Inflow=3.2 cfs 10,146 cf
 Outflow=3.2 cfs 9,970 cf

Link POA-1: POA-1 Inflow=3.4 cfs 21,226 cf
 Primary=3.4 cfs 21,226 cf

Total Runoff Area = 111,468 sf Runoff Volume = 22,301 cf Average Runoff Depth = 2.40"
81.88% Pervious = 91,268 sf 18.12% Impervious = 20,200 sf

Appendix 3

Inspection, Maintenance and Housekeeping Plan



INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

For:
POWSLAND STREET
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 as well as stormwater management facilities for the project. This plan also outlines several housekeeping requirements that shall be followed during and after construction. These procedures shall be followed in order 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 the construction process, 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. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

C. 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.

D. 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).

E. 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.

F. 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.

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, detention basins and ponds, pipes and related structures, in accordance with all 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. Ditches, Swales and Other Open Channels:

- Inspect ditches, swales, level spreaders and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, remove woody vegetative growth that could obstruct flow, and repair any erosion of the ditch lining.
- Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
- Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
- If the ditch has a riprap lining, replace riprap in areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged.

C. Culverts:

- Inspect culverts in the spring, in the late fall, and after heavy rains (>0.5") to remove any obstructions to flow.
- Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit.
- Inspect and repair any erosion damage at the culvert's inlet and outlet.

D. Removal of Winter Sand:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

E. Focal Points:

- Debris and sediment buildup shall be removed as needed. Any bare area or erosion rills on focal point surface shall be repaired with double shredded hardwood mulch.
- See inspection log within Attachment 1 of this document for the inspection requirements of this BMP.

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. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the MDEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with MDEP standards. Upon such assumption of responsibility, and approval by the MDEP, the municipality, quasi-municipal district, or 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

POWSLAND STREET PORTLAND, MAINE

This log is intended to accompany the Inspection, Maintenance, and Housekeeping Plan for the Subdivision Development. 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 and the Maine DEP. Qualified personnel familiar with the drainage systems and soils shall perform all inspections. A copy of the construction and post-construction maintenance logs are provided.

Focal Point

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 (recm'd frequency)	Observations	Inspection Notes/Recommended Action
Forebay/Pretreatment	Sediment/Debris Removal (Semi-Annually)		
	Inspect for bare areas or rill erosion (Semi-Annually)		
R-Tanks	Sediment Depth (Quarterly for the first year and annually thereafter.)		
	Floatables/Debris (Quarterly for the first year and annually thereafter.)		
Discharge Pipe	Ground Stabilized (>1" rain, Annually)		
Embankments	Review for signs of erosion (Semi-Annually)		
Filter Bed	Harvesting and pruning of excessive growth (Occasionally)		
	Review basin for evidence of vehicular traffic or storage of snow within footprint (Semi-Annually)		
	Review for removal and replacement of mulch (Annually or As Needed)		
	Confirm filter drains in 24-48 hours for water quality volume (Semi-Annually)		
Additional Notes/Observations:			

Appendix 4

Subsurface Investigations



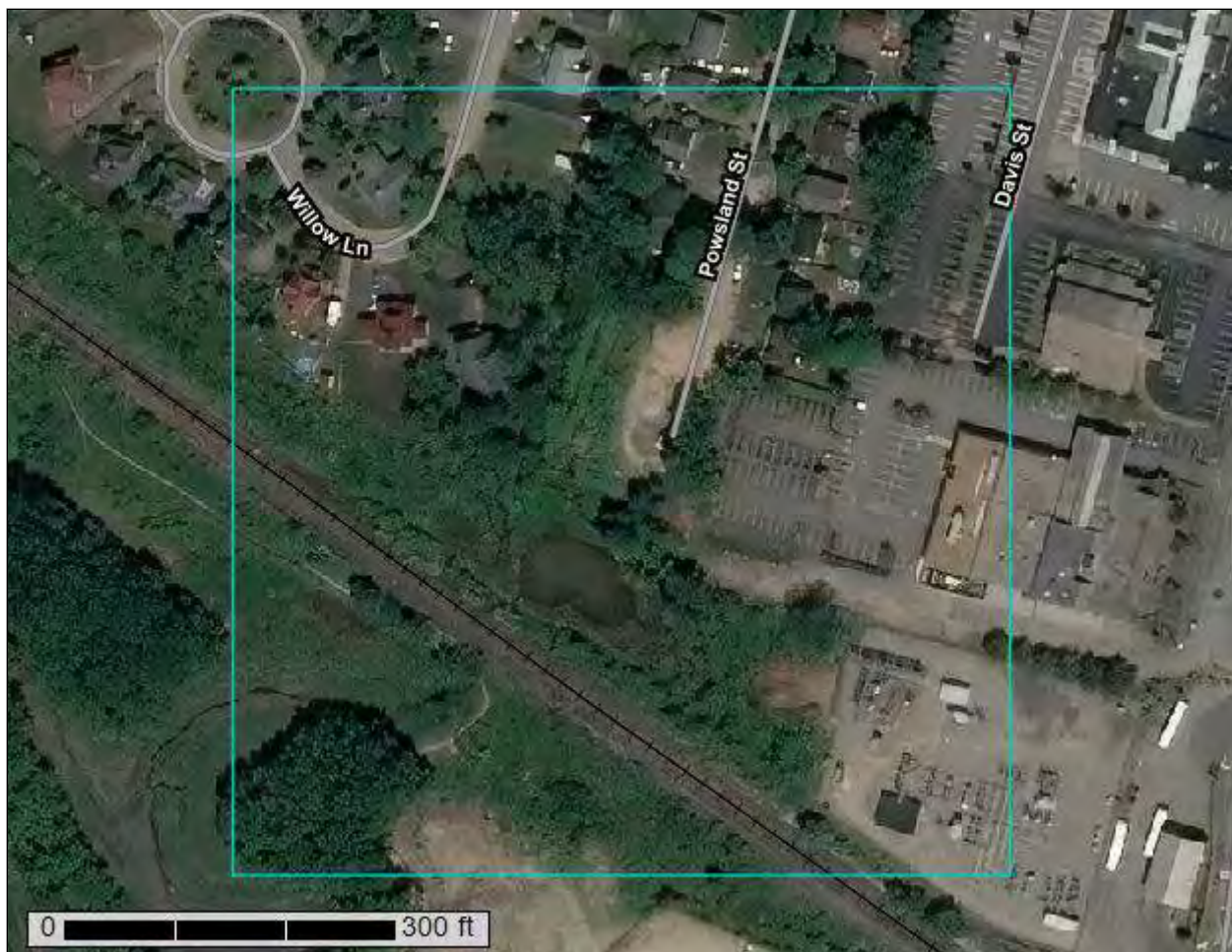
United States
Department of
Agriculture

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



June 7, 2021

Contents

Preface	2
How Soil Surveys Are Made	5
Soil Map	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Cumberland County and Part of Oxford County, Maine.....	13
BgB—Nicholville very fine sandy loam, 0 to 8 percent slopes.....	13
BuB—Lamoine silt loam, 3 to 8 percent slopes.....	14
DeB—Deerfield loamy fine sand, 3 to 8 percent slopes.....	16
Tm—Pemaquid, Todds point, and Damariscotta soils, 0 to 2 percent slopes.....	18
References	21

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

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.

Custom Soil Resource Report Soil Map



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 17, Jun 5, 2020

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Data not available.

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
BgB	Nicholville very fine sandy loam, 0 to 8 percent slopes	4.5	38.6%
BuB	Lamoine silt loam, 3 to 8 percent slopes	6.2	53.6%
DeB	Deerfield loamy fine sand, 3 to 8 percent slopes	0.6	5.0%
Tm	Pemaquid, Todds point, and Damariscotta soils, 0 to 2 percent slopes	0.3	2.8%
Totals for Area of Interest		11.6	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

BgB—Nicholville very fine sandy loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2yJg5

Elevation: 20 to 2,300 feet

Mean annual precipitation: 34 to 50 inches

Mean annual air temperature: 37 to 45 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Nicholville and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Nicholville

Setting

Landform: Lakebeds (relict)

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Coarse-silty glaciomarine deposits

Typical profile

Ap - 0 to 7 inches: very fine sandy loam

Bs - 7 to 19 inches: very fine sandy loam

BC - 19 to 30 inches: very fine sandy loam

C - 30 to 65 inches: loamy very fine sand

Properties and qualities

Slope: 0 to 8 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)

Available water capacity: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: C

Hydric soil rating: No

Minor Components

Roundabout, somewhat poorly drained

Percent of map unit: 5 percent

Landform: Lakebeds (relict)

Custom Soil Resource Report

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Croghan

Percent of map unit: 5 percent

Landform: Lakebeds (relict)

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Side slope

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Salmon

Percent of map unit: 3 percent

Landform: Lakebeds (relict)

Landform position (two-dimensional): Backslope, summit

Landform position (three-dimensional): Side slope, crest

Down-slope shape: Linear

Across-slope shape: Convex

Hydric soil rating: No

Roundabout

Percent of map unit: 2 percent

Landform: Lakebeds (relict)

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Base slope

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: Yes

BuB—Lamoine silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t0kc

Elevation: 10 to 490 feet

Mean annual precipitation: 33 to 60 inches

Mean annual air temperature: 36 to 52 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Lamoine and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lamoine

Setting

Landform: Marine terraces, river valleys
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine glaciomarine deposits

Typical profile

Ap - 0 to 7 inches: silt loam
Bw - 7 to 13 inches: silt loam
Bg - 13 to 24 inches: silty clay loam
Cg - 24 to 65 inches: silty clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 6 to 17 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline (0.0 to 1.9 mmhos/cm)
Available water capacity: Moderate (about 7.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Hydric soil rating: No

Minor Components

Scantic

Percent of map unit: 10 percent
Landform: Marine terraces, river valleys
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Hydric soil rating: Yes

Buxton

Percent of map unit: 3 percent
Landform: Marine terraces, river valleys
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Linear
Across-slope shape: Convex
Hydric soil rating: No

Ragmuff

Percent of map unit: 1 percent
Landform: Marine terraces, river valleys

Custom Soil Resource Report

Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Side slope, base slope
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Biddeford

Percent of map unit: 1 percent
Landform: Marine terraces, river valleys
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: F144BY002ME - Marine Terrace Depression
Hydric soil rating: Yes

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
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Deerfield

Setting

Landform: Outwash deltas, kame terraces, outwash plains, outwash terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave, convex, linear
Across-slope shape: Linear, convex, 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

Custom Soil Resource Report

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 capacity: Moderate (about 6.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: A

Hydric soil rating: No

Minor Components

Windsor

Percent of map unit: 7 percent

Landform: Outwash deltas, kame terraces, outwash plains, outwash terraces

Landform position (three-dimensional): Tread

Down-slope shape: Linear, concave, convex

Across-slope shape: Concave, linear, convex

Hydric soil rating: No

Wareham

Percent of map unit: 5 percent

Landform: Depressions, drainageways

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Sudbury

Percent of map unit: 2 percent

Landform: Outwash terraces, outwash deltas, kame terraces, outwash plains

Landform position (three-dimensional): Tread

Down-slope shape: Convex, linear, concave

Across-slope shape: Concave, linear, convex

Hydric soil rating: No

Ninigret

Percent of map unit: 1 percent

Landform: Outwash plains, kame terraces, outwash terraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex, linear

Across-slope shape: Convex, concave

Hydric soil rating: No

Tm—Pemaquid, Todds point, and Damariscotta soils, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2x1d9

Elevation: 0 to 10 feet

Mean annual precipitation: 63 to 87 inches

Mean annual air temperature: 36 to 52 degrees F

Frost-free period: 90 to 160 days

Farmland classification: Not prime farmland

Map Unit Composition

Pemaquid and similar soils: 40 percent

Todds point and similar soils: 30 percent

Damariscotta and similar soils: 15 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Pemaquid

Setting

Landform: Tidal marshes

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Herbaceous organic material over sandy marine deposits

Typical profile

Oi - 0 to 16 inches: peat

Oe - 16 to 35 inches: mucky peat

Cseg - 35 to 65 inches: sand

Properties and qualities

Slope: 0 to 2 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Very poorly drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(1.42 to 14.17 in/hr)

Depth to water table: About 0 inches

Frequency of flooding: Very frequent

Frequency of ponding: None

Maximum salinity: Very slightly saline to strongly saline (2.0 to 16.0 mmhos/cm)

Sodium adsorption ratio, maximum: 20.0

Available water capacity: Very high (about 14.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Description of Todds Point

Setting

Landform: Tidal marshes
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Herbaceous organic material

Typical profile

Oe1 - 0 to 31 inches: mucky peat
Oe2 - 31 to 42 inches: mucky peat
Oa - 42 to 65 inches: muck

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (1.42 to 14.17 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Maximum salinity: Very slightly saline to strongly saline (2.0 to 16.0 mmhos/cm)
Sodium adsorption ratio, maximum: 20.0
Available water capacity: Very high (about 16.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 8
Hydrologic Soil Group: A/D
Hydric soil rating: Yes

Description of Damariscotta

Setting

Landform: Tidal marshes
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Sandy glaciomarine deposits

Typical profile

Ase1 - 0 to 10 inches: mucky loamy fine sand
Ase2 - 10 to 21 inches: mucky loamy fine sand
Cseg - 21 to 65 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Very poorly drained
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 0 inches
Frequency of flooding: Very frequent
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Custom Soil Resource Report

Sodium adsorption ratio, maximum: 20.0

Available water capacity: High (about 11.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 8

Hydrologic Soil Group: A/D

Hydric soil rating: Yes

Minor Components

Phippsburg

Percent of map unit: 8 percent

Landform: Tidal marshes

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Todds point, moderately deep

Percent of map unit: 5 percent

Landform: Tidal marshes

Landform position (three-dimensional): Dip

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Fort knox

Percent of map unit: 1 percent

Landform: Tidal marshes

Landform position (three-dimensional): Talf

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: Yes

Gouldsboro

Percent of map unit: 1 percent

Landform: Tidal marshes

Landform position (three-dimensional): Talf

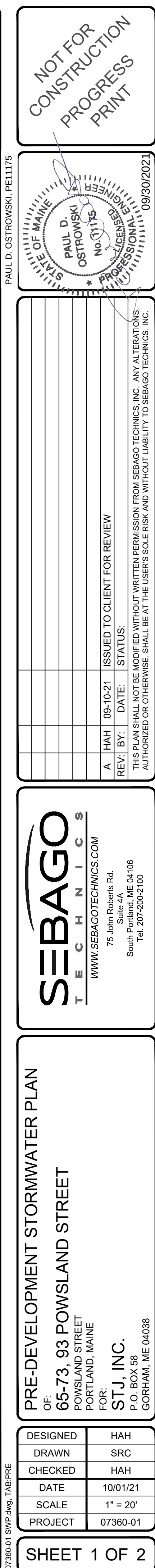
Down-slope shape: Linear

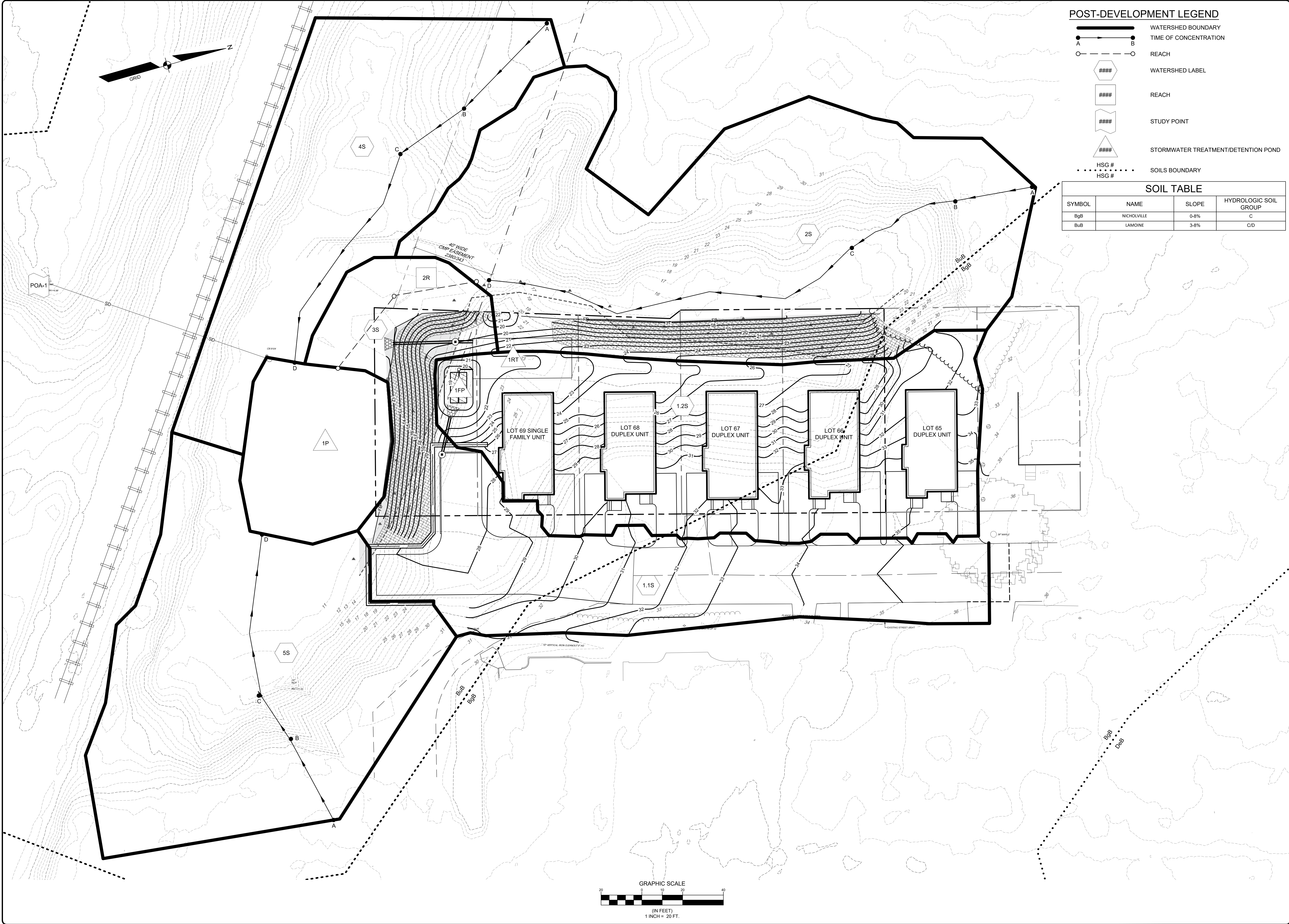
Across-slope shape: Linear

Hydric soil rating: Yes

Appendix 5

Stormwater Management Plans



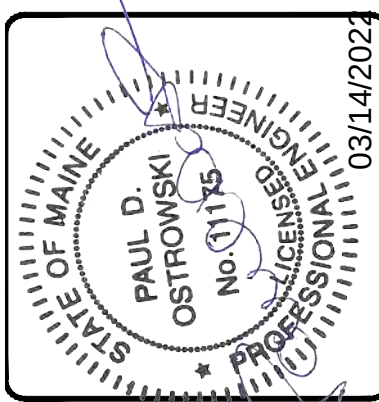


POST-DEVELOPMENT LEGEND

- Watershed Boundary
- Time of Concentration
- Reach
- Watershed Label
- Reach
- Study Point
- Stormwater Treatment/Detention Pond
- HSG #
- Soils Boundary

SOIL TABLE			
SYMBOL	NAME	SLOPE	HYDROLOGIC SOIL GROUP
BgB	NICHOLVILLE	0-8%	C
BuB	LAMOINE	3-8%	C/D

NOT FOR
CONSTRUCTION
PROGRESS
PRINT



ISSUED TO CLIENT FOR REVIEW			
REV.	BY	DATE	STATUS
A	HAH	08-10-21	ISSUED TO CLIENT FOR REVIEW

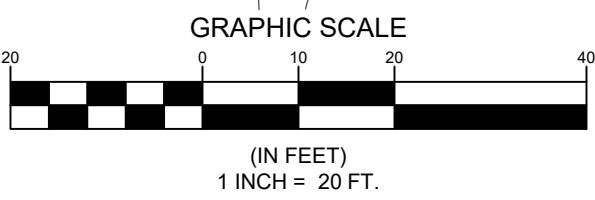
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

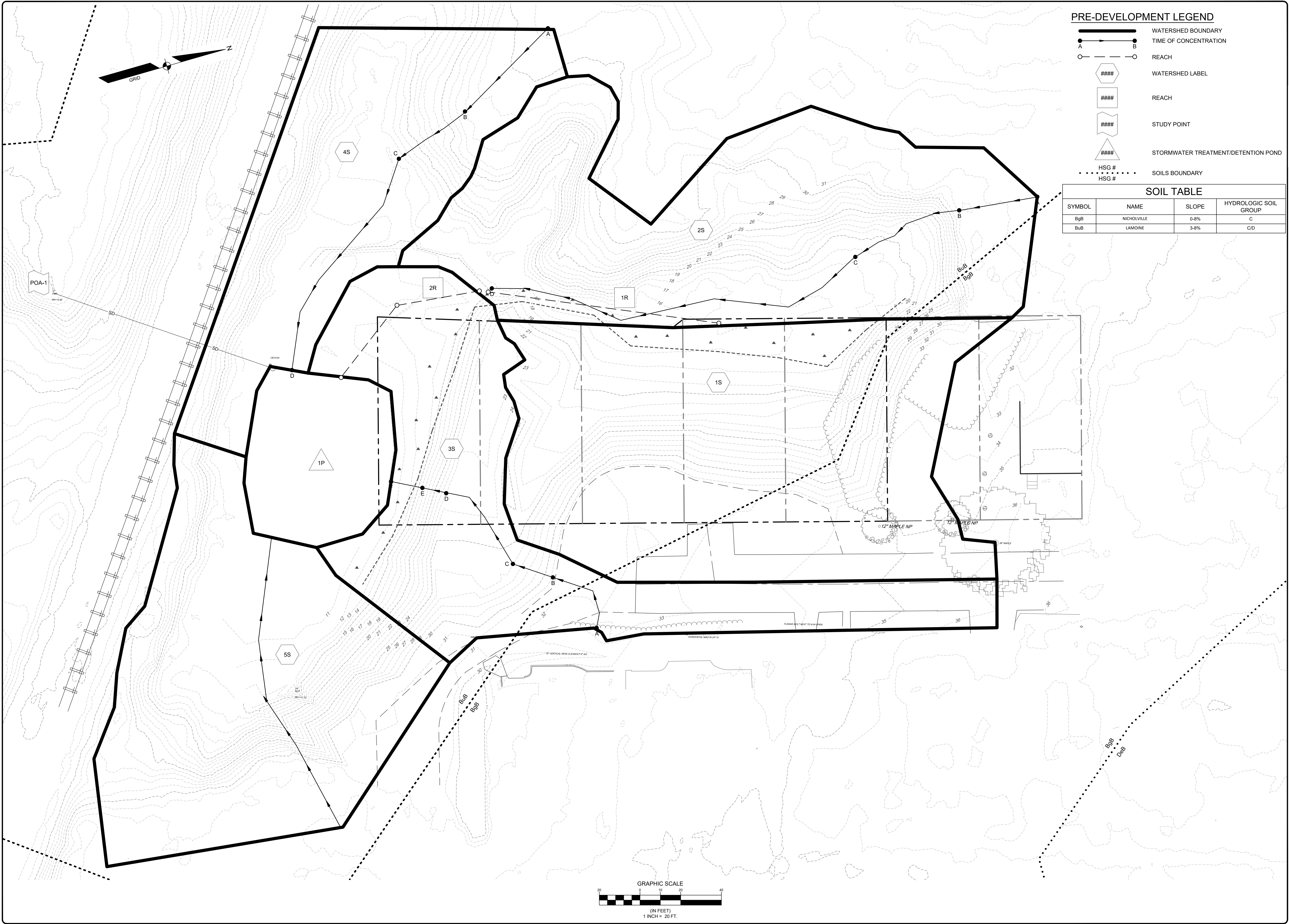
SEBAGO
T E C H N I C S
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100
www.sebagotechnics.com

POST DEVELOPMENT STORMWATER PLAN
OF:
65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR:
STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 20'
PROJECT	07360-01

SHEET 2 OF 2



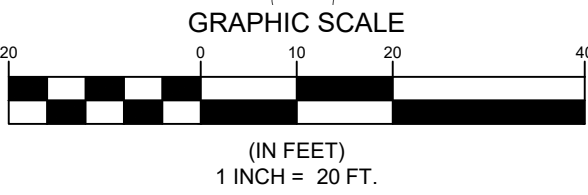


PRE-DEVELOPMENT LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- WATERSHED LABEL
- REACH
- STUDY POINT
- STORMWATER TREATMENT/DETENTION POND
- HSG #
- SOILS BOUNDARY

SOIL TABLE

SYMBOL	NAME	SLOPE	HYDROLOGIC SOIL GROUP
BgB	NICHOLVILLE	0-8%	C
BuB	LAMOINE	3-8%	C/D



NOT FOR
CONSTRUCTION
PROGRESS
PRINT



REV	BY	DATE	STATUS	ISSUED TO CLIENT FOR REVIEW
A	HAH	08-10-21	DATE:	STATUS:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGOTECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

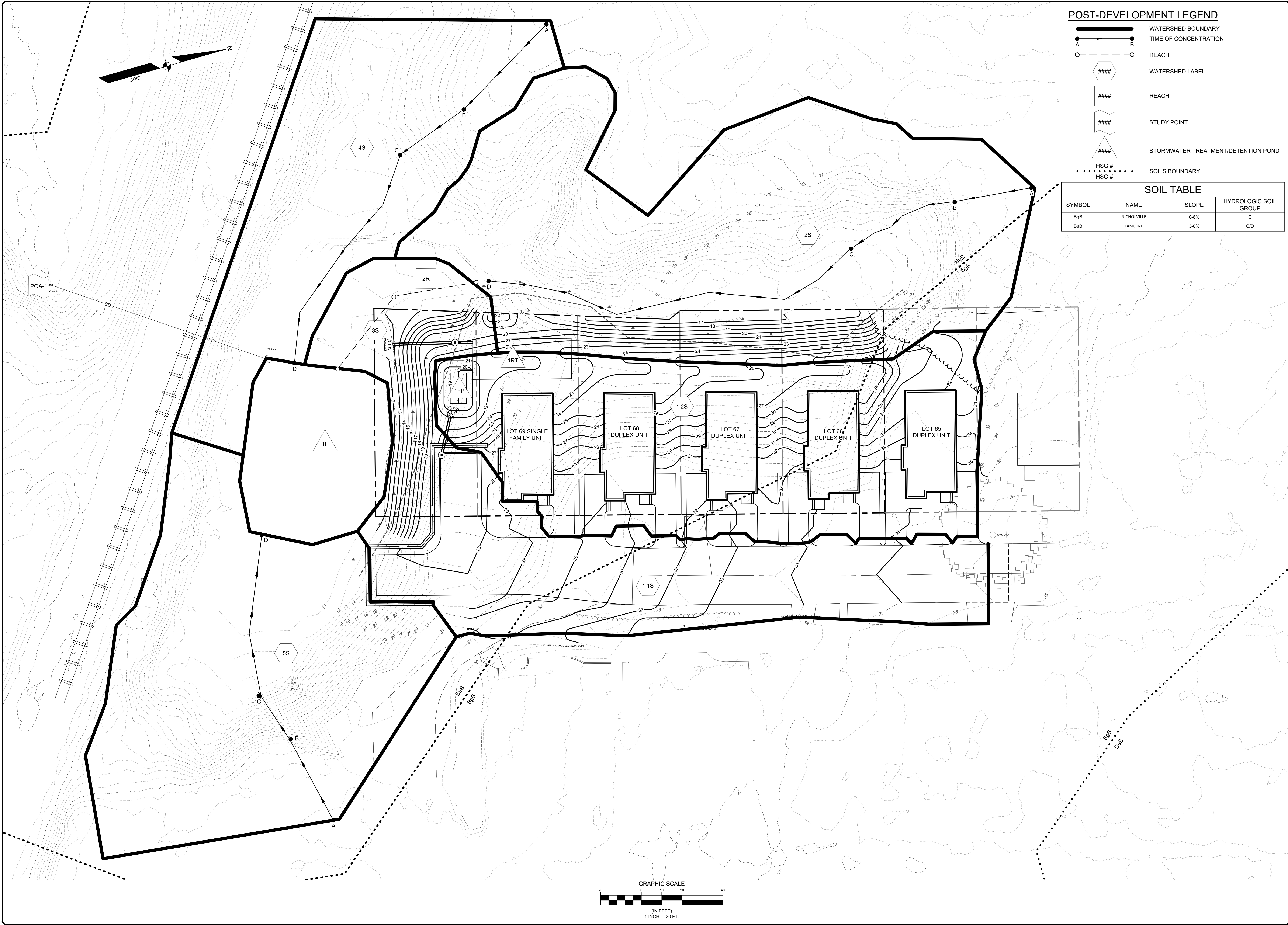
SEBAGO
TECHNICS
WWW.SEAGOTECHNICS.COM
75 John Roberts Rd.
Sullivan, ME 04106
South Portland, ME 04106
Tel. 207-200-2100

PRE-DEVELOPMENT STORMWATER PLAN
OF: 65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR: STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 20'
PROJECT	07360-01

SHEET 1 OF 2

07360-01 SWP.dwg, TAB PRE



POST-DEVELOPMENT LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- WATERSHED LABEL
- REACH
- STUDY POINT
- STORMWATER TREATMENT/DETENTION POND
- HSG #
- SOILS BOUNDARY

SOIL TABLE

SYMBOL	NAME	SLOPE	HYDROLOGIC SOIL GROUP
BgB	NICHOLVILLE	0-6%	C
BuB	LAMOINE	3-8%	C/D

NOT FOR CONSTRUCTION
PROGRESS PRINT

PAUL D. OSTROWSKI, P.E.
STATE OF MAINE
PAUL D. OSTROWSKI
No. 11175
Professional Engineer
09/30/2021

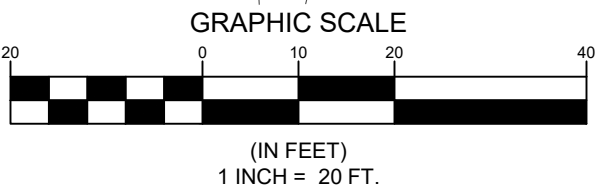
ISSUED TO CLIENT FOR REVIEW
A. HAH 08-10-21
REV. BY: NICHOLVILLE
DATE: 08-10-21
STATUS: ISSUED TO CLIENT FOR REVIEW
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGOTECHNICS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO
TECHNICS
www.sebagotechnics.com
75 John Roberts Rd.
Sullivan, ME 04106
South Portland, ME 04106
Tel. 207-200-2100

POST DEVELOPMENT STORMWATER PLAN
OF: 65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR: STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 20'
PROJECT	07360-01

SHEET 2 OF 2



NOT FOR
CONSTRUCTION
PROGRESS
PRINT



04/14/2022

[illegible]

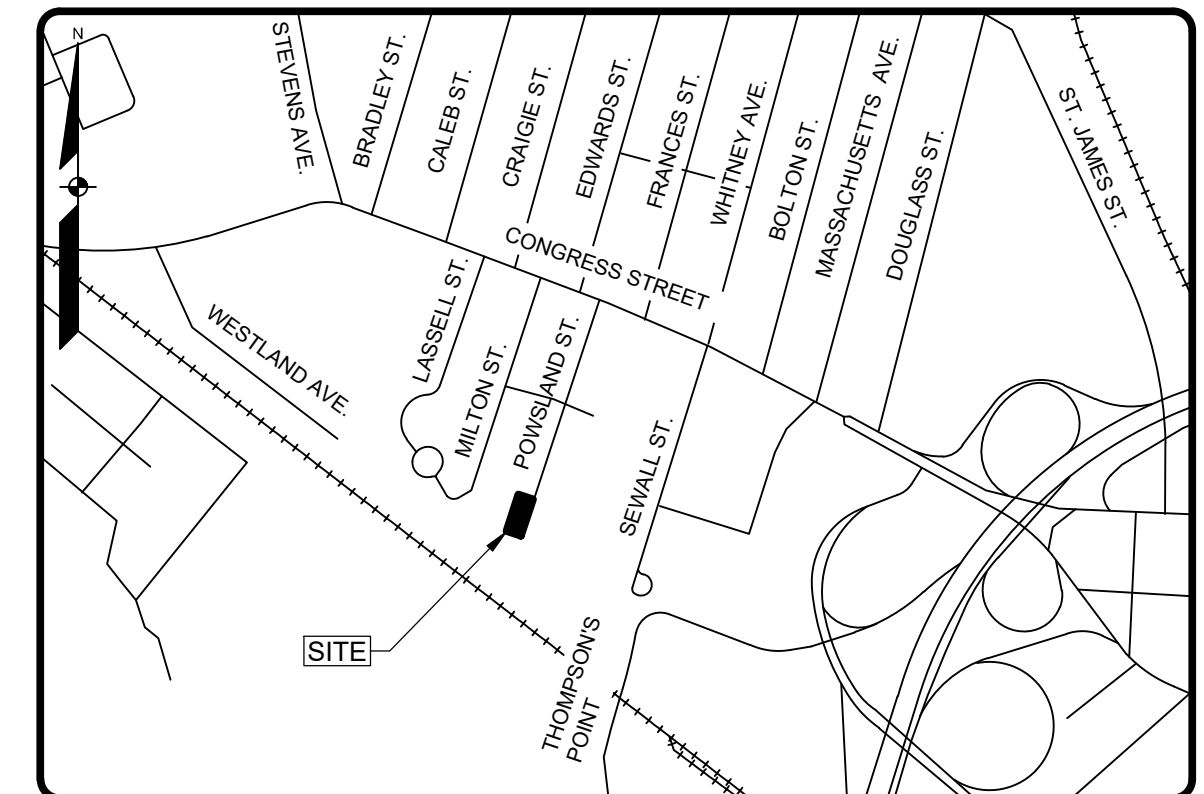
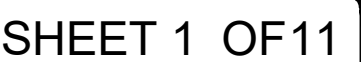
SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

COVER SHEET
OF:
65-73, 93 POWSLAND STREET
POWSLAND STREET
PORTLAND, MAINE
FOR:
STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 30'
PROJECT	07360-01



LOCATION MAP

Sheet Number	Sheet Title
--------------	-------------

1	COVER SHEET
2	NOTES AND LEGEND
3	SITE PLAN
4	OVERALL GRADING AND UTILITY PLAN
5	GRADING AND UTILITY PLAN
6	LANDSCAPE PLAN
7	EROSION CONTROL NOTES
8	DETAILS
9	DETAILS
10	DETAILS
11	DETAILS
1 OF 2	PRE-DEVELOPMENT STORMWATER PLAN
2 OF 2	POST DEVELOPMENT STORMWATER PLAN

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
C1/L1	CURVE/LINE NO.	C1/L1
---	SOILS	---
---	ZONE LINE	---
---	ZONE LINE ON PL	---
	BENCHMARK	---
	SURVEY CONTROL	---
	TEST PIT	---
	MONITORING WELL	---
	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	---
	CONTOURS	---
	SPOT GRADE	---
	CHAIN LINK FENCE	---
	BARB WIRE FENCE	---
	STOCKADE FENCE	---
---	GUARD RAIL	---
	STONE WALL	---
---	RETAINING WALL	---
	DECIDUOUS TREE	
	CONIFEROUS TREE	
---	MULCH LINE	---
	BOLLARD	---
	SIGN	---
---	RAILROAD	---
	GAS	---
	GAS GATE VALVE	---
	GAS METER	---
	GAS MANHOLE	---
---	WATER	---
	WATER GATE VALVE	---
	WATER SHUT OFF	---
	HYDRANT	---
	WATER MANHOLE	---
	WELL	---
---	SANITARY SEWER	---
FM	FORCE MAIN	FM
	SANITARY MANHOLE	
SD	STORM DRAIN	SD
UD	UNDER DRAIN	UD
	DRAINAGE MANHOLE	
	CATCH BASIN	
OHU	OVERHEAD UTILITY	OHU
UGU	UNDERGROUND UTILITY	UGU
	TRANSFORMER PAD	
	ELECTRICAL MANHOLE	
	ELECTRIC METER	---
	HVAC UNIT	---
	TELEPHONE MANHOLE	---
	LIGHT POLE	---
	UTILITY POLE	---
	GUY WIRE	---
---	DRAINAGE DITCH	---
---	EROSION CONTROL BLANKET	---
	FILTER BARRIER	FB
	RIPRAP	---
---	CHECK DAM	---
---	INLET PROTECTION	---
---	BOULDER	---
---	STREAM	---

THE RECORD OWNER OF THE PARCEL IS STL, INC. BY THE FOLLOWING DEEDS RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 24766 PAGE 258.

2. THE PROPERTY IS SHOWN AS LOTS 9-14, BLOCK K, ON THE CITY OF PORTLAND TAX MAP 190 AND IS LOCATED IN THE URBAN COMMERCIAL MIXED USE / RESIDENTIAL ZONE DISTRICT (B-5/R-5).

3. SPACE AND BULK CRITERIA FOR THE URBAN COMMERCIAL MIXED USE / RESIDENTIAL ZONE DISTRICT (B-5/R-5) ARE AS FOLLOWS:

	REQUIRED	PROPOSED
MINIMUM LOT SIZE:	6,000 SF	N/A
MINIMUM FRONT SETBACK:	20 FEET	20 FEET
MINIMUM SIDE SETBACK:	12 FEET	12 FEET
MINIMUM REAR SETBACK:	20 FEET	39 FEET
MAXIMUM BUILDING HEIGHT:	35 FEET	N/A
MAXIMUM BUILDING FOOTPRINT/STRUCTURE:	N/A	N/A
MAXIMUM IMPERVIOUS LOT COVERAGE:	N/A	N/A

* SEE ORDINANCE FOR MORE SPECIFIC INFORMATION AND CONFIRM WITH A TOWN OFFICIAL.

4. A WETLAND DELINEATION WAS PERFORMED ON THIS PROJECT SITE IN APRIL, 2021 BY GARY M. FULLERTON, LICENSED SITE EVALUATOR OF SEBAGO TECHNIQS, INC. THIS DELINEATION CONFORMS TO THE STANDARDS AND METHODS OUTLINED IN THE 1987 WETLANDS DELINEATION MANUAL AND NORTHEAST REGIONAL SURVEILLANT AUTHORED AND PUBLISHED BY THE U.S. ARMY CORPS OF ENGINEERS. WETLAND FLAGS WERE LOCATED USING A COMBINATION OF GLOBAL POSITIONING SYSTEMS (GPS) TECHNOLOGY CAPABLE OF SUBMETER ACCURACY AND GROUND SURVEY.

5. BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNIQS, INC. IN MAY OF 2021.

6. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON PLAN REFERENCE A, WITH UPDATED AND ADDITIONAL RESEARCH, AND FOUND MONUMENTATION. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHNIQS, INC. IN MAY AND JUNE OF 2021.

7. PLAN REFERENCES:

- A. PLAN SHOWING A STANDARD BOUNDARY SURVEY MADE FOR GORHAM SAND AND GRAVEL ON POWSLAND STREET, PORTLAND, MAINE BY DANIEL J. DALFONSO LLC, (DRAWING NUMBER 1163), DATED FEBRUARY 14, 2007.
- B. PLAN OF PROPERTY BELONGING TO MARTIN CURRAN JR. BY PERCY RICHARDSON, DATED APRIL, 1902 AND RECORDED IN THE CORP IN PLAN BOOK 9 PAGE 121.
- C. POWSLAND STREET / MITTON STREET SEWER REPLACEMENT PROJECT PLAN SET, BY THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT, DATED AUGUST OF 2020, P.W.V.D. VAULT NUMBER 01038_002R.
- D. POWSLAND STREET MONUMENT DRAWING BY PORTLAND PUBLIC WORKS.
- E. LOT CONFIGURATION PLAN, WILLOW, FOR NEPTUNE PROPERTIES, BY CIVIL CONSULTANTS, LAST DATED DECEMBER 2, 1996, AND RECORDED IN PLAN BOOK 197 PAGE 1.

8. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.

9. 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.

10. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.

11. 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.

12. 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.

13. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC, STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.

14. 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.

15. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.

16. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMP'S" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY OF THE 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.

17. 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.

18. 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.

19. 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.

20. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.

21. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.

22. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.

23. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIFIED ON PLANS.

24. THE CONTRACTOR SHALL BE FULLY AND SOLELY RESPONSIBLE FOR THE REMOVAL, REPLACEMENT AND RECTIFICATION OF ALL DAMAGED AND DEFECTIVE MATERIAL AND WORKSMANSHIP 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.

25. 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.

26. 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 TECHNIQS, INC.

27. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.

28. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.

29. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT OWNER.

30. 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.

31. 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.

32. 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 A GROUND LASER.

33. 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.

34. 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.

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 A VARIATION 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.

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 BMP'S" MANUAL PUBLISHED BY BUREAU OF LAND AND WATER, DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION. THE CONTRACTOR 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 IMPEVIOUS SURFACES (BUILDINGS, PAVEMENTS, WALKS, ETC.) SHALL RECEIVE LOAM AND SEED PER DETAILS.
4. SEE UTILITY DRAWINGS FOR PIPE AND STRUCTURE DATA TABLES.

1. PROVIDE EROSION CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
2. WETLANDS, ASSOCIATED SETBACKS AND STREAM SETBACKS TO BE STAKED BY OWNER PRIOR TO SITE DISTURBANCE.
3. BEFORE TREE CLEARING, REFER TO PLANS FOR WOODED BUFFER LOCATIONS. TREES SHALL NOT BE CLEARED WITHIN DESIGNATED WOODED BUFFER AREAS.
4. GRADING AND CLEARING LIMITS SHALL NOT ENCROACH ON ADJACENT PROPERTIES UNLESS NOT OTHERWISE ON THE PLANS.
5. 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 THE AREAS ARE REVEGETATED AND PERMANENTLY STABILIZED BEFORE ADDITIONAL AREAS ARE STRIPPED OF EXISTING VEGETATION. CONSTRUCTION BY USE OF RIPRAP, SEED, MULCH, OR OTHER GROUND COVER WITHIN ONE WEEK FROM THE TIME IT WAS ACTIVELY WORKED. SURFACES SHALL BE STABLE PRIOR TO DIRECTING STORMWATER RUNOFF TOWARD STORMWATER BMPs. PLEASE REFER TO DRAINAGE PLANS FOR WATERSHED AREAS.

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 ON-SITE 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 30 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 BE PROVIDED 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 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/C900-11/A21.1 (LATEST REVISION). PIPE SHALL BE CEMENT-LINED AWWA/C900-11/A21.1 WITH LINING THICKNESS 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 UTILITY INVERTS AT BUILDING WITH ARCHITECTURAL, STRUCTURAL AND PLUMBING DRAWINGS.
9. COORDINATE LOCATION OF SEWER, WATER, GAS, FOUNDATION DRAINS AND ROOF DRAIN INVERTS AT THE BUILDING WITH ARCHITECTURAL DRAWINGS.
10. WATER SERVICE ENTRANCE DESIGNS TO INCLUDE METERS AND BACKFLOW PREVENTERS TO MEET ALL STANDARDS AND REQUIREMENTS OF THE PORTLAND WATER DISTRICT.
11. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY GRADE CHANGES THAT WILL IMPACT STORM DRAINAGE INFRASTRUCTURE OR OTHER UTILITIES.
12. 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.
13. PROVIDE AN OIL BOOM IN EVERY CATCH BASIN WITHIN A PAVED AREA.
14. CONTRACTOR SHALL FURNISH AND INSTALL TRENCING, MATERIALS AND BACKFILL FOR ALL UTILITIES. ELECTRICAL AND TELECOM/DATA 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)
 - VAN A. HOBGOOD, DISTRIBUTION ENGINEERING
 - (207) 490-3075WATER:
 - PORTLAND WATER DISTRICT
 - GORDON JOHNSON, ENGINEER
 - (207) 774-3091FAIRPOINT:
 - STUART JENSEN
 - (207)797-1015

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 AND DIGGING OPERATIONS. THE LANDSCAPE CONTRACTOR SHALL REPLACE OR REPAIR UTILITIES, FENCING, 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 FLOWERING BED AREAS SHALL CONSIST OF FOUR PARTS TOPSOIL, TWO PARTS SPAGNUM PEAT MOSS, AND ONE PART HORTICULTURAL PERLITE BY VOLUME. PEAT MOSS MAY BE SUBSTITUTED WITH WOOD CHIPPED OR DEHYDRATED MANURE OR COMPOST. ROTILLTOP BEDS TO A DEPTH OF 8 INCHES.
13. DURING CLEANSING 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.

04/14/2022

[illegible]

SEBAGO
TECHNICS

WWW.SEBOGOTECHNICS.COM

75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

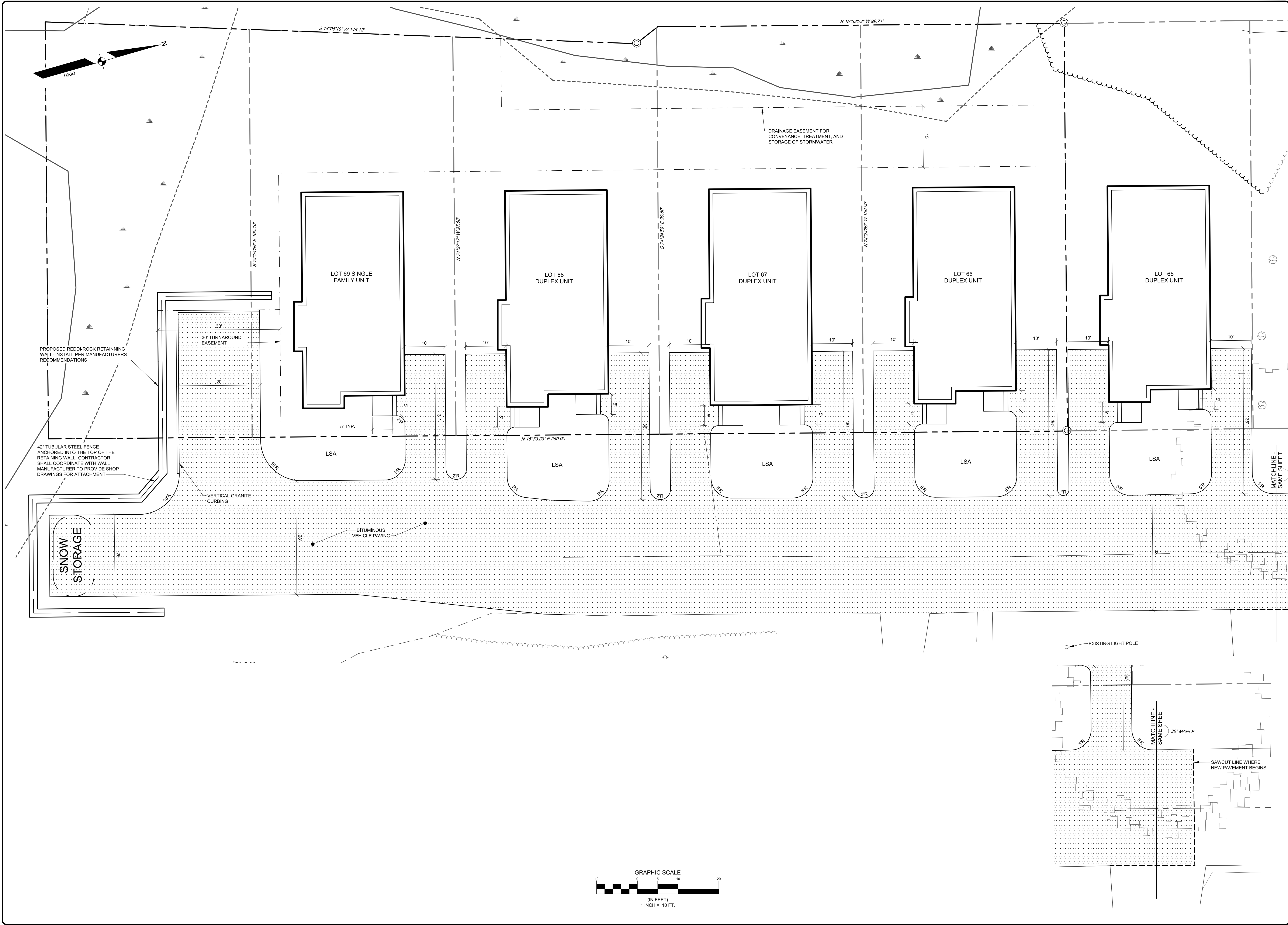
NOTES AND LEGEND

OF: 65-73, 93 POWSLAND STREET
POWSLAND STREET
PORTLAND, MAINE

FOR: STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	NTS
PROJECT	07360-01

SHEET 2 OF 11



NOT FOR
CONSTRUCTION
PROGRESS
PRINT



REV.	BY	DATE	STATUS
B	HAH	04-13-22	UPLOADED FOR CITY REVIEW
A	HAH	08-10-21	ISSUED TO CLIENT FOR REVIEW

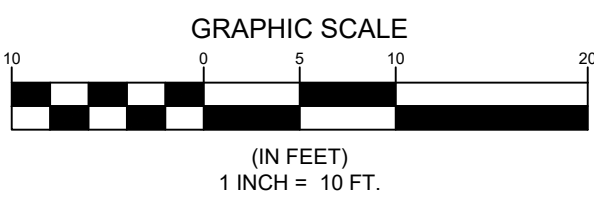
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Sullivan, ME 04106
South Portland, ME 04106
Tel. 207-200-2100

SITE PLAN
OF: 65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR: STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

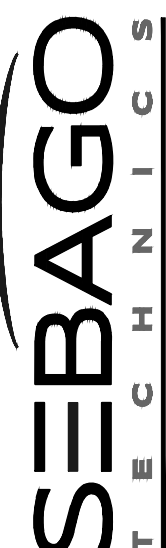
DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 10'
PROJECT	07360-01

SHEET 3 OF 11





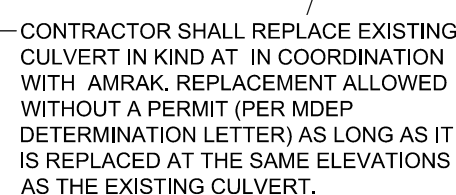
REV.	DATE:	STATUS:



P.O. BOX 58
GOBHAM ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 10'
PROJECT	07360-01

SHEET 4 OF 11

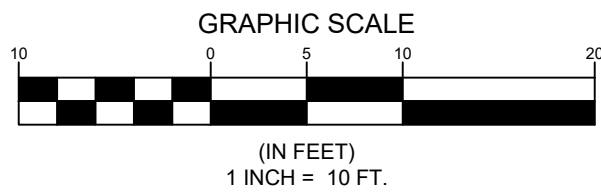


NOTE:
CULVERT MAY BE REPLACED WITHOUT A PERMIT FROM THE DEPARTMENT WITH A LARGER DIAMETER CULVERT AS LONG AS THE BOTTOM ELEVATION OF THE REPLACEMENT CULVERT IS AT THE SAME ELEVATION AS THE EXISTING CULVERT

—WORK WITHIN THE CMP EASEMENT SHALL REQUIRE PERMISSION FROM CMP PRIOR TO COMMENCING WORK.



(IN FEET)
1 INCH = 20 FT



KEY	BOTANICAL NAME	COMMON NAME	SIZE
AX	ACER X FREEMANII 'SIENNA'	SIENNA RED MAPLE	2.5" CAL
PO	PICEA OMORIKA	SERBIAN SPRUCE	6-10' HGT
MG	MYRICA GALE	SWEET GALE BAYBERRY	#3 CONT.

NOTE: LOAM AND SEED ALL DISTURBED AREAS WITH MDOT SEED MIX #1 (PARK MIX)

ALL 2:1 SLOPES AND SWALES SHALL BE SEEDDED WITH NEW ENGLAND WETLAND PLANTS INC. "NEW ENGLAND CONSERVATION/WILDLIFE SEED MIX" - CONTRACTOR SHALL PROVIDE SEED MIX FOR APPROVAL PRIOR TO SEEDING

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 10'
PROJECT	07360-01

SHEET 6 OF 11

LANDSCAPE PLAN
OF:
65-73, 93 POWSLAND STREET
POWSLAND STREET
PORTLAND, MAINE
FOR:
STJ, INC.
P.O. BOX 58
GROHAM, ME 04038

SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

[illegible]

B	H AH	04-13-22	UPLOADED FOR CITY REVIEW		
A	H AH	09-10-21	ISSUED TO CLIENT FOR REVIEW		
	REV: BY:	DATE:	STATUS:		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS WILL BE AT THE USER'S RISK.					

HENRY A. HESS, RLA 4841

04/11/2022

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. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEEDIMENTATION 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.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEEDIMENTATION 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) WITHIN 100 FEET OF ANY NATURAL RESOURCES. MULCHING SHALL BE APPLIED AT A RATE OF 220 LBS/1,000 S.F. ON ALL SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 5%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8%. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

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 STUDY 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 THAN 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 THAN 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 MANUFACTURER'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 SWEEP 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 OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEPED 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. SEEDED 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 LOADED 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:

SEEDED PREPARATION:

- 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.
- 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.
- 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 SEEDED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.

APPLICATION OF SEED:

- SEEDING SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (MDEP SEED MIX 2 IS DISPLAYED)

SEED TYPE	APPLICATION RATE
CREEPING RED FESCUE	0.46 LBS/1,000 S.F. (20 LBS/ACRE)
REDTOP	0.05 LBS/1,000 S.F. (2 LBS/ACRE)
TALL FESCUE	0.46 LBS/1,000 S.F. (20 LBS/ACRE)
TOTAL:	0.97 LBS/1,000 S.F. (42 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, LATEST REVISION.

- 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.

- MULCHING SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SODDING:

FOLLOWING SEEDED 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% (10H: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.

- 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 APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C). IF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT 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 APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
- 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 APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- STABILIZE THE SLOPE WITH STONE RIPRAP -- THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT 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.

- 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 APPLICANT 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 APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C) OF THIS STANDARD.
 - STABILIZE THE SOIL WITH SOD -- THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT 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 15 THE APPLICANT 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 APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.
- 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.
 - FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMI-MONTHLY 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:

- 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.
- 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 CONTAMINATION THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. NO 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.
- 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 ADITIVES 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 SWEEP 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.
- 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.
- 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 AREAS OR OTHER 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.
- 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:
 - DISCHARGES FROM FIREFIGHTING ACTIVITY;
 - FIRE HYDRANT FLUSHINGS;
 - VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
 - DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS;
 - ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
 - PAVEMENT WASHWATER (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 FLOWING FLOWS ARE NOT CONTAMINATED;
 - UNCONTAMINATED EXCAVATION DEWATERING;
 - POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
 - LANDSCAPE IRRIGATION.
- UNAUTHORIZED NON-STORMWATER DISCHARGES:** THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES. SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:
 - WASTEWATER FROM THE WASHOUT OR CLEAN OUT 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; AND
 - TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

WINTER EROSION CONTROL MEASURES

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 1 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 S.F. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEEDIMENTATION 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.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS./1,000 S.F. (3 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 OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL 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. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING

ALL AREA SHALL BE CONSIDERED TO BE DENIED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, 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. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL 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 WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH.

BETWEEN THE DATES OF SEPTEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

5. MULCHING ON SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 220 LBS/1,000 S.F. ON ALL SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 5%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8%. EROSION CONTROL MIX CAN BE USED TO SUBSTITUTE EROSION CONTROL BLANKETS ON ALL SLOPES EXCEPT DITCHES.

6. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL 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 BEEN LOADED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDING AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED. DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING ANCHORED WITH STAPLES. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND SEED AT AN APPLICATION RATE OF 5LBS/1000 S.F. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS SUFFICIENTLY 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. SEED TYPE SHALL BE WINTER RYE.

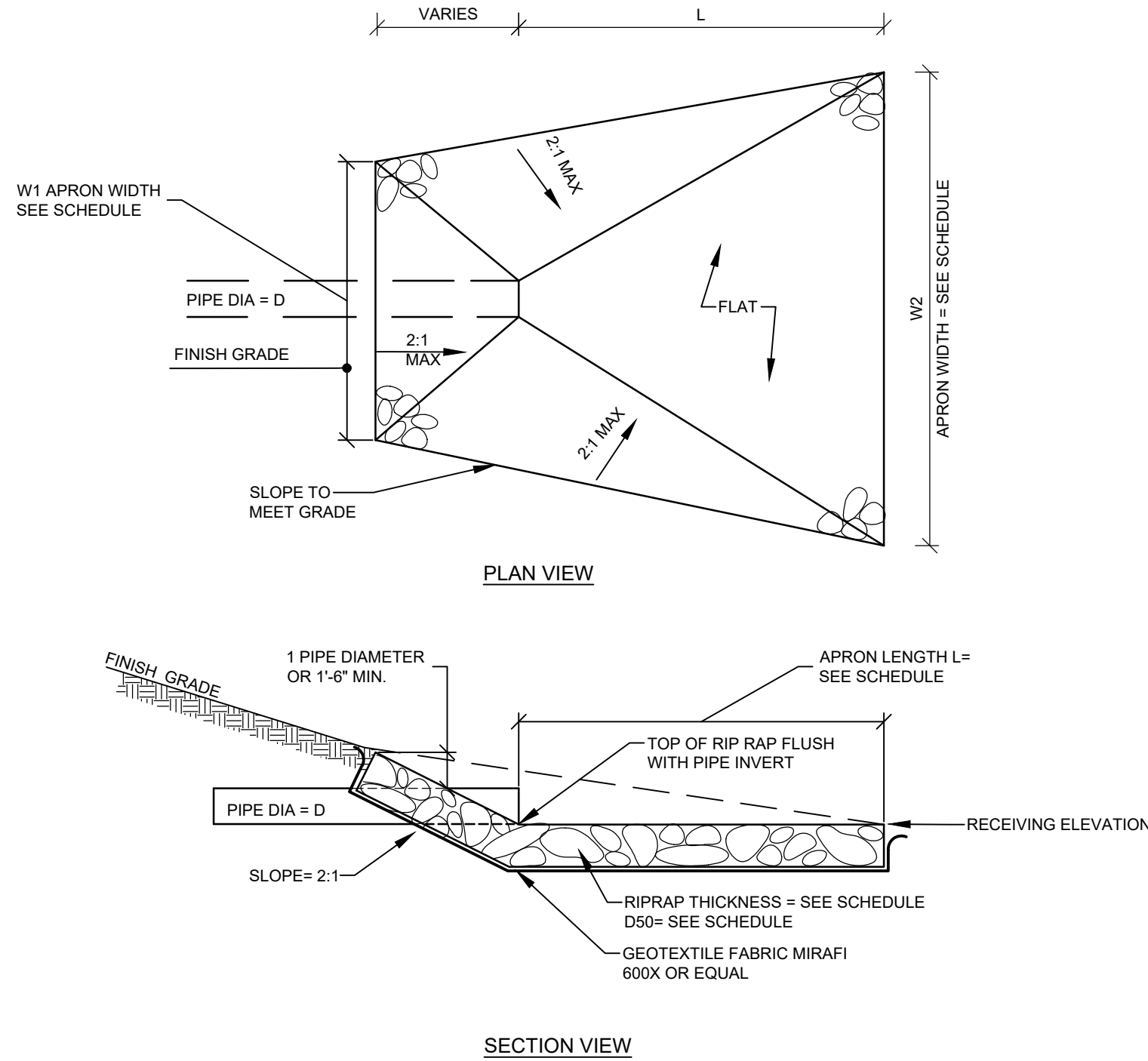
7. INSPECTION AND MONITORING

CONSTRUCTION NOTES

1. ALL WORK SHALL CONFORM TO THE APPLICABLE CODES AND ORDINANCES.
2. 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.
3. CONTRACTOR SHALL NOTIFY ENGINEER OF ALL PRODUCTS OR ITEMS NOTED AS "EXISTING" WHICH ARE NOT FOUND IN THE FIELD.
4. INSTALL 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.
5. 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.
6. CONTRACTOR SHALL CLEAN AND REMOVE DEBRIS AND SEDIMENT DEPOSITED ON PUBLIC STREETS, SIDEWALKS, ADJACENT AREAS, OR OTHER PUBLIC WAYS DUE TO CONSTRUCTION.
7. 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.
8. SITE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO CONSTRUCTION.
9. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENT CONTROL BMPs" PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY OF THE 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.
10. 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.
11. 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.
12. 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.
13. ALL PAVEMENT MARKINGS AND DIRECTIONAL SIGNAGE SHOWN ON THE PLAN SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS.
14. ALL PAVEMENT JOINTS SHALL BE SAWCUT PRIOR TO PAVING TO PROVIDE A DURABLE AND UNIFORM JOINT.
15. NO HOLES, TRENCHES OR STRUCTURES SHALL BE LEFT OPEN OVERNIGHT IN ANY EXCAVATION ACCESSIBLE TO THE PUBLIC OR IN PUBLIC RIGHTS-OF-WAY.
16. ALL WORK WITHIN THE PUBLIC RIGHT-OF-WAY SHALL REQUIRE A M.D.O.T. PERMIT AS WELL AS PERMITS FROM THE TOWN AS APPLICABLE.
17. THE PROPOSED LIMITS OF CLEARING SHOWN HEREON ARE APPROXIMATE BASED UPON THE PROPOSED LIMITS OF SITE GRADING. THE APPLICANT RESERVES THE RIGHT TO PERFORM NORMAL FOREST MANAGEMENT ACTIVITIES OUTSIDE OF THE CLEARING LIMIT AS SHOWN. TREE REMOVAL OUTSIDE OF THE LIMITS OF CLEARING MAY BE NECESSARY TO REMOVE DEAD OR DYING TREES OR TREE LIMBS. THIS REMOVAL IS DUE TO POTENTIAL SAFETY HAZARDS AND TO PROMOTE PROPER FOREST GROWTH.
18. IMMEDIATELY UPON COMPLETION OF CUTS/FILLS, THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH EROSION CONTROL NOTES AND AS SPECIED ON PLANS.
19. 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.
20. 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.
21. 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 JUDGMENT OF SEBAGO TECHINCS, INC.
22. THE GENERAL CONTRACTOR SHALL PROVIDE ALL NECESSARY PROTECTION FOR THE WORK UNTIL TURNED OVER TO THE OWNER.
23. THE GENERAL CONTRACTOR SHALL MAINTAIN A CURRENT AND COMPLETE SET OF CONSTRUCTION DRAWINGS ON SITE DURING ALL PHASES OF CONSTRUCTION FOR USE OF ALL TRADES.
24. THE CONTRACTOR SHALL TAKE FULL RESPONSIBILITY FOR ANY CHANGES AND DEVIATION OF APPROVED PLANS NOT AUTHORIZED BY THE ARCHITECT/ENGINEER AND/OR CLIENT/OWNER.
25. 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.
26. 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.
27. ALL SUBSURFACE UTILITY LINES SHOWN HEREON ARE BASED SOLELY ON THE FIELD LOCATION OF VISIBLE STRUCTURES, SMHS, CB'S, HYDRANTS, ETC.. IN CONJUNCTION WITH DESIGN AND/OR AS-BUILT PLANS SUPPLIED TO SEBAGO TECHINCS INC. BY OTHERS. PRIOR TO ANY CONSTRUCTION, EXCAVATION, TEST BORINGS, DRILLING, ETC., DIG SAFE MUST BE NOTIFIED AND A SITE IDENTIFICATION NUMBER ALONG WITH A SAFE TO DIG DATE OBTAINED. THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION, DEPTH AND MATERIAL OF ALL SUBSURFACE UTILITY LINES SHOWN HEREON AND ANY AND ALL OTHERS LOCATED ON SITE WITHIN THE CONSTRUCTION AREA.

INSPECTIONS/MONITORING:

1. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, OR AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED 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.
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 85%-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.



NOTES:

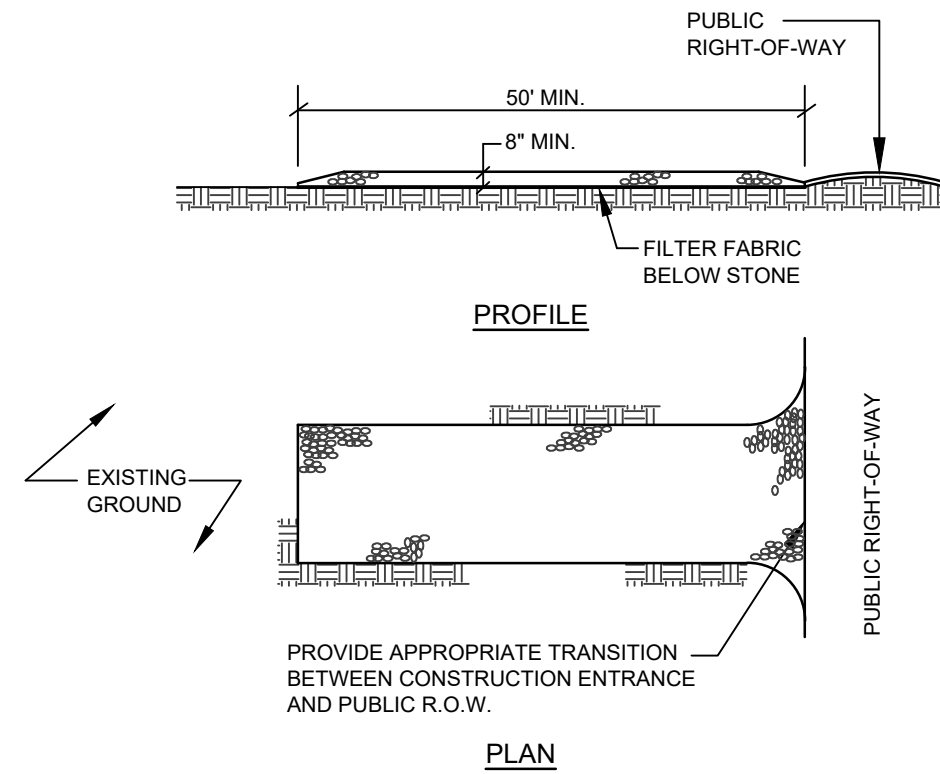
1. RIPRAP TO BE PROCESSED ANGULAR ROCK
2. RIPRAP GRADATION SHALL BE A WELL GRADED MIX FROM ABOUT 1.5 TIMES D SIZE TO 25 PERCENT OF THE D SIZE
3. THE RIPRAP STONES SHALL BE CAREFULLY PLACED FROM THE TOE OF THE SLOPE UPWARD
4. STONES SHALL BE LOWERED TO THE SLOPE AND NOT BE ALLOWED TO DROP MORE THAN 12" ONTO THE GEOTEXTILE
5. THE FINISHED SURFACE SHALL BE A RELATIVELY SMOOTH, UNIFORMLY SLOPED SURFACE

TYPICAL RIPRAP APRON SCHEDULE

CULVERT DIAMETER - D (IN.)	APRON LENGTH - L (FT.)	WIDTH - W1 (FT)	WIDTH - W2 (FT)	RIPRAP D50 (IN.)	RIPRAP THICKNESS (IN.)
12	8	3	9	6	14
15	10	4	12	6	14
18	13	5	15	7	16
24	18	6	20	8	18
36	29	9	32	11	25
42	33	11	37	12	27
48	39	12	43	16	36

RIPRAP APRON

NOT TO SCALE

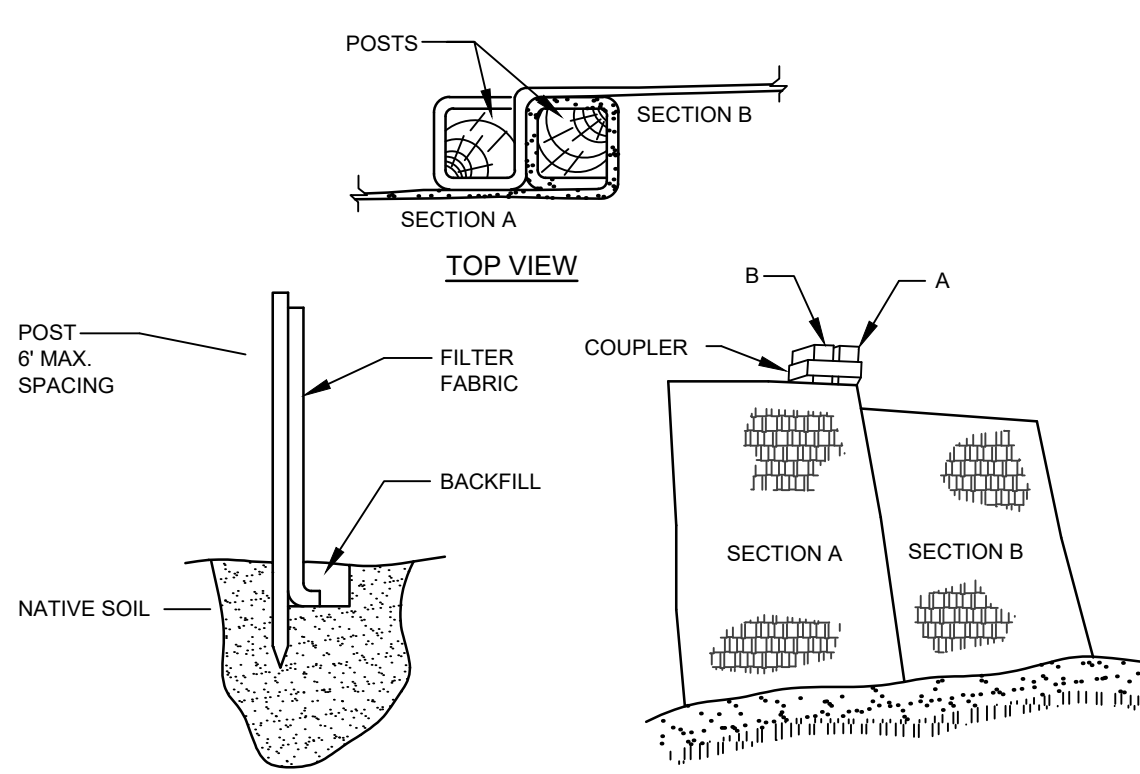


NOTES:

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 EXIT

NOT TO SCALE

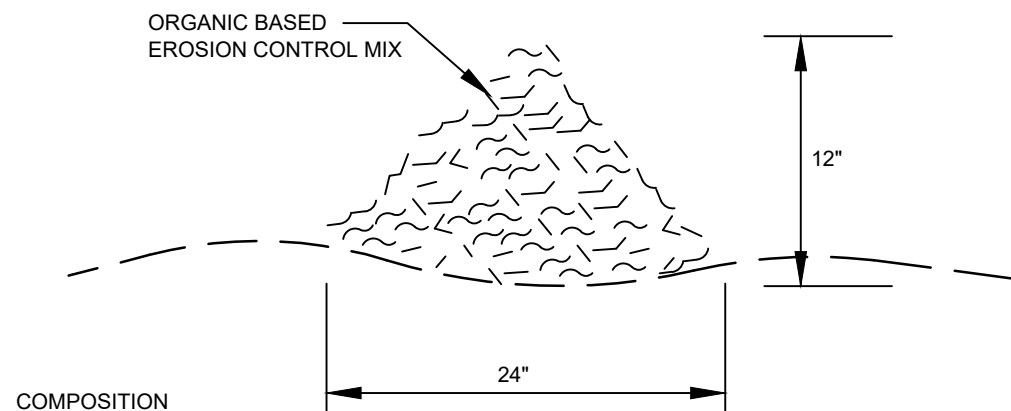


INSTALLATION NOTES:

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



COMPOSITION

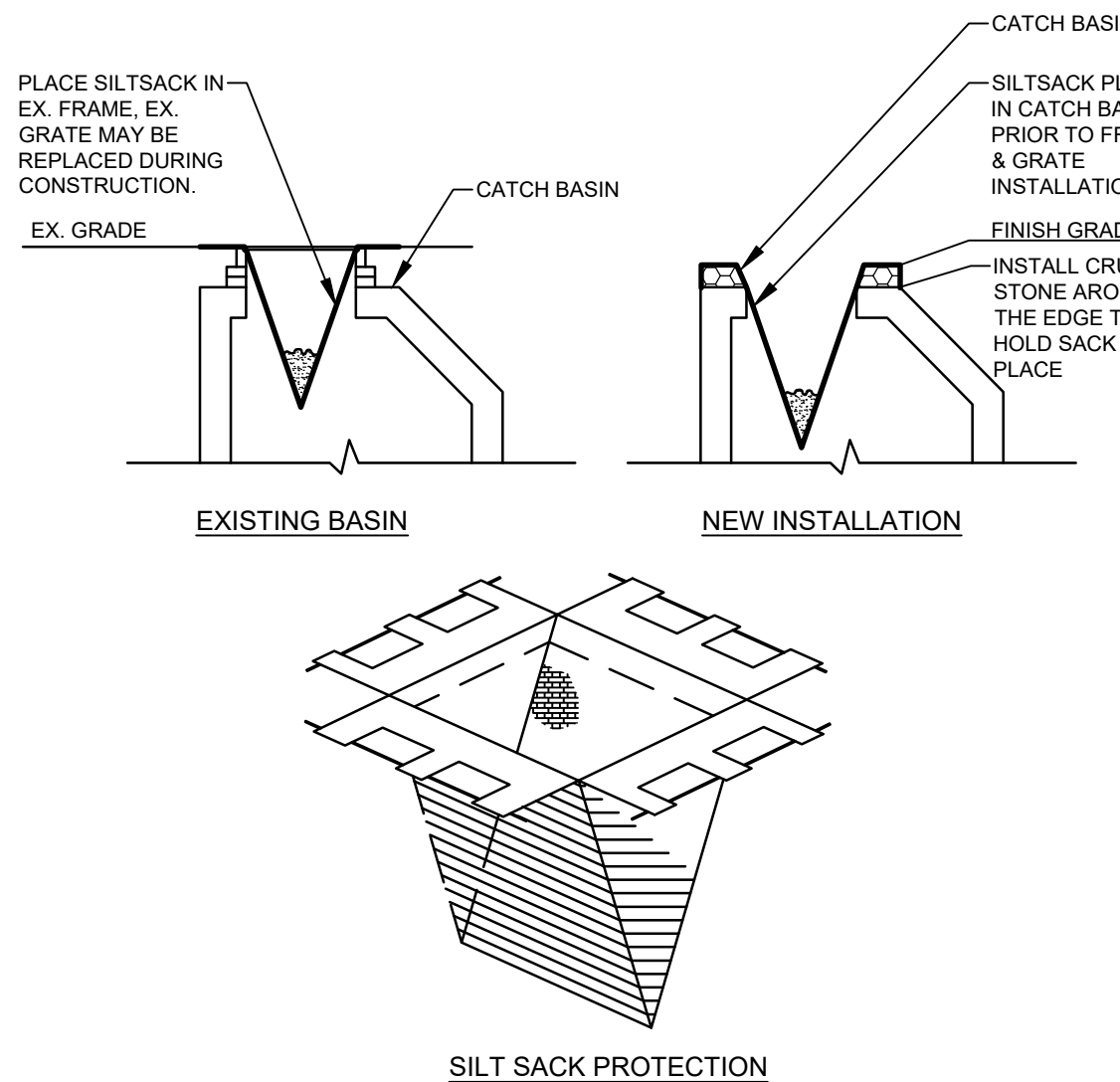
EROSION CONTROL MIX SHALL BE MANUFACTURED ON OR OFF THE PROJECT SITE SUCH THAT ITS COMPOSITION IS IN ACCORDANCE WITH THE MDEP MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL, LAST REVISED 3/2003 OR LATER. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: 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

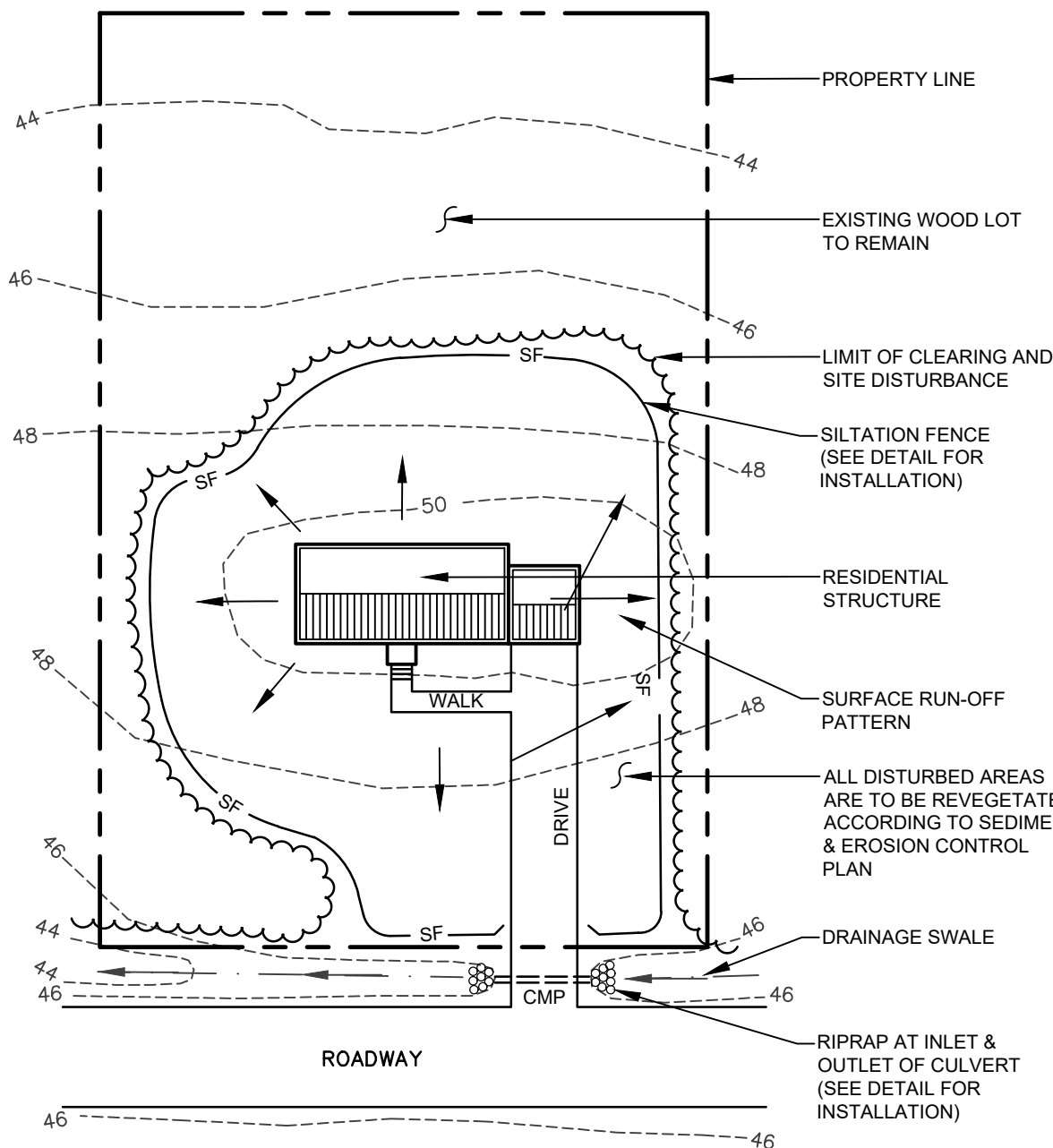


NOTES:

- PRIOR TO FINAL GRADING AND PAVING OPERATIONS BEGIN A CATCH BASIN INSERT (SUCH AS A SILT SACK OR A DANDY BAG) MUST BE INSTALLED IN EACH BASIN PER MANUFACTURERS INSTRUCTIONS. HAY BALES SHOULD BE REMOVED ONCE INSERTS ARE INSTALLED.

CATCH BASIN PROTECTION DETAIL (FOR PAVED AREAS)

NOT TO SCALE



EROSION CONTROL MEASURES FOR RESIDENTIAL LOTS

NOT TO SCALE

NOT FOR CONSTRUCTION PROGRESS PRINT

HENRY A. HESS, R.L. 4841



04/14/2022

REV.	BY	DATE	STATUS	ISSUED TO CLIENT FOR REVIEW
A	HAH	08-10-21	DATE:	STATUS:
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHINCS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHINCS, INC.				

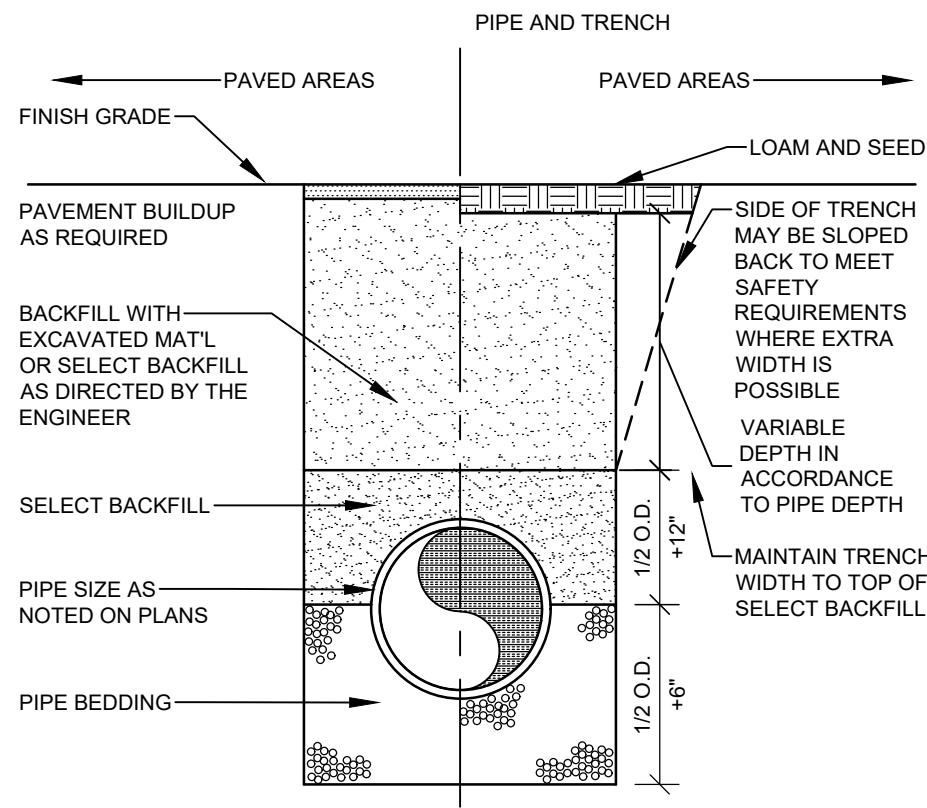
SEBAGO
TECHNICS
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100
WWW.SEAGOTECHNICS.COM

DETAILS
OF: 65-73, 93 POWSLAND STREET
POWSLAND STREET
PORTLAND, MAINE
FOR: STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	NTS
PROJECT	07360-01

SHEET 8 OF 11

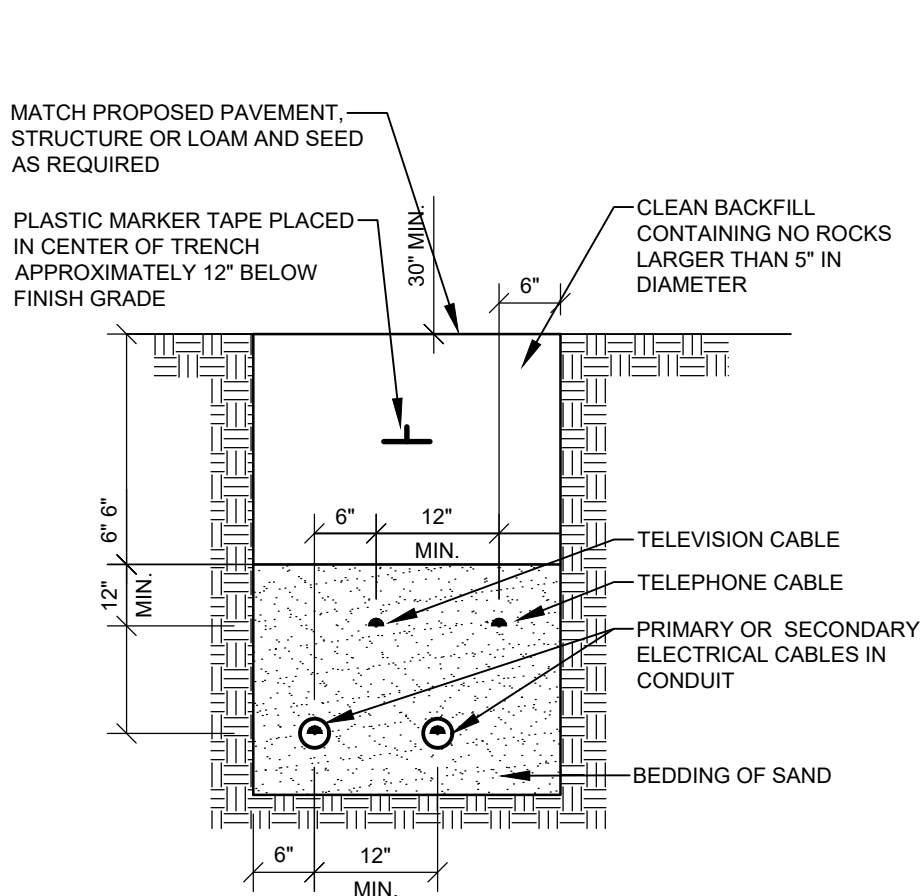
07360-01 Dwg. TAB 02



TRENCH BACKFILL SCHEDULE		
PIPE TYPE	PIPE BEDDING MATERIAL	SELECT BACKFILL
CORRUGATED METAL DUCTILE IRON REINFORCED CONCRETE	MDOT 703.22 TYPE B UD BACKFILL	MDOT 703.22 TYPE B UD BACKFILL
PVC-SDR 35 HDPE	MDOT 703.13 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL, OR MDOT 703.13 3/4" CRUSHED STONE
PERFORATED PVC-SDR 35 HDPE	MDOT 703.13 3/4" CRUSHED STONE	MDOT 703.22 TYPE B UD BACKFILL, OR MDOT 703.13 3/4" CRUSHED STONE

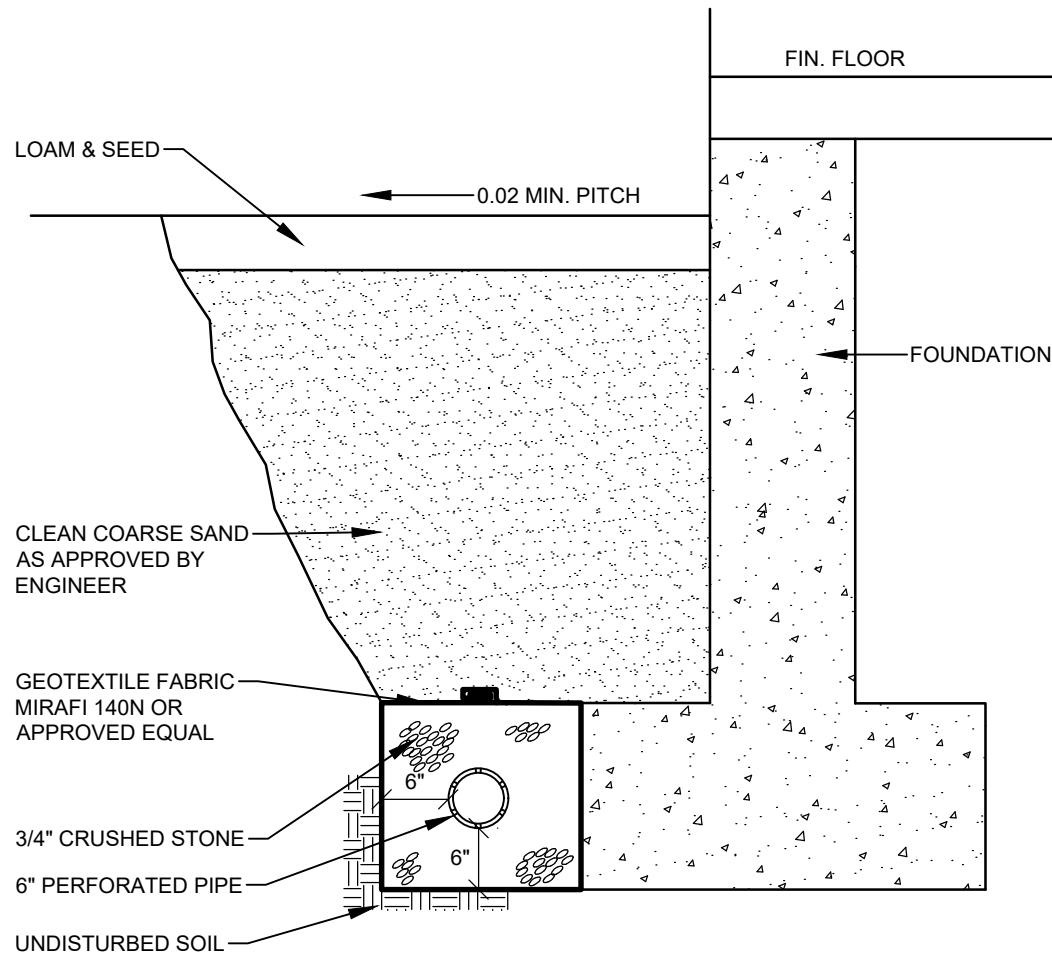
NOTE:
ALL BRACING AND SHEETING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL MEET ALL STATE AND O.S.H.A. SAFETY STANDARDS.

TRENCH SECTION
NOT TO SCALE

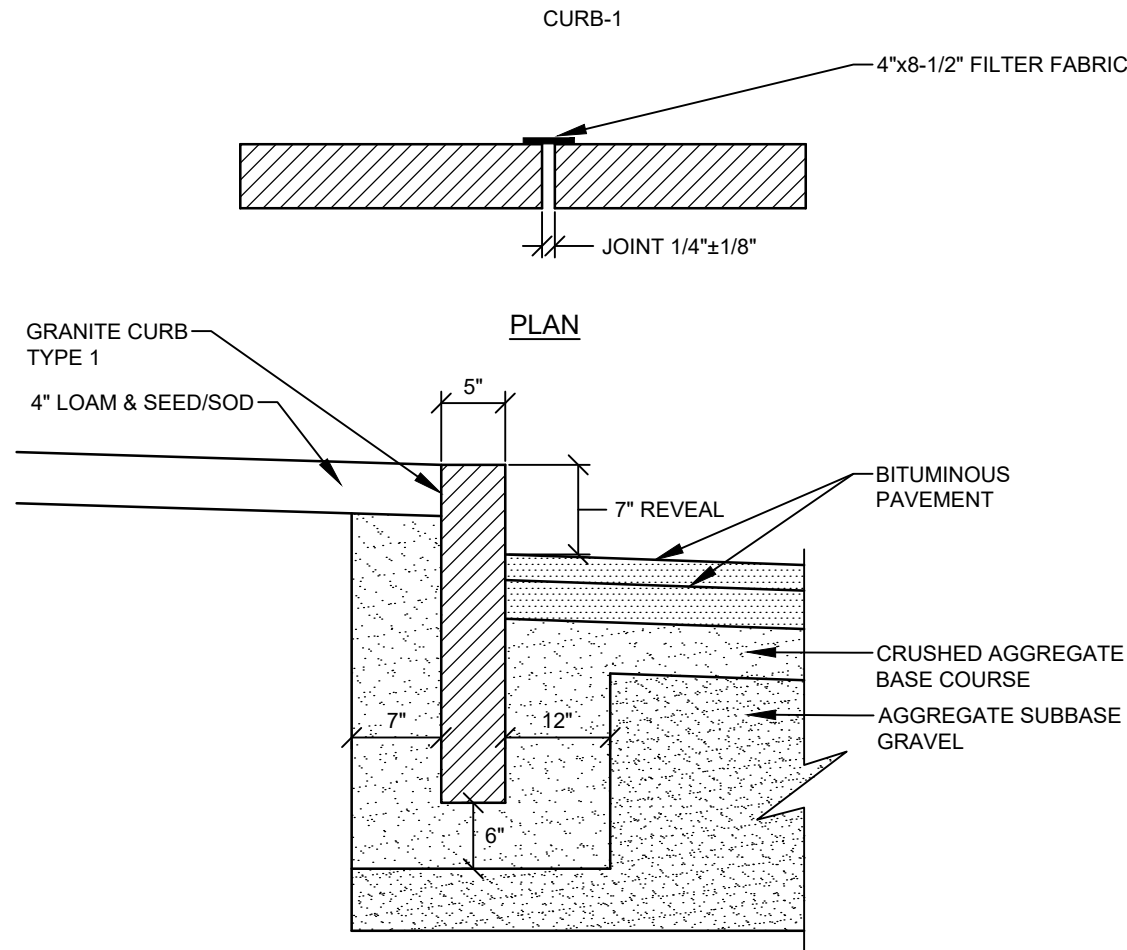


NOTES:
CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT.

**UNDERGROUND CABLE
INSTALLATION**
NOT TO SCALE

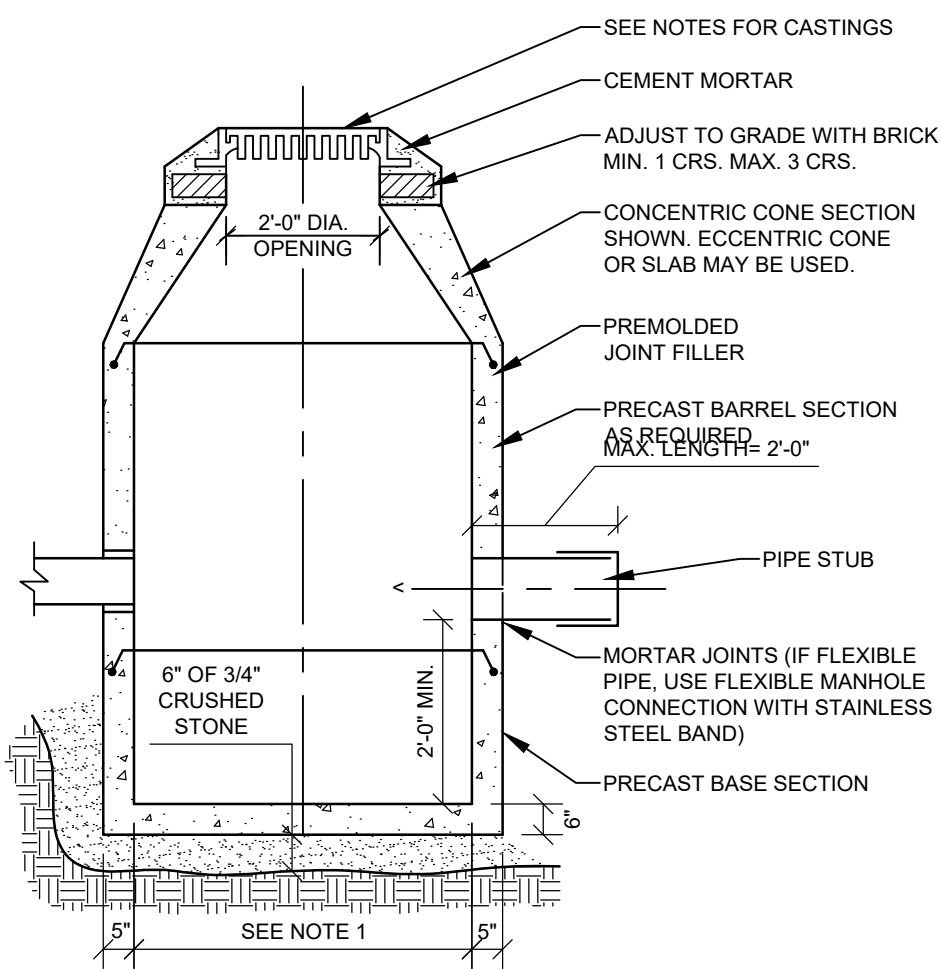


FOUNDATION DRAIN SECTION
NOT TO SCALE



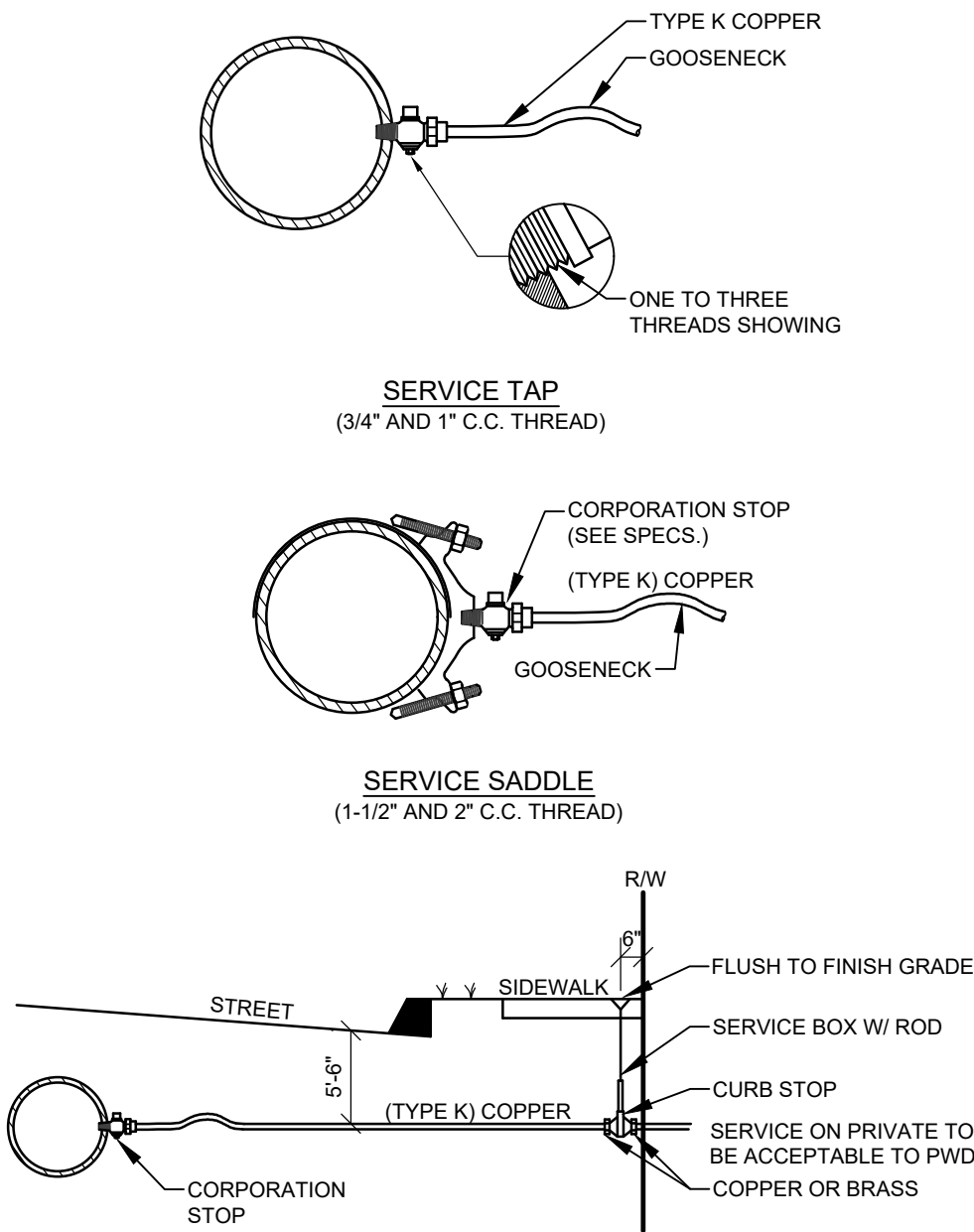
NOTES:
1. EXCAVATION INCIDENTAL TO TO COST OF CURB
2. SUBBASE SHALL BE COMPACTED TO A FIRM EVEN SURFACE PRIOR TO SETTING OF CURB

VERTICAL GRANITE CURB
NOT TO SCALE

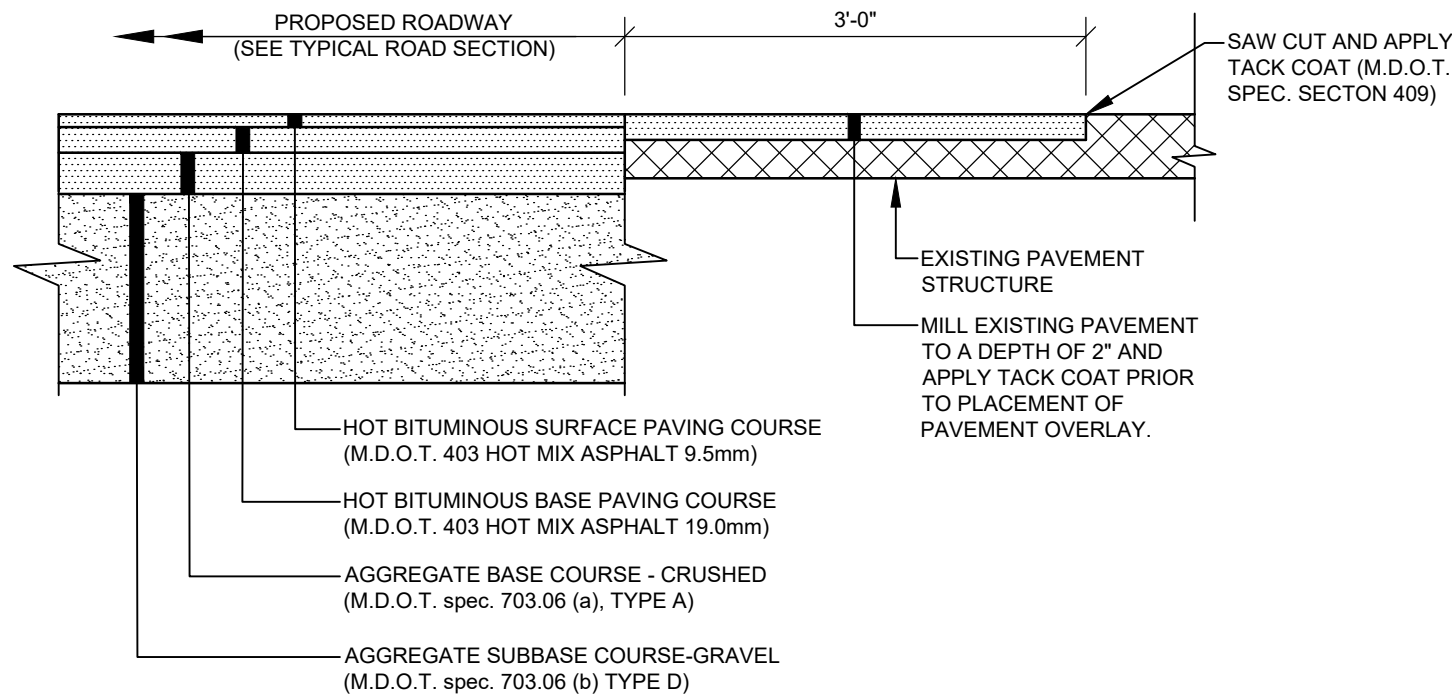


NOTES:
1. 4'-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
4. CATCH BASIN FRAME AND GRATE TO BE EJ 5520M5, OR APPROVED EQUAL.

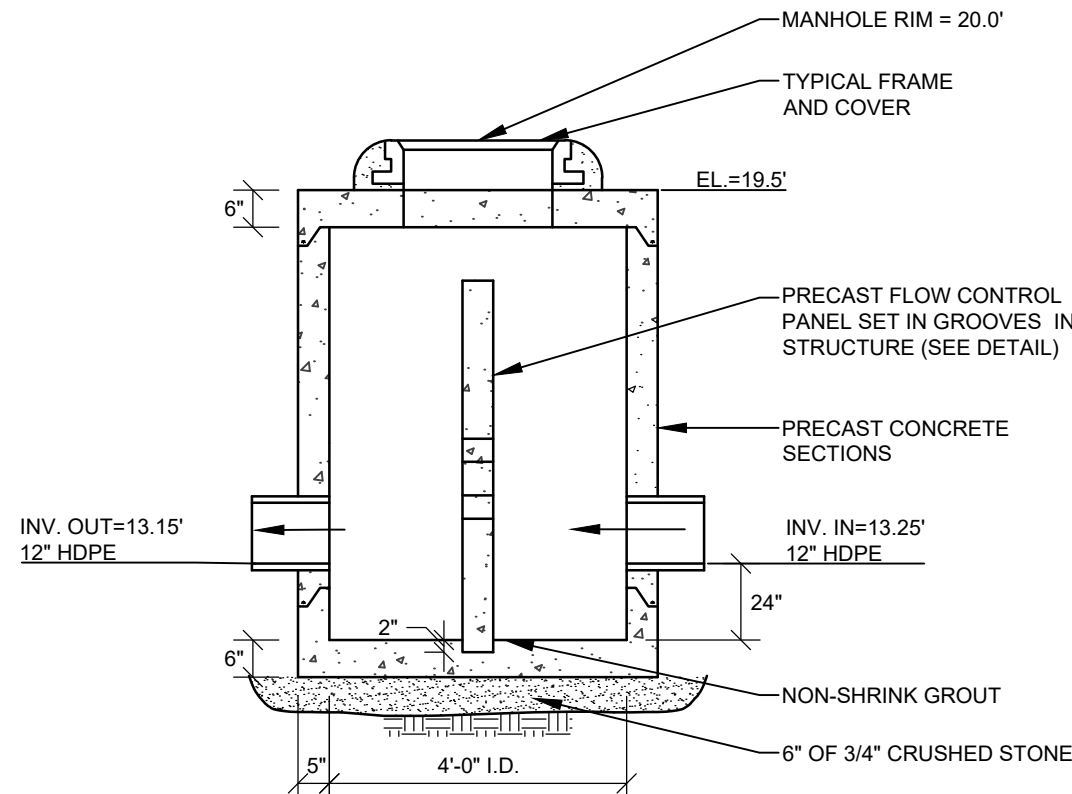
CATCH BASIN
NOT TO SCALE



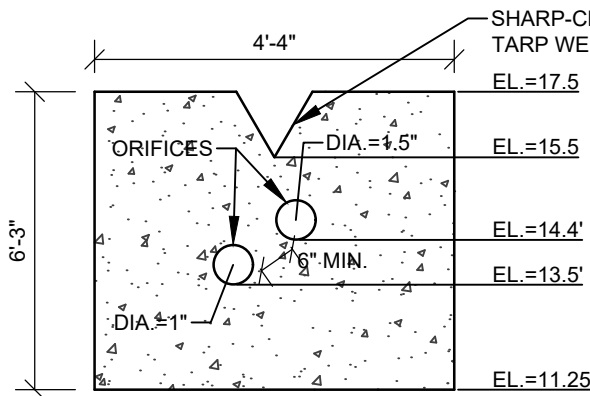
SERVICE CONNECTION
NOT TO SCALE



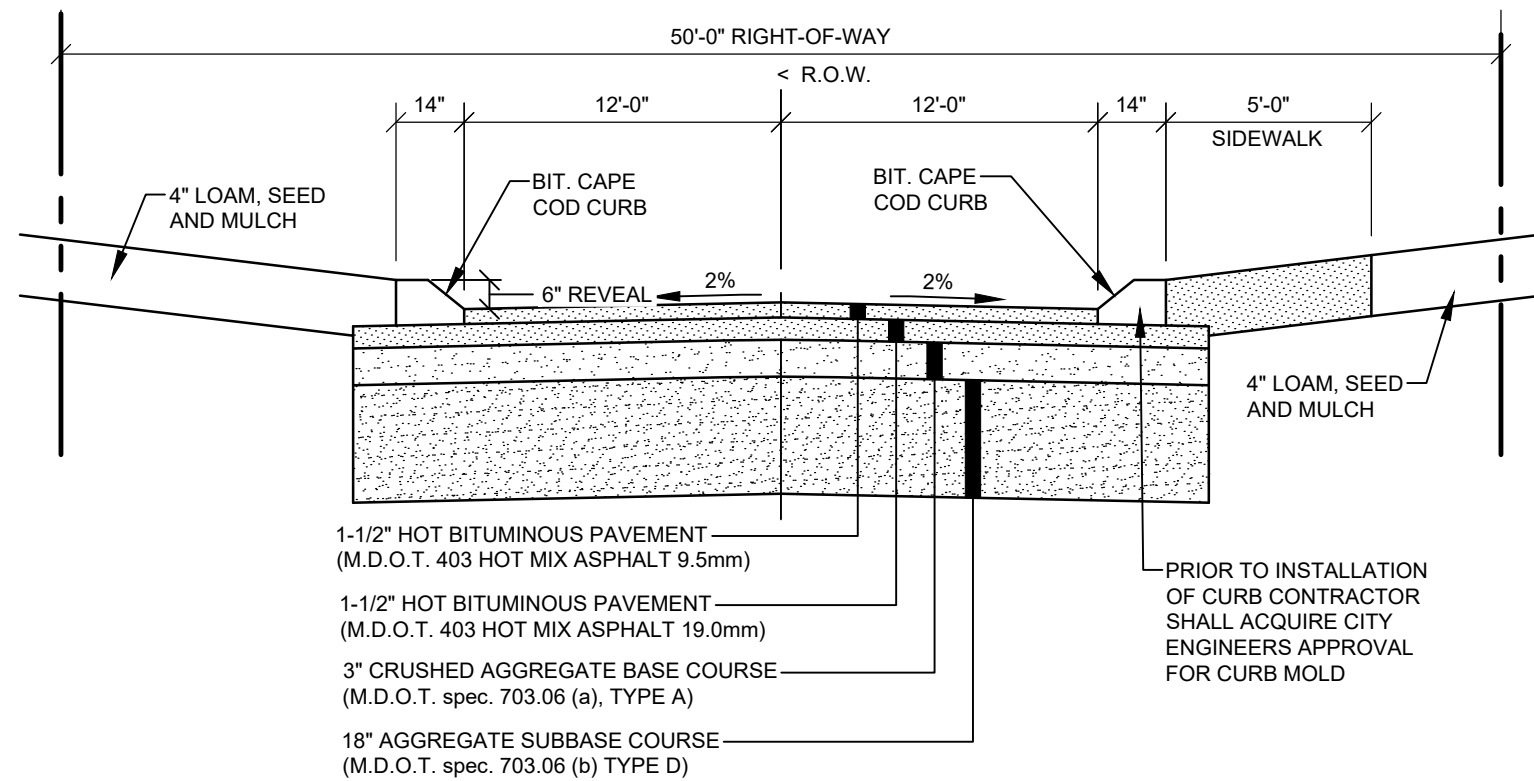
PAVEMENT JOINT
NOT TO SCALE



OUTLET CONTROL STRUCTURE DETAIL
NOT TO SCALE



PRECAST FLOW CONTROL PANEL
NOT TO SCALE



TYPICAL ROAD SECTION
NOT TO SCALE

NOT FOR
CONSTRUCTION
PROGRESS
PRINT



REV.	BY	DATE	STATUS	ISSUED TO CLIENT FOR REVIEW
A	HAH	08-10-21	DATE:	STATUS:

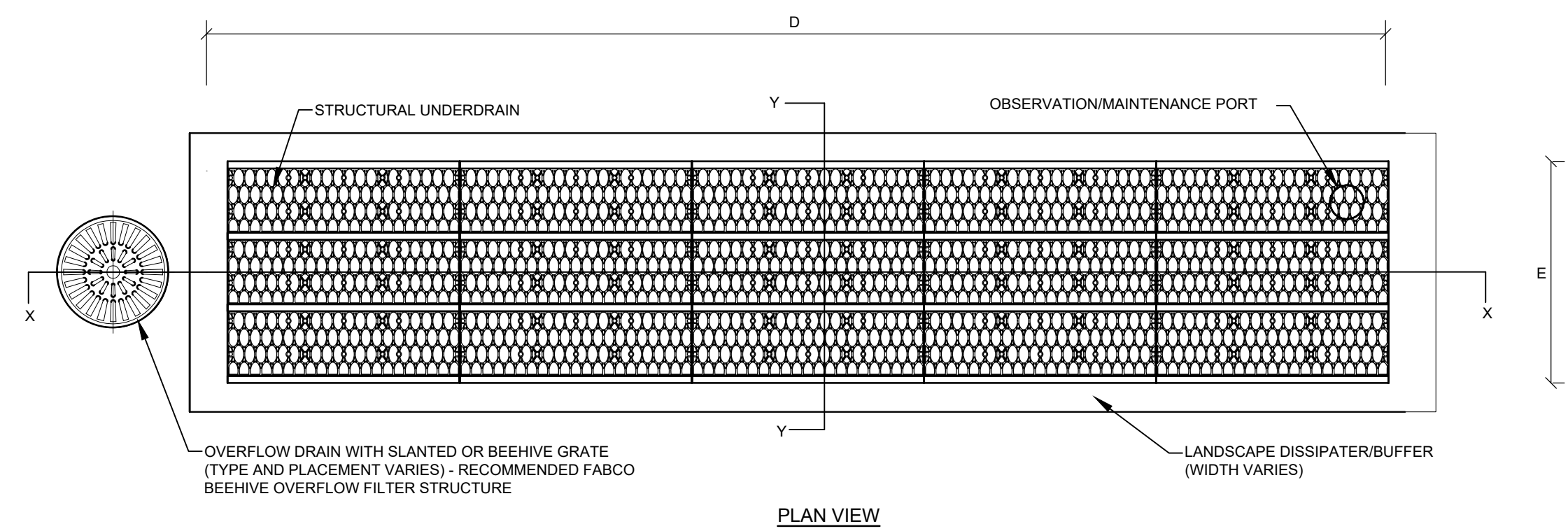
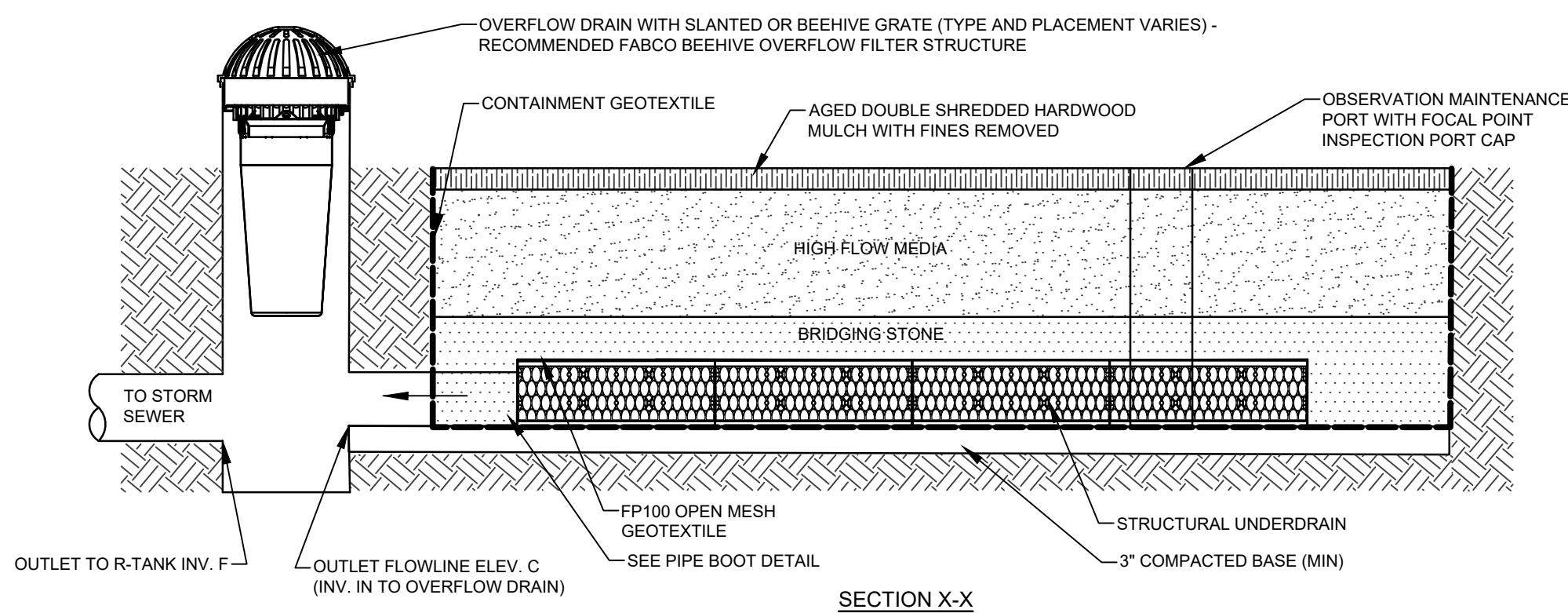
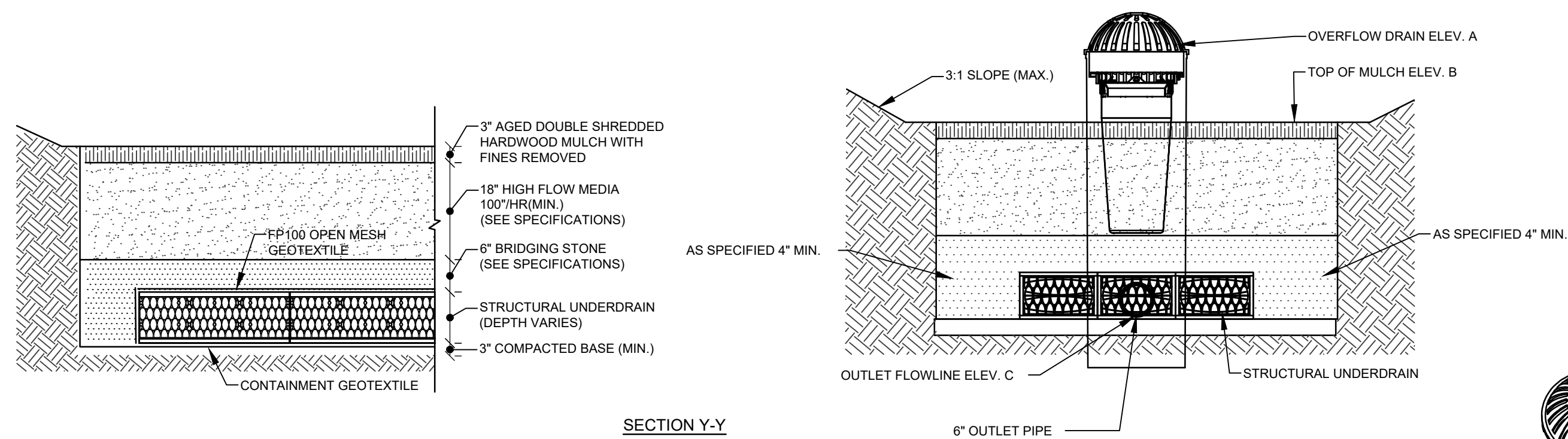
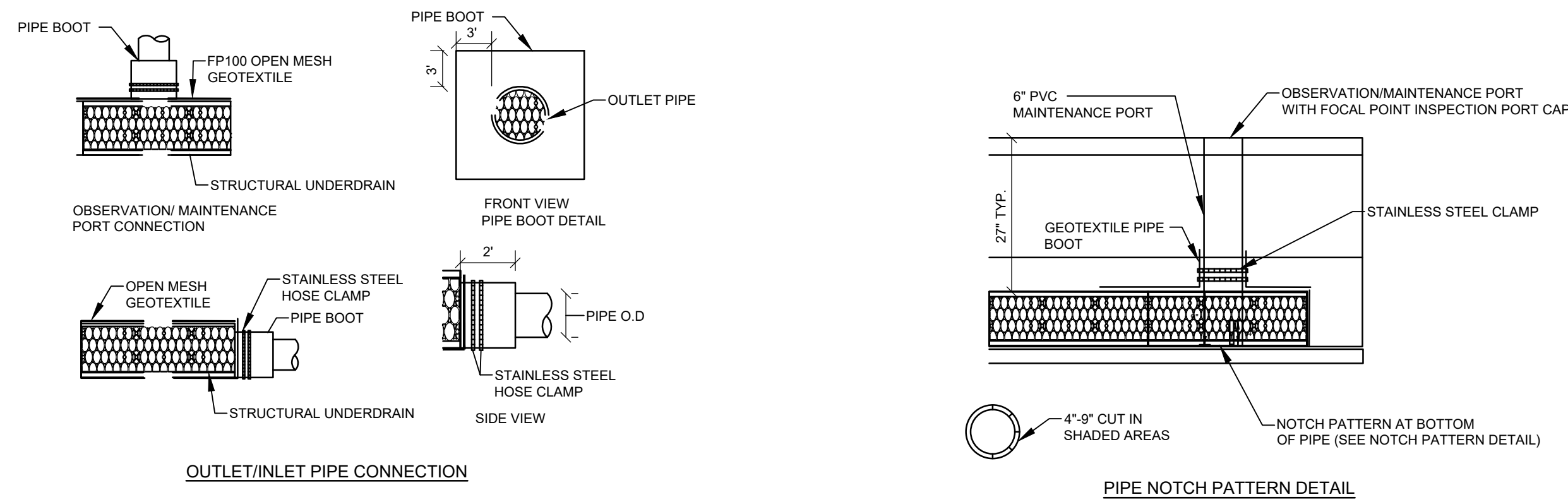
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.



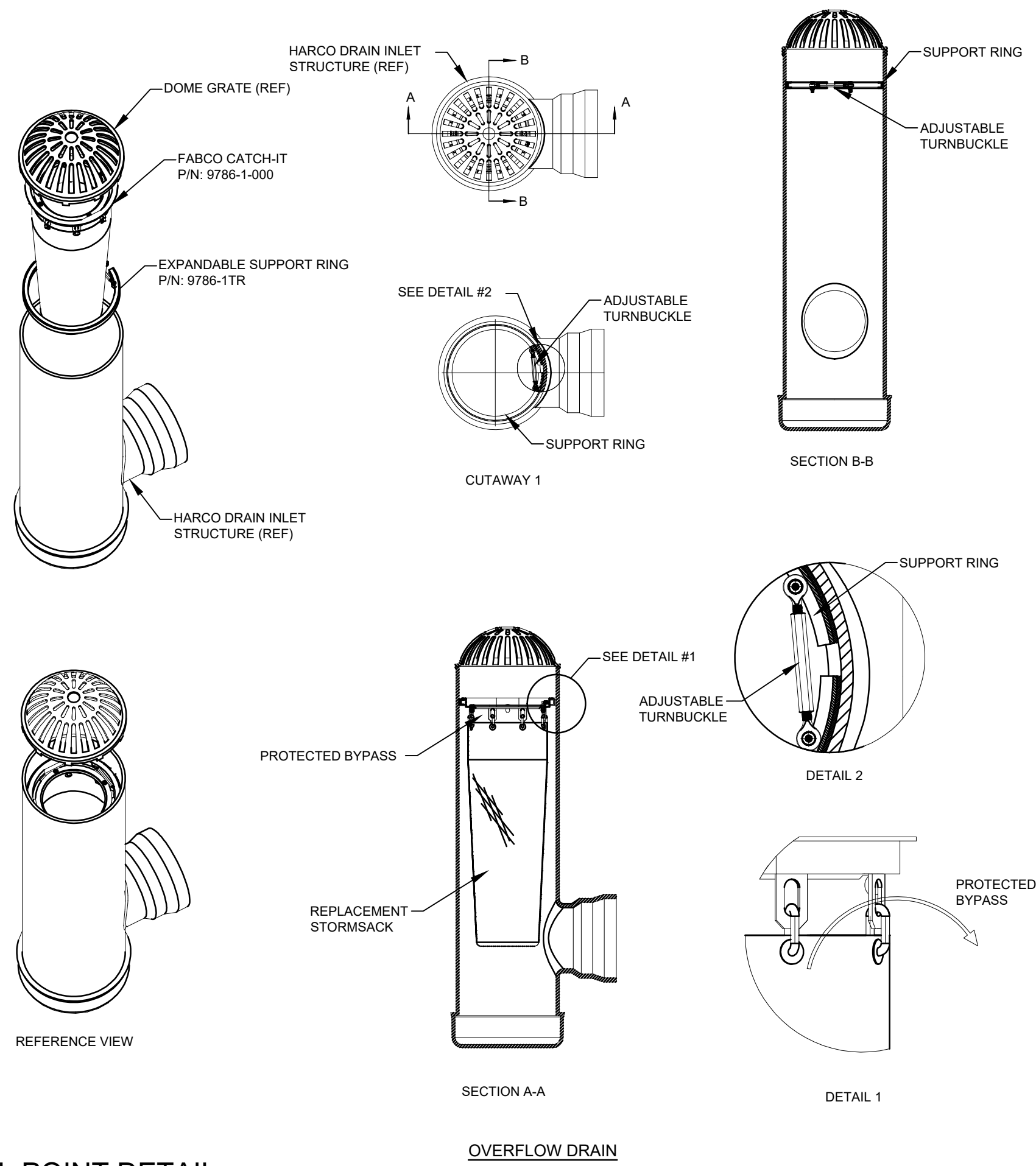
DETAILS
OF:
65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR:
STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	NTS
PROJECT	07360-01

SHEET 9 OF 11



FOCAL POINT CONSTRUCTION TABLE						
	ELEV. A	ELEV. B	INV. C	DIST D	DIST E	INV. F
FOCAL POINT 1	19.80'	19.00'	16.00'	15.00'	8.00'	15.40'



REV.	BY	DATE	STATUS	ISSUED TO CLIENT FOR REVIEW
A	HAH	08-10-21	DATE	STATUS

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.

SEBAGO
TECHNIQS
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel: 207-200-2100
WWW.SEBAGOTECHNIQS.COM

DETAILS
OF: 65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR: STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	NTS
PROJECT	07360-01

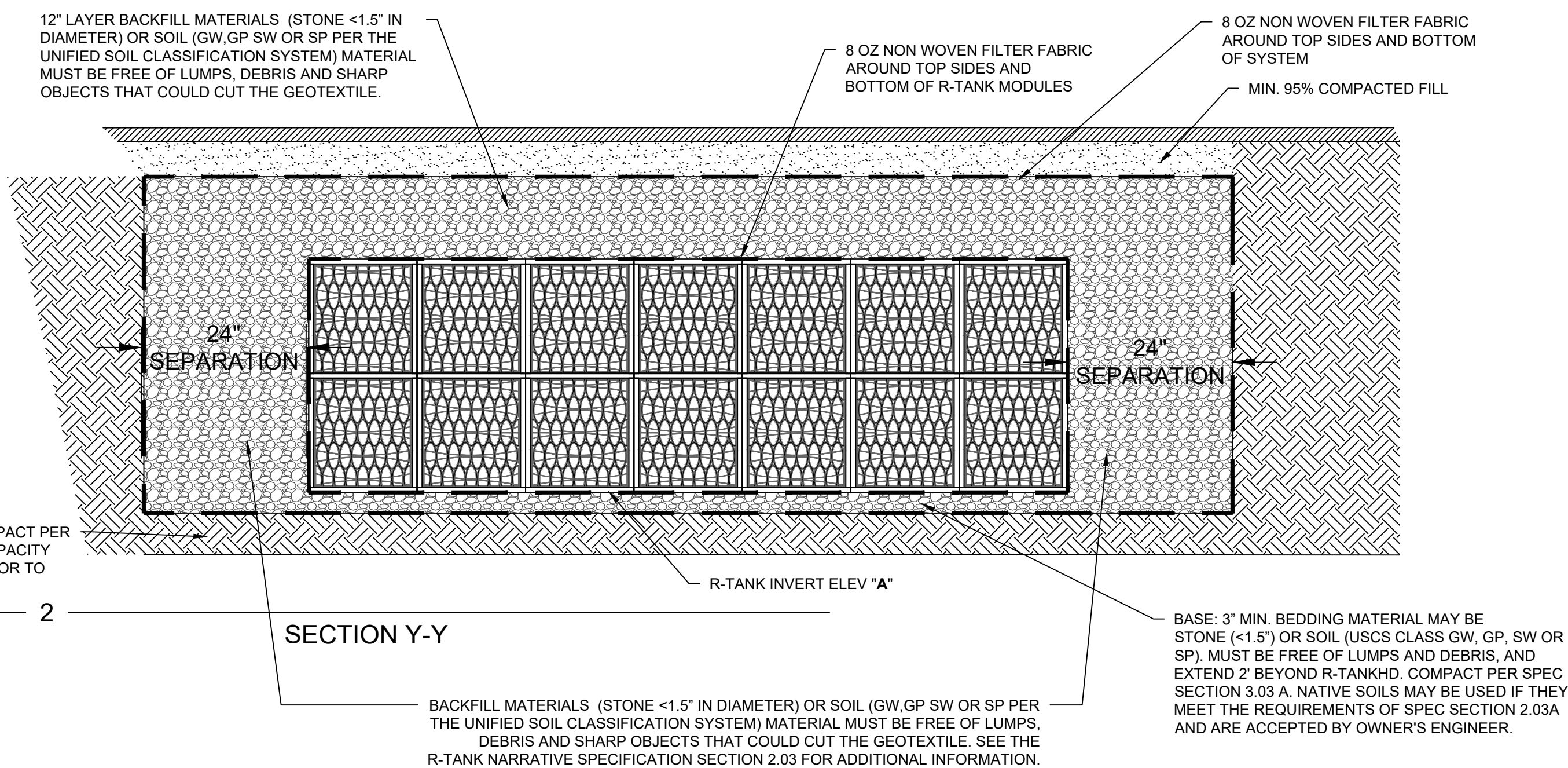
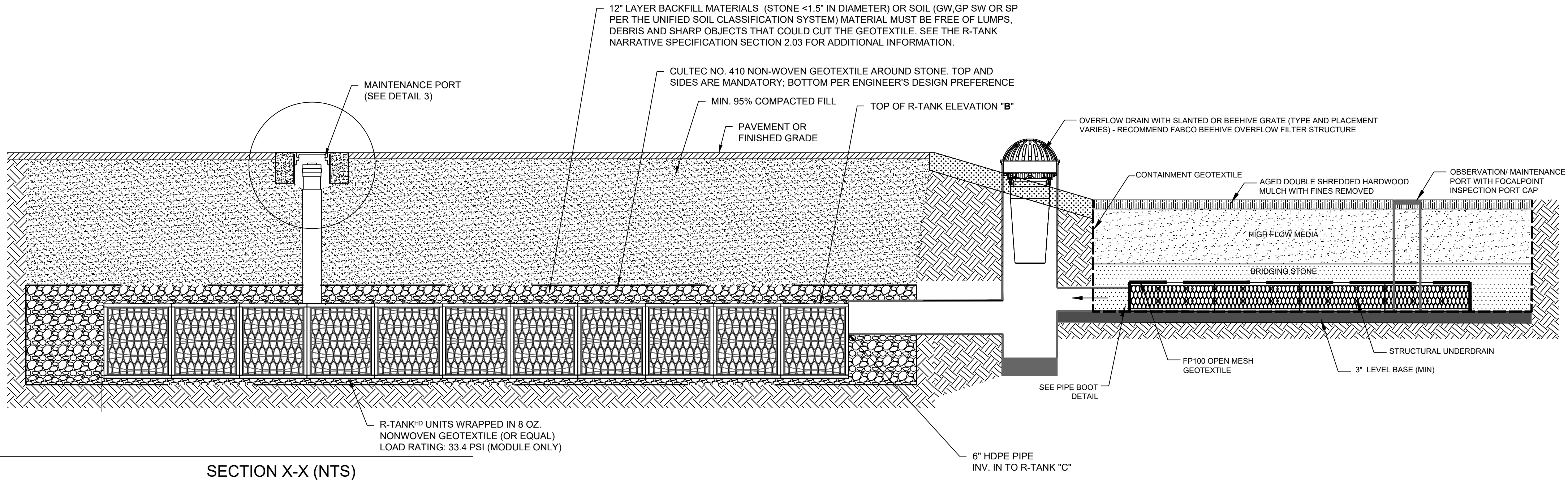
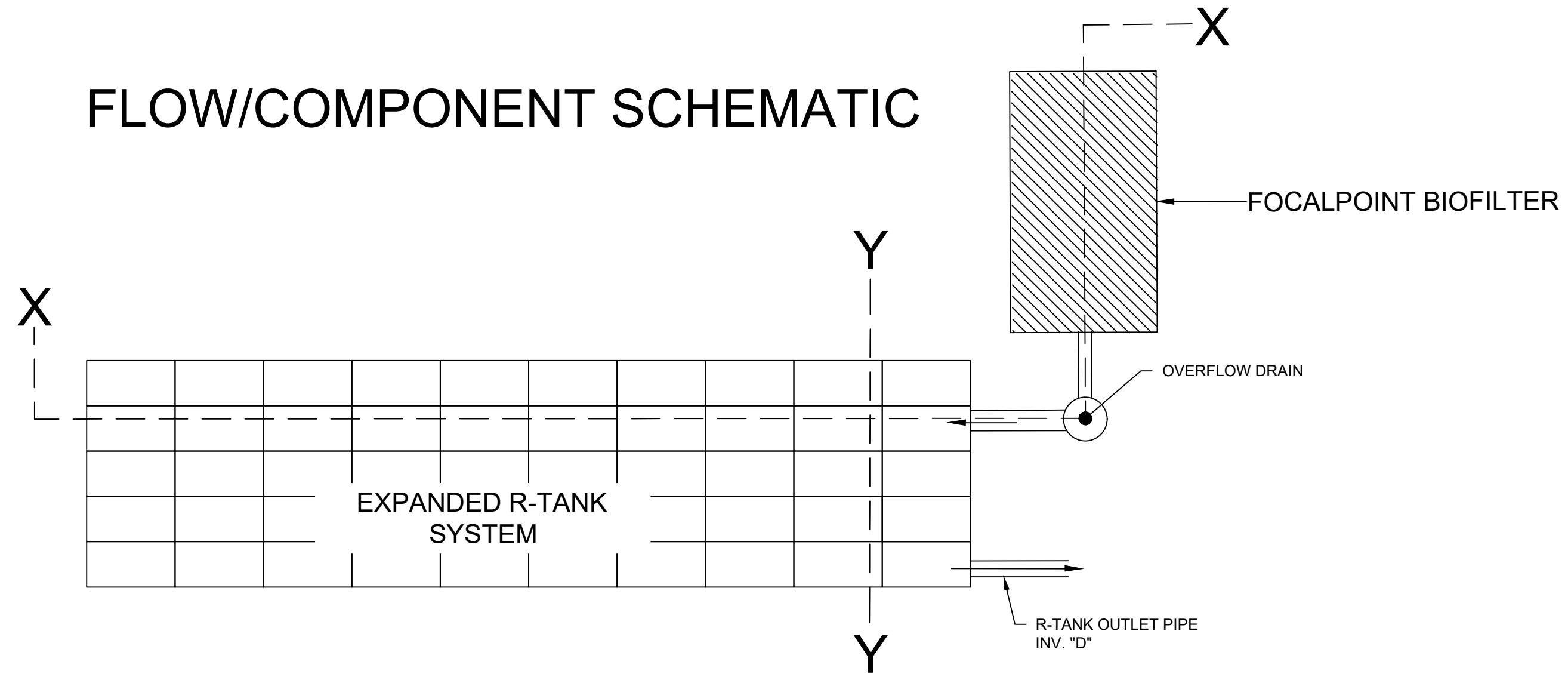
SHEET10 OF 11

NOT FOR
CONSTRUCTION
PROGRESS
PRINT

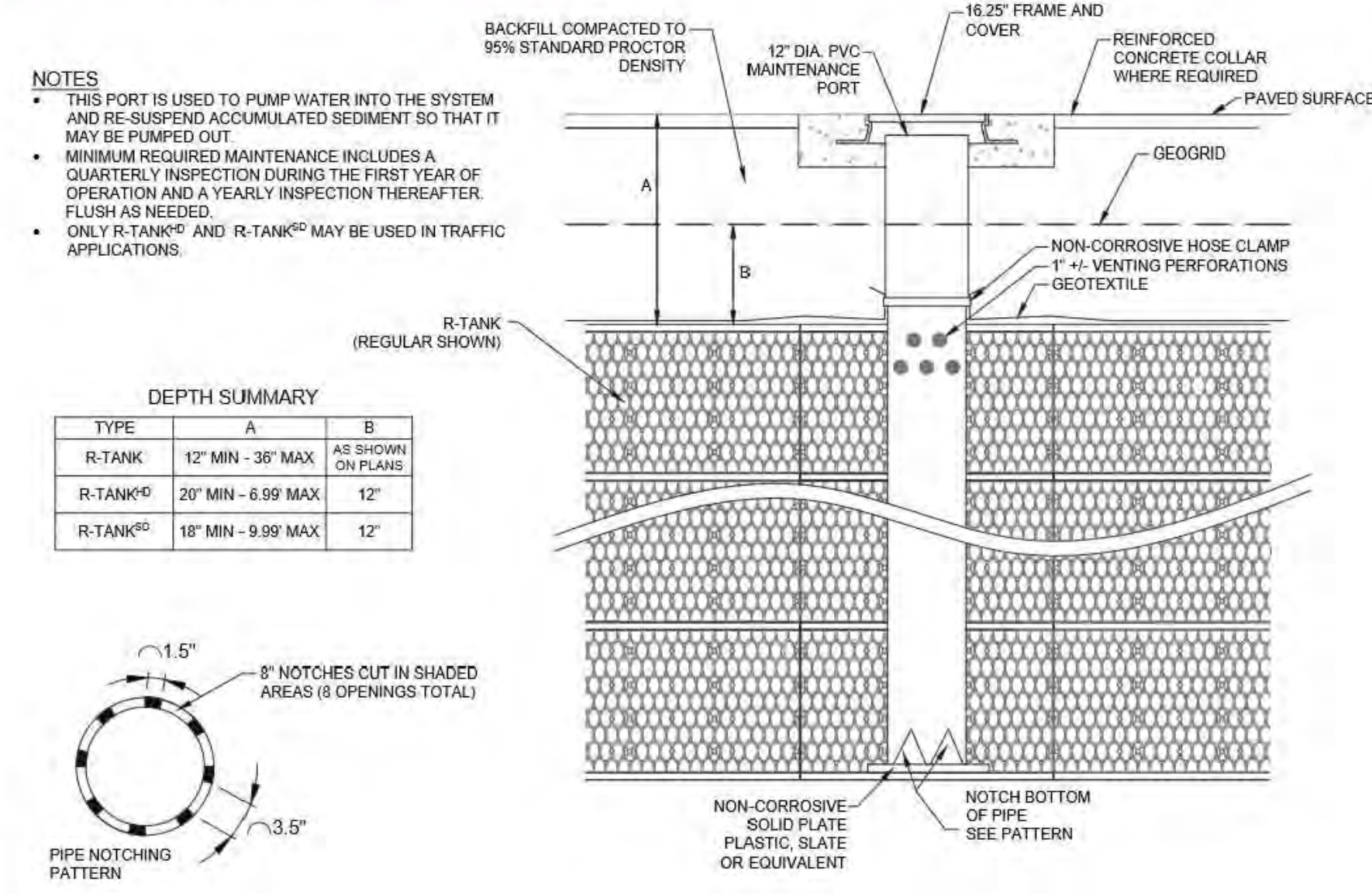
HENRY A. HESS, R.L.A. 4841

04/14/2022

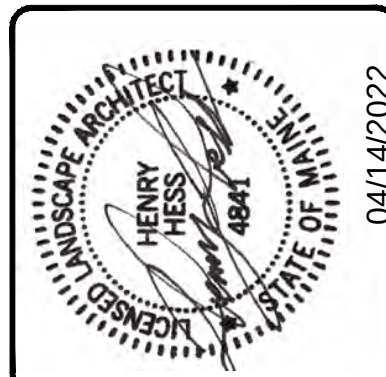
R-TANK KEY DIMENSIONAL DATA		
A	R-TANK INVERT	13.40'
B	TOP OF R-TANK ELEVATION	15.57'
C	PIPE INV. IN TO R-TANKS	15.00'
D	R-TANK OUTLET PIPE INV.	13.40'
	NUMBER OF R-TANKS	228 (12 x 19)
	R-TANK MODULE	SIZE 1.5



MAINTENANCE PORT



NOT FOR
CONSTRUCTION
PROGRESS
PRINT



REV.	BY	DATE	STATUS
A	HAH	08-10-21	ISSUED TO CLIENT FOR REVIEW

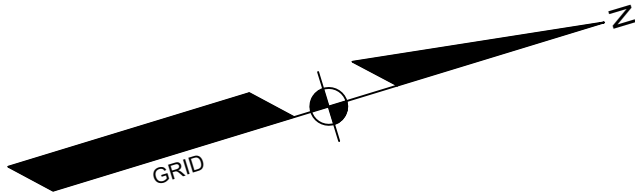
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.

SEBAGO
TECHNIQS
www.sebagotechniqs.com
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

DETAILS
OF:
65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR:
STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

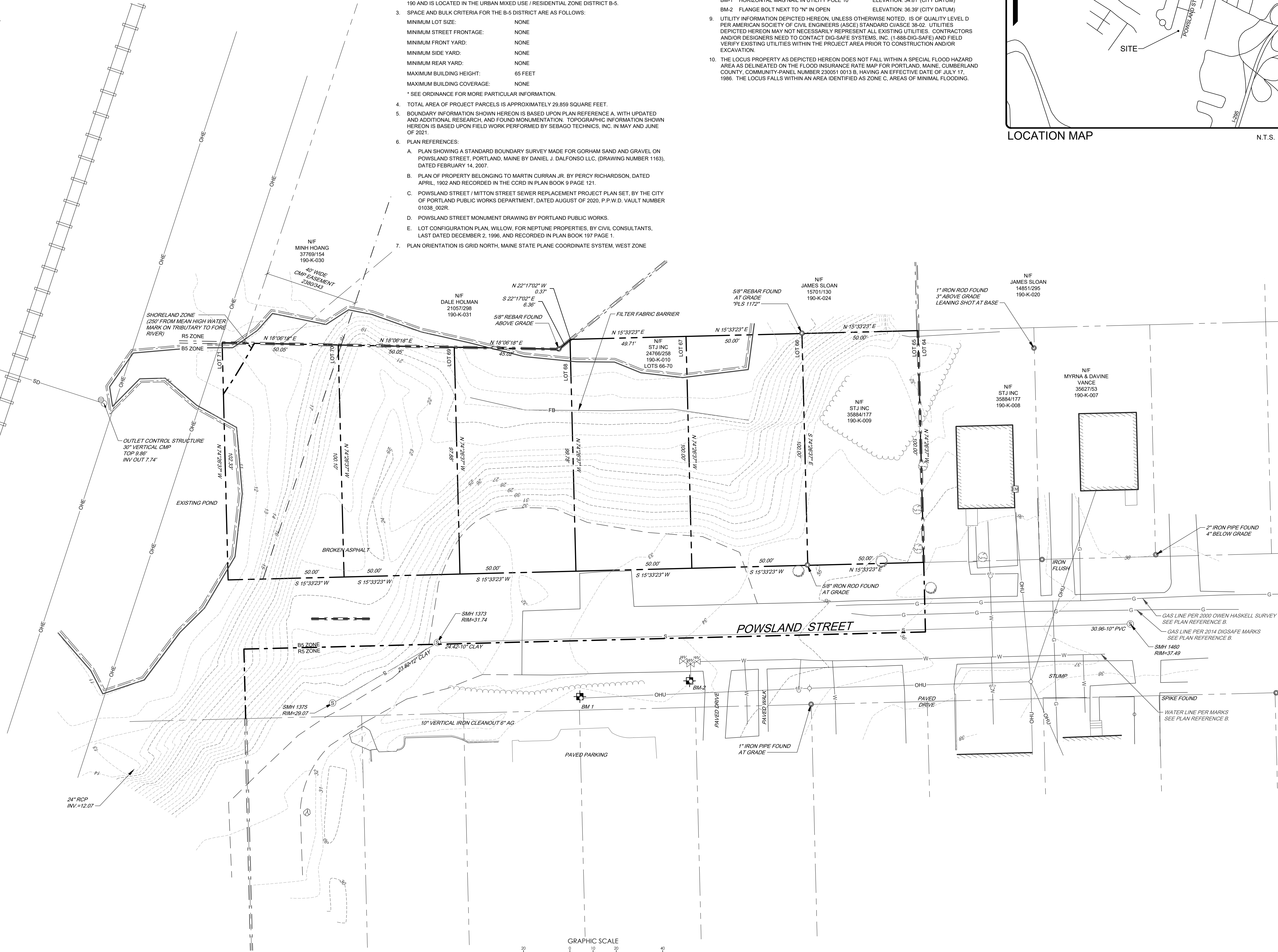
DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	NTS
PROJECT	07360-01

SHEET 11 OF 11



12" CMP
INV.=4.98

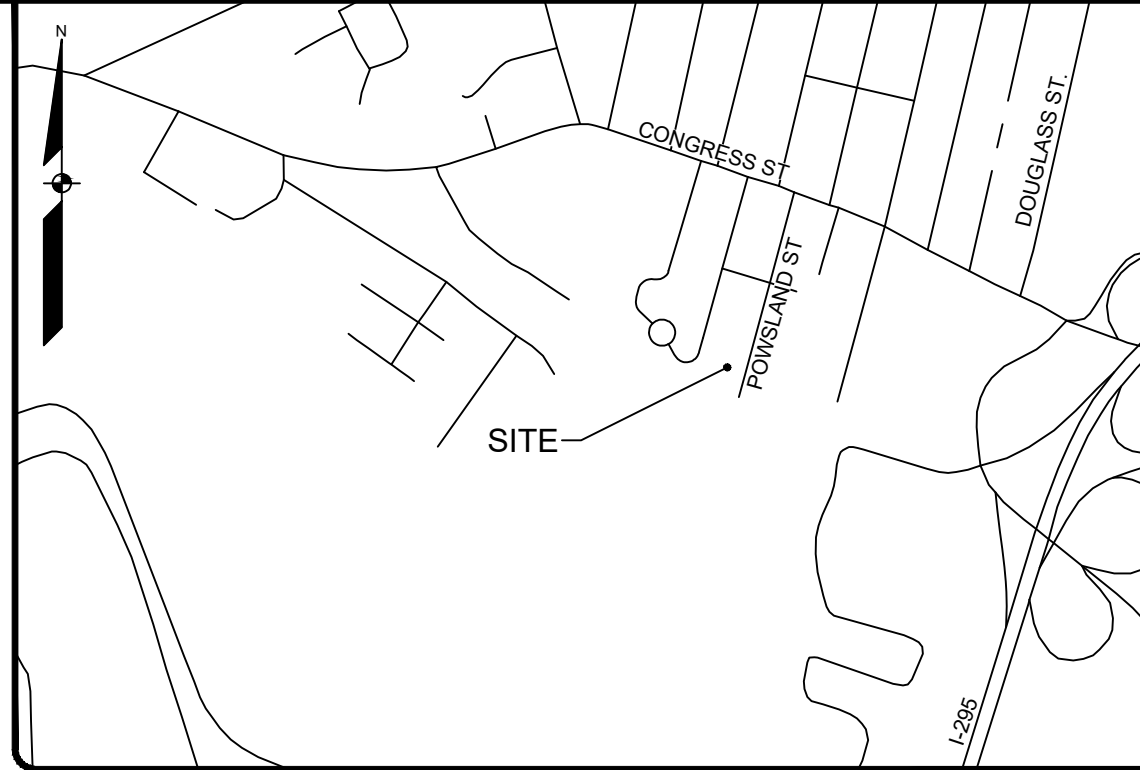
LEGEND	
EXISTING	
	PROPERTY LINE/R.O.W.
	ABUTTER LINE/R.O.W.
	SETBACK
	IRON PIPE/ROD
	CURVE/LINE NO.
	NOW OR FORMERLY
	BENCHMARK
	BUILDING
	DECK/STEPS/ OVERHANG
	EDGE PAVEMENT
	EDGE OF GRAVEL
	CURB LINE
	EDGE OF WATER
	TREELINE
	CONTOURS
	DECIDUOUS TREE
	SHRUB
	MULCH LINE
	SIGN
	GAS
	WATER
	WATER GATE VALVE
	WATER SHUT OFF
	HYDRANT
	SANITARY SEWER
	SANITARY MANHOLE
	STORM DRAIN
	CATCH BASIN
	OVERHEAD UTILITY
	ELECTRIC METER
	UTILITY POLE
	ZONE LINE
	ZONE LINE ON PL



GENERAL NOTES:

- THE RECORD OWNER OF THE PARCELS IS STJ INC BY THE FOLLOWING DEEDS RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS (CCRD) IN BOOK 24766, PAGE 258 (LOTS 66-70) AND BOOK 35884 PAGE 177 (LOTS 64 AND 65).
- THE PROPERTY IS SHOWN AS LOTS 9 AND 10, WITHIN BLOCK K ON THE CITY OF PORTLAND TAX MAP 190 AND IS LOCATED IN THE URBAN MIXED USE / RESIDENTIAL ZONE DISTRICT B-5.
- SPACE AND BULK CRITERIA FOR THE B-5 DISTRICT ARE AS FOLLOWS:
MINIMUM LOT SIZE: NONE
MINIMUM STREET FRONTAGE: NONE
MINIMUM FRONT YARD: NONE
MINIMUM SIDE YARD: NONE
MINIMUM REAR YARD: NONE
MAXIMUM BUILDING HEIGHT: 65 FEET
MAXIMUM BUILDING COVERAGE: NONE
* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
- TOTAL AREA OF PROJECT PARCELS IS APPROXIMATELY 29,859 SQUARE FEET.
- BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON PLAN REFERENCE A, WITH UPDATED AND ADDITIONAL RESEARCH, AND FOUND MONUMENTATION. TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED UPON FIELD WORK PERFORMED BY SEBAGO TECHINCS, INC. IN MAY AND JUNE OF 2021.
- PLAN REFERENCES:
A. PLAN SHOWING A STANDARD BOUNDARY SURVEY MADE FOR GORHAM SAND AND GRAVEL ON POWSLAND STREET, PORTLAND, MAINE BY DANIEL J. DALFONSO LLC, (DRAWING NUMBER 1163), DATED FEBRUARY 14, 2007.
B. PLAN OF PROPERTY BELONGING TO MARTIN CURRAN JR. BY PERCY RICHARDSON, DATED APRIL, 1902 AND RECORDED IN THE CCRD IN PLAN BOOK 9 PAGE 121.
C. POWSLAND STREET / MITTON STREET SEWER REPLACEMENT PROJECT PLAN SET, BY THE CITY OF PORTLAND PUBLIC WORKS DEPARTMENT, DATED AUGUST OF 2020, P.P.W.D. VAULT NUMBER 01038_002R.
D. POWSLAND STREET MONUMENT DRAWING BY PORTLAND PUBLIC WORKS.
E. LOT CONFIGURATION PLAN, WILLOW, FOR NEPTUNE PROPERTIES, BY CIVIL CONSULTANTS, LAST DATED DECEMBER 2, 1996, AND RECORDED IN PLAN BOOK 197 PAGE 1.
- PLAN ORIENTATION IS GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE

- 1802-NAD83. ELEVATIONS DEPICTED HEREON ARE NGVD29(CITY OF PORTLAND DATUM), BASED ON DUAL FREQUENCY GPS OBSERVATIONS.
- BENCHMARK:
BM-1 HORIZONTAL MAG NAIL IN UTILITY POLE 10 ELEVATION: 34.81' (CITY DATUM)
BM-2 FLANGE BOLT NEXT TO "N" IN OPEN ELEVATION: 36.39' (CITY DATUM)
 - UTILITY INFORMATION DEPICTED HEREON, UNLESS OTHERWISE NOTED, IS OF QUALITY LEVEL D PER AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE) STANDARD CHANCE 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.
 - 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 MINIMAL FLOODING.

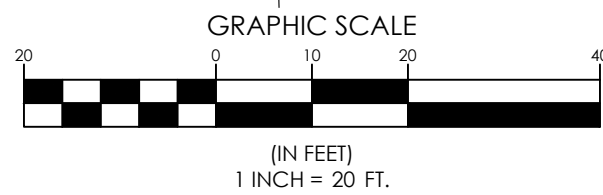


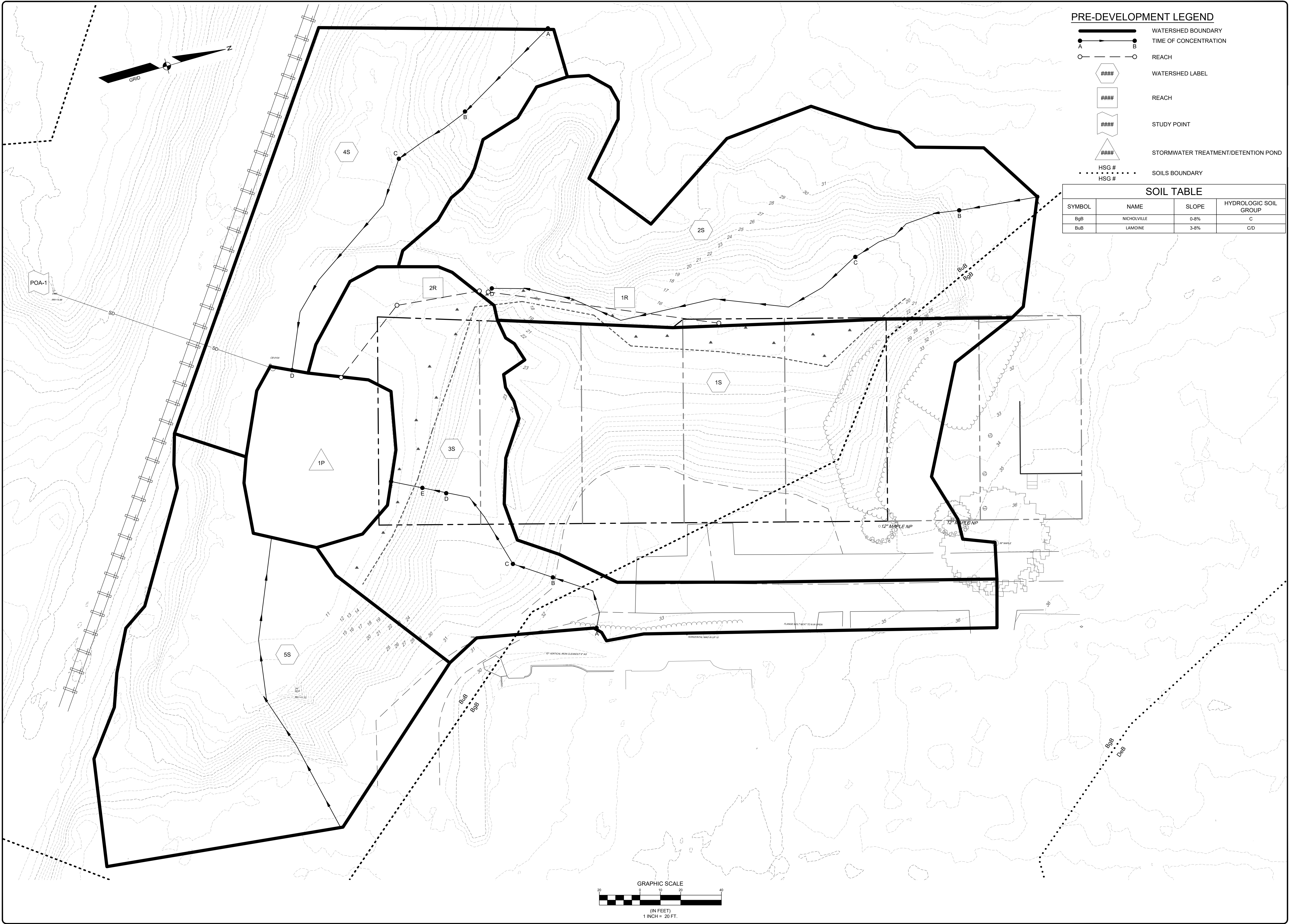
LOCATION MAP N.T.S.

ISSUED FOR CLIENT REVIEW			
REV.	BY	DATE	STATUS
A	MWE	9/24/2021	ISSUED FOR CLIENT REVIEW
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHINCS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHINCS, INC.			

SEBAGO
TECHINCS
WWW.SEAGOTECHINCS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

EXISTING CONDITIONS PLAN	
OF: LOTS 65-70 POWSLAND STREET PORTLAND, ME FOR RECORD OWNER: STJ, INC. P.O. BOX 58 GORHAM, ME 04038	
DESIGNED	-
DRAWN	TSL
CHECKED	MWE
DATE	09/22/2021
SCALE	1" = 20'
PROJECT	07361-01
SHEET 1 OF 1	





PRE-DEVELOPMENT LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- WATERSHED LABEL
- REACH
- STUDY POINT
- STORMWATER TREATMENT/DETENTION POND
- HSG #
- SOILS BOUNDARY

SOIL TABLE

SYMBOL	NAME	SLOPE	HYDROLOGIC SOIL GROUP
BgB	NICHOLVILLE	0-8%	C
BuB	LAMOINE	3-8%	C/D

NOT FOR
CONSTRUCTION
PROGRESS
PRINT



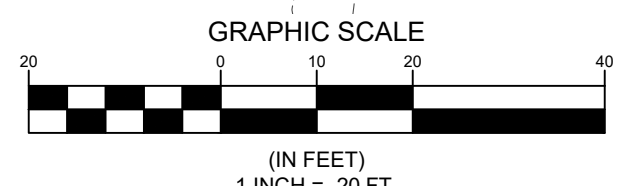
REV	BY	DATE	STATUS	ISSUED TO CLIENT FOR REVIEW
A	HAH	08-10-21	DATE:	STATUS:

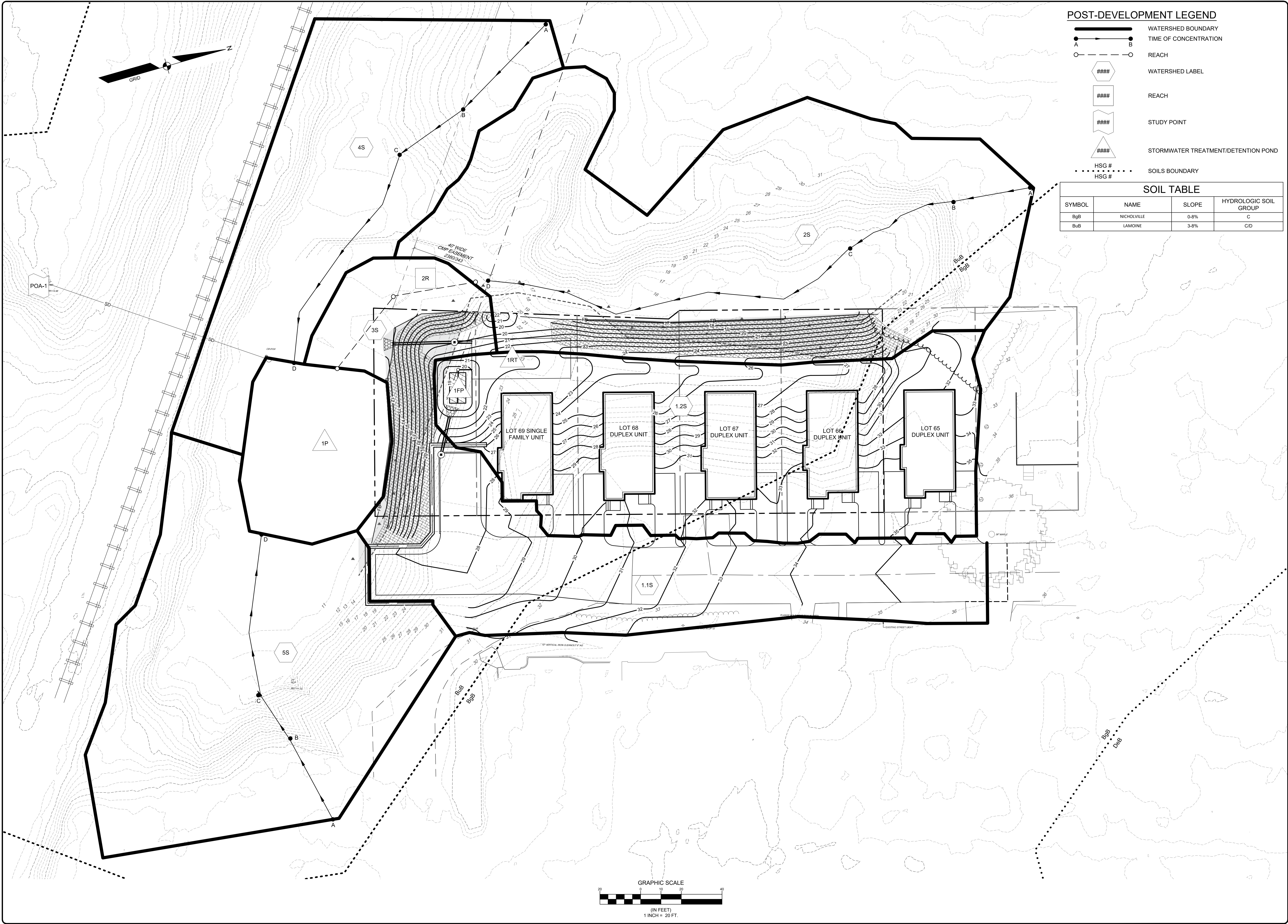
SEBAGO
T E C H N I C S
www.sebagotechnics.com
75 John Roberts Rd.
Sullivan, ME 04106
South Portland, ME 04106
Tel. 207-200-2100

PRE-DEVELOPMENT STORMWATER PLAN
OF: 65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR: STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 20'
PROJECT	07360-01

SHEET 1 OF 2





NOT FOR CONSTRUCTION
PROGRESS PRINT

PAUL D. OSTROWSKI PELLITS

STATE OF MAINE
PAUL D. OSTROWSKI
No. 01175
PROFESSIONAL
03/14/2023

ISSUED TO CLIENT FOR REVIEW
A. HAH 08-10-21
REV. BY: NICHOLVILLE
DATE: 08-10-21
STATUS: ISSUED TO CLIENT FOR REVIEW

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.

SEBAGO TECHNIQS
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100
WWW.SEAGOTECHNIQS.COM

POST DEVELOPMENT STORMWATER PLAN
OF: 65-73, 93 POWSLAND STREET
PORTLAND, MAINE
FOR: STJ, INC.
P.O. BOX 58
GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 20'
PROJECT	07360-01

SHEET 2 OF 2

PLAN OF PROPERTY

BELONGING TO

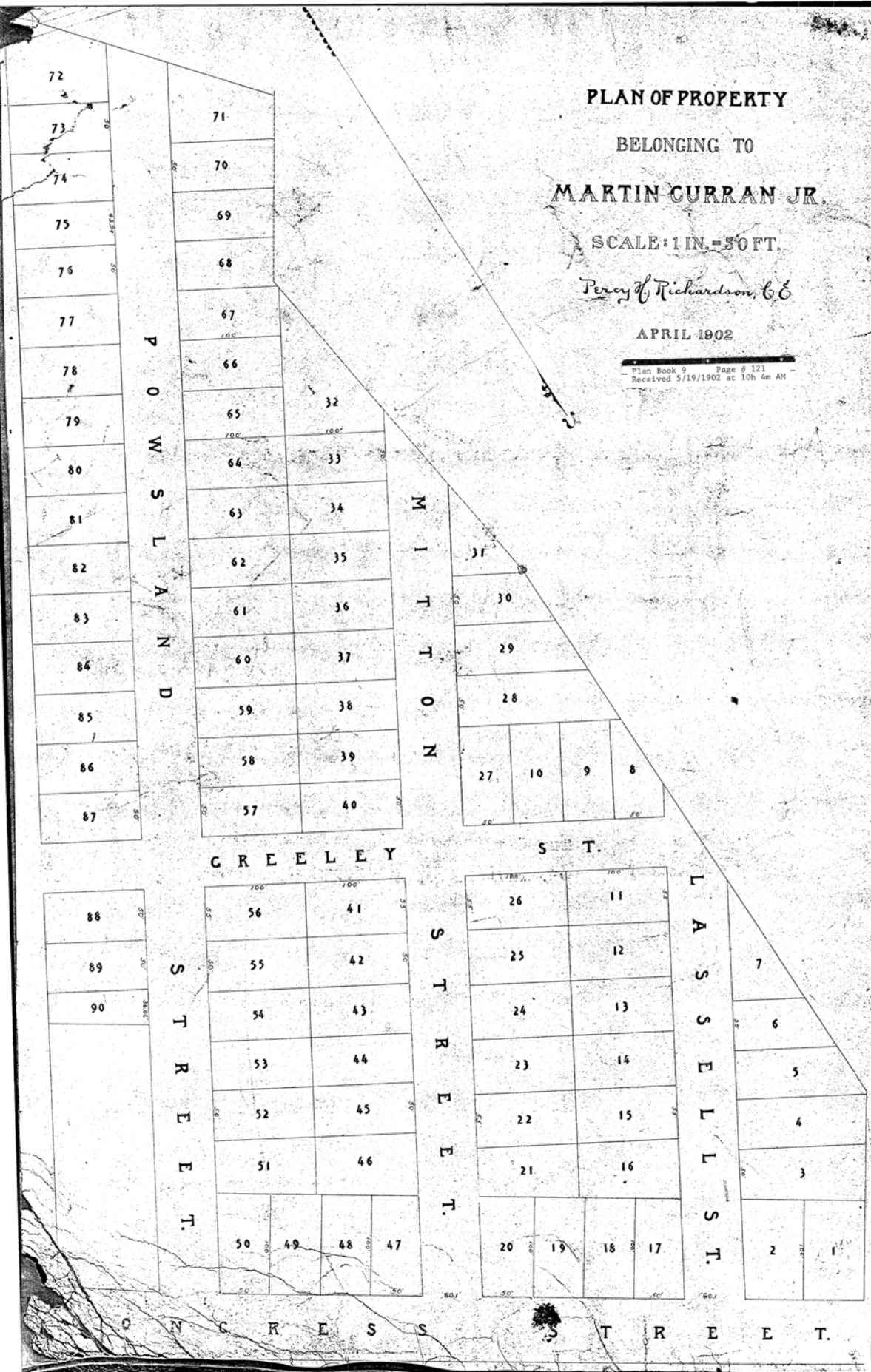
MARTIN CURRAN JR.

SCALE: 1 IN. = 50 FT.

Percy H. Richardson, C.E.

APRIL 1902

Plan Book 9 Page # 121
Received 5/19/1902 at 10h 4m AM





2 SOUTH ELEVATION
1/4" = 1'-0"



1 EAST ELEVATION
1/4" = 1'-0"

© 2019 RYAN SENATORE
ARCHITECTURE

POWSLAND STREET APARTMENTS
63 POWSLAND STREET
PORTLAND, MAINE

RSA
RYAN SENATORE
ARCHITECTURE
500 CONGRESS STREET
PORTLAND, MAINE 04101
207-650-6414
senatorearchitecture.com

CONSULTANTS:

REVISIONS:
PROGRESS PRINT ONLY
Not for Construction
OCTOBER 11, 2021

DATE:

PROJECT No. 2065

DRAWN BY: RRT, RJS, JPF

CHECKED BY: RJS

SCALE: AS NOTED

SHEET TITLE:
ELEVATIONS

A2-0



2 NORTH ELEVATION
1/4" = 1'-0"



1 WEST ELEVATION
1/4" = 1'-0"

© 2019 RYAN SENATORE
ARCHITECTURE

POWSLAND STREET APARTMENTS
63 POWSLAND STREET
PORTLAND, MAINE

RSA
RYAN SENATORE
ARCHITECTURE
500 CONGRESS STREET
PORTLAND, MAINE 04101
207-650-6414
senatorearchitecture.com

CONSULTANTS:

REVISIONS:
PROGRESS PRINT ONLY
Not for Construction
OCTOBER 11, 2021

DATE:

PROJECT No. 2065

DRAWN BY: RRT, RJS, JPF

CHECKED BY: RJS

SCALE: AS NOTED

SHEET TITLE:
ELEVATIONS

A2-1



4 SOUTHEAST ELEVATION



3 SOUTHWEST ELEVATION



2 NORTHWEST ELEVATION



1 NORTHEAST ELEVATION

© 2019 RYAN SENATORE
ARCHITECTURE

POWLSLAND STREET APARTMENTS
63 POWLSLAND STREET
PORTLAND, MAINE

RSA
RYAN SENATORE
ARCHITECTURE
500 CONGRESS STREET
PORTLAND, MAINE 04101
207-650-6414
senatorearchitecture.com

CONSULTANTS:

REVISIONS:
PROGRESS PRINT ONLY
Not for Construction
OCTOBER 11, 2021

DATE:

PROJECT No. 2065

DRAWN BY: RRT, RJS, JPF

CHECKED BY: RJS

SCALE: AS NOTED

SHEET TITLE:
PERSPECTIVE
VIEWS

A2-2



2 VIEW SOUTH DOWN POWSLAND STREET



1 VIEW NORTH UP POWSLAND STREET

© 2019 RYAN SENATORE
ARCHITECTURE

POWSLAND STREET APARTMENTS
63 POWSLAND STREET
PORTLAND, MAINE



**RYAN SENATORE
ARCHITECTURE**
500 CONGRESS STREET
PORTLAND, MAINE 04101
207-650-6414
senatorearchitecture.com

CONSULTANTS:

REVISIONS:
PROGRESS PRINT ONLY
Not for Construction
OCTOBER 11, 2021

DATE:

PROJECT No. 2065

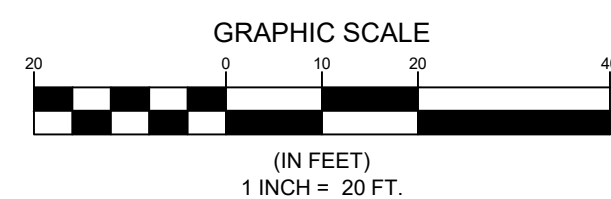
DRAWN BY: RRT, RJS, JPF

CHECKED BY: RJS

SCALE: AS NOTED

SHEET TITLE:
**PERSPECTIVE
VIEWS**

A2-3

[illegible]

OVERALL GRADING AND UTILITY PLAN

OF:

LOTS 65-70

POWSLAND STREET

PORTLAND, MAINE

FOR

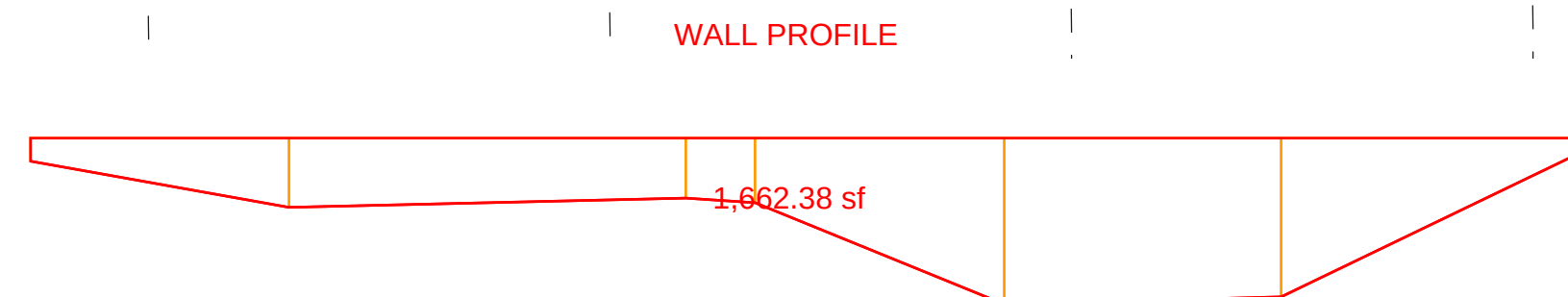
STJ, INC.

P.O. BOX 58

GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 10'
PROJECT	07360-01

SHEET 4 OF 11



GRAPHIC SCALE

(IN FEET)
1 INCH = 20 FT.

[illegible]

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-206-2100

OVERALL GRADING AND UTILITY PLAN	
OF:	LOTS 65-70
	POWNSLAND STREET
	PORTLAND, MAINE
FOR:	STJ INC.
	P.O. BOX 59
	GORHAM, ME 04038

DESIGNED	HAH
DRAWN	SRC
CHECKED	HAH
DATE	10/01/21
SCALE	1" = 10'
PROJECT	07360-01

SHEET 4 OF 11



Jimmy Dealaman <jdealaman@portlandmaine.gov>

FW: 69 - 73 Powsland Street, Portland, Maine Sea Level rising/flooding

Date <dholman1@maine.rr.com>
To: jdealaman@portlandmaine.gov

Sat, Dec 11, 2021 at 11:50 AM

There will be sea level rising issues back up into the existing culvert and any new improvements.

From: Markesich, Christopher <christopher.markesich@fema.dhs.gov>
Sent: Monday, December 6, 2021 2:03 PM
To: Dale <dholman1@maine.rr.com>
Subject: RE: 69 - 73 Powsland Street, Portland, Maine Sea Level rising/flooding

Good afternoon Mr. Holman,

I have attached a copy of the preliminary Flood Insurance Rate Map (FIRM) for your location. The FIRM is not slated to go effective until sometime in 2023 but that figure is based on resolution of any /all appeals and protests from various parties.

The map itself can be downloaded by visiting our map service center website at: [FEMA Flood Map Service Center | Search All Products](#). Once on that page there will be a series of pull down options for State (Maine), County (Cumberland) and community (City of Portland). Once you choose those options, click the blue search button.

Under the search results, select the "Preliminary Products" folder, and then the "Preliminary FIRM Panels" arrow located to the left of the text. Do not click "Download All" or your computer will be undertaking a lengthy download of all the Flood Maps in the county!

Lastly you want to locate the correct Product ID that pertains to your property which is 23005C0693F and that is located on page 3 of the results. You should then be able to download a .pdf copy of the preliminary map.

Please let me know if you have any questions once you download the map or if you have difficulty doing so.

Thank you,

Chris Markesich

From: Dale <dholman1@maine.rr.com>
Sent: Sunday, December 5, 2021 10:07 AM
To: Markesich, Christopher <christopher.markesich@fema.dhs.gov>
Subject: FW: 69 - 73 Powsland Street, Portland, Maine Sea Level rising/flooding

Good morning Chris,

I hope that this email message finds you doing well.

Read your story this a.m. regarding the Capisic Brook area that is part of the new updated flood maps.

Do you know where I can obtain these updated maps?

I live at **10 Willow Lane, Portland, Maine**, and I have been in a land dispute (15 years) with the owners STJ, INC. (relentless developer Tom Shaw that own Gorham Sand and Gravel. Brother to the Shaw Brothers) that keeps trying to build upon the watercourse that abuts my property.

Attached you will find my legal complaint/response to the City of Portland for illegal zoning and allowing this proposed development to continue.

Thank you for your time!

Best,

Dale Holman

10 Willow Lane

Portland, ME 04102

207-409-9307

From: Dale <dholman1@maine.rr.com>

Sent: Monday, November 29, 2021 10:04 AM

To: 'viewermail@newshour.org' <viewermail@newshour.org>

Subject: 69 - 73 Powsland Street, Portland, Maine Sea Level rising/flooding

Please forward to Sam Weber and Christopher Booker regarding their excellent story/coverage of the sea level rise/flooding in Maine:

<https://www.pbs.org/newshour/show/barely-a-cloud-in-the-sky-and-portland-maine-is-flooding>

I really appreciate your work as I am a former National Account Sales Manager for VIACOM/Simon & Schuster/Macmillan Publishing, USA.

Best,

Dale Holman

10 Willow Lane

Portland, ME 04102

207-409-9307

From: Dale <dholman1@maine.rr.com>
Sent: Monday, November 29, 2021 9:55 AM
To: 'gbowness@gmri.org' <gbowness@gmri.org>; 'dreidmiller@gmri.org' <dreidmiller@gmri.org>
Subject: FW: 69 - 73 Powsland Street, Portland, Maine

Any known place to obtain maps/information/resources?

From: Dale <dholman1@maine.rr.com>
Sent: Monday, November 29, 2021 9:49 AM
To: 'tommy.higgins@usda.gov' <tommy.higgins@usda.gov>
Subject: FW: 69 - 73 Powsland Street, Portland, Maine

Good morning Tommy,

I hope that you had an enjoyable Thanksgiving holiday weekend.

Fifteen years ago the Scarborough office was very helpful with providing me flood maps.

Do you know where I can obtain updated flood maps for 73 Powsland Street, Portland, Maine?

Best,

Dale Holman

From: Dale <dholman1@maine.rr.com>
Sent: Monday, November 29, 2021 9:45 AM
To: 'nrcm@nrcm.org' <nrcm@nrcm.org>
Subject: FW: 69 - 73 Powsland Street, Portland, Maine

Good morning All,

I hope that this email finds you doing well, and that you enjoyed your Thanksgiving holiday.

I have an ongoing 15 year land dispute with an abutting property owner that attempts to develop in a watercourse/retention pond/sea level rise from backed up tide water.

Do you have a more up-to-date sea level rise map than the 2006 map from your website?

Is FEMA or other agencies that would be a resource?

Thank you!

Dale Holman

10 Willow Lane

Portland, ME 04102

207-409-9307

From: Dale <dholman1@maine.rr.com>

Sent: Friday, November 26, 2021 3:36 PM

To: 'HHess@sebagotechnics.com' <HHess@sebagotechnics.com>

Cc: 'Jen Thompson' <jlt@portlandmaine.gov>; 'Christine Grimando' <cdg@portlandmaine.gov>;

'jbartlett@sebagotechnics.com' <jbartlett@sebagotechnics.com>; 'mek@sebagotechnics.com'

<mek@sebagotechnics.com>; 'cmarchese@sebagotechnics.com' <cmarchese@sebagotechnics.com>;

'madams@sebagotechnics.com' <madams@sebagotechnics.com>

Subject: 69 - 73 Powsland Street, Portland, Maine

Henry,

I am in receipt of your letter dated November 18, 2021 to my area neighbors (attached Gallery jpg).

There is a pending lawsuit regarding the legality of the zoning to this area.

I am confident that I will prevail as this illegal zone change by the City is out of the scope for statutes of limitations to apply.

I have to question your company's work as in the past they attempted to mislead the Portland Planning Department with its stormwater calculations that Woodward & Curran pointed out in their letter dated November 16, 2007 (attached Curtis Letter 11-20-07 page 4).

I still have not seen any complete work where your company or any others have addressed the following items:

Stormwater run-off issues

Geo technical study of the land

Wetland issues

Sea level rising

Written permission/rights to maintain the drainage on the CMP and Federal railroad property

Sea level rise is real. Orlando Delogu has been telling us this for years.

Science:

<https://www.pbs.org/newshour/show/barely-a-cloud-in-the-sky-and-portland-maine-is-flooding>

https://legislature.maine.gov/legis/bills/bills_129th/billtexts/HP040701.asp

I understand, as I have never met an engineer that doesn't believe they can build anything anywhere.

Good luck!

Best,

Dale J. Holman

10 Willow Lane

Portland, ME 04102

From: Dale <dholman1@maine.rr.com>

Sent: Wednesday, October 13, 2021 7:00 PM

To: 'cdg@portlandmaine.gov' <cdg@portlandmaine.gov>

Cc: 'planning@portlandmaine.gov' <planning@portlandmaine.gov>; 'planningboard@portlandmaine.gov' <planningboard@portlandmaine.gov>; 'bmazer@perkinsthompson.com' <bmazer@perkinsthompson.com>

Subject: 69 - 73 Powsland Street, Portland, Maine

Good evening Ms. Grimando,

It's my understanding that the owner STJ, Inc./Tom Shaw/Gorham Sand & Gravel will be proposing five house lots to be built upon the grandfathered lots in the illegally zoned area of Powsland Street, Portland, Maine.

This irresponsible developer has been attempting to illegally develop here since 2006 (see attached). The developer still has not addressed any of Alex Jaegerman's attached concerns:

How will the storm water flooding issues be resolved? (attached photo)

Geo technical study of the land

Wetland issues

Sea level rising

Written permission/rights to maintain the drainage on the CMP and railroad property.

My expert witness added:

Mr. Holman:

I received your email; I took the liberty of reexamining all of Sewell, Powsland, Mitton streets, Willow Circle development and then crossed over to Hobart Street's furthest extension. I drove and walked to see the lay of the land. It is what is has been for a century or more, a natural buffer area absorbing runoff waters from the upland side and sea level rise from Portland's inner harbor. The steep gulleys invite indiscriminate filling; but that fill is unstable. Moreover, the water levels at the foot of Sewell Powsland, and Mitton rise and fall with annual snow, rain, storm surges, etc.

This morning I spoke at some length with attorney AJ.

I'm knowledgeable about land use law; But you need a hydrologist as well; A person who knows the value of wetlands that act as a buffer between solid upland areas and open waters; a person who designs sewer systems, storm water runoff systems is the expert you need. Illegal filling by Gorham Sand & Gravel or anyone else including the city along lower Powsland should be enjoined. Obviously any filling from behind lower Mitton St, Willow Lane properties closest to the water and from the Hobart Street extension should not be permitted. These are unbuildable natural areas in my mind; the gulleys and the vegetation they support protect the housing that is in place. An expert hydrologist can document the unbuildable character of this land and show worst case scenarios. Sea level rise suggests the situation will grow worse overtime. The other thing to be enjoined and cleaned up is the illegal dumping of trash at the foot of Powsland. Large granite stones prevent driving from Sewell to Powsland. A similar layering of stones should block off the turnaround and dumping areas at the foot of Powsland. I witnessed a pickup dumping into the gully at the foot of Powsland as I made my tour yesterday. I'd stay on the city's back; filling, dumping and certainly any large scale development should not be permitted on unstable, previously filled land in/on lower Powsland St. or any of the street areas noted above.

O. E. Delogu

I am moving forward with a Federal Lawsuit that will involve the Superior Court, State of Maine, and I am undecided to enjoin STJ, INC. If anything they will be called as a witness along with their attorney.

Please let know if you have any questions or would like to have a conversation.

Best,

Dale J. Holman

10 Willow Lane

Portland, ME 04102

207-409-9307

From: Christine Grimando <cdg@portlandmaine.gov>

Sent: Tuesday, November 5, 2019 12:41 PM

To: Dale <dholman1@maine.rr.com>

Subject: Re: Petition for City Planner to request Zoning Department to change B5 zone on Powsland Street, Portland, Maine

Mr. Holman,

Thank you for your email, and the attachments. However, if you're interested in an amendment to the City's zoning map, the attachments do not begin that process. Property owners can apply for zoning map amendments for their property (information on different application types and processes are here: <http://portlandmaine.gov/2002/Application-Types-Applicability-and-Chec>). The City may also initiate zoning map or text changes, but there aren't currently plans to change the zoning in this area. If I can provide any additional clarification on the process, please don't hesitate to let me know.

Christine

Christine Grimando, AICP
Acting Director
Planning & Urban Development Department
[389 Congress Street](#)
[Portland, Maine 04101](#)
cdg@portlandmaine.gov
Ph: (207) 874-8608

From: Dale <dholman1@maine.rr.com>

Sent: Saturday, November 2, 2019 9:06 PM

To: 'Ben.Chipman@legislature.maine.gov' <Ben.Chipman@legislature.maine.gov>

Subject: FW: Petition for City Planner to request Zoning Department to change B5 zone on Powsland Street, Portland, Maine

From: Dale <dholman1@maine.rr.com>

Sent: Saturday, November 2, 2019 7:48 PM

To: 'richard.farnsworth@legislature.maine.gov' <richard.farnsworth@legislature.maine.gov>

Cc: bbatson@portlandmaine.gov

Subject: FW: Petition for City Planner to request Zoning Department to change B5 zone on Powsland Street, Portland, Maine

Good evening Mr. Farnsworth,

Please see below email and attached items.

It's State of Maine Legislative Law that any zone change must follow a legal process, and the City of Portland never perfected nor followed the legal procedure to change the Powsland Street B5 Zone.

I am requesting that you get involved as this is a State issue not just City.

Also, please let me know if there are any other contacts that I should be reaching out to (Governor, State Attorney General, Federal contacts, etc.)?

Best,

Dale J. Holman

207-409-9307

From: Dale <dholman1@maine.rr.com>

Sent: Saturday, November 2, 2019 7:10 PM

To: 'cdg@portlandmaine.gov' <cdg@portlandmaine.gov>

Cc: DWCHUHTA@portlandmaine.gov; 'MIG@portlandmaine.gov' <MIG@portlandmaine.gov>; 'NLE@portlandmaine.gov' <NLE@portlandmaine.gov>; 'amachado@portlandmaine.gov' <amachado@portlandmaine.gov>; 'zoning@portlandmaine.gov' <zoning@portlandmaine.gov>; 'KLJ@portlandmaine.gov' <KLJ@portlandmaine.gov>; 'cityclerk@portlandmaine.gov' <cityclerk@portlandmaine.gov>; 'jdealaman@portlandmaine.gov' <jdealaman@portlandmaine.gov>; 'dmk@portlandmaine.gov' <dmk@portlandmaine.gov>

Subject: Petition for City Planner to request Zoning Department to change B5 zone on Powsland Street, Portland, Maine

Dear Ms. Grimando,

I hope that this message finds you doing well.

Below you will see the history to improperly B5 zoned of Powsland Street. Attached you will find the support material, a photo of the Powsland Street eight lots in question, and cover letter for petition to rezone B5 Powsland Street to a less impact zone.

I will be sending the original petition to you, and copies to the others that are cc'd.

Please let me know if you have any questions.

Thank you for your time!

Best,
Dale J. Holman

10 Willow Lane

Portland, ME 04102

207-409-9307

From: Barbara Barhydt [<mailto:BAB@portlandmaine.gov>]
Sent: Thursday, December 04, 2014 1:11 PM
To: Dale Holman
Cc: Alex Jaegerman; Katherine Jones; Rick Knowland
Subject: Fwd: RE: Powsland Street:

Hello Dale:

Kathy forwarded your e-mail to me.

I have looked at old zoning maps in the Inspection office. I have also looked at the files for the Industrial and Commerce Plan in the Planning Office. Here is what I have found to date:

1. The 1946 Zoning Map (date hand written on the back of the map) shows an Industrial zone that includes Thompson's Point and it incorporates the end of Powsland Street and the pond. There is a 400 foot measurement for the zone line from Congress Street shown along Powsland Street. Attached is a scan of this section. (You will need to rotate the image, as I had to scan it upside down due to its size).
2. The 1984 map shows Thompson's Point and the end of Powsland Street. Scan of the section attached.
3. The B-5 zone text amendments were adopted in 1992 for Peninsula locations. It included a map amendment for an area along Commercial Street. It did not include Thompson's Point at that time.
4. Portland's Industry and Commerce Plan was adopted as part of the Comprehensive Plan in 1994. As part of the Industry and Commerce Plan, Thompson's Point and the end of Powsland, were shown as potentially being rezoned to the I-L zone. I have found some task force minutes that indicate the committee looked at expanding the B-5 zone to locations off the peninsula and possible locations included Thompson's Point. This plan is available to review in our office, but it is not on-line.
5. The City Council adopted the zoning text amendments for a comprehensive update of the Industrial zones in 1997.
6. We have not found the actual council orders as of yet for the rezoning, but the area at the end of Powsland has been in an industrial zone for quite some time. It appears all of the industrially zoned area was rezoned to B-5 sometime after 1997.

I wanted to give you an update on what I have found. Alex has offered to look and see if he has any files that related to the Industry and Commerce Plan that may show the zone change to B-5. He is not in the office today.

Thank you.

Barbara

Barbara Barhydt
Development Review Services Manager

Planning Division
[389 Congress Street 4th Floor](#)
[Portland, ME 04101](#)
(207) 874-8699
Fax: (207) 756-8256
bab@portlandmaine.gov

>>> Katherine Jones Wednesday, December 03, 2014 9:06 AM >>>

FYI

>>> "Dale Holman" <dholman1@maine.rr.com> 12/3/2014 7:46 AM >>>

Hello Kathy,

I hope that this message finds you doing well, and that you had a Happy Thanksgiving!

How can I be of help with researching the B5 zone change for [69 Powsland St](#) (190-K-9 [POWSLAND ST](#) 69-71) & 73 Powsland St (190-K-10 TO 14 [POWSLAND ST](#) 73-91)?

My attorney is going to be making a request with the City to overturn these lots B5 zone status if there is not any evidence that the lots were properly zoned. As of right now the GIS map is the only indication and this is not an authoritative document.

Thank you,

Dale H.

From: Katherine Jones [<mailto:KLJ@portlandmaine.gov>]
Sent: Monday, November 24, 2014 11:50 AM
To: Dale Holman
Subject: RE: Powsland Street:

Nothing to report/ GIS mapping does not go back to the 90's. Looking manually through the 97-98 for any changes to the B5 Zone or maps.

Kathy

>>> "Dale Holman" <dholman1@maine.rr.com> 11/18/2014 8:46 PM >>>

Hello Kathy,

Any update regarding the council orders/GIS mapping for Powsland Street B5 zoning?

Thank you,
Dale H.

From: Barbara Barhydt [<mailto:BAB@portlandmaine.gov>]
Sent: Monday, November 10, 2014 8:24 AM
To: Dale Holman; Katherine Jones
Cc: Alex Jaegerman
Subject: RE: Powsland Street:

Hi Dale:

Katherine Jones, City Clerk, has asked that you e-mail her directly for the request and I have added her this e-mail.

I had requested the following council orders, based upon the list provided in the zoning ordinance:

Ord. No. 168-93, § 3, 1-4-93; Ord. No. 39-96, § 4, 10-7-96; Substitute Ord. No. 164-97, § 2, 5-19-97; Ord. No. 164-97, § 5, 12-1-97; Ord. No. 80, 12-8-04; Ord. No. 215-04/05, 5-2-05; Ord. No. 127-09/10, 1-4-10 emergency passage; Ord. No. 279-09/10, 6-6-11; Ord. No. 33-11/12, 1-18-12; Ord. No. 113-11/12, 2-22-12)

Kathy, could we have copies of the orders as well, in case Mr. Holman has questions of us regarding the orders?

Thank you.

Barbara

Barbara Barhydt
Development Review Services Manager

Planning Division
389 Congress Street 4th Floor
Portland, ME 04101
(207) 874-8699
Fax: (207) 756-8256
bab@portlandmaine.gov

>>> "Dale Holman" <dholman1@maine.rr.com> Monday, November 10, 2014 12:02 AM >>>

Good Day Barbara,

Please let me know once you have received the Council Orders regarding B-5 for [73 Powsland Street](#).

Thank you,
Dale Holman

From: Barbara Barhydt [<mailto:BAB@portlandmaine.gov>]
Sent: Monday, October 27, 2014 12:53 PM
To: Dale Holman
Cc: Alex Jaegerman
Subject: Re: Powsland Street:

Hi Dale:

I have asked the City Clerk's office for the Council Orders that pertain to B-5. We will continue to check our files, as well. The Clerk has told me that they will fulfill this request after the election. I will forward what I receive from her.

Thank you.

Barbara

Barbara Barhydt
Development Review Services Manager

Planning Division
389 Congress Street 4th Floor
Portland, ME 04101
(207) 874-8699
Fax: (207) 756-8256
bab@portlandmaine.gov

>>> "Dale Holman" <dholman1@maine.rr.com> Friday, October 24, 2014 11:49 PM >>>

Hello Barbara,

Thank you for taking the brief time to discuss with today about my concerns of the B5 zone for the 5 grandfathered lots known as [73 Powsland Street](#) (owner STJ, INC.). I have a copy of your letter dated October 8, 2014 to Greg Payne, Avesta Housing.

As I had mentioned to you earlier today I am challenging the B5 zone of these 5 lots. Can you please provide me with the file, and all information pertaining to any/all past meetings that demonstrate why these 5 lots were ever allowed to be a B5 zone?

I did speak with Portland Water District's Norm Twadell, and he doesn't seem to have any information pertaining to my questions.

It seems as though this information can't be produced, and I am not going to just rely on colored maps to say this was ever approved. There could be a clerical error, and this was never zoned correctly.

Thank you,
Dale Holman

207-409-9307

Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

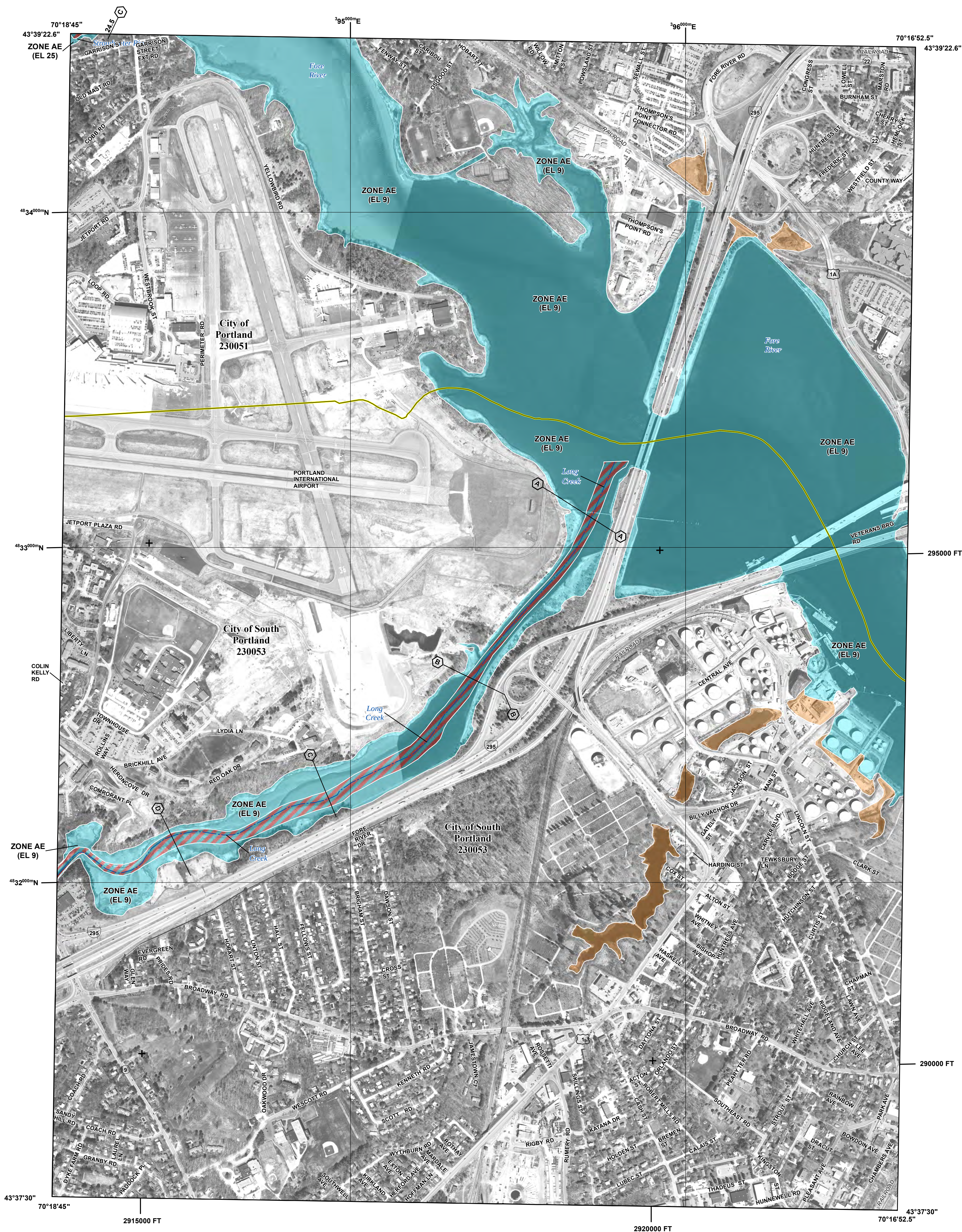


Virus-free. www.avast.com



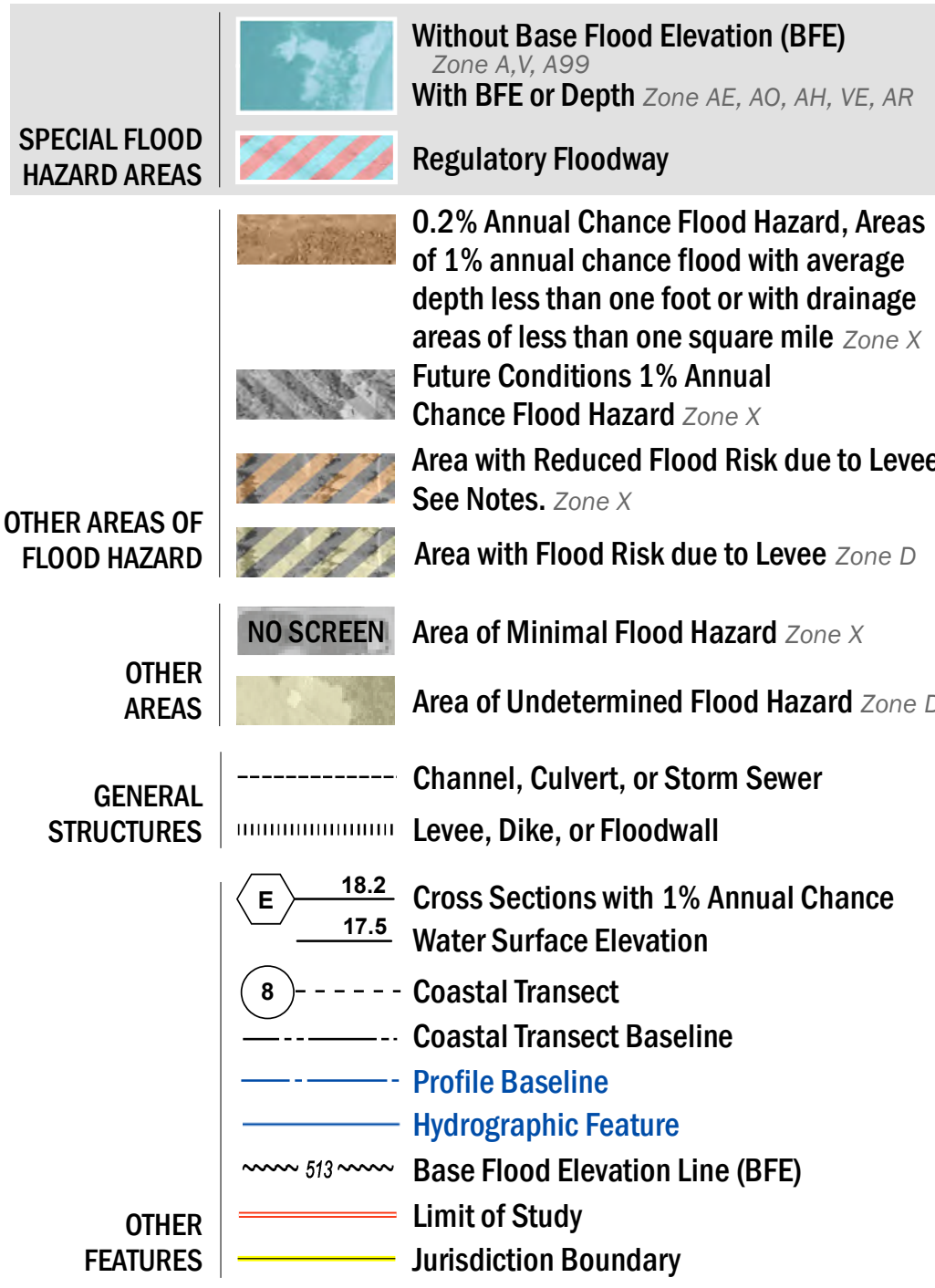
23005C0693F.pdf

18173K



FLOOD HAZARD INFORMATION

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT
THE INFORMATION DEPICTED ON THIS MAP AND SUPPORTING
DOCUMENTATION ARE ALSO AVAILABLE IN DIGITAL FORMAT AT
[HTTP://MSC.FEMA.GOV](http://msc.fema.gov)



NOTES TO USERS

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

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

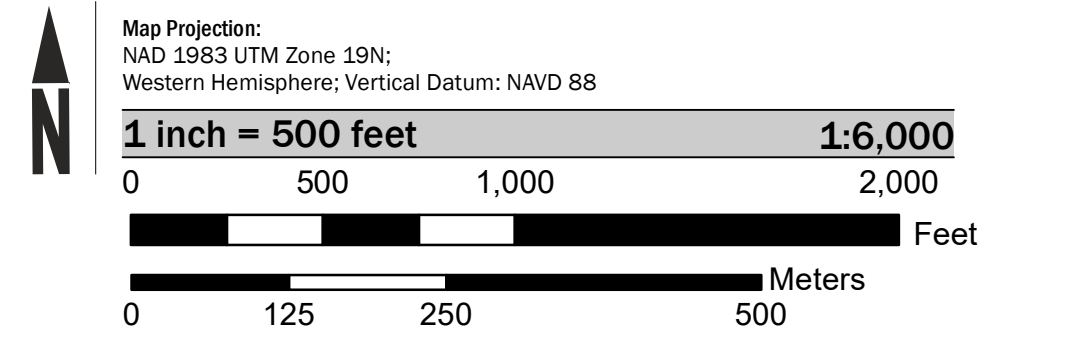
For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

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

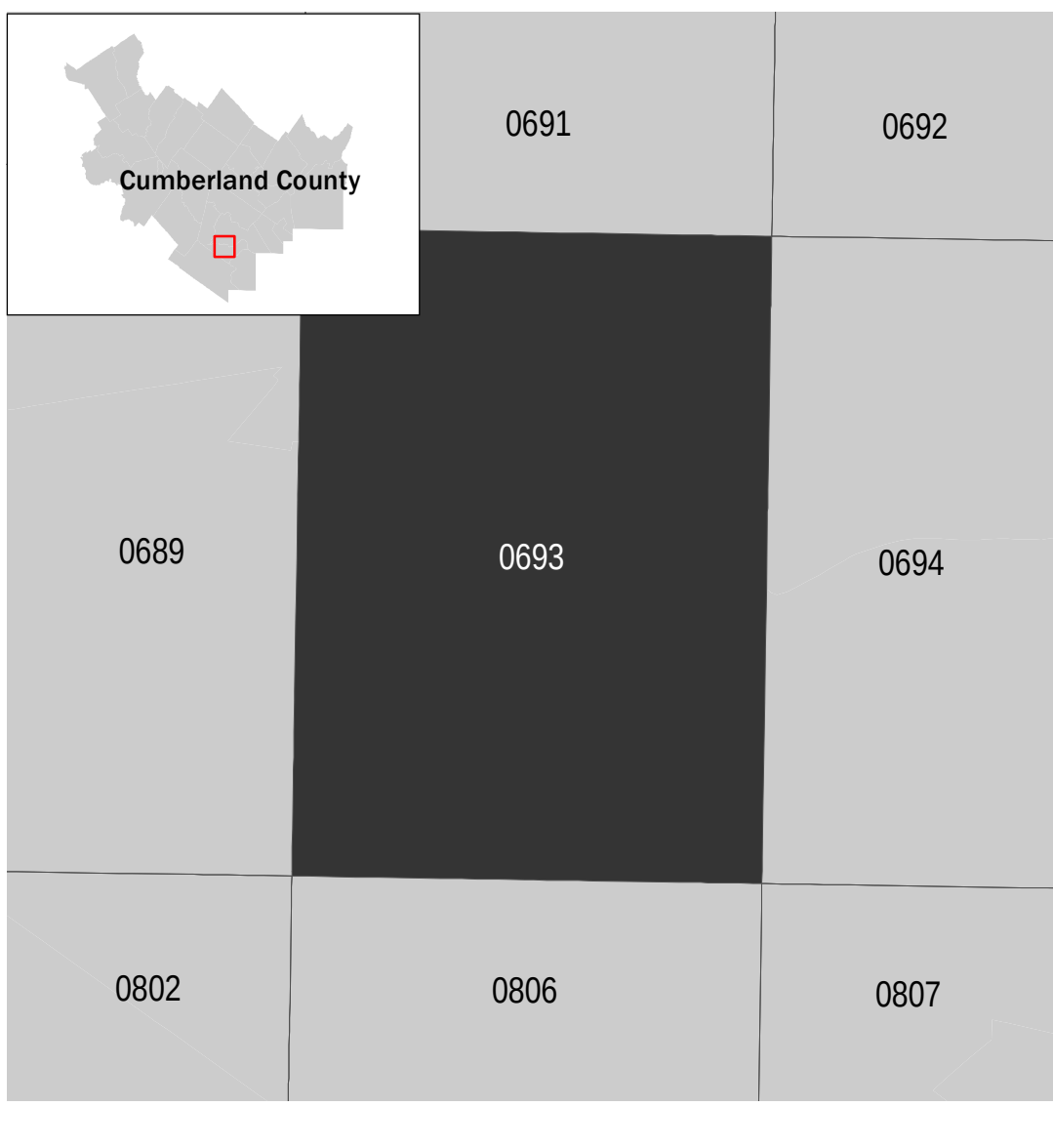
Basemap information shown on this FIRM provided in digital format by State of Maine, Maine office of GIS (MeGIS). This information was derived from MeGIS, dated 2012.

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

SCALE



PANEL LOCATOR



National Flood Insurance Program

NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

CUMBERLAND COUNTY, MAINE
All Jurisdictions

PANEL **0693** of **0837**

Panel Contains:

COMMUNITY	NUMBER	PANEL	SUFFIX
PORTLAND, CITY OF	230051	0693	F
SOUTH PORTLAND, CITY OF	230053	0693	F

REVISED PRELIMINARY
4/14/2017

VERSION NUMBER **2.3.2.1**
MAP NUMBER **23005C0693F**
EFFECTIVE DATE



Jimmy Dealaman <jdealaman@portlandmaine.gov>

73 Powsland Street, Portland, Maine Sebago Technics Harry Hess

Dale <dholman1@maine.rr.com>
To: jdealaman@portlandmaine.gov

Sat, Dec 11, 2021 at 11:48 AM

It's my understanding that State Maine has not spoken with the applicant about any expansion of the drainage culvert since 2018.

I hope that this email finds you doing well.

My name is Dale Holman, and I am the property owner of [10 Willow Lane, Portland, Maine](#) that abuts proposed 73 Powsland Street development.

I have ongoing issues (15 years) with the abutter and Sebago Technics with less than adequate work with literally misleading information/calculations.

Harry Hess with Sebago Technics has written a letter Oct 13, 2021 to Portland Planning Department, Portland, Maine.

He states the following:

MDEP has provided a letter of determination that will allow for the replacement and enlargement of the existing culvert so long as the invert of the culvert remains at the same elevation. In its current condition, the culvert and outlet control do not function to their full capacity due to being filled with debris and waste over time. This project shall provide improved conditions of City stormwater infrastructure and treatment of runoff from Powsland Street.

As part of the improvements to the site, a small portion of wetlands shall be impacted. Permitting for the wetland impacts has been filed with MDEP and approvals shall be forwarded to the City when received. The total amount of wetland impact is 4,351SF.

I am not confident of Sebago Technics work:

1. Can you please provide me or let me know where I can obtain the information that sent you regarding the culvert mentioned?
2. Shoreland zoning that will need permits?
3. Wetland delineation that Gary M. Fullerton should have submitted with field notes and photos?

Thank you!

Dale Holman

207-409-9307



Virus-free. www.avast.com

4 attachments



Flood Photo.JPG
4444K



Letter17Jan2008DEPKalinichHolman.pdf
1662K



Curtis Letter with attachment 11-20-07.pdf
1290K



HPSCAN_20211130181348465_2021-11-30_181522875.pdf
12485K



PORTLAND MAINE

Strengthening a Remarkable City. Building a Community for Life • www.portlandmaine.gov

Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

November 20, 2007

Mr. Mark Curtis
STJ Inc.
939 Parker Farm Road
Buxton, Maine 04093

Re: Powsland Street Fill Project, #2007-0117

Dear Mr. Curtis:

The Portland Planning Authority has reviewed the application by STJ, Inc. for an after-the-fact minor site plan for fill activities in the vicinity of 73 Powsland Street. The latest submission included a cover letter dated November 8, 2007 with supporting information and a site plan prepared by Sebago Technics and stamped by Richard Meek (dated November 8, 2007.) This information was submitted in response to a letter from Senior Planner Rick Knowland, dated August 2, 2007.

Please be advised that your site plan application is denied.

The submitted site plan proposes additional fill to be added within or adjacent to the drainage channel along the westerly property line and along the southerly property line adjacent to the pond area. The placement of additional fill in this area reduces the capacity of the watershed; facilitates the encroachment of stormwater on abutting properties; and only worsens drainage conditions in this area. The City had requested that documentation be submitted on your right to maintain the culvert under the railroad tracks in order to evaluate whether improvements to this structure might alleviate the City's concerns with your proposal. You have failed to provide this documentation. As we have recently seen, when the culvert was blocked with debris, the elevation of the water rose and stormwater encroached on abutting properties. This is an unacceptable impact and a reason for the denial of your application. (Please see the attached memorandum dated 11/16/07 from Dan Goyette, consulting engineer with Woodard & Curran, for his comments on the proposed fill plan.)

In sum, the project does not meet two important site plan standards contained within the Portland Land Use Code §§:

O:\PLAN\Dev Rev\Powsland St fill\PowslanddisapprovalletterFINAL11-20-07.doc

389 Congress Street • Portland, Maine 04101-3509 • Ph (207) 874-8721 or 874-8719 • Fx 756-8258 • TTY 874-8936

14-526(8) The site plan does not create any significant soil and drainage problems, whether on- or off-site, and adequately provides for control of erosion and sedimentation during construction and afterward.

This standard is not met by the proposed plan.

14-526(20) The proposed development shall have no adverse impact upon the existing natural resources including groundwater quantity and quality, surface water quantity and quality, wetlands, unusual natural areas, and wildlife and fisheries habitats. Stormwater runoff from paved areas shall be treated to the extent practicable to minimize contaminants.

This standard is not met by the proposed plan.

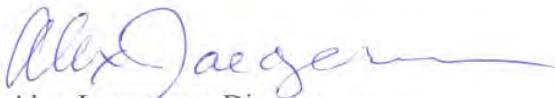
Required Remediation

Because you have altered the area (through regrading or fill) without the required permits and the City has determined approval of your after-the-fact application cannot be granted, you are obligated to immediately remediate the site to its previously existing condition. The drainage channel must be restored to the original grades and stabilized and re-vegetated as appropriate. Prior to this regrading, the site must be staked, and plans and specifications reviewed by this office or our designee to confirm the extent of restoration work to be performed. Evidence of permission from abutting property owners and DEP to remove the silt within the drainage channel is required. A performance guarantee to cover the cost of the regrading and site stabilization must be submitted to this office prior to commencing such site work, and no later than November 30, 2007. If the permissions for the off site remediation are not able to be secured within this time frame, the on-site remediation of your property must proceed independently. This work must be completed by December 7, 2007.

Should you have any questions on this letter, please feel free to call me. Under the provisions of sec. 14-527 of the site plan ordinance an applicant may appeal a decision by the Planning Authority to the Planning Board within ten days of such decision.

At this time, you remain in violation of the City's Site Plan Ordinance for the work done to date on the site. If we do not receive a performance guarantee for the work specified in this letter by November 30, 2007, we will refer this matter to the Corporation Counsel's office for appropriate enforcement action.

Sincerely,



Alex Jaegerman, Director
Planning Division

cc: Lee Urban, Director of Planning & Development
Barbara Barhydt, Development Review Services Manager
Richard Knowland, Senior Planner
Penny Littell, Associate Corporation Counsel

**COMMITMENT & INTEGRITY
DRIVE RESULTS**

41 Hutchins Drive
Portland, Maine 04102
www.woodardcurran.com

T 800.426.4262
T 207.774.2112
F 207.774.6635

**MEMORANDUM**

TO: Rick Knowland
FROM: Dan Goyette
DATE: November 16, 2007
RE: Powsland Property Fill Project

Woodard & Curran has performed a review of the proposed fill project for the property located on 73 Powsland Street.

Documents Reviewed

- Response Letter and Stormwater Model dated November 8, 2007, prepared by Shawn Frank, Sebago Technics, Inc..
- Engineering Plan Sheets, 1-3 for Powsland Street, dated October 8, 2007 and Watershed Map Plan Sheets 1-2 dated October 8, 2007 by Sebago Technics, Inc.

Comments

- The applicant has not shown rights to maintain the existing culvert under the railroad. We ran the stormwater model under the assumption that no outflow existed, ie a plugged culvert. The results indicate that the water in the pond would rise to the elevation of 22.69'. No filling should be allowed below this elevation as it would cause the water level to rise on abutting properties. If the applicant can demonstrate rights to maintain the existing culvert, the water level in the pond would rise to elevation 18.81'. No filling below this elevation should occur as it would result in an increase of the water level on abutting properties.
- At this time no structures are being proposed on the property. A geotechnical report will need to be supplied indicating slope stability prior to the design of any new proposed slopes.

DRG
203943.39

Memo - Portland.doc



DALE J. HOLMAN
10 Willow Lane
Portland, ME 04102
(207) 409-9307

November 29, 2021

Caitlin Kellner, Clerk
Cumberland County Superior Court
205 Newbury Street, Ground Floor
Portland, Maine 04101

Re: Dale J. Holman v. City of Portland, Maine, et al. Docket# CV-2021-381

Dear Ms. Kellner:

I hope that this message finds you doing well.

I am the Plaintiff in the above-entitled action.

Please find enclosed Plaintiff's Response to Defendant's Opposition to Plaintiff's Motion for Preliminary Injunction.

Please let me know if you have any questions.

Thank you for your time!

Respectfully,

A handwritten signature in dark ink, appearing to read 'Dale J. Holman', with a long horizontal line extending to the right.

Dale J. Holman
Plaintiff Pro Se

cc: City of Portland, Jennifer L. Thompson, Esq.

STATE OF MAINE
SUPERIOR COURT
CUMBERLAND COUNTY
CIVIL ACTION

DALE J. HOLMAN,
Plaintiff,

vs.

CITY OF PORTLAND, MAINE, *et al.*,
Defendant.

**RESPONSE TO DEFENDANT'S
OPPOSITION TO PLAINTIFF'S
MOTION FOR PRELIMINARY
INJUNCTION**

DOCKET NO.: CV-2021-381

COMES NOW, Plaintiff, DALE J. HOLMAN ("Holman"), and responds to Defendant's Opposition to Plaintiff's Motion for a Preliminary Injunction and states as follows:

PROCEDURAL BACKGROUND

On or about October 22, 2021, Plaintiff filed a Complaint against Defendant. [See **Plaintiff's Verified Complaint**]. Plaintiff also filed a Motion for Preliminary Injunction together with the Complaint. [See **Plaintiff's Motion for Preliminary Injunction**].

On or about November 15, 2021, the Defendant filed a response to Plaintiff's filings. Notably, Defendant filed an Opposition to Plaintiff's Motion for Preliminary Injunction [See **Defendant's Opposition to Plaintiff's Motion for Preliminary Injunction**]; and alleged that the Plaintiff had not demonstrated any injury to justify the request for a preliminary injunction; the injury alleged by the Plaintiff does not outweigh public interest; and that

Plaintiff cannot show likelihood on the success on the merits of the case.

ARGUMENTS

I. Plaintiff sufficiently demonstrated irreparable injury

Violation of property right constitutes irreparable injury. *See Gaffny v. Reid*, 628 A.2d 155, 157-58 (Me. 1993). Besides, damage may be presumed to flow from a legal injury to a real property right. *James Fitzpatrick v. Boston and Maine R.R.*, 84 Me. 33, 41, 24 A. 432 (1891). It should also be noted that "irreparable injury" is defined as "injury for which there is no adequate remedy at law." *Bar Harbor Banking & Trust Co. v. Alexander*, 411 A.2d 74, 79 (Me.1980). Accordingly, since environmental harm cannot be remedied by monetary damages, it amounts to an irreparable injury.

A temporary restraining order may be granted only if it "clearly appears from specific facts shown by affidavit or by the verified complaint **that immediate and irreparable injury, loss, or damage will result to the applicant.**" M.R. Civ. P. 65(a) (Emphasis added); *see also Town of Charleston v. School Admin.* Dist. No. 68, 2002 ME 95, P6, 798 A.2d at 1104. Applicant plans are to build within an illegal zone, therefore, damage will result to applicant. Letter dated November 18, 2021 from applicant's engineer firm with plans to be move forward with nine unit development within this illegal zone. [See **EXHIBIT A**]. Plaintiff has objected to the Defendant of this application moving forward. Engineering firms are notorious to want to build anything anywhere.

Since 2006, the said developer has been attempting to illegally develop the land. The development had been causing disturbances on the watercourse with ongoing illegal fill. [See **EXHIBIT B**].

The illegal change of zone from legal I2 zone to B5 zone allows higher impact to this area than the original I2 zone that would only allow one structure if the applicant can

demonstrate to remediate storm water and sea level rising [Maine H.P. 1169 -L.D. 1572 Chp. 67 Resolve, To Analyze the Impact of Sea-Level Rise, June, 2021], geo technical study of the earth, written rights to maintain abutters drainage, and wetlands study. Plaintiff submits that the approval of the said construction will predispose Plaintiff's property to additional flooding. Developer's activities on the property would negatively impact the watercourse, in violation of Maine's Natural Resource Protection Act 38 M.R.S.A. 480.

Further, the Planning and Development Department also observed that the developer's activities on the said property reduces the capacity of the watershed; facilitates the encroachment of storm water on abutting properties; and worsens the drainage conditions of the area. [EXHIBIT C - Letter from the Planning Division]. The developer also failed to provide any concrete response to the concerns of Alex Jaegarman- former Director of Planning Division. Notably, Alex Jaegarman raised concerns on how the developer would resolve the storm water flooding issues; the Geo technical study of the land; wetland issues; and written rights to maintain the abutting landowner drainage.

Since Plaintiff is already facing flooding issues, there is an urgent need for this Honorable Court to issue an Order preserving the status quo, to prevent and/or stop any activity that would expose Plaintiff's property to further damage.

II. Plaintiff's injury outweighs public interest

Plaintiff submits that public interest will not be adversely affected by enforcing property rights. *See Gaffny v. Reid*, 628 A.2d 155, 157-58 (Me. 1993). In *Gaffny*, the Court held that the Plaintiffs were entitled to an injunction prohibiting the defendants from constructing a road, which would affect Plaintiff's property.

In the instant case, Plaintiff will lose quiet enjoyment of his property if the

developer's application is permitted.

Planning Department's mission statement: "The Department of Planning & Urban Development's mission is to strengthen and revitalize the City of Portland's neighborhoods and communities and to preserve and positively transform our physical, social and economic environment, while protecting the health, safety and welfare of our residents and visitors. In doing so, we will work collaboratively toward comprehensive and sustainable solutions, streamline systems and processes to be efficient and responsive, and engage the public through open communication and ready access to information." The Defendant does not live by its own publicly stated core values and mission statement.

It is also instrumental to note that the flooding would diminish the market value of Plaintiff's property. The said damage to Plaintiff's property outweighs any public interest justification alleged by the Defendant. Plaintiff also re-alleges that it would instead be in the public interest to grant the injunction because it would help prevent and/or protect the residents around Powsland Street from the ravages of flood water consequential to the developer's construction of additional units in the said area. It follows; the public interest will not be adversely affected by preserving the status quo as this litigation proceeds and by protecting legitimate property rights.

III. Plaintiff's case has a likelihood to succeed on its merits

Plaintiff reiterates that "[e]ven if likelihood of success is low, a court might consider injunctive relief based on a very significant showing of irreparable harm." *Me. Educ. Ass'n Benefits Trust v. Cioppa*, 842 F. Supp. 2d 336, 387 (D. Me. 2012). Plaintiff therefore maintains that the Defendant illegally rezoned the area, which act subjected Plaintiff's property to flooding by allowing the illegal fill by the applicant. It is evident that Defendant's action did not follow required legislative law. *See* 5 Eugene McQuillin, *The Law of Municipal Corporations* § 16:53 (3d ed.1978); *see also Friends of Cong. Square Park v. City of Portland*, 91 A.3d 601 (Me. 2014). And since the act was legislative, it required public participation. *See Friends of Cong. Square Park v. City of Portland*, 91 A.3d 601 (Me. 2014).

Defendant alleges that Plaintiff's case cannot succeed because it is "almost two decades late". To that argument, Plaintiff avers that the statutory limit may cease to apply in cases of public interest. The Maine Supreme Court accepted a case challenging the 30 year-old decision in *Bell v. Town of Wells*, 557 A.2d 168 (1989) that limited the public's enjoyment of private beaches. Also, the Maine Supreme Court accepted to reconsider its decision in *Almeder v. Town of Kennebunkport*, 2014 ME 12, issued on February 4, 2014, which was past the statutory limit. The statute of limitations case laws Defendant raises in her opposition motion, i.e.; *F.S. Plummer Co. v. Cape Elizabeth*, *Zahares v. Town of Old Orchard*, and *Bog Lake Co. v. Town of Northfield* applied to these cases as they ALL legally followed legislative law to obtain their respective underlying zone changes. Statute of limitations does not apply to Plaintiff's motion as the zone change was illegally obtained.

The Defendant cannot claim that the Plaintiff's case is late since the Defendant's actions to rezone were illegal hence voids the B5 zone change. Defendant misleads this Court by claims that the City Council properly voted upon this zone change that is required by legislative law; public notice, public hearing, and vote by City Council. Voting on zoning maps for an existing illegal zone change does not constitute a legal zone change. It is worth noting that on or about December 4, 2014, Barbara Barhydt, the Development Review Services Manager, affirmed in an email that she could not trace the actual council orders that authorized the rezoning. [See **Exhibit D - Barbara Barhydt's Letter**]. Further, on February 13, 2015, the Defendant's attorney, Jennifer Thompson, Esq., admitted that she could not find any order that adopted the rezoning. [See **Exhibit E - Defendant's Attorney Jennifer Thompson, Esq. Letter**]. Therefore, Defendants cannot claim reliance on an illegal ordinance zone. Plaintiff further avers that the controversy

in the case is triggered by the developer's application to conduct construction activities, which developments expose Plaintiff's property to additional floods.

Plaintiff also avers that adhering to future acts or procedures cannot be used as a shield to validate the prior illegal acts. It is a principle of common law that no wrong should go without redress. Therefore, granting such liberty and sanction to the country's authorities will be akin to giving them an impression that they can follow such illegal practices in the future as well. If this is the standard then Plaintiff can arbitrary make a zone change as well. Defendant questions Plaintiff waiting seven years to file this lawsuit once discovering the zone change was illegal. Since there was not any threat in the past seven years of any proposed plans of development that would impact this area with additional flooding to the Plaintiff's property/home there was not any need to file a lawsuit. This does not undermine the facts that the illegal zone change does not become legal over time and just because the Defendant claims it is a legal zone change. Defendant seems to not recall that the Plaintiff attempted on two occasions to resolve this matter by exhaustive administrative remedies, and the Defendant's Attorney Jennifer Thompson, Esq. was overly combative in the first meeting that included then City Manager, Jon Jennings. A few years later a second meeting that included AJ Hungerford, Esq., and that meeting was less combative in nature.

On November 10, 2021 at 7:58 a.m. Plaintiff had received a phone call from the Defendant's Attorney Jennier Thompson, Esq. stating, "I am calling to beg for mercy as I am late with filing a response." "We will work good together, and we will work something out." Plaintiff agreed to an uncontested motion to expand time to then receive opposition to preliminary injunction and motion to dismiss. This is an example of why licensed attorneys have a bad reputation.

It follows; Plaintiff's case raises valid allegations in law, and the case will succeed on its merits. Notably, the Defendant's violation of the requirement(s) to involve the public in its decision making raises successful and meritorious causes of action against Defendant.

Pursuant to 30-A M.R.S. § 4352(1), "[t]he public shall be given an adequate opportunity to be heard in the preparation of a zoning ordinance." Further, 30-A M.R.S. § 4352(2) provides that "a zoning ordinance must be pursuant to and consistent with a comprehensive plan adopted by the municipal legislative body."

CONCLUSION

For the foregoing reasons, Plaintiff respectfully submits that the Court dismisses Defendant's opposition to Plaintiff's Motion for Preliminary Injunction in its entirety and grant Plaintiff's prayers in the said Motion.

Dated this 29 day of November, 2021

VERIFICATION

I, Dale J. Holman, hereby verify, swear and affirm under oath, under penalty of perjury, that I have read the foregoing Motion and that everything stated therein is true and accurate to the best of my knowledge, except as to those statements made by me "upon information and belief" and as to those statements I believe them to be true.

A handwritten signature in black ink, appearing to read 'Dale J. Holman', with a long horizontal line extending to the right.

Dale J. Holman

STATE OF MAINE
SUPERIOR COURT
CUMBERLAND COUNTY
CIVIL ACTION

DALE J. HOLMAN,
Plaintiff,

vs.

CITY OF PORTLAND, MAINE, *et al.*,
Defendant.

ORDER

This matter comes before the Court, Judge of the Superior Court, Cumberland County, Maine.

Upon reading and considering the Plaintiff's Response to Defendant's Opposition to Plaintiff's Motion for a Preliminary Injunction, IT IS HEREBY ORDERED THAT:

1. The Defendant's opposition to Plaintiff's Motion for Preliminary Injunction is hereby DENIED in its entirety.
2. The Plaintiff's Motion for Preliminary Injunction is hereby GRANTED.

IT IS SO ORDERED

Dated: _____, 2021

Justice, Superior Court

EXHIBITS

EXHIBIT - A [Application to build additional units].



November 18, 2021
07360-01

Dear Neighbor:

On behalf of STJ, INC. you are invited to a virtual neighborhood meeting to discuss plans for a proposed residential development planned for the vacant lots at the end of Powsland Street. The proposed project is planning for four (4) duplexes and one (1) single family home providing nine (9) dwelling units. The new Housing units shall be accessed via individual driveways off Powsland Street. Improvements for a paved hammerhead turnaround at the end of the street are also planned. The site is located within the Urban Commercial Business / Residential Zone District (B-5/R-5), identified as lots 9-14 on Tax Map 190, with a combined land area of approximately 0.68 acres.

As a property owner within 500 feet of the project, you are invited to participate in a neighborhood meeting. Attendance will be recorded and minutes of the meeting will be taken. Both the attendance list and minutes shall be submitted to the Planning Department for record. The virtual meeting will take place via Zoom and can be accessed online using the link shown below.

Meeting Location: Virtual

Zoom Link: https://us02web.zoom.us/webinar/register/WN_2ZC55UKUSa-Pu84XqZXjbA

Meeting Date: Thursday December 9th, 2021

Meeting Time: 6:00PM

If you have any questions, please email the project facilitator at PF@Sebagotechnics.com

Sincerely,

SEBAGO TECHNICS, INC.

Henry Hess, R.L.A.
Project Manager
Maine Licensed Landscape Architect

HAH:hah

Cc: STJ Inc.

EXHIBIT - B [Illegal Fill & Flooding Photos August 2018 & December 2018]









Additional development and fill only continues to flood Plaintiff's property/home.





Circa 2006 before 73 Powsland Street (end of street on right side) was leveled without any permission, approvals, or permits by developer STJ, INC (Applicant) Wetlands tidal back up is visible in the photo. Plaintiff's home has the U-shape driveway across the retention pond/watercourse to the right of the wooded area and to the left of the red roof house. Home backs up to the Pan Am Railroad.

APPROVED
JUNE 16, 2021
BY GOVERNOR

CHAPTER
67
RESOLVES

STATE OF MAINE

IN THE YEAR OF OUR LORD
TWO THOUSAND TWENTY-ONE

H.P. 1169 - L.D. 1572

Resolve, To Analyze the Impact of Sea Level Rise

Preamble. Whereas, the scientific and technical subcommittee of the Maine Climate Council determined it is likely that the sea level in Maine will rise between 3 and 5 feet by the year 2100 based on an intermediate sea level rise scenario, although scenarios of higher rise are physically plausible; and

Whereas, a one-foot increase in sea level in the future will lead to a 15-fold increase in the frequency of nuisance flooding and would cause a 100-year storm flood level to have a probability of occurring once every 10 years; and

Whereas, communities with a strong dependence on waterfront and shorefront industries such as tourism, ports and fishing will be heavily disrupted by increased flood frequency; and

Whereas, sea level rise of 4 feet by 2100 is projected to cause more than \$671,000,000 in cumulative building losses and \$665,000,000 in gross domestic product losses in Maine; and

Whereas, 1.5 feet of relative sea level rise by 2050 and 4 feet by 2100 would cause immersion and submersion of land and accompanying materials, structures and facilities that are not currently designed for those conditions and, therefore, present a threat of release of pollutants to the environment; and

Whereas, the scientific and technical subcommittee of the Maine Climate Council has recommended that the State manage for 1.5 feet of relative sea level rise by 2050 and 4 feet by 2100; now, therefore, be it

Sec. 1. Department review of laws and rules. Resolved: That the Department of Agriculture, Conservation and Forestry, the Department of Defense, Veterans and Emergency Management, Maine Emergency Management Agency, the Department of Environmental Protection, the Department of Inland Fisheries and Wildlife, the Department of Marine Resources, the Department of Transportation and the Office of the Attorney General shall conduct a review of the laws and rules they are charged with administering under the Maine Revised Statutes and, by January 1, 2022, shall recommend

to the Joint Standing Committee on Environment and Natural Resources any changes necessary to:

1. Incorporate consideration of 1.5 feet of relative sea level rise by 2050 and 4 feet by 2100 into administration of those laws and rules; and
2. Implement the strategy designated as "Strategy F3" in the state climate action plan issued by the Maine Climate Council in 2020 pursuant to the Maine Revised Statutes, Title 38, section 577 to enhance community resilience to flooding and other climate impacts.

The Joint Standing Committee on Environment and Natural Resources may report out legislation to implement the recommendations to the Second Regular Session of the 130th Legislature.

EXHIBIT - C [Letter from Planning Division]



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life

Planning and Development Department
Lee D. Urban, Director

Planning Division
Alexander Jaegerman, Director

November 20, 2007

Mr. Mark Curtis
STJ Inc.
939 Parker Farm Road
Buxton, Maine 04093

Re: Powsland Street Fill Project, #2007-0117

Dear Mr. Curtis:

The Portland Planning Authority has reviewed the application by STJ, Inc. for an after-the-fact minor site plan for fill activities in the vicinity of 73 Powsland Street. The latest submission included a cover letter dated November 8, 2007 with supporting information and a site plan prepared by Sebago Technics and stamped by Richard Meek (dated November 8, 2007.) This information was submitted in response to a letter from Senior Planner Rick Knowland, dated August 2, 2007.

Please be advised that your site plan application is denied.

The submitted site plan proposes additional fill to be added within or adjacent to the drainage channel along the westerly property line and along the southerly property line adjacent to the pond area. The placement of additional fill in this area reduces the capacity of the watershed; facilitates the encroachment of stormwater on abutting properties; and only worsens drainage conditions in this area. The City had requested that documentation be submitted on your right to maintain the culvert under the railroad tracks in order to evaluate whether improvements to this structure might alleviate the City's concerns with your proposal. You have failed to provide this documentation. As we have recently seen, when the culvert was blocked with debris, the elevation of the water rose and stormwater encroached on abutting properties. This is an unacceptable impact and a reason for the denial of your application. (Please see the attached memorandum dated 11/16/07 from Dan Goyette, consulting engineer with Woodard & Curran, for his comments on the proposed fill plan.)

In sum, the project does not meet two important site plan standards contained within the Portland Land Use Code §§:

O: PLAN Dev Rev Powsland St fill PowslanddisapprovalletterFINAL11-20-07.doc
389 Congress Street • Portland, Maine 04101-3509 • Ph (207) 874-8721 or 874-8719 • Fx 756-8258 • TTY 874-8936

14-526(8) The site plan does not create any significant soil and drainage problems, whether on- or off-site, and adequately provides for control of erosion and sedimentation during construction and afterward.

This standard is not met by the proposed plan.

14-526(20) The proposed development shall have no adverse impact upon the existing natural resources including groundwater quantity and quality, surface water quantity and quality, wetlands, unusual natural areas, and wildlife and fisheries habitats. Stormwater runoff from paved areas shall be treated to the extent practicable to minimize contaminants.

This standard is not met by the proposed plan.

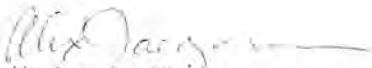
Required Remediation

Because you have altered the area (through regrading or fill) without the required permits and the City has determined approval of your after-the-fact application cannot be granted, you are obligated to immediately remediate the site to its previously existing condition. The drainage channel must be restored to the original grades and stabilized and re-vegetated as appropriate. Prior to this regrading, the site must be staked, and plans and specifications reviewed by this office or our designee to confirm the extent of restoration work to be performed. Evidence of permission from abutting property owners and DEP to remove the silt within the drainage channel is required. A performance guarantee to cover the cost of the regrading and site stabilization must be submitted to this office prior to commencing such site work, and no later than November 30, 2007. If the permissions for the off site remediation are not able to be secured within this time frame, the on-site remediation of your property must proceed independently. This work must be completed by December 7, 2007.

Should you have any questions on this letter, please feel free to call me. Under the provisions of sec. 14-527 of the site plan ordinance an applicant may appeal a decision by the Planning Authority to the Planning Board within ten days of such decision.

At this time, you remain in violation of the City's Site Plan Ordinance for the work done to date on the site. If we do not receive a performance guarantee for the work specified in this letter by November 30, 2007, we will refer this matter to the Corporation Counsel's office for appropriate enforcement action.

Sincerely,



Alex Jaegerman, Director
Planning Division

O:\PLAN\Dev Rev\Powsland St fil\PowslanddisapprovalletterFINAL11-20-07.doc



PORTLAND MAINE

Strengthening a Remarkable City, Building a Community for Life - www.portlandmaine.gov

Lee Urban - Director of Planning and Development
Jennie Bourke - Inspection Division Services Director

Exhibit A

Gorham Sand and Gravel
939 Parker Farm Road
Buxton, ME 04093

CBL: 190-K-010
Located at 73 Powsland Street

Dear Tom Shaw:

STOP WORK ORDER

An evaluation of the above-referenced property on 06/01/2007 revealed that site work was being conducted. In particular soil disturbance has occurred in a watercourse. The Land Use Ordinance, Section 14-523 states that this site work requires minor site plan review and approval by the City and may require approval from the Maine Department of Environmental Protection. Also, there were no erosion control measures in place at the time of the site inspection, which is a violation of City and State ordinances.

Appropriate permitting has not been issued for the above listed property; therefore all construction activity at that property must STOP immediately. This is a **STOP WORK ORDER** pursuant to 14-528(b) of the Land Use Code of the City of Portland. All activity must cease until further notice.

In order to come into compliance, you must apply for a belated minor site plan review and approval. Enclosed is a checklist that will assist in what to submit on your site plan.

Failure to comply will result in this office referring the matter to the City of Portland Corporation Counsel for legal action and possible civil penalties, as provided for in Section 6-1 of the Code and in Title 30-A of M.R.S.A. Section 4452. This constitutes an appealable decision pursuant to Section 112 of the City of Portland Building Code.

If you wish to discuss this matter, or you have any questions, please feel free to contact me @ 874-8701 or Phil DiPierro in Planning @ 874-8632.

Sincerely,

Jennie Bourke
Inspection Services Division Director

Developer's illegal activity prompted this Stop Work Order. In, 2018 Developer presumed illegal fill activity after allowing this property to be used as a staging area for the area sewer separation project.

EXHIBIT D - [Barbara Barhydt's Letter].

From: Barbara Barhydt [mailto:BAB@portlandmaine.gov]

Sent: Thursday, December 04, 2014 1:11 PM

To: Dale Holman

Cc: Alex Jaegerman; Katherine Jones; Rick Knowland

Subject: Fwd: RE: Powsland Street:

Hello Dale:

Kathy forwarded your e-mail to me.

I have looked at old zoning maps in the Inspection office. I have also looked at the files for the Industrial and Commerce Plan in the Planning Office. Here is what I have found to date:

1. The 1946 Zoning Map (date hand written on the back of the map) shows an Industrial zone that includes Thompson's Point and it incorporates the end of Powsland Street and the pond. There is a 400 foot measurement for the zone line from Congress Street shown along Powsland Street. Attached is a scan of this section. (You will need to rotate the image, as I had to scan it upside down due to its size).
2. The 1984 map shows Thompson's Point and the end of Powsland Street. Scan of the section attached.
3. The B-5 zone text amendments were adopted in 1992 for Peninsula locations. It included a map amendment for an area along Commercial Street. It did not include Thompson's Point at that time.
4. Portland's Industry and Commerce Plan was adopted as part of the Comprehensive Plan in 1994. As part of the Industry and Commerce Plan, Thompson's Point and the end of Powsland, were shown as potentially being rezoned to the I-L zone. I have found some task force minutes that indicate the committee looked at expanding the B-5 zone to locations off the peninsula and possible locations included Thompson's Point. This plan is available to review in our office, but it is not on-line.
5. The City Council adopted the zoning text amendments for a comprehensive update of the Industrial zones in 1997.
6. We have not found the actual council orders as of yet for the rezoning, but the area at the end of Powsland has been in an industrial zone for quite some time. It appears all of the industrially zoned area was rezoned to B-5 sometime after 1997.

I wanted to give you an update on what I have found. Alex has offered to look and see if he has any files that related to the Industry and Commerce Plan that may show the zone change to B-5. He is not in the office today.

Thank you.

Barbara

Barbara Barhydt

Development Review Services Manager

Planning Division

389 Congress Street 4th Floor

Portland, ME 04101

(207) 874-8699

Fax: (207) 756-8256

bab@portlandmaine.gov

EXHIBIT E - [Defendant's Attorney's Letter]

Portland, Maine



Yes. Life's good here.

Danielle P. West-Chuhta
Corporation Counsel

Jennifer L. Thompson
Associate Counsel

Adam R. Lee
Associate Counsel

Michael I. Goldman
Associate Counsel

February 13, 2015

Andre J. Hungerford
PO Box 7584
Portland, ME 04112-7584

RE: Powsland Street Zoning

Dear A.J.,

Thank you for your letter of February 5, 2015 and for your visit to my office a few days later. It's always nice to talk with you.

Following your inquiry, I have been working with Barbara Barhydt in Planning and with Katherine Jones, the City Clerk to locate the map amendment and order that originally affected the change to B-5. I attach a copy of the map as it existed after March 1997, which you will see shows that portion of Powsland as B-5. We still have not been able to find the Order adopting that amendment but will continue to look.

In the meantime, however, I think there's a simpler way to demonstrate to you that, in fact, Powsland Street has effectively been rezoned to B-5. As you know, under 30-A M.R.S. 4352(3), the City is required to adopt a zoning map. Although I have every reason to believe that the Council affirmatively adopted the amendment to the map in 1996-1997 to rezone that area (and Thompson's point) to B-5, even if it hadn't, the City's current map lists that property in B-5. I attach an order from 2001 in which the Council adopted the first version of the GIS version of the City's zoning map. That map was subsequently amended in February 17, 2001 and again on January 9, 2015. As you will see, pursuant to the Order, the Council is clearly adopting the whole of the zoning map as it is required to do under Section 4352(3). Given that the map depicts that portion of Powsland as B-5, I don't think there can be any real question that that zone is correct or that it has been properly adopted.

I believe the current map is available online. We also have hard copies available for review in our Planning Division that you are welcome to come take a look at if that would be helpful.

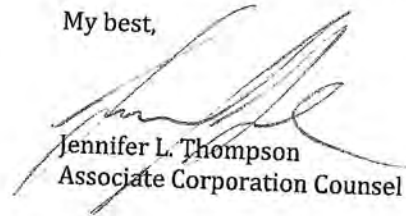
389 Congress Street, Room 211, Portland ME 04101

www.portlandmaine.gov / tel. 207.874.8480 / tty. 207.874.8936 / fax. 207.874.8497

Andre J. Hungerford
February 13, 2015
Page 2

I hope this clears up the confusion. As always, if you have any further questions please do not hesitate to be in touch.

My best,



Jennifer L. Thompson
Associate Corporation Counsel

Enclosures
cc: Katherine Jones
Barbara Barhydt

389 Congress Street, Room 211, Portland ME 04101
www.portlandmaine.gov / tel. 207.874.8480 / tty. 207.874.8936 / fax. 207.874.8497



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

DAVID P. LITTELL
COMMISSIONER

Certified Mail # 7005 1160 0003 6104 5094

January 17, 2008

Mr. Mark Curtis
STJ, Inc.
939 Parker Farm Road
Buxton, Maine 04093

Re: Powsland Street Fill Project; Response to STJ, Inc. Letter Dated January 14, 2008.

Dear Mr. Curtis,

The Department's letter dated January 7, 2008 supersedes any earlier correspondence from the Department regarding the fill project on Powsland Street in Portland, Maine. During our phone conversation you stated that you were aware the Department had changed its position regarding the wetland delineation some time ago. The issue is not what qualifications the City of Portland or Mr. Holman have to question Mr. Hampton's delineation, but that Jay Clement of the United States Army Corps of Engineers, and Mike Mullen and I from the Department have visited this property and found inaccuracies in Mr. Hampton's delineation.

Any perceived "inaccuracies or miscalculations" regarding square footage of wetland and lot size are a result of an unclear delineation report and unclear development plans. The two areas of wetlands identified by the National Wetlands Inventory (NWI) may or may not be entirely on property owned by STJ, Inc.. The issue is that these wetlands are not accounted for in the delineation report to the Department's satisfaction. Enclosed you will find a copy of ARCMap imagery identifying the NWI wetlands and a copy of a portion of the City of Portland's zoning map identifying the shoreland zone.

Finally it should be made clear that the only way you or the Department will be able to determine if wetlands are to be filled or altered with any proposal you have made, or may make, other than restoration, will be to have the property redelineated. The delineation

AUGUSTA

17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR

106 HOGAN ROAD
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND

312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

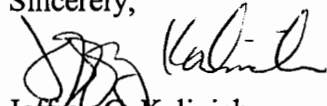
PRESQUE ISLE

1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769-2094
(207) 764-0477 FAX: (207) 760-3143

by Mark Hampton reviewed by the Department is unacceptable for the purposes of determining Department permitting requirements, and during our phone conversation you stated there was no additional information available for the Department to review. I appreciate your desire to involve the Department in any proposed future activity on this property and look forward to receiving your development plans and wetland delineation.

If you have any questions regarding this letter, please contact me at (207) 822-6325.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeffrey C. Kalinich', written over a horizontal line.

Jeffrey C. Kalinich
Enforcement Case Manager

Enclosure.

CC: Dale Holman

Andre J. Hungerford, Esq., Hungerford Legal
Mark Hampton, Mark Hampton Associates, Inc.
Penny Littell, Esq., City of Portland
Jay Clement, U.S. Army Corps of Engineers
Mike Mullen, Maine Department of Environmental Protection



STJ, Inc.

RECEIVED DEP - SMR 939 Parker Farm Road
Buxton, Me 04093
JAN 16 PM 12:04

Tel 207-839-2442
Fax 207-839-5445

Jeffrey C. Kalinich
State of Maine
Department of Environmental Protection
312 Canco Road
Portland, Me 04103

January 14, 2008

Mr. Kalinich,

We have received your certified letter dated January 7, 2008. Thank you for taking the time to speak with me this morning. During our conversation, we discussed the fact that you and Kara Moody initially agreed with Mr. Hampton's assessment. This was referred to in an email Kara sent to me on the July 3rd, 2007. "I performed two site visits at the property off Powsland Street during the month of June. In addition to these visits, I also examined the wetland delineation plan and accompanying letter produced by Mark Hampton, as well as aerial photography of the area. After reviewing all of this information with my supervisor, we have concluded that the Department is in agreement with the delineation performed by Mark Hampton, and there are currently no violations at the Powsland Street property. Please let me know if there is anything else I can provide you with." Kara Moody. We obviously moved forward based on the delineation and the confirmation from Ms. Moody. As I stated I our conversation we have no intent to operate outside of the DEP or Army Corps regulations.

I have many concerns regarding your letter. First, you state "Both Mr. Holman and the City of Portland have questioned the accuracy of this delineation." We hired a Certified Soil Scientist and Licensed Site Evaluator to delineate the wetlands. What qualifications does Mr. Holman or the people at the City of Portland doing the questioning have to question a licensed professional's assessment of this site? What specifically do they question?

I am perplexed by your assertion that our lots 66,67,68,69,and 70 (five lots approximately 50'x 100' each for a total of 25,000 square feet) contain 17,183.63 and 11,003.82 (a total of 28, 187.45) square feet of wetlands. The calculated wetlands total is more than the entire square footage of our property. This is obviously a typographical error or a miscalculation. You did not include any of the supporting information for our review.

You also state that the delineation information supplied to you does not contain any supporting information. In the future, please do not rely on anyone but the source for the required information. I have no way of confirming that the information you received was the most up to date or the entire package supplied to Mr. Hungerford. Furthermore, it is my understanding that Mr. Hampton met all of the requirements for this type of delineation.

As I stated in our conversation this morning we do not intend to fill any wetlands without the proper permits. That is why we hired a certified expert. Any fill proposed to be placed in the wetland or shore land zone would be properly permitted prior to placement.

At the request of the city, we have re-graded this site to the pre-existing conditions plan on file with the City of Portland. This work was completed in early December. We are in the process of re-assessing our options for this property and will gladly involve the DEP should our new plans involve filling wetlands.

In the future, if you have a concern with any property we own please do not hesitate to contact us. We are always willing to work with the DEP to resolve any issue.

Mark Curtis

A handwritten signature in black ink, appearing to be 'Mark Curtis', with a long horizontal line extending to the right.

CC: Mark Hampton, Mark Hampton Associates, Inc.
Penny Littell, City of Portland
Jay Clement, US Army Corps of Engineers



Jimmy Dealaman <jdealaman@portlandmaine.gov>

73 Powsland Street, Portland, Maine minutes for Thursday, December 9th meeting hosted by Sebago Technics Applicant STJ, INC. representatives

Dale <dholman1@maine.rr.com>
To: jdealaman@portlandmaine.gov

Sat, Dec 11, 2021 at 11:46 AM

FYI-

As mentioned before, I object to this upcoming meeting Thursday, December 9th, hosted by Sebago Technics for Applicant STJ, INC. regarding proposed development in the illegal zone of 69 – 73 Powsland Street, Portland, Maine as there is an active pending lawsuit regarding this illegally zoned area.

Overview of Sebago Technics documents submitted to Portland Planning Department on October 13 & December 02, 2021.

1. Documents/plans are incorrectly labelled “93 Powsland” vs. “73 Powsland”
2. It's cute and sexy that Sebago Technics is having a “Landscape Architect” spearhead this project instead of an engineer. Guess it is the “in thing to do” with attempting to appeal to City Planning Departments with this strategy.
3. B5 is an illegal zone for lots 69 – 73 Powsland Street, Portland, Maine
4. Henry Hess cover letter dated October 13, 2021 is inaccurate as there is no mention of 65 Powsland Street that is in legal R5 zone where they are proposing a two-story unit dwelling that unsure if is allowed in this zone?
5. Would like to see a copy (along with field notes and photos) of the wetland delineation that was performed by Gary M. Fullerton on April 2021.
6. Stormwater proposal not complete: would require an overflow pond onsite of the lots owned by STJ, INC.
7. Retaining wall, fence, lawn, and planting trees will be required along the North West of the entire property line Dale Holman & James Sloan.

8. Still haven't addressed: illegal zone, geo technical study, wetlands, sea level rising, flooding, and storm water.
9. [10 Willow Lane, Portland](#) will require a seismometer, audio, and video provided by Sebago Technics before any start of earth work/through completion.
10. Design and buildings can't impact upon neighboring property with any potential shadows, wind vortex, lighting, site views, and building heights.
11. City of Portland third party engineering firm will be required to review all flow charts, storm water plans, wetlands, plans, and documents.

There are other potential legal actions regarding tortious interference of contract by STJ, Inc./Mark Curtis/Thomas Shaw, and ongoing Defamation by their Attorney that are being considered. Sebago Technics and it's employees may become a party or party of interest.



Virus-free. www.avast.com

Harlan Baker <hbaker@maine.edu>
to planningboard@portlandmaine.gov

Dec 12, 2021, 6:33:20 PM (14 hours ago)

This is where a proposed 9 unit project on Powsland Street is in developed. While the additional housing units would be welcome, my concern is that this area suffers flooding as a result of a nearby culvert. Unless that problem is satisfactorily addressed, there will problems.

>
> Hi,
> I took this photo several years ago. As you can see the area is flooded. It's right in back of where the project will be located.
> Harlan Baker



----- Forwarded message -----

From: Dale <dholman1@maine.rr.com>

Date: Tue, Jul 5, 2022 at 7:35 AM

Subject: FW: Appellant Holman v. Appellee City of Portland, et. al. Cum 22-72 Brief Electronic Copy / 73 Powsland Street, Portland Planning Board Worksop

To: <publiccomment@portlandmaine.gov>

From: Dale <dholman1@maine.rr.com>

Sent: Monday, July 4, 2022 5:48 PM

To: 'planningboard@portlandmaine.gov' <planningboard@portlandmaine.gov>

Subject: Appellant Holman v. Appellee City of Portland, et. al. Cum 22-72 Brief Electronic Copy / 73 Powsland Street, Portland Planning Board Worksop

73 Powsland Street, Portland, Maine Workshop:

I will not be attending any Zoom meeting for Tuesday, July 12, 2022 at 4:30pm

Applicant still not shown any rights/permission/approval from the State for Federal Government to remedy the storm water issues.

Please see below pending lawsuit with the City of Portland. I will be serving parties with the Federal lawsuit over the next few weeks.

From: Dale <dholman1@maine.rr.com>

Sent: Monday, May 30, 2022 11:04 AM

To: 'lawcourt.clerk@courts.maine.gov' <lawcourt.clerk@courts.maine.gov>

Subject: Appellant Holman v. Appellee City of Portland, et. al. Cum 22-72 Brief Electronic Copy

Dear Mr. Pollack:

I hope that this message finds you doing well and that you are having a great Memorial Day!

I am the Appellant in the above-entitled action.

Attached is an electronic copy of the Brief per Rule 7(a), and (2).,

Hard copies will be delivered Tuesday, May 31, 2022:

Ten copies of Appellant Brief (Two copies provided to Appellee)

Eight copies of Appellant Appendix (One copy provided to Appellee)

As a courtesy an electronic copy of the Appendix is included here via Google Drive:

https://drive.google.com/file/d/1_5SRMYtSIc03K3DAoZS7x0wIJgINHpqf/view?usp=sharing

Please let me know if you have any questions.

Thank you for your time!

Warmest regards,

Dale Holman

10 Willow Lane

Portland, ME 04102

[207-409-9307](tel:207-409-9307)

There is a pending lawsuit regarding the legality of the zoning to this area.

I am confident that I will prevail as this illegal zone change by the City is out of the scope for statutes of limitations to apply.

I have to question your company's work as in the past they attempted to mislead the Portland Planning Department with its stormwater calculations that Woodward & Curran pointed out in their letter dated November 16, 2007 (attached Curtis Letter 11-20-07 page 4).

I still have not seen any complete work where your company or any others have addressed the following items:

Stormwater run-off issues

Geo technical study of the land

Wetland issues

Sea level rising

Written permission/rights to maintain the drainage on the CMP and Federal railroad property

Sea level rise is real. Orlando Delogu has been telling us this for years.

Science:

<https://www.pbs.org/newshour/show/barely-a-cloud-in-the-sky-and-portland-maine-is-flooding>

https://legislature.maine.gov/legis/bills/bills_129th/billtexts/HP040701.asp

My expert witness added:

Mr. Holman:

I received your email; I took the liberty of reexamining all of Sewell, Powsland, Mitton streets, Willow Circle development and then crossed over to Hobart Street's furthest extension. I drove and walked to see the lay of the land. It is what is has been for a century or more, a natural buffer area absorbing runoff waters from the upland side and sea level rise from Portland's inner harbor. The steep gulleys invite indiscriminate filling; but that fill is unstable. Moreover, the water levels at the foot of Sewell Powsland, and Mitton rise and fall with annual snow, rain, storm surges, etc.

This morning I spoke at some length with attorney AJ.

I'm knowledgeable about land use law; But you need a hydrologist as well; A person who knows the value of wetlands that act as a buffer between solid upland areas and open waters; a person who designs sewer systems, storm water runoff systems is the expert you need. Illegal filling by Gorham Sand & Gravel or anyone else including the city along lower Powsland should be enjoined. Obviously any filling from behind lower Mitton St, Willow Lane properties closest to the water and from the Hobart Street extension should not be permitted. These are unbuildable natural areas in my mind; the gulleys and the vegetation they support protect the housing that is in place. An expert hydrologist can document the unbuildable character of this land and show worst case scenarios. Sea level rise suggests the situation will grow worse overtime. The other thing to be enjoined and cleaned up is the illegal dumping of trash at the foot of Powsland. Large granite stones prevent driving from Sewell to Powsland. A similar layering of stones should block off the turnaround and dumping areas at the foot of Powsland. I witnessed a pickup dumping into the gully at the foot of Powsland as I made my tour yesterday. I'd stay on the city's back; filling, dumping and certainly any large scale development should not be permitted on unstable, previously filled land in/on lower Powsland St. or any of the street areas noted above.

O. E. Delogu

I am moving forward with a Federal Lawsuit that will involve the Superior Court, State of Maine, and I am undecided to enjoin STJ, INC. If anything they will be called as a witness along with their attorney.

I understand, as I have never met an engineer that doesn't believe they can build anything anywhere.

Good luck!

Best,

Dale J. Holman

10 Willow Lane

Portland, ME 04102

**STATE OF MAINE
SUPREME JUDICIAL COURT
SITTING AS THE LAW COURT**

DALE J. HOLMAN

Appellant

v.

CITY OF PORTLAND, MAINE, et al,

Appellee

Docket No. Cum-22-72

BRIEF FOR APPELLANT

**Appeal from a decision of the
Cumberland County Superior Court
Located at Portland, Maine**

Dale J. Holman
10 Willow Lane
Portland, ME 04102
Appellant, *pro se*
207-409-9307

TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
TABLE OF AUTHORITIES	3
STATEMENT OF FACTS	4
PROCEDURAL HISTORY.....	7
STATEMENT OF ISSUES	8
SUMMARY OF ARGUMENTS.....	8
ARGUMENTS.....	9
I. THE TRIAL COURT ERRED WHEN IT FAILED TO RECOGNIZE THAT PUBLIC PARTICIPATION WAS REQUIRED IN THE PREPARATION OF THE CITY’S ZONING ORDINANCE.....	9
II. THE TRIAL COURT ERRED WHEN IT FAILED TO CONSIDER THE FACT THAT THE UNDERLYING ZONE CHANGE WAS IMPROPER/ILLEGAL.. ..	10
III. THIS CASE IS NOT BARRED BY THE STATUTE OF LIMITATIONS	12
CONCLUSION	15

CERTIFICATE OF SERVICE	15
------------------------------	----

TABLE OF AUTHORITIES

Cases

<i>Almeder v. Town of Kennebunkport</i> , 2014 ME 12	13
<i>Barnard v. Zoning Board. of Appeals of Town of Yarmouth</i> , 313 A.2d 741, 744 (Me. 1974).....	10, 11
<i>Bell v. Town of Wells</i> , 557 A.2d 168 (1989)	12
<i>Crispin v. Town of Scarborough</i> , 736 A.2d 241 (1999).	9
<i>Hrouda v. Town of Hollis</i> , 568 A.2d 824, 826 (Me.1990)	11
<i>In re Maine Clean Fuels, Inc.</i> , 310 A.2d 736, 741 (Me.1973).....	12
<i>Penobscot Area Housing Development Corp. v. City of Brewer</i> , 434 A.2d 14, 23 (Me.1981).....	11
<i>Tisei v. Town of Ogunquit</i> , 491 A.2d 564, 569 (Me. 1985).....	10
<i>Toulouse, et al. v. Board of Zoning Adjustment</i> , 147 Me. 387, 393.....	10
<i>Warren v. Municipal Officer, Etc.</i> , 431 A.2d 624, 628 (Me. 1981).	11
<i>Wright v. Michaud</i> , 959 A.2d 753.....	11
<i>Wright v. Michaud</i> , 160 Me. 164, 173 (Me. 1964).....	11
<i>Bog Lake Co. v. Town of Northfield</i> , 2008 ME 37, ¶ 9, 942 A.2d 700.	14

Statutes

1 M.R.S.A. § 406 (1989).....	9
1 M.R.S.A. § 401-410 (1989 & Supp.1998).....	9
30-A M.R.S. § 4352(1)	4, 9
30-A M.R.S. § 4352(2)	4, 5
Stat. Tit. 14, § 752.....	12

Other Authorities

The Law of Zoning and Planning, Rathkopf, Vol. 1, page 21-1	11
Maine H.P. 1169 -L.D. 1572 Chp. 67 Resolve, To Analyze the Impact of Sea- Level Rise, June, 2021.....	6

STATEMENT OF FACTS

On or about March 1997, the planning Board of the City's Department of Planning and Urban Development recommended to the Town Council that parcels of land on Powsland Street be zoned from I-2 (Industrial Zone) to B-5 (Urban Commercial Mixed Use Zone). The City adopted the Board's recommendation and rezoned the area around Powsland Street to B-5.

The City's current map shows the aforesaid area zoned as B-5.

Upon Appellant's information and belief, the rezoning of the aforesaid area did not follow due process. Pursuant to 30-A M.R.S. § 4352(1), "[t]he public shall be given an adequate opportunity to be heard in the preparation of a zoning ordinance." (App. p. 12) Further, 30-A M.R.S. § 4352(2) provides that "a zoning ordinance must be pursuant to and consistent with a comprehensive plan adopted by the municipal legislative body."

The City was also obligated to post and publish a public notice before adopting a new zoning ordinance or map or amending an existing zoning ordinance or map. *See* 30-A M.R.S. § 4352(2). (App. p. 17)

On or about December 4, 2014, Barbara Barhydt, the Development Review Services Manager, affirmed in an email that she could not trace the actual council orders that authorized the rezoning. (App. p. 25-30)

On or about February 5, 2015, Appellant's former Counsel, A.J. Hungerford, Esq. (hereinafter "Hungerford") wrote to Jennifer L. Thompson (hereinafter "Thompson"), who was the Associate Corporation Counsel of the City of Portland. (App. p. 18-19) In the said letter, Hungerford raised Appellant's concerns that the street directly behind Appellant's house was illegally zoned as B-5. Hungerford also pointed out to Thompson that the City Council did not make any approval of the zoning change. The Attorney further emphasized that the Planning Board violated 30-A M.R.S. § 4352(2) by effecting the zoning change without following the law.

On or about February 13, 2015, Thompson replied to Hungerford's letter, and stated that she engaged the staff of the City Council and managed to locate the amendment map and the 2001 Order that effected the 1997 decision to rezone Powsland Street to B-5. However, Jennifer noted that she did not find the 1997 order adopting the amendment. (App. p. 18-19) There had been a meeting prior to this date with City Manager Jon Jennings, and Thompson. There was also a follow up meeting with Thompson, Hungerford, and Appellant. Thompson stated her position is that "time has passed, and that these updated maps had been voted on several times, therefore, this allows a legal zone change."

On or about November 2, 2019, Appellant drafted a letter to Christine Grimando (hereinafter "Grimando"), the Acting Planning and Urban

Development Director. (App. p. 20-24) The letter's intent was to notify Grimando of Appellant's Petition for a zone change to Powsland Street B-5 Zone to a less impact zone. In the letter, Appellant raised complaints of how his property is subjected to flooding as a result of the Appellee's unlawful decision to rezone the Powsland Street from I-2 to B-5. Appellant also emphasized how the Appellee violated the law by rezoning the said area without following the required proper legal steps including public notification, public hearing, or City Council vote.

As a result of the rezoning of the aforesaid area, Appellant's property has been subjected to flooding from storm water. (App. p. 63-64) The illegal change of zone from legal I2 zone to B5 zone allows higher impact to this area than the original I2 zone that would only allow one structure if the applicant can demonstrate to remediate storm water and sea level rising [Maine H.P. 1169 -L.D. 1572 Chp. 67 Resolve, To Analyze the Impact of Sea-Level Rise, June, 2021], (App. p. 81-82) geo technical study of the earth, written rights to maintain abutters drainage, and wetlands study. The Planning and Development Department observed that the developer's activities on the said property reduces the capacity of the watershed; facilitates the encroachment of storm water on abutting properties; and worsens the drainage conditions of the area. (App. p. 65-66)

Further, it is worth noting that plans are to build within an illegal zone, therefore, damage will result to applicant. There is to that effect a letter dated

November 18, 2021 from an engineer firm with plans to be move forward with nine unit development within this illegal zone. (App. p. 58)

PROCEDURAL HISTORY

This is an appeal from a decision of the Cumberland County Superior Court in Maine. The said decision dismissed Appellant's Complaint.

Appellant filed a Verified Complaint on or about October 22, 2021. (App. p. 7-16). Appellant also filed a Motion for Preliminary Injunction pursuant to Maine Civ. P. 65(b). (App. p. 32-40)

The Appellee filed an Opposition to the Appellant's Motion for Preliminary Injunction. (App. p. 42-46) The Appellee also filed a Motion to Dismiss. (App. p. 47-50) On or about November 29, 2021, the Appellant filed a Response to the Appellee's Opposition to Appellant's Motion for Preliminary Injunction. (App. p. 51-57) Appellant also filed a response to Appellee's Motion to Dismiss. (App. p. 68-73)

On or about March 8, 2022, the Court issued an Order dismissing the Appellant's Complaint. (App. p. 5-6) Appellant hereby files this Appeal against the aforesaid decision.

STATEMENT OF ISSUES

- I.** WHETHER THE TRIAL COURT ERRED WHEN IT FAILED TO RECOGNIZE THAT PUBLIC PARTICIPATION WAS REQUIRED IN THE PREPARATION OF A ZONING ORDINANCE BY PUBLIC NOTICE AND PUBLIC HEARING.
- II.** WHETHER THE TRIAL COURT ERRED WHEN IT FAILED TO CONSIDER THE FACT THAT THE UNDERLYING ZONE CHANGE WAS IMPROPER/ILLEGAL AS PER LEGASLATIVE LAW THE CITY COUNCIL/VOTING BODY MUST VOTE FOR ANY ZONE CHANGE.
- III.** WHETHER THE CASE IS BARRED BY THE STATUTE OF LIMITATIONS.

SUMMARY OF ARGUMENTS

- I.** The Trial Court erred when it failed to recognize that public participation was required in the preparation of the City's zoning ordinance.
- II.** The Trial Court erred when it failed to consider the fact that the underlying zone change was improper/illegal.
- III.** This case is not barred by the Statue of Limitations.

ARGUMENTS

I. THE TRIAL COURT ERRED WHEN IT FAILED TO RECOGNIZE THAT PUBLIC PARTICIPATION WAS REQUIRED IN THE PREPARATION OF THE CITY'S ZONING ORDINANCE.

Pursuant to 30-A M.R.S. § 4352(1), the public **must** be given an adequate opportunity to be heard in the preparation of a zoning ordinance. The public must also be "given [notice of a public proceeding] in ample time to allow public attendance," 1 M.R.S.A. § 406 (1989). To be sufficient under the Freedom of Access Act, 1 M.R.S.A. § 401-410 (1989 & Supp.1998), notice of the meeting must have been "given in ample time to allow public attendance and... disseminated in a manner reasonably calculated to notify the general public in the jurisdiction served" by the Town Council. See 30-A M.R.S.A. § 4352(1) (requiring the opportunity for public participation in the preparation of a zoning ordinance). This standard required the authority to provide notice that was sufficient to give the public a reasonable opportunity under the circumstances to be present during the authority's deliberations. *Crispin v. Town of Scarborough*, 736 A.2d 241 (1999).

The Appellee effected the rezoning upon a recommendation by the planning Board of the City's Department of Planning and Urban Development, without engaging the public for their input on the said intention. Besides, no voting was done, which included the public. According to the aforesaid law 30-A M.R.S. § 4352(1),

public participation is **required**. In that regard, public participation is a pertinent requirement in the preparation of a zoning ordinance. Failure to conduct public participation amounts to a blatant violation of the said Statute, thus making the ordinance null and void.

II. THE TRIAL COURT ERRED WHEN IT FAILED TO CONSIDER THE FACT THAT THE UNDERLYING ZONE CHANGE WAS IMPROPER/ILLEGAL.

In order for the ordinance to be a valid exercise of the Town's police power it must 1) provide for the public welfare, 2) use means appropriate to the desired ends, and 3) not be exercised in an arbitrary or capricious manner. *Tisei v. Town of Ogunquit*, 491 A.2d 564, 569 (Me. 1985). Further, "[a] zoning ordinance shall be drafted as an integral part of a comprehensive plan for municipal development, and promotion of health, safety and general welfare of the residents of the municipality." *Barnard v. Zoning Bd. of App. of Town of Yarmouth*, 313 A.2d 741, 744 (Me. 1974).

In order to constitute a valid exercise of the police power the restriction imposed by zoning ordinances must bear a substantial relation to the public health, safety, morals or general welfare of the public. *Toulouse, et al. v. Board of Zoning Adjustment*, 147 Me. 387, 393. It is worth noting that "[t]he term public welfare has never been and cannot be precisely defined. Sometimes it has been said to include public convenience, comfort, peace and order, prosperity, and similar concepts, but

not to include mere expediency." *Wright v. Michaud*, 959 A.2d 753. There is therefore a tendency to give a broad interpretation to the term "public welfare". *Id.* Accordingly, in considering the provisions of a comprehensive zoning ordinance the legislative body may take into consideration the nature and character of the community and of its proposed zone districts, the nature and trend of the growth of the community and that of surrounding municipalities, the areas of undeveloped property and such other factors that necessarily enter into a reasonable and well-balanced zoning ordinance. *Wright v. Michaud*, 160 Me. 164, 173 (Me. 1964).

According to *Warren v. Municipal Officers, Etc.*, 431 A.2d 624, 628 (Me.1981), the zoning ordinance itself is presumed to be constitutional. Notably, a **properly promulgated** zoning ordinance is accorded a "strong presumption of constitutional validity." *Penobscot Area Housing Development Corp. v. City of Brewer*, 434 A.2d 14, 23 (Me.1981). See also *Barnard v. Zoning Board of Appeals of the Town of Yarmouth*, 313 A.2d 741, 744 (Me.1974). The burden is on Complainant to show by "clear and irrefutable evidence that it infringes on paramount law". *Warren v. Municipal Officer, Etc.*, 431 A.2d 624, 628 (Me.1981). See also *The Law of Zoning and Planning*, Rathkopf, Vol. 1, page 21-1. Substantial evidence" has been characterized as "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Hrouda v. Town of Hollis*, 568

A.2d 824, 826 (Me.1990) (quoting *In re Maine Clean Fuels, Inc.*, 310 A.2d 736, 741 (Me.1973)).

In the instant action, the zoning ordinance was improperly enacted and effected. First, it became operational in violation of statutory provision that required public participation. The fact that no public participation was done in the preparation of the ordinance makes the said ordinance null and void. Next, the ordinance is against public welfare. It is clear from the foregoing case law that the Courts give public welfare a broad interpretation. Accordingly, public welfare consideration may include protecting and/or preventing individuals' properties from flooding. In this case, one of the effect of the zoning ordinance is that it made it possible for developments to be done in an around the Appellant's property, which developments subject Appellant's property to flooding. In that regard, Appellant avers that there is sufficient evidence to ascertain that the City violated paramount law, when it effected the zoning ordinance without an involvement of the public as required by the applicable law.

III. THIS CASE IS NOT BARRED BY THE STATUTE OF LIMITATIONS

According to Stat. Tit. 14, § 752, all civil actions shall be commenced within 6 years after the cause of action accrues. The Maine Supreme Court accepted a case challenging the 30 year-old decision in *Bell v. Town of Wells*, 557 A.2d 168

(1989) that limited the public's enjoyment of private beaches. Also, the Maine Supreme Court accepted to reconsider its decision in *Almeder v. Town of Kennebunkport*, 2014 ME 12, issued on February 4, 2014, which was past the statutory limit.

Appellant avers that the statutory limit may cease to apply in cases of public interest. Notably, the Statute of limitations does not apply to Appellant's motion as the zone change was illegally obtained. The Appellee cannot claim that the Appellant's case is late since the Appellee's actions to rezone were illegal, hence voids the B5 zone change. Appellee misleads this Court by claims that the City Council properly voted upon this zone change that is required by legislative law; public notice, public hearing, and vote by City Council. Voting on zoning maps for an existing illegal zone change does not constitute a legal zone change.

It is worth noting that on or about December 4, 2014, Barbara Barhydt, the Development Review Services Manager, affirmed in an email that she could not trace the actual council orders that authorized the rezoning. Further, on February 13, 2015, the Appellee's attorney, Jennifer Thompson, Esq., admitted that she could not find any order that adopted the rezoning. Therefore, Appellee cannot claim reliance on an illegal ordinance zone. Appellant further avers that the controversy in the case is triggered by the developer's application to conduct construction activities, which developments expose Appellant's property to

additional floods. In that regard, Appellant avers that he did not bring this matter before the Court in 2014 as there was not any application for development to further harm the Appellant. Appellant avers that there was not any threat in the past seven years of any proposed plans of development that would impact this area with additional flooding to the Appellant's property/home there was not any need to file a lawsuit. This does not undermine the facts that the illegal zone change does not become legal over time and just because the Appellee claims it is a legal zone change. Appellee and Trial Court relies solely on the case law *Bog Lake Co. v. Town of Northfield*, 2008 ME 37, ¶ 9, 942 A.2d 700. This case law does not apply to this matter as in the referenced case law the Town of Northfield underlying zone change was legally perfected unlike where the Appellee did not follow the proper legal process to obtain their zone change. Appellee seems to not recall that the Appellant attempted on two occasions to resolve this matter by exhaustive administrative remedies, and the Appellee's Attorney Jennifer Thompson, Esq. was overly combative in the first meeting that included then City Manager, Jon Jennings. A few years later a second meeting that included A.J. Hungerford, Esq., and that meeting was less combative in nature.

CONCLUSION

In light of the foregoing, Appellant humbly submits that Trial Court erred in dismissing Appellant's case. Notably, the Trial Court erred when it failed to recognize that public participation was required in the preparation of the city's zoning ordinance. The Trial Court also erred when it failed to consider the fact that the underlying zone change was improper and/or illegal. Lastly, it is clear that the statute of limitations argument raised by the Appellee does not apply to the case.

Respectfully submitted,

Dated: May, 22, 2022

Dale J. Holman
10 Willow Lane
Portland, ME 04102
Appellant, *pro se*
207-409-9307

CERTIFICATE OF SERVICE

The undersigned hereby certifies that he served a copy of the foregoing brief on counsel for the Appellee/Respondent by depositing a copy, contained in a first-class postage-paid wrapper or envelope, at an office of the United States Postal Service, addressed as follows:

Appellee, Jennifer Thomas, Esq.
Acting Corporation Counsel
389 Congress Street, Room 211
Portland, ME 04101
207-874-8480

Dated: May 25, 2022

/s/ Dale J. Holman

Dale J. Holman
10 Willow Lane
Portland, ME 04102
Appellant, *pro se*
207-409-9307

Fwd: 73 Powsland Street, Portland Planning Board Workshop

Subscribe ☐

0 views



Sheba Brown <sbrown@portlandmaine.gov>
to Planning Board

Jul 6, 2022, 3:14:00 PM (yesterday)

Best,
Sheba

----- Forwarded message -----

From: **Scott Rheault** <smrheault@hotmail.com>

Date: Wed, Jul 6, 2022 at 11:58 AM

Subject: 73 Powsland Street, Portland Planning Board Workshop

To: publiccomment@portlandmaine.gov <publiccomment@portlandmaine.gov>

The Applicant has still not shown any rights/permissions/approvals from the State or Federal Governments or the Railroad Company to remedy the storm water issues associated with this area and its potential development.

None of the documents located online have changed to address any of the concerns of the City/State and Neighborhood expressed at the last meeting.

The developer has, on multiple occasions, directly, and intentionally performed non-permitted work (and allowed R.E. Coleman to do the same) on this site without any corrective measures performed.

The developer should lose their right to develop this site as they have made it very clear with their past actions that they have no regards for the City/State planning/permitting processes.

Thanks,

Scott Rheault

72 Powsland St

[207-899-6708](tel:207-899-6708)



Planning and Urban Development Department

Subject: B5 Design Review – 65-73, 93 Powsland Street

Written by: Sean King, Urban Designer

Date of Review: Thursday, December 30, 2021

The proposed development of (4) two-family (duplex) and (1) single family residence at 65-73, 93 Powsland Street was reviewed against section (i) Two-Family in the City of Portland Design Manual.

Reviewers: Sean King – Urban Designer, Austen Torres Davis - Planner, Jimmy Dealaman - Planner, and Kevin Kraft - Deputy Director of the Department of Planning & Urban Development.

Design Review Comments (*red text denotes standards that are not met*):

The proposed design currently **does not meet** all of the design standards for development – please refer to comments below regarding design standards currently not met in order to meet the site plan standards. Conditions of approval may be needed to resolve these outstanding design items.

(i) TWO-FAMILY, SPECIAL NEEDS INDEPENDENT LIVING UNITS, MULTIPLE-FAMILY, LODGING HOUSES, BED AND BREAKFASTS, AND EMERGENCY SHELTERS

(1) STANDARDS. Two-family, special needs independent living units, multiple-family, lodging houses, bed and breakfasts, and emergency shelters shall meet the following standards:

a. Proposed structures and related site improvements shall meet the following standards:

1. The exterior design of the proposed structures shall be designed to complement and enhance the nearest residential neighborhood. – **Not Met**
The design of exterior facades provides positive visual interest in building form and height, window pattern and spacing, porches and entryways, cornerboard and trim details, and facade variation in projecting or recessed building elements for each residence appropriate to context of residential neighborhood. **The residential quality of the neighborhood can be described as incremental infill that reflects a variety of architectural style and periods that does not capture a singular precedent. The uniformity of the proposed two-family (duplex) architectural style deviates from the residential neighborhood pattern, consider further exterior design variation for greater positive visual interest through façade material, roof type and/or differential façade variation. Facade materials to be indicated on architectural elevations. The proposed hipped roof form is not the dominant roof form present throughout the surrounding neighborhood, and where evident there is the inclusion of a dormer window or other roof**

projections to additional opportunities for air and light into upper floor. Consider further variation in roof form as an opportunity for greater positive visual interests that responds to the variety reflected in the surrounding residential neighborhood character.

2. The proposed development shall respect the existing relationship of buildings to public streets. – Met

The proposed development integrates into the existing residential fabric with observed building location, street frontage landscaping and identified porches for each residence.

3. Open space on the site for all two-family shall be integrated into the development site. – **Not Met**

The proposed development landscape plan includes tree plantings within the street frontage buffer to screen from street. **Identify open space functions to 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. Include additional vegetated screening to buffer adjacent properties at side and rear yard, with special consideration for vegetation at top of proposed slope in rear to screen steep grades proposed and views from adjacent rear properties.**

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 – **Not Met**

Proposed dwellings includes ample windows throughout all facades. **Provide architectural floor plans to identify window arrangement specific to proposed interior living spaces. Provide allocation of sufficient storage areas within basement, attic space or other interior space.**

5. The scale and surface area of parking, driveways and paved areas are arranged and landscaped to properly screen vehicles from adjacent properties and streets. – **Not Met**

The proposed development landscape plan shall include proposed landscaping to properly screen vehicles from adjacent properties.

6. Two-family shall not be converted to lodging houses unless all units in the building have been vacant for at least one (1) year prior to the date conversion is sought or unless the individual multiple-family units are less than one thousand (1,000) square feet in size. **Standard is not applicable.**

Design Review
Planning and Urban Development Department



Subject: 73 Powsland Street
 Zone: B5
 Date of: Friday June, 3 2022
 Review: Design Review – Follow Up
 Reviewer(s): Sean King (Urban Designer), Austen Torres Davis (Planner), Kevin Kraft (Deputy Director)
 Project ID: PL-001808-2021

I. INTRODUCTION

The proposed development of (4) two-family (duplex) and (1) single family residence at 65-73, 93 Powsland Street.

II. DESIGN REVIEW COMMENTS:

The proposed development was reviewed against section (i) Two-Family in the City of Portland Design Manual. Conditions of approval may be needed to resolve these outstanding design items.

MULTIPLE-FAMILY STANDARDS. Multiple-family shall meet the following standards, *(red text denotes standards that are not met)*:

(i) TWO-FAMILY, SPECIAL NEEDS INDEPENDENT LIVING UNITS, MULTIPLE-FAMILY, LODGING HOUSES, BED AND BREAKFASTS, AND EMERGENCY SHELTERS

a. Proposed structures and related site improvements shall meet the following standards:

1. The exterior design of the proposed structures shall be designed to complement and enhance the nearest residential neighborhood. – **Met**

The residential quality of the neighborhood can be described as incremental infill that reflects a variety of architectural style and periods that does not capture a singular precedent. The applicant has provided a complimentary variation of architectural style to create distinguishable dwelling units that reinforce that overall residential neighborhood pattern. The design of exterior facades provides positive visual interest in building form and height, roof form variations, window pattern and spacing, porches and entryways, cornerboard and trim details, and facade variation in projecting or recessed building elements.

2. The proposed development shall respect the existing relationship of buildings to public streets. – **Met**

The proposed development integrates into the existing residential fabric with observed building location, street frontage landscaping and identified porches for each residence.

3. Open space on the site for all two-family shall be integrated into the development site. – **Not Met**

The proposed development landscape plan includes tree plantings within the street frontage buffer to screen from street. **Identify open space functions to 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. Include additional vegetated screening to buffer adjacent properties at side and rear yard, with special consideration for vegetation at top of proposed slope in rear to screen steep grades proposed and views from adjacent rear properties.**

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 – **Met**

Proposed dwellings include ample windows throughout all facades, in addition to storage areas accessed by each unit at the basement level.

5. The scale and surface area of parking, driveways and paved areas are arranged and landscaped to properly screen vehicles from adjacent properties and streets. – **Not Met**

The proposed development landscape plan shall include 5' feet minimum planted area between each driveway and adequately screened with landscaping with a mix of tree and understory shrub plantings.

6. Two-family shall not be converted to lodging houses unless all units in the building have been vacant for at least one (1) year prior to the date conversion is sought or unless the individual multiple-family units are less than one thousand (1,000) square feet in size. **Standard is not applicable.**

73 Powsland Street – Preliminary Review Comments

Zoning

-Please show shoreland zone line on the plan. The 250' setback needs to be measured from the upland edge of the coastal wetland or the annual highest tide, whichever is closest to the property. The plan should show the location of the edge of the shoreland to the 250' mark on the property. The plan should also state the square footage of the area within the Shoreland Zone and include any trees or existing vegetation within this area.

-For any development or land use activities within 250 feet of the Shoreland zone, please respond with narrative to how the proposal is addressing any applicable Shoreland Zone standards under City Code Chapter 14, Section 11.4

Transportation

-In general hammerhead turnarounds are not recommended, and the retaining wall is not something Public Works generally supports in the Public ROW. Public Works would prefer to see a street connection with Powsland Street connecting to Sewall Street.

-Please note the street width

-Please clearly label on the site plan where new paving begins and label which portions of the roadway that are being repaved. A written request to repave a street under moratorium should be submitted, and permission to pave during moratorium must be granted Public Works (Powsland St was recently paved in 2019 and currently under a 5-year moratorium). Please address request to Chris Branch, Director of Public Works, and Planning Staff will forward this to Public Works for consideration.

-If no sidewalk or curb is proposed, please submit a waiver request for not providing a sidewalk and curb providing the eligibility of how the project meets the criteria listed under City Code Chapter 14, Section 14.6.1.B.3.c and d.

-The current driveway separation will necessitate a waiver to Technical Manual Section 1.7.1. Please submit a written request citing this section and justification as a basis for granting a waiver.

-Please show snow storage areas on plan or note how snow removal will occur and parties responsible. (Note: Snow storage areas may not encroach on areas designed to meet minimum parking requirements or on pedestrian walkways and shall not be located where they would adversely impact the functionality of stormwater management systems. Landscaping also should also not be negatively impacted)

Landscape Preservation/Landscaping

-Please indicate any tree removals or areas where vegetation is being removed as well as showing any appropriate tree protection measures taken for any existing trees/vegetation to be preserved on site.

-The project is required to provide 10 street trees (Per Sec. 4 of Technical Manual: 2 required trees for a single family, and 1 tree per unit for multifamily). If site constraints prevent the project from planting the required, please submit a request to be considered for an alternative (ex. tree fund financial contribution (\$400 per tree) for each tree not planted, or proposing trees planted within 20 feet of the street frontage where visible from the street may also be considered to address street tree requirement).

-Please clarify if transformers are above ground if so, please also provide adequate screening. Per City Code Section 14.6.2.C.2.a ground-mounted utility structures must be screened from view from public sidewalks, streets and adjacent properties by dense evergreen landscaping, fencing, architectural screening products, masonry walls, building walls, or a combination thereof.

-Per City Code Section. 14.6.2.C.2.c. *"All residential development shall provide and/or preserve evergreen vegetated buffers where necessary to buffer the development from detrimental impacts of existing surrounding development."* Please update plan to meet this standard, and also see design comments regarding open space for more information.

-On the existing conditions plan, please note the two 12" maples that are being cleared to develop the site

Utility

-Please submit the attached Wastewater Capacity Application to Brad Roland brad@portlandmaine.gov in Public Works to confirm sufficient capacity to handle wastewater.

-Please provide an ability serve letter from the Portland Water District for the project

Parking

-Please denote the parking space areas on plan. (Note: a standard parking space is 9'x18')

Street Lighting

-The project is subject to meeting street lighting standards (Technical Manual Sec 10.2). Town and Country pole lighting fixtures are required for a local streets, please update plans to show at least one new pole street lighting which should start approximately 130 feet from the nearest/existing cobrahead fixture. (Please note the distance to nearest existing street light) Public Works continues to review the proposed street design so additional lighting may potentially be determined necessary. Please see attached detail for the required X-1 fixture type.

Site Lighting

-Please provide a lighting plan or request waiver for providing a lighting plan. Staff recommend providing a lighting plan. Regardless, please provide cutsheets of any lighting fixtures proposed, indicating the models intended. (Note: please ensure these fixtures are full cutoff and do not exceed 3000k CCT.

Stormwater

-Our stormwater consultant has the following notes:

- The stormwater management plan was not attached, please submit
- o The waiver request for the flooding standard appears to have an incorrect reference. The stormwater management plan should provide more information to support the waiver request.
- o The stormwater report should also provide more information on the stormwater treatment requirements – treatment of the new roadway per Maine DEP Chapter 500 and City of Portland Technical Manual Section 5 will be required, and it is not clear from the plan how this is being accomplished.
- The application notes a NRPA permit has been filed for wetland impacts. The grading plan should clearly delineate the wetland impact area. No erosion control plan was provided, or a plan in the set that includes locations of erosion control. This plan should also account for the wetlands proximity with appropriate measures (i.e. double row of sediment barrier).
- The documents note that a NRPA exemption was issued in 2004. This was not provided, please submit this documentation to confirm the project's right to replace of the existing culvert under the railroad tracks.

- Please provide any updates on the NRPA filed for wetland impacts. Please forward to the City when received.
- Please clarify the amount of wetland that might be filled. Please also provide more information on how the wetland was delineated.

Design

- See attached design review memo with review comments

General:

- Please provide documentation for the right title and interest for lot 190 K009. The deed provided appears to only cover lots 190 K010 thru 014.

-Several documents provided, the contract for the sale of commercial real estate dated August 2020 for, DEP letter from 2005, Planning Board Approval from 2005, and a Declaration of Covenants and Restrictions, don't appear to pertain to the property being applied for, please resubmit any other relevant documents for the application such as past applicable approvals, easements, and restrictions on the property.

- Please confirm that the project has obtained the necessary permission from CMP or that the project will not conflict with the existing CMP easement (which is shown on survey), or if corrective easement if needed. Please also provide a copy of the existing easement for documentation purposes, and show any easement areas on the plan.

- The financial capability letter described was not attached. Please submit demonstration of financial capability.

GENERAL

- This project will need some kind of **alternative or common ownership structure** (like a homeowners association) in order for the site to fully function as it relates to the structure of the site (as proposed) and responsibility for stormwater maintenance.
- City Staff sent over recommendations on alternative layouts. The City recommended four options that the applicant could receive although those are **not** the only options available at this time – only what City staff had considered. Any future changes that will significantly impact site plan layout after conversations with CMP and the City will need to be reviewed.

ZONING

- Please make sure the 250 ft. Shoreland Zone setback is properly located and labeled on the site plan.

TRANSPORTATION

- At this time, City Staff do not find the waiver analysis for driveway separation to be acceptable. The applicant should revisit the design layout of the site and consider shared driveways or other access scenarios.
- The applicant will need to submit a waiver for exceeding the maximum number of driveways on each lot. Technical Manual requires 1 per lot. City Staff are not fully supportive of this waiver without justification provided from the applicant.
- DPW will need to complete the review of the sidewalk and curbing waiver analysis.
- The roadway alignment of Powsland adjacent to the site has a shifting alignment. DPW will need to review.

WATER QUALITY, STORMWATER, & INFRASTRUCTURE

- DPW not supportive of maintaining the r-tank stormwater system on private property and DPW doesn't usually take ownership or long-term maintenance responsibility for these improvements.
- Staff are still reviewing stormwater, but anticipate some follow up comments on future layouts.
- DPW is requiring that any treatment or infrastructure at the end of Powsland not interfere with a future connection to Sewall Street.
- Applicant will need to receive permission for a pavement moratorium repair.
- City Staff are requesting a downstream capacity evaluation (Discharge Study) to see site impacts on surrounding system. (May not be needed if site layout changes).

PUBLIC SAFETY

- Public Safety has not provided comments at this time.

LANDSCAPING & ENVIRONMENTAL QUALITY

- Planning Staff have not received landscaping/environmental quality comments at this time.

DESIGN REVIEW

- Design Memo has been attached to this document. Comments are below. 73 Powsland is being reviewed against section (i) Two-Family in the City of Portland Design Manual.
- Open Space requirement not met.
- The proposed development landscape plan includes tree plantings within the street frontage buffer to screen from street. **Identify open space functions to 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. Include additional vegetated screening to buffer adjacent properties at side and rear yard, with special consideration for vegetation at top of proposed slope in rear to screen steep grades proposed and views from adjacent rear properties.**
- The scale and surface area of parking, driveways and paved areas are arranged and landscaped to properly screen vehicles from adjacent properties and streets. – **Not Met**

Six-Unit Residential Building
26 East Oxford Street
Major Site Plan Review
PL-001837-2021
26 Oxford LLC., Applicant

Submitted to:	Portland Planning Board	Prepared By:	James Rather
Public Hearing Date:	July 12, 2022	Date:	June 8, 2022

I. INTRODUCTION

26 Oxford, LLC has submitted a Major Site Plan application to facilitate the development of a four-story multifamily residential development including six new residential units totaling approximately 8,750 square feet of floor area at 26 East Oxford Street in the East Bayside neighborhood. This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code Site Plan Standards, Section 14.1.

The Planning and Urban Development Department mailed 156 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the July 2nd and July 5th, 2022 editions of the *Portland Press Herald*.

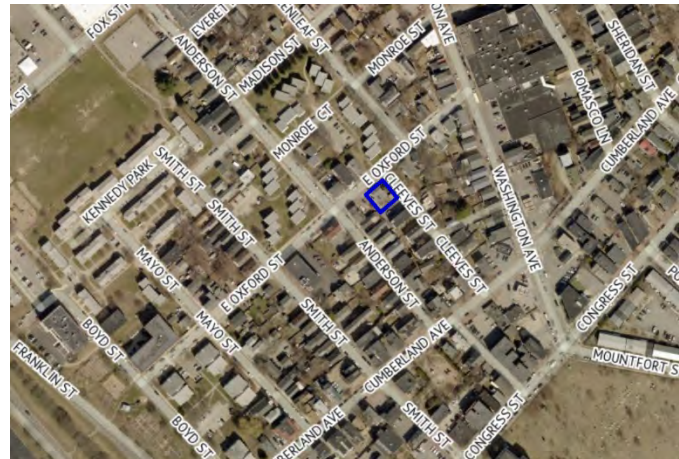


Figure 1 – Aerial View of Site Outlined in Blue

A Planning Board workshop related to this development proposal was held on April 26, 2022.

Owner/Applicant: 26 Oxford LLC (Ray Chang)
Applicant Representatives: Trillium Engineering; Paul Designs Project, PLLC

II. REQUIRED REVIEWS

I. Review	Applicable Standards
Site Plan	Section 14.6
Design Review	City of Portland Design Manual Section (k) Small Residential Lot Development Located in the R-6 Zone; Appendix 7 R-6 Infill Development Design Principles & Standards

Waiver Requests	Applicable Standards
Request: To reduce parking lot drive aisle width from 24 feet to 15 feet 9 inches	Technical Manual, Section 1.14.3.: Parking lot layout shall provide a minimum drive aisle of 24 feet.

Request: To allow use of existing curb cut for site driveway at a distance of 16 feet, 9 inches from the nearest intersection	Technical Manual, Section 1.7.2.7: The location and spacing of driveways shall be determined as follows: Along local streets, access driveways to corner lots shall be located a minimum of thirty-five (35) feet from the intersection of the projection of right-of-way lines to the center line of the driveway, except as provided hereinafter.
Request: To allow for a concrete sidewalk and driveway apron versus the required brick material type	Technical Manual, Section 1.8.2: The type of sidewalk and driveway apron material shall consult the City's Sidewalk Materials Policy indicated in the Appendices. The Technical Manual Appendices indicates the property is within the brick sidewalk district.

III. PROJECT DATA

Existing Zoning	R-6 Residential
Property Size	4,720 SF
Existing Use	Two-Family Residential
Proposed Use	Multifamily Residential

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	1,834 SF	2,500 SF	+666 SF
Building Floor Area	4,655 SF	8,750 SF	+4,095 SF
Impervious Surface Area	2,573 SF	2,832 SF	+259 SF
Parking Spaces	2 spaces	4 spaces	+2 spaces
Bicycle Parking Spaces	0	2 spaces	+2 spaces

IV. EXISTING CONDITIONS AND SURROUNDING AREA

The property at 26 East Oxford Street (CBL 013 D002) is a corner lot on a block bounded by Cleeve Street, Cumberland Avenue, Anderson Street, and East Oxford Street, with a primary frontage along East Oxford Street and located in the East Bayside neighborhood. The development site, which is one block downslope from Cumberland Avenue, is proximate to several priority corridors, the nearest of which runs along Washington Avenue which is roughly a two-minute walk from the site and offers a mix of commercial uses, as well as METRO bus routes 7B, 9A, and 9B, located to the east of the site. The property is located to the north of Peppermint Park, a small pocket park containing a playground on Cumberland Avenue, as well as Kennedy Park (i.e. 'Fox Field') a recreation and open space offering playground, basketball courts, and futsal court amenities to the west.

The property currently contains an existing two-family home (1,834 square feet) which was built in approximately 1910 and which includes two driveways on each end of the building. The site's surrounding context is primarily comprised of residential uses, including single-family and multifamily buildings that range between two and four stories.



Figure 3 – Street View of Existing Building Facing Northeast

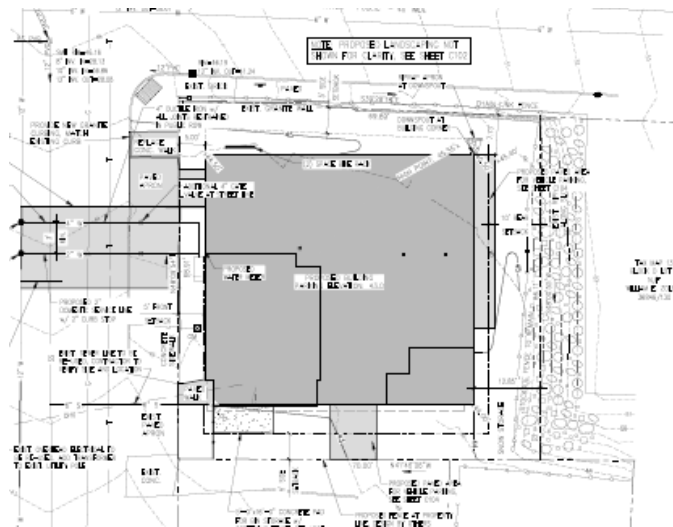


Figure 4 – Proposed Site Plan

V. PROPOSED DEVELOPMENT

The applicant proposes to demolish the existing two-family home at 26 East Oxford Street and construct a four-story, six unit residential building containing one 1-bedroom, four 2-bedroom, and one 3-bedroom rental unit totaling 8,750 square feet of floor area. The project includes a covered ground-floor parking area at the ground level accessed by an existing curb cut. The site driveway leads directly into the ground floor parking level, which contains four indoor parking spaces. The proposed development would have a front streetwall height of 40 feet, with the portions of the building stepped back from the side and rear of the property lines measuring at 29 feet tall, with the latter required to meet the 15-foot rear setback. The stepped back portion along



Figure 5 – Perspective Rendering 1

the side yard property line off of Cleeve Street includes an elevated deck benefiting the third floor unit.

The project includes one honey locust tree planted in the public right of way, five arborvitae trees planted within the side yard and one in the rear yard, as well as six bayberry bushes along the frontage and seven in the rear yard.

VI. PREVIOUS WORKSHOP

On April 26, 2022 a Planning Board Workshop was held to discuss the development proposal. Site design items raised during this workshop included vehicle and pedestrian circulation, specifically the need for two curb cuts to serve the development site; screening and operation of the bin storage area, and the proposed use of concrete for sidewalks along the property's frontage. Building design items discussed included the screening of the ground floor parking area, window trim and design, and the location of HVAC mechanicals.

Since that meeting, the applicant has provided an updated plan set, including a parking layout plan with Autoturn movements, and has reconfigured site access to utilize only the existing, northerly curb cut closer to Cleeve Street, rather than both of the existing curb cuts. With the removal of the southerly curb cut, access to the parking space located on plan south, adjacent to the bin storage area, will now be provided via a "hammerhead" configuration. Updated elevations have also been provided to include louvers to screen the ground floor parking area and gated screening for the bin storage area. Consistent with existing conditions in the surrounding project area, the applicant will utilize concrete for the sidewalk along their frontage, and DPW is supportive of a waiver from the requisite Technical Manual standard.

VII. RIGHT, TITLE, & INTEREST

The owner of the property is 26 Oxford LLC. The applicant has provided a copy of a warranty deed recorded at the Cumberland County Registry of Deeds (Book 35605 Page 186), which demonstrates their right, title and interest in the property (Attachment C).

VIII. FINANCIAL & TECHNICAL CAPACITY

The applicant has submitted a letter by the owner's financial institution stating the owner's financial capability to undertake the project (Attachment E).

The applicant's representative has submitted a Letter of Technical Capacity stating the development team's experience in design and permitting in the State of Maine and ability to undertake the project (Attachment F).

IX. ZONING ANALYSIS

The parcel is located in the R-6 Residential zone. R-6 is a high-density zone located on the peninsula characterized primarily by multi-family dwellings, which encourages new housing consistent with the compact lot development pattern. The zone is bounded by the B-2b Community Business zone to the east, the India Street Form-Based Code and B-3 Downtown Business zones to the south, the B-7 Mixed Development zone to the west, as well as a collection of neighborhood business, urban commercial, and low impact industrial zones to the north (Figure 5).

The proposed multi-family dwelling use is a permitted use in the R-6 zone (Land Use Code Table 6-A). Staff analyzed the proposal and found that all relevant dimensional standards including minimum lot size, setbacks, and frontage requirements set forth within the R-6 zone are being met which are summarized below:

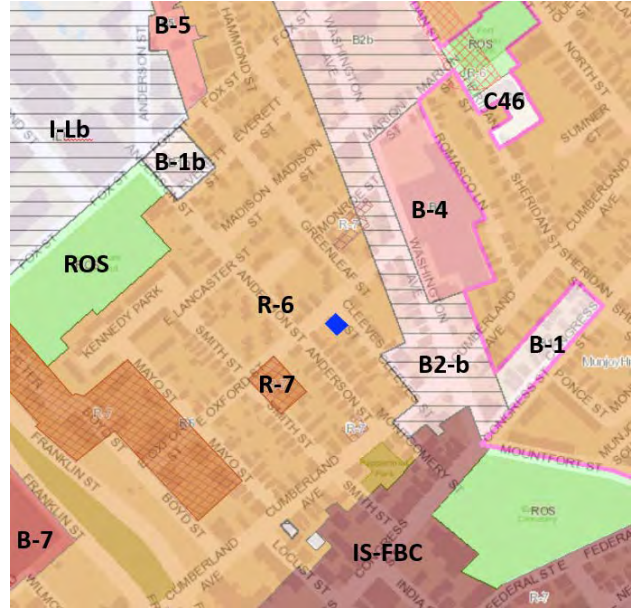


Figure 6 – Zoning Map with Subject Parcel in Blue

DIMENSIONAL AND USE REQUIREMENTS

<i>R-6 Residential Zone</i>	<i>Permitted</i>	<i>Proposed</i>
Lot area per dwelling unit (min)	725 SF	786.7 SF
Street frontage (min)	20 ft.	70 ft.
Lot width (min)	20 ft.	70 ft.
Front setback (min)	5 ft.	5 ft.
Rear setback (min)	10 ft.	12.85 ft
Minimum side setback (right)	5 ft.	7.73 ft
Minimum side setback (left)	None (on side street)	10.51 ft.
Rear stepback (above 35 ft. when property line abuts a residential zone)	15 ft.	15 ft.
Side stepback	N/A	19.73 ft.
Structure height (max.)	45 ft.	40 ft.
Lot coverage (max.)	60%	60%
Landscaped open space ratio (min.)	20%	40%
Width of garage opening on front façade (max.)	9 ft. or 40% of the front facade, whichever is greater, and in no case more than 20 ft.	26.5% (13 foot wide garage opening / 49 feet front façade)

X. SITE PLAN REVIEW STANDARDS (Section 14.6)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's Site Plan Ordinance, Section 14.6. Staff comments are below.

1. Transportation Standards (Section 14.6.1)

A. Impact on surrounding street systems; and B. Access and circulation

With the proposed program of six dwelling units, an increment of four units over the existing condition of two units, the project is not expected to have an appreciable impact on vehicular or pedestrian movement within the surrounding street systems. The site is located on East Oxford Street, a local street, is proximate to public transportation, and, as an infill project within a dense, peninsular context, facilitates the ability of residents to reach destinations via foot, bicycle, and other nonmotorized modes. A new painted crosswalk at the intersection of Oxford and Cleeve Street, along with the replacement of an existing ADA detectable warning panel that does not meet Technical Manual requirements are also included within the project scope.

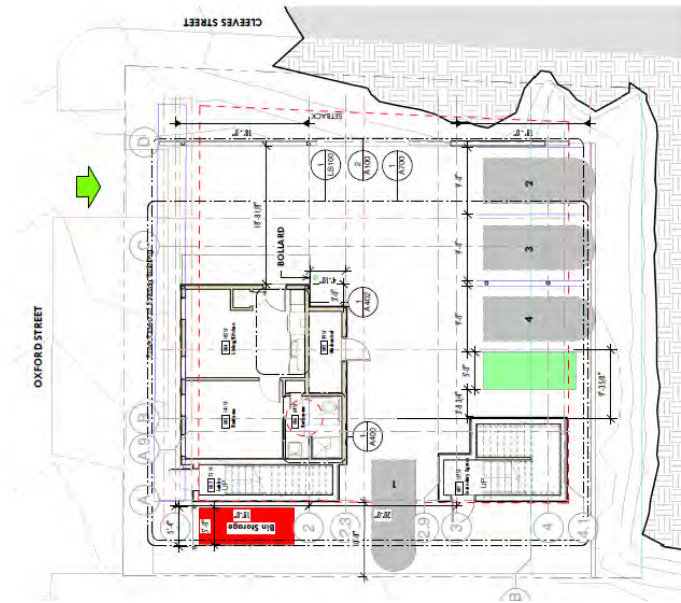


Figure 7- Ground Floor Parking Layout

To allow the desired development program within the confines of the site, the applicant seeks several Technical Manual waivers:

Technical Manual Waiver – Sec. 1.14.3 – Parking Lot Drive Aisle Width

The Technical Manual requires a minimum drive aisle width of 24 feet; the applicant proposes a parking lot drive aisle width of 15 feet 9 inches, requiring relief of 7 feet, 3 inches from the standard. Previously, staff asked that the applicant provide Autoturn templates, including the specific design vehicle used to model the turning movements, and to demonstrate that the movements into, out of, and within the ground floor parking area are viable. As per the Consulting Traffic Engineer:

The parking lot aisle width at its narrowest point is 15.73 feet wide. In support of a waiver from the City's Technical Standards, the applicant has provided vehicle turning templates. According to the information provided vehicles can maneuver and back out of the site onto East Oxford Street. The applicant should provide the vehicle dimension details used in the turning template analysis. Assuming the design vehicle used in the analysis is acceptable, I do support a waiver from the City's Technical standards. This is based on the fact that East Oxford Street is a local street, with low traffic volumes and vehicle speeds.

The applicant has now provided the requested materials (Attachment Q) to demonstrate that the model used for vehicle movement in and out of the development site is sound.

Technical Manual Waiver – Sec 1.7.2.7 – Location and Spacing of Driveways

The existing condition at the development site contains two driveways; pursuant to staff and Board feedback, the applicant will close the southerly curb cut and will utilize only the northerly cut as the vehicular access point into the site driveway and ground floor parking area. As the northerly driveway is located approximately 17 feet from the intersection of Oxford and Cleeve Street, a Technical Manual waiver is required, and staff is supportive of this waiver given the generally low vehicle speeds in the vicinity and low trip generation levels resulting from the proposed project. (Attachment 3)

Technical Manual Section 1.8.2 – Sidewalks and Driveway Aprons

In general, staff find the application provides for reasonable pedestrian access and circulation. The applicant's plan accommodates pedestrian circulation by way of making updates to the existing sidewalk and installing a new concrete sidewalk. Given that the site is located within a brick sidewalk district, pursuant to Section 1.8.2 of the City's Technical Manual, the applicant requests a waiver from the City's Sidewalk Materials Policy to keep the sidewalk consistent with those in the surrounding area which are concrete. Public Works engineers have reviewed the application and support the proposed concrete material in order to keep the material consistent in the area (Attachment 3).

Staff Finding: This standard has been met.

B. Public transit access

All residential development consisting of 20 or more dwelling units shall provide a transit shelter adjacent to or within the public right-of-way along its frontage when the development is proposed along an existing public transit route and the nearest transit shelter on the route is more than ¼ mile from the site.

Staff Finding: The proposed residential development is under 20 dwelling units, therefore this standard is not applicable.

C. Parking

Pursuant to Table 19-A of the City's Land Use Code, multifamily developments are required to provide one parking space per dwelling unit. In the R-6 zone no off-street parking is required for the first three dwelling units (per Table 19-B Exceptions to off-street parking minimums). In addition, no off-street parking is required for sites within ¼ of fixed route transit service per Table 19-B of the City's Land Use Code. The applicant proposes to provide four parking spaces onsite, one more than the requirement, all of which are to be located within the ground floor parking area.

The development is also required to provide two bicycle parking spaces for every five units proposed. The applicant has provided the required two bicycle parking spaces which are located along the north end of the property toward the street frontage.

Staff Finding: This standard has been met.

D. Transportation demand management (TDM)

Not required. The application proposes a total of 8,750 square feet of residential floor area, which is less than the review criteria threshold that would require a TDM plan.

Staff Finding: This standard is not applicable.

2. Environmental Quality Standards (Section 14.6.2)

A. Preservation of significant natural features

The existing site is a developed parcel located in an urban environment. The applicant has indicated that there are no significant natural features on site.

Staff Finding: This standard is not applicable.

B. Landscape preservation

The property includes existing landscaping onsite located along Cleeve Street, which includes a white pine and fir tree. The proposal calls for removing the existing vegetation, including invasive Asiatic bittersweet vine, along the north property line and replacing it with new landscaping (See Section C below) in the hope that the invasive landscaping will be eliminated. As the existing trees are located within the side property line that does not have a setback requirement due to being on a side street, no preservation within the side yard is required.

Staff Finding: This standard has been met.

C. Site landscaping and buffers

Under Section 4.6.1 of the City's Technical Manual multi-family residential projects are required to provide one tree per unit. The application proposes six units requiring six street trees be provided. The application proposes planting one honey locust street tree within the front sidewalk and due to the existing utilities preventing planting and a limited street frontage of 70 feet, the applicant proposes planting five additional trees onsite along Cleeve Street within 20 feet of the property line to meet the requirement.

Staff Finding: This standard has been met.

D. Water quality/storm water management/erosion control

The project proposes a stormwater system which conveys stormwater off the roof and discharges in the rear of the site through the downspout system, which then discharges to a swale onsite.

The City's consulting stormwater engineer has reviewed the applicant's drainage plans and stormwater management report with the applicable stormwater standards and finds that the project does not trigger any of the thresholds requiring stormwater treatment for redevelopment projects under MaineDEP Chapter 500 due to less than 5,000 sf of non-roof redeveloped impervious area, with 259 square feet proposed (Attachment 1). Since the Board workshop, the stormwater consultant has provided additional review comments to the applicant requesting that the plans include a detail for the rip rap area associated with the downspout with ground surface stabilization in order to prevent erosion (Attachment 3). The applicant has indicated that the rip rap area will consist of angular stone, 3 feet 6 inches in size, but has not yet provided the detail for inclusion in the plan set. As this has not yet been provided, an approval condition for updates to the plan set to include this item has been included with this report.

3. **Public Infrastructure and Community Safety Standards (Section 14.6.3)**

A. Consistency with City Master Plans

In addition to fostering development within one of the City's priority nodes in close proximity to priority corridors, the proposed project is in keeping with the stated goals of *Portland Plan 2030* regarding housing and the policy of creating complete neighborhoods. The project takes advantage of an on peninsula location near transit and walkable services.

Livable City: Housing – local goals met by this project:

- 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.

Staff Finding: This standard has been met.

B. Public safety and fire prevention

Planning Staff have reviewed the proposal with the City's Fire Marshal and find that all public safety and fire prevention concerns have been addressed.

Staff Finding: This standard has been met.

C. Availability and capacity of public utilities

The applicant has provided an ability to serve letter from the Portland Water District (PWD) (Attachment O) which demonstrated a need for the existing domestic water service line to be increased in size to 2 inches and the addition of a 4-inch sprinkler supply to serve the building sprinkler system. A letter from Central Maine Power (CMP) has also been provided indicating that CMP intends to supply power to this site via existing, overhead utility lines, rather than via underground electric, and thus a waiver from the City's undergrounding requirements is not applicable (Attachment P). A wastewater capacity authorization from DPW indicating the ability to service the required flows has been provided and is attached (Attachment I).

Staff Finding: This standard has been met.

4. **Site Design Standards (Section 14.6.4)**

A. Massing, ventilation, and wind impact



The proposed four-story multifamily structure meets the zoning dimensional requirements and the proposed height is consistent with the surrounding built context. No ventilation or wind impacts are anticipated.

Staff Finding: This standard has been met.

B. Shadows

Not applicable. The project is not adjacent to publicly accessible open space therefore the standards of this section are not relevant.

Staff Finding: This standard has been met.

C. Snow and ice loading

The proposal directs stormwater off the roof and discharges in the rear of the site through the downspout system. The applicant has shown designated snow storage areas on their plans. The development has been designed to prevent significant amounts of ice and snow from loading or falling onto adjacent properties or public ways.

Staff Finding: This standard has been met.

D. View corridors

There are no designated view corridors within the project vicinity.

Staff Finding: This standard is not applicable.

E. Historic resources

The site is not within an established historic district, nor within 100 feet of a historic landmark.

Staff Finding: This standard is not applicable.

F. Exterior lighting

The applicant has provided a lighting plan with photometrics, along with fixture cut sheets, that demonstrate compliance with the light trespass, lumen, color temperature, and other applicable requirements of Technical Manual Section 12, Site Lighting Standards.

Staff Finding: This standard has been met.

G. Noise and vibration

No adverse impacts related to noise and vibration are anticipated as mechanical equipment is screened and located away from residential properties. The applicant has stated that the HVAC system will meet the applicable state and federal emissions requirements and heat pump condensers and other HVAC equipment will operate from a ground level mechanical room and hung on the backside of the building approximately 13 feet away from the rear property line away from abutters. Additionally, there are arborvitae trees proposed along the rear property line which are 5 – 6 feet tall to provide screening at ground level.

Staff Finding: This standard has been met.

H. Signage and wayfinding

No wayfinding signage is currently proposed, and the only signage shown on plans is related to vehicular access.

Staff Finding: This standard has been met.

I. Zoning-related design standards

The proposal is subject to meeting the applicable R-6 Infill Development design standards under Section (k) of the City's Design Manual. The applicant has submitted elevations and renderings which have received multiple rounds of revision based on Board and staff comment.



Figure 8 – Oxford Street Elevation

The applicant's latest plans were reviewed in June by a design review team made up of three Planning staff which found that the design meets the applicable design standards. At the Planning Board workshop that preceded the second design review meeting, screening of the ground floor parking and bin storage areas were items of discussion, and to address these, the applicant has provided louvers to screen the parking area and a screen (with gate) for the bin storage area. Other items addressed within the most recent set of revisions included:

- Reduction in cornice depth to minimize roof profile
- Orientation of composite siding made consistent throughout building facades
- Ground floor window types updated to match upper floors at E Oxford elevation and sized to allow more light into ground level, with planted screening for privacy
- Updates to perimeter cable system guardrail for deck

A final design memo is attached (Attachment 4)

XI. NEIGHBORHOOD MEETING & PUBLIC COMMENT

The applicant's neighborhood meeting was held on January 13, 2022 and the required neighborhood meeting documentation has been submitted (Attachment L). Five members of the public were in attendance. The meeting included questions asking about the proposed design materials and landscaping. Discussion and feedback received by attendees included concerns about the amount of parking and waste disposal. Suggestions received included seeking upgrades to city infrastructure and supporting tree planting in the right of way area.

At the time of writing this report, no written public comment has been received for this project.

XII. STAFF RECOMMENDATION

Subject to the proposed motions and conditions of approval listed below, Planning Department staff find that the multi-family residential development at 26 East Oxford Street meets the applicable standards of Portland's Land Use Code. Planning staff recommend that the Planning Board approve the application to construct a six-unit residential structure.

XIII. 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 on July 12, 2022 for application PL-001837-2021 relevant to the Site Plan Standards of the Land Use Code and Portland's Technical and Design Standards, and other regulations, and testimony presented at the Planning Board public hearing:

1. **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 1.14.3 which requires a minimum drive aisle width of 24 feet on all drive aisles within two-way parking lots. The Planning Board [**waives/does not waive**] Technical Manual Section 1.14.3 to allow a parking lot drive aisle width of 15 feet, 9 inches.
2. **Location and Spacing of Driveways**
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 1.7.2.7, which requires a minimum of 35 feet between a site's access driveway and the nearest intersection. The Planning Board [**waives/does not waive**] Technical Manual Section 1.7.2.7 to allow the existing site driveway, located 16 feet 9 inches from the nearest intersection, to remain.
3. **Sidewalk Materials**
The Planning Board [**finds/does not find**] based upon review by the Department of Public Works, that extraordinary conditions exist or undue hardship may result from strict compliance with Technical Manual Section 1.8.2, which requires the usage of brick for sidewalks and driveways in designated areas pursuant to the City Sidewalk Materials Policy. The Planning Board [**waives/does not waive**] Technical Manual Section 1.8.2 to allow the sidewalk and driveway apron to be constructed with concrete.

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 July 12, 2022 for application PL-001837-2021 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 APPLICATION FOR A BUILDING PERMIT

1. The applicant shall update the drawings to include an oil-water separator connected to the sewer lateral for the drainage from covered parking areas and will provide an updated plan set to the Planning Authority and Department of Public Works for review and approval.
2. The applicant shall televise the sewer lateral serving the development site to confirm the condition of the lateral and its ability to handle the projected flows and will provide a report of findings to the Department of Public Works.
3. The applicant shall provide a detail for the rip rap area associated with the downspout to the Planning Authority for review and approval.

XIV. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Consolidated Review Comments – Pre-Workshop
2. Planning Board Workshop Memo
3. Consolidated Review Comments – Pre-Hearing
4. Design Review Comments (ver 7-7-22)

APPLICANT'S SUBMITTAL

- A. Project Narrative
- B. Application Checklist
- C. Deed
- D. Agent Authorization
- E. Financial Capacity
- F. Technical Capacity
- G. Zoning Table
- H. TM Waiver Table
- I. Wastewater Capacity Authorization
- J. Stormwater Report
- K. Cost of Estimate of Electrical Service
- L. Neighborhood Meeting Documentation
- M. Response to Staff Comments (dated 2.22.2022)
- N. Response to Staff Comments (dated 4.6.2022)
- O. PWD Ability to Serve Letter
- P. CMP Ability to Serve Letter
- Q. Autoturn Design Vehicle

PLANS

- Plan 1 – Survey
- Plan 2 – Cover Sheet – Civil Plans
- Plan 3 – Existing Site Plan
- Plan 4 – Proposed Site Plan
- Plan 5 – Proposed Landscaping Plan
- Plan 6 – Construction Management Plan
- Plan 7 – Parking Layout Plan

Plan 8 – Site Details
Plan 9 – Erosion Control Details
Plan 10 – Arch Cover Sheet
Plan 11 – Foundation Plan
Plan 12 – Ground Floor Layout Plan
Plan 13 – Ground Floor Plan
Plan 14 – Second Floor Plan
Plan 15 – Third Floor Plan
Plan 16 – Fourth Floor Plan
Plan 17 – Roof Plan
Plan 18 – Elevation – Oxford St
Plan 19 – Elevation – Cleeve St
Plan 20 – Elevation – Side-Garage Entrance
Plan 21 – Elevation – Back
Plan 22 – Bldg Sections
Plan 23 – Bldg Sections Cont
Plan 14 – Stair Tower Sect
Plan 25 – RCP – Gnd Lvl
Plan 26 – RCP – 2nd Fl
Plan 27 – RCP – 3rd Fl
Plan 28 – RCP – 4th Fl



189 Main Street, Suite 200
Yarmouth, ME 04096

October 29, 2021

City of Portland
389 Congress Street
Portland, ME 04101

Re: 26 Oxford Street – Proposed Building
Site Plan Application

Dear Planning:

Trillium Engineering Group is providing this project narrative for the proposed building to be erected at 26 East Oxford Street. This development proposes the demolition of an existing two-story building in order to provide a new four-story residential building with (6) units (CBL 013 D002001).

The site currently features an existing 1,350± square foot building with an associated deck, bulkhead and adjacent garage. These buildings are to be removed and replaced with a new 22'-5 ¼"x34'-6 ¾" multi-family building. This project will lead to an increase of 259 square feet of impervious area.

Please see the plans, application, and below responses to the City of Portland Major Site Plan Application Checklist for further information.

General Application Documents:

1. *Project Description*

Response: A project description has been provided above.

2. *Completed checklist*

Response: A completed checklist has been provided, see attached documents.

3. *Evidence of Right, Title, and Interest*

Response: A deed to the property has been provided, see attached documents

4. *Evidence of State or Federal Approvals*

Response: This section is non-applicable, as the project will not require state or federal approval.

5. *Zoning Assessment*

Response: A modified version of zoning assessment table showing all relevant dimensional requirements has been provided on Sheet C101.

6. *Site Plan Standards Assessment*

Response: This project meets all the relevant standards outlined in Section 14.6 of the City of Portland Land Use Code. Due to the small nature of the work in question, this project will not have a notable effect on the surrounding transportation, public transit access, or environmental quality. This site meets the necessary off-street parking, public infrastructure, and site design requirements.



189 Main Street, Suite 200
Yarmouth, ME 04096

7. Summary of existing and/or proposed easements or covenants

Response: This section is non-applicable, as there are no known easements or covenants on this site.

8. Waiver requests

Response: Trillium Engineering Group is not requesting any waivers for this project.

9. Evidence of financial and technical capacity

Response: Letters of financial and technical capacity have been included in this application, see attached.

Transportation

Response: This section is non-applicable, as this project will not affect the existing on- or off-site traffic patterns or demands.

Environmental

Response: This section is non-applicable, as this project will not affect the existing on- or off-site traffic patterns or demands.

Public Infrastructure and Safety

Response: This project is consistent with the City's Master Plan. Trillium Engineering Group has spoken with George Carhart of the Portland Department of Public Works to confirm that the existing 6" sewer line will work for the proposed development.

Additionally, Trillium Engineering Group has obtained and attached an Ability to Serve letter from the Portland Water District for the proposed development.

Site Design

Response: Exterior lighting information has been included in the attached documents, and the location of the exterior lights have been shown on the architectural plans. All other portions of the site design checklist are not applicable.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eric Dube', with a stylized flourish at the end.

Eric Dube, P.E.
Trillium Engineering Group

CITY OF PORTLAND
Planning & Urban Development Department

MAJOR SITE PLAN GENERAL DOCUMENT AND DRAWINGS CHECKLIST Please submit each document as a separate PDF file. Please confirm by electronically checking the boxes in the left-hand column. ** PLEASE FILL OUT AND UPLOAD THE ZONING ASSESSMENT TABLE AND WAIVER TABLE SEPARATELY AS NOTED BELOW ** At the time of application submission, please contact the Department of Public Works regarding E-911 addressing for your project.		
GENERAL APPLICATION DOCUMENTS		
☒ Yes	NA	Project Description Cover letter with detailed project description
☒ Yes	NA	Completed Checklist (this document)
☒ Yes	NA	Evidence of Right, Title, and Interest Deeds, leases, or purchase and sales agreements
Yes	☒ NA	Evidence of State or Federal Approvals Permits or letters of non-jurisdiction, if applicable
☒ Yes	NA	Zoning Assessment (see Zoning Assessment Table) Summary of compliance with use and dimensional standards of the land use code
☒ Yes	NA	Site Plan Standards Assessment (see Section 14.6 of the land use code) Summary of project compliance with site plan standards of the land use code
Yes	☒ NA	Summary of Existing and/or Proposed Easements or Covenants, applicable. Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way
Yes	☒ NA	Waiver Requests (see Waiver Table) Written request for waiver describing request and compliance with applicable waiver standards
☒ Yes	NA	Financial Capability Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
☒ Yes	NA	Technical Capability Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

MAJOR SITE PLAN STANDARDS AND SUBMISSION CHECKLIST

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

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

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

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

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

MAJOR SITE PLAN DRAWINGS CHECKLIST

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

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

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

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

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

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

Existing Conditions Plan with the following:

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

Proposed Site Plan with the following:

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

• Location of solid waste management receptacles • Location of all proposed HVAC and mechanical equipment, including proposed screening, where applicable • Location of proposed easements and rights-of-way, including dimensions • Please utilize color-coding and/or hatches and shading to delineate changes between the pre and post development condition as needed
UTILITY PLAN including:
• Proposed electrical infrastructure • Location, sizing and directional flows of all proposed sewer and stormwater infrastructure • Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site • Electric utility infrastructure
GRADING AND DRAINAGE PLAN including:
• Proposed grades • Proposed stormwater management measures meeting Technical Manual (Section 5) standards • Any proposed alteration of a watercourse or wetlands • Any groundwater protection measures • Proposed buffers and preservation measures for wetlands or significant natural features
LANDSCAPE PLAN including:
• Existing vegetation to be preserved and preservation measures • Proposed landscaping, screening, and street trees, including caliper widths for trees • Planting schedule, including street trees
ARCHITECTURAL PLANS AND RENDERINGS including:
• Exterior building elevations, color renderings, illustrations of all sides • Axonometric and street-level views for structures greater than three stories in height • Provide context drawings, if applicable (Design Manual, page 1) • Floor plans
CONSTRUCTION MANAGEMENT PLAN including:
• Specifics on traffic control, sidewalk sheds, and pedestrian rerouting • Include a drawing and written narrative
OTHER
• Details and cross-sections, as necessary

WARRANTY DEED

(Maine Statutory Short Form)

1001940055799

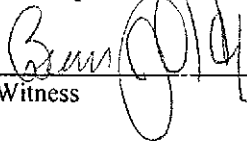
MAINE REAL ESTATE TAX-Paid

KNOW ALL PERSONS BY THESE PRESENTS, that **Barbara Cumming**, of 179 Second Street, Hallowell, ME 04347 for consideration paid, grants to **26 Oxford LLC**, a Maine limited liability company with a mailing address of 146 Pleasant Street, Lexington, MA 02421, with **warranty covenants**, the land together with all buildings thereon situated in the City of Portland, County of Cumberland and State of Maine, being more particularly described as follows:

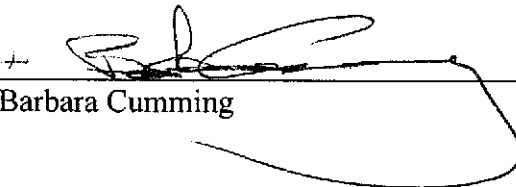
See attached Exhibit A – Property Description

WITNESS my hand and seal this 26th day of April, 2019

Signed, Sealed, and Delivered
in the presence of:



Witness



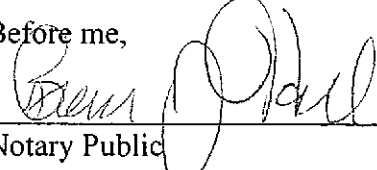
Barbara Cumming

STATE OF MAINE
COUNTY OF CUMBERLAND

April 26, 2019

Personally appeared the above-named **Barbara Cumming**, and acknowledged the foregoing instrument to be her free act and deed.

Before me,



Notary Public
My commission expires:

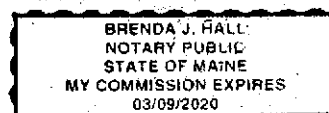


EXHIBIT A

A certain lot or parcel of land, with the buildings thereon, situated at the southwesterly corner of Cleave Street, formerly known as Cleaves Street, in the City of Portland, County of Cumberland and State of Maine, and known as the premises No. 26-28 Oxford Street and more particularly bounded and described as follows:

Beginning on the southwesterly side of Cleave Street, formerly known as Cleaves Street, at the line of land formerly owned by Sarah Williams; thence northwesterly by said Cleave Street sixty-eight (68) feet, more or less, to Oxford Street; thence southwesterly by said Oxford Street sixty-seven (67) feet, more or less, to land formerly of J. Fitts; thence southeasterly about at right angles with Oxford Street and by said Fitts land and continuing in a straight line, by the easterly boundary line of land formerly owned by the heirs of C. Kehoe, a distance of sixty-eight (68) feet, more or less, to said Sarah Williams land, thence northeasterly by said Sarah Williams land sixty-seven (67) feet, more or less, to the place of beginning; containing about 4,655 square feet. Said portion of Oxford Street is now known as East Oxford Street.

Meaning and intending to convey the same premises set forth in a deed from Heather Hagle and Linda Hagle to Barbara C. Cameron dated April 22, 2014 and recorded in the Cumberland County Registry of Deeds in Book 31465, Page 125.

Reference is also made to a deed from Barbara C. Cameron, now known as Barbara Cumming to Barbara Cumming dated July 24, 2015 and recorded in said registry of deeds in Book 32476, Page 279.



189 Main Street, Suite 200
Yarmouth, ME 04096

June 15, 2021

To Whom It May Concern:

We hereby authorize

Trillium Engineering Group
189 Main Street
Yarmouth, ME 04096

As our agent to act on our behalf in all matter relating to all processes required in the proposed building work located at 26 East Oxford Street in Portland, Maine.

This certification commences on the date of signing and is valid for two years from June 15, 2021 to June 15, 2023.

This certificate will become null and void unless it is agreed between both parties to make an extension.

Sincerely,

A handwritten signature in black ink, appearing to read 'Eric Dube', written in a cursive style.

Eric Dube, P.E.
Trillium Engineering Group

A handwritten signature in black ink, appearing to read 'Ray Chang', written in a cursive style.

Signature of Owner
Ray Chang

A handwritten signature in black ink, appearing to read 'Eric Dube', written in a cursive style.

Signature of Agent
Eric Dube, P.E.



October 18, 2021

To Whom It May Concern:

RE: 26 Oxford, LLC Financing

This letter is to confirm that 26 Oxford, LLC has approved financing in place for the project located at 26 E. Oxford Street in Portland.

Katahdin Trust has reviewed the financials of the owner of 26 Oxford, LLC and he demonstrates strong financial capacity for a project of this size and scope.

If you need anything else please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read 'Vicki Bessette', is written over a horizontal line.

Vicki L. Bessette
Vice President
Commercial Services Officer
207-510-7017



189 Main Street, Suite 200
Yarmouth, ME 04096

May 14, 2021

City of Portland
389 Congress Street
Portland, ME 04101

Re: Warren Mechanical
Letter of Technical Capacity

Dear City of Portland:

The Applicant has assembled a team of qualified professionals for the design and permitting of the project. Each team member has extensive experience in the design and permitting of projects throughout the state of Maine. The consultant team consists of the following members:

Civil Engineer: Eric Dube, P.E. and David Latham, E.I.
Trillium Engineering Group
189 Main Street
Yarmouth, Maine 04096

Architect: Andrew Treworgy, AIA
Paul Designs Project
142 High Street
Portland, ME 04101



ZONING ANALYSIS Relevant Zone(s) R-6

All Projects:

	Required	Proposed
Lot Size	2,000	4,720
Area Per Dwelling Unit	725	786.7
Minimum Street Frontage	20'	68.91'
Front Yard Minimum	5'	5.00
Front Yard Maximum	--	--
Rear Yard	10'	12.85
Yard Right	5'	7.73
Yard Left	5	10.51
Side Street Setback	--	--
Step Back	--	--
Maximum Lot Coverage	60%	60%
Minimum Lot Coverage	--	--
Maximum Height	45'	42.5'
Open Space	20%	40%
Maximum Impervious Area	60%	60%
Pavement Setback	5'	5.00
Floor Area Ratio	--	--
Off Street Parking Spaces	6	6
Loading Bays	--	--
Other 1		
Other 2		
Other 3		

Planned Residential Unit Developments (PRUD) Requirements

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

Affordable Housing Density Bonuses (if applicable)

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

Standard to be Waived: Cite Ordinance or Technical Manual Standard	Cite Standard Language: Cite specific language of applicable Ordinance or Technical Manual Standard	Waiver Being Sought: Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	Justification for Waiver: Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Section 1.14.3	24' minimum two-way parking lot drive aisle	We are requesting a 15'-9" two-way parking lot drive aisle	The shallow lot depth limits our proposed drive aisle and is impractical. Due to the limited units, two-way traffic is unlikely. It is our professional opinion that this is the best practical approach for this site situation.
Section 1.7.2.7	Location and spacing of driveways - minimum distance per Tech Manual is 35 feet from intersection	We are requesting a waiver for use of the existing driveway, which is located 16'-9" from the intersection.	We are re-using an existing driveway curb cut for the proposed building and we are also eliminating an existing curb cut for the same property
Section 1.8.2	Brick sidewalks required along property frontage per Tech Manual	We are requesting a waiver to construct the sidewalk and driveway apron with concrete, rather than brick	Concrete is the predominant sidewalk material used on this street, and using this material would provide consistency with the as-built conditions in the area

Department of Public Works
Christopher C. Branch, P.E.
Director



Date: April 8, 2022
Re: Wastewater Capacity Authorization
Address: 26 East Oxford Street
Applicant: Ray Chang
Planner: Jimmy Dealaman

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				
Single Family Home	PWD Records		175 GPD	-175
Vacant				
Proposed flow				
Multiple Family Dwelling Units	2-Bedroom	6	180	1080
Multiple Family Dwelling Units	3-Bedroom	1	270	270
Net Change				+ 1,175
*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. You are reminded that the sewers you are proposing to connect into convey both sanitary and stormwater (Combined Sewer) and therefore a backflow preventer is suggested.

If the City can be of further assistance, please contact me at all 874-8840 or brad@portlandmaine.gov

Sincerely,

A handwritten signature in black ink that reads "Bradley A. Roland".

Bradley A. Roland, P.E.,
Senior Project Engineer

STORMWATER MANAGEMENT REPORT

PROPOSED RESIDENTIAL BUILDING

26 OXFORD STREET
PORTLAND, MAINE

February 8, 2022

PREPARED BY:

*TRILLIUM ENGINEERING GROUP
189 MAIN STREET
YARMOUTH, ME 04096
(207) 307-0872*

A. Project Background:

The applicant is proposing a new four-story residential building with (6) units on a currently developed parcel (CBL 013 D002001). The applicant is looking to break ground as soon as possible.

Access to the site is via Oxford Street. The new building is to be serviced by public water, sewer, and overhead electricity/telephone/cable. The parcel features a steep slope along the rear property line before leveling off into a light slope draining in a general northwesterly direction.

This project will only result in the increase of 259 square feet of impervious area, while the site grading shall be left largely unchanged. Ultimately, due to the small scope of this work, it is our professional opinion that this project will not have an adverse impact on the quality or quantity of stormwater runoff leaving the site.

The applicant is proposing a new 23-unit subdivision with a proposed private road on a currently undeveloped lot (Tax Map 62, Lot 55). The applicant is looking to break ground as soon as possible.

B. Existing Site Conditions

The existing site currently features an existing two-story residential building. Topography of the site and the immediate surrounding area has been shown at a one-foot contour interval with data provided by Owen Haskell, Inc.

C. Wetlands and Streams

The site does not feature any wetlands or streams.

D. Soils

All on-site soils are rated Hydrologic Soil Group "A", per the United States Web Soil Survey (WSS).

E. Proposed Use

The proposed development will call for (6) new apartment units with associated parking and driveway access. In total, this project will create a net increase of 259 square feet of impervious area on the existing lot.

As shown in the calculations below and in the attached stormwater development plans, this project will have no adverse effect on the quality or quantity of stormwater leaving the site. Because of this, Trillium Engineering Group is not proposing any new stormwater treatment systems.

F. Stormwater

We have been authorized to perform a drainage analysis on the site that would meet the standards of the Maine Department of Environmental Protection and the City of Portland, Maine. I have reviewed the drainage characteristics of the site, which includes proposed driveways and buildings. The analysis required post construction stormwater flows to be substantially equal to or less than the existing stormwater flow rates.

We have used the SCS TR-20 (HydroCAD 10.00 stormwater model) method of computing stormwater runoff peak flow rates. This method accounts for soil types, existing land uses, topography, vegetative cover, and proposed land use for the parcel to be developed. The future conditions were analyzed using data for a design frequency of occurrence of 2/10/25 years. The Type III, 24-hour storm distribution rainfall has a 3.1, 4.6, and 5.8 inches/hour respectively has been used, and storm values have been provided by

Appendix H of Chapter 500 of the State of Maine Stormwater Management Law. All supporting calculations and data are submitted with this report.

The existing and proposed site conditions were evaluated using information taken from the existing condition and proposed design plan of the area. Impervious, lawns/fields, and woods areas for each hydrologic soil condition were measured by HydroCAD in order to calculate a weighted curve number that typifies the drainage condition of the site.

Stormwater Model Summary

CFS (Cubic Feet per Second = Rate)

Value based on flow entering Analysis Points (AP) 1 and 2

Storm Event	2-Yr (Pre)	2-Yr (Post)	10-Yr (Pre)	10-Yr (Post)	25-Yr (Pre)	25-Yr (Post)
Flow	0.09	0.12	0.23	0.26	0.35	0.38

Calculations for the 2-, 10-, and 25-year Pre- and Post-Drainage are included in the attached stormwater reports.

Evaluation of Results

As shown in the data above, stormwater flow rates are left effectively unchanged in the 2-, 10-, and 25-year storm events.

G. Water Quantity and Quality

Quantity: Peak flows have been left effectively unchanged in the 2-, 10-, and 25-year storm event. Because of this, we can assume the stormwater quality will not lead to increased erosion rates.

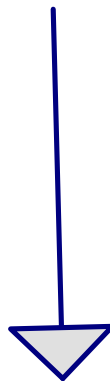
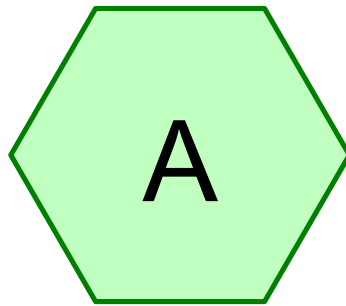
Quality: This project results in a net increase of 259 square feet of impervious area. By inspection, this minor increase is negligible and will not have an adverse effect on the quality of stormwater runoff.

Thank you for taking the time to review this project. Should you have any questions or require any additional information, please do not hesitate to contact me.

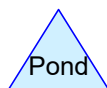
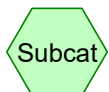
Sincerely yours,



Eric Dube, P.E.
Trillium Engineering Group



Runoff Flow



Routing Diagram for 26 Oxford Pre
Prepared by HP Inc., Printed 2/8/2022
HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

26 Oxford Pre

Prepared by HP Inc.

Printed 2/8/2022

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Page 2

Rainfall Events Listing

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

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Printed 2/8/2022

Page 3

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.049	39	>75% Grass cover, Good, HSG A (A)
0.059	98	Impervious (A)
0.108	71	TOTAL AREA

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Printed 2/8/2022

Page 4

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.049	HSG A	A
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.059	Other	A
0.108		TOTAL AREA

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Printed 2/8/2022

Page 5

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.049	0.000	0.000	0.000	0.000	0.049	>75% Grass cover, Good	A
0.000	0.000	0.000	0.000	0.059	0.059	Impervious	A
0.049	0.000	0.000	0.000	0.059	0.108	TOTAL AREA	

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 2-Yr Rainfall=3.10"

Printed 2/8/2022

Page 6

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

SubcatchmentA:

Runoff Area=4,720 sf 54.51% Impervious Runoff Depth>0.74"
Tc=5.0 min CN=71 Runoff=0.09 cfs 0.007 af

Link AP1: Runoff Flow

Inflow=0.09 cfs 0.007 af
Primary=0.09 cfs 0.007 af

Total Runoff Area = 0.108 ac Runoff Volume = 0.007 af Average Runoff Depth = 0.74"
45.49% Pervious = 0.049 ac 54.51% Impervious = 0.059 ac

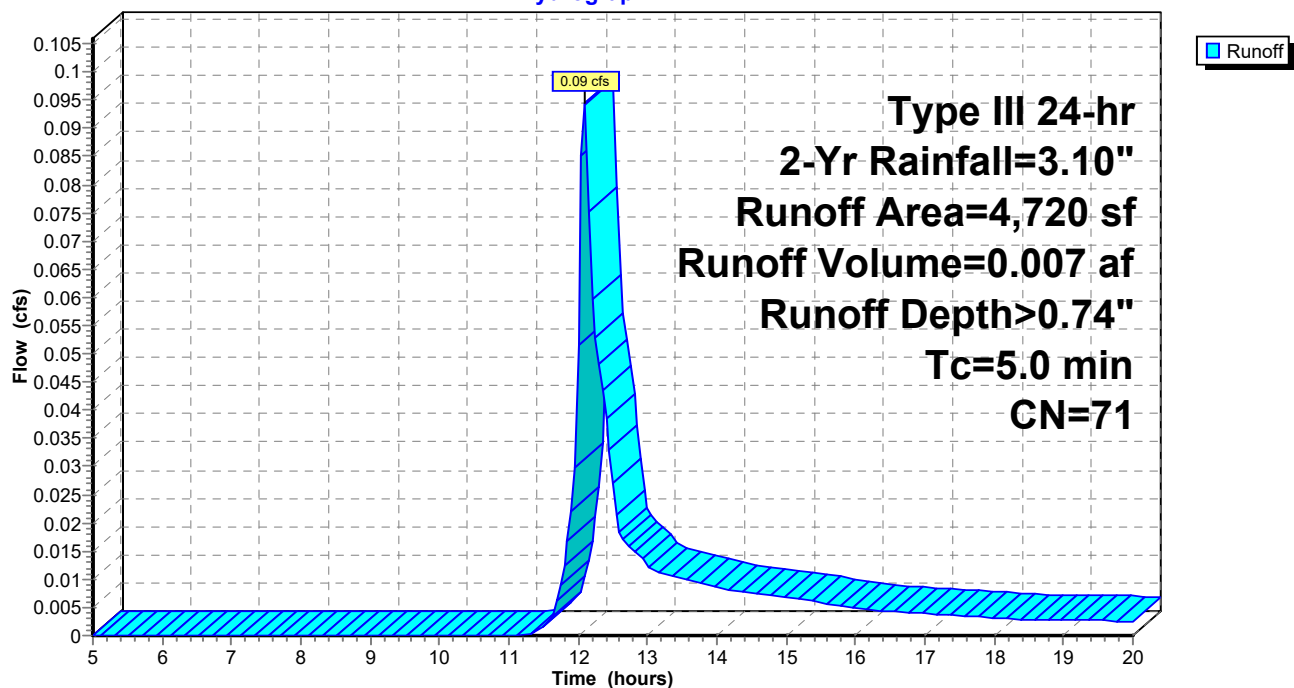
Summary for Subcatchment A:[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Depth> 0.74"

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
*	2,573	98	Impervious
	2,147	39	>75% Grass cover, Good, HSG A
	4,720	71	Weighted Average
	2,147		45.49% Pervious Area
	2,573		54.51% Impervious Area

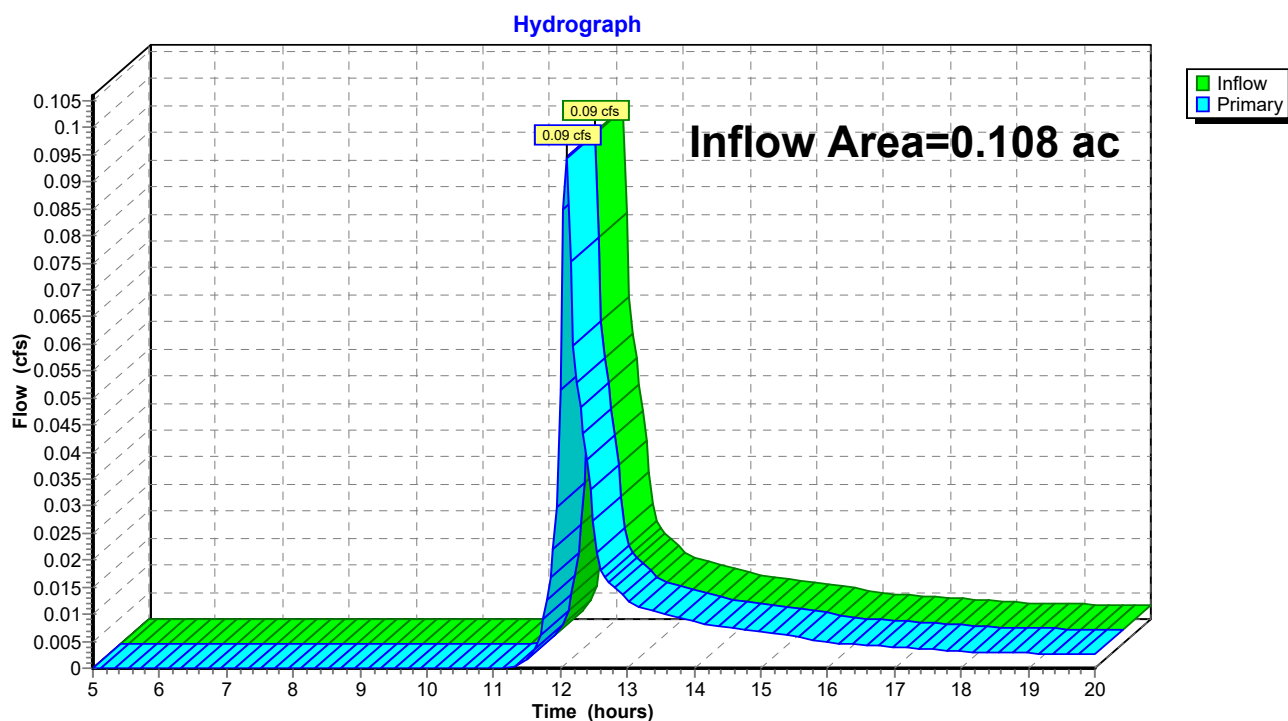
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment A:**Hydrograph**

Summary for Link AP1: Runoff Flow

Inflow Area = 0.108 ac, 54.51% Impervious, Inflow Depth > 0.74" for 2-Yr event
Inflow = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af
Primary = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link AP1: Runoff Flow

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 10-Yr Rainfall=4.60"

Printed 2/8/2022

Page 9

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

SubcatchmentA:

Runoff Area=4,720 sf 54.51% Impervious Runoff Depth>1.67"
Tc=5.0 min CN=71 Runoff=0.23 cfs 0.015 af

Link AP1: Runoff Flow

Inflow=0.23 cfs 0.015 af
Primary=0.23 cfs 0.015 af

Total Runoff Area = 0.108 ac Runoff Volume = 0.015 af Average Runoff Depth = 1.67"
45.49% Pervious = 0.049 ac 54.51% Impervious = 0.059 ac

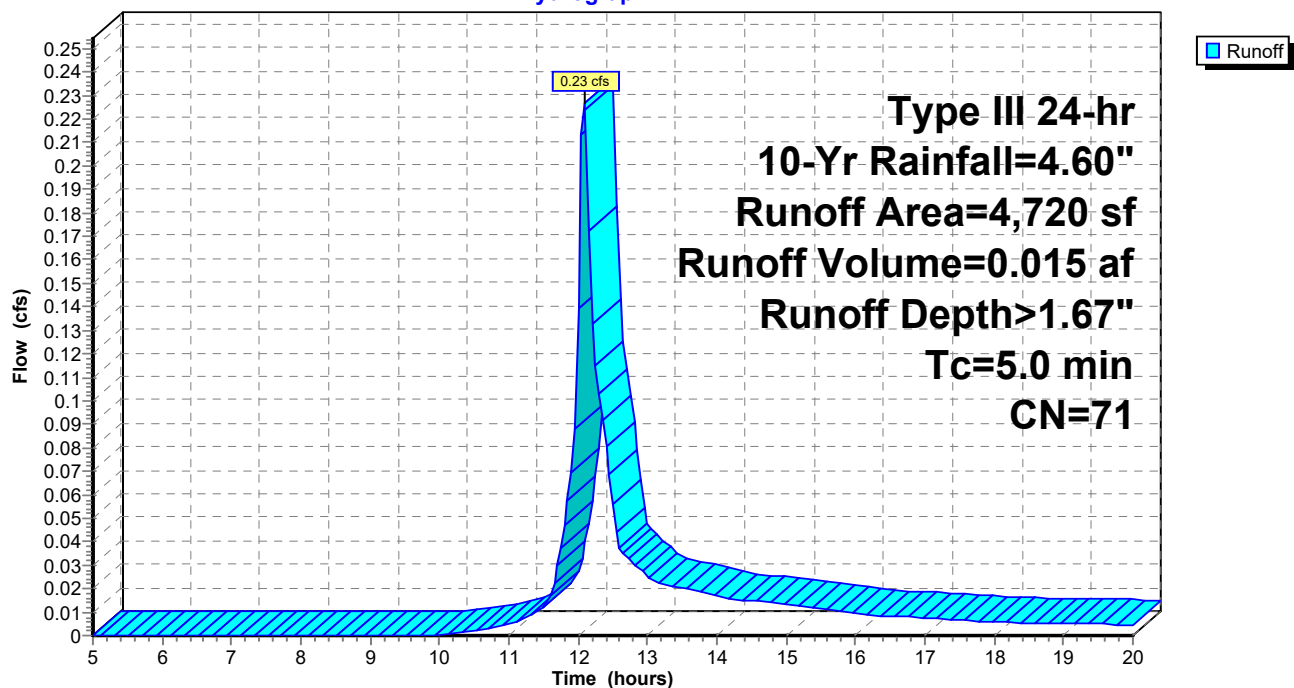
Summary for Subcatchment A:[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.23 cfs @ 12.08 hrs, Volume= 0.015 af, Depth> 1.67"

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
*	2,573	98	Impervious
	2,147	39	>75% Grass cover, Good, HSG A
	4,720	71	Weighted Average
	2,147		45.49% Pervious Area
	2,573		54.51% Impervious Area

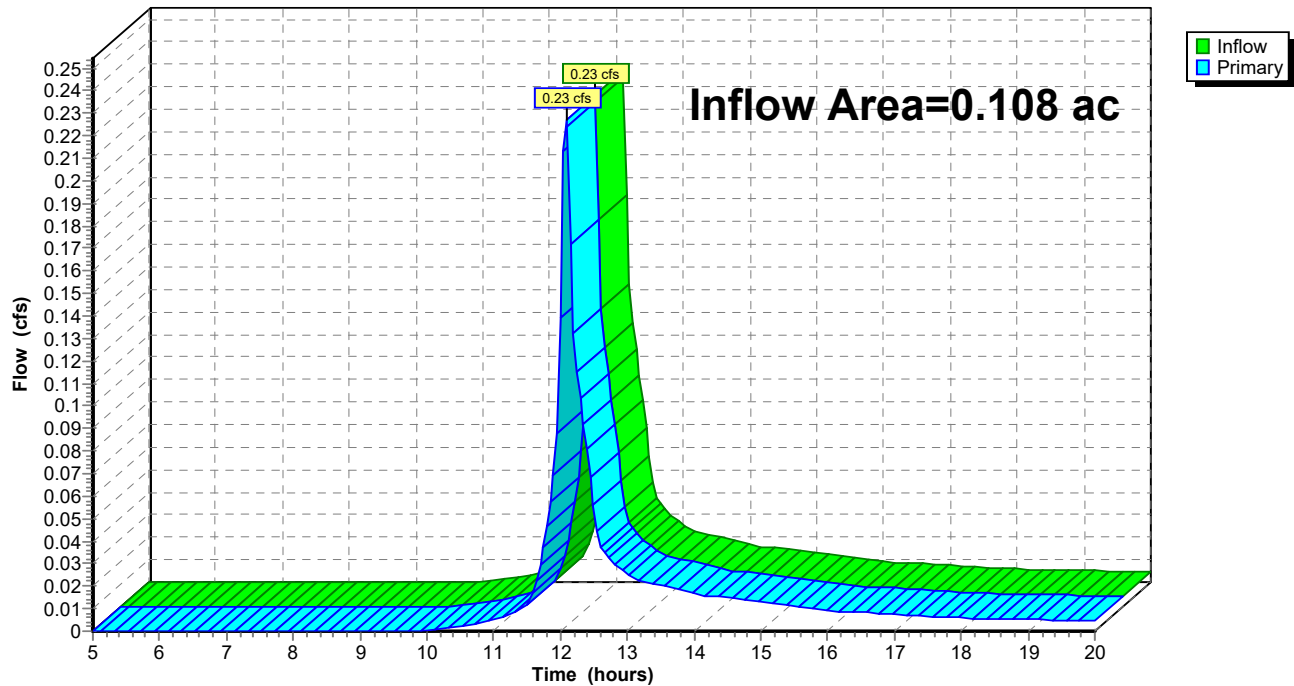
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment A:**Hydrograph**

Summary for Link AP1: Runoff Flow

Inflow Area = 0.108 ac, 54.51% Impervious, Inflow Depth > 1.67" for 10-Yr event
Inflow = 0.23 cfs @ 12.08 hrs, Volume= 0.015 af
Primary = 0.23 cfs @ 12.08 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link AP1: Runoff Flow**Hydrograph**

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25-Yr Rainfall=5.80"

Printed 2/8/2022

Page 12

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

SubcatchmentA:

Runoff Area=4,720 sf 54.51% Impervious Runoff Depth>2.54"

Tc=5.0 min CN=71 Runoff=0.35 cfs 0.023 af

Link AP1: Runoff Flow

Inflow=0.35 cfs 0.023 af

Primary=0.35 cfs 0.023 af

Total Runoff Area = 0.108 ac Runoff Volume = 0.023 af Average Runoff Depth = 2.54"
45.49% Pervious = 0.049 ac 54.51% Impervious = 0.059 ac

Summary for Subcatchment A:

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.35 cfs @ 12.08 hrs, Volume= 0.023 af, Depth> 2.54"

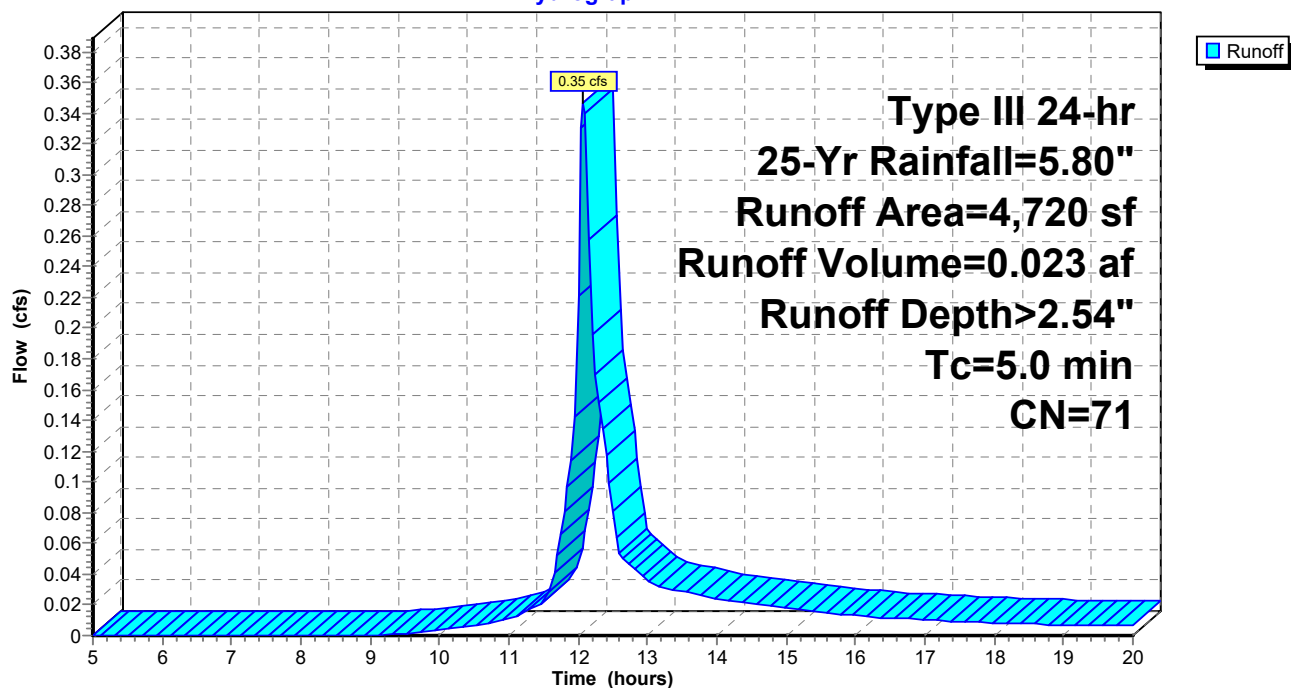
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, $dt=0.05$ hrs
Type III 24-hr 25-Yr Rainfall=5.80"

	Area (sf)	CN	Description
*	2,573	98	Impervious
	2,147	39	>75% Grass cover, Good, HSG A
	4,720	71	Weighted Average
	2,147		45.49% Pervious Area
	2,573		54.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment A:

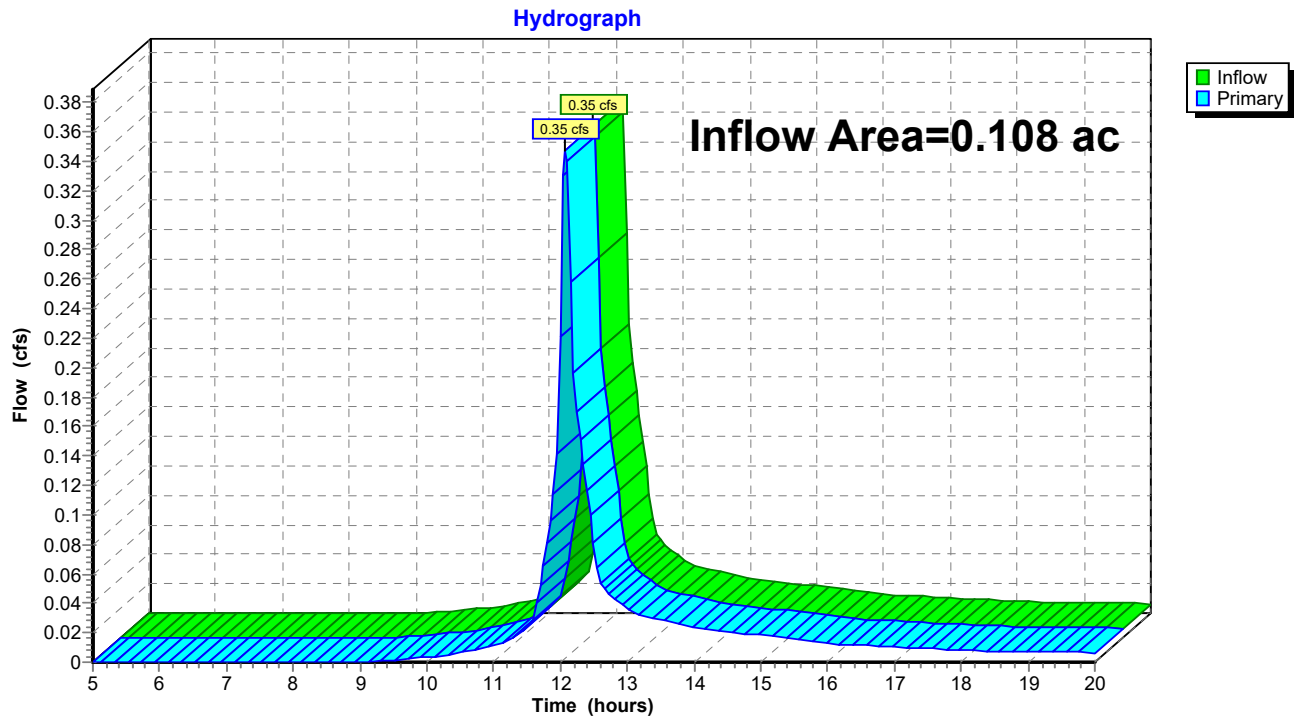
Hydrograph



Summary for Link AP1: Runoff Flow

Inflow Area = 0.108 ac, 54.51% Impervious, Inflow Depth > 2.54" for 25-Yr event
Inflow = 0.35 cfs @ 12.08 hrs, Volume= 0.023 af
Primary = 0.35 cfs @ 12.08 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link AP1: Runoff Flow

26 Oxford Post

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Printed 2/8/2022

Page 1

Rainfall Events Listing

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

26 Oxford Post

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 2-Yr Rainfall=3.10"

Printed 2/8/2022

Page 2

Summary for Subcatchment 1:

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.12 cfs @ 12.09 hrs, Volume= 0.008 af, Depth> 0.89"

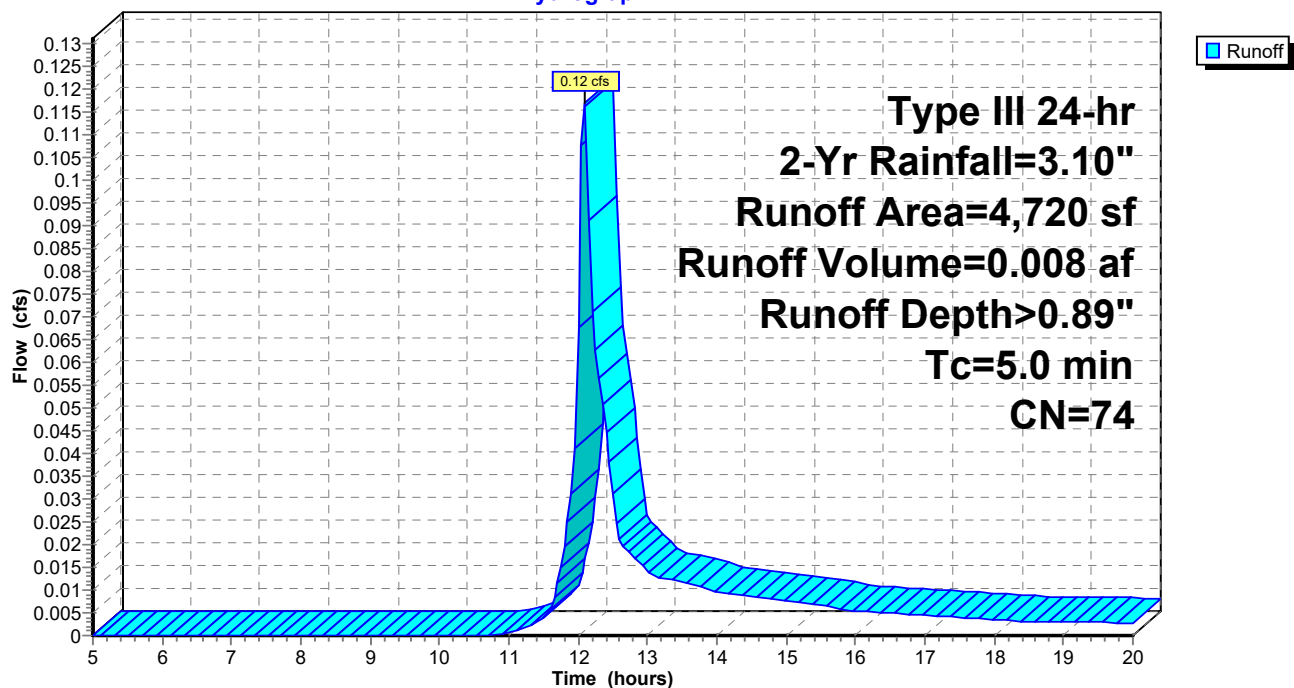
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, $dt=0.05$ hrs
Type III 24-hr 2-Yr Rainfall=3.10"

	Area (sf)	CN	Description
*	2,832	98	Impervious
	1,888	39	>75% Grass cover, Good, HSG A
	4,720	74	Weighted Average
	1,888		40.00% Pervious Area
	2,832		60.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 1:

Hydrograph



26 Oxford Post

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 10-Yr Rainfall=4.60"

Printed 2/8/2022

Page 3

Summary for Subcatchment 1:

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.26 cfs @ 12.08 hrs, Volume= 0.017 af, Depth> 1.90"

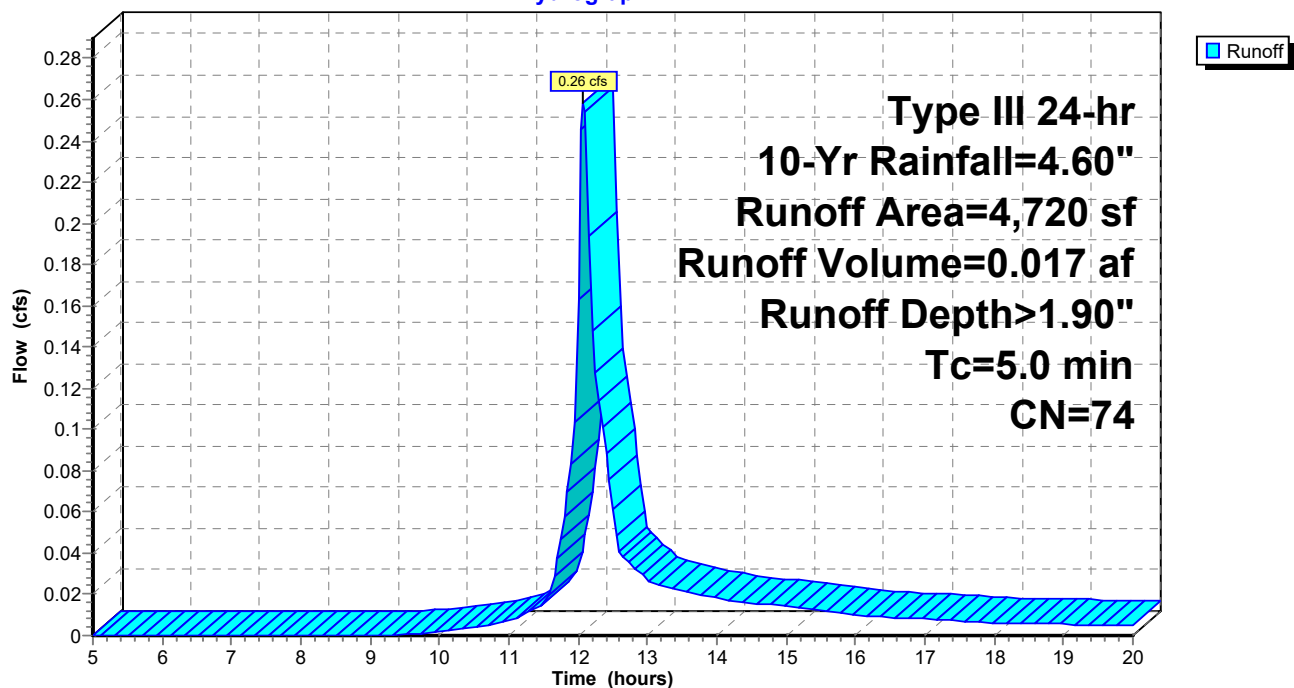
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, $dt=0.05$ hrs
Type III 24-hr 10-Yr Rainfall=4.60"

	Area (sf)	CN	Description
*	2,832	98	Impervious
	1,888	39	>75% Grass cover, Good, HSG A
	4,720	74	Weighted Average
	1,888		40.00% Pervious Area
	2,832		60.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 1:

Hydrograph



26 Oxford Post

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25-Yr Rainfall=5.80"

Printed 2/8/2022

Page 4

Summary for Subcatchment 1:

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.38 cfs @ 12.08 hrs, Volume= 0.025 af, Depth> 2.81"

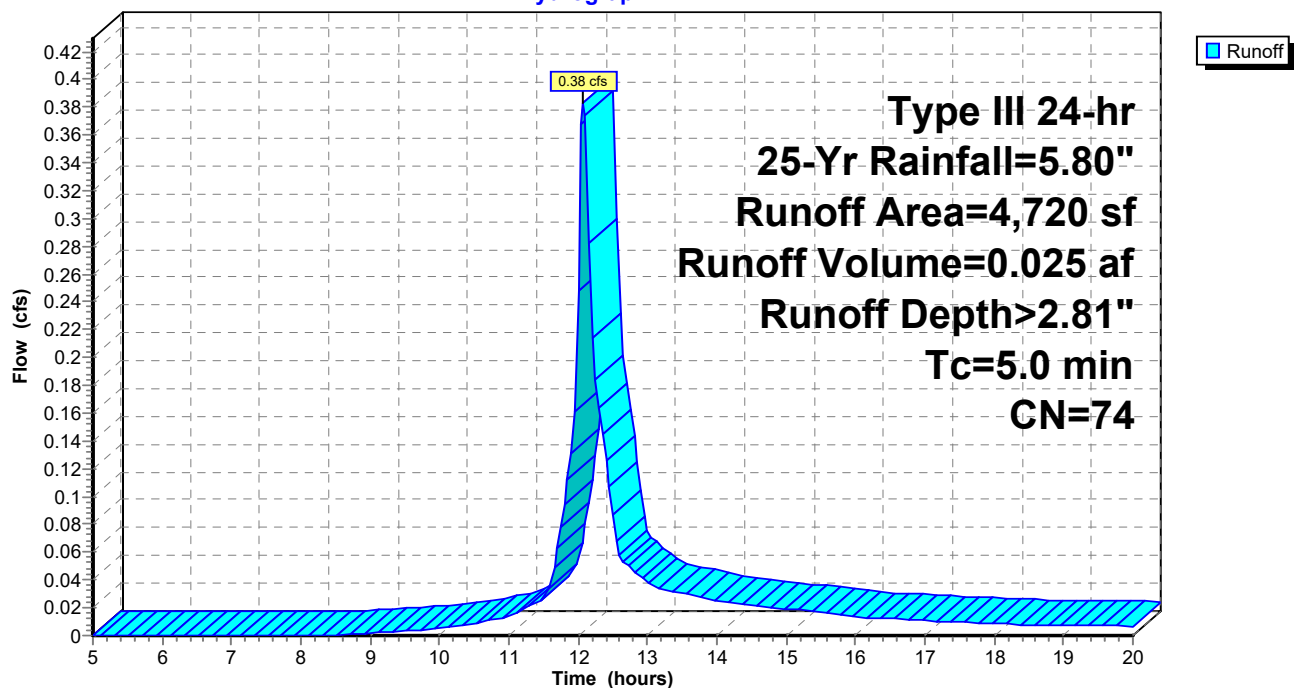
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, $dt=0.05$ hrs
Type III 24-hr 25-Yr Rainfall=5.80"

	Area (sf)	CN	Description
*	2,832	98	Impervious
	1,888	39	>75% Grass cover, Good, HSG A
	4,720	74	Weighted Average
	1,888		40.00% Pervious Area
	2,832		60.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 1:

Hydrograph



David Latham

From: Patrick Landers <patrick@mindfulbuildingllc.com>
Sent: Friday, February 4, 2022 12:16 PM
To: Jimmy Dealaman
Cc: Ray Chang; Andrew Treworgy; David Latham; Paul Lewandowski
Subject: Re: Major Site Plan Development PL-001837-2021, 26 E OXFORD ST

Hello I,

\$24,000.00 to \$34,000.00 for excavation, pavement and sidewalk cutting, street closure permits, installing conduit, and paving.

The estimate has a range because depending on existing utility location may cause the opening to be larger which will extend the time and size of street opening.

\$5,600.0 to repair sidewalks on both sides of the roads.

\$3,375.00 for master Electrician to run wire, install & mount conduit and the weather head on pole.

Over head installation has no cost because CMP Cover 100% of the cost to connect the line and mount the transformer on the pole.

The 600 amp service for the building is included under the electrical estimate for the building. And would be in addition to the above cost no matter which way we completed it.

I have opened up Oxford street on this block before and it's a bit of a mess there are so many abandon pipes as well as multiple utility connection in a very short distance.

I hope this helps you understand why it's simply not readable to budget into the project. Also I would mention there are no underground connection electrical connection on this block or for a minimum of 1 block each direction up on down the street.

Thank you for your time!

Patrick Landers
Mindful Building LLC
207-408-0663

On Feb 4, 2022, at 11:22 AM, Jimmy Dealaman <jdealaman@portlandmaine.gov> wrote:

Hi Ray,

Nice meeting with your team last week. I wanted to follow up on a question that came up at the meeting which was regarding whether the above ground utility could be supported instead of needing to provide underground utilities.

To be considered for a financial hardship to provide above ground utility, please provide us with the two options, one showing below ground and one showing above ground and what the anticipated cost is, as well as if you anticipate needing to install additional utility poles in either scenario.

Once we receive this information we can review this internally and provide a recommendation to the Board.

Kind regards,

Jimmy

On Tue, Jan 25, 2022 at 8:39 AM Jimmy Dealaman <jdealaman@portlandmaine.gov> wrote:

I also wanted to share a few more comments received from our engineer in Public Works who reviews the wastewater utility connection. He has asked for a couple of things be provided:

1. The owner/ developer should have the existing sewer lateral televised to confirm the condition of it for re-use.
A statement should be provided confirming the development team has completed that research.
2. The engineer should provide written confirmation for our records that a 6 inch sewer is big enough for the proposed building.
3. If these 2 items come back as "sewer lateral is in good condition" and "a 6 inch sewer lateral will handle the proposed flows" then you should be all set.

Also please submit the attached request letter to Brad Roland <brad@portlandmaine.gov>

Thank you and see you tomorrow,

On Mon, Jan 24, 2022 at 1:28 PM Jimmy Dealaman <jdealaman@portlandmaine.gov> wrote:
Added

On Mon, Jan 24, 2022 at 1:16 PM Ray Chang <ray@db9ventures.com> wrote:

Great and thanks! Could you kindly include David Latham to the invite? He wasn't listed in the calendar invite.

Cheers,

Ray

On Jan 24, 2022, at 13:08, Jimmy Dealaman <jdealaman@portlandmaine.gov> wrote:

I'll send out the invite for Wednesday at 11am. We'll plan to start out discussing any design questions you have, given our Urban Designer will attend and may not need to stay for the full hour.



189 Main Street, Suite 200
Yarmouth, ME 04096

Neighborhood Meeting Certification

I, David Latham, hereby certify that a neighborhood meeting was held on January 13, 2022 via Zoom at 6:30 PM for the proposed project located at 26 Oxford Street in Portland, Maine.

I also certify that on December 22, 2021, notices 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 (1,000 feet for subdivisions within an industrial zone or industrial zone changes).
2. Residents on the "interested parties" list

Signed,

A handwritten signature in black ink, appearing to read 'David Latham', is written over a light gray circular background.

David Latham, P.E.
Trillium Engineering Group

Attachments:

1. Copy of the notice sent
2. Sign-in sheet
3. Record of feedback

December 22, 2021

Dear Neighbor:

Please join us for a neighborhood meeting to discuss our plans for a proposed four-story residential building with (6) units located at 26 Oxford Street in Portland, Maine. Due to COVID-19, this meeting will be held virtually via Microsoft Teams. If you are interested in joining, please email me at davidl@trilliumeg.com and I will send you a link to the meeting.

Meeting Date: January 13, 2022

Meeting Time: 6:30 PM

The Land Use Code requires that neighboring property owners and residents on an "interested parties list" be invited to participate in this neighborhood meeting. A sign-in sheet will be created and a record of the meeting will be taken. Both the sign-in sheet and record will be submitted to the Planning Board.

If you have any questions, please call 207-307-0872

Sincerely,



David Latham, P.E.
Trillium Engineering Group

Note:

Under the City of Portland land use code, an applicant for a major site plan, master development plan, subdivision of over five lots, or zoning map amendment is required to hold a neighborhood meeting within 30 days of an application being deemed complete and no less than seven calendar days before a public hearing. Should you wish to offer additional comments on this proposed development, you may forward them by e-mail to planning@portlandmaine.gov or by mail to the Planning and Urban Development Department, Planning Division, 4th Floor, Congress Street, Portland, ME 04101

Neighborhood Meeting Sign-In Sheet

Date of Meeting: January 13, 2022

Location of Meeting: Microsoft Teams

Proposed Project Name and Address: 26 Oxford Street – Proposed Residential Building

Members of the Public in Attendance:

<i>Name</i>	<i>Email</i>
Caitlin Crowe	Caitlin.e.crowe@gmail.com
Nina Hope	Ninahopecreative@gmail.com
Steve Davis	sspringerdavis@gmail.com
Christian MilNeil	christian@streetsblog.org
Gary Motal	gwmotal@hotmail.com

Developer and Consultant Team in Attendance:

<i>Name</i>	<i>Email</i>
David Latham	davidl@trilliumeg.com
Ray Chang	ray@dbgventures.com

Neighborhood Meeting Minutes

Date of Meeting: January 13, 2022

Location of Meeting: Microsoft Teams

Proposed Project Name and Address: 26 Oxford Street – Proposed Residential Building

See attached Sign-In Sheet for attendance information.

6:30 PM: Meeting Begins

- David begins by explaining scope of project
 - o Four stories, three floors, six units
 - o Parking under building – six spaces
 - o Rendering and elevations shown
- Ray continues to describe project
 - o Mentions unit layout - apartments, not condos
- Nina asks about roof line, rendering orientation
 - o Ray explains butterfly roof line – runoff slopes to pipe
- Nina asks about façade materials
 - o Ray: high-end vinyl product, but not set on that
 - o Still finalizing material choices
- Christian's up
 - o It seems like too much parking
 - o Wants housing for car-free households
 - o City has minimum separation standards from driveway to roads
 - o Will we rebuild curb along Cleeve and Oxford?
 - o Possibly widening sidewalk – add trees?
 - o Notes it's easy to find street parking in this area
- Nina and Steve disagree with the street parking issue
 - o What happens if street picks up popularity?
 - o Notes new restaurants in the area
- Ray responds:
 - o City does not want us to replace curb cut near Cleeve St
 - o Bottom unit is ADA accessible, cut allows easier access for ADA
- David responds:
 - o Code can't fit a seventh unit
 - o Roads are narrow already, getting wider sidewalks won't help that
- Christian:
 - o Really wants to widen the sidewalks – notes off-street parking isn't allowed near intersections, so could be widened without affecting travel lane
 - o Adds that widened sidewalks w/ tree could pay for itself – better view
 - o Cites development on Anderson Street as precedent
- Gary
 - o Concerned about waste disposal
 - o Would be nice to have common trash area
- Ray:
 - o Says he'll look into it – try to find a spot to put it



189 Main Street, Suite 200
Yarmouth, ME 04096

February 8, 2022
City of Portland
389 Congress Street
Portland, ME 04101

Re: 26 Oxford Street – Proposed Building
Major Site Plan Application – Response to City Comments

Dear Planning:

Trillium Engineering Group is providing this response as additional information for City comments originally received from Town Planner Jimmy Dealaman via email on January 14, 2022. This development proposes the demolition of an existing two-story building in order to provide a new four-story residential building with (6) units (CBL 013 D002001).

Please see the updated plans, documents, and below responses to the comments. Please also note that Paul Designs Projects have revised the architectural plans based on the Planning and Urban Development Department comments originally received on January 19, 2022 and Public Safety and Fire Prevention comments originally received on January 14, 2022.

Zoning

Rear Setback – What are the bump-outs shown at the rear of the building? If part of the building it should be factored into the setback calculation. A 12.85' setback is shown, but using a scaled measure to the actual edge of the building shown it appears to be 12 feet. Please revise showing the correct rear setback line.

- Response: The bump-outs shown are pavement strips for vehicle parking and are thus not a part of the building. The dashed line alluded to in the response above is the roof overhang, and not the edge of building itself. Said roof line has since been revised as noted on the architectural plans, leaving the 12.85' setback as the accurate number.

Rear Stepback – For portions of the building above 35 feet a step back is required within 15 feet of the rear property line and 10 feet of site property line except when along a side street. The proposal shows a rear setback of 12 feet, and there is three feet of the rear of building, which appears to exceed 35 feet, that must be stepped back 15 feet from the property line. Please revise.

- Response: The building has been revised to meet this requirement. Please see architectural plans for additional information.

Height – Elevations must show the height to the extent of the roofline. Please also see design comments related to roof form before revising. As currently proposed it does not appear to meet the 45 foot max height in the R-6. What is the average grade, and how was this determined? How it was determined should be noted and shown on the elevations so the actual height of the building from the average grade can be measured.

- Response: The average grade of 44.25' was determined by taking the average elevation at each of the building corners. Per the architectural elevations, the proposed structure does not exceed the maximum allowable 45' height.

Landscaped Open Space Ratio – Please show on landscaping plan all landscaped open space areas that are provided to meet 20% landscaped open space ratio requirement.

- Response: See Sheet C102, Proposed Landscaping Plan, for the landscaping layout.

Access and Circulation

Please show dimension of driveway width on plan.

- Response: The driveway width dimension has been shown on Sheet C101.

Section 1.7.1 of the City's Technical Manual requires that "no more than (1) driveway shall be permitted." Even if both driveways are existing, if proposing (2) driveways, a waiver request to Section 1.7.1 should be submitted providing justification for the waiver.

- Response: The design team coordinated with the City in order to keep both driveways. Please see the attached waiver request document for additional information.

Please provide turning templates for vehicles accessing the site. Also, please clarify how vehicle access to the site is intended.

- Response: Vehicle access and turning templates are provided on Sheet L100.

Please provide a curb, bollard, or separation for pedestrians accessing the ground floor unit.

- Response: Parking space 1 on Sheet L100 is for the ground floor unit. This spot allows direct access to the ground floor unit without passing through the travel way for the remaining five spots. Bollards have also been provided to separate the ground floor unit parking space from the other five.

Provide more detail on the sidewalk (closing of existing driveway, utility trenching, etc). Note: the sidewalk and driveway apron material policy indicates the site is subject to providing brick in the Public ROW. Please show this in plans.

- Response: Utility trench and sidewalk details have been shown on Sheet C200. Per a conversation with Jennifer Ladd of Public Works, it is acceptable to keep the Oxford Street sidewalk as concrete. The only disturbance to the sidewalk will be for trenching and the remainder of the sidewalk is in good condition.

Please clarify the paving strips and how cars get into the parking area. Why do the paving strips go beyond the garage doors?

- Response: The paving strips were installed in lieu of a traditional driveway to limit the amount of impervious area on the site. Cars will travel on the strip to get to the parking area under the building footprint. The paving strips beyond the garage doors is for vehicle parking.

Parking

A minimum of (3) parking spaces must be provided. Please show parking arrangements/spaces proposed on plan.

- Response: (6) parking spaces will be provided as depicted on Sheet L100 by Paul Designs Projects.

(2) bicycle spaces are required for every five units. With six units proposed, please show where bicycle parking is proposed for the required (2) spaces.

- Response: Bicycle parking has been shown on Sheet C101 with a detail on Sheet C200.

Please clarify what units utilize which proposed parking areas.

- Response: Sheet L100 depicts the parking layout with numbered spots corresponding to the associated unit.

Snow Storage – Please indicate all areas intended for snow storage or provide an acceptable snow removal plan.

- Response: Snow storage areas have been shown on Sheet C101.

Preservation of Significant Natural Features

Please confirm if the project is making any impacts to any significant natural features.

- Response: There are no significant natural features on site.

Site Landscaping and Buffers

Submit landscape plan factoring in the following comments as well as those listed under Landscape Preservation section.

- Response: The plans have been adjusted as shown on the attached sheets and as described below.

Street Trees – The application is required to provide (6) street trees. The City Arborist has recommended (2) 'Street Keeper' Honeylocust street trees, 2" caliper size, planted in rectangular tree pit in sidewalk. The remaining (4) trees could be planed within 20 feet of the property line where visible from the right-of-way. The City Arborist recommends planning Amelanchier or evergreen trees like Arborvitae or Serbian Spruce in the site lot.

- Response: Portland Water District standards state that street trees are not permitted within 10' of any new water lines. Due to this standard, there is not adequate room on Oxford Street for (2) separate street trees. In lieu of this, Trillium Engineering Group is proposing (1) Honeylocust street trees and (5) Arborvitae trees along the northeastern property line.

Screening – Please indicate the locations of any loading and servicing areas, trash and recycling, areas, storage areas, and roof- and ground-mounted utility structures. If proposing these areas, please ensure they are screened from view from public sidewalks, streets, and adjacent properties.

- Response: This project does not propose loading or servicing areas. Trash and recycling will be stored in the Caretaker Storage room noted on Sheet A100. There will be no roof-mounted structures. Ground-mounted structures shall be screened as shown on Sheet C102.

Landscape Buffer – All residential development must provide and/or preserve evergreen vegetated buffers were necessary to buffer the development from detrimental impacts of existing surrounding development. Please update as necessary.

- Response: See Sheet C102 for the proposed landscaping plan

Landscaping – All development subject to required zoning setbacks shall include a minimum of one shade tree or six plantings per 30 linear feet of all frontages as measured along the property line. The proposal requires at least (2) shade trees or (13) plantings/shrubs to be planted or (1) shade tree and (7) shrubs.

- Response: One shade tree and seven shrubs have been added to the rear lot line in addition to the other screening and street tree requirements.

Landscape Preservation

Site development shall be designed to incorporate, limit disturbance to, and limit removal of existing trees. As such, please indicate all trees and areas with vegetation onsite, and any landscape being removed and preserved.

- Response: It is not feasible to preserve the existing landscape along Cleeve Street. Said vegetation currently features an invasive Asiatic bittersweet vine, which is taking over many towns in Cumberland County. The owner has previously tried to cut it down on multiple occasions with no success, and it is our hope that the vine will be eliminated by removing the existing vegetation and replacing it with the proposed landscaping illustrated on Sheet C102.

Additionally, due to the small site, it is not feasible to construct the project without disturbing the existing vegetation. Even if the invasive vine wasn't present, the scope of the project combined with the relatively small lot means that the existing vegetation would need to be replaced as shown on Sheet C102.

30 percent of existing trees 10 inches DBH or greater within the required setback area must be preserved, or if removing is necessary due to compromising development of the site, please request a waiver with justification and proposing an alternative to preserving as indicated in the City's Technical Manual Section 4. Planting of replacement trees is one such alternative.

- Response: Please see the attached waiver request.

Water Quality, Stormwater Management, and Erosion Control

Please submit a stormwater management plan and provide more information about how roof drainage will be managed and discharging to as well as the stormwater management requirements on the site. Note that no stormwater from the site shall discharge to the sewer infrastructure.

- Response: The previously submitted butterfly roof has been re-designed to a flat roof. In the new design, stormwater runs off the roof and discharges in the rear of the site through the downspout system illustrated on Sheet A104. From there, stormwater follows a swale for off-site discharge. Please see the attached stormwater management report for additional information.

Confirm that stormwater draining onto or across the lot will not be impeded or redirected so as to create ponding on, or flooding of, adjacent lots. Planning staff recommend that a licensed engineer confirm the ability for the site to sufficiently manage stormwater.

- Response: As a licensed Professional Engineer in the State of Maine, I, David Latham, confirm that this site has the ability to sufficiently manage stormwater runoff.

Please clarify roof drainage, noting any roof drains on the elevations and where they discharge on the plan. It is unclear where stormwater flows are going to (i.e. plumbed internally or discharged on site). Please also show any regrading on site to understand stormwater flows.

- Response: The previously submitted butterfly roof has been re-designed to a flat roof. In the new design, stormwater runs off the roof and discharges in the rear of the site via a downspout system as illustrated on Sheet A104. Proposed contour lines have been shown on Sheet C101. Please note that the existing grading is largely to remain unchanged.

It is noted that a pavement detail was submitted, but it should match the City of Portland's requirements for repaving in roadways per the technical manual in Section 1. The thickness appears fine, but the surface course should be 12.5 mm HMA and the base course pavement should be 19 mm HMA.

- Response: The detail has been updated as requested.

Public Utilities

Electrical service must be underground unless it is determined to be unfeasible due to extreme cost, the need to retrofit properties not owned by the applicant, or complexity of revising existing overhead facilities. Please provide electric underground or justification for why overhead utility is necessary.

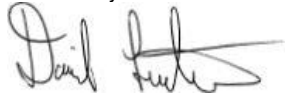
- Response: Please see the attached waiver request as well as email correspondence from Patrick Landers detailing cost estimation.

Please clarify what are the strips shown at the front of the building.

- Response: These are pavement strips for site access to the parking area.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,



David Latham, P.E.
Trillium Engineering Group

Standard to be Waived: Cite Ordinance or Technical Manual Standard	Cite Standard Language: Cite specific language of applicable Ordinance or Technical Manual Standard	Waiver Being Sought: Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	Justification for Waiver: Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Section 1.14.3	24' minimum two-way parking lot drive aisle	We are requesting a 15'-9" two-way parking lot drive aisle	The shallow lot depth limits our proposed drive aisle and is impractical. Due to the limited units, two-way traffic is unlikely. It is our professional opinion that this is the best practical approach for this site situation.
Section 1.7.2.7	Location and spacing of driveways - minimum distance per Tech Manual is 35 feet from intersection	We are requesting a waiver for use of the existing driveway, which is located 16'-9" from the intersection.	We are re-using an existing driveway curb cut for the proposed building and we are also eliminating an existing curb cut for the same property
Section 1.8.2	Brick sidewalks required along property frontage per Tech Manual	We are requesting a waiver to construct the sidewalk and driveway apron with concrete, rather than brick	Concrete is the predominant sidewalk material used on this street, and using this material would provide consistency with the as-built conditions in the area

Standard to be Waived: Cite Ordinance or Technical Manual Standard	Cite Standard Language: Cite specific language of applicable Ordinance or Technical Manual Standard	Waiver Being Sought: Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	Justification for Waiver: Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Section 1.14.3	24' minimum two-way parking lot drive aisle	We are requesting a 15'-9" two-way parking lot drive aisle	The shallow lot depth limits our proposed drive aisle and is impractical. Due to the limited units, two-way traffic is unlikely. It is our professional opinion that this is the best practical approach for this site situation.
Section 1.7.2.7	Location and spacing of driveways - minimum distance per Tech Manual is 35 feet from intersection	We are requesting a waiver for use of the existing driveway, which is located 16'-9" from the intersection.	We are re-using an existing driveway curb cut for the proposed building and we are also eliminating an existing curb cut for the same property
Section 1.8.2	Brick sidewalks required along property frontage per Tech Manual	We are requesting a waiver to construct the sidewalk and driveway apron with concrete, rather than brick	Concrete is the predominant sidewalk material used on this street, and using this material would provide consistency with the as-built conditions in the area

David Latham

From: Patrick Landers <patrick@mindfulbuildingllc.com>
Sent: Friday, February 4, 2022 12:16 PM
To: Jimmy Dealaman
Cc: Ray Chang; Andrew Treworgy; David Latham; Paul Lewandowski
Subject: Re: Major Site Plan Development PL-001837-2021, 26 E OXFORD ST

Hello I,

\$24,000.00 to \$34,000.00 for excavation, pavement and sidewalk cutting, street closure permits, installing conduit, and paving.

The estimate has a range because depending on existing utility location may cause the opening to be larger which will extend the time and size of street opening.

\$5,600.0 to repair sidewalks on both sides of the roads.

\$3,375.00 for master Electrician to run wire, install & mount conduit and the weather head on pole.

Over head installation has no cost because CMP Cover 100% of the cost to connect the line and mount the transformer on the pole.

The 600 amp service for the building is included under the electrical estimate for the building. And would be in addition to the above cost no matter which way we completed it.

I have opened up Oxford street on this block before and it's a bit of a mess there are so many abandon pipes as well as multiple utility connection in a very short distance.

I hope this helps you understand why it's simply not readable to budget into the project. Also I would mention there are no underground connection electrical connection on this block or for a minimum of 1 block each direction up on down the street.

Thank you for your time!

Patrick Landers
Mindful Building LLC
207-408-0663

On Feb 4, 2022, at 11:22 AM, Jimmy Dealaman <jdealaman@portlandmaine.gov> wrote:

Hi Ray,

Nice meeting with your team last week. I wanted to follow up on a question that came up at the meeting which was regarding whether the above ground utility could be supported instead of needing to provide underground utilities.

To be considered for a financial hardship to provide above ground utility, please provide us with the two options, one showing below ground and one showing above ground and what the anticipated cost is, as well as if you anticipate needing to install additional utility poles in either scenario.

Once we receive this information we can review this internally and provide a recommendation to the Board.

Kind regards,

Jimmy

On Tue, Jan 25, 2022 at 8:39 AM Jimmy Dealaman <jdealaman@portlandmaine.gov> wrote:

I also wanted to share a few more comments received from our engineer in Public Works who reviews the wastewater utility connection. He has asked for a couple of things be provided:

1. The owner/ developer should have the existing sewer lateral televised to confirm the condition of it for re-use.
A statement should be provided confirming the development team has completed that research.
2. The engineer should provide written confirmation for our records that a 6 inch sewer is big enough for the proposed building.
3. If these 2 items come back as "sewer lateral is in good condition" and "a 6 inch sewer lateral will handle the proposed flows" then you should be all set.

Also please submit the attached request letter to Brad Roland <brad@portlandmaine.gov>

Thank you and see you tomorrow,

On Mon, Jan 24, 2022 at 1:28 PM Jimmy Dealaman <jdealaman@portlandmaine.gov> wrote:
Added

On Mon, Jan 24, 2022 at 1:16 PM Ray Chang <ray@db9ventures.com> wrote:

Great and thanks! Could you kindly include David Latham to the invite? He wasn't listed in the calendar invite.

Cheers,

Ray

On Jan 24, 2022, at 13:08, Jimmy Dealaman <jdealaman@portlandmaine.gov> wrote:

I'll send out the invite for Wednesday at 11am. We'll plan to start out discussing any design questions you have, given our Urban Designer will attend and may not need to stay for the full hour.

26 Oxford Street Planning Review

Architectural Response

Rear Stepback: For portions of the building above 35 feet a step back is required within 15 feet of rear property line and 10 feet of side property line except when along a side street. The proposal shows a rear setback of 12 feet, and there is 3 feet of the rear of building, which appears to exceed 35 ft, that must be stepped back 15 feet from property line. Please revise

Setback on 4th story abv. Grade plane adjusted to meet setback in accordance with Portland Zoning Ordinance. All overhangs fall within setback of 15' abv. 35' Elevation

Height: Elevations must show the height to the extent of roofline. Please also see design comments related to roof form before revising. As currently proposed it does not appear to meet the 45 max height in the R-6. What is the average grade, and how was this determined? (Note: Usually it is based on taking the average of the proposed finished grade at the four corners of the building.) How it was determined should be noted and shown on the elevations so the actual height of the building from the average grade can be measured.

Roof Structure redesigned to flat roof w/ pitch panel drainage in lieu of pitched butterfly roof. The Avg. Grade Plane calculated by Civil as 44.25' Elevation. The building has a total height of 40' – 5" at highest point.

-Please provide a curb, bollard, or separation for pedestrians accessing the ground floor unit.

Bollards called out on new L100 in Architectural Set. This also addresses the “pull through” issue acknowledged for two curb cut condition.

-Please provide more detail on the ground floor plan, or separate plan clarifying the layout of the area and how residents will can access the rear yard, parking, and where entrances are. The site should be designed to provide natural surveillance that promotes visibility of public spaces and areas. Please ensure sufficient lighting is proposed to promote visibility/safety.

L100 of Architectural resubmit highlights entry/exit doors as well as labels parking spaces per unit.

-Separation of egress – Permitting/life safety staff have noted that it doesn't appear that there is adequate separation of egress leading to the stairwell from upper units. (Note: building code doesn't allow for single egress for a four story building)

Architectural Redesign addresses several issues with the exit-way and egress from the units to ground floor. IBC Table 1006.2.1 allows R-2 Max Travel distance of 125' in sprinklered building along Common Path of Travel

Table 1006.3.2(1) dictates requiring two exits for units fourth story above grade plane or higher. Since (1) means of egress is allowed for Ground, second and third floors given that maximum dwelling units is (4), the only compliant (2) serviceable exit path unit is Unit 6. In the redesigned layout, we've adjusted our exit doors to exceed 1/3 the total distance of unit, complying with 1007.1.1 Exception 2. All stories up to 4th story abv. Grade plane comply with 1006.2.1 under 10 occupant load + under 125' common path of exit travel distance.

26 Oxford Street Design Review

Architectural Response

PRINCIPLE B - Massing – The massing of the building reflects and reinforces the traditional building character of the neighborhood through a well composed form, shape and volume. - Not Met

Massing adjusted with roof redesign. Flat roof evens out the proportional masses along the building façade and aligns with current 3+ unit multifamily of Portland vernacular.

Roof form is not compatible with the predominant character-defining architectural features of the neighborhood. Multi-family above 35 feet utilize a flat roof form expressed by a continuous cornice line.

See above. Roof adjusted to flat with continuous cornice line.

The building main roof form is not compatible, with subsidiary roof forms appropriately identified as flat roof that are parallel and perpendicular to the street. Express main and subsidiary roofs with continuous cornice. Identify exterior space, shown on A102, and clarify the vertical dimension between future deck and parapet wall.

See above. Roof adjusted to flat with continuous cornice line. Exterior space shown as Future Deck- not part of this phase- it is designed as such to provide the foundations for a future roof deck. The depth of this from parapet to exterior wall is 12 feet.

Main entrance is oriented toward the street and articulated with recessed entry and canopy. Clarify materiality of canopy.

Canopy is a purchased product modular metal assembly by MAPES purchased to standard width. Galv Steel and break-metal aluminum clips + flashing.

Visual privacy of occupants on ground floor dwelling does not meet standard. Observe the window sill height at least 48" above adjoining sidewalk grade.

Windows on Ground Level unit adjusted for 48" Sill Height. Verifying that bedroom windows still have a roughly 6SF casement opening 36" x 36". New types reflecting heights shown in Window Schedule.

Identify 5' front setback as buffer for landscaping.

It is our understanding that the City would allow the building to match the average frontage of the street existing condition.

Surface articulation in the building should include detailed consistency on the façade visible from the public right of way through dimensional trim (minimum width of 4"), window reveals, or similar elements appropriate to style of building. Clarify material type of proposed trim and details on the façade for windows and exterior doors facing street.

All Trim provided by Wolf Siding in dimensional standards. Wolf Siding is a composite siding alternative to vinyl and clapboard. They have a complete selection of reveals, trims and detail-work that fits within modular system, and matches colorway of siding product. This ensures consistency between siding and trim combined with ease of construction.

For visual cohesion of siding material, prioritize horizontal orientation and consistency of clapboard material prevalent within the surrounding neighborhood.

Horizontal orientation of Composite Siding is predominant orientation.

The main pedestrian entry is facing East Oxford Street. Provide materiality of main entry canopy.

See Above

All exterior façade trim such as that used for windows, doors, corner boards, and other trim, shall have a minimum, width of 4 inches except for buildings with masonry exteriors.

Nominal 4" Trim piece selected from Wolf Siding catalogue. This includes Window/Opening trim, outside corner, capping @ Parapet

Vinyl siding, as proposed as the predominant façade material, is not appropriate for the multi-residential building to be compatible with the neighborhood. Applicant to explore clapboard material and clarify type and color.

Composite high density cellular acrylic form Wolf Siding. We are proposing a mix of 7" and 4" profiles to color the massing of the facades. Morning Mist, Graphite and Baltic Blue are selected colors. All colors transition between siding and trim

February 1, 2022

City of Portland
389 Congress Street
Portland, ME 04101

Re: 26 Oxford Street – Proposed Building
Construction Management Plan Narrative

Dear Planning:

The following narrative provides an overview of the construction management principles that Trillium Engineering Group and the contractor have identified to minimize impacts from construction, such as noise, vibrations, ground movement, truck traffic, and other construction related factors to the surrounding building and communities.

Development Review of Construction Management Plan

Trillium Engineering Group has submitted a Construction Management Plan that provides a comprehensive logistics and safety program for the construction project. Minimizing impacts to areas surrounding the building shall be primary considerations to the process.

The following details define the intended approach to the successful management of the project construction and the construction management plan will address the general conditions contained below.

Performance Guarantees, Inspection Fees, Pre-Construction Meetings, and Permits

Prior to scheduling a pre-construction meeting and the issuance of any city required permits, Trillium Engineering Group and the contractor shall meet all of the requirements contained in Section 14-530: Development Review Fees and Post Approval Requirements and 14-542: General Requirements and Enforcement of Portland's Land Use Code. Since this is a Level III Site Plan Application with under 50,00 square feet of proposed work, the fee shall be \$2,750, per Section 14-530.

No other permits will be required for this project.

Construction Administration and Communication

Trillium Engineering Group and the contractor will work diligently to implement a communication strategy as outlined below. The communication strategy is intended to ensure that all construction operations are performed in accordance with all agreements, ordinances, and special permits applicable to this project. The Construction Manager will work closely with the adjacent abutters, businesses and all parties informed, as far in advance as possible, of schedule work, particularly work anticipated to cause significant noise, vibrations, or dust. The final construction management plan shall provide the following:

1. Contact Person and contact information for the contractor and who is available 24 hours.
2. Construction Signage posted on the site with contact information for contractor.
3. Describe any additional communication strategies.
4. All construction site signage is temporary and shall be removed at project completion.

Construction Schedule

Mobilization – May 2022
Initial Sitework – June/July 2022
Construction – August 2022 – February 2023
Final Closeout – March 2023

Security and Public Safety

See Construction Management Plan for depiction of all proposed fencing or other barriers and access gates (with knox locking devices) separating pedestrian and vehicle circulation from the construction site. All work done on the existing building shall comply with NFPA 1 Chapter 16, *Safeguarding Construction, Alteration, and Demolition Operations*.

Construction Permitting and Traffic Control Plans

Trillium Engineering Group is proposing a small amount of work in the Oxford Street right-of-way to install a new 2" domestic service line and 4" fire service line. On Sheet C103, "Construction Management Plan", Trillium Engineering Group has added a note instructing the contractor to coordinate with the City and shift traffic during road construction.

Site Management and Controls

The final Construction Management Plan will address maintaining the site in a safe condition and includes the following:

1. Trash and debris will be removed as required by the contractor. The on-site staging area will allow for plenty of trash and debris storage prior to removal.
2. Street cleaning and damage controls will be performed as required by contractor.
3. Dust controls complying with Portland's requirements under Section 25-129 on Noise, dust, and debris shall be followed.
4. Contractor will comply with Portland's requirements under Section 25-129
5. Snow removal per Section 25-173.

Erosion Control and Preservation of Trees

Erosion control shall be performed by the contractor as depicted on Sheets C200 and C300. This project does not propose any preservation of trees as explained in waiver requests submitted to the Planning Board.

Construction Staging Area

All material staging and delivery truck holding areas shall be located on-site as depicted on the Construction Management Plan. Note that the storage areas will eventually feature landscaping and pavement, but these are to be installed after the completion of the building itself. Therefore, the landscaping and driveway will not pose an issue with on-site staging.

There will not be a need for off-site delivery truck holding areas. All other staging areas shall be laid out as shown on Sheet C102, "Construction Management Plan".

Parking During Construction

Workers will utilize the nearby street parking during construction. The site itself will not have any residential demand until the project is completed.

Dewatering Plan

Trillium Engineering Group is not anticipating groundwater to be an issue during construction.

Special Measures as Necessary

This section does not apply, as construction is not anticipated to take over a long period as defined by the General Construction Management Template.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,



David Latham, P.E.
Trillium Engineering Group

STORMWATER MANAGEMENT REPORT

PROPOSED RESIDENTIAL BUILDING

26 OXFORD STREET
PORTLAND, MAINE

February 8, 2022

PREPARED BY:

*TRILLIUM ENGINEERING GROUP
189 MAIN STREET
YARMOUTH, ME 04096
(207) 307-0872*

A. Project Background:

The applicant is proposing a new four-story residential building with (6) units on a currently developed parcel (CBL 013 D002001). The applicant is looking to break ground as soon as possible.

Access to the site is via Oxford Street. The new building is to be serviced by public water, sewer, and overhead electricity/telephone/cable. The parcel features a steep slope along the rear property line before leveling off into a light slope draining in a general northwesterly direction.

This project will only result in the increase of 259 square feet of impervious area, while the site grading shall be left largely unchanged. Ultimately, due to the small scope of this work, it is our professional opinion that this project will not have an adverse impact on the quality or quantity of stormwater runoff leaving the site.

The applicant is proposing a new 23-unit subdivision with a proposed private road on a currently undeveloped lot (Tax Map 62, Lot 55). The applicant is looking to break ground as soon as possible.

B. Existing Site Conditions

The existing site currently features an existing two-story residential building. Topography of the site and the immediate surrounding area has been shown at a one-foot contour interval with data provided by Owen Haskell, Inc.

C. Wetlands and Streams

The site does not feature any wetlands or streams.

D. Soils

All on-site soils are rated Hydrologic Soil Group "A", per the United States Web Soil Survey (WSS).

E. Proposed Use

The proposed development will call for (6) new apartment units with associated parking and driveway access. In total, this project will create a net increase of 259 square feet of impervious area on the existing lot.

As shown in the calculations below and in the attached stormwater development plans, this project will have no adverse effect on the quality or quantity of stormwater leaving the site. Because of this, Trillium Engineering Group is not proposing any new stormwater treatment systems.

F. Stormwater

We have been authorized to perform a drainage analysis on the site that would meet the standards of the Maine Department of Environmental Protection and the City of Portland, Maine. I have reviewed the drainage characteristics of the site, which includes proposed driveways and buildings. The analysis required post construction stormwater flows to be substantially equal to or less than the existing stormwater flow rates.

We have used the SCS TR-20 (HydroCAD 10.00 stormwater model) method of computing stormwater runoff peak flow rates. This method accounts for soil types, existing land uses, topography, vegetative cover, and proposed land use for the parcel to be developed. The future conditions were analyzed using data for a design frequency of occurrence of 2/10/25 years. The Type III, 24-hour storm distribution rainfall has a 3.1, 4.6, and 5.8 inches/hour respectively has been used, and storm values have been provided by

Appendix H of Chapter 500 of the State of Maine Stormwater Management Law. All supporting calculations and data are submitted with this report.

The existing and proposed site conditions were evaluated using information taken from the existing condition and proposed design plan of the area. Impervious, lawns/fields, and woods areas for each hydrologic soil condition were measured by HydroCAD in order to calculate a weighted curve number that typifies the drainage condition of the site.

Stormwater Model Summary

CFS (Cubic Feet per Second = Rate)

Value based on flow entering Analysis Points (AP) 1 and 2

Storm Event	2-Yr (Pre)	2-Yr (Post)	10-Yr (Pre)	10-Yr (Post)	25-Yr (Pre)	25-Yr (Post)
Flow	0.09	0.12	0.23	0.26	0.35	0.38

Calculations for the 2-, 10-, and 25-year Pre- and Post-Drainage are included in the attached stormwater reports.

Evaluation of Results

As shown in the data above, stormwater flow rates are left effectively unchanged in the 2-, 10-, and 25-year storm events.

G. Water Quantity and Quality

Quantity: Peak flows have been left effectively unchanged in the 2-, 10-, and 25-year storm event. Because of this, we can assume the stormwater quality will not lead to increased erosion rates.

Quality: This project results in a net increase of 259 square feet of impervious area. By inspection, this minor increase is negligible and will not have an adverse effect on the quality of stormwater runoff.

Thank you for taking the time to review this project. Should you have any questions or require any additional information, please do not hesitate to contact me.

Sincerely yours,



David Latham, P.E.
Trillium Engineering Group

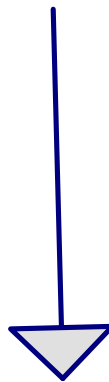
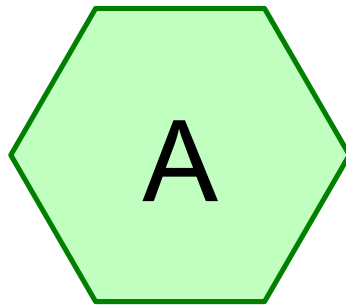
PROPOSED RESIDENTIAL BUILDING

Pre-Development Stormwater Analysis

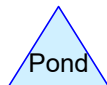
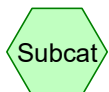
26 Oxford Street
Portland, Maine

Submitted:

February 8, 2022



Runoff Flow



Routing Diagram for 26 Oxford Pre
Prepared by HP Inc., Printed 2/8/2022
HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Printed 2/8/2022

Page 2

Rainfall Events Listing

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

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Printed 2/8/2022

Page 3

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.049	39	>75% Grass cover, Good, HSG A (A)
0.059	98	Impervious (A)
0.108	71	TOTAL AREA

26 Oxford Pre

Prepared by HP Inc.

Printed 2/8/2022

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Page 4

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.049	HSG A	A
0.000	HSG B	
0.000	HSG C	
0.000	HSG D	
0.059	Other	A
0.108		TOTAL AREA

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Printed 2/8/2022

Page 5

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
0.049	0.000	0.000	0.000	0.000	0.049	>75% Grass cover, Good	A
0.000	0.000	0.000	0.000	0.059	0.059	Impervious	A
0.049	0.000	0.000	0.000	0.059	0.108	TOTAL AREA	

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 2-Yr Rainfall=3.10"

Printed 2/8/2022

Page 6

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

SubcatchmentA:

Runoff Area=4,720 sf 54.51% Impervious Runoff Depth>0.74"
Tc=5.0 min CN=71 Runoff=0.09 cfs 0.007 af

Link AP1: Runoff Flow

Inflow=0.09 cfs 0.007 af
Primary=0.09 cfs 0.007 af

Total Runoff Area = 0.108 ac Runoff Volume = 0.007 af Average Runoff Depth = 0.74"
45.49% Pervious = 0.049 ac 54.51% Impervious = 0.059 ac

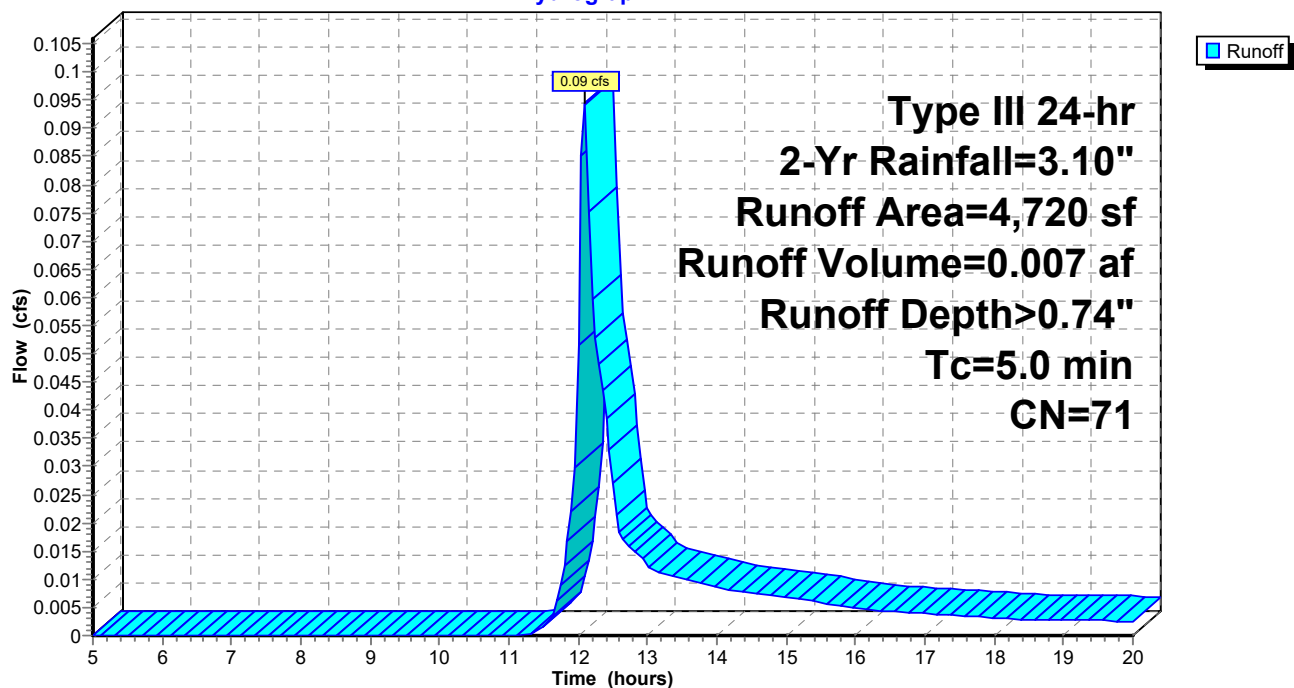
Summary for Subcatchment A:[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Depth> 0.74"

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
*	2,573	98	Impervious
	2,147	39	>75% Grass cover, Good, HSG A
	4,720	71	Weighted Average
	2,147		45.49% Pervious Area
	2,573		54.51% Impervious Area

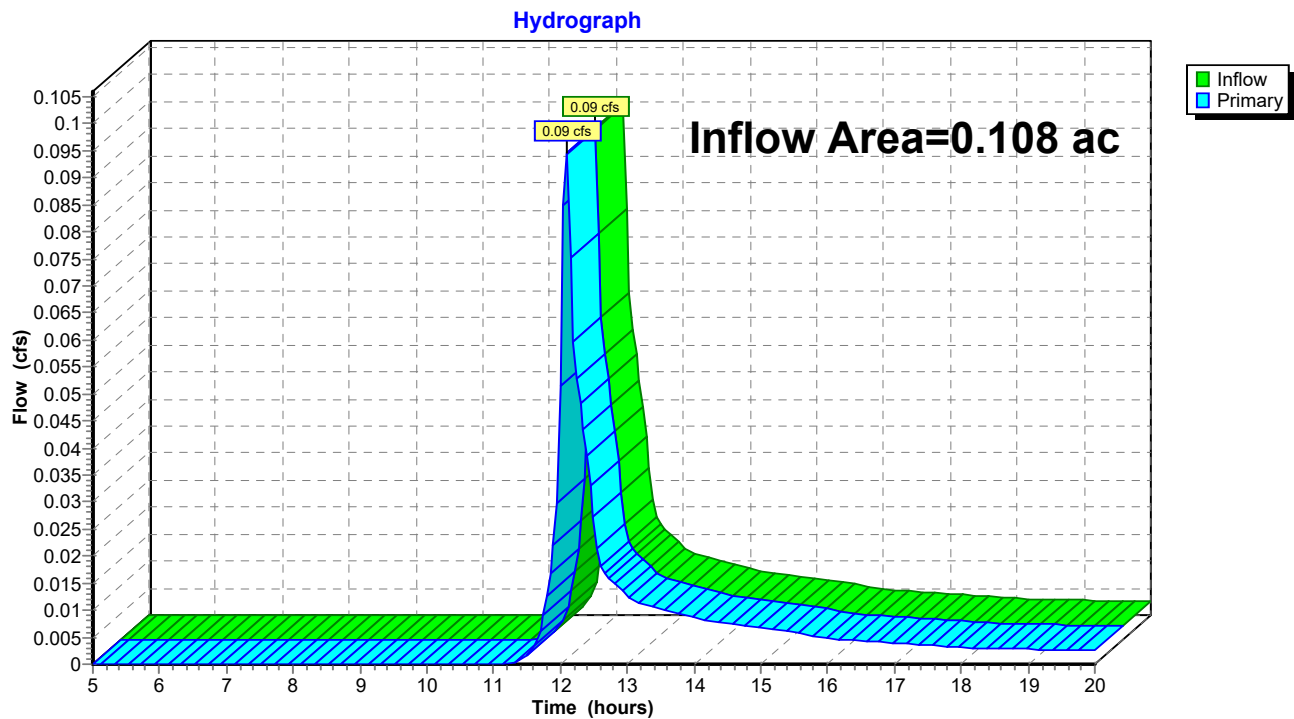
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment A:**Hydrograph**

Summary for Link AP1: Runoff Flow

Inflow Area = 0.108 ac, 54.51% Impervious, Inflow Depth > 0.74" for 2-Yr event
Inflow = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af
Primary = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link AP1: Runoff Flow

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 10-Yr Rainfall=4.60"

Printed 2/8/2022

Page 9

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

SubcatchmentA:

Runoff Area=4,720 sf 54.51% Impervious Runoff Depth>1.67"

Tc=5.0 min CN=71 Runoff=0.23 cfs 0.015 af

Link AP1: Runoff Flow

Inflow=0.23 cfs 0.015 af

Primary=0.23 cfs 0.015 af

Total Runoff Area = 0.108 ac Runoff Volume = 0.015 af Average Runoff Depth = 1.67"
45.49% Pervious = 0.049 ac 54.51% Impervious = 0.059 ac

Summary for Subcatchment A:

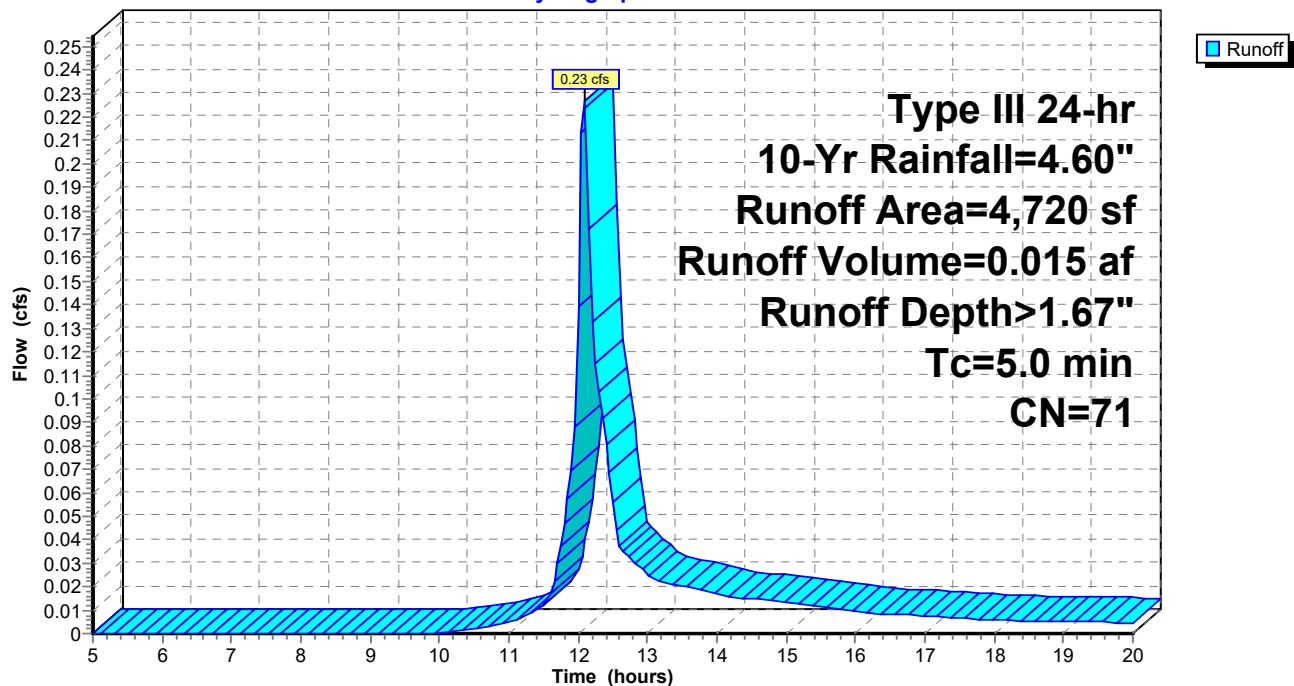
[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.23 cfs @ 12.08 hrs, Volume= 0.015 af, Depth> 1.67"

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
*	2,573	98	Impervious
	2,147	39	>75% Grass cover, Good, HSG A
	4,720	71	Weighted Average
	2,147		45.49% Pervious Area
	2,573		54.51% Impervious Area

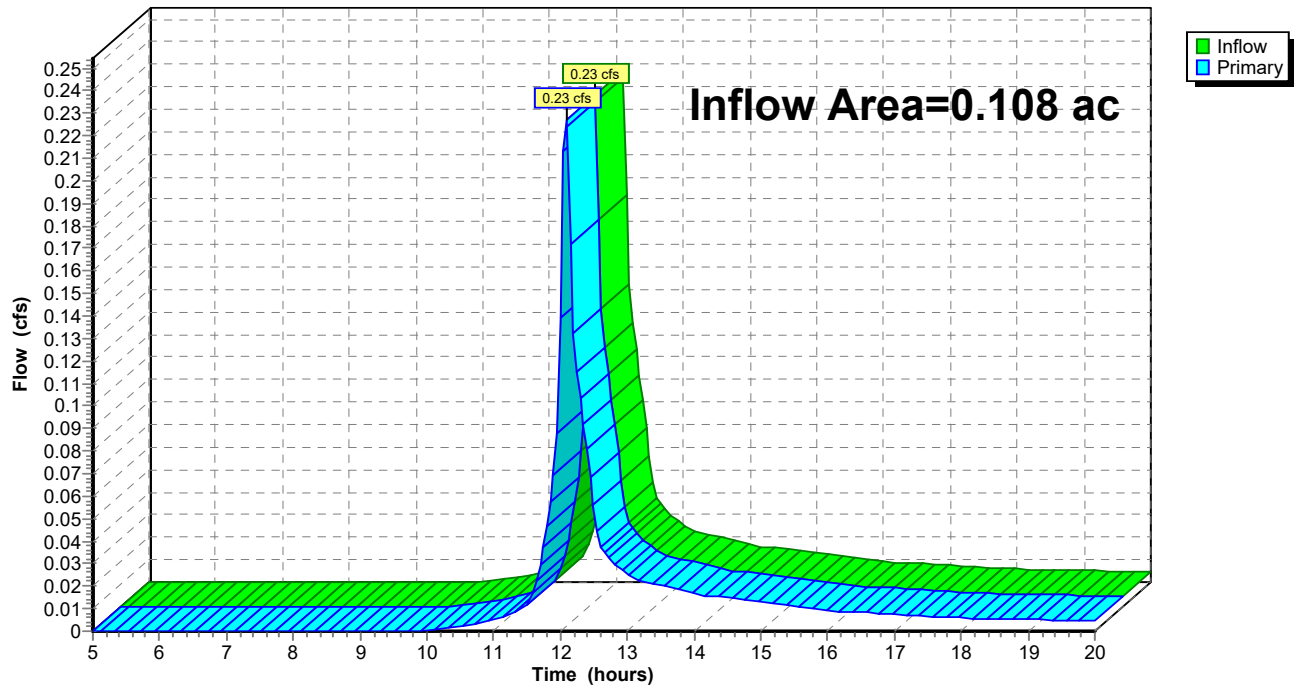
Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment A:**Hydrograph**

Summary for Link AP1: Runoff Flow

Inflow Area = 0.108 ac, 54.51% Impervious, Inflow Depth > 1.67" for 10-Yr event
Inflow = 0.23 cfs @ 12.08 hrs, Volume= 0.015 af
Primary = 0.23 cfs @ 12.08 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link AP1: Runoff Flow**Hydrograph**

26 Oxford Pre

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25-Yr Rainfall=5.80"

Printed 2/8/2022

Page 12

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

SubcatchmentA:

Runoff Area=4,720 sf 54.51% Impervious Runoff Depth>2.54"

Tc=5.0 min CN=71 Runoff=0.35 cfs 0.023 af

Link AP1: Runoff Flow

Inflow=0.35 cfs 0.023 af

Primary=0.35 cfs 0.023 af

Total Runoff Area = 0.108 ac Runoff Volume = 0.023 af Average Runoff Depth = 2.54"
45.49% Pervious = 0.049 ac 54.51% Impervious = 0.059 ac

Summary for Subcatchment A:

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.35 cfs @ 12.08 hrs, Volume= 0.023 af, Depth> 2.54"

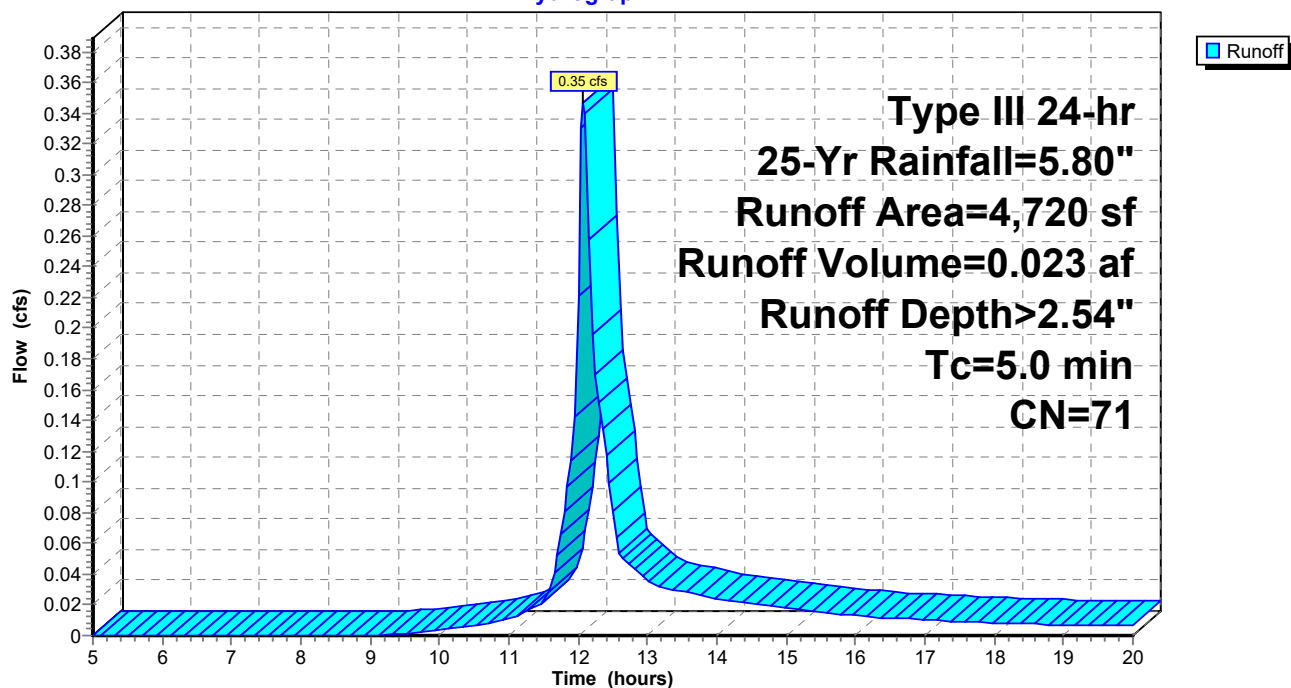
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, $dt=0.05$ hrs
Type III 24-hr 25-Yr Rainfall=5.80"

	Area (sf)	CN	Description
*	2,573	98	Impervious
	2,147	39	>75% Grass cover, Good, HSG A
	4,720	71	Weighted Average
	2,147		45.49% Pervious Area
	2,573		54.51% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment A:

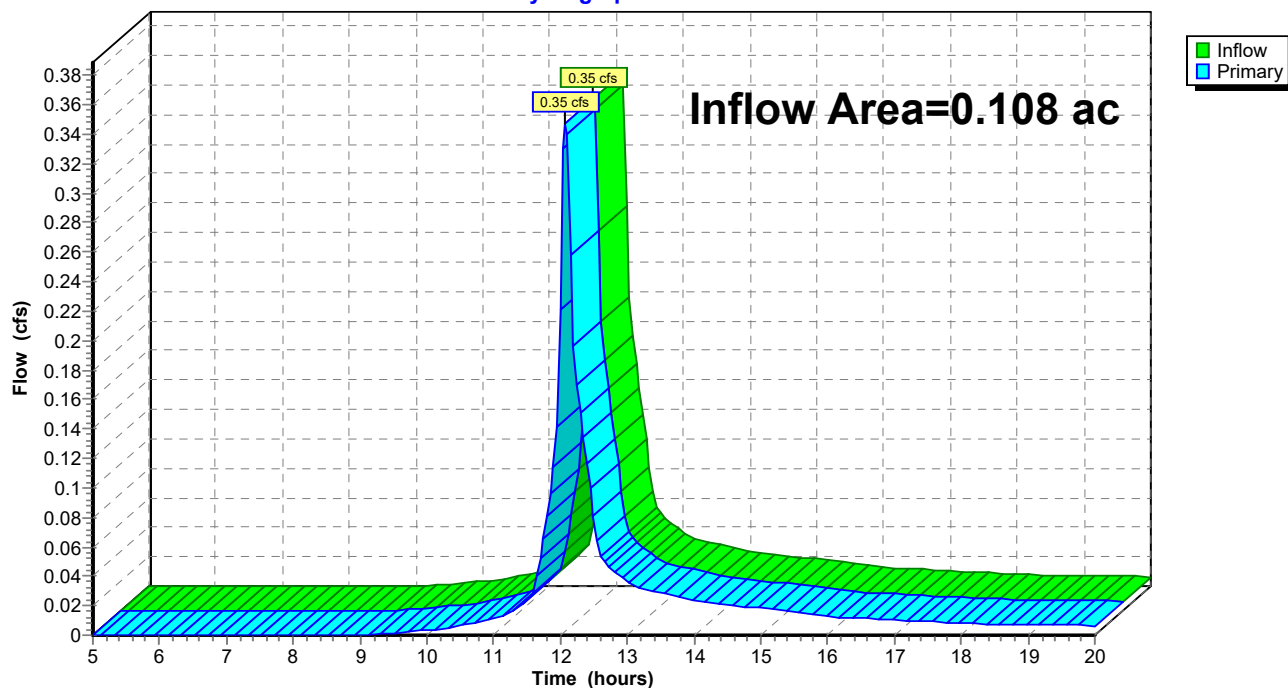
Hydrograph



Summary for Link AP1: Runoff Flow

Inflow Area = 0.108 ac, 54.51% Impervious, Inflow Depth > 2.54" for 25-Yr event
Inflow = 0.35 cfs @ 12.08 hrs, Volume= 0.023 af
Primary = 0.35 cfs @ 12.08 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link AP1: Runoff Flow**Hydrograph**

PROPOSED RESIDENTIAL BUILDING

Post-Development Stormwater Analysis

26 Oxford Street
Portland, Maine

Submitted:

February 8, 2022

26 Oxford Post

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Printed 2/8/2022

Page 1

Rainfall Events Listing

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

26 Oxford Post

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 2-Yr Rainfall=3.10"

Printed 2/8/2022

Page 2

Summary for Subcatchment 1:

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.12 cfs @ 12.09 hrs, Volume= 0.008 af, Depth> 0.89"

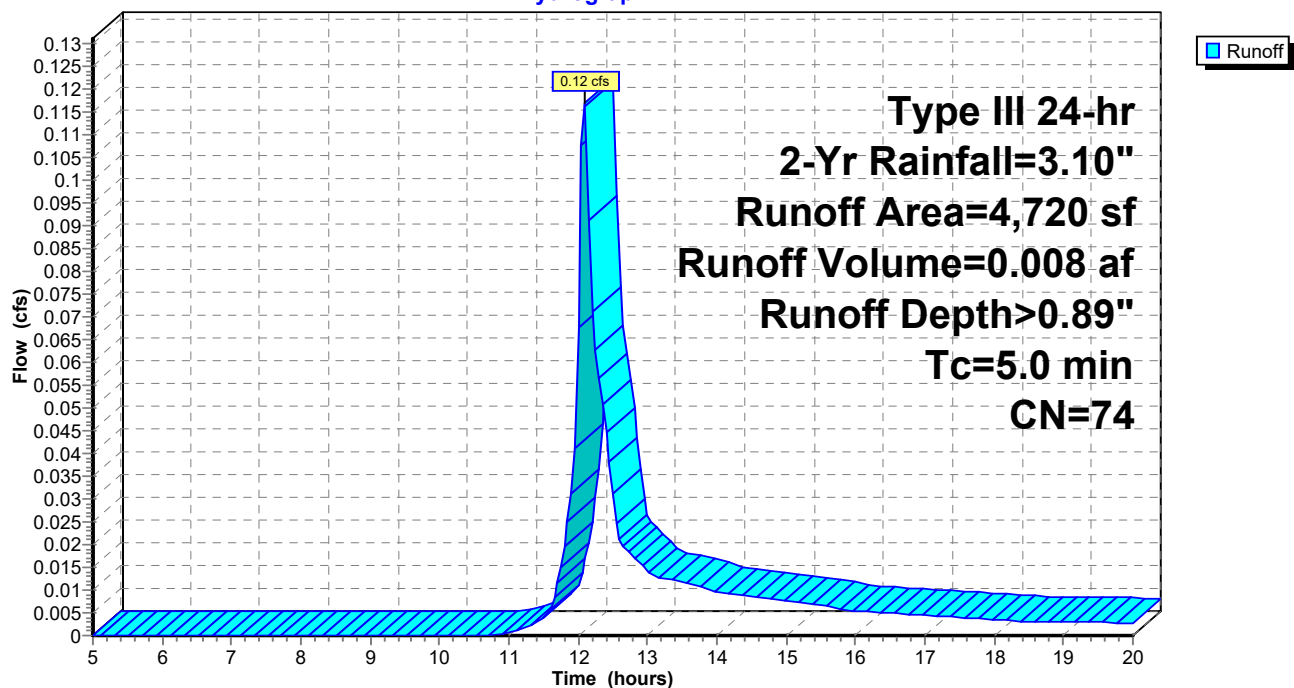
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, $dt=0.05$ hrs
Type III 24-hr 2-Yr Rainfall=3.10"

	Area (sf)	CN	Description
*	2,832	98	Impervious
	1,888	39	>75% Grass cover, Good, HSG A
	4,720	74	Weighted Average
	1,888		40.00% Pervious Area
	2,832		60.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 1:

Hydrograph



26 Oxford Post

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 10-Yr Rainfall=4.60"

Printed 2/8/2022

Page 3

Summary for Subcatchment 1:

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.26 cfs @ 12.08 hrs, Volume= 0.017 af, Depth> 1.90"

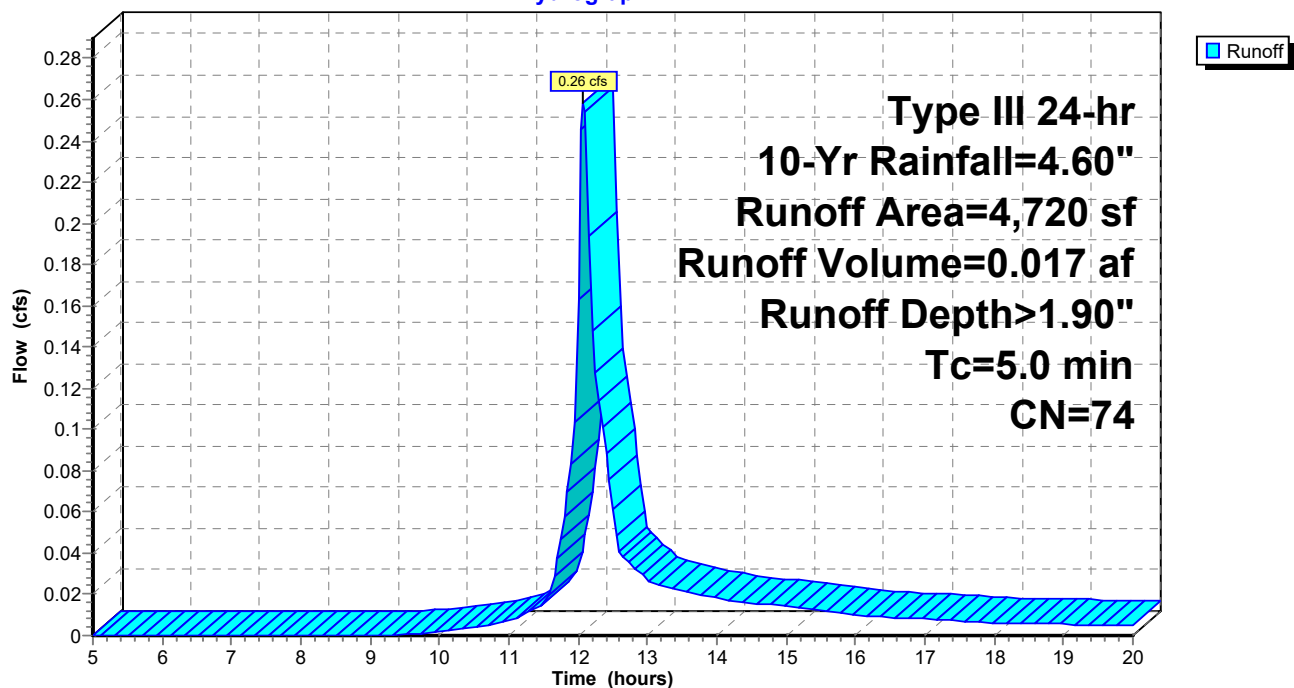
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, $dt=0.05$ hrs
Type III 24-hr 10-Yr Rainfall=4.60"

	Area (sf)	CN	Description
*	2,832	98	Impervious
	1,888	39	>75% Grass cover, Good, HSG A
	4,720	74	Weighted Average
	1,888		40.00% Pervious Area
	2,832		60.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 1:

Hydrograph



26 Oxford Post

Prepared by HP Inc.

HydroCAD® 10.10-5a s/n 11914 © 2020 HydroCAD Software Solutions LLC

Type III 24-hr 25-Yr Rainfall=5.80"

Printed 2/8/2022

Page 4

Summary for Subcatchment 1:

[49] Hint: $T_c < 2dt$ may require smaller dt

Runoff = 0.38 cfs @ 12.08 hrs, Volume= 0.025 af, Depth> 2.81"

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
*	2,832	98	Impervious
	1,888	39	>75% Grass cover, Good, HSG A
	4,720	74	Weighted Average
	1,888		40.00% Pervious Area
	2,832		60.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry,

Subcatchment 1:

Hydrograph

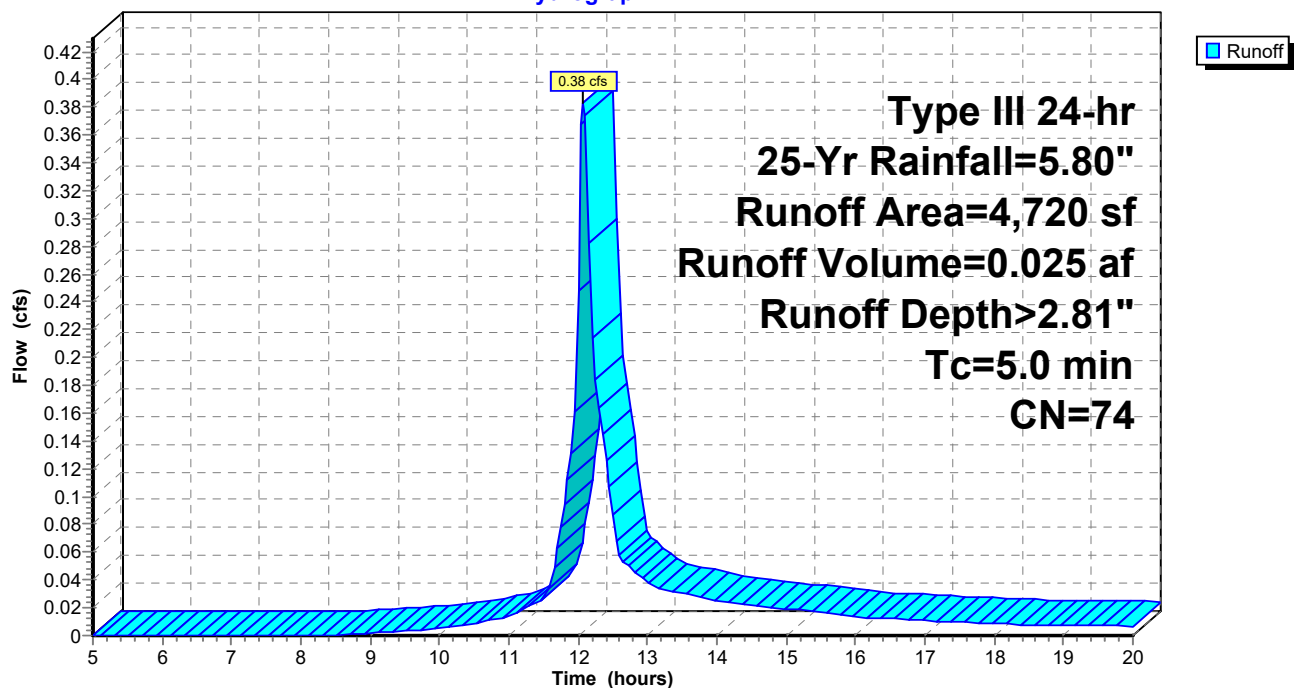




Photo 1: Proposed siding for 26 Oxford development



Photo 2: Side view of proposed siding for 26 Oxford development



189 Main Street, Suite 200
Yarmouth, ME 04096

March 28, 2022
City of Portland
389 Congress Street
Portland, ME 04101

Re: 26 Oxford Street – Proposed Building
Major Site Plan Application – Response to City Comments

Dear Planning:

Trillium Engineering Group is providing this response as additional information for City comments originally received from Town Planner Jimmy Dealaman via email on March 25, 2022. This development proposes the demolition of an existing two-story building in order to provide a new four-story residential building with (6) units (CBL 013 D002001).

Please see the updated plans, documents, and below responses to the comments.

Zoning

Please provide more information on the average grade plan. The Architectural response states that the average grade plane calculated by Civil as 44.25' elevation. This needs to be shown. The grade at each of the corners needs to be added to Plan C101. The average grade line needs to be shown on all four elevations.

- Response: The architectural and site plans have been updated as noted.

Regarding the rear setback, it needs to be measured to the foundation unless the roof overhang is more than 2'. The plans show that the setback is 12.85' to the overhang. It appears that the top floor is set back 5.8' from the edge so the 15' step back should be met for the height above 35'

- Response: The 12.85' dimension is the distance from the rear property line to the foundation. No change is necessary.

Access and Circulation

The City's Consulting Traffic Engineer requests an Auto-Turn analysis be conducted/submitted to prove vehicles can enter and exit spaces.

- Response: A vehicle turning template has been added to Sheet L100.

Parking lot layout must provide a minimum drive aisle of 24 feet. The parking drive aisles shows approximately 15 feet at its widest point. Please request a waiver to Section 1.14.3 with justification speaking to the site constraints and why a waiver is justified.

- Response: Please see the attached updated waiver request.

Landscaping

Evergreen trees like Arborvitae should be noted/measured in height vs caliper or thickness of the trunk. Arborvitae should be in the 5'-6' range.

- Response: Sheet C102 has been updated as requested.

Design

The design review team has reviewed the latest plan submission and find that all design standards are met, however staff are asking that the elevations be updated to show the future vertical barrier (i.e. guardrail, etc) for the future deck, otherwise staff would recommend this as a condition of approval

- Response: Please see the attached updated architectural plans.

Utility

Regarding the request for financial hardship to be considered for an underground utility, thank you for submitting the detailed costs provided by Patrick Landers. Please clarify if a new pole would need to be installed if needing to provide an underground electric line.

- Response: The cost estimation previously provided did not account for the potential installation of a new utility pole.

Thank you for taking the time to review this. Should you have any further questions or require any additional information, please do not hesitate to ask.

Sincerely,



David Latham, P.E.
Trillium Engineering Group

Standard to be Waived: Cite Ordinance or Technical Manual Standard	Cite Standard Language: Cite specific language of applicable Ordinance or Technical Manual Standard	Waiver Being Sought: Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	Justification for Waiver: Address specific waiver criteria, if applicable, and document reasons for the waiver request.
Section 1.14.3	24' minimum two-way parking lot drive aisle	We are requesting a 15'-9" two-way parking lot drive aisle	The shallow lot depth limits our proposed drive aisle and is impractical. Due to the limited units, two-way traffic is unlikely. It is our professional opinion that this is the best practical approach for this site situation.
Section 1.7.2.7	Location and spacing of driveways - minimum distance per Tech Manual is 35 feet from intersection	We are requesting a waiver for use of the existing driveway, which is located 16'-9" from the intersection.	We are re-using an existing driveway curb cut for the proposed building and we are also eliminating an existing curb cut for the same property
Section 1.8.2	Brick sidewalks required along property frontage per Tech Manual	We are requesting a waiver to construct the sidewalk and driveway apron with concrete, rather than brick	Concrete is the predominant sidewalk material used on this street, and using this material would provide consistency with the as-built conditions in the area

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: April 5, 2022

1. Please, Submit Utility, Site, and Locus Plans.

Site Address: 26 Oxford St

Chart Block Lot Number: CBL 013 D002001

Proposed Use: Residential apartments
Previous Use: Residential apartments
Existing Sanitary Flows: _____ GPD
Existing Process Flows: _____ GPD
Description and location of City sewer that is to
receive the proposed building sewer lateral.
Existing 6" sewer line to be re-used

Site Category | Commercial (see part 4 below)
Industrial (complete part 5 below)
Governmental
Residential
Other (specify)

X

Clearly, indicate the proposed connections, on the submitted plans.

2. Please, Submit Contact Information.

City Planner's Name: Jimmy Dealaman Phone: 207-874-8718
Owner/Developer Name: Ray Chang
Owner/Developer Address: 26 Oxford Street, Portland ME 04101
Phone: 781-540-8641 Fax: _____ E-mail: ray@db9ventures.com
Engineering Consultant Name: David Latham, PE - Trillium Engineering Group
Engineering Consultant Address: 189 Main Street, Yarmouth ME 04096
Phone: 207-307-0872 Fax: _____ E-mail: davidl@trilliumeg.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: 1,110 GPD
Peaking Factor/ Peak Times: 6:00 - 8:00 AM
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)
Chapter 241: State of Maine Subsurface Wastewater Disposal Rules

Note: Please submit calculations showing the derivation of your design flows, either on the following page, in the space provided, or attached, as a separate sheet.

4. Please, Submit External Grease Interceptor Calculations.

Total Drainage Fixture Unit (DFU) Values: _____

Size of External Grease Interceptor: _____

Retention Time: _____

Peaking Factor/ Peak Times: _____

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: _____ 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.

Calculation For Domestic Wastewater

Per Chapter 241.4.E.2., "the design flow for multiple family dwelling units is calculated at 120 gallons per unit for one-bedroom units, and 90 gallons per day per bedroom for multiple bedroom units

We have (1) single bedroom unit = 120 gallons

We have a combined (11) bedrooms in the other five rooms

11 bedrooms * 90 gallons/bedroom = 990 gallons

Total Demand: 1,110 gallons per day



October 27, 2021

Trillium Engineering
ATTN: David Latham
189 Main St Suite 200
Yarmouth, ME 04096

Re: 26 E Oxford St, Portland
Ability to Serve with PWD Water

Dear Mr. Latham:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on August 19, 2021. Based on the information provided per plans dated October 27, 2021, we can confirm that the District will be able to serve the proposed project as further described in this letter. **Please note that this letter constitutes approval of the water system as currently designed and is valid for eighteen (18) months after the date of issue. Any changes affecting the approved water system will require further review and approval by PWD.**

Conditions of Service

The following conditions of service apply:

- A new 2-inch domestic service with a 1-inch meter may be installed from the water main in East Oxford St. The service should enter through the property's frontage on East Oxford St at least 10-feet from any side property lines. An approved non-testable dual check backflow prevention device must be installed on the service line directly after the meter prior to service activation.
- A new 4-inch fire service may be installed from the water main in East Oxford St. The service should enter through the property's frontage on East Oxford St at least 10-feet from any side property lines. An approved testable double check backflow prevention device must be installed on the service line directly before the sprinkler riser prior to service activation.
- The existing building is currently served with a 3/4-inch domestic water service and 5/8-inch meter; the size of this service is undersized for the proposed use. This service must be terminated by shutting the corporation valve and cutting the pipe from the water main. The building will be without water while the existing service is retired and the proposed service is installed. This process will take at least one day, and may take several days depending on the project. The service must be shut at stop with the meter pulled and have the account closed before the service can be retired. Please contact customer service at 207-761-8310 to complete this work prior to service retirement.
- The Portland Water District does not have record of any other existing infrastructure in public roads and recommends a survey and test pitting be performed by the development team prior to construction. Any conflicts that arise during construction are at the risk of the developer and may result in job shutdown until new plans are submitted by the developer and reviewed and approved by PWD.



Prior to construction, the owner or contractor will need to complete a Service Application and pay all necessary fees for each proposed service. When the project is ready for construction, an Application for each service can be requested by contacting the MEANS Group at MEANS@pwd.org or 207-774-5961 ext. 3199. Once a completed Application has been submitted with payment, please allow seven (7) days for processing.

Existing Site Service

According to District records, the project site does currently have existing water service. A 3/4-inch diameter copper domestic service line provides water service to the site. Please refer to the "Conditions of Service" section of this letter for requirements related to the use of this service.

Water System Characteristics

According to District records, there is an 12-inch diameter cast iron water main in East Oxford Street and a public fire hydrant located approximately 40 feet from the site. The most recent static pressure reading was 94 psi on February 19, 2021.

Public Fire Protection

The installation of new public hydrants to be accepted into the District water system will most likely not be required. It is your responsibility to contact the Portland Fire Department to ensure that this project is adequately served by existing and/or proposed hydrants.

Domestic Water Needs

The data noted above indicates there should be adequate pressure and volume of water to serve the domestic water needs of your proposed project. Based on the high water pressure in this area, we recommend that you consider the installation of pressure reducing devices that comply with state plumbing codes.

Private Fire Protection Water Needs

You have indicated that this project will require water service to provide private fire protection to the site. Please note that the District does not guarantee any quantity of water or pressure through a fire protection service. Please share these results with your sprinkler system designer so that they can design the fire protection system to best fit the noted conditions. If the data is out of date or insufficient for their needs, please contact MEANS to request a hydrant flow test and we will work with you to get more complete data.

Should you disagree with this determination, you may request a review by the District's Internal Review Team. Your request for review must be in writing and state the reason for your disagreement with the determination. The request must be sent to MEANS@PWD.org or mailed to 225 Douglass Street, Portland Maine, 04104 c/o MEANS. The Internal Review Team will undertake review as requested within 2 weeks of receipt of a request for review.

If the District can be of further assistance in this matter, please let us know.

Sincerely,
Portland Water District



Robert A. Bartels, P.E.
Senior Project Engineer



July 6, 2022

To Whom This May Concern,

CMP Customer Chia Ray Chang, with a property at 26 Oxford St. in Portland, Maine 04101 (Notification 10300902094) has completed the required Site Evaluation and we have approved the Overhead Service Installation for this property. Overhead Service is the preferred method for this property and the project.

Sincerely,

Cory Osborne

New Service Coordinator

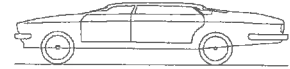
1-800-750-4000

Vehicle Tracking Vehicle Details**Ref: 100003**

Unit Name:	P - Passenger Car Tractor
Type:	Tractor (with driver controlled steering)
Body style:	Passenger Car (Large)
Classification:	Autodesk
Source:	AASHTO handbook 2001
Description:	Design vehicle
Notes:	
Datum:	Front Primary Axle
Front Axle(s):	1 Ackerman (axles fixed, wheels turn)
Primary Front Axle Offset:	0.000ft
Effective Front Axle Offset:	0.000ft (Auto Calculated)
Maximum Wheel Angle:	31.600deg (Any Front Wheel)
Status:	Active Non Self-Steered
Track Width:	6.000ft
Total Wheels:	2 (positioned at the ends of the axle)
Tire Width:	0.600ft (Auto Calculated - proportion of Track Width)
Tire Diameter:	2.297ft
Rear Axle(s):	1 Fixed
Primary Rear Axle Offset:	11.000ft (Innermost Axle behind Front Primary Axle)
Effective Rear Axle Offset:	11.000ft (Auto Calculated)
Maximum Wheel Angle:	Unlimited
Status:	Active Non Self-Steered
Track Width:	6.000ft
Total Wheels:	2 (positioned at the ends of the axle)
Tire Width:	0.600ft (Auto Calculated - proportion of Track Width)
Tire Diameter:	2.297ft
Steering:	Front Axle(s):
Maximum Virtual Steering Angle:	32deg
Lock-to-Lock Time (Fwd/Rev):	4.0sec / 4.0sec
Driver / Pilot	
Driver Offset Longitudinally:	1.921ft (in front of Front Primary Axle)
Driver / Pilot Offset Laterally:	-1.969ft (Right of Centerline)
Driver Height:	3.937ft (Above ground level)
Front Coupling:	None
Rear Coupling:	None
Body outline (plan):	
Outline Type:	Rectangle
Offset (X,Y):	-3.000ft, 0.000ft
Length / Width:	19.000ft / 7.000ft

Vehicle Tracking Vehicle Details

Ref: 100003



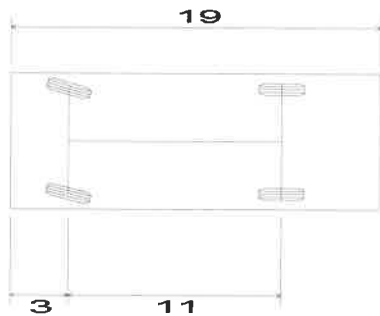
Vehicle Name: P - Passenger Car
Type: Passenger car
Category: Autodesk
Classification: Autodesk

Source: AASHTO handbook 2011

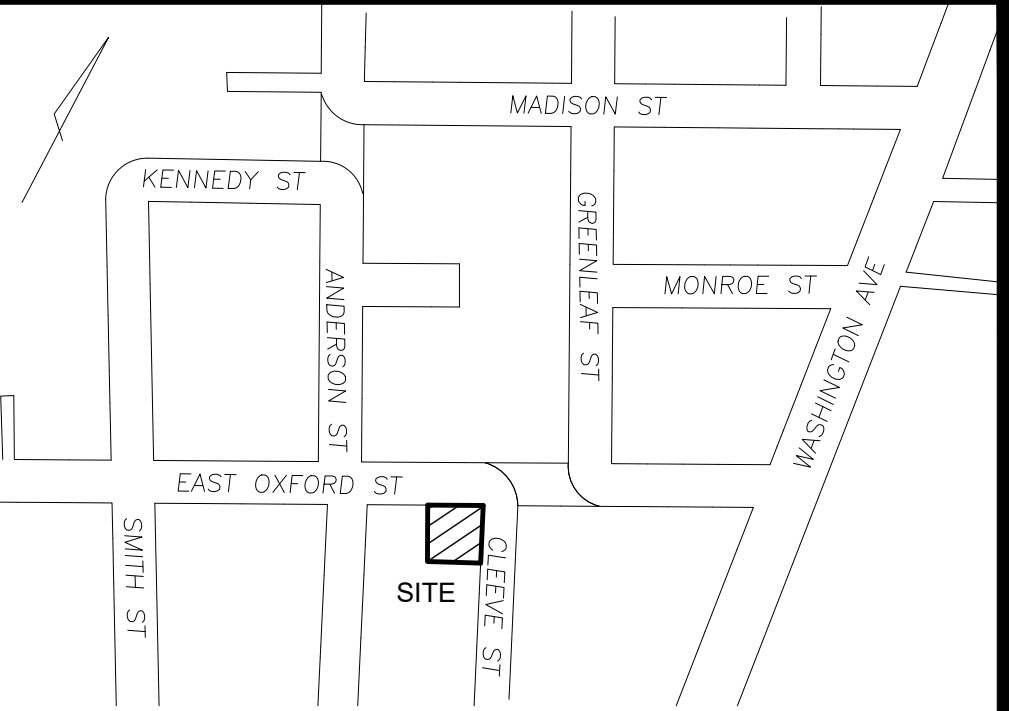
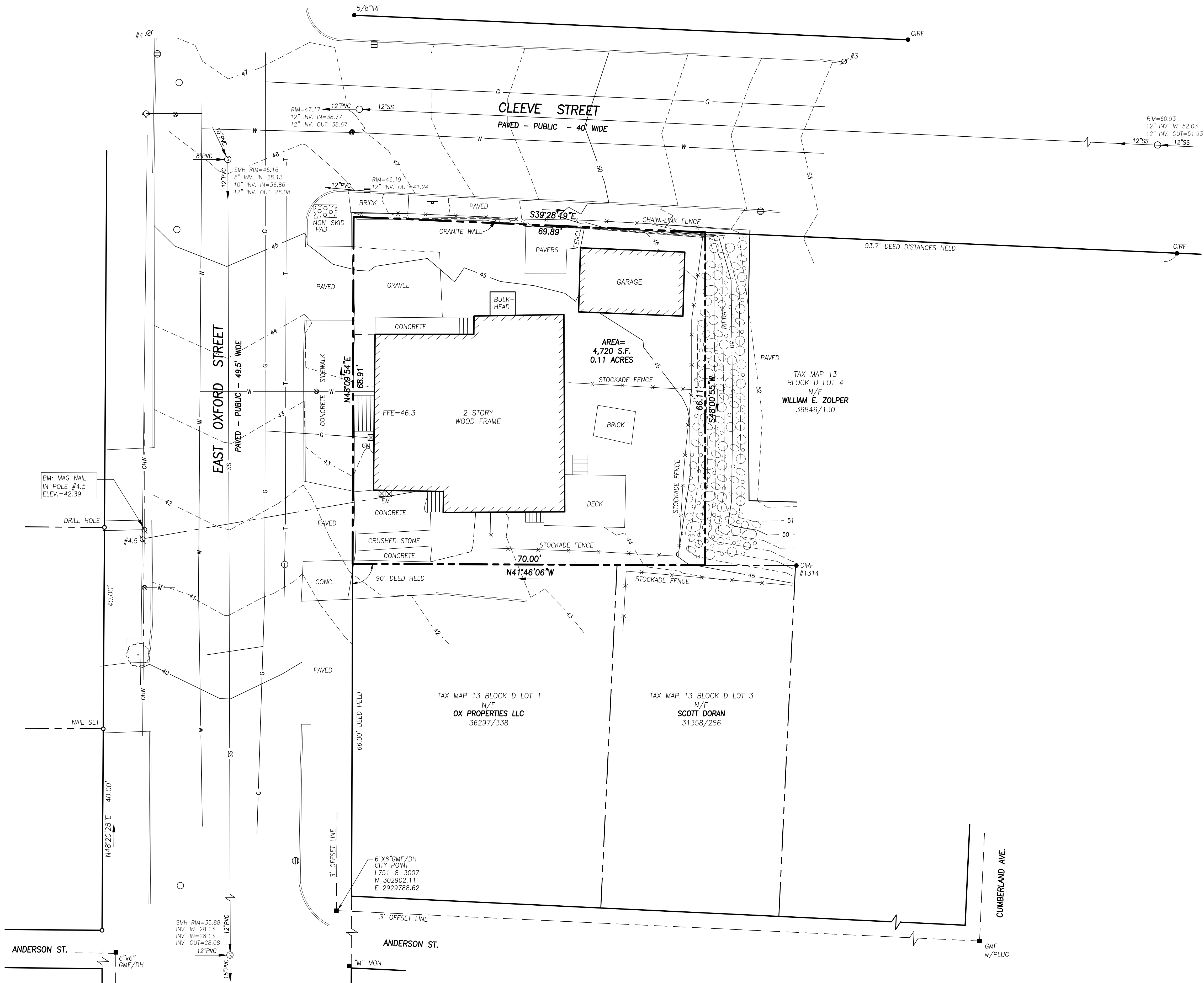
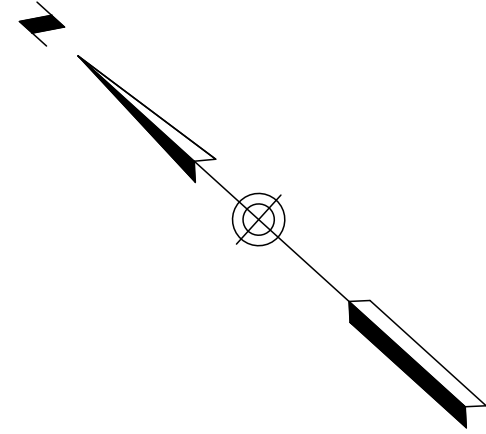
Description: Design vehicle

Notes:

Unit 1 Name: P - Passenger Car Tractor



P - Passenger Car	
Overall Length	19.000ft
Overall Width	7.000ft
Overall Body Height	4.300ft
Min Body Ground Clearance	1.115ft
Track Width	6.000ft
Lock-to-lock time	4.00s
Max Steering Angle (Virtual)	31.60°



LOCATION MAP N.T.S.

LEGEND	
●	IRON PIPE OR ROD FOUND
■	MONUMENT FOUND
○	UTILITY POLE
○	MANHOLE
⊗	ELECTRIC/GAS METER
+	SIGN
⊕	CATCH BASIN
⊙	HYDRANT
⊗	WATER VALVE OR SHUTOFF
⊙	LIGHT POLE
—X—X—	FENCE
—	CURB
—OHW—	OVERHEAD WIRES
—W—	WATER LINE
—G—	GAS LINE
—T—	TELEPHONE
—SS—	SANITARY SEWER
50	1' CONTOUR
IPF/IRF	IRON PIPE OR ROD FOUND
N/F	NOW OR FORMERLY
000/000	DEED BOOK / PAGE
CONC.	CONCRETE

- PLAN REFERENCES**
- "38 MONROE COURT / 47 ANDERSON STREET CONDOMINIUM CONDOMINIUM PLAT PORTLAND, MAINE FOR HABITAT FOR HUMANITY / GREATER PORTLAND, INC." BY ROSS BOUNDARY SURVEYS DATED JANUARY, 2002 REVISED THROUGH JANUARY 1993 RECORDED IN PLAN BOOK 193 PAGE 16.
 - "CONDOMINIUM PLAT 'EAST OXFORD FLATS' 31 EAST OXFORD STREET, PORTLAND, MAINE MADE FOR RECORD OWNER DB9 VENTURES, LLC" MAY 17, 2019 BY OWEN HASKELL, INC.
 - "CONDOMINIUM PLAT 'OXFORD CORNER CONDOMINIUM' 35 EAST OXFORD STREET, PORTLAND, MAINE MADE FOR RECORD OWNER 35 EAST OXFORD LLC" MARCH 17, 2020 BY OWEN HASKELL, INC.

- GENERAL NOTES**
- OWNER OF RECORD: 26 OXFORD LLC
146 PLEASANT ST., LEXINGTON, MA 02421
TAX MAP 13 BLOCK D LOT 2
C.C.R.D. BOOK 35605 PAGE 186
 - BEARINGS ARE BASED ON MAINE STATE PLANE COORDINATE SYSTEM WEST ZONE NAD 83 PER CITY OF PORTLAND CONTROL POINTS:
T102-77-02 L751-8-3007
N 303502.36 N 302902.11
E 2929187.90 E 2929788.62
 - BENCH MARK: MONUMENT T102-77-1 AT NORTHWEST CORNER OF ANDERSON STREET AND EAST LANCASTER STREET, ELEVATION 19.57 CITY DATUM.

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 SURVEY HAS NOT PHYSICALLY LOCATION 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.

CERTIFICATE

OWEN HASKELL, INC. HEREBY CERTIFIES THAT THIS PLAN IS BASED ON, AND THE RESULT OF, AN ON THE GROUND FIELD SURVEY AND THAT TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT STANDARDS OF PRACTICE.

ELLEN C. BREWER, PLS #2367

DATE

Boundary & Topographic Survey
At
26 East Oxford Street, Portland, Maine
Made for Owner of Record
26 Oxford, LLC
146 Pleasant Street, Lexington, MA

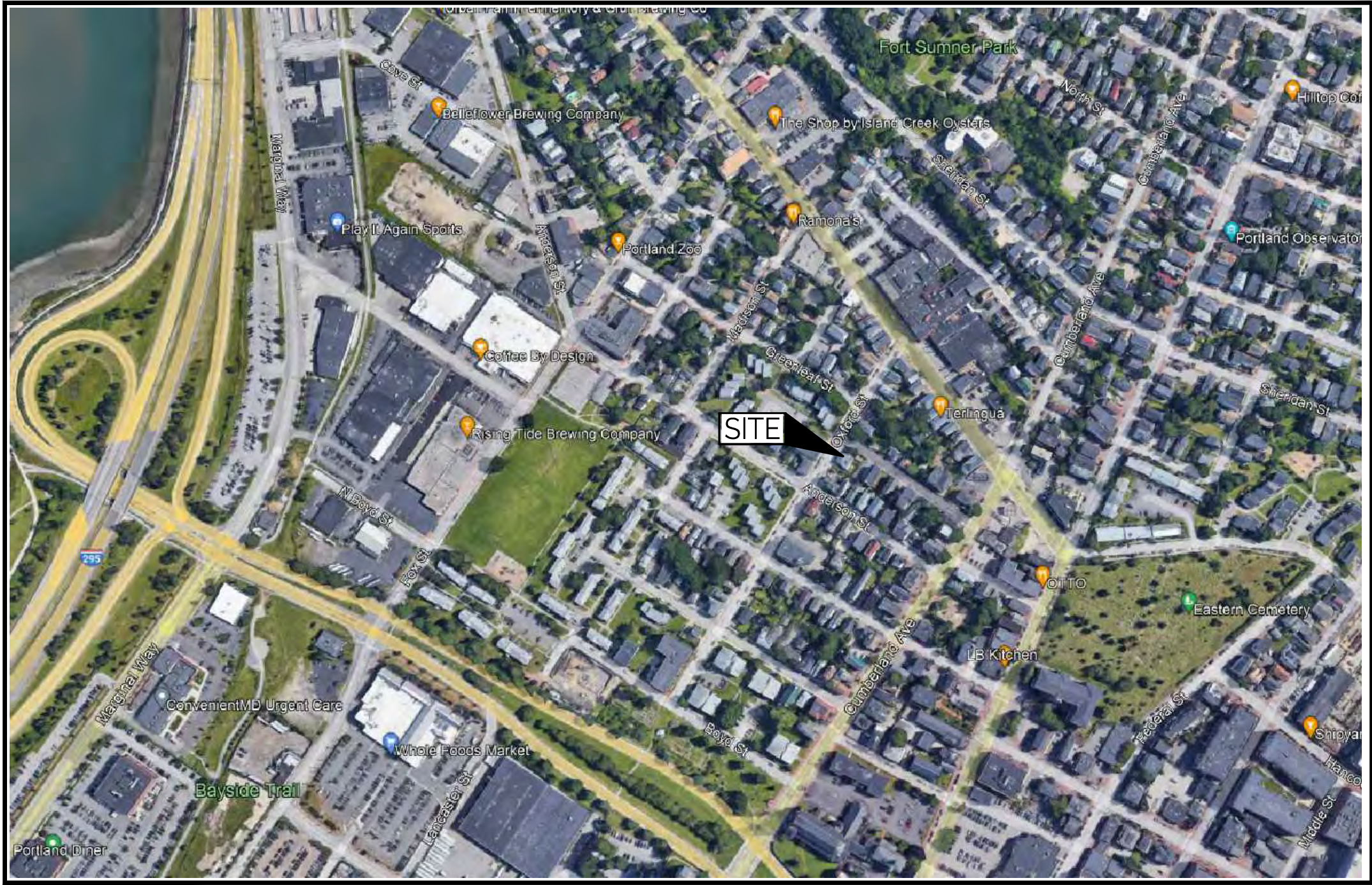
OWEN HASKELL, INC.
PROFESSIONAL LAND SURVEYORS
390 US ROUTE 1, UNIT 10, FALMOUTH, ME 04105 TEL. 207-774-0424

DRAWN BY: RS / JLW	DATE: JAN. 28, 2021	JOB NO. 2020-381 P
CHECKED BY: ECB	SCALE: 1" = 10'	DRWG. NO. 1

26 OXFORD STREET

PORTLAND, ME 04101

JULY 5, 2022



LOCUS MAP
NOT TO SCALE

DRAWING LIST

C100	EXISTING SITE PLAN
C101	PROPOSED SITE PLAN
C102	PROPOSED LANDSCAPING PLAN
C103	CONSTRUCTION MANAGEMENT PLAN
C104	PARKING LAYOUT PLAN
C200	SITE DETAILS
C300	EROSION CONTROL DETAILS

OWNER:

RAY CHANG
26 OXFORD STREET
PORTLAND, ME 04101

CONSULTANTS:

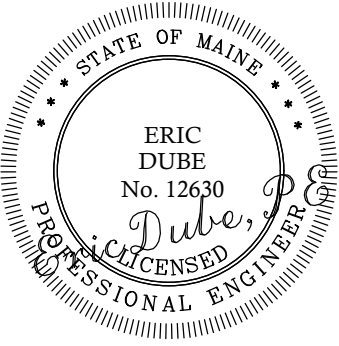
TRILLIUM ENGINEERING GROUP
189 MAIN STREET
YARMOUTH, ME 04096

PAUL DESIGNS PROJECT
142 HIGH STREET
PORTLAND, ME 04101



CLIENT:
RAY CHANG

26 OXFORD STREET
PORTLAND, ME 04101



26 OXFORD STREET
PORTLAND
MAINE
PROPOSED BUILDING

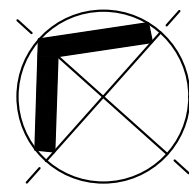
No.	DESCRIPTION	BR	BY	CHKD	DATE
A	ISSUED FOR PLANNING PERMIT	DL	DL	ED	10-26-21
B	RESPONSE TO CITY COMMENTS	DL	DL	ED	02-22-22
C	RESPONSE TO CITY COMMENTS	DL	DL	ED	06-14-22
D	RESPONSE TO CITY COMMENTS	DL	DL	ED	06-30-22

SHEET TITLE:

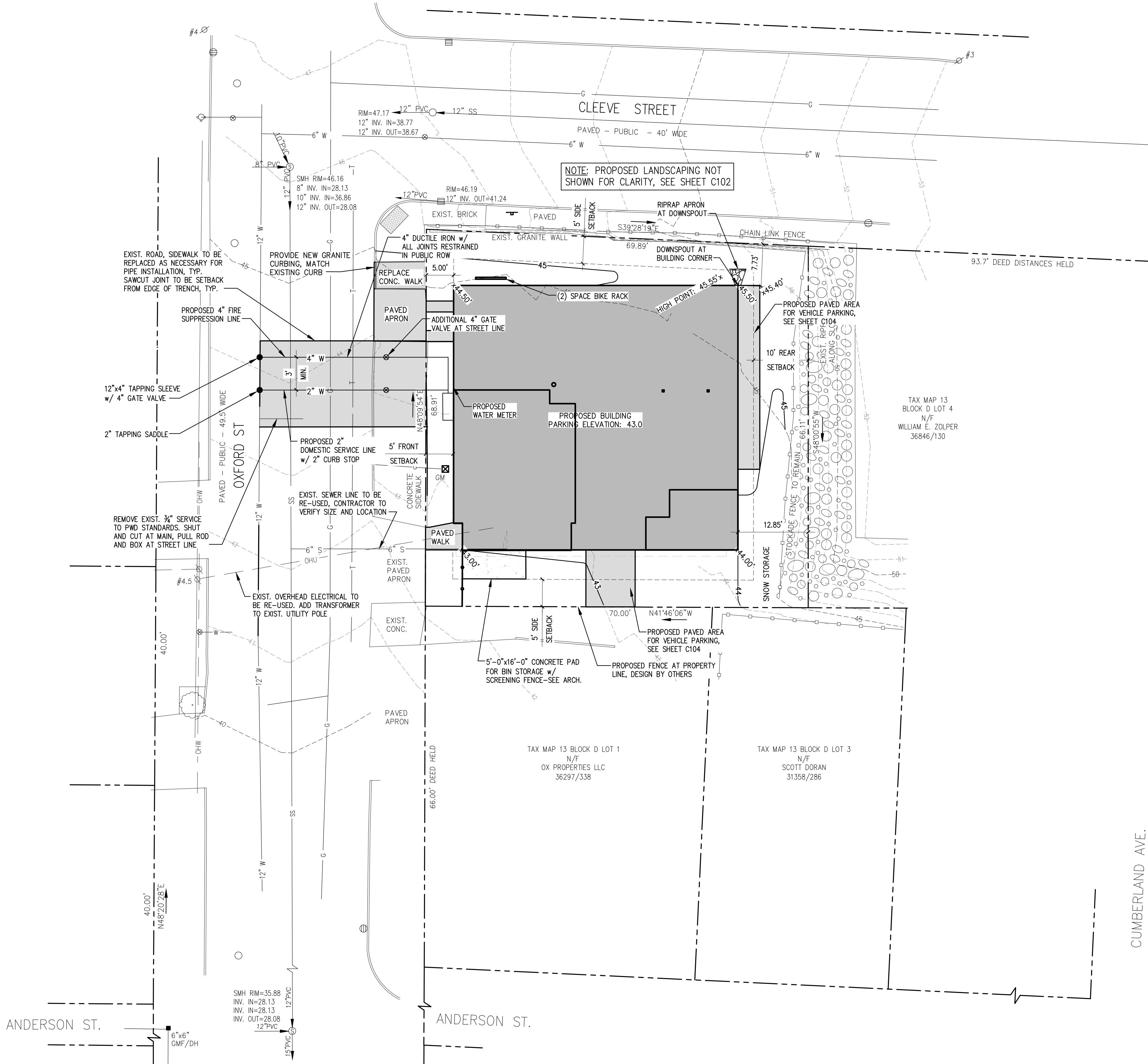
COVER SHEET

DESIGNED: DL
DRAWN: DL
DATE: 06-14-22
PROJECT NUMBER: 21-052

Co



NORTH



ZONE: R-6	REQUIRED	PROPOSED
MIN. FRONTAGE	20'	68.91'
MIN. LOT SIZE (SF)	2,000	4,720
FRONT SETBACK	5'	5.00'
SIDE SETBACK	5' ^A	7.73'
REAR SETBACK	10'	12.85'
MAX. IMPERVIOUS RATIO	60%	58.92%
LANDSCAPED OPEN SPACE	20%	26.53%

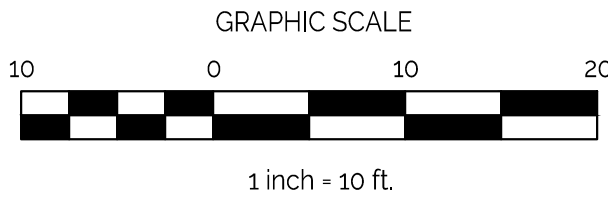
^A ONE SIDE YARD MAY BE REDUCED TO 0' AS LONG AS THE CUMULATIVE SIDE YARDS ARE NOT LESS THAN 10 FT.

SOILS NOTE:

1. ALL ON-SITE SOILS ARE RATED HYDROLOGIC SOIL GROUP "A", PER THE UNITED STATES WEB SOIL SURVEY (WSS).

IMPERVIOUS AREA TABLE		
TYPE OF COVER	EXISTING IMP. AREA (SF)	PROPOSED IMP. AREA (SF)
BUILDING	1,834	2,507
PAVEMENT	739	274
TOTAL	2,573	2,781
CHANGE FROM EXISTING (+/-)		208
PERCENT CHANGE (+/-)		4.41%

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
	GRANITE MONUMENT - 3' OFFSET	
	IRON PIN FOUND/SET	
	IRON ROD FOUND	
	CAPED IRON ROD FOUND	
	DRILL HOLE FOUND	
	GRANITE MONUMENT FOUND	
	STREET LINE	
	LOT SETBACKS	
	PROPERTY LINE	
	ABUTTOR LINE	
	"NO CUT" BUFFER	
	WETLANDS	
	EDGE OF ROAD/TRAVELLED WAY	
	SOIL TEST PIT	
	CONTOUR	
	SPOT GRADE	
	GAS SHUT-OFF	
	UTILITY POLE	
	OVERHEAD ELECTRICAL	
	UNDERGROUND ELECTRICAL	
	ELECTRICAL TRANSFORMER	
	FIRE HYDRANT	
	WATER LINE	
	WATER GATE	
	SEWER LINE	
	SEWER MANHOLE	
	DRAINAGE MANHOLE	
	CATCH BASIN	
	UNDERDRAIN/STORMDRAIN	
	UNDERDRAIN	
	SILT FENCE	
	TEMP. STONE CHECK DAM	
	GRADING AND FLOW DIRECTION	
	HAY BALES	
	EROSION CONTROL BLANKET	
	STORMWATER BOUNDARY	
	STORMWATER FLOW (To)	
	FACE OF LEDGE OUTCROP	
	BIRCH	
	MAPLE	
	TREE LINE	
	SITE LIGHTING (BAYSIDE FIXTURE)	
	STONE WALL	



PROPOSED SITE PLAN

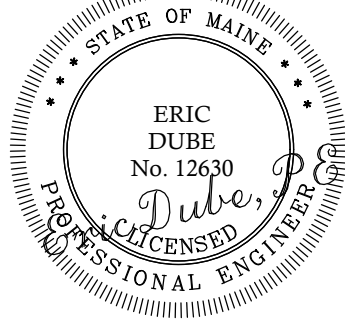
SCALE: 1" = 10'-0"



CLIENT:

RAY CHANG

26 OXFORD STREET
PORTLAND, ME 04101



26 OXFORD STREET
PORTLAND

PROPOSED BUILDING

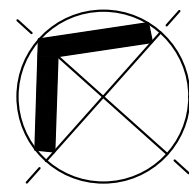
ISSUED	DESCRIPTION	DATE	BY	CHKD.	DR.
	ISSUED FOR PLANNING PERMIT	10-26-21	DL		
	RESPONSE TO CITY COMMENTS	02-22-22	DL		
	RESPONSE TO CITY COMMENTS	05-14-22	DL		
	RESPONSE TO CITY COMMENTS	07-05-22	DL		
No.					
A					
B					
C					
D					

SHEET TITLE:

PROPOSED
SITE PLAN

DESIGNED: DL
DRAWN: DL
DATE: 06-14-22
PROJECT NUMBER: 21-052

C101

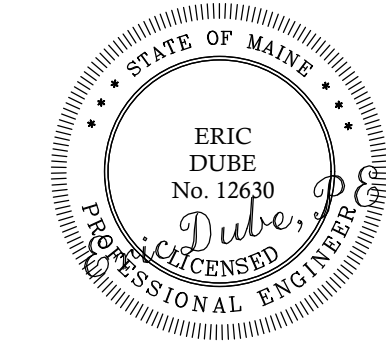


NORTH

CLIENT:

RAY CHANG

26 OXFORD STREET
PORTLAND, ME 04101



MAINE

26 OXFORD STREET
PORTLAND

PROPOSED BUILDING

ISSUED	DESCRIPTION	DR	BY	DATE
No.	ISSUED FOR PLANNING PERMIT	DL	ED	10-26-21
	RESPONSE TO CITY COMMENTS	B	ED	02-22-22
	RESPONSE TO CITY COMMENTS	C	ED	06-14-22
	RESPONSE TO CITY COMMENTS	D	ED	07-05-22

SHEET TITLE:

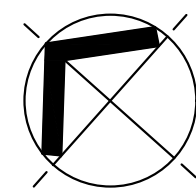
PROPOSED
LANDSCAPING
PLAN

DESIGNED: DL
DRAWN: DL
DATE: 06-14-22
PROJECT NUMBER: 21-052

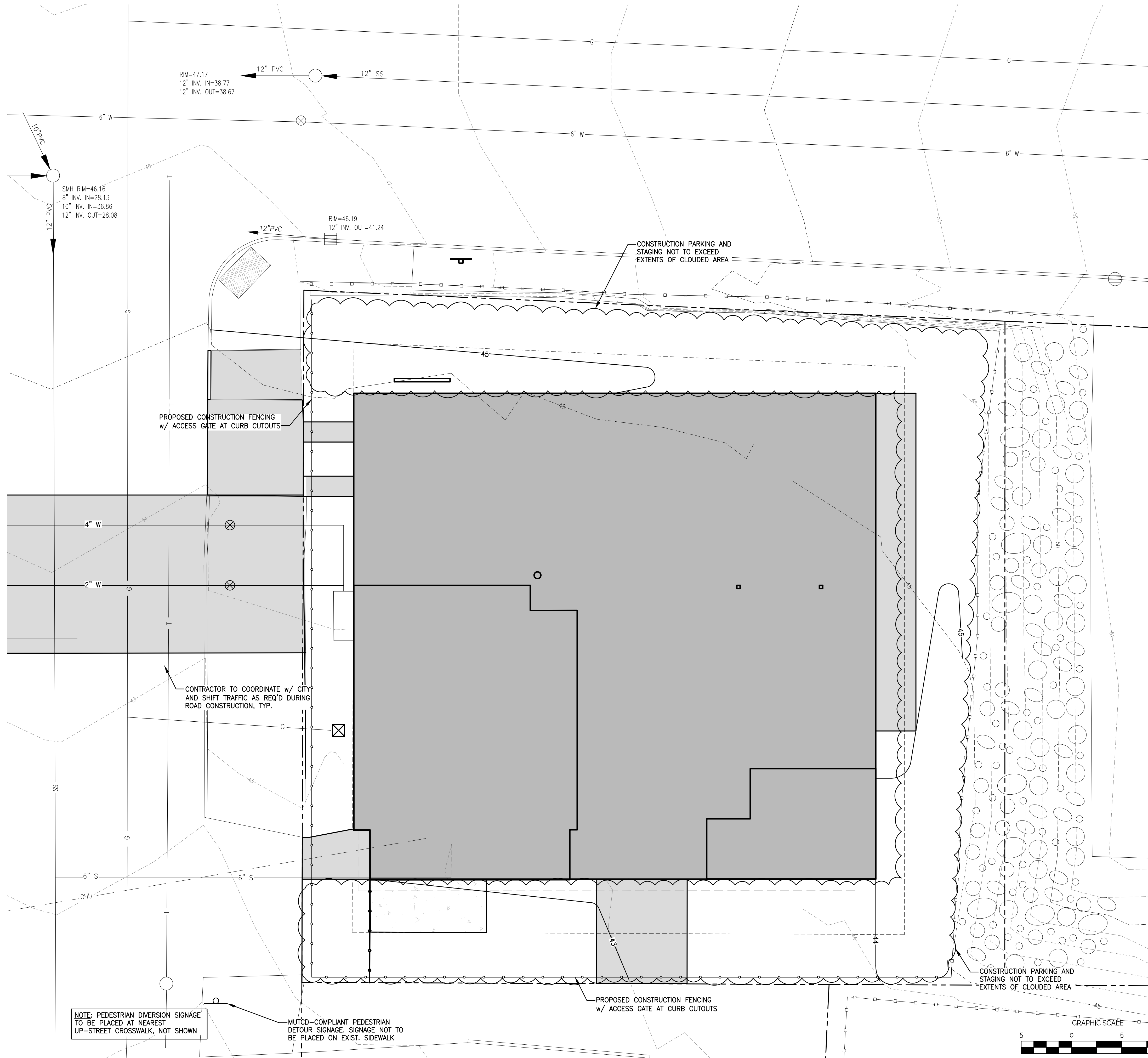
C102

PROPOSED LANDSCAPING PLAN

SCALE: 1" = 5'-0"



NORTH



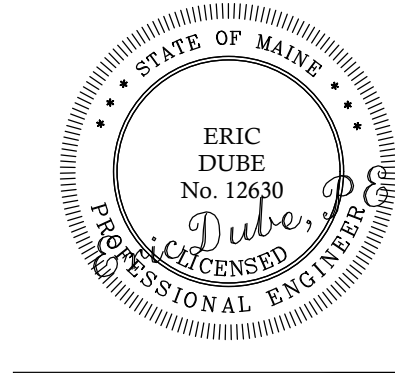
LEGEND		
EXISTING	DESCRIPTION	PROPOSED
	GRANITE MONUMENT - 3' OFFSET	
	IRON PIN FOUND/SET	
	IRON ROD FOUND	
	CAPED IRON ROD FOUND	
	DRILL HOLE FOUND	
	GRANITE MONUMENT FOUND	
	STREET LINE	
	LOT SETBACKS	
	PROPERTY LINE	
	ABUTTOR LINE	
	"NO CUT" BUFFER	
	WETLANDS	
	EDGE OF ROAD/TRAVELLED WAY	
	SOIL TEST PIT	
	CONTOUR	
	SPOT GRADE	
	GAS SHUT-OFF	
	UTILITY POLE	
	OVERHEAD ELECTRICAL	
	UNDERGROUND ELECTRICAL	
	ELECTRICAL TRANSFORMER	
	FIRE HYDRANT	
	WATER LINE	
	WATER GATE	
	SEWER LINE	
	SEWER MANHOLE	
	DRAINAGE MANHOLE	
	CATCH BASIN	
	UNDERDRAIN/STORMDRAIN	
	UNDERDRAIN	
	SILT FENCE	
	TEMP. STONE CHECK DAM	
	GRADING AND FLOW DIRECTION	
	HAY BALES	
	EROSION CONTROL BLANKET	
	STORMWATER BOUNDARY	
	STORMWATER FLOW (To)	
	FACE OF LEDGE OUTCROP	
	BIRCH	
	MAPLE	
	TREE LINE	
	SITE LIGHTING (BAYSIDE FIXTURE)	
	STONE WALL	

CONSTRUCTION MANAGEMENT PLAN



CLIENT:
RAY CHANG

26 OXFORD STREET
PORTLAND, ME 04101



26 OXFORD STREET
PORTLAND
MAINE
PROPOSED BUILDING

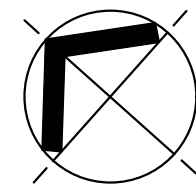
ISSUED			DR	CHKD	DATE
No.	DESCRIPTION		BY	BY	
A	ISSUED FOR PLANNING PERMIT		DL	ED	10-26-21
B	RESPONSE TO CITY COMMENTS		DL	ED	02-22-22
C	RESPONSE TO CITY COMMENTS		DL	ED	06-14-22
D	RESPONSE TO CITY COMMENTS		ED	ED	07-05-22

SHEET TITLE:
CONSTRUCTION
MANAGEMENT PLAN

DESIGNED: DL
DRAWN: DL
DATE: 06-14-22
PROJECT NUMBER: 21-052

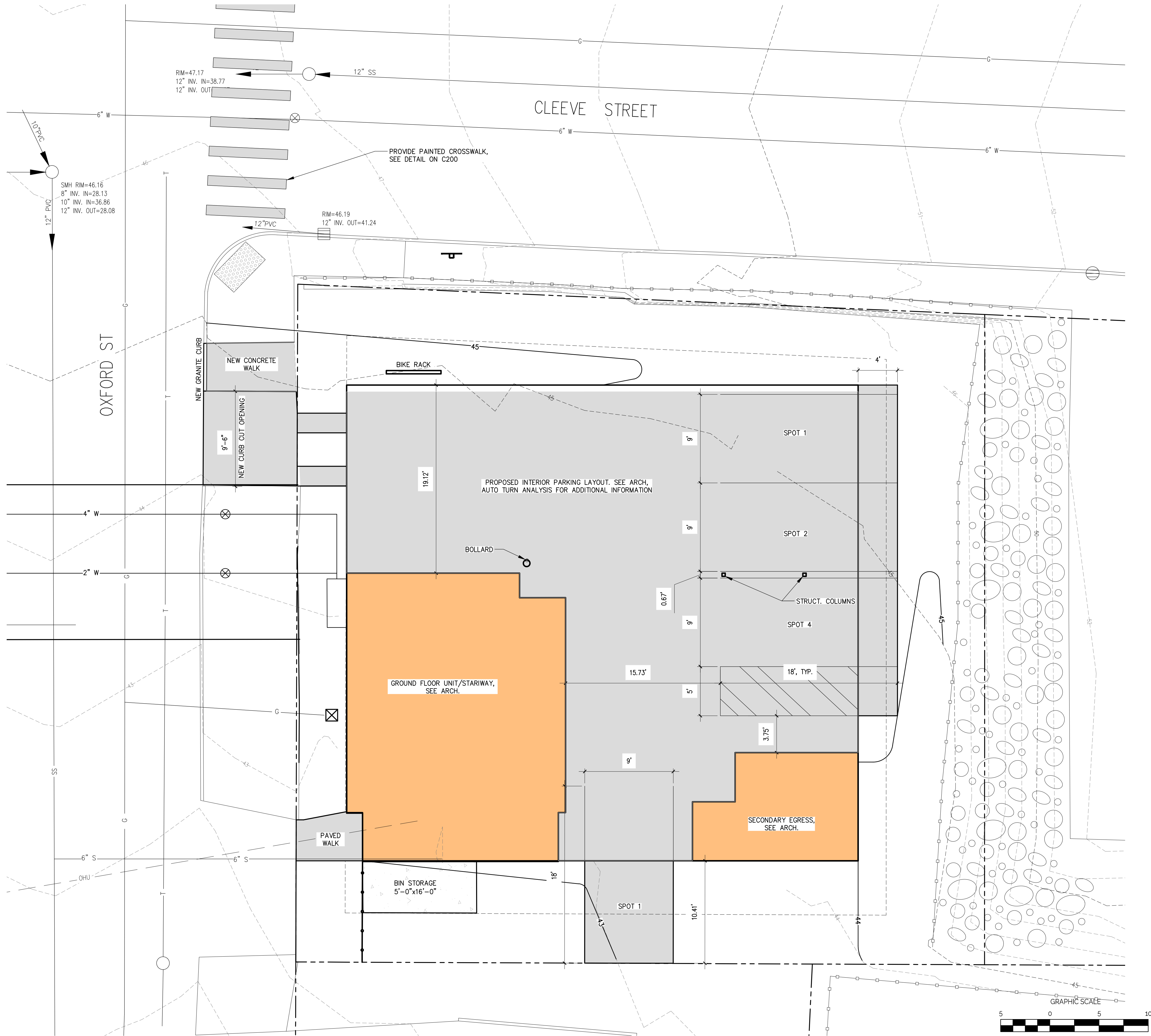
C103

SCALE: 1" = 5'-0"



NORTH

PARKING LAYOUT PLAN



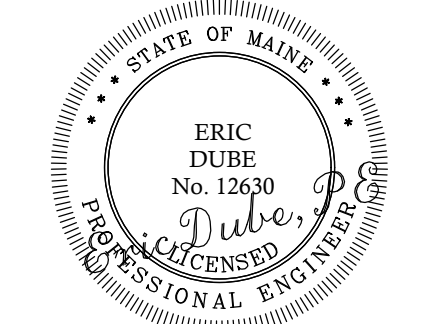
LEGEND		
EXISTING	DESCRIPTION	PROPOSED
	GRANITE MONUMENT - 3' OFFSET	
	IRON PIN FOUND/SET	
	IRON ROD FOUND	
	CAPED IRON ROD FOUND	
	DRILL HOLE FOUND	
	GRANITE MONUMENT FOUND	
	STREET LINE	
	LOT SETBACKS	
	PROPERTY LINE	
	ABUTTOR LINE	
	"NO CUT" BUFFER	
	WETLANDS	
	EDGE OF ROAD/TRAVELLED WAY	
	SOIL TEST PIT	
	CONTOUR	
	SPOT GRADE	
	GAS SHUT-OFF	
	UTILITY POLE	
	OVERHEAD ELECTRICAL	
	UNDERGROUND ELECTRICAL	
	ELECTRICAL TRANSFORMER	
	FIRE HYDRANT	
	WATER LINE	
	WATER GATE	
	SEWER LINE	
	SEWER MANHOLE	
	DRAINAGE MANHOLE	
	CATCH BASIN	
	UNDERDRAIN/STORMDRAIN	
	UNDERDRAIN	
	SILT FENCE	
	TEMP. STONE CHECK DAM	
	GRADING AND FLOW DIRECTION	
	HAY BALES	
	EROSION CONTROL BLANKET	
	STORMWATER BOUNDARY	
	STORMWATER FLOW (To)	
	FACE OF LEDGE OUTCROP	
	BIRCH	
	MAPLE	
	TREE LINE	
	SITE LIGHTING (BAYSIDE FIXTURE)	
	STONE WALL	



CLIENT:

RAY CHANG

26 OXFORD STREET
PORTLAND, ME 04101



26 OXFORD STREET
PORTLAND

PROPOSED BUILDING

ISSUED		DATE	
DR	BY	DR	BY
DESCRIPTION	ISSUED FOR PLANNING PERMIT	DL	10-26-21
	RESPONSE TO CITY COMMENTS	DL	02-22-22
	RESPONSE TO CITY COMMENTS	DL	06-14-22
	RESPONSE TO CITY COMMENTS	DL	07-05-22
No.	A	B	C

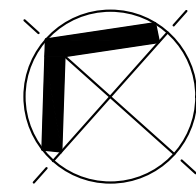
SHEET TITLE:

PARKING
LAYOUT PLAN

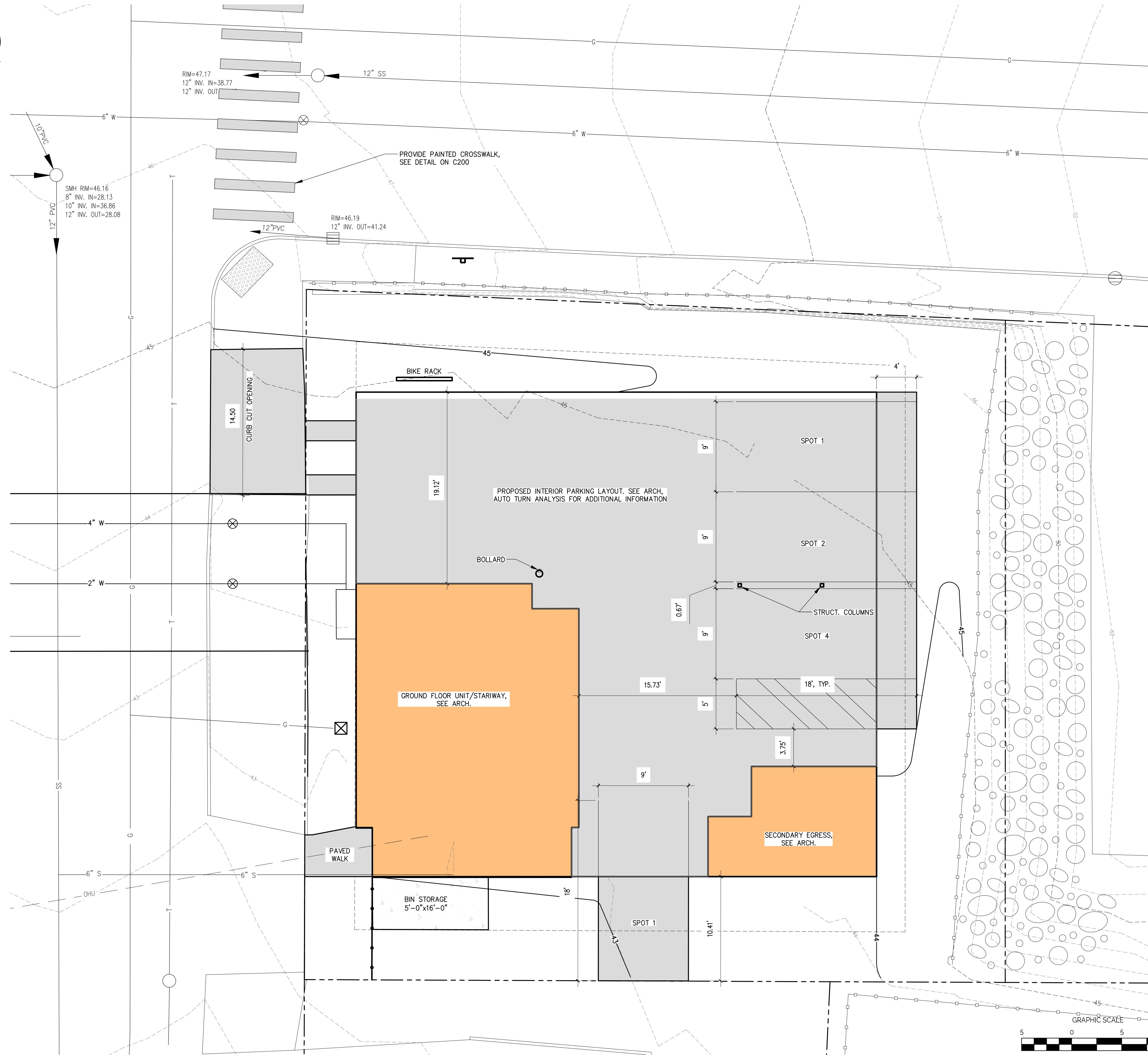
DESIGNED: DL
DRAWN: DL
DATE: 06-14-22
PROJECT NUMBER: 21-052

C104

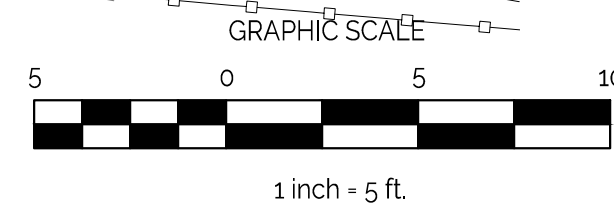
SCALE: 1" = 5'-0"



NORTH



PARKING LAYOUT PLAN



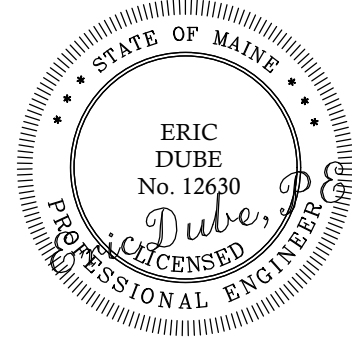
LEGEND		
EXISTING	DESCRIPTION	PROPOSED
	GRANITE MONUMENT - 3' OFFSET	
	IRON PIN FOUND/SET	
	IRON ROD FOUND	
	CAPED IRON ROD FOUND	
	DRILL HOLE FOUND	
	GRANITE MONUMENT FOUND	
	STREET LINE	
	LOT SETBACKS	
	PROPERTY LINE	
	ABUTTOR LINE	
	"NO CUT" BUFFER	
	WETLANDS	
	EDGE OF ROAD/TRAVELLED WAY	
	SOIL TEST PIT	
	CONTOUR	
	SPOT GRADE	
	GAS SHUT-OFF	
	UTILITY POLE	
	OVERHEAD ELECTRICAL	
	UNDERGROUND ELECTRICAL	
	ELECTRICAL TRANSFORMER	
	FIRE HYDRANT	
	WATER LINE	
	WATER GATE	
	SEWER LINE	
	SEWER MANHOLE	
	DRAINAGE MANHOLE	
	CATCH BASIN	
	UNDERDRAIN/STORMDRAIN	
	UNDERDRAIN	
	SILT FENCE	
	TEMP. STONE CHECK DAM	
	GRADING AND FLOW DIRECTION	
	HAY BALES	
	EROSION CONTROL BLANKET	
	STORMWATER BOUNDARY	
	STORMWATER FLOW (To)	
	FACE OF LEDGE OUTCROP	
	BIRCH	
	MAPLE	
	TREE LINE	
	SITE LIGHTING (BAYSIDE FIXTURE)	
	STONE WALL	



CLIENT:

RAY CHANG

26 OXFORD STREET
PORTLAND, ME 04101



26 OXFORD STREET
PORTLAND

PROPOSED BUILDING

ISSUED		DATE
DR	BY	
		10-26-21
		02-22-22
		06-14-22
		06-30-22
DESCRIPTION		
		ISSUED FOR PLANNING PERMIT
		RESPONSE TO CITY COMMENTS
		RESPONSE TO CITY COMMENTS
		RESPONSE TO CITY COMMENTS
No.		
A		
B		
C		
D		

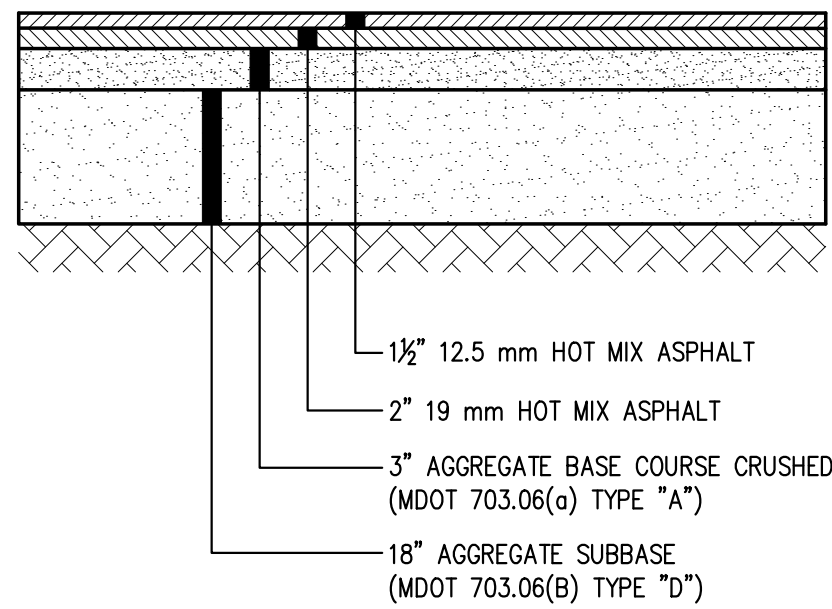
SHEET TITLE:

PARKING
LAYOUT PLAN

DESIGNED: DL
DRAWN: DL
DATE: 06-14-22
PROJECT NUMBER: 21-052

C104

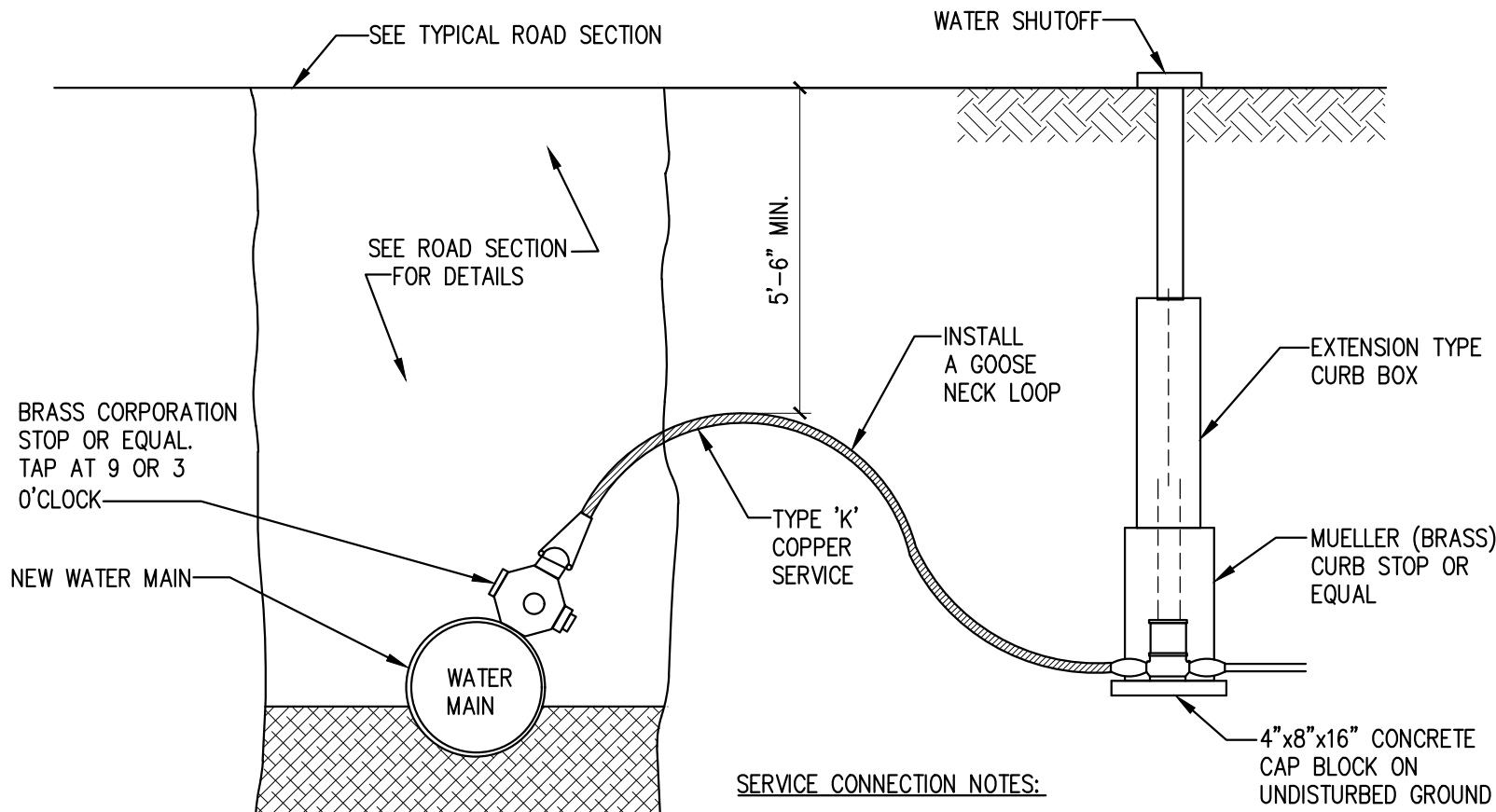
SCALE: 1" = 5'-0"



NOTE:
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 PARKING LOT SECTION

SCALE: NTS

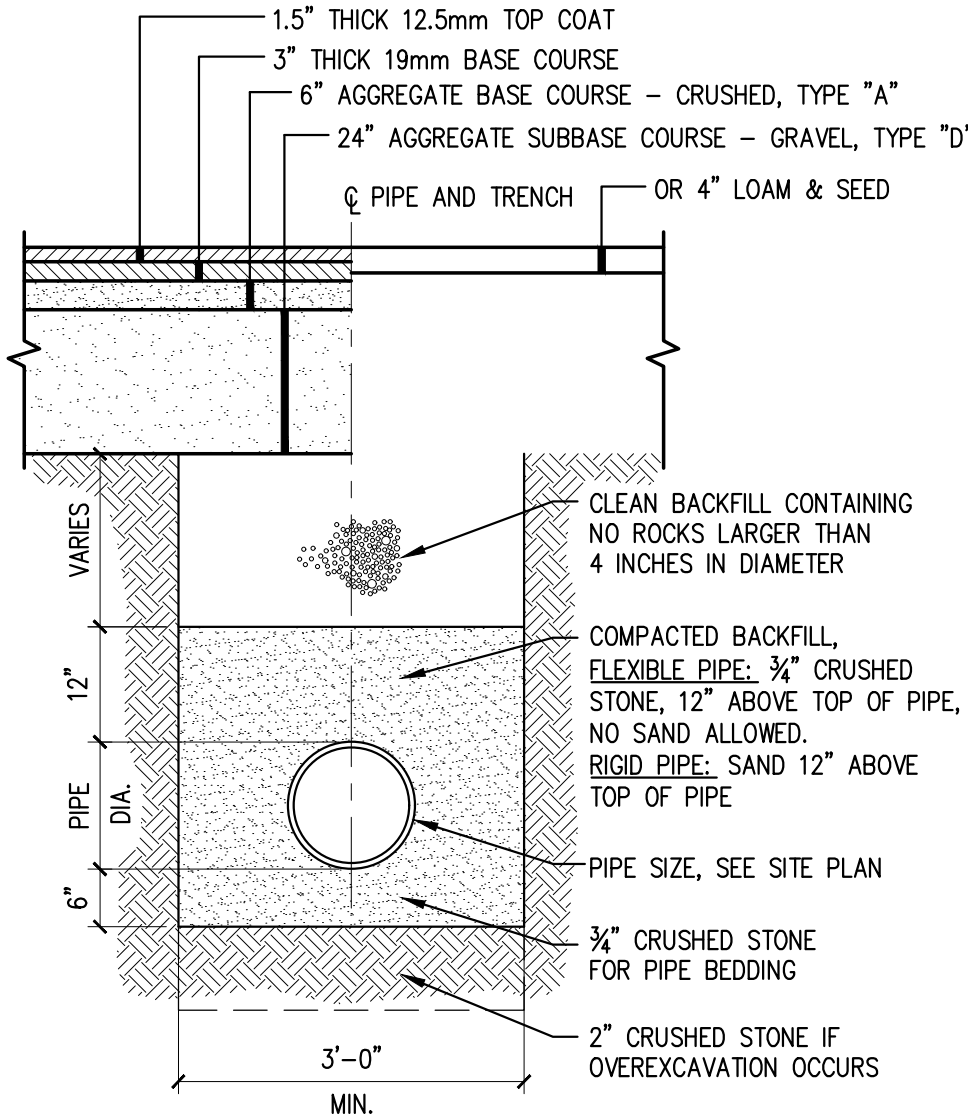


- SERVICE CONNECTION NOTES:
1. TEFLON THREADED SEALANT TAPE WILL BE USED ON ALL CORPORATION STOPS PRIOR TO INSTALLATION.
A. SPIRAL WRAP COMPLETELY COVERING THE THREAD AREA WITH TWO WRAPS.
B. PIPE DOPE OR OTHER LIQUID THREAD SEALANTS ARE NOT ACCEPTABLE.
 2. LEAVE UP TO THREE THREADS SHOWING OUTSIDE OF PIPE. A TORQUE OF 35 POUNDS IS RECOMMENDED.

- GENERAL NOTES
1. CONTRACTOR SHALL CONFIRM ALL PIPE SIZES WITH THE CITY WATER DISTRICT.
 2. WORK AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY WATER DISTRICT STANDARDS.
 3. CONTRACTOR SHALL STUB NEW SERVICES AT THE EDGE OF THE R.O.W. IN THE MIDDLE OF EACH LOT, UNLESS OTHERWISE NOTED ON THE PLAN/PROFILES.
 4. FINAL LOCATION OF ALL BLOW OFF VALVES, SHUT OFF VALVES, STREET BOXES AND HYDRANT VALVES SHALL BE IN ACCORDANCE WITH THE CITY WATER DISTRICT.

TYPICAL WATER CONNECTION DETAIL

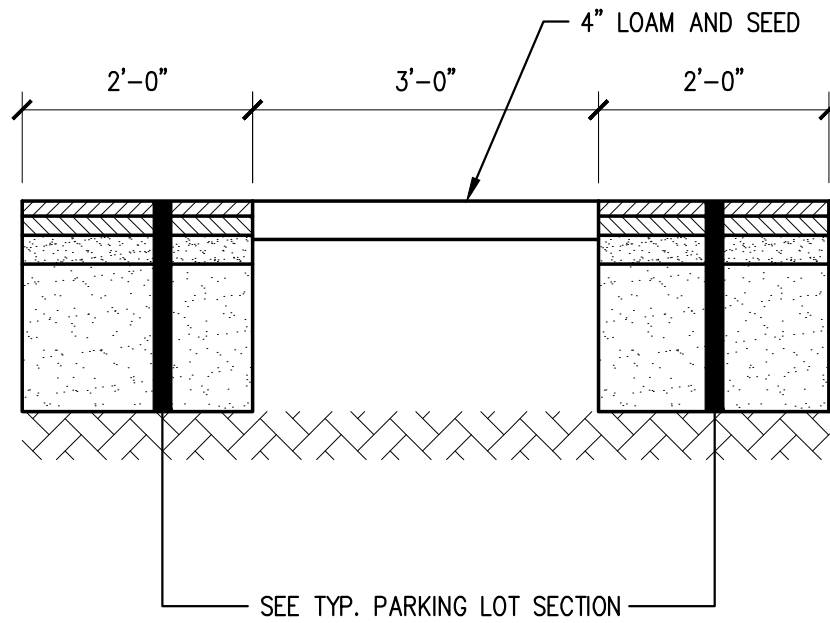
SCALE: NTS



NOTE:
ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED BY THE CITY.

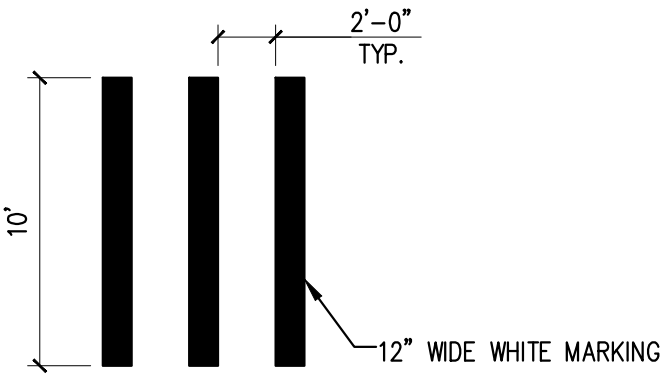
TYPICAL PIPE TRENCH DETAIL

SCALE: NTS



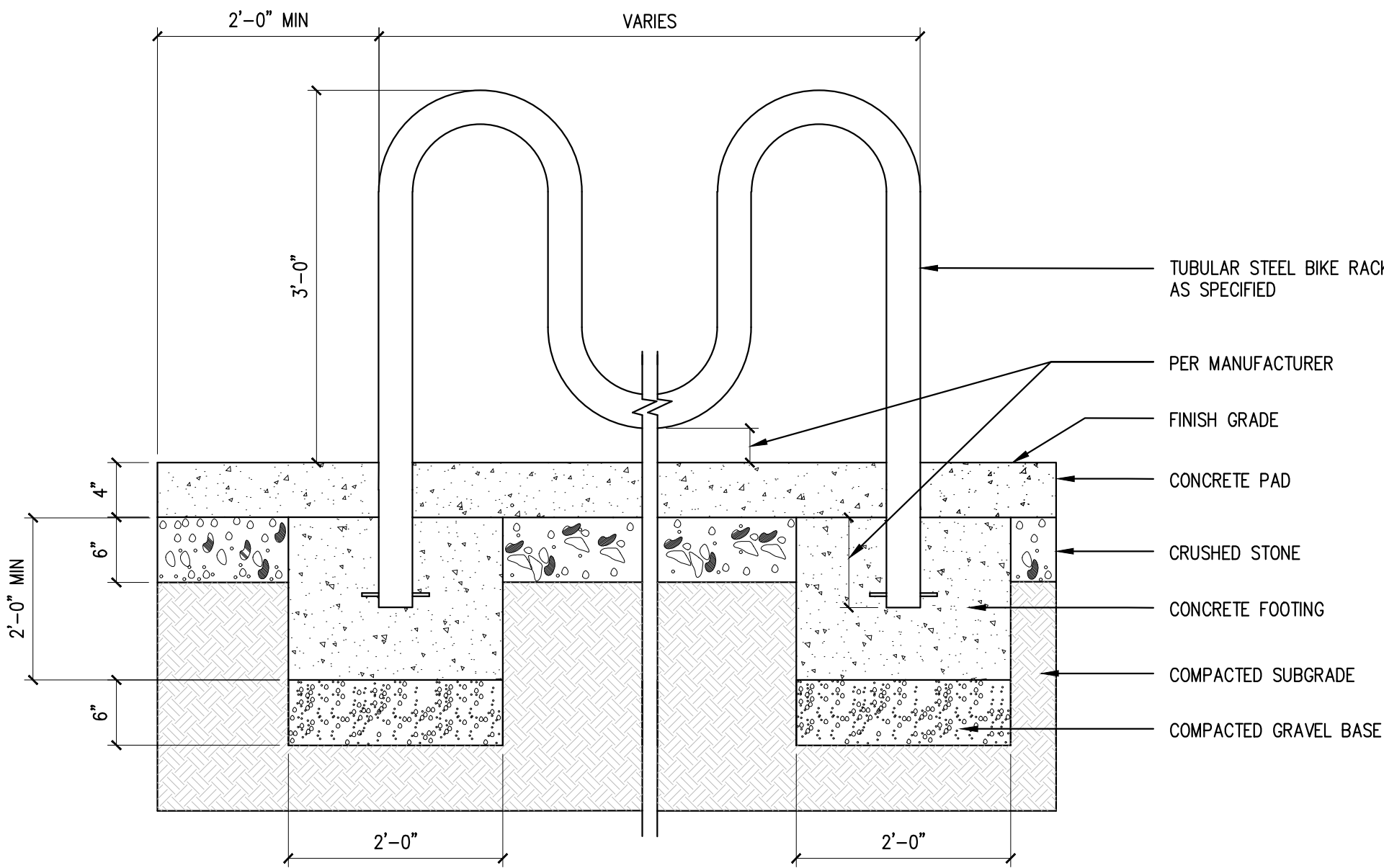
TYPICAL DRIVEWAY STRIPS

SCALE: NTS



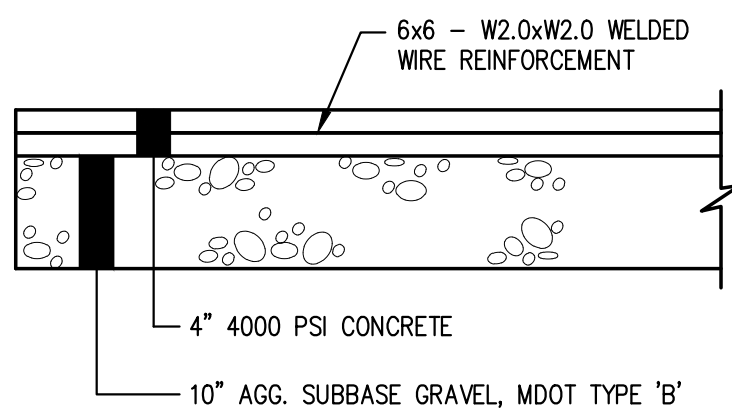
PAINTED CROSSWALK DETAIL

SCALE: NTS



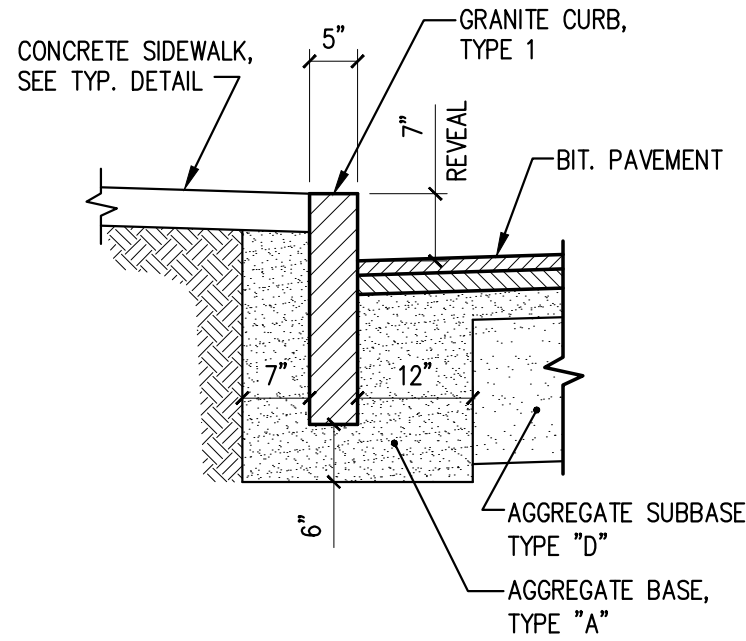
TYPICAL BIKE RACK DETAIL

SCALE: NTS



TYP. CONCRETE SIDEWALK DETAIL

SCALE: NTS



TYPICAL GRANITE CURB DETAIL

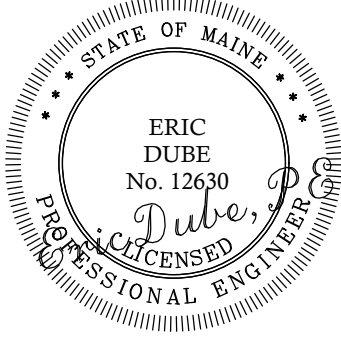
SCALE: NTS



CLIENT:

RAY CHANG

26 OXFORD STREET
PORTLAND, ME 04101



26 OXFORD STREET
PORTLAND
TOWN OF STANTIS

PROPOSED BUILDING

No.	DESCRIPTION	DR	CHKD	BY	DATE
A	ISSUED FOR PLANNING PERMIT	DL	DL	ED	10-26-21
B	RESPONSE TO CITY COMMENTS	DL	DL	ED	02-22-22
C	RESPONSE TO CITY COMMENTS	DL	DL	ED	05-14-22
D	RESPONSE TO CITY COMMENTS	DL	DL	ED	06-30-22

SHEET TITLE:

SITE DETAILS

DESIGNED: DL
DRAWN: DL
DATE: 06-14-22
PROJECT NUMBER: 21-052

C200

1. THIS PLAN HAS BEEN DEVELOPED TO PROVIDE A STRATEGY FOR DEALING WITH SOIL EROSION AND SEDIMENTATION DURING AND AFTER PROJECT CONSTRUCTION. THIS PLAN IS BASED ON THE STANDARD AND SPECIFICATIONS FOR EROSION PREVENTION AS CONTAINED IN THE MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION: "MAINE EROSION AND SEDIMENT CONTROL BMPs" PUBLISHED BY THE MAINE DEP, LATEST EDITION.

1. EROSION/SEDIMENT CONTROL DEVICES
THE FOLLOWING EROSION SEDIMENTATION CONTROL DEVICES ARE PROPOSED FOR CONSTRUCTION ON THIS PROJECT. INSTALL THESE DEVICES AS INDICATED ON THE PLANS.

1. SILT FENCE: SILT FENCE WILL BE INSTALLED ALONG THE DOWN GRADING EDGES OF DISTURBED AREAS TO TRAP RUNOFF BORNE SEDIMENTS UNTIL THE SITE IS STABILIZED. IN AREAS WHERE STORMWATER DISCHARGES THE SILT FENCE WILL BE REINFORCED WITH HAY BALES TO HELP MAINTAIN THE INTEGRITY OF THE SILT FENCE AND TO PROVIDE ADDITIONAL TREATMENT.
2. HAY BALES TO BE PLACED IN LOW FLOW DRAINAGE SWALES AND PATHS TO TRAP SEDIMENTS AND REDUCE RUNOFF VELOCITIES. DO NOT PLACE HAY BALES IN FLOWING WATER OR STREAMS.
3. RIPRAP: PROVIDE RIPRAP IN AREAS WHERE CULVERTS DISCHARGE OR AS SHOWN ON THE PLANS.
4. LOAM, SEED, & MULCH: ALL DISTURBED AREAS, WHICH ARE NOT OTHERWISE TREATED, SHALL RECEIVE PERMANENT SEEDING AND MULCH TO STABILIZE THE DISTURBED AREAS. THE DISTURBED AREAS WILL BE REVEGETATED WITHIN 5 DAYS OF FINAL GRADING. SEEDING REQUIREMENTS ARE PROVIDED AT THE END OF THIS SPECIFICATION.
5. STRAW AND HAY MULCH: USED TO COVER DENUDDED AREAS UNTIL PERMANENT SEED OR EROSION CONTROL MEASURES ARE IN PLACE. MULCH BY ITSELF CAN BE USED ON SLOPES LESS THAN 15% IN SUMMER AND 8% IN WINTER. ALL OTHER SLOPES MUST BE COVERED WITH JUTE MESH OVER MULCH, OR CURLEX II OR EXCELSIOR MAY BE USED IN PLACE OF JUTE MESH AND MULCH OVER LOAM AND SEED.
6. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH EXCELSIOR OR CURLEX.
2. TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES
PROVIDE THE FOLLOWING TEMPORARY EROSION/SEDIMENTATION CONTROL MEASURES DURING CONSTRUCTION OF THE DEVELOPMENT:
 - 2.1 SILTATION FENCE ALONG THE DOWNGRADIENT SIDE OF THE PARKING AREAS AND OF ALL FILL SECTIONS. THE SILTATION FENCE WILL REMAIN IN PLACE UNTIL THE SITE IS 85% REVEGETATED.
 - 2.2 HAY BALES PLACED AT KEY LOCATIONS TO SUPPLEMENT THE SILT FENCE.
 - 2.3 PROTECT TEMPORARY STOCKPILES OF STUMPS, GRUBBINGS, OR COMMON EXCAVATION AS FOLLOWS:
 - A. SOIL STOCKPILE SIDE SLOPES SHALL NOT EXCEED 2:1.
 - B. AVOID PLACING TEMPORARY STOCKPILES IN AREAS WITH SLOPES OVER 10 PERCENT, OR NEAR DRAINAGE SWALES. SEE ITEM 3 IN CONSTRUCTION PHASE NOTES BELOW.
 - C. STABILIZE STOCKPILES WITHIN 15 DAYS BY TEMPORARILY SEEDING WITH A HYDROSEED METHOD CONTAINING AN EMULSIFIED MULCH TACKIFIER OR BY COVERING THE STOCKPILE WITH MULCH.
 - D. SURROUND STOCKPILE SOIL WITH SILTATION FENCE AT BASE OF PILE.
 - 2.4 ALL DENUDDED AREAS WHICH HAVE BEEN ROUGH GRADED AND ARE NOT LOCATED WITHIN THE BUILDING PAD, OR PARKING AND DRIVEWAY SUBBASE AREA SHALL RECEIVE MULCH WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL OR WITHIN 15 DAYS AFTER COMPLETING THE ROUGH GRADING OPERATIONS. IN THE EVENT THE CONTRACTOR COMPLETES FINAL GRADING AND INSTALLATION OF LOAM AND SEED WITHIN THE TIME PERIODS PRESENTED ABOVE, INSTALLATION OF MULCH AND NETTING, WHERE APPLICABLE, IS NOT REQUIRED.
 - 2.5 IF WORK IS CONDUCTED BETWEEN OCTOBER 15 AND APRIL 15, ALL DENUDDED AREAS ARE TO BE COVERED WITH HAY MULCH, APPLIED AT TWICE THE NORMAL APPLICATION RATE, AND ANCHORED WITH FABRIC NETTING. THE PERIOD BETWEEN FINAL GRADING AND MULCHING SHALL BE REDUCED TO A 15 DAY MAXIMUM.
 - 2.6 TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE THE SITE HAS BEEN STABILIZED OR IN AREAS WHERE PERMANENT EROSION CONTROL MEASURES HAVE BEEN INSTALLED.
 3. PERMANENT EROSION CONTROL MEASURES
THE FOLLOWING PERMANENT CONTROL MEASURES ARE REQUIRED BY THIS EROSION/SEDIMENTATION CONTROL PLAN:
 - 3.1 ALL AREAS DISTURBED DURING CONSTRUCTION, BUT NOT SUBJECT TO OTHER RESTORATION (PAVING, RIPRAP, ETC.), WILL BE LOAMED, LIMED, FERTILIZED AND SEEDDED. NATIVE TOPSOIL SHALL BE STOCKPILED AND REUSED FOR FINAL RESTORATION WHEN IT IS OF SUFFICIENT QUALITY.
 - 3.2 SLOPES GREATER THAN 2:1 WILL RECEIVE RIPRAP.

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION DURING CONSTRUCTION OF THIS PROJECT.

1. ONLY THOSE AREAS UNDER ACTIVE CONSTRUCTION WILL BE CLEARED AND LEFT IN AN UNTREATED OR UNVEGETATED CONDITION. IF FINAL GRADING, LOAMING AND SEEDING WILL NOT OCCUR WITHIN 15 DAYS, SEE ITEM NO. 4.
2. PRIOR TO THE START OF CONSTRUCTION IN A SPECIFIC AREA, SILT FENCING AND/OR HAY BALES WILL BE INSTALLED AT THE TOE OF SLOPE AND IN AREAS AS LOCATED ON THE PLANS TO PROTECT AGAINST EROSION RELATED EROSION. IMMEDIATELY FOLLOWING CONSTRUCTION OF CULVERTS AND SWALES, RIP RAP AND STONE SHALL BE INSTALLED, AS SHOWN ON THE PLANS.
3. TOPSOIL WILL BE STOCKPILED WHEN NECESSARY IN AREAS WHICH HAVE MINIMUM POTENTIAL FOR EROSION AND WILL BE KEPT AS FAR AS POSSIBLE FROM THE EXISTING DRAINAGE COURSE. NO STOCKPILE SHALL BE CLOSER THAN 100' OF A RESOURCE INCLUDING, BUT NOT LIMITED TO, WETLANDS, STREAMS, AND OPEN WATER BODIES. ALL STOCKPILES SHALL HAVE A SILTATION FENCE BELOW THEM REGARDLESS OF TIME OF PRESENCE. ALL STOCKPILES EXPECTED TO REMAIN LONGER THAN 15 DAYS SHALL BE:
 - A. TREATED WITH ANCHORED MULCH (WITHIN 5 DAYS OF THE LAST DEPOSIT OF STOCKPILED SOIL).
 - B. SEEDED WITH CONSERVATION MIX AND MULCHED IMMEDIATELY.
 - C. INSTALL SILT FENCE AROUND STOCKPILE AT BASE OF PILE.STOCKPILES TO HAVE SILT FENCE INSTALLED AT TIME OF ESTABLISHMENT AT BASE OF PILE.
4. ALL DISTURBED AREAS EXPECTED TO REMAIN LONGER THAN 30 DAYS SHALL BE EITHER:
 - A. TREATED WITH ANCHORED MULCH IMMEDIATELY, OR
 - B. SEEDED WITH CONSERVATION MIX OF ANNUAL RYE GRASS (0.9 LBS/1000 SQ. FT) AND MULCHED IMMEDIATELY.
5. ALL GRADING WILL BE HELD TO A MAXIMUM 2:1 SLOPE WHERE PRACTICAL. ALL SLOPES WILL BE STABILIZED WITH PERMANENT SEEDING, OR WITH STONE, WITHIN 5 DAYS AFTER FINAL GRADING IS COMPLETE. (SEE POST-CONSTRUCTION REVEGETATION FOR SEEDING SPECIFICATION.)
6. ALL CULVERTS WILL BE PROTECTED WITH STONE RIPRAP (D50 = 6" UNLESS OTHERWISE SPECIFIED) AT INLETS AND OUTLETS.

THE FOLLOWING GENERAL PRACTICES WILL BE USED TO PREVENT EROSION AS SOON AS AN AREA IS READY TO UNDERGO FINAL GRADING.

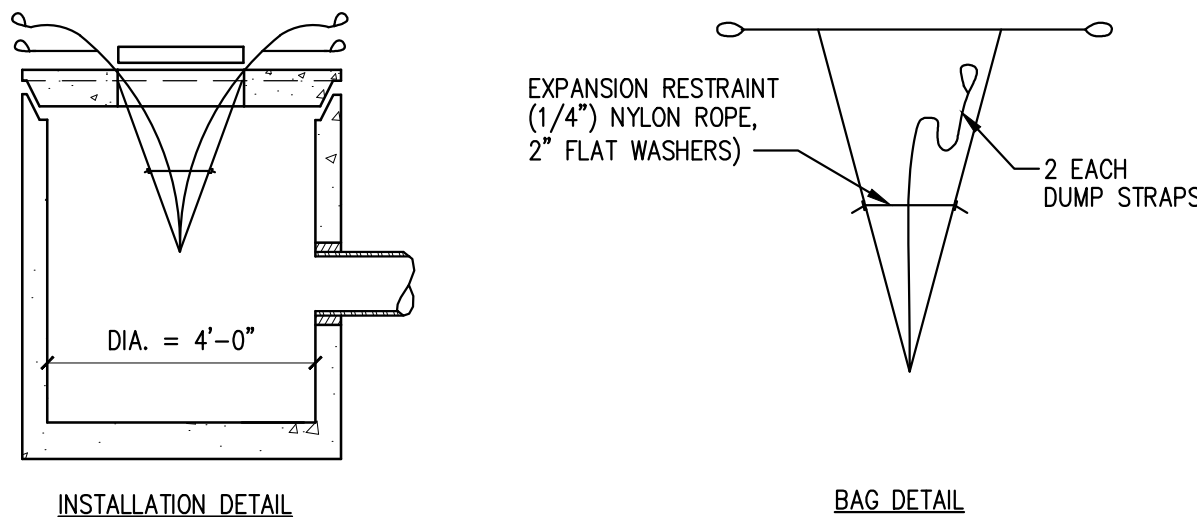
1. A MINIMUM OF 4" OF LOAM WILL BE SPREAD OVER DISTURBED AREAS AND GRADED TO A UNIFORM DEPTH AND NATURAL APPEARANCE, OR STONE WILL BE PLACED ON SLOPES TO STABILIZE SURFACES.
2. IF FINAL GRADING IS REACHED DURING THE NORMAL GROWING SEASON (4/15 TO 9/15), PERMANENT SEEDING WILL BE DONE AS SPECIFIED BELOW. PRIOR TO SEEDING, LIMESTONE SHALL BE APPLIED AT A RATE OF 138 LBS/1000 SQ. FT. AND 10:20:20 FERTILIZER AT A RATE OF 18.4 LBS/1000 SQ.FT WILL BE APPLIED. BROADCAST SEEDING AT THE FOLLOWING RATES:

<u>LAWN</u>	<u>SWALES</u>
KENTUCKY BLUEGRASS 0.46 LBS/1000 SF.	RED TOP 0.05 LBS/1000 SF.
CREeping RED FESCUE 0.46 LBS/1000 SF.	TALL FESCUE 0.46 LBS/1000 SF.
PERENNIAL RYE GRASS 0.11 LBS/1000 SF.	
3. AN AREA SHALL BE MULCHED IMMEDIATELY AFTER IS HAS BEEN SEEDED, MULCHING SHALL CONSIST OF HAY MULCH, HYDRO-MULCH, JUTE NET OR MULCH, PRE-MANUFACTURED EROSION MATS OR ANY SUITABLE SUBSTITUTE DEEMED ACCEPTABLE BY THE DESIGNER.
 - A. HAY MULCH SHALL BE APPLIED AT THE RATE OF 2 TONS PER ACRE. HAY MULCH SHALL BE SECURED BY EITHER: (NOTE: SOIL SHALL NOT BE VISIBLE)
 - I. BEING DRIVEN OVER BY TRACKED CONSTRUCTION EQUIPMENT ON GRADES OF 5% AND LESS.
 - II. BLANKETED BY TACKED PHOTODEGRADABLE/BIODEGRADABLE NETTING, OR WITH SPRAY, ON GRADES GREATER THAN 5%.
 - III. SEE NOTE 6, GENERAL NOTES, AND NOTE 8, WINTER CONSTRUCTION.
4. HYDRO-MULCH SHALL CONSIST OF A MIXTURE OF EITHER ASPHALT, WOOD FIBER OR PAPER FIBER AND WATER SPRAYED OVER A SEEDED AREA. HYDRO-MULCH SHALL NOT BE USED BETWEEN 9/15 AND 4/15.
4. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN SEPTEMBER 15 AND APRIL 15. SHOULD SEEDING BE NECESSARY BETWEEN SEPTEMBER 15 AND APRIL 15 THE FOLLOWING PROCEDURE SHALL BE FOLLOWED. ALSO REFER TO NOTE 9 WINTER CONSTRUCTION.
 - A. ONLY UNFROZEN LOAM SHALL BE USED.
 - B. LOAMING, SEEDING AND MULCHING WILL NOT BE DONE OVER SNOW OR ICE COVER. IF SNOW EXISTS, IT MUST BE REMOVED PRIOR TO PLACEMENT OF SEED.
 - C. WHERE PERMANENT SEEDING IS NECESSARY, ANNUAL WINTER RYE (1.2 LBS/1000 SQ.FT) SHALL BE ADDED TO THE PREVIOUSLY NOTED AREAS.
 - D. WHERE TEMPORARY SEEDING IS REQUIRED, ANNUAL WINTER RYE (2.6 LBS/1000 SQ. FT.) SHALL BE SOWN INSTEAD OF THE PREVIOUSLY NOTED SEEDING RATE.
 - E. FERTILIZING, SEEDING AND MULCHING SHALL BE APPLIED TO LOAM THE DAY THE LOAM IS SPREAD BY MACHINERY.
 - F. ALTERNATIVE HAY MULCH SHALL BE SECURED WITH PHOTODEGRADABLE/BIODEGRADABLE NETTING. TRACKING BY MACHINERY ALONE WILL NOT SUFFICE.
5. FOLLOWING FINAL SEEDING, THE SITE WILL BE INSPECTED EVERY 30 DAYS UNTIL 85% COVER HAS BEEN ESTABLISHED. RESEEDING WILL BE CARRIED OUT BY THE CONTRACTOR WITHIN 10 DAYS OF NOTIFICATION BY THE ENGINEER THAT THE EXISTING CATCH IS INADEQUATE.

THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING, MONITORING, MAINTAINING, REPAIRING, REPLACING AND REMOVING ALL OF THE EROSION AND SEDIMENTATION CONTROLS OR APPOINTING A QUALIFIED SUBCONTRACTOR TO DO SO.

MAINTENANCE MEASURES WILL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, A VISUAL INSPECTION WILL BE MADE OF ALL EROSION AND SEDIMENTATION CONTROLS AS FOLLOWS:

1. HAY BALE BARRIERS, SILT FENCE, AND STONE CHECK DAMS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK OR IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL. SEDIMENT TRAPPED BEHIND THESE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REDISTRIBUTED TO AREAS UNDERGOING FINAL GRADING. SHOULD THE HAY BALE BARRIERS PROVE TO BE INEFFECTIVE, THE CONTRACTOR SHALL REMOVE THE BARRIERS AND REPAIR AS NEEDED.
2. VISUALLY INSPECT RIPRAP ONCE A WEEK OR AFTER EACH SIGNIFICANT RAINFALL AND REPAIR AS NEEDED. REMOVE SEDIMENT TRAPPED BEHIND THESE DEVICES ONCE IT ATTAINS A DEPTH EQUAL TO 1/2 THE HEIGHT OF THE DAM OR RIBBLE. REDISTRIBUTE REMOVED SEDIMENT OFF-SITE OR TO AN AREA UNDERGOING FINAL GRADING.
3. REVEGETATION OF DISTURBED AREAS WITHIN 25' OF DRAINAGE-COURSE/STREAM WILL BE SEEDED WITH THE "MEADOW AREA MIX" AND INSPECTED ON A WEEKLY BASIS OR AFTER EACH SIGNIFICANT RAINFALL AND RESEED AS NEEDED. EXPOSED AREAS WILL BE RESEED AS NEEDED UNTIL THE AREA HAS OBTAINED 100% GROWTH RATE. PROVIDE PERMANENT RIPRAP FOR SLOPES IN EXCESS OF 3:1 AND WITHIN 25' OF DRAINAGE COURSE.

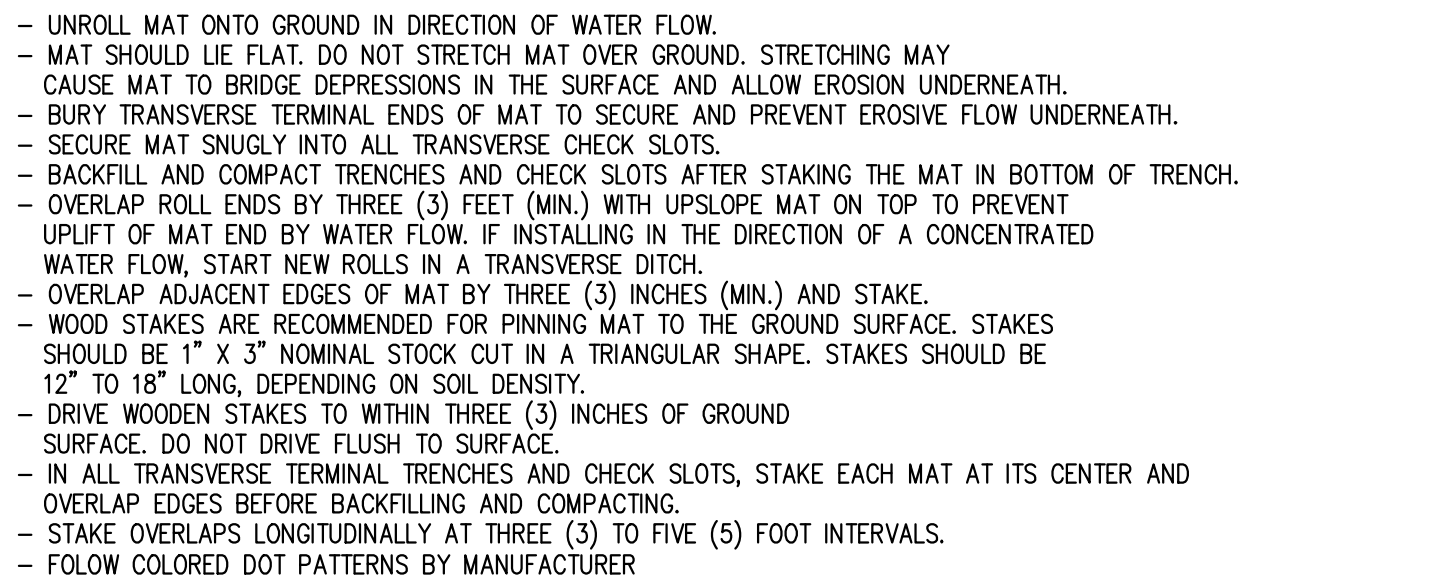


1. REMOVE THE CATCH BASIN GRATE AND PLACE THE SACK INTO THE OPENING. HOLD OUT APPROXIMATELY SIX (6) INCHES OF THE SACK BEYOND THE BASIN FRAME TO ALLOW ACCESS TO THE "SILTSAK" LIFTING STRAPS. REPLACING THE GRATE BACK INSIDE OF ITS FRAME WILL HOLD THE SACK IN PLACE.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING AND MAINTAINING THIS SEDIMENT CONTROL DEVICE. THE SACK IS CONSIDERED FULL AND READY TO EMPTY WHEN THE THE "RESTRAINT CORD" IS NO LONGER VISIBLE.
3. THE "SILTSAK" IS REMOVED BY PLACING TWO (2) PIECES IF 1 INCH DIAMETER REBAR THROUGH THE LIFTING LOOPS LOCATED ON EACH SIDE OF THE SACK AND LIFTING WITH AN APPROPRIATE PIECE OF CONSTRUCTION EQUIPMENT. THE LIFTING STRAPS ARE CONNECTED TO THE BOTTOM OF THE SACK AND THE LIFTING WILL CAUSE THE SACK TO TURN INSIDE OUT, AND EMPTYING THE CONTENTS. THE SACK SHOULD THEN BE CLEANED, RINSED AND RETURNED TO ITS ORIGINAL SHAPE AND PLACED BACK IN THE BASIN.
4. THE "SILTSAK" IS REUSABLE, THEREFORE, ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE THE SACK FROM THE BASIN, CLEAN AND STORE OUT OF DIRECT SUNLIGHT UNTIL ITS NEXT USE.
5. THE "SILTSAK" SEDIMENT CONTROL DEVICE IS MANUFACTURED BY: ACF ENVIRONMENTAL

1. WINTER CONSTRUCTION PERIOD: NOVEMBER 1 THROUGH APRIL 15.
2. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME.
3. EXPOSED AREA SHALL BE LIMITED TO THOSE AREAS TO BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. AT THE END OF EACH WORK WEEK NO AREAS MAY BE LEFT UNSTABILIZED OVER THE WEEKEND.
4. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, SUCH THAT NO LARGER AREA OF THE SITE IS WITHOUT STABILIZATION OR PROTECTION THAN AS LISTED IN ITEM 2 ABOVE.
5. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1000 SF. (WITH OR WITHOUT SEEDING) OR DORMANT SEEDED, MULCHED AND ANCHORED SUCH THAT SOIL SURFACE IS NOT VISIBLE THROUGH THE MULCH. NOTE: AN AREA IS ALSO CONSIDERED STABLE IF SOODED, COVERED WITH GRAVEL (PARKING LOTS) OR STRUCTURAL SAND.
6. BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM SEED WILL NOT BE REQUIRED.
DURING PERIODS OF ABOVE FREEZING TEMPERATURES THE SLOPES 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 1 AND IF THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED 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. IF CONSTRUCTION CONTINUES DURING FREEZING WEATHER, ALL EXPOSED AREAS SHALL BE CONTINUOUSLY GRADED AND FRESHLY EXPOSED AREAS SHALL BE MULCHED IMMEDIATELY. AFTER THE APPLICATION OF MULCH, SLOPES SHALL NOT BE LEFT UNEXPOSED OVER THE WINTER OR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS TREATED IN THE ABOVE MANNER. UNTIL SUCH TIME AS WEATHER CONDITIONS ALLOW, DITCHES TO BE FINISHED WITH THE PERMANENT SURFACE TREATMENT, EROSION SHALL BE CONTROLLED BY THE INSTALLATION OF BALES OF HAY, SILT FENCE OR STONE CHECK DAMS IN ACCORDANCE WITH THE STANDARD DETAILS SHOWN ON THE DESIGN DRAWINGS. NOTE: DORMANT SEEDING SHOULD NOT BE ATTEMPTED UNTIL SOIL TEMPERATURE REMAINS BELOW 50 DEGREES AND DAY TIME TEMPERATURES REMAIN IN THE 30'S.
7. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WALES WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. VEGETATED DRAINAGE SWALES SHALL BE LINED WITH EXCELISIOR OR CURLEX.
8. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WALES WITH SLOPES GREATER THAN 15%. AFTER OCTOBER 1 THE SAME APPLIES FOR ALL SLOPES GREATER THAN 8%.
9. BETWEEN THE DATES OF OCTOBER 15 TO NOVEMBER 1, WINTER RYE IS RECOMMENDED FOR STABILIZATION. AFTER NOVEMBER 1, WINTER RYE IS NOT EFFECTIVE. AROUND NOVEMBER 15 OR LATER, ONCE TEMPERATURES OF THE SOIL PERMIT, DORMANT SEEDING IS EFFECTIVE.
10. IN THE EVENT OF SNOWFALL (FRESH OR CUMULATIVE) GREATER THAN 1 INCH DURING WINTER CONSTRUCTION PERIOD ALL SNOW SHALL BE REMOVED FROM ALL AREAS OF SEEDING AND MULCHING PRIOR TO PLACEMENT.

1. WEEKLY INSPECTIONS, AS WELL AS ROUTINE INSPECTIONS FOLLOWING RAIN FALLS, SHALL BE CONDUCTED BY THE GENERAL CONTRACTOR OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES UNTIL FINAL ACCEPTANCE OF THE PROJECT (85% GRASS CATCH). NECESSARY REPAIRS SHALL BE MADE TO CORRECT UNDERMINING OR DETERIORATION. FINAL ACCEPTANCE SHALL INCLUDE A SITE INSPECTION TO VERIFY THAT ALL EROSION ARREST AND CONTROL DEVICES ARE IN PLACE. DURING INSPECTION, ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL IMMEDIATELY BE CLEANED, AND REPAIRED BY THE GENERAL CONTRACTOR AS REQUIRED. DISPOSAL OF ALL TEMPORARY EROSION AND CONTROL DEVICES SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
IT IS RECOMMENDED THAT THE OWNER HIRE THE SERVICES OF THE DESIGN ENGINEER TO PROVIDE COMPLIANCE INSPECTIONS (DURING ACTIVE CONSTRUCTION) RELATIVE TO IMPLEMENTATION OF THE STORMWATER AND EROSION CONTROL PLANS. THESE INSPECTIONS SHOULD BE LIMITED TO ONCE A WEEK OR AS NECESSARY AND BE REPORTABLE TO THE OWNER, TOWN AND DEP.
2. SHORT-TERM SEDIMENTATION MAINTENANCE SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAN OUT ALL SWALES AND STRUCTURES PRIOR TO TURNING PROJECT OVER TO THE CITY.

1. LONG-TERM PROVISIONS FOR PERMANENT MAINTENANCE OF ALL EROSION AND SEDIMENTATION CONTROL FACILITIES AFTER ACCEPTANCE OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE OWNER OR THEIR DESIGNEE. SUCH RESPONSIBILITIES INCLUDE BUT ARE NOT LIMITED TO THOSE DETAILED AS FOLLOWS:
 - A. PARKING LOT SHALL BE MECHANICALLY SWEEPED TWICE PER YEAR. THE FIRST SHALL TAKE PLACE IN THE MID WINTER (JANUARY THAW) TO REMOVE ACCUMULATED SANDS FROM WINTER SANDING TO THIS POINT. THE SECOND SWEEPING SHALL TAKE PLACE AFTER WINTER SANDING OPERATIONS TERMINATE BUT PRIOR TO MAY 1.
 - B. INSPECTION OF STORMWATER OUTLET STRUCTURE SHOULD BE CONDUCTED TWICE PER YEAR. ACCESS TO THE STRUCTURE IS THROUGH THE TOP. THE OIL/WATER SEPARATOR UNIT SHALL BE PUMPED DOWN AND THE SEDIMENT AND TRASH SHALL BE REMOVED AT THE TIME OF THE INSPECTION. THE REMOVAL OF ALL SEDIMENT AND TRASH WILL HELP MINIMIZE VOLUME LOSS.
2. THE OWNER SHALL FILE A YEARLY MAINTENANCE REPORT TO THE CITY DOCUMENTING THE REQUIRED MAINTENANCE FOR THE STORMWATER SYSTEM.



The diagram illustrates the installation of an Erosion Control Blanket (ECB) in a trench. The main part of the diagram shows a cross-section of a trench with a blanket being laid along its length. Arrows indicate the direction of water flow and the placement of staples. Labels point to specific installation details: 'STAPLE OUTSIDE EDGE ON 2" CENTERS', '4" OVERLAP OF NETTING WHERE 2 OR MORE STRIP WIDTHS ARE REQUIRED, STAPLE ON 18" CENTERS', and 'CONSTRUCTION NOTES'. To the right, two vertical diagrams show the typical dimensions of the staples used: one for a 6" wide blanket and another for an 18" wide blanket, both with a 1 1/2" height.

CONSTRUCTION NOTES:

- BURY THE TOP OF THE NETTING IN A TRENCH 6" OR MORE DEEP
- TAM TRENCH FULL OF SOIL. SECURE WITH ROW OF STAPLES, 12" SPACING, 4" DOWN FROM THE TRENCH
- OVERLAP-- BURY UPPER END OF LOWER STRIP AS IN "A" & "B". OVERLAP END OF TOP STRIP 4" AND STAPLE
- CHECK SLOT-- FOLD OF NETTING BURIED IN SLOT TRENCH AND TAMPED; DOUBLE ROW OF STAPLES AT 12" SPACING. USE CHECK SLOTS AT 15" SPACING IN DITCHES OR STEEP SLOPES.

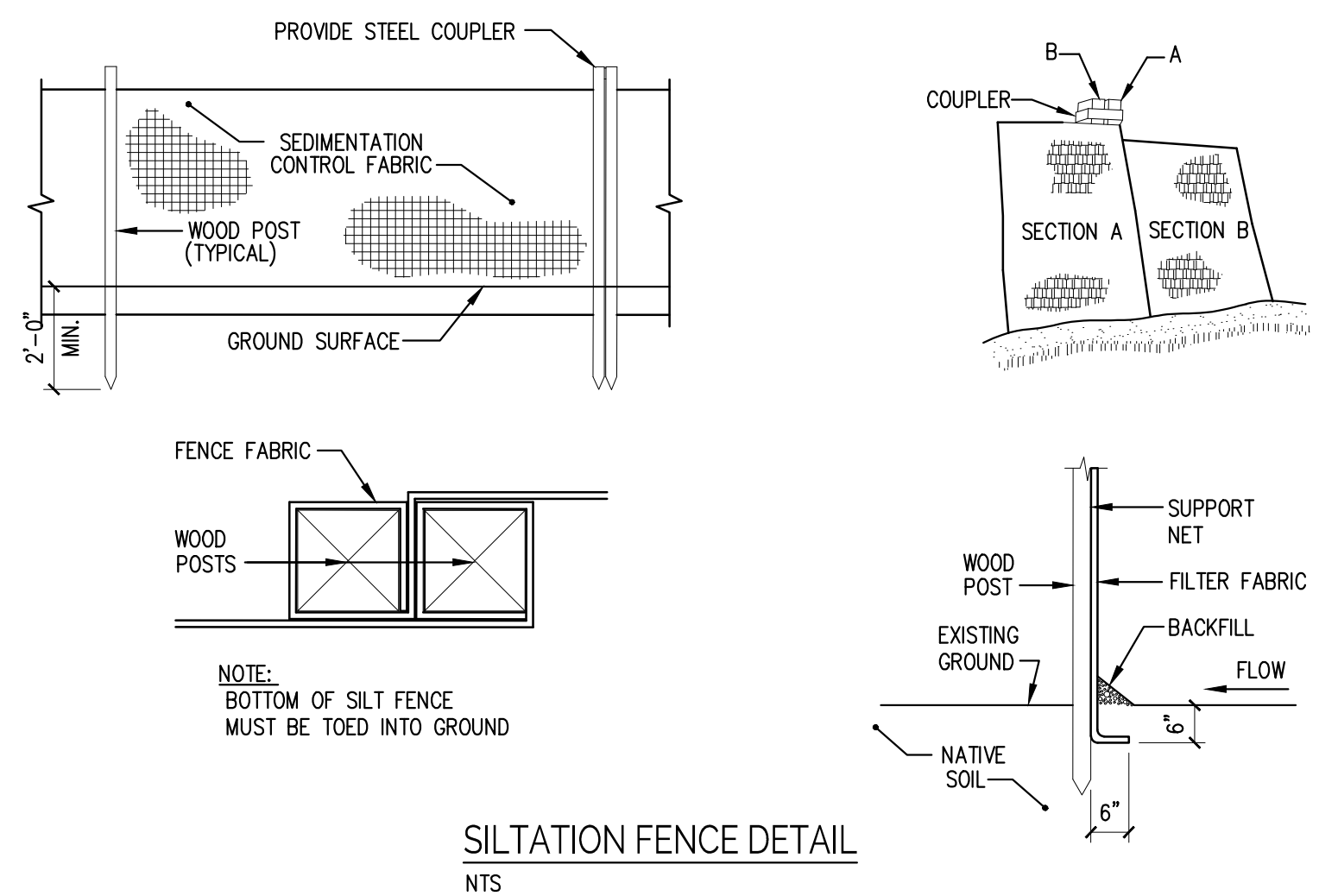
STAPLE DIMENSIONS:

- 6" WIDE: 1 1/2" HEIGHT
- 18" WIDE: 1 1/2" HEIGHT

TYPICAL STAPLES NO. 11 GAUGE WIRE

EROSION CONTROL BLANKET REQUIRED IN ALL DITCHES & SLOPES

NOTE: GRADING PLAN GOVERNS IN ALL LOCATIONS



3'-0"

GROUND UP STUMP MIX FROM SITE

1'-0"

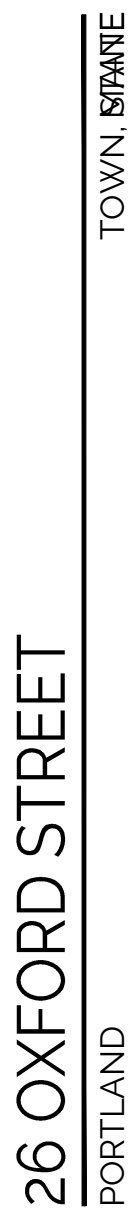
FLOW

MAY BE USED IN LIEU OF SILT FENCE

EROSION CONTROL MIX DETAIL

N.T.S.

1. EXCAVATE A 6"x6" 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. JOIN SECTION AS SHOWN ABOVE.
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 FLIP AT THE BASE, BUT MUST BE ACCOMPLISHED BY AN INTERCEPTION DITCH.
5. BARRIER SHALL BE MIRAFI SILT FENCE OR APPROVED EQUAL.



ISSUED		DR	CKD	DATE
No.	DESCRIPTION	BY	ED	
A	ISSUED FOR PLANNING PERMIT	DL	ED	10-26-21
B	RESPONSE TO CITY COMMENTS	DL	ED	02-22-22
C	RESPONSE TO CITY COMMENTS	DL	ED	06-14-22
D	RESPONSE TO CITY COMMENTS	DL	ED	06-30-22

SHEET TITLE

DESIGNED:	DL
DRAWN:	DL
DATE:	06-14-22
PROJECT NUMBER:	21-052

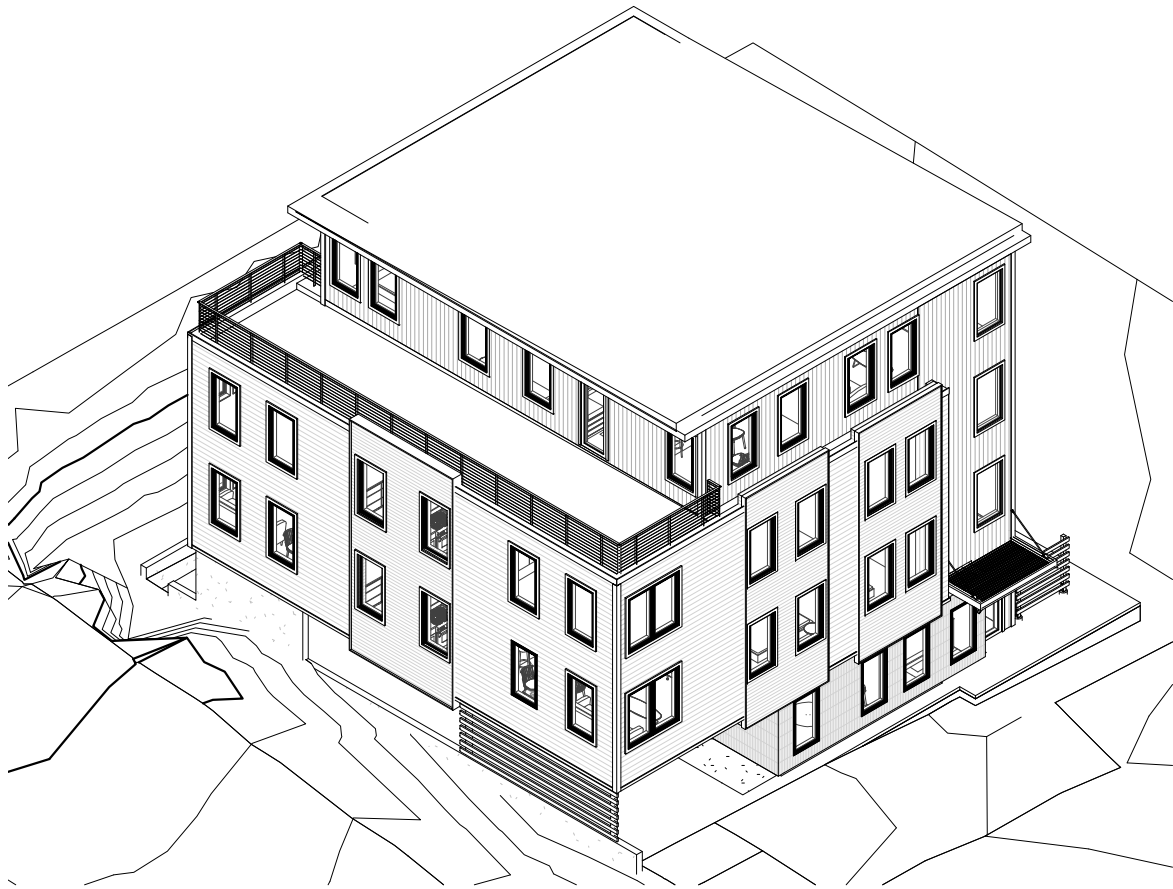
C300



Scale

A000

7.12.2022



Sheet List	
Sheet Number	Sheet Name
A000	Cover
A001	Code Information
A002	General Notes
A100	Ground Floor Plan
A101	Second Floor Plan
A102	Third Floor Plan
A103	Fourth Floor Plan
A104	Roof Plan
A150	RCP - Ground Level
A151	RCP - Second Floor
A152	RCP - Third Floor
A153	RCP - Fourth Floor
A200	Elevation - Oxford Street
A201	Elevation - Cleaves Street
A202	Elevation - Side-Garage Entrance
A203	Elevation - Back
A300	Building Sections
A301	Building Sections Cont.
A302	Stair Tower Sections
A400	Bathroom Elevations
A401	Bathroom Elevations Cont.
A402	Kitchen Elevations
A500	Details
A501	Details Cont.
A601	Schedules
A602	Schedules Cont.
A603	Schedules Cont.
A700	Floor Finish Plan
A702	Room + Finish Schedule
A703	Room + Finish Schedule Cont.
A900	Area Plans
F100	Foundation Plan
L100	Site Plan
LS100	Life Safety Plans
SK104	Stair

26 Oxford Street

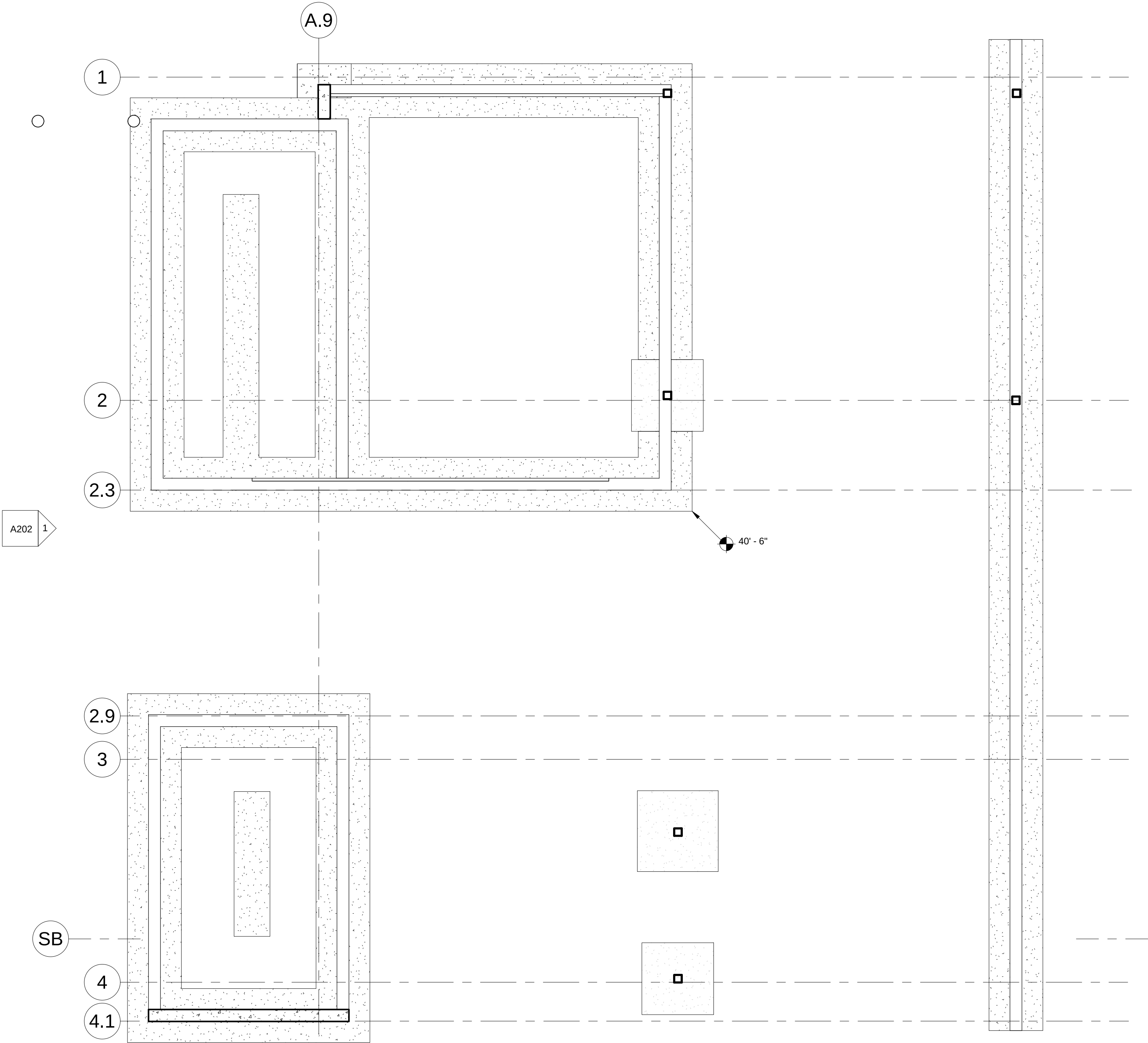
Portland, Maine



Scale 1/4" = 1'-0"

F100

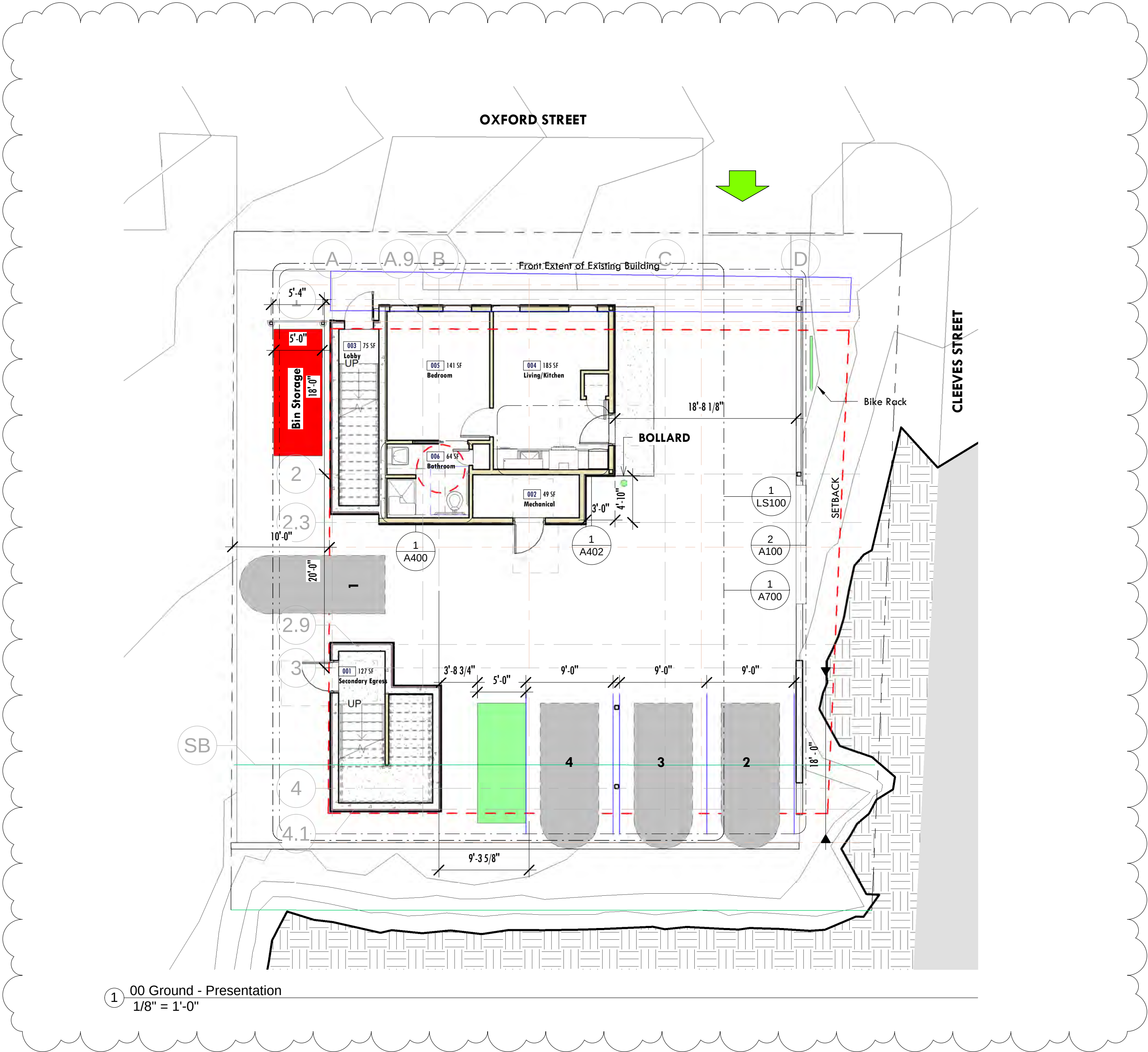
6.13.2022

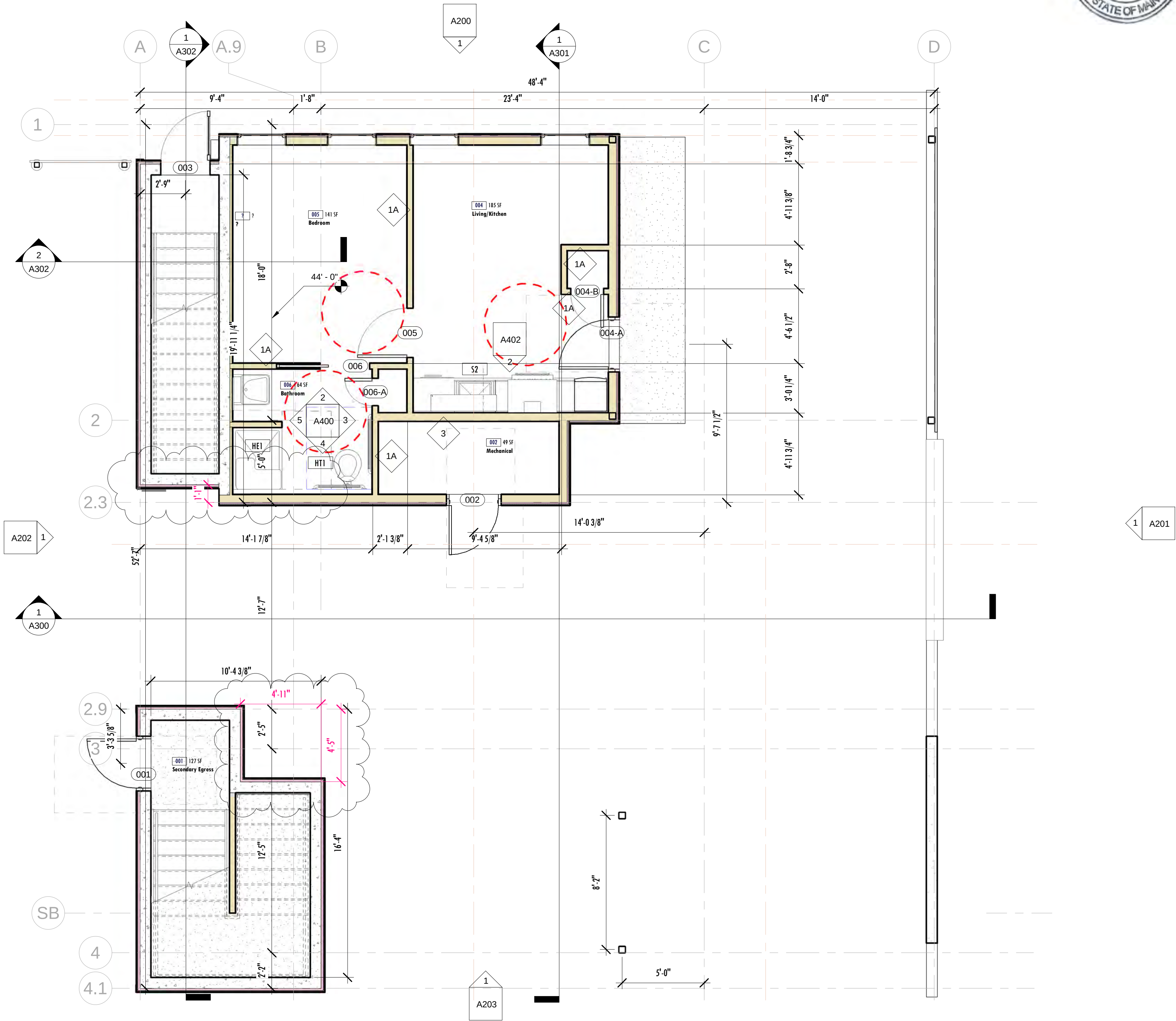


1 Top of Foundation
1/4" = 1'-0"

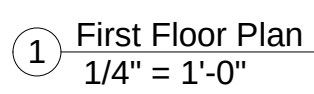


REFERENCE TURNING TEMPLATES FOR FULL SCOPE OF PARKING





00 Ground - Presentation - Accessible
Apartment
1/4" = 1'-0"

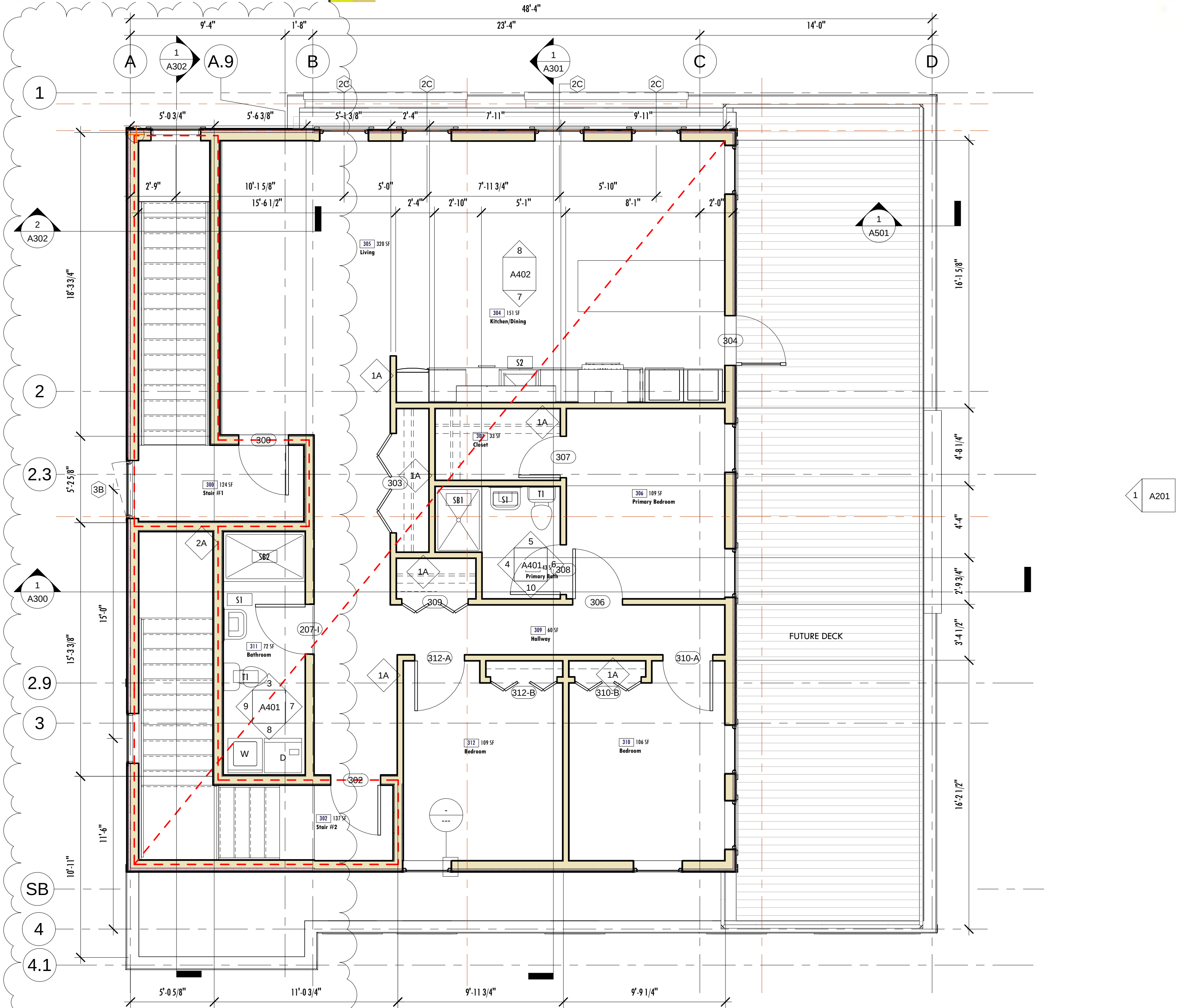




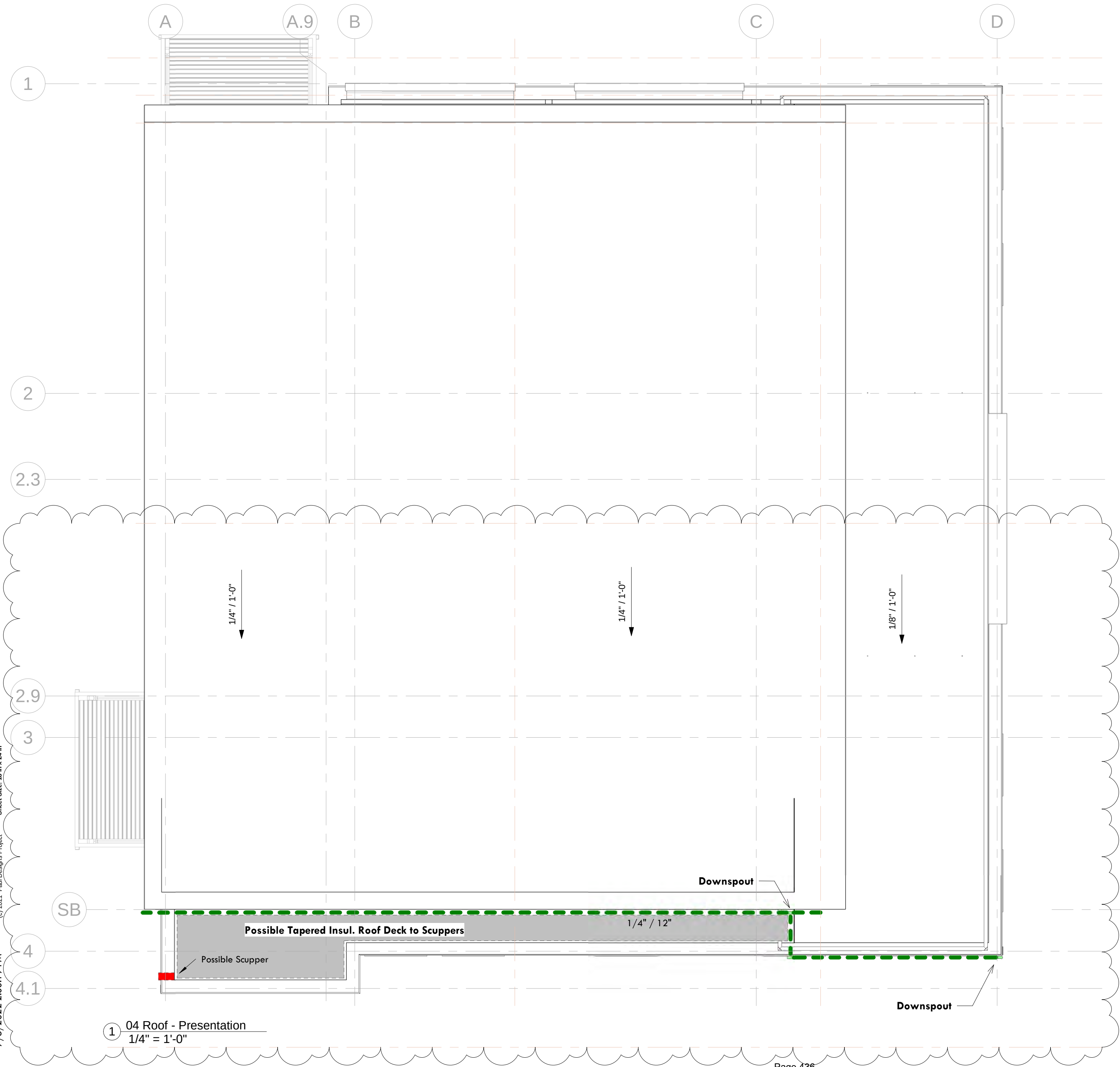
Scale 1/4" = 1'-0"



1 Second Floor Plan
1/4" = 1'-0"



1 Third Floor Plan
1/4" = 1'-0"





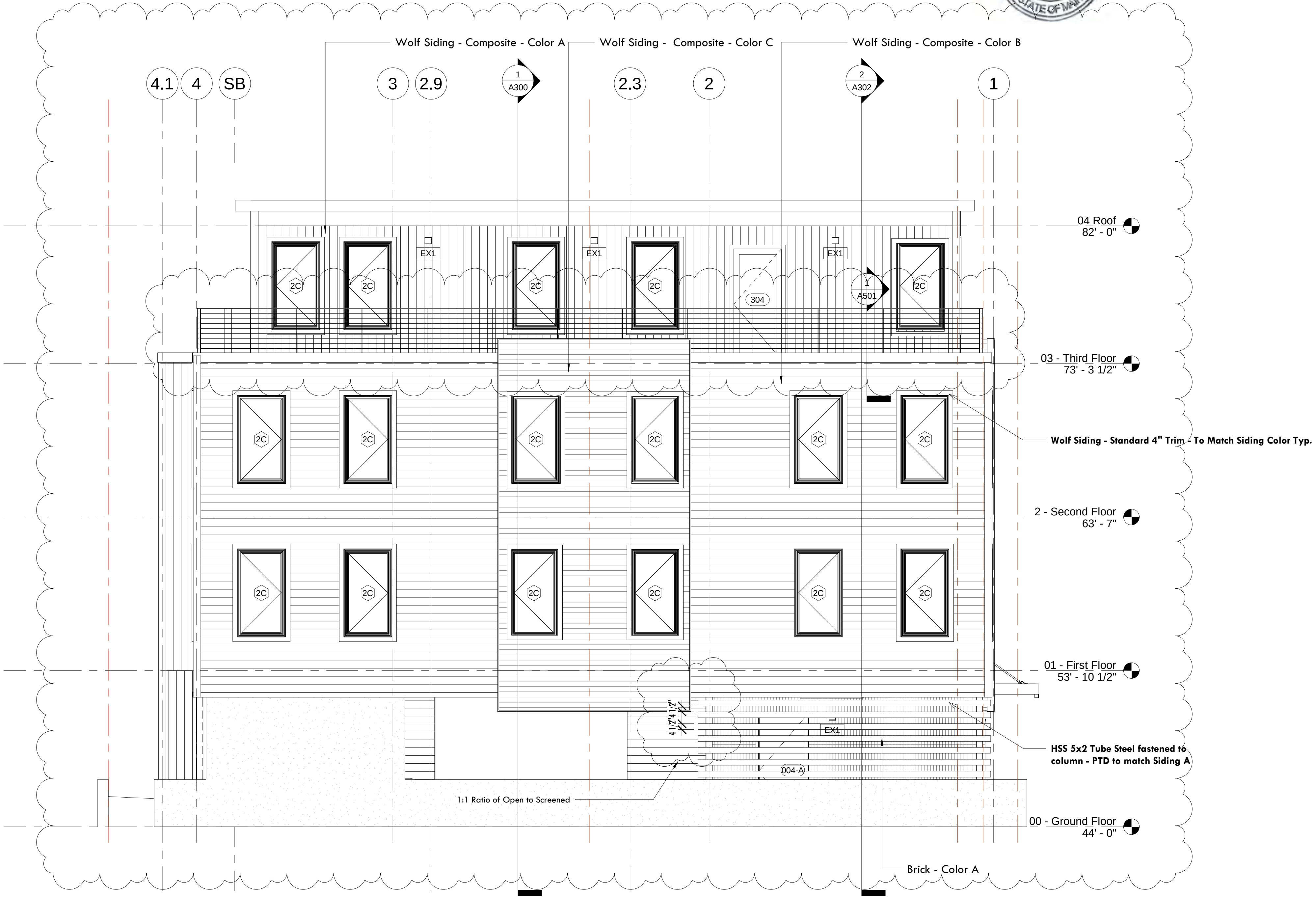
Scale 1/4" = 1'-0"

A200

7.12.2022



1 Elevation - Oxford Street
1/4" = 1'-0"



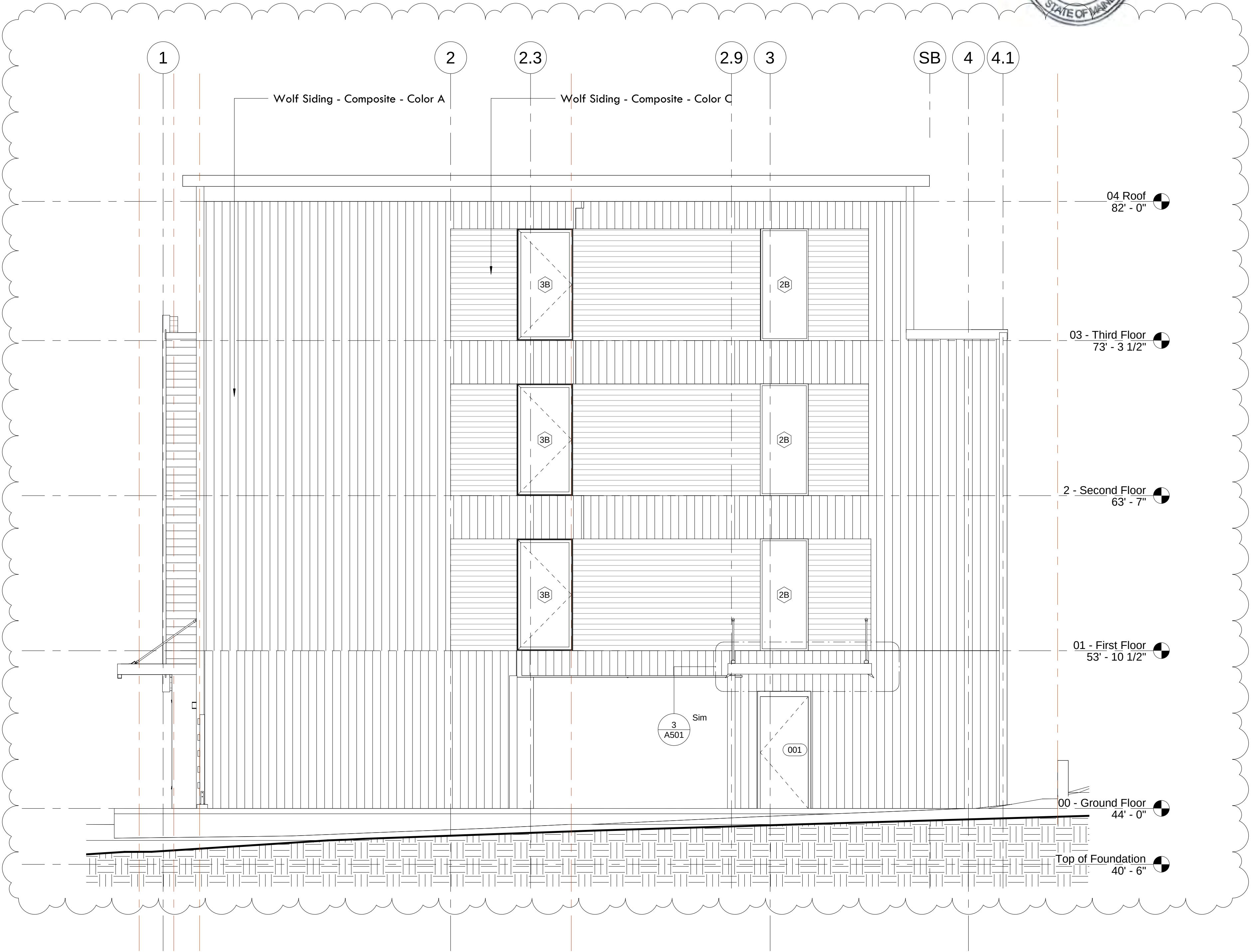
1 Elevation - Cleeves Street
1/4" = 1'-0"



Scale 1/4" = 1'-0"

A202

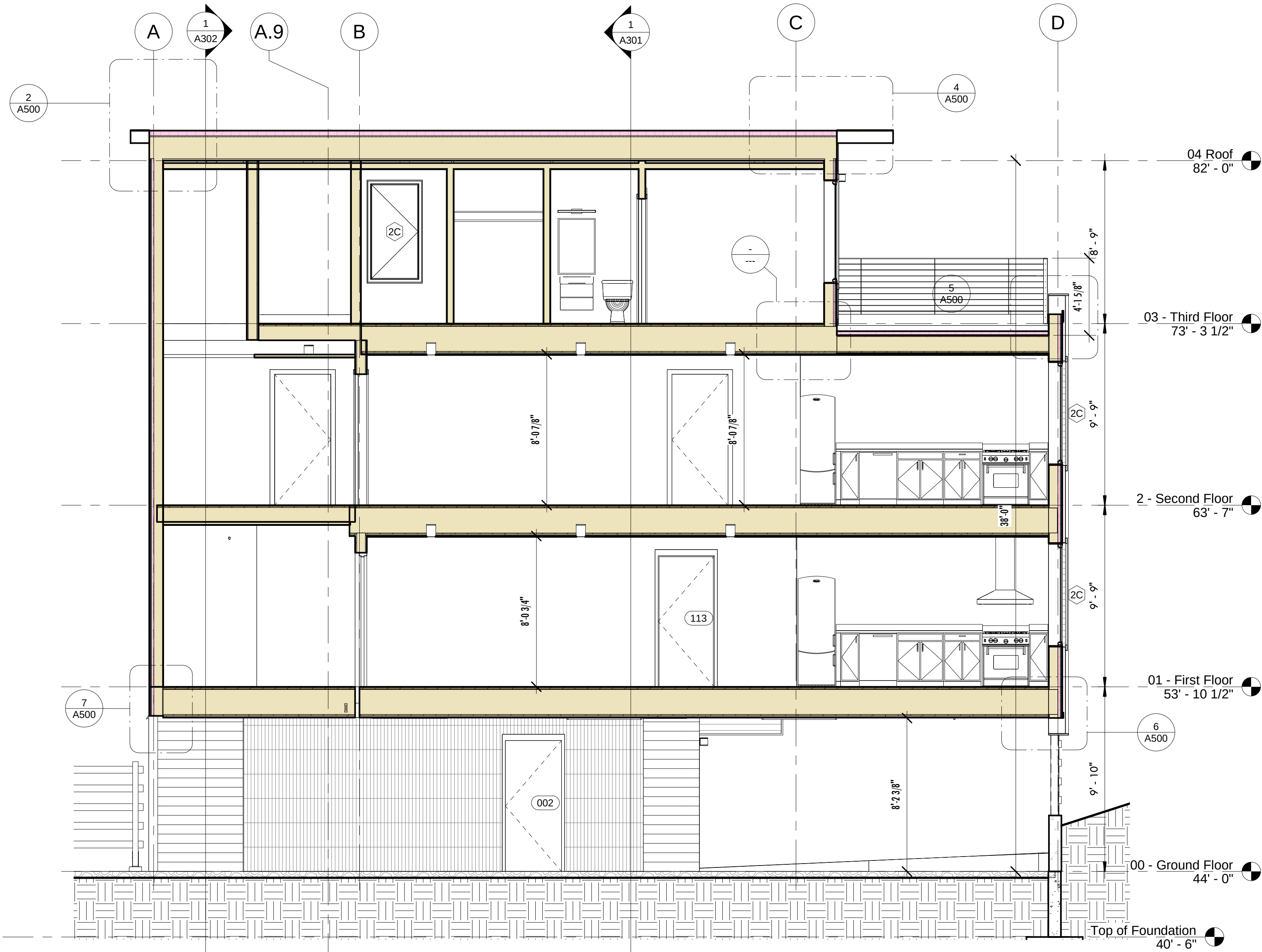
6.13.2022



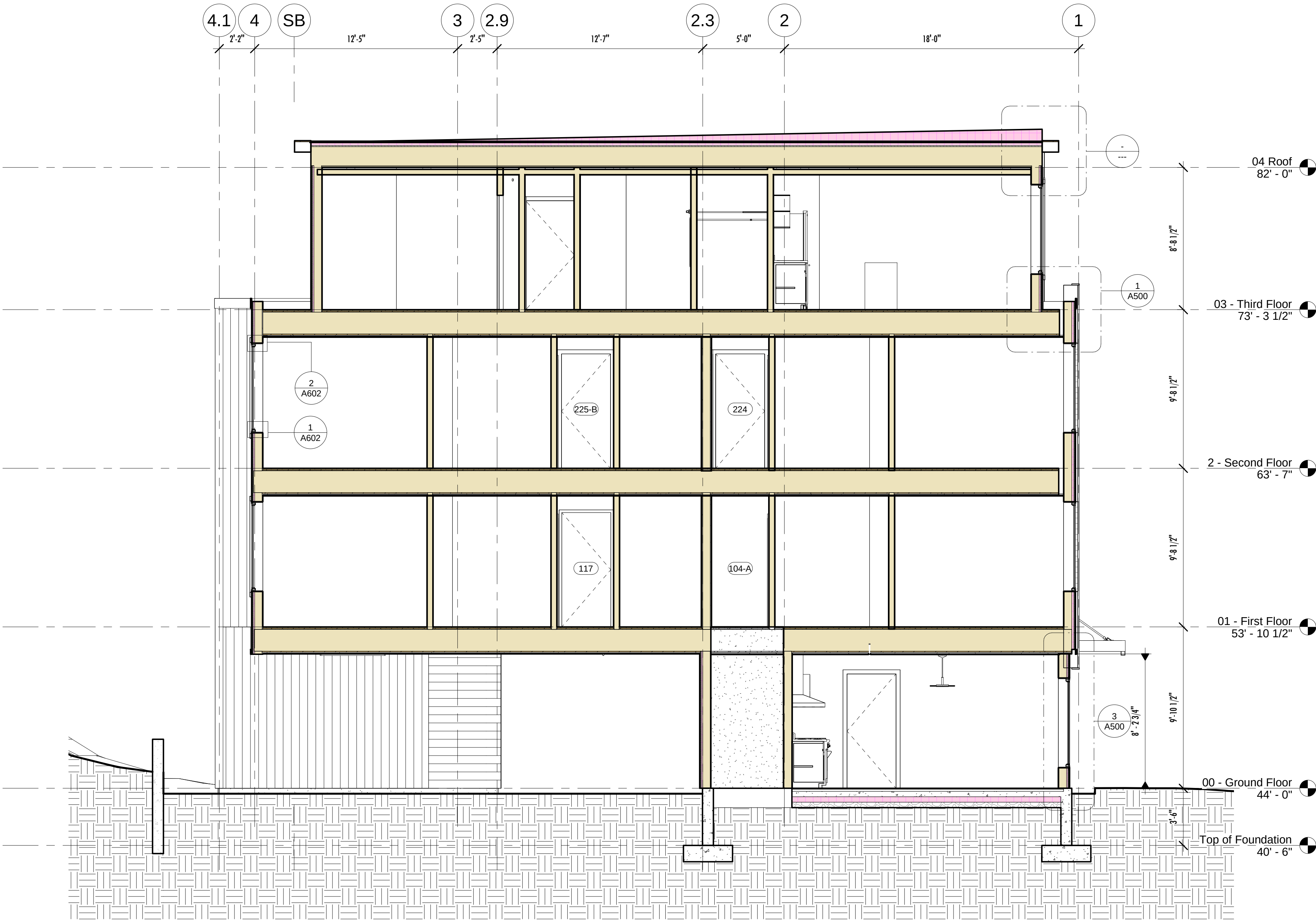
① Elevation - Side - Garage Entrance
1/4" = 1'-0"



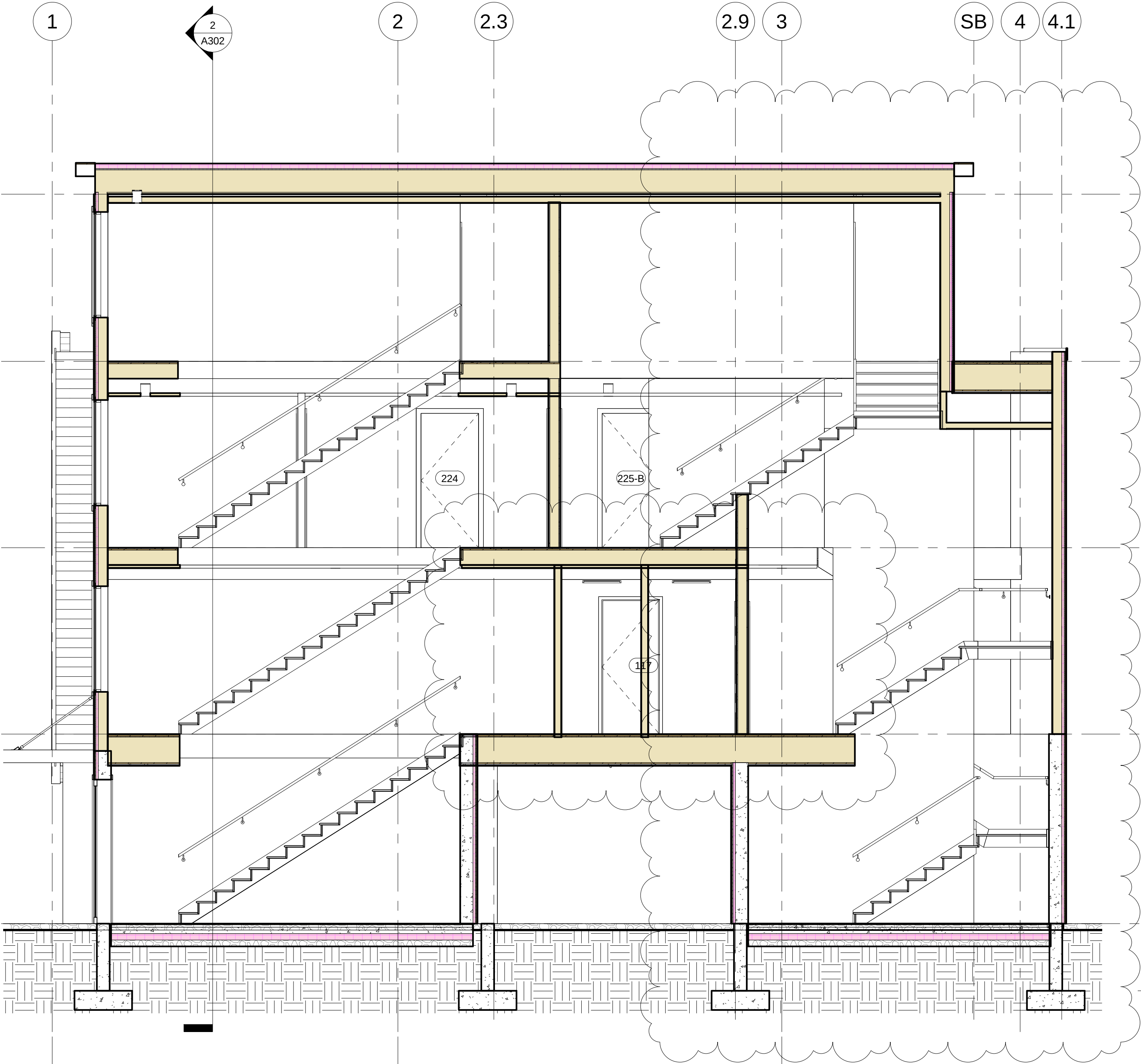
① Elevation - Back
1/4" = 1'-0"



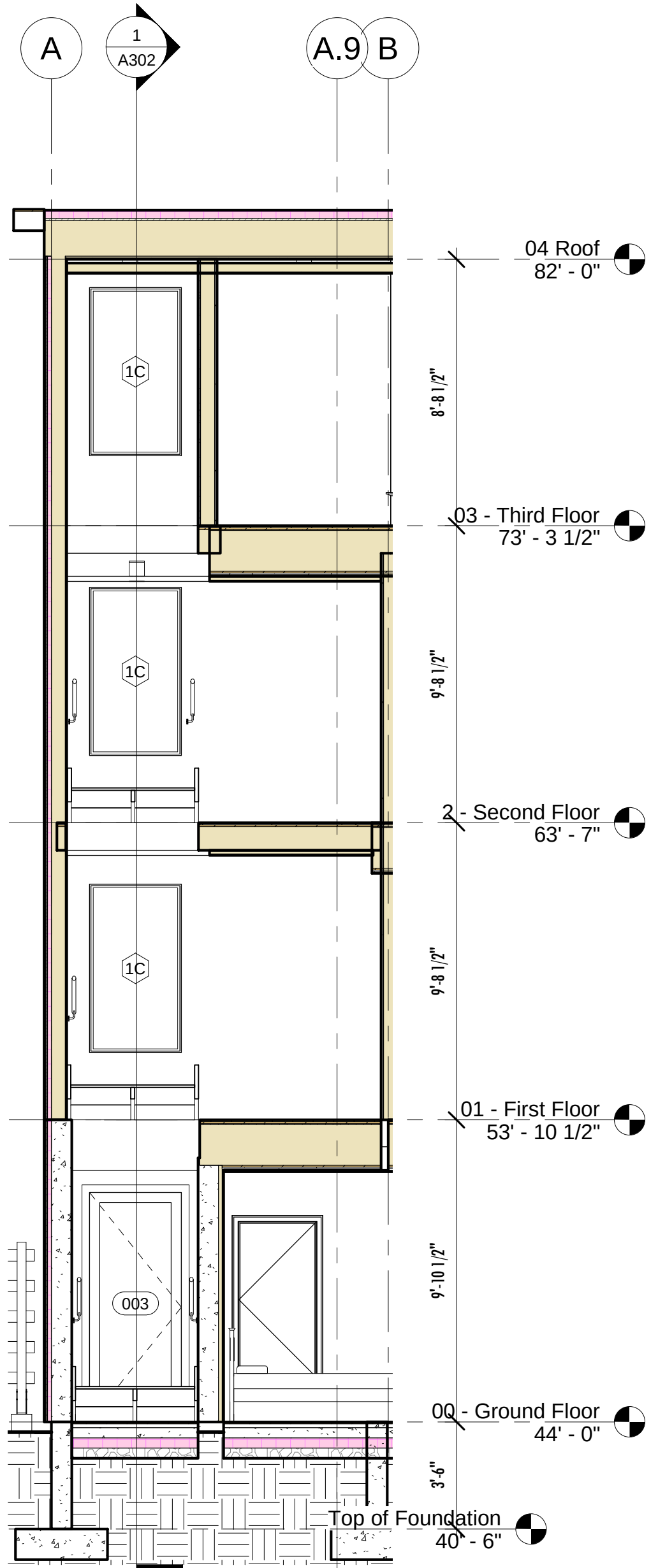
① Building Section - Transverse
1/4" = 1'-0"



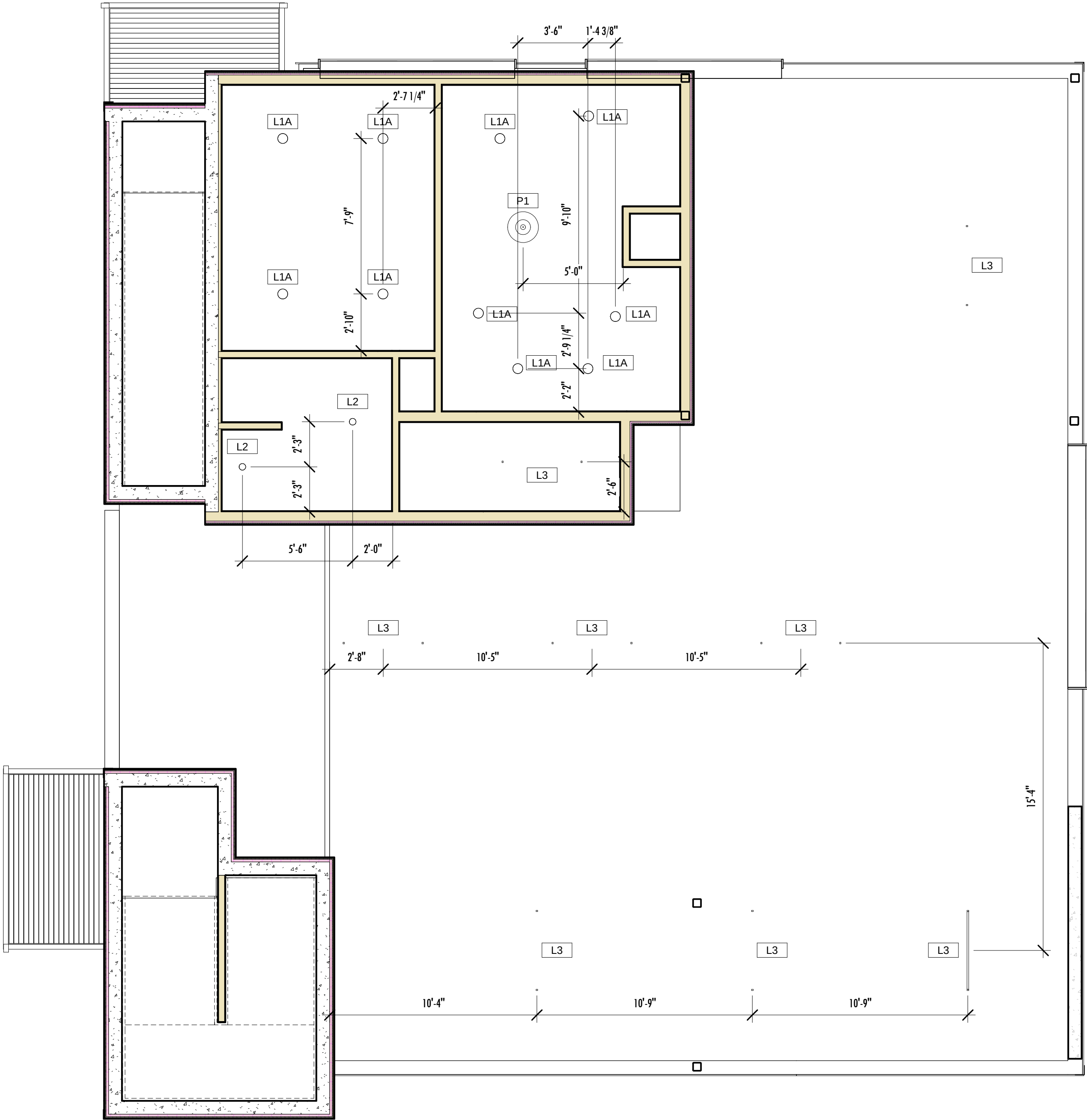
① Building Section - Longitudinal
1/4" = 1'-0"

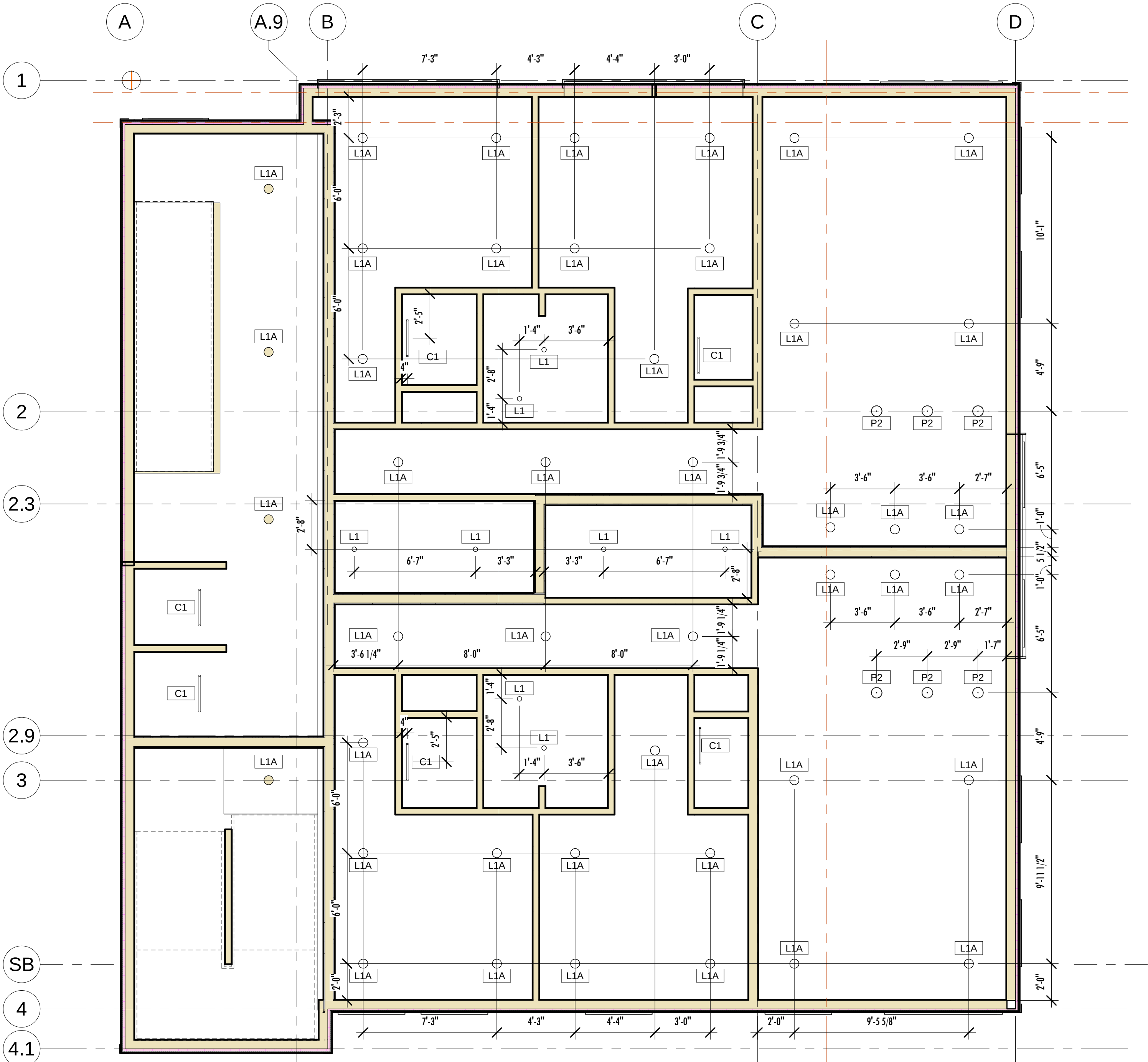


1 Stair Tower Section - Longitudinal
1/4" = 1'-0"

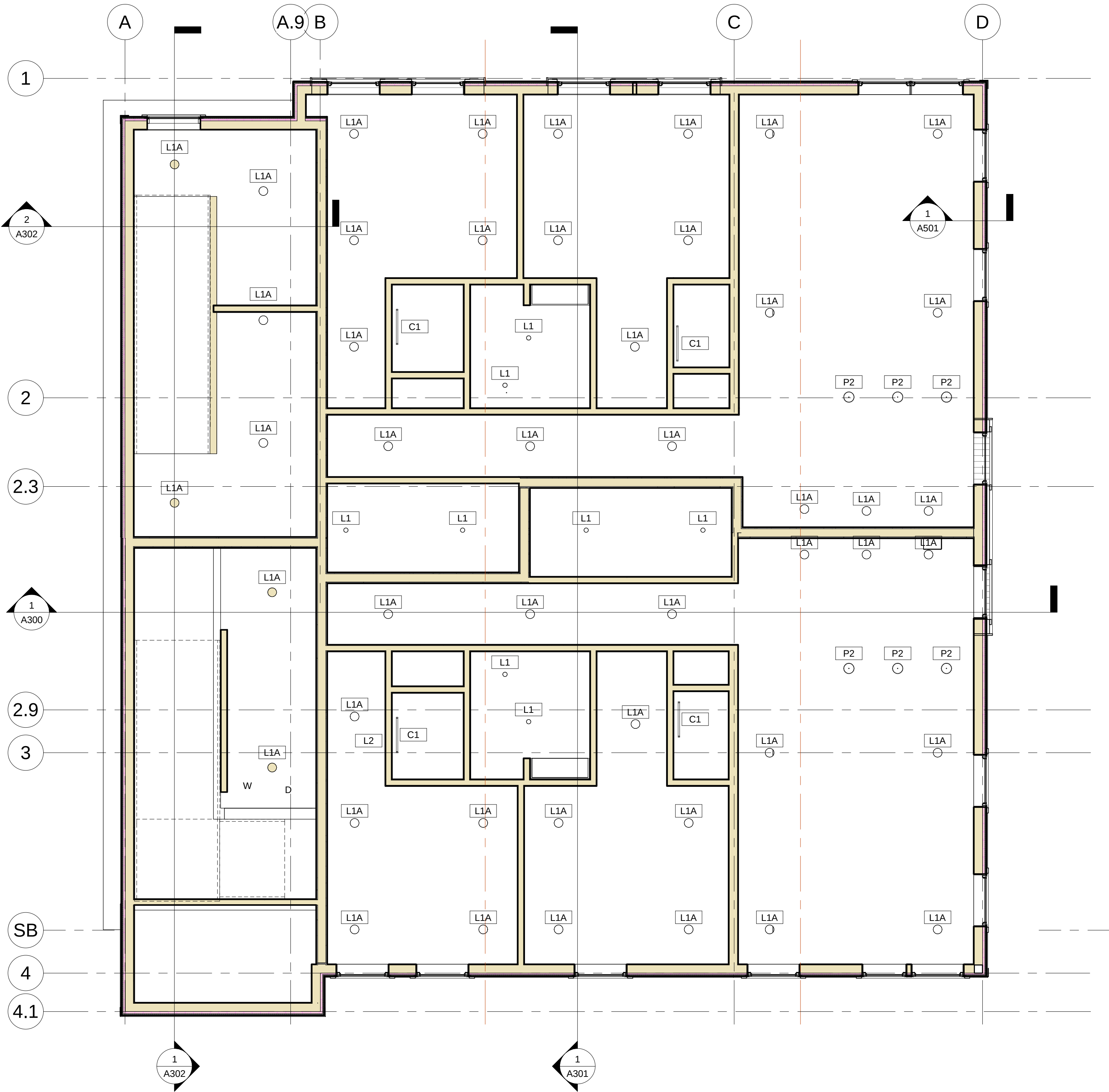


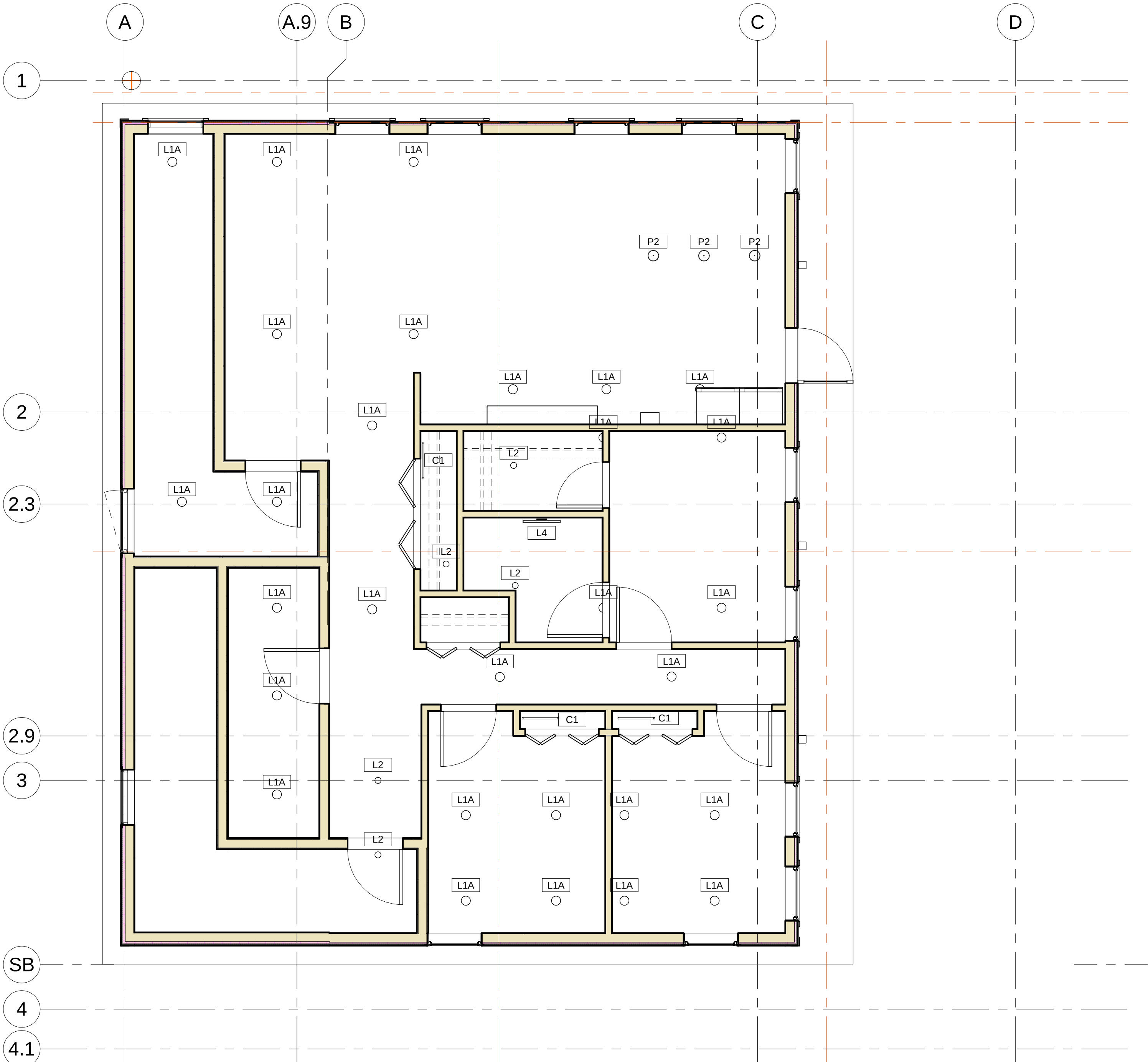
2 Stair Tower Section - Transverse
1/4" = 1'-0"





02 - Second
1/4" = 1'-0"





1 RCP - Third Floor
1/4" = 1'-0"



Jimmy Dealaman <jdealaman@portlandmaine.gov>

26 E. Oxford Street - Traffic Comments

Tom Errico <thomas.errico@tylin.com>

Thu, Apr 7, 2022 at 3:23 PM

To: James Dealaman <jdealaman@portlandmaine.gov>

Hi Jimmy – the applicant has provided some information based upon our request to document the adequacy of the site layout for acceptable vehicle turn maneuvering into and out of the proposed parking spaces. The information provided by the applicant illustrates a generic vehicle path template and does not adequately provide information to determine the feasibility of vehicle movements into and out of the proposed parking spaces. As requested previously, the applicant shall provide auto-turn diagrams that depict vehicle movements into and out of all parking spaces.

If you have any questions, please contact me.

Best regards,

Tom Errico, PE

NE TRAFFIC ENGINEERING DIRECTOR

T +1 207.347.4354

M +1 207.400.0719

E thomas.errico@tylin.com

TYLin

12 Northbrook Drive Building A, Suite One
Falmouth, ME 04105, United States

[TYLin.com](https://www.tylin.com)





Jimmy Dealaman <jdealaman@portlandmaine.gov>

Oxford St Sidewalks

Lauren Andersen <landersen@portlandmaine.gov>
To: Jimmy Dealaman <jdealaman@portlandmaine.gov>
Cc: Jennifer Ladd <jwl@portlandmaine.gov>

Tue, Jan 18, 2022 at 10:00 AM

Hey Jimmy,

Yes - the sidewalk material should cross the driveway apron and be accessible (2% max cross slope). I've attached another driveway detail that shows the accessible path of travel across the driveway.

This is a brick district however because the adjacent sidewalks are concrete I think it makes sense to keep this area consistent. The material policy states:

Partial replacement:

The Department of Public Works may approve a deviation from the sidewalk material policy to match existing sidewalks in cases where:

1. A substantial portion of sidewalks adjacent to and in the area surrounding the portion to be constructed or disturbed are of a material other than that designated on the Sidewalk Material map, and:
 - a. Existing sidewalks on the affected street frontage, other than those in the area to be disturbed, are in sound conditions, and
 - b. Less than 50% of the existing sidewalk on the affected block is to be disturbed

I think we meet this criteria and it makes sense to keep this area consistently concrete.

Please let me know if you have any questions or concerns. Thanks!

[Quoted text hidden]

2 attachments

 **Figure_I_11C_ReinforcedConcreteSidewalk.pdf**
41K

 **Final Detail Package - 2021 CIP 12.pdf**
40K



Jimmy Dealaman <jdealaman@portlandmaine.gov>

26 E. Oxford Street - Additional Comments

Jeff Tarling <jst@portlandmaine.gov>

Fri, Mar 25, 2022 at 12:59 PM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Hi Jimmy -

This looks OK, we can mention that evergreen trees like Arborvitae are measured in height vs caliper or thickness of the trunk.

We would ask for Arborvitae in the 5-6' range to better establish than, say asking for the larger 7-8' range which often struggle if not maintained and watered for a few years.

Jeff

[Quoted text hidden]



Jimmy Dealaman <jdealaman@portlandmaine.gov>

25 East Oxford Street

Lauren Swett <lswett@woodardcurran.com>
To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Thu, Apr 7, 2022 at 1:12 PM

Hi Jimmy,

I've taken a look at their response to comments and updated plans. They have provided some description of the roof redesign, and they reference an architectural plan for this. What they are proposing is fine, but the final grading and drainage plan should show the location of the downspout, and there should be stabilization on the ground surface where the downspout discharges to the swale – this could be something like crushed stone or rip rap or some kind of splash block. Essentially, the design should ensure that the roof drainage will not result in erosion at the discharge location.

As you note, their comment on discharge of stormwater is a bit at odds. As long as they provide some sort of stabilization at the discharge location, the swale will manage the stormwater. They don't need to meet the Flooding Standard with this project, but they can't negatively impact their neighbors, and this system should manage that. One way they could confirm this is to add the swale to their HydroCAD model – that would definitely shows that they are reducing flow.

They also will need to show their erosion and sedimentation control measures on their plans – I think that was a prior comment, but I'm not sure it was shared with them. They should

Let me know if you have any additional questions.

Thanks,

Lauren

[Quoted text hidden]

[Quoted text hidden]

[Quoted text hidden]

[Quoted text hidden]

[Quoted text hidden]

[Quoted text hidden]

--

Jimmy Dealaman

Planner

City of Portland

Planning and Urban Development Department

[389 Congress Street, 4th Floor](#)

Portland, Maine 04101

(207) 874-8718

jdealaman@portlandmaine.gov

www.portlandmaine.gov



--

Jimmy Dealaman

Planner

City of Portland

Planning and Urban Development Department

[389 Congress Street, 4th Floor](#)

Portland, Maine 04101

(207) 874-8718

jdealaman@portlandmaine.gov

www.portlandmaine.gov



Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

Memorandum

Planning and Urban Development Department



To: Chair Stanley & Members of the Planning Board
From: Jimmy Dealaman, Planner
Date: April 8, 2022
Re: New Six Unit Apartment Building
Project ID: PL-001837-2021
CBL: 013 D002
Meeting Date: April 12, 2022

I. INTRODUCTION

26 Oxford, LLC has submitted a Major Site Plan application to facilitate the development of a four-story multifamily residential development including six new residential units totaling approximately 8,750 square feet at 26 E. Oxford Street in the East Bayside neighborhood. This application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code Site Plan Standards, Section 14.1.

The Planning and Urban Development Department mailed 156 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the April 1st and April 2nd, 2022 editions of the *Portland Press Herald*.

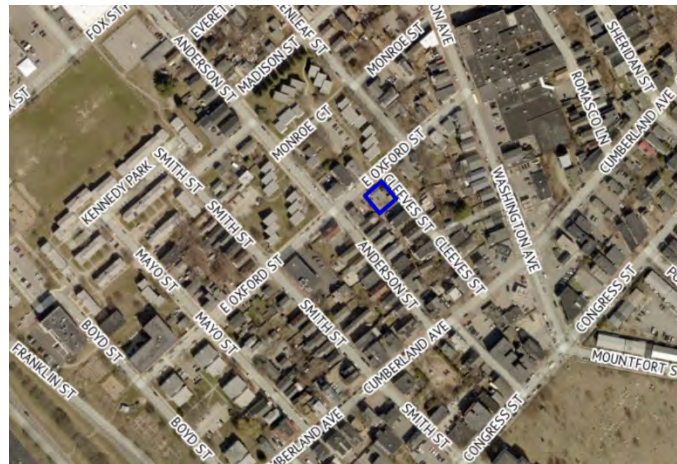


Figure 1 – Aerial View of Site Outlined in Blue

Owner/Applicant: 26 Oxford LLC (Ray Chang)
Applicant: Trillium Engineering; Paul Designs Project, PLLC
Representatives:

II. REQUIRED REVIEWS

<i>Review</i>	<i>Applicable Standards</i>
Site Plan	Section 14.6
Design Review	City of Portland Design Manual Section (k) Small Residential Lot Development Located in the R-6 Zone; Appendix 7 R-6 Infill Development Design Principles & Standards

<i>Waiver Requests</i>	<i>Applicable Standards</i>
Request: To allow for two driveways versus the required one driveway	Technical Manual, Section 1.7.1 No more than one (1) driveway shall be permitted for residential development with nine (9) parking spaces or less

Request: To reduce drive aisle width from 24 feet to 15 feet	Technical Manual, Section 1.14.3.: Parking lot layout shall provide a minimum drive aisle of 24 feet.
Request: To allow for concrete sidewalk and driveway apron versus the required brick material type	Technical Manual, Section 1.8.2 The type of sidewalk and driveway apron material shall consult the City's Sidewalk Materials Policy indicated in the Appendices. The Technical Manual Appendices indicates the property is within brick sidewalk district.
Request: To allow for overhead utility lines instead of providing an underground electrical service	Land Use Code Sec. 14.6.3.C.2 Electrical service shall be underground unless it is determined to be unfeasible due to extreme cost, the need to retrofit properties not owned by the applicant or complexity of revising existing overhead facilities.

III. PROJECT DATA

Existing Zoning	R-6 Residential Zone
Property Size	4,720 SF
Existing Use	Two-Family Residential
Proposed Use	Multifamily Residential

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	1,834 SF	2,500 SF	+666 SF
Building Floor Area	4,655 SF	8,750 SF	+4,095 SF
Impervious Surface Area	2,573 SF	2,832 SF	+259 SF
Parking Spaces	2 spaces	6 spaces	+4 spaces
Bicycle Parking Spaces	0	2 spaces	+2 spaces



Figure 2 – Existing Site Outlined in Blue

IV. EXISTING CONDITIONS AND SURROUNDING AREA

The property at 26 East Oxford Street (CBL 013 D002) is a corner lot on a block bounded by Cleve Street, Cumberland Avenue, Anderson Street, and East Oxford Street. and with a primary frontage along East Oxford Street located in the East Bayside neighborhood. The property is proximate to several priority

corridors, the nearest of which runs along Washington Avenue which is roughly a two-minute walk from the site and offers a mix of commercial uses, as well as METRO bus routes 7, B, 9A, and 9B, located to the east of the site. The property is located to the north of Peppermint Park, a small pocket park containing a playground on Cumberland Avenue, as well as Kennedy Park (i.e. 'Fox Field') a recreation and open space offering playground, basketball courts, and futsal court amenities to the west. In October 2020, the Planning Department reviewed and approved the application for the now installed futsal (hard surface soccer) court at Kennedy Park (PL-001201-2020) which included a permeable paving walk boundary and was Portland's first futsal court.

The property contains an existing two-family home (1,834 square feet) which was built in approximately 1910 which includes two driveways on either end of the building. The site's surrounding context is primarily comprised of residential uses, including single-family and multifamily buildings that range between two and four stories.



Figure 3 – Street View of Existing Building Facing Northeast

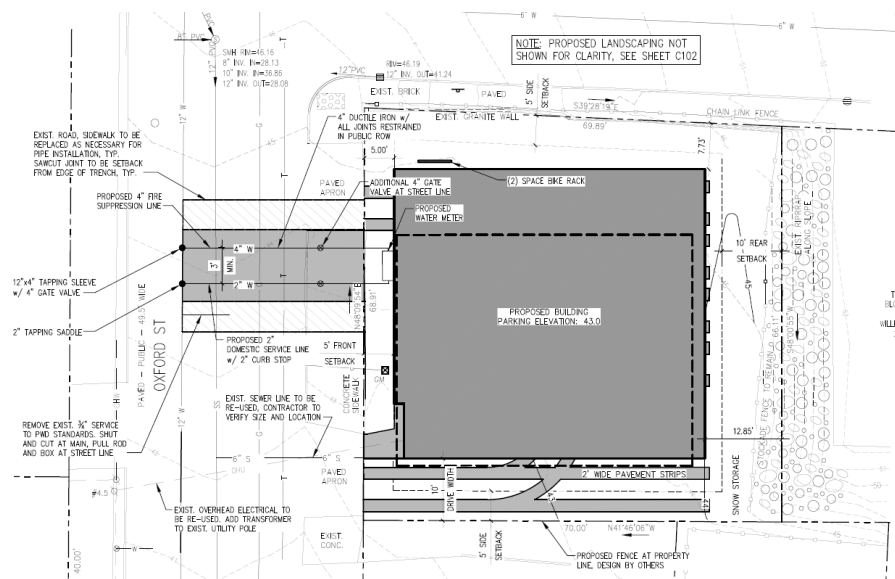


Figure 4 – Proposed Site Plan

V. PROPOSED DEVELOPMENT

The applicant proposes to demolish the existing two-family home at 26 E. Oxford Street and construct a four-story six unit residential building containing one 1-bedroom, four 2-bedroom, and one 3-bedroom rental units totaling 8,750 square feet of floor area. The project includes providing covered parking areas at the ground level accessed from two existing curb cuts. The north driveway leads directly into one handicap accessible parking space and the south driveway connecting to one outdoor space and four indoor spaces for a total of six parking spaces on site. The proposed development would have a front street wall height of 40 feet, with the portions of the building stepped back from the side and rear of the property lines measuring at 29 feet tall, with the latter required to meet the 15-foot rear setback. The stepped back portion along the side yard property line off of Cleeve Street includes an elevated deck benefiting the third floor unit.



Figure 5 – Perspective Rendering 1

The project includes one honey locust tree planted in the public right of way, five arborvitae trees planted within the side yard and one in the rear yard, as well as six bayberry bushes along the frontage and seven in the rear yard.

VI. RIGHT, TITLE, & INTEREST

The owner of the property is 26 Oxford LLC. The applicant has provided a copy of a warranty deed recorded at the Cumberland County Registry of Deeds (Book 35605 Page 186), which demonstrates their right, title and interest in the property (Attachment C).

VII. FINANCIAL & TECHNICAL CAPACITY

The applicant has submitted a letter by the owner's financial institution stating the owner's financial capability to undertake the project (Attachment E).

The applicant's representative has submitted a Letter of Technical Capacity stating the development team's experience in design and permitting in the State of Maine and ability to undertake the project (Attachment F).

VIII. ZONING ANALYSIS

The parcel is located in the R-6 Residential zone. R-6 is a high-density zone located on peninsula characterized primarily by multi-family dwellings, which encourages new housing consistent with the compact lot development pattern. The zone is bounded by the B-2b Community Business zone to the east, the India Street Form-Based Code and B-3 Downtown Business zones to the south, the B-7 Mixed Development zone to the west, as well as a collection of neighborhood business, urban commercial, and low impact industrial zones to the north (Figure 5).

The proposed multi-family dwelling use is a permitted use in the R-6 zone (Land Use Code Table 6-A). Staff analyzed the proposal and found that all relevant dimensional standards including minimum lot size, setbacks, and frontage requirements set forth within the R-6 Zone of the Land Use Code are being met which are summarized below:

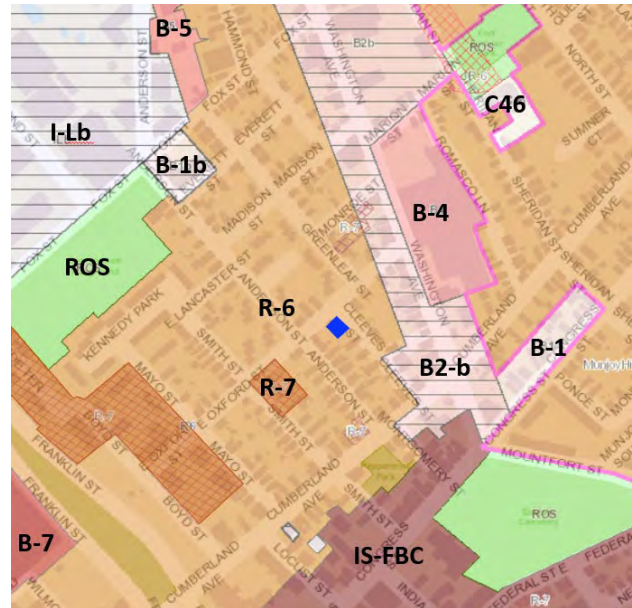


Figure 6 – Zoning Map with Subject Parcel in Blue

A. DIMENSIONAL AND USE REQUIREMENTS

<i>R-6 Residential Zone</i>	<i>Permitted</i>	<i>Proposed</i>
Lot area per dwelling unit (min)	725 SF	786.7 SF
Street frontage (min)	20 ft.	70 ft.
Lot width (min)	20 ft.	70 ft.
Front setback	5 ft.	5 ft.
Rear setback	10 ft.	12.85 ft
Minimum side setback (right)	5 ft.	7.73 ft
Minimum side setback (left)	None (on side street)	10.51 ft.
Rear stepback (above 35 ft. when property line abuts a residential zone)	15 ft.	15 ft.
Side stepback	N/A	19.73 ft.
Structure height (max.)	45 ft.	40 ft.
Lot coverage (max.)	60%	60%
Landscaped open space ratio (min.)	20%	40%
Width of garage opening on front façade (max.)	9 ft. or 40% of the front facade, whichever is greater, and in no case more than 20 ft.	26.5% (13 foot wide garage opening / 49 feet front façade)

IX. SITE PLAN STANDARDS (Section 14.6)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's Site Plan Ordinance, Section 14.6. As of the writing of this memo staff are still awaiting additional submissions from the applicant. Staff comments are below:

1. Transportation Standards (Section 14.6.1)

A. Impact on surrounding street systems; Access and circulation;

The City's consulting traffic engineer continues to review the project with the standards to ensure provision of safe and reasonable access and internal circulation for all users of the site. The site proposes one handicap accessible vehicle parking space accessed from the 10-foot wide driveway to the north benefiting the ground level unit, and providing primary vehicle access/egress via a 10-foot two-way driveway located at the south of the site accommodating four indoor parking spaces and one additional outdoor space.

Technical Manual Sections 1.7.1 & 1.14.3

– Driveway Design and Parking Lot

Layout

To facilitate the plan, the applicant requests waivers to Technical Manual Section 1.7.1 and Section 1.14.3 which permits no more than one driveway for residential development with nine parking spaces or less, and minimum of a 24 foot drive aisle width in parking areas, respectively.

The applicant's ground level plan (Figure 6) shows a vehicle turning radius of 24'-0" and 14'-5" along the south driveway.

However, in order to confirm the adequacy of the site layout for acceptable vehicle turning movement into and out of the proposed spaces, the City's consulting traffic engineer has requested the applicant provide an Autoturn analysis/diagram that depicts vehicle movements into parking spaces, which has not yet been received (Attachment 1).

At this time **staff are seeking to introduce the Board to these waiver requests for general questions and feedback.**

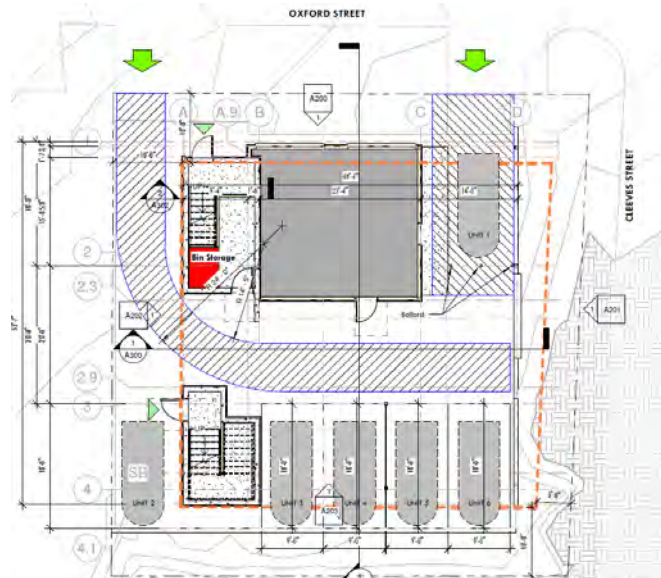


Figure 6 – Proposed Parking and Access at Ground Level

Technical Manual Section 1.8.2 – Sidewalks and Driveway Aprons

In general, staff find the application provides for reasonable pedestrian access and circulation. The applicant's plan accommodates pedestrian circulation by way of making updates to the existing sidewalk and installing new concrete sidewalk. Given that the site is located within a brick sidewalk district, according to Section 1.8.2 of the City's Technical Manual, the applicant requests a waiver to the City's Sidewalk Materials Policy to keep the sidewalk consistent with those in the surrounding area which are concrete. Public Works engineers have reviewed the application and support the

proposed concrete material in order to keep the material consistent in the area Attachment 2).

Planning Staff are seeking the Board's feedback on this waiver request.

B. Public transit access

All residential development consisting of 20 or more dwelling units shall provide a transit shelter adjacent to or within the public right-of-way along its frontage when the development is proposed along an existing public transit route and the nearest transit shelter on the route is more than $\frac{1}{4}$ mile from the site. The proposed residential development is under 20 dwelling units therefore this standard is not applicable.

C. Parking

Under Table 19-A of the City's Land Use Code, multifamily units are required to provide one parking space per dwelling unit. In the R-6 zone no off-street parking is required for the first three dwelling units (Table 19-B Exceptions to off-street parking minimums). The application includes providing six parking spaces onsite (one per unit).

It should be noted that the site is located within $\frac{1}{4}$ of fixed route transit service and therefore no off-street parking is required (Table 19-B) should the applicant choose to take advantage of this exception.

The development is required to provide two bicycle parking spaces for every five units proposed. The applicant has provided the required two bicycle parking spaces which are located along the north end of the property toward the street frontages.

D. Transportation demand management (TDM)

Not required. The application proposes a total of 8,750 square feet of residential floor area, which is less than the review criteria threshold that would require a TDM plan.

2. Environmental Quality Standards (Section 14.6.2)

A. Preservation of significant natural features

The existing site is a developed parcel located in an urban environment. The applicant has indicated that there are no significant natural features on site.

B. Landscape preservation

The property includes existing landscaping onsite located along Cleeve Street, which includes a white pine and fir tree. The proposal calls for removing the existing vegetation, including removing invasive Asiatic bittersweet vine, along the north property line and replacing it with new landscaping (See Section C below) in the hope that the invasive landscaping will be eliminated. Due to the fact that the existing trees exist within the side property line that does not have a setback requirement (due to being on a side street), no preservation within the side yard is required.

C. Site landscaping and buffers

Under Section 4.6.1 of the City's Technical Manual multi-family residential projects are required to provide one tree per unit. The application proposes six units requiring six street trees be provided. The application proposes planting one honey locust street tree within the front sidewalk and due to the existing utilities preventing planting as well as a limited street frontage of 70 feet, the applicant proposes planting five additional trees onsite along Cleeve Street within 20 feet of the property line to meet the requirement.

In total to meet the landscaping requirements of the site the applicant has provided an evergreen vegetated buffer along the rear property line to buffer the development from surrounding development, as well as shrubs throughout the site for a total of 13 bayberry shrubs, six arborvitae trees, and one honey locust tree.

The City Arborist has reviewed the applicant's plan and finds all review comments have been addressed (Attachment 5).

D. Water quality/storm water management/erosion control

The project proposes a stormwater system which runs stormwater off the roof and discharges in the rear of the site through the downspout system (Plans 22 & 24), which discharges to a swale onsite.

The City's consulting stormwater engineer has reviewed the applicant's drainage plans and stormwater management report with the applicable stormwater standards and finds that the project does not trigger any of the thresholds requiring stormwater treatment for redevelopment projects under MaineDEP Chapter 500 due to proposing less than 5,000 SF of non-roof redeveloped impervious area, with 332 square feet proposed (Attachment 6). The stormwater consultant has recently provided additional review comments to the applicant requesting that the plans show the location of the downspout with ground surface stabilization in order to prevent erosion. The plans propose managing the site's stormwater onsite with a swale but the City's consulting engineer recommends adding the swale into the project's HydroCAD model to confirm that the site will not impact adjacent properties with resulting stormwater flows. More information will be forthcoming at the next public meeting once these materials are received.

3. Public Infrastructure and Community Safety Standards (Section 14.6.3)

A. Consistency with City Master Plans

In addition to fostering development within one of the City's priority nodes and close proximity to priority corridors, the proposed project is in keeping with the stated goals of *Portland Plan 2030* regarding housing and the policy of creating complete neighborhoods. The project takes advantage of an on peninsula, location near transit and walkable services.

Livable City: Housing – local goals met by this project:

- 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.

B. Public safety and fire prevention

Planning Staff have reviewed the proposal with the City's Fire Marshal and find that all public safety and fire prevention concerns have been addressed.

C. Availability and capacity of public utilities

The applicant has provided an ability to serve letter from the Portland Water District (PWD) (Attachment H) which demonstrated a need for the existing domestic water service line to be

increased in size to 2 inches and the addition of a 4-inch sprinkler supply to serve the building sprinkler system.

The applicant has proposed upgrading the existing utility lines on their site plan. Public Works continues to review the proposed utilities and more information will be forthcoming at the next public meeting.

Land Use Code Section 14.6.3.2C – Underground Utilities

The proposal includes providing above ground electrical utilities to serve the electric needs of the project. However, Section 14.6.3.2.C of the City's Land Use Code requires that *"Electrical service shall be underground unless otherwise specified for industrial uses, or if it is determined to be unfeasible due to extreme cost, the need to retrofit properties not owned by the applicant or complexity of revising existing overhead facilities."*

As a basis for the submitted waiver request, the applicant has submitted additional information (Attachment L) from their contractor which indicates that approximate cost of installing underground electrical service is between \$24,000 to \$34,000, and states that there are challenges with attempting to budget for installing an underground electrical service due to the likelihood of unearthing abandoned pipes and multiple utility connections under the Oxford Street block. In addition to obtaining this cost estimate, the applicant has reported that the surrounding neighborhood uses overhead lines, stating that because there is no existing underground electrical connection on this block or for a minimum of 1 block each direction on the street, the installation of overhead electrical lines would not disrupt the existing neighborhood aesthetic.

Staff have reviewed the proposal and confirm the applicant's assessment is accurate in that the existing neighborhood condition is made up of overhead utility lines. Staff acknowledge the additional information provided that explains the potential for complications during excavation in a dense urban setting which may translate into unforeseen complications or unknown project costs which may result. Planning staff, in coordination with the Department of Public Works, are continuing to evaluate the waiver request and have yet to make a determination as to the suitability of a waiver in this case. **Staff are requesting feedback from the Planning Board if a waiver to provide overhead electrical service is supported.**

4. Site Design Standards (Section 14.6.4)

A. Massing, ventilation, and wind impact

The proposed four-story multifamily structure meets the zoning dimensional requirements and the proposed height is consistent with the surrounding built context. No ventilation or wind impacts are anticipated.

B. Shadows

Not applicable. The project is not adjacent to publicly accessible open space therefore the standards of this section are not relevant.

C. Snow and ice loading

The proposal directs stormwater off the roof and discharges in the rear of the site through the downspout system. The applicant has shown designated snow storage areas on their plans (Plan 4). The development has been designed to prevent significant amounts of ice and snow from loading or falling onto adjacent properties or public ways. Staff have no concerns that the project has demonstrated meeting the standards of this section.

D. View corridors

There are no designated view corridors within the project vicinity; this standard does not apply.

E. Historic resources

The proposed development is not located in or within 100 feet of a historic district or historic landmark; this standard does not apply.

F. Exterior lighting

The applicant has recently submitted a lighting plan (Plan 47) and lighting cut sheets proposed new site lighting. Staff continue to review these materials to ensure the plan is not exceeding allowable lighting levels, etc., and more information will be forthcoming at the next public meeting.

G. Noise and vibration

No adverse impacts related to noise and vibration are anticipated as mechanical equipment is either screened and located away from residential properties. The applicant has stated that the HVAC system will meet the applicable state and federal emissions requirements and heat pump condensers and other HVAC equipment will operate from a ground level mechanical room and hung on the backside of the building approximately 13 feet away from the rear property line away from abutters. Additionally, there are arborvitae trees proposed along the rear property line which are 5 – 6 feet tall to provide some screening at ground level.

H. Signage and wayfinding

No wayfinding signage is currently proposed, and the only signage shown on plans is related to vehicular access.

I. Zoning-related design standards

The proposal is subject to meeting the applicable R-6 Infill Development design standards under Section (k) of the City's Design Manual. The applicant has submitted elevations and renderings (Plan 48) which have been recently revised to address staff preliminary review comments (Attachment 2).

The applicant's revised plans (Plans 16 & 29-32) were reviewed in March by a design review team made up of three Planning staff which found that the design meets the applicable design standards (Attachment 3). The applicant has since provided additional information regarding the future vertical barrier at parapet wall intended for a future deck, and staff believe the barrier is appropriate to compliment the building design.

In particular, some of the key changes the applicant made to address the design standards include the following:

- 1) Eliminating the previously submitted butterfly roof-design and proposing a flat roof expressed by a continuous cornice line to be consistent with typical multifamily buildings above 35 feet in neighborhood
- 2) Successfully integrating landscaping within the front setback to provide a transition space
- 3) Adjusting windows on ground level unit for 48" sill height to create visual privacy of occupants
- 4) Clarifying the materiality which includes composite high density cellular acrylic form Wolf Siding with a mix of 7" and 4" profiles to color the massing of the facades, including: Morning Mist, Graphite and Baltic Blue as selected colors



Figure 7 – Perspective Rendering 2



Figure 8 – West Elevation (Building Front)

X. NEIGHBORHOOD MEETING & PUBLIC COMMENT

The applicant's neighborhood meeting was held on January 13, 2022 and the required neighborhood meeting documentation has been submitted (Attachment I). Five members of the public were in attendance. The meeting included questions asking about the proposed design materials and landscaping. Discussion and feedback received by attendees included concerns about the amount of parking and waste disposal. Suggestions received included seeking upgrades to city infrastructure and supporting tree planting in the right of way area.

At the time of writing this report no written public comment has been received for this project.

XI. NEXT STEPS

At this time staff are specifically seeking Board feedback on the three waivers and design feedback.

Following the workshop, the application will:

1. Continue to address staff and Planning Board review comments
2. Prepare final plan submission
3. Schedule and hold a Planning Board public hearing

XII. ATTACHMENTS**REPORT ATTACHMENTS**

1. Comments from Consulting Traffic Engineer (dated 4.8.2022)
2. Design Comments (dated 1.19.2021)
3. Design Comments (dated 3.2.2022)
4. Comments from Public Works Engineer (dated 1.18.2022)
5. Comments from City Arborist (dated 3.25.2022)
6. Comments from Consulting Civil Engineer (dated 4.7.2022)

APPLICANT'S SUBMITTAL

- A. Project Narrative
- B. Application Checklist
- C. Deed
- D. Agent Authorization
- E. Financial Capacity
- F. Technical Capacity
- G. Zoning Table
- H. Ability to Serve Letter
- I. Neighborhood Meeting Documentation
- J. Response to Staff Comments (dated 2.22.2022)
- K. Cost Estimate of Electrical Service
- L. Response to Staff Comments (dated 4.6.2022)

PLANS

- Plan 1. Survey
- Plan 2. Cover Sheet - Civil Plans
- Plan 3. Existing Site Plan
- Plan 4. Site Plan
- Plan 5. Landscaping Plan
- Plan 6. Construction Management Plan
- Plan 7. Site Details
- Plan 8. Erosion Control Details
- Plan 9. Foundation Plan
- Plan 10. Ground Level Vehicle Access Plan
- Plan 11. Life Safety Plans
- Plan 12. First Floor Framing
- Plan 13. 2nd and 3rd Floor Framing
- Plan 14. Roof Framing
- Plan 15. Stair
- Plan 16. Coversheet - Architectural Plans
- Plan 17. Code Information
- Plan 18. General Notes
- Plan 19. Ground Floor Plan
- Plan 20. First Floor Plan
- Plan 21. Second Floor Plan
- Plan 22. Roof Plan 1
- Plan 23. Third Floor Plan

- Plan 24. Roof Plan 2
- Plan 25. RCP Ground Level
- Plan 26. RCP – Second Floor
- Plan 27. RCP – Third Floor
- Plan 28. RCP – Fourth Floor
- Plan 29. Elevation – Oxford Street
- Plan 30. Elevation Cleaves Street
- Plan 31. Elevation – Side-Garage Entrance
- Plan 32. Elevation – Back
- Plan 33. Building Sections
- Plan 34. Building Sections Cont.
- Plan 35. Stair Tower Sections
- Plan 36. Bathroom Elevations
- Plan 37. Bathroom Elevations Cont
- Plan 38. Kitchen Elevations
- Plan 39. Details
- Plan 40. Details Cont.
- Plan 41. Area Plans
- Plan 42. Schedules 1
- Plan 43. Schedules 2
- Plan 44. Schedules 3
- Plan 45. Floor Finish Plan
- Plan 46. Room and Finish Schedule
- Plan 47. Lighting Plan
- Plan 48. Originally Submitted Rendering and Elevations

CITY PLANNING

- Please clean up the drawing set by turning off layers that are not needed for the purposes of a site layout plan (i.e., utilities, for example), using shaders, hatching, and colors where needed, and other visual measures to improve the legibility of the drawing set. An example of a recent approved site plan is attached.
- Please ensure that the plan set is fully dimensioned, including aisle widths, curb cut width, and parking space widths.
- How is bin storage to be screened? Please clarify, and update drawing as needed to show screening.
- A stormwater management narrative does not appear to have been provided in the e-plan package – please provide one
- The ADA ramp at the corner of Cleeve and Oxford does not meet City standards – it is oriented 90 degrees from the radius of the curb. Will you be replacing this?
- Please provide an updated narrative that explains why undergrounding of electric power is not viable for this project, including numeric figures justifying any hardship or rationale for not placing electric below grade, given that the street will already need to be opened for utility work to facilitate this project. Have there been any updates on this front since February of this year?
- A painted crosswalk on Oxford will be needed – please update plan accordingly
- As per the Consulting Traffic Engineer's comments below, please submit the following:
 - Updated Waiver Table to include
 - Waiver from TM Sec 1.7.2.7, Location and spacing of driveways
 - Waiver for TM Sec 1.14.3 that references the minimum width of 15.73, rather than 14 foot 9 inches (which is what it contains currently)
 - Provide the specific Autoturn design vehicle number designation for the design vehicle used to model entry into the parking lot
 - Update site plan to provide dimension for driveway width, per Consulting Traffic Engineer comments
- As per the Consulting Stormwater Engineer's comments below, please submit the following:
 - Update all relevant plan set drawings to include rip rap apron and provide detail drawing for rip rap apron
 - Update drawings to include oil-water separator in ground floor parking lot and provide information on drainage scheme for this area
- As per the Urban Designer's comments, please update elevations to include requisite material changes on elevations

TRANSPORTATION

Consulting Traffic Engineer

- The parking lot aisle width at its narrowest point is 15.73 feet wide. In support of a waiver from the City's Technical Standards, the applicant has provided vehicle turning templates. According to the information provided vehicles can maneuver and back out of the site onto East Oxford Street. The applicant should provide the vehicle dimension details used in the turning template analysis. Assuming the design vehicle used in the analysis is acceptable, I do support a waiver from the City's Technical standards. This is based on the fact that East Oxford Street is a local street, with low traffic volumes and vehicle speeds.
- The site plan should provide a dimension for the driveway width.
- The project driveway location does not meet City Technical standards for corner clearance. Given that the project will be removing an existing driveway (going from two to one), and traffic volumes generated by the project and on East Oxford Street are low, I support a waiver from the City's Technical standards.

WATER QUALITY, STORMWATER & INFRASTRUCTURE

Consulting Stormwater Engineer

- With their prior submission, the applicant has included a model to evaluate the Flooding Standard. They did see a slight increase in flow, but I am in agreement that it will be minor, as the total flow values are very small. There was a request that they confirm that stormwater will not impact their neighbors, and the applicant included a statement noting that. I would agree, they just need to make sure they install the rip rap apron at their roof drain downspout. This is shown on the site plan C101, but is not on any of the other plans (i.e. landscaping plan). A detail for the rip rap apron should be provided.
- The ground level plan does not show any drainage provided for the proposed interior parking. That area should not be allowed to drain to the outside of the building as stormwater, and should be collected by a floor drain to an oil water separator that connects to the sewer.

URBAN DESIGN

- Please see the attached Design Review memo dated 6/21/22. Staff finds that the project meets the design standards with the exception of Standard D-2, Fenestration.

From: [Jennifer Ladd](#)
To: [James Rather](#)
Subject: 26 E Oxford St - Sidewalk Material
Date: Thursday, July 7, 2022 3:13:36 PM
Attachments: [image.png](#)

Hi James,

Regarding the project at 26 E Oxford Street, I offer the following comments with regard to sidewalk material:

- The City's Sidewalk Material Policy allows DPW to make a material exception when surrounding sidewalks are in a different material (concrete, in this case) and less than 50% of the block is to be disturbed. (Excerpt from Sidewalk Material Policy referenced below)
- Additionally, DPW has had internal conversations about submitting proposed changes to council for parts of the City's sidewalk material policy. More to come on that as we move out of construction season and have more time to concentrate on that this fall.

Sidewalk Material

The Sidewalk Material map identifies three sidewalk materials, brick, concrete, and asphalt, specific to each city street. Within the City's historic districts, only brick shall be used.

Note that the following exceptions may apply:

- *Exception to brick sidewalks:* On sidewalks, or sections of sidewalks, where the slope exceeds 10% percent, the Department of Public Works may approve the use of alternative material in lieu of brick if such alternative material would provide a more slip resistant surface to improve pedestrian safety. The alternative material includes concrete for sidewalks outside of the designated historic districts, and Pinehall/Pathway Lachance item #193623 Brick Pavers, for sidewalks within all designated historic districts.
- *Partial replacement:* The Department of Public Works may approve a deviation from the sidewalk material policy to match existing sidewalks in cases where:
 1. A substantial portion of sidewalks adjacent to and in the area surround the portion to be constructed or disturbed are of a material other than that designated on the Sidewalk Material map, and:
 - a. Existing sidewalks on the affected street frontage, other than those in the area to be disturbed, are in sound conditions, and
 - b. Less than 50% of the existing sidewalk on the affected block is to be disturbed; or
 2. Other unusual circumstances exist, subject to the approval of the City Manager.

Jennifer Ladd

Senior Transportation Engineer
City of Portland
Department of Public Works - Engineering
212 Canco Road
Portland, Maine 04103
(207) 874-8894
jwl@portlandmaine.gov
(she/her/hers)



Design Review

Planning and Urban Development Department



Subject: 26 East Oxford Street
Zone: R-6
Date of July 7, 2022
Review: Design Review
Reviewer(s): Sean King (Urban Designer), James Rather (Development Review Service Manager), Kevin Kraft (Deputy Director)
Project ID: PL-001837-2021

I. INTRODUCTION

The project was reviewed against the R6 Residential Zone Standards (Appendix 7 of the Design Manual).

SMALL RESIDENTIAL LOT DEVELOPMENT LOCATED IN THE R-6 ZONE

(1) STANDARDS. Small residential lot development located in the R-6 zone on lots of ten thousand (10,000) square feet or less shall provide a high degree of architectural quality and compatibility with the surrounding neighborhood as demonstrated by compliance with the principles and standards of the R-6 Infill Development Principles and Standards, promulgated by the Planning Board and contained in Appendix 7 of this manual. Any proposal required to obtain a certificate of appropriateness under Portland's historic preservation ordinance is exempt from the R-6 design review standard.

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

PRINCIPLE A - Overall Context. A building design shall contribute to and be compatible with the predominant character-defining architectural features of the neighborhood.

STANDARD A-1 - Scale and Form:

Scale and form relates to nearby residential structures that contribute to and are compatible with the predominant residential neighborhood character.

STANDARD A-2 - Composition of Principal Facades:

Composition of the new building façade, including the projection of bays along with the rhythm, size, orientation and proportion of window and door openings is compatible of neighborhood.

STANDARD A-3 - Relationship to Street:

The building placement is consistent with the spacing and rhythm of the residential fabric. The building's main entry is oriented toward the street and is slightly setback to allow for a stoop as primary residential entry.

PRINCIPLE B - Massing – The massing of the building reflects and reinforces the traditional building character of the neighborhood through a well composed form, shape and volume. - Met

STANDARD B-1 - Massing - Met

The building's massing is appropriate in relationship to size, scale and shape within the existing neighborhood.

STANDARD B-2 - Roof Forms – Met

Roof form is compatible with the predominant character-defining architectural features of the neighborhood with multi-family above 35 feet utilize a flat roof form expressed by a continuous cornice line.

STANDARD B-3 - Main Roofs and Subsidiary Roofs – **Met**

The building main roof form is compatible with subsidiary roof forms appropriately identified as flat roof that are parallel and perpendicular to the street. **The future deck includes a perimeter cable system guardrail at 42" height that complement the building design, attachment to roof parapet wall or other means per building contractor.**

STANDARD B-4 - Roof Pitch – Met

The proposed roof form for multi-family above 35 feet is a flat roof form expressed by a continuous cornice line.

STANDARD B-5 - Façade Articulation – Met

Project proposes recessed entry with a canopy.

STANDARD B-6 - Garages

A garage is not proposed at the street-facing façade.

PRINCIPLE C - Orientation to the Street – The building façade shall reinforce a sense of the public realm of the sidewalk while providing a sense of transition into the private realm of the home. - Met

STANDARD C-1 – Entrances – Met

Main entrance is oriented toward the street and articulated with recessed entry and canopy.

STANDARD C-2 - Visual Privacy – Met

Visual privacy of occupants on ground floor dwelling includes window sill height at least 48" above adjoining sidewalk grade.

STANDARD C-3 - Transition Spaces – Met

A five (5) foot front setback is proposed as buffer with landscaping to delineate sidewalk from building.

PRINCIPLE D - Proportion and Scale – Building proportions must be harmonious and individual building elements shall be human scaled.

STANDARD D-1 – Windows - **Met**

All windows and doorways have a proportional relationship to the overall massing of the building. **Ground floor window type to match upper floors at East Oxford elevation with a proportional relationship to the overall massing of the building.**

STANDARD D-2 – Fenestration – **Met**

Windows and doorways scaled appropriately and meet at least 12% area of fenestration of the total façade area for a corner lot at Cleeves and East Oxford Street. **Staff is supportive of the addition of HSS 5 x 2 steel as a durable screening element, with a proposed 2:1 ratio for material to void space, for the ground level unit and parking area. Staff recommends a 1:1 ratio to increase the material to void space that still allows for ample light and air at the Cleeves Street elevation. While the applicant has selected a color to match Siding C, a blue accent to articulate the window projections as a façade composition element, staff recommends a color to match Siding A, a charcoal tone, to minimize the visual impact at the ground level.**

STANDARD D-3 - Porches

Porch standard does not apply.

PRINCIPLE E – Balance – The building façade elements must create a sense of balance by employing local or overall symmetry and by appropriate alignment of building forms, features and elements.

STANDARD E-1 - Window and Door Height - Met

The majority of window and door head heights align along a common horizontal datum.

STANDARD E-2 - Window and Door Alignment - Met

The majority of windows stack to express a vertical alignment.

STANDARD E-3 – Symmetricality - Met

The primary window composition relates to the floor plan organization with bedrooms and living spaces facing the street.

PRINCIPLE F – Articulation – The design of the building is articulated to create a visually interesting and well composed residential façade. – Met

STANDARD F-1 – Articulation – **Met**

Surface articulation in the building should include detailed consistency on the façade visible from the public right of way through dimensional trim (minimum width of 4”), window reveals, or similar elements appropriate to style of building. Proposed use of composite siding alternative is appropriate for trim and details on the façade for windows facing street. **Cornice depth reduced to minimize roof profile.**

STANDARD F-2 - Window Types - Met

Two window types and sizes are used on the street-facing façade.

STANDARD F-3- Visual Cohesion – Met

Proposed horizontal orientation of composite siding with vertical orientation proposed to articulate entry, which is consistent of clapboard material prevalent within the surrounding neighborhood.

STANDARD F-4- Delineation Between Floors - Met

Delineation between floors is assembled by fenestration pattern set by window alignment in upper floors.

STANDARD F-5 - Porches, etc. - Met

Entryway stoop is architecturally integrated into the overall design of the building.

STANDARD F-6 - Main Entries – Met

The main pedestrian entry is facing East Oxford Street and proposed as modular metal assembly system.

STANDARD F-8 - Articulation - Met

The following features shall be on all facades facing and adjacent to the street:

Eaves and rakes shall have a minimum projection of 6 inches.

All exterior façade trim such as that used for windows, doors, corner boards, and other trim proposed meets the minimum, width of 4 inches except for buildings with masonry exteriors.

If there are off sets in building faces or roof forms, the off sets shall be a minimum of 12 inches.

Pronounced and decorative cornices is appropriate.

Principle G - Materials – Building facades shall utilize appropriate building materials that are harmonious with the character defining materials and architectural features of the neighborhood. Met

STANDARD G-1 – Materials - Met

A proposed composite siding is proposed with a variety of reveal and color to provide a durable and aesthetic façade. **Orientation of siding is appropriate throughout overall building facades.**

STANDARD G-2 - Material and Façade Design - Met

Ground floor is differentiated with a change in material of masonry.

STANDARD G-3 – Chimneys - Met

No chimneys are visible, standard not applicable.

STANDARD G-4 - Window Types - Met

The window types include only two types on the front façade. The predominant character in this context is vertical proportioned windows with one or two types visible from the street.

STANDARD G-5 - Patios and Plazas - Met

Not applicable.

Planning Board Report

Planning and Urban Development Department



Conditional Use Application
1498 Westbrook Street
PL-001974-2022
Stroudwater Food Pantry, Applicant

Submitted to:	Portland Planning Board	Prepared By:	Austen Torres Davis
Public Hearing Date:	July 12, 2022	Date:	July 8, 2022

I. INTRODUCTION

Stroudwater Food Pantry has submitted a Conditional Use application and Minor Site Plan to facilitate the placement of a modular building of approximately 1,900 square feet, at 1498 Westbrook Street, within the Stroudwater neighborhood.

The application is being referred to the Planning Board for compliance with the City of Portland's Land Use Code General Conditional Use Standards, Section 6.5.2. 1498 Westbrook Street is occupied by Stroudwater Christian Church, which operates the Stroudwater Food Pantry. As this application would facilitate the expansion of the current use as a place of assembly, which is a conditional use in the R-2 zone, this site requires a conditional use application. Pursuant to Site Plan review thresholds, the Minor Site Plan application is under review by Planning staff and is not within the scope of the Planning Board's review.



Figure 1. 1498 Westbrook Street Parcel

In anticipation of this Planning Board Public Hearing the Planning and Urban Development Department mailed 96 notices to residences within 500 feet of the subject property. A legal advertisement ran in the July 2, 2022 and July 5, 2022 editions of the *Portland Press Herald*.

Applicant: Doug Horner, Stroudwater Food Pantry

Applicant Team: Doug Horner, Stroudwater Food Pantry

II. PROJECT ACTIONS

Applicant's Proposal	Applicable Standards
General Conditional Use	Land Use Code Sec. 6.5.2

III. PROJECT DATA

SUBJECT	1498 Westbrook Street
Total area of the site	4.73 Acres
Total Disturbed Area	2,405 square feet
Existing Zoning	R-2 and R-3 Residential

Existing Use	Place of Assembly
Proposed Use	Expansion of existing use to accommodate food storage
Impervious Surface Area --Existing --Proposed --Net Change	41,505 square feet 43,910 square feet +2,405 square feet
Building Footprint --Existing --Proposed --Net Change	6,296 square feet 8,200 square feet +1,904 square feet
Building Floor Area --Existing --Proposed --Net Change	6,296 square feet 8,200 square feet +1,904 square feet
Parking Spaces --Existing --Proposed --Net Change	68 65 -3

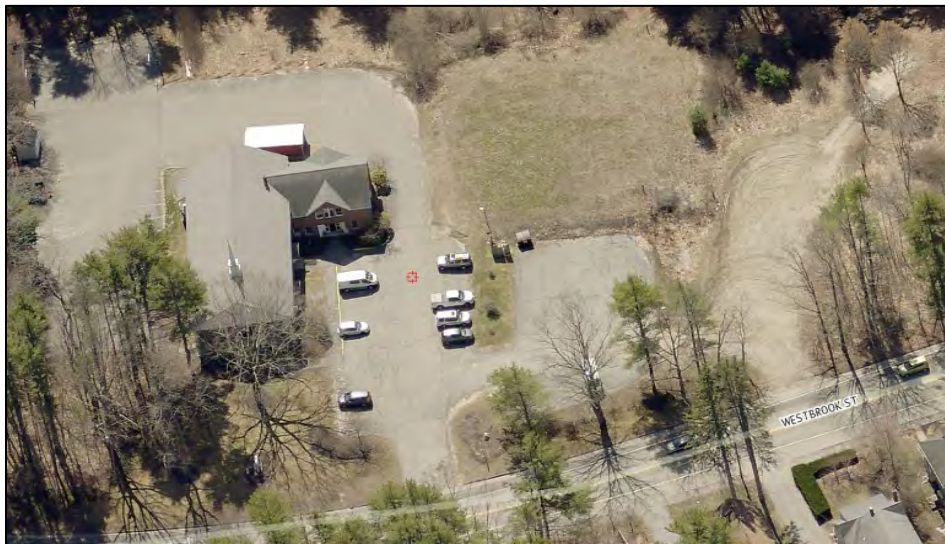


Figure 2. 1498 Westbrook Street, Existing Conditions

IV. BACKGROUND AND EXISTING CONDITIONS

The subject property at 1498 Westbrook Street consists of an approximately 4.73 acre lot, occupied by the Stroudwater Christian Church and associated surface parking. The building was constructed in 1981. The parcel is zoned R-2 and R-3 Residential, though the church structure is entirely within the R-2 zone. The site is northwest of the Stroudwater Historic District, in an area characterized by low-density residential uses.

V. PROPOSED DEVELOPMENT

The applicant proposes to locate a modular building of 1,904 square feet and an attached freezer of 192 square feet on the lot which will be accessed by a stairway and ADA accessible ramp. This modular building would be utilized for food storage with once-per-week active pantry use. This will free up space within the church primary building which is intended to improve programming and accessibility.

The modular building is proposed to be located toward the rear, southeast corner of the lot behind the church structure. The building is not anticipated to be visible from the street and no negative visual impacts are anticipated. The proposal would result in the creation of approximately 850 square feet of new impervious surface in the form of gravel and crushed stone upon which a portion of the modular building would be sited. The rest of the surface upon which the modular building would be located is existing asphalt. No significant impacts to the natural features or vegetation on site are anticipated.

Associated site improvements proposed in connection with the modular building include the addition of one ADA accessible parking space to serve the food pantry. Additionally, a dilapidated fence in the southeast portion of the lot would be removed, replaced, or repaired.

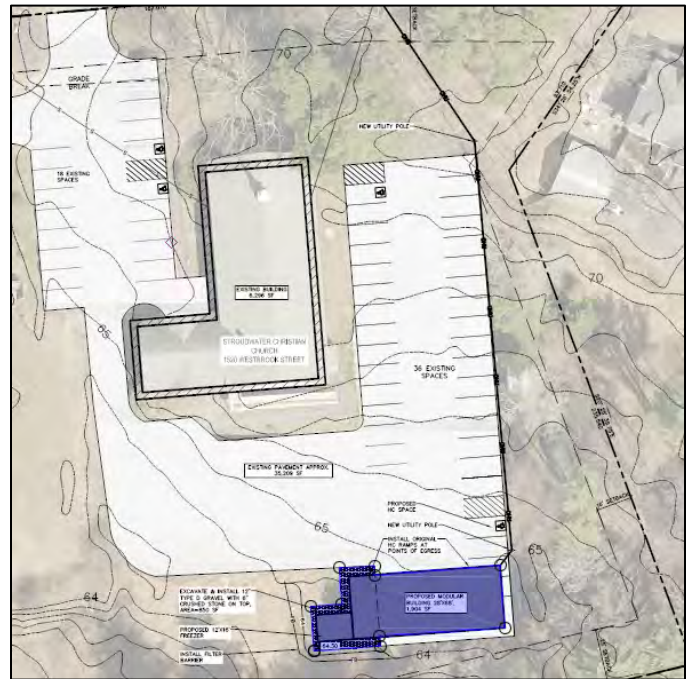


Figure 3. Portion of Site Plan with Development Highlighted



Figure 4. Photo of Modular Building to be Located at 1498 Westbrook Street

VI. RIGHT, TITLE AND INTEREST AND FINANCIAL/TECHNICAL CAPACITY

The owner of the property is Stroudwater Christian Church. The applicant has submitted a Statement of Financial Capacity letter from their financial institution, Northeast Credit Union, as demonstration of their financial capacity (Attachment F). A Statement of Technical Capacity is not required for low impact site development. As such, no Statement of Technical Capacity has been submitted.

VII. ZONING ANALYSIS

A. DIMENSIONAL AND USE REQUIREMENTS

1498 Westbrook Street (parcel 256 A001001), is located in both the R-2 and R-3 Residential zones. As the pantry is proposed to be entirely within the R-2 portion of the site, the proposal will be analyzed according to the standards of the R-2 zone. Places of assembly are listed as a conditional use in the R-2 zone as described in Table 6-A of the Land Use Code. Places of assembly are defined in Section 3 of the Land Use Code as “a building or portion of a building used as a community hall, neighborhood center, private club, or fraternal organization, or place of religious assembly. This definition shall not include buildings used as a community hall, neighborhood center, private and fraternal organization, or place of religious assembly where 15 or fewer people, not including the permanent residents of a single-family dwelling,



Figure 5. 1498 Westbrook Street in R-2 and R-3 Zone Context

assemble.” Therefore an expansion of the existing use is subject to the General Conditional Use Standards, Section 6.5.2.

The R-2 dimensional standards are described in Table 7-A of the Land Use Code.

The maximum height of a detached accessory structure is 18 feet. As per Article 19, Table 19-A, the minimum off-street parking requirement is calculated as one space per 150 square feet of floor area used for assembly purposes. Therefore, the baseline zoning requirement is for a minimum of 42 parking spaces. The applicant is proposing to reduce the existing 68 parking spaces to 65 parking spaces, therefore the site continues to meet the minimum parking requirements.

The following table shows the dimensional requirements of the R-2 zone which are met by this proposal:

<i>Standard</i>	<i>R-2 Zoning Requirement</i>	<i>1498 Westbrook Street</i>
Minimum Lot Area (for places of assembly <10,000 sq. ft.)	1 acre	4.72 acres
Minimum Lot Area (for places of assembly >10,000 sq. ft.)	2 acres	4.72 acres
Minimum Street Frontage	50 feet	617 feet
Minimum Front Setback	25 feet	75 feet
Minimum Rear Setback	25 feet	164 feet (church)
Minimum Rear Setback (Detached Accessory <250 SF footprint)	5 feet	35 feet (pantry)
Minimum Side Setback (>2.5 stories)	12 feet	92 feet (church)
Minimum Side Setback (Detached Accessory)	5 feet	65 feet (pantry)
Maximum Lot Coverage	20%	20%
Minimum Lot Width	80 feet	~ 650 feet

Maximum Structure Height (Detached Accessory)	18 feet	< 18 feet
Minimum Off-Street Parking	42 Spaces	65 spaces

VIII. CONDITIONAL USE REVIEW

A. GENERAL CONDITIONAL USE STANDARDS – SECTION 6.5.2

1. The volume and type of vehicle traffic to be generated, hours of operation, expanse of pavement, and the number of parking spaces required are not substantially greater than would normally occur at surrounding uses or other allowable uses in the same zone.

The proposed modular building will be occupied for approximately eight hours per week, with food receiving and shipping occurring on Fridays between 8:30am and 12:00pm. Four-to-eight automobiles are anticipated to be parked in the lot during this time. The food pantry is scheduled to be open for in-person food pick-up on Sundays between 11:30am and 3:00pm. Twenty-to-thirty automobiles are anticipated to park in the lot during this time, utilizing about half of the parking spaces on site.

This proposal would result in the creation of approximately 850 square feet of new impervious surface in the form of gravel and crushed stone upon which a portion of the modular building would be sited. The rest of the surface upon which the modular building would be located is existing asphalt. Locating the modular building where proposed would result in a net decline of three parking spaces, though the site would still meet the minimum parking requirements.

2. The proposed use will not create unsanitary or harmful conditions by reason of noise, glare, dust, sewage disposal, emissions to the air, odor, lighting, or litter.
The modular building is proposed to be used as food storage with once-per-week active pantry use and will not be serviced by utilities other than electric. The building is proposed to be occupied for approximately eight hours per week, on Fridays (8:30 am – 12:00 pm) and Sundays (11:30 am – 3:00 pm). No unsanitary or harmful conditions are anticipated to be generated.
3. The design and operation of the proposed use, including but not limited to landscaping, screening, signs, loading deliveries, trash or waste generation, arrangement of structures, and materials storage will not have a substantially greater effect/impact on surrounding properties than those associated with surrounding uses or other allowable uses in the zone.
The proposed modular building is significantly smaller in scale than the existing church on site, and is proposed to be located near the rear of the lot away from the residential uses along Westbrook Street. Trash is proposed to be disposed in an existing covered commercial dumpster on site, while cardboard will be transported off site to be disposed at the City-owned recycling center. Receiving and shipping of food for the pantry will not utilize trucks or box vans, instead being undertaken by volunteers using their personal vehicles. The building will fit within the footprint of the existing parking lot in a manner that is not anticipated to have greater impacts than similar allowable uses in the R-2 zone.
4. The proposed use will meet any additional zone or use-specific standards identified in Tables 6-A to 6-F and Subsections 6.5.6 and 6.5.7.

The proposed expansion of the place of assembly use is listed as a conditional use in the R-2 zone in Table 6-A, but is not subject to use-specific standards identified in Section 6.5.6(C). This standard is not applicable.

IX. PUBLIC COMMENT

In anticipation of this Planning Board Public Hearing, the Planning and Urban Development Department mailed 96 notices to residences within 500 feet of the subject property. A legal advertisement ran in the July 2, 2022 and July 5, 2022 editions of the *Portland Press Herald*.

At the time of writing this memo, the Planning Department has received four public comments. Three comments were related to the staff level minor site plan review, while one comment voiced disapproval of locating a pantry within the R-2 zone.

X. STAFF RECOMMENDATION

Subject to the proposed motions listed below, Planning Department staff find that the proposal to place a modular building at 1498 Westbrook Street as an expansion of the existing conditional use as a place of assembly meets the applicable conditional use standards of Portland's Land Use Code.

XI. PROPOSED MOTIONS

A. 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 July 12, 2022 for application PL-001974-2022 relevant to Land Use Code Section 6.5.2 and the testimony presented at the Planning Board hearing, the Planning Board finds that the plan is/is not in conformance with the conditional use standards of the Land Use Code.

XII. ATTACHMENTS

APPLICANT'S SUBMITTAL

- A. Cover Letter
- B. Conditional Use Checklist
- C. Minor Site Plan Checklist
- D. Right, Title, and Interest
- E. Zoning Assessment
- F. Financial Capacity
- G. Stormwater Management Report
- H. Design and Operation Narrative
- I. Utility Plan
- J. Traffic Assessment
- K. HVAC Information

PLANS

- Plan 1 – Boundary Survey
- Plan 2 – Site Plan
- Plan 3 – Stormwater Management Plan

PUBLIC COMMENT

- PC1. Richard and Suzanne Mailman
- PC2. Ed Goddin
- PC3. Ronald N. Ward
- PC4. Maryann Cocca-Leffler



Cover Letter

PLANNING – PL-001974-2022

Stroudwater Food Pantry, 1520 Westbrook Street, Portland

Director, Doug Horner – 609-341-6031

Application -

Stroudwater Food Pantry is seeking approval to move a modular building onto the premises of Stroudwater Christian Church, located at 1520 Westbrook Street. The pantry needs more space to support its growth as it continues its mission to provide hunger relief in the greater Portland area. In 2021 Stroudwater Food Pantry distributed and home-delivered 105 tons of food to meal insecure families throughout southern and central Maine.

The following link goes to the News Center Maine channel-6 story highlighting our pantry's efforts to feed meal insecure families in Portland.

<https://www.youtube.com/watch?v=gvwLaKLdmZY>

Building Use –

The building will be used primarily to store food. Non-perishable food will be stored on shelves, perishable food will be stored in refrigerators and in a walk-in freezer. The building will also contain push carts for moving and organizing food. No cooking stovetops or ovens will be installed or used.

People will be present in the building approximately eight hours per week. On Fridays volunteers will receive, sort, and put away food between the hours of 8:30am to 12:30pm. City agencies will send case workers to pick up boxes of groceries between the hours of 11:00am to 12:00pm. (approximately 4-8 case worker cars).

On Sundays volunteers will organize and distribute food between the hours of 11:30am to 3:30pm. The building will be open to the public (pantry clients) from 1:00 to 3:00pm. Clients will be allowed to come inside (in small groups of 3-6) to shop for free groceries. This represents approximately 20-30 client cars, about half of what we normally get during the 10:00am church service.

Generally speaking, the building will be locked and unoccupied during other days and times, unless there is a special delivery of food during off hours.

Previous Building Use –

The building was purchased from Yarmouth Schools, where it was regularly used by the Yarmouth Elementary School as two classrooms.

Building Construction –

This is a modular single story building of primarily wooden construction sitting on top of steel I-beam framing and supports. It was manufactured by Burlington Homes of Maine in Oxford in 1998, License #130. The building has two modular halves, each measuring 14' x 68'. The two halves bolt together to form a single 28' x 68' structure of 1,900 sq. feet.

Roof –

The building has a steel roof supported by trusses. The roof design load is 60PSF. The building has a Design Wind Load of 95MPH. The ceiling crawl space area is fully insulated.

Floor –

The current floor covering is a vinyl tile product. It has a floor design load of 50PSF. The underside of the floor is fully insulated.

Building Relocation –

The building will be prepped, moved, and reconnected by Schiavi Leasing. Preparation will consist of removal of the roof peak, disconnecting electrical wiring and data cabling, and unbolting the two building halves. Schiavi will transport the two building halves from the Yarmouth Elementary School to Stroudwater Christian Church. Schiavi will place and level the two halves, and fasten them together. They will remake all internal electrical and data cabling connections, and reinstall the roof peak.

Building placement will have a 25' setback from the property line, see the Site Plan.

Utility Hookup –

The only utility planned at this time is electricity. CMP will provide utility power (Carrie Reynolds, field planner). Poles will be placed and utility wire (primary) will be run by Private Power Services (Hector Picard); Private Power will make all connections from the street to the building. The line will then be conferred back to CMP. Any electrical connections or electrical work not covered by Private Power or by Schiavi Leasing will be provided by Apex Electrical. (see electrical plan and Site plan)

Internal Wiring -

The panel box is 200amp. It has the capacity to hold twenty breakers. 7 breakers are currently in use; these breakers supply all lights, outlets, and heating. All light and outlet wiring is 12/2 schedule NM-B (see picture).

Heat –

The building comes with 2 Rinnai propane heaters that were being used to heat the classrooms. Although we will use them initially, we are planning to upgrade to heat pumps at future time.

Entrance/Exit –

The building has 3 doors. Two are on the front side, and are the primary sources of entering and exiting. Access will be gained via ramps. A third door is on the back of the building. Access will be gained via steps and a landing. Although the third door will not be used as a primary source of entering and exiting, it will serve as fire exit. The ramps and steps are of pressure treated wooden construction, and have been in use by Yarmouth Schools and come with the building. (see pictures)

Windows –

The front side of the building has 4 double hung, double pane windows; each end of the building has 2 double hung, double pane windows for a total of 8 windows. Additionally, each of the 3 steel doors have a fixed window. (see pictures)

Bathrooms –

The primary purpose of the building is to store food; it is expected that it will be occupied approximately 8 hours each week. The building does not come with bathrooms. The plan is to use a readily assessable bathroom in a common area of the church. The entrance is only 116 feet away. Currently there is no plan to have running water in the building.

Foundation –

The building will be placed on an asphalt parking laid over 2 feet of gravel (see pictures). The building is currently supported by cement blocks under the steel I-beams. The blocks sit on pads. It is intended that the building will be supported in the same manor once moved to the new location. (see pictures)

Renovations –

Removal of an interior wall is planned, to better open up floor space so that food may be stored and moved more efficiently. New vinyl flooring is intended to be installed over the existing floor, to improve pushing carts of food around. The building will be outfitted with steel shelving to hold food, and with carts to move food around.

Walk-in Freezer –

Our walk-in freezer (12'x16') will be will be moved from the church to the new pantry building. (see Site Plan)

CITY OF PORTLAND
Planning & Urban Development Department

**CONDITIONAL USE – PLANNING BOARD REVIEW
SUBMISSION CHECKLIST**

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

Conditional uses are listed in the land use code for each zone. The applicant must address the general standards as well as any use- or zone-based conditional use standards contained in Article 6.5 of the land use code in the written application.

GENERAL APPLICATION DOCUMENTS

Yes	N/A	Project Description Cover letter with detailed project description
Yes	N/A	Completed Checklist – Conditional Use (this document)
Yes	N/A	Evidence of Right, Title and Interest Deeds, leases, or purchase and sales agreements

CONDITIONAL USE STANDARDS AND CRITERIA

Yes	N/A	Traffic Demonstrate that the volume and type of vehicle traffic to be generated, hours of operation, expanse of pavement, and number of parking spaces required are not substantially greater than would normally occur at surrounding uses or other allowable uses in the zone.
Yes	N/A	Environmental Impacts Demonstrate that the proposed use will not create any unsanitary or harmful conditions by reason of noise, glare, dust, sewage disposal, emissions to the air, odor, lighting, or litter.
Yes	N/A	Design and Operation Demonstrate that the design and operation of the proposed use, including but not limited to landscaping, screening, signs, loading, deliveries, trash or waste generation, arrangement of structures, and materials storage will not have a substantially greater effect/impact on surrounding properties than those associated with surrounding uses or other allowable uses in the zone.
Yes	N/A	Use- and Zone-Specific Criteria Address any use- or zone-specific standards in Sections 6.5.6 and 6.5.7 of the land use code.

CITY OF PORTLAND
Planning & Urban Development Department

MINOR SITE PLAN GENERAL DOCUMENT AND DRAWINGS CHECKLIST Please submit each document as a separate PDF file. Please confirm by electronically checking the boxes in the left-hand column. ** PLEASE FILL OUT AND UPLOAD SEPARATELY THE ZONING ASSESSMENT TABLE AND WAIVER TABLE AS NOTED BELOW ** At the time of application submission, please contact the Department of Public Works regarding E-911 addressing for your project.		
GENERAL APPLICATION DOCUMENTS		
Yes	NA	Project Description Cover letter with detailed project description
Yes	NA	Completed Checklist (this document)
Yes	NA	Evidence of Right, Title and Interest Deeds, leases, or purchase and sales agreements
Yes	NA	Evidence of State or Federal Approvals Permits or letters of non-jurisdiction, if applicable
Yes	NA	Zoning Assessment (see Zoning Assessment Table) Summary of compliance with use and dimensional standards of the land use code
Yes	NA	Site Plan Standards Assessment (see Article 14.6 of the land use code) Summary of project compliance with site plan standards of the land use code
Yes	NA	Summary of Existing and/or Proposed Easements or Covenants, if applicable Evidence of existing easements and any proposed easements, covenants, public or private rights-of-way
Yes	NA	Waiver Requests (see Waiver Table) Written request for waiver describing request and compliance with waiver standards
Yes	NA	Evidence of Financial and Technical Capacity* - Letter or evidence from a financial institution or third party verifying financial capacity to undertake project - Evidence of the project team's technical capacity to undertake project *NOTE: Not required for Minor Residential and Low Impact Site Development projects

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

ENVIRONMENTAL		
Yes	NA	Preservation of Significant Natural Features (14-14.6.2(A)), if applicable Identify and describe the following: • High and moderate value waterfowl and wading habitat • Aquifers (for Casco Bay Islands) • Waterbodies (including wetlands, watercourses, significant vernal pools and floodplains) • Proposed preservation areas and protection measures • Documentation from environmental compliance consultants and determinations from applicable state and federal agencies
Yes	NA	Landscape Preservation (14-14.6.2(B)) Identify and describe the following: • Measures to preserve trees, including within required zoning setbacks (Technical Manual, Section 4) • Measures to protect existing vegetation during construction
Yes	NA	Site Landscaping and Buffers (14-14.6.2(C)) Identify and describe the following: • Overall landscaping approach and consistency with standards • The use of screening and buffering of service areas and between non-residential and residential uses • Existing Heritage or Feature Trees on site and measures to preserve • Compliance with street tree requirements
Yes	NA	Water Quality, Stormwater Management, and Erosion Control (14-14.6.2(D)) • Provide stormwater management plan in compliance with Section 5 of Technical Manual and DEP Chapter 500 stormwater for basic, general, and flooding standards, as applicable • Provide erosion control plan and measures • Provide evidence of compliance with Urban Impaired Stream Standards pursuant to DEP Chapter 500 stormwater, as applicable • Describe subsurface sanitary sewage disposal and groundwater protection

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

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

MINOR SITE PLAN DRAWINGS CHECKLIST

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

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

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

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

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

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

Existing Conditions Plan with the following:

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

Proposed Site Plan with the following:

- Location, area, and limits of the proposed site disturbance or alteration, including any proposed pier, dock, or wharf reconstruction
- Proposed structures, including floor area and finish floor elevation and distance from the property line
- Proposed paved areas, including parking spaces and dimensions if applicable
- Location of proposed utilities
- Proposed protection measures for watercourses, wetlands, or other significant natural features
- Proposed grades and contours
- Erosion control plan
- Proposed landscaping, screening, and proposed street trees, including existing vegetation to be preserved
- Proposed stormwater management controls

- Proposed curb and sidewalk (show any proposed geometric modifications, if applicable) - Engineered specifications and cross-sections for proposed driveways, sidewalks and paved areas, if applicable - Location, dimensions and ownership of proposed easements, public or private rights-of-way - Please utilize color-coding and/or hatches and shading to delineate changes between the pre and post development condition as needed *NOTE: Minor Residential and Low-Impact Site Development projects may optionally submit the drawings below, but are not required to do so; all other Minor Site Plan applications should include the below drawings in their submission.
UTILITY PLAN* including:
- Proposed electrical infrastructure - Location, sizing and directional flows of all proposed sewer and stormwater infrastructure - Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site - Electric utility infrastructure
GRADING AND DRAINAGE PLAN* including:
- Proposed grades - Proposed stormwater management measures meeting Technical Manual (Section 5) standards - Any proposed alteration of a watercourse or wetlands - Any groundwater protection measures - Proposed buffers and preservation measures for wetlands or significant natural features
LANDSCAPE PLAN* including:
- Existing vegetation to be preserved and preservation measures - Proposed landscaping, screening, and street trees, including caliper widths for trees - Planting schedule, including street trees
ARCHITECTURAL PLANS AND RENDERINGS* including:
- Exterior building elevations, color renderings, illustrations of all sides - Axonometric and street-level views for structures greater than three stories in height - Provide context drawings, if applicable (Design Manual, page 1) - Floor plans
CONSTRUCTION MANAGEMENT PLAN* including:
- Specifics on traffic control, sidewalk sheds, and pedestrian rerouting - Include a drawing and written narrative
OTHER*
Details and cross-sections, as necessary

29799

WARRANTY DEED

KNOW ALL MEN BY THESE PRESENTS,

175

THAT, WE, GLENWOOD C. JORDAN (Pastor), MAURICE S. STONE, STANLEY A. GRANT, DAVID WORMWOOD, DONALD E. KEENE, MALCOLM E. LEBEAU, LEON CORLISS (Deacons), of ADVENT CHRISTIAN CHURCH of Portland, Maine, a/k/a Trustees of SECOND ADVENT CHURCH of Portland, a/k/a SECOND ADVENT CHRISTIAN CHURCH of Portland, Maine, a/k/a SECOND ADVENT CHURCH, a/k/a ADVENT CHRISTIAN CHURCH, a/k/a PARK AVENUE ADVENT CHRISTIAN CHURCH, a religious corporation organized and existing under the laws of the State of Maine, and located in Portland, County of Cumberland and State of Maine, in consideration of \$1.00 and other valuable consideration, paid by ADVENT CHRISTIAN CHURCH of Portland, Maine, a corporation organized on or about August 27, 1979 pursuant to T.13 C.93, M.R.S.A., and located at said Portland, the receipt whereof we do hereby acknowledge, do hereby give, grant, bargain, sell and convey unto the said ADVENT CHRISTIAN CHURCH of Portland, Maine, its successors and assigns forever, two certain lots or parcels of land as follows:

Parcel No. 1.

A certain lot or parcel of land, together with any buildings thereon or to be constructed thereon, situated on the southerly side of Westbrook Street in Portland, County of Cumberland and State of Maine, bounded and described as follows:

Beginning at a point on said Westbrook Street which divides the lot hereby conveyed from land formerly from Andrew Hawes; thence by land formerly of said Hawes in a southwesterly direction to a point; thence in a westerly direction and by land formerly of said Hawes to land formerly of A. S. Castner; thence in a northerly direction by land now or formerly of said Castner to said Westbrook Street; thence in an easterly direction by said Westbrook Street to the point of beginning.

Excepting from the above described premises that portion thereof conveyed by Miriam L. Porch to C. Walter Hansen, et. al. by deed dated February 10, 1970 and recorded in the Cumberland County Registry of Deeds in Book 3119, Page 720; and further excepting that portion taken by the State of Maine under Notice of Layout and Taking dated December 12, 1977 and recorded in said Registry of Deeds in Book 4146, Page 333. The premises hereby conveyed are a portion of the premises conveyed to Miriam L. Porch by Lillian E. Shurtleff by deed dated March 27, 1939 and recorded in said Registry, Book 1573, Page 191 and by the Executor under the Will of Walter G. Hay by deed dated October 18, 1943 and recorded in said Registry, Book 1727, Page 391 to which deeds and said deed to C. Walter Hansen, et. al, and said Notice of Layout and Taking reference is hereby made for a further and more particular description of the premises hereby conveyed.

The premises hereby conveyed are conveyed subject to the rights of the Portland Water District in a strip approximately 30 feet wide across the southwest corner of said premises extending approximately 72 feet as measured along its center line from the westerly line of said premises to the southerly line of said premises. The premises are further conveyed subject to rights in any portion of the premises that may be included in the taking by the Portland Water District dated August 31, 1931, recorded in Cumberland Registry of Deeds, Book 1382, Page 144.

Being the same premises conveyed by Miriam L. Porch to the Grantor corporation by warranty deed dated November 24, 1978 and recorded in the Cumberland County Registry of Deeds in Book 4346, Page 315.

176

Parcel No. 2.

A certain lot or parcel of land with the buildings thereon, situated in Portland, and being on the Southeasterly side of a street leading from Exeter Street to Deering Avenue, said street being an extension of Granite Street, said lot being bounded and described as follows, to wit:

Beginning at a point on the side line of said street, which said point marks the Northeastly corner of a lot of land formerly owned by William and Ina French; thence Southerly by land of said French, and land of Stoneham and Holeman, one hundred fifty-one and three-tenths (151.3) feet, more or less, to land now or formerly of one Lufkin; thence Northeastly forty-six (46) feet, more or less, by land now or formerly of said Lufkin, to land formerly of Alice S. Marr, which said point also marks the northwesterly corner of a lot of land now or formerly owned by one Vail; thence Northerly by land of said Marr, one hundred forty-six and one-tenth (146.1) feet, more or less, to the side line of said street; thence westerly by the side line of said street, fifty (50) feet to the point of beginning.

The above described premises are the same deeded to Lincoln Conley and Alma W. Conley by Ernest F. Ginn, by his Warranty Deed dated December 15, 1922, and recorded in the Cumberland County Registry of Deeds, in Book 1121, Page 463. The said Alma W. Conley died testate, bequeathing and devising all her estate to the said Lincoln Conley, now deceased, both estates having been duly probated in the Probate Court for the County of Cumberland.

The above described premises are the same deeded to Irvin E. Currier by Executor's Deed from Harry R. Withee, Executor for Estate of Lincoln Conley, said deed being dated September 24, 1942 and recorded in the Cumberland County Registry of Deeds on October 15, 1942, Book 1694, Page 412.

The above described premises are the same deeded to Nicholas Velentgas and Priscilla Velentgas by Irvin E. Currier by his Warranty Deed dated December 10, 1942, and recorded in Cumberland County Registry of Deeds, Book 1700, Page 422, and in turn conveyed by said Velentgas to the Grantor corporation by warranty deed dated May 23, 1945 and recorded in said Registry of Deeds in Book 1781, Page 216.

TO HAVE AND TO HOLD the aforegranted and bargained premises with all privileges and appurtenances thereof to the said ADVENT CHRISTIAN CHURCH of Portland, Maine, its successors and assigns, to its and their use and behoof forever.

AND we do COVENANT with the said Grantee, its successors and assigns, that we are lawfully seized in fee of the premises that they are free of all encumbrances: except as aforesaid that we have good right to sell and convey the same to the said Grantee to hold as aforesaid; and that we and our successors shall and will WARRANT and DEFEND the same to the said Grantee, its successors and assigns forever, against the lawful claims and demands of all persons.

IN WITNESS WHEREOF, we, the said Pastor and Deacons of ADVENT CHRISTIAN CHURCH of Portland, Maine, a/k/a SECOND ADVENT CHRISTIAN CHURCH of Portland, Maine, a/k/a SECOND ADVENT CHURCH, a/k/a ADVENT CHRISTIAN CHURCH, a/k/a PARK AVENUE ADVENT CHRISTIAN CHURCH, a/k/a Trustees of SECOND ADVENT CHURCH of Portland, have hereunto set our hands and seals this thirtieth day of October in the year of our Lord one thousand nine hundred and seventy-nine.

177

TRUSTEES OF SECOND ADVENT CHURCH
OF PORTLAND, a/k/a SECOND ADVENT
CHURCH OF PORTLAND, MAINE, a/k/a
SECOND ADVENT CHURCH, a/k/a ADVENT
CHRISTIAN CHURCH, a/k/a PARK
AVENUE ADVENT CHRISTIAN CHURCH

SIGNED, SEALED AND DELIVERED
IN PRESENCE OF

Glenwood C. Jordan

By: *Glenwood C. Jordan*
Pastor
Stanley A. Drost
Deacon
Donald E. Keene
Deacon
Maurice S. Stone
Deacon
Leon R. Corliss
Deacon
David L. Johnson
Deacon
Melba E. LeBeau
Deacon

STATE OF MAINE
CUMBERLAND, ss.

October 30, 1979

Personally appeared the above named GLENWOOD C. JORDAN, Pastor
of said Grantor corporation, and acknowledged the above instrument
to be his free act and deed in his said capacity and the free act and
deed of said corporation, and did further affirm under oath that the
foregoing recitations are true to the best of his knowledge and be-
lief.

Before me,

Evelyn C. Ballou
Justice of the Peace
Notary Public
Attorney at Law

OCT 30 1979

REGISTRY OF DEEDS CUMBERLAND COUNTY, MAINE
Received at 4:21 PM, and recorded in

BOOK 4520 PAGE 175 *Edward J. Bernstein* Register

Yarmouth School Department (Seller), for the sum of \$5,000.00 agrees to sell to Stroudwater Christian Church (Buyer) the following:

- one 28'x68' modular classroom building ("HMS#1") including 2 sets of wood ramps and steps

Seller affirms that the above information is accurate to the best of Seller's knowledge.

Buyer acknowledges that the above is sold in "as-is/where-is" condition with no guarantees or warranties, either expressed or implied. Buyer acknowledges also that Buyer assumes all costs associated with dismantling and removing the structure from Yarmouth School Department grounds between April 18, 2022 and April 22, 2022 and will engage the services of Schiavi Leasing to perform this work. Buyer will provide Seller a copy of an executed contract between Buyer and Schiavi Leasing for these services on or before Friday February 4, 2022.

SELLER

Yarmouth School Department, 101 McCartney Street, Yarmouth, ME 04096 207-846-5586

Signature:



Date:

1/30/2022

Bruce A. Rudolph, Director of Business Services

BUYER

Name:

STROUDWATER CHRISTIAN CHURCH

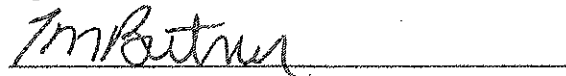
Address:

1520 WESTBROOK ST
PORTLAND ME 04102

Phone:

207-772-2193

Signature:



Date:

1/30/2022

Portland, Maine



Yes. Life's good here.

Planning & Urban Development Department

This is for an existing commercial property

ZONING ANALYSIS

Relevant Zone(s)

B2

All Projects:

	Required	Proposed
Lot Size	205853 sq'	205853 sq'
Area Per Dwelling Unit		1,900 sq'
Minimum Street Frontage	585'	585'
Front Yard Minimum		
Front Yard Maximum Set Back		260'
Rear Yard Set Back		40'
Yard Right Set Back		50'
Yard Left Set Back		560'
Side Street Setback	N/A	No side street
Step Back		
Maximum Lot Coverage		
Minimum Lot Coverage		1,900 sq'
Maximum Height		13' 13"
Open Space	162248 sq'	162248 sq'
Maximum Impervious Area	43605 sq'	43605 sq'ff
Pavement Setback	35'	35'
Floor Area Ratio		
Off Street Parking Spaces	81	81
Loading Bays	0	0
Other 1		
Other 2		
Other 3		

N/A

Planned Residential Unit Developments (PRUD) Requirements

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

Affordable Housing Density Bonuses (if applicable)

N/A

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

**Account Statement**

1-888-436-1847 | www.necu.org

PO Box 1240 • Portsmouth, NH 03802-1240

Member Number 0000411637

Statement For 02/21/2022 - 03/20/2022

Page 1 of 3

ADDRESS SERVICE REQUESTED

555373 21183 1/2 C62 03-21-22 CLT
188778703 1 AB 0.461STROUDWATER CHRISTIAN CHURCH
1520 WESTBROOK ST
PORTLAND ME 04102-1621**GET YOUR MAXIMUM
REFUND, GUARANTEED.**Discounts on Turbo Tax® and H&R Block®.
Visit NECU.org/Taxes**Your Account Balances as of 03/20**

Savings Account ID 00	\$71,379.03
Church Growth Account ID 02	103,494.38
Business Checking ID 73	99,170.82
Account Balance Total	274,044.23
Total Dividends Paid Year-To-Date	\$4.34

SAVINGS ACCOUNT ID 00

Total Dividends Paid Year-To-Date \$1.24

Annual Percentage Yield earned 0.01% from 02/01/2022 through 02/28/2022

Beginning Balance	\$71,635.34
5 Total Deposits for	1,885.01
2 Total Withdrawals for	2,141.32-
Ending Balance	71,379.03

Date	Transaction Description	Withdrawal	Deposit	Balance
02/28	Deposit Online Banking Transfer From Savings 73 MEMO: Food Pantry Feb Donations		\$121.97	\$71,757.31
02/28	Deposit Online Banking Transfer From Savings 73 MEMO: G-22 Fundraiser Donations		1,395.69	73,153.00
02/28	Deposit Online Banking Transfer From Savings 73 MEMO: Body Life Donations		116.80	73,269.80
02/28	Withdrawal Online Banking Transfer To Savings 73 MEMO: Food Pantry Feb Expenses	847.57-		72,422.23
02/28	Deposit By Check		250.00	72,672.23
02/28	Deposit Interest 0.010%		0.55	72,672.78
03/02	Withdrawal Online Banking Transfer To Savings 73 MEMO: G-22 Airline Tix	1,293.75-		71,379.03

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
R1	-	For submission to Portland Planning Board.	6/17/02	AHR
R1	A	For resubmission to Portland Planning Board.	9/03/02	AHR
R1	B	For resubmission to Portland Planning Board.	9/18/02	AHR
R1	C	Show PRE-LOAD as per sketch by William White	10/10/03	AHR

REFERENCES

- 1) Topographic information and existing conditions traced from plans compiled by R.P. Titcomb Associates, Falmouth, ME - Aug. 7, 1987
- 2) Existing condition contours revised in area of new parking areas and fill.
- 3) Neighboring building locations from plan titled
Capisc brook greenbelt project Aerial survey of watershed,
For: City of Portland, Parks & Public Works Dept. Engineering Div.
Dated 5-15-92 By: Aerial survey & Photo Inc. Norridgewock, ME

NOTES

- 1) Bearings are based on magnetic north 1987 (see reference #1).
- 2) Elevations are based on the City of Portland Data

AREA

211,882 SF.
4.86 ac.

OWNER OF RECORD

Advent Christian Church of Portland, Maine
4520/175

LEGEND

-  IRON PIN FOUND (1/2" hollow pipe, unless noted)
 IRON PIN TO BE SET (5/8 rebar)
 MONUMENT FOUND
 NOW OR FORMERLY OF
 UTILITY POLE
 EDGE OF PAVEMENT
 EXISTING BUILDING
 FENCE LINE
 CATCH BASIN
 WATER VALVE
 MANHOLE
 FIRE HYDRANT
 DECIDUOUS TREE
 CONIFER TREE
 TREE LINE
 NEW PAVED SIDEWALK
 NEW CONTOUR LINE
 STONE CHECK DAM
 SILT FENCE

Preliminary Site Plan
STROUDWATER CHRISTIAN CHURCH

1520 WESTBROOK STREET - PORTLAND, ME

PREPARED BY

Civil Engineering

#2 Bensons Way
Gorham, Maine 04038-2082

September, 2002

Alton H. Benson III, PE # 5014

AHB Engineering #2 Bensons Way Gorham, ME 04038-2082 Ph: (207) 839-4780		Site Plan			
		Stroudwater Christian Church 1520 Westbrook Street - Portland Maine			
SIZE #D40		FSCM NO. by: AHB	DWG NO. scc-site 100x100.dwg	REV	
SCALE 1"=40'		September 17, 2002		SHEET 2 of 10	

Design and Operation

The building will be placed on an existing asphalt parking lot. There is no landscaping. The building will be placed behind the church, with limited line of sight from the road. The building will be used primarily to store food. Deliveries of food are received on Fridays; volunteers pickup food in their personal vehicles and transport it to the pantry. On Sundays clients will push their shopping carts of food to their parked cars and unload their food much like at a supermarket parking lot.

Trash will be disposed in a covered commercial trash dumpster, and card board will be taken to the cardboard recycling center in Portland.

Environmental Impacts

No unsanitary or harmful conditions will be created the building. Operations inside the building will include hand assembly of cardboard boxes of groceries for delivery to shut-in clients, but there are no manufacturing processes. There is no machinery to generate noise, dust, litter, or pollution emissions or odors. No cooking stovetops or ovens will be installed or used. The primary purpose of the building is to store food, so it will be kept clean and sanitary.

Trash will be disposed in a covered commercial trash dumpster, and card board will be taken to the cardboard recycling center in Portland.

PRIVATE LINE DOCUMENTS/UPDATE

TO: Lineclerknewservice@cmpco.com or **FAX: 207-629-4752**

FROM: Private Power Services privatepowersvs@gmail.com
Hector Picard Tel: 207-468-8459

Private Line Built Line for:
Customer: Stroudwater Food Pantry
CMP Notification: <u>1 0 300862036</u>
Service Location: Portland

Attached, please find:

- ☒ Private Line Sketch
- ☒ Private Line Invoice
- ☐ Private Line is Entirely Built (Please schedule a Field Planner Appointment)
- ☐ Private Line is Ready for Inspection

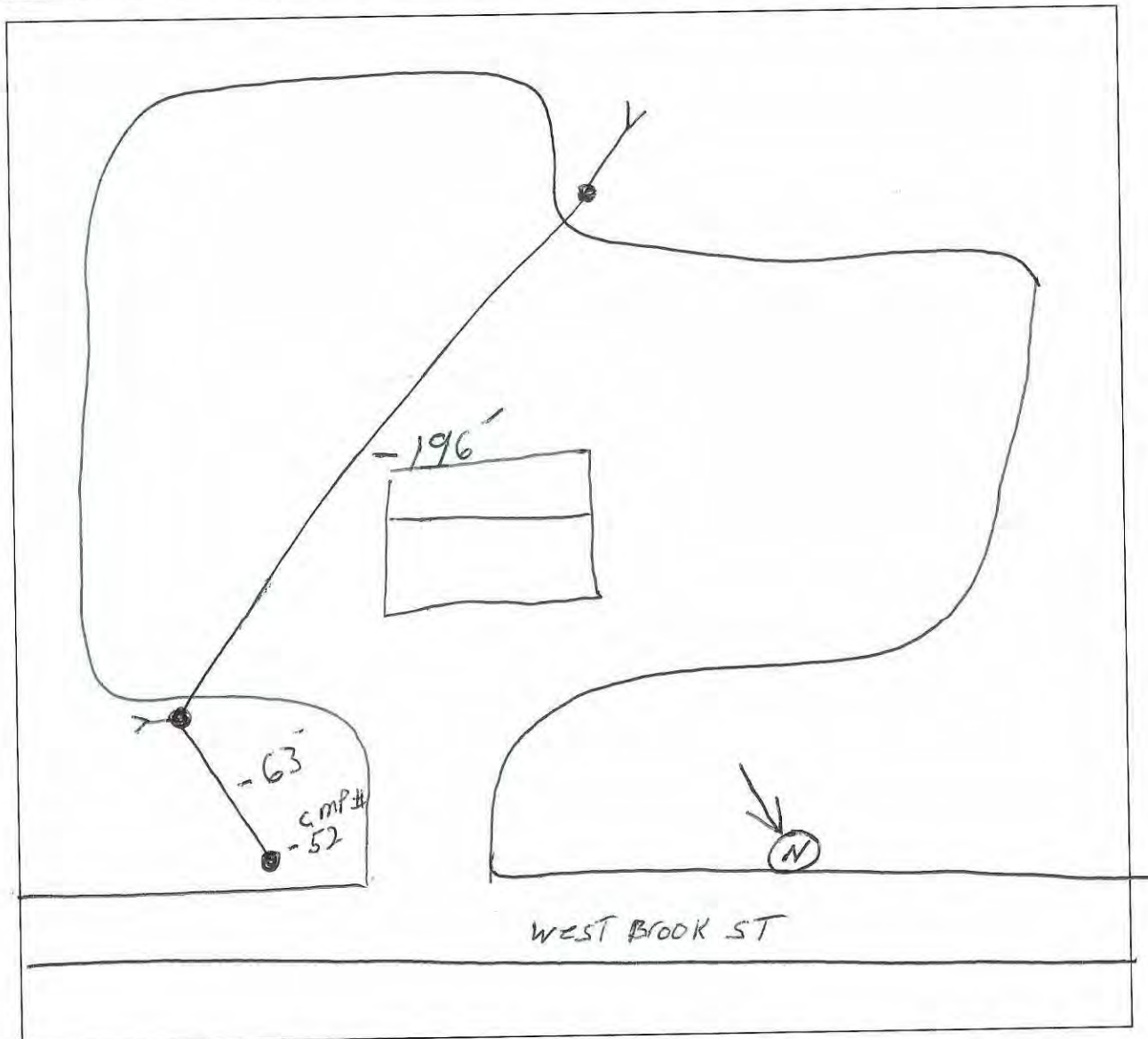
- ☒ Private Line has not been built.
(Customer will notify CMP when ready for Field Planner Appointment)

Additional notes/comments:

WORK SKETCH SHEET

Customer: <i>STroudwater Food Pantry</i>	Date: <i>3-3-22</i>
Phone #: <i>207-200-5985</i>	CMP W/O#: <i>10300862036</i>
Town: <i>Portland</i>	
Street: <i>West Brook St</i>	
Takeoff Pole: <i>52</i>	

REMARKS:



Private Power Services

Date: 3-3-22

Customer Name: ST/OD WATER FOOD PANTRY

Telephone # 207-200-5985

Job Location: PORTLAND

Work Order #: 10300862036

MATERIAL LIST

	Quantity	Length
Pole	2	40
Pole Tops	1	
Insulators Pole Top 15 KVA	1	
Insulators Dead End 15 KVA	1	
Dead End Shoes 1/0	2	
8' Wooden Cross Arm		
8' F/G DE Cross Arm		
10; Wooden Cross Arm		
3" Washers		
Spring Washers		
Connectors Aluminum	4	
Connectors Copper		
10" Eye Bolts		
12" Eye Bolts		
Neutral Brackets	1	
Guy Guards	2	
Guy Hooks/Strain rod	2	
Guy Wire 3/8		80
Anchor Rods & Plates	2	
Rod Bonding Clamps	2	
#4 Copper Wire		6
#2 Copper Wire		
Tie Wire Aluminum		4
1/0 AAAC Aluminum Wire		520
336 AAA Aluminum		
#2 Primary URD 15 KVA		
Elbows Load brake 15 KVA		
Seal Kits		
Terminators 15 KVA		
Lightening Arrestors		
Cutouts 15 KVA		
Equipment Mounting Brackets		
Cable Positioning Brackets		
Ground Rods		
Other		

Traffic

Current pantry client traffic is 20-30 cars, one Sunday afternoon per week. This is approximately half of what is normally experienced during the 10:00am Sunday church service.

Public hours of pantry operation are Sundays 1-3pm, well after church services have concluded. No off-street parking is required, and no expansion of parking spaces is planned, because the church has a large parking lot with far more space than need for pantry clients.



Rinnai
CORPORATION NAGOYA, JAPAN
FAN TYPE DIRECT VENT WALL FURNACE

MODEL NO. **EX22CTP**
(RHFE-559FTA2-P)

TYPE OF GAS : PROPANE GAS

MANIFOLD PRESSURE : 4.0 INCHES W.C.

INPUT RATING : MAX 20700 BTU/HR
MIN 8200 BTU/HR

ANS Z21.86 • CSA 2.32-2016

SERIAL NO. MH. LB-013834



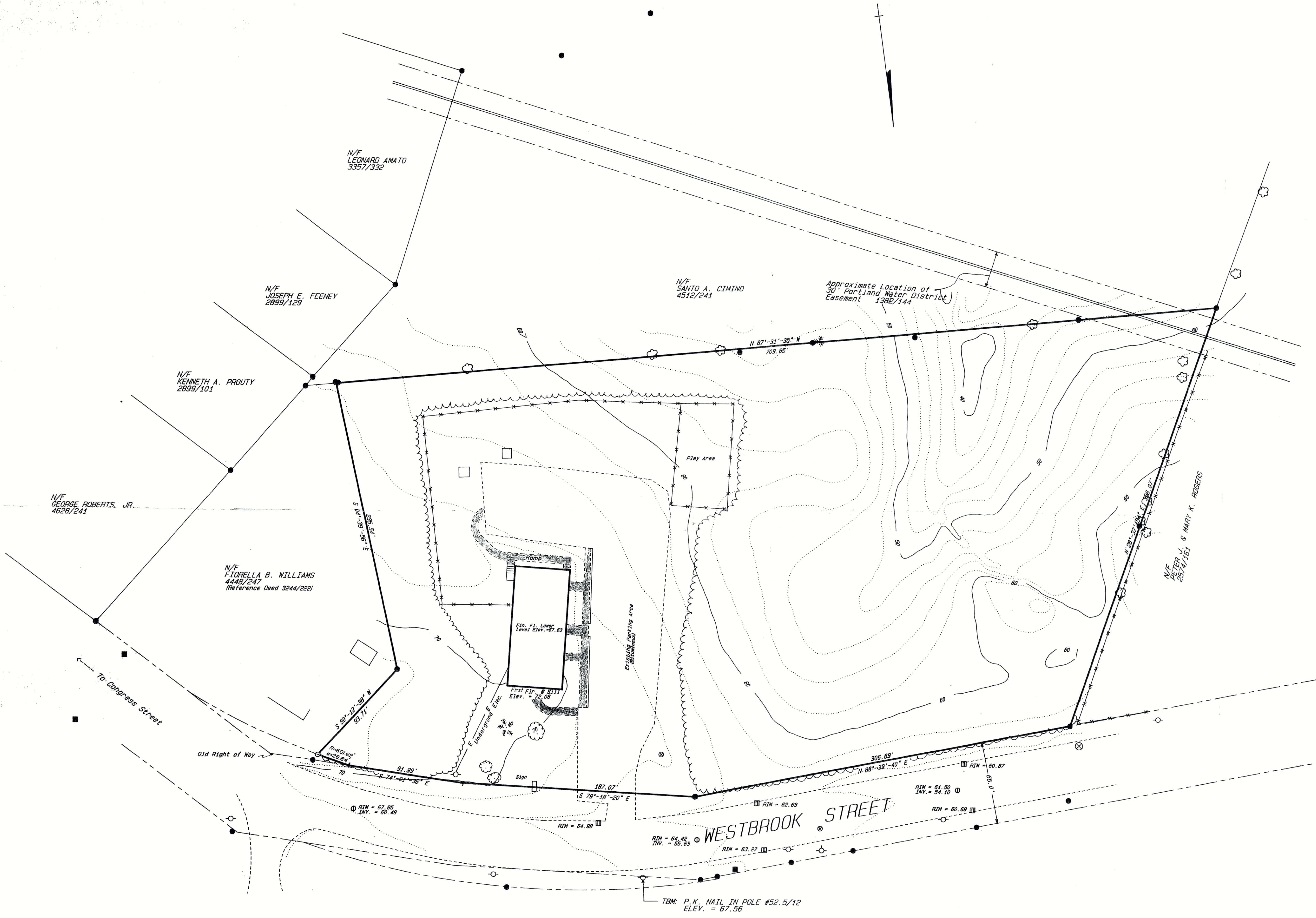
MADE IN JAPAN

*10-7533

CP-74167-47X01

MINIMUM GAS SUPPLY PRESSURE FOR INPUT ADJUSTMENT
ARE 3.5 INCHES W.C. FOR NAT. GAS AND 8.0 INCHES W.C.
FOR PROPANE GAS.

ONLY FOR DIRECT DISCHARGE WITHOUT DUCT CONNECTIONS.
ELECTRICAL RATING : 120V, 60Hz, LESS THAN 3 AMPERES.



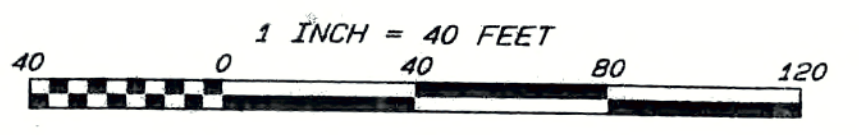
- REFERENCES**
- 1) State of Maine Department of Transportation Right of Way Map, dated April 1977, D.O.T. File No. 3-255.
 - 2) City of Portland Engineering Dept. Right of Way Plans.
 - 3) Portland Water District Portland, Maine 42" Concrete Pipe Line Right of Way Plans, dated August 1931, recorded in the Cumberland County Registry of Deeds in Plan Book 20, Page 39.
 - 4) Portland Pipe Line Co. Survey of Property of Ruby H. Young, dated October 8, 1941.
 - 5) Plan made for Laurence C. Plowman Plan of Riverview Sec. A recorded in Plan Book 46, Page 14.

- NOTES**
- 1) Bearings are based on magnetic north 1977 (see reference #1).
 - 2) Elevations are based on the City of Portland Data.

AREA
211,882 sf.
4.86 ac.

OWNER OF RECORD
Advent Christian Church of Portland, Maine
4520/175

- LEGEND**
- IRON PIN FOUND (1/2" hollow pipe, unless noted)
 - IRON PIN TO BE SET (5/8" rebar)
 - MONUMENT FOUND
 - N/F NOW OR FORMERLY OF
 - UTILITY POLE
 - - - EDGE OF PAVEMENT
 - ▭ EXISTING BUILDING
 - * - * - FENCE LINE
 - ▭ CATCH BASIN
 - ⊗ WATER VALVE
 - MANHOLE
 - ⊗ FIRE HYDRANT
 - ⊗ DECIDUOUS TREE
 - ⊗ CONIFER TREE
 - ~ ~ ~ TREE LINE



This survey conforms to category I condition II as defined by the Standards of the Maine State Board of Registration for Land Surveyors dated 1985. Except as noted.

- Exceptions:**
- (1) Irons and Monuments not labeled
 - (2)
 - (3)

Stephen J. Martin RLS 1262
checked by *[Signature]*



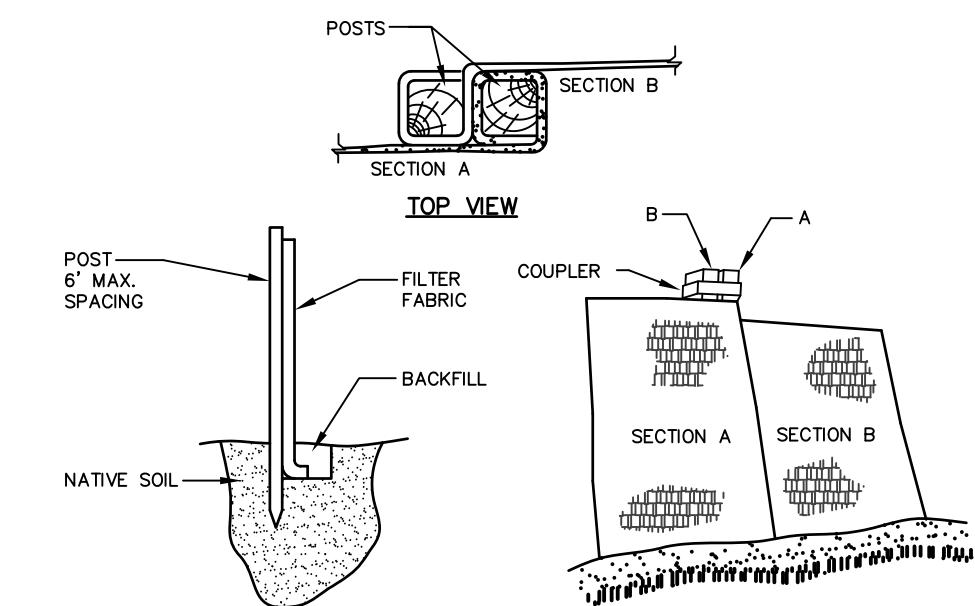
— STANDARD BOUNDARY SURVEY —
PROPERTY & TOPO PLAN
1520 Westbrook Street Portland, Maine
made for
Advent Christian Church
1520 Westbrook Street Portland, Maine
Job 87084 Book 345 File 4369 Disc 143
August 7, 1987
R. P. TITCOMB ASSOCIATES, INC.
LAND SURVEYORS / ENGINEERS
50 Gray Road, Falmouth, Maine

1. THE RECORD OWNER OF THE PARCEL IS ADVENT CHRISTIAN CHURCH OF PORTLAND, MAINE. RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 4520, PAGE 175.
2. THE PROPERTY IS SHOWN AS PARCEL ID 256 A001001 AND IS LOCATED IN THE RESIDENTIAL 2 DISTRICT.
3. SPACE AND BULK CRITERIA FOR THE RESIDENTIAL 2 DISTRICT ARE AS FOLLOWS:

MINIMUM LOT SIZE:	10,000SF
MINIMUM STREET FRONTAGE:	50'
MINIMUM FRONT YARD:	25'
MINIMUM SIDE YARD:	12'-16'
MINIMUM REAR YARD:	25'
MAXIMUM BUILDING HEIGHT:	35'
MAXIMUM BUILDING COVERAGE:	20%

 - * SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
4. TOTAL AREA OF PARCEL IS APPROXIMATELY 4.7946 ACRES.
5. BOUNDARY AND EXISTING CONDITIONS INFORMATION SHOWN HEREON IS BASED ON RECORD INFORMATION AVAILABLE FROM PLANS COMPILED BY TITCOMB ASSOCIATES, FALMOUTH, ME DATED AUGUST 7, 1987.
6. TOPOGRAPHIC INFORMATION FOUND ON THE PLAN(S) WAS COMPILED FROM SPRING 2015 LIDAR DATA. GROUND CLASSIFIED LIDAR POINT DATA WAS USED TO CREATE THE TOPOGRAPHIC INFORMATION. THE VERTICAL DATUM OF THE TOPOGRAPHIC MAPPING IS NGVD29 WITH THE UNITS OF MEASURE IN U.S. SURVEY FEET. FOR PURPOSES OF THIS PLAN, PORTLAND'S CITY DATUM AND NGVD29 ARE BEING CONSIDERED EQUIVALENT.

1. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD AND PRECEDING PLANS. 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.
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, MARCH 2003 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.
3. INSTALL FILTRATION BARRIERS DOWN GRADIENT OF DISTURBED AREAS, AS SHOWN ON THIS PLAN.
4. GRADE TO DRAIN, MIN OF 1.5%, UNLESS OTHERWISE NOTED



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 OR FABRIC ON 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.

NOT TO SCALE

LEGEND		
EXISTING		PROPOSED
_____	PROPERTY LINE/R.O.W.	
_____	ABUTTER LINE/R.O.W.	
_____	TIE LINE	
_____	SETBACK	
<u>////</u>	BUILDING	
_____	EDGE PAVEMENT	
_____	EDGE GRAVEL	
_____	CURB LINE	
--120-- --118--	CONTOURS	<u>120</u>
x120.00	SPOT GRADE	+120.00
	DECIDUOUS TREE	
	CONIFEROUS TREE	
== --o-- ==	CULVERT	
 	CATCH BASIN FILTER BARRIER	
		<u>FB</u>

[illegible]

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
R1	-	For submission to Portland Planning Board.	6/17/02	AHB
R1	A	For resubmission to Portland Planning Board.	9/03/02	AHB
R1	B	For resubmission to Portland Planning Board.	9/18/02	AHB
R1	C	Show PRE-LOAD as per sketch by William Whited	10/10/03	AHB

REFERENCES

- Topographic information and existing conditions traced from plans compiled by R.P. Titcomb Associates, Falmouth, ME - Aug. 7, 1987
- Existing condition contours revised in area of new parking areas and fill.
- Neighboring building locations from plan titled Capiac brook greenbelt project Aerial survey of watershed, For: City of Portland, Parks & Public Works Dept. Engineering Div. Dated 5-15-92 By: Aerial survey & Photo Inc. Norridgewock, ME

NOTES

- Bearings are based on magnetic north 1987 (see reference #1).
- Elevations are based on the City of Portland Data

AREA

211,882 SF.
4.86 ac.

OWNER OF RECORD

Advent Christian Church of Portland, Maine
4520/175

LEGEND

- IRON PIN FOUND (1/2" hollow pipe, unless noted)
- IRON PIN TO BE SET (5/8 rebar)
- MONUMENT FOUND
- NF NOW OR FORMERLY OF
- UTILITY POLE
- EDGE OF PAVEMENT
- EXISTING BUILDING
- FENCE LINE
- CATCH BASIN
- WATER VALVE
- MANHOLE
- FIRE HYDRANT
- DECIDUOUS TREE
- CONIFER TREE
- TREE LINE
- NEW PAVED SIDEWALK
- NEW CONTOUR LINE
- STONE CHECK DAM
- SILT FENCE

Preliminary Site Plan STROUDWATER CHRISTIAN CHURCH

1520 WESTBROOK STREET - PORTLAND, ME

PREPARED BY

Civil Engineering

#2 Bensons Way
Gorham, Maine 04038-2082

September, 2002

DATE

Alton H. Benson III, PE # 5014

Site Plan		Stroudwater Christian Church	
1520 Westbrook Street - Portland Maine			
AHB Engineering #2 Bensons Way Gorham, ME 04038-2082 Ph: (207) 839-4780	SIZE "D40" SCALE 1"=40'	FSM NO. by: AHB September 17, 2002	DWG NO. scc-site 100x100.dwg SHEET 2 of 10



Professional Engineer stamp on these drawings covers only "Stormwater design" as well as "erosion & sediment controls". The copy of this seal is not valid unless accompanied by a separate stamp that is embossed signed and dated.

CATCH BASIN & PIPE SCHEDULE				
Item	Description	Length	Inlet elev.	Outlet elev.
CB #1	6 ft. dia.	VF	NA	48.5
Pipe	48" dia. PVC	131 ft.	48.5	48.4
CB #2	6 ft. dia.	VF	48.4	48.3
Pipe	48" dia. PVC	170.5 ft.	48.3	48.2
CB #3	6 ft. dia.	VF	48.2	48.1
Pipe	24" dia. PVC	43.5 ft.	48.1	48.0
CB #4	7' x 13' MS000	5-9 VF	48.0	48.0
Pipe	18" dia. PVC	26 ft.	48.0	46.0
Pipe	12" cap under walk	200 ft.	59.5	59.3

40 0 40' 80' 120'



Austen Davis <austentd@portlandmaine.gov>

Site Plan review of 1498 Westbrook St/ PL-001974-2022

8 messages

Ronald N. Ward <RWard@dwmlaw.com>

Mon, Apr 25, 2022 at 11:35 AM

To: "austentd@portlandmaine.gov" <austentd@portlandmaine.gov>

This message was sent securely using Zix®

Mr Davis- this office represents Richard and Suzanne Mailman, abutters to the above- captioned property. They have received your Notice of administrative review of the proposed project, post- marked 4/19/ 2022. The Mailmans are generally supportive of the proposed use, but have questions regarding site plan issues they intend to discuss with the Applicant. In order to organize their inquiry, we have the initial questions for you:

- When does the Staff intend to complete its review of the application;
- Is the Site Plan available on- line and, if not, how do we arrange a review of that; and
- When does the period for written comments close?

I called your number this morning and reached "Max" who will pass along my inquiry to you. That is summarized, above- thanks.

Ronald N. Ward

Attorney

207.772.1941 ext. 503

RWard@dwmlaw.com

84 Marginal Way, Suite 600, Portland, ME 04101-2480

800.727.1941 | 207.772.3627 Fax | dwmlaw.com



The information transmitted herein is intended only for the person or entity to which it is addressed and may contain confidential and/or privileged material. Unintended transmission shall not constitute waiver of any privilege, including, without limitation, the attorney-client privilege if applicable. Any review, retransmission, dissemination or other use of, or taking of any action in reliance upon, this information by persons or entities other than the intended recipient is prohibited. If you received this in error, please contact the sender and delete the e-mail and any attachments from any computer.

This message was secured by Zix[®] #174.

Austen Davis <austentd@portlandmaine.gov>
To: "Ronald N. Ward" <RWard@dwmlaw.com>

Mon, Apr 25, 2022 at 4:09 PM

Hey Ron,

I have attached the site plan submitted by the church at 1498 Westbrook St.

All information on the 1498 Westbrook St. site plan application, including the site plan drawings and other materials uploaded by the applicant, can be found at [this link](#).

I should reiterate that we are still in an initial fact-finding phase of review, and staff have yet to make any findings on the consistency of the application with the City's Land Use Code; this will occur in the coming weeks and as we review the materials. Feel free to send me any additional questions or comments you have on the materials etc.

Best wishes,

Austen

[Quoted text hidden]

--

Austen Torres Davis

Planner

Planning & Urban Development Department

389 Congress Street
Portland, Maine 04101

austentd@portlandmaine.gov | (207) 874-8632 **Site Plan.pdf**
9631K

Ronald N. Ward <RWard@dwmlaw.com>
To: Austen Davis <austentd@portlandmaine.gov>

Mon, Apr 25, 2022 at 4:22 PM

This message was sent securely using Zix®

Austen- thanks for that amazingly quick reply- Ron

[Quoted text hidden]

Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

This message was secured by Zix®.

[Quoted text hidden]

Ronald N. Ward <RWard@dwmlaw.com>
To: Austen Davis <austentd@portlandmaine.gov>

Wed, May 4, 2022 at 12:22 PM

This message was sent securely using Zix®

Hi Austen- I am following up on the current status of this plan which we discussed on 4/25. As your file will reflect, I represent abutters to the Project site, Richard and Suzanne Mailman, who have concerns about proposed site improvements- a perimeter wooden fence which has deteriorated and is largely fallen down along the common boundary line and a significant drainage problem generated from the site which is expected to accelerate unless the site is designed to retain the drainage.

At the time of my inquiry, you were awaiting a zoning interpretation to determine the course of review of this application. The website seems not to reference any decision on those issues, or any schedule for the application to enter the final review process. Mr Mailman has since renewed his contact with the Church to determine current intentions and has received no material response.

Please advise on the current status of this application, and enter our concerns as abutter Comments to this Application.

Thanks- Ron Ward

From: Austen Davis <austentd@portlandmaine.gov>
Sent: Monday, April 25, 2022 4:09 PM
To: Ronald N. Ward <RWard@dwmlaw.com>
Subject: Re: Site Plan review of 1498 Westbrook St/ PL-001974-2022

This message was sent securely using Zix®

[Quoted text hidden]

Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

This message was secured by Zix®.

[Quoted text hidden]

Austen Davis <austentd@portlandmaine.gov>
To: "Ronald N. Ward" <RWard@dwmlaw.com>

Fri, May 6, 2022 at 10:46 AM

Good morning Ron,

I will enter Richard and Suzanne Mailman's concerns as public comments on this project. Planning & Development Staff have determined that the addition of a food pantry on the church property would be considered a conditional use, and therefore the application would need to go before the Planning Board. As of now our team is awaiting materials from the applicant and there are no workshops of public hearings yet planned.

I will give you an update when we have a better idea of a timeline.

Best wishes,
Austen

[Quoted text hidden]

Ronald N. Ward <RWard@dwmlaw.com>
To: Austen Davis <austentd@portlandmaine.gov>

Fri, May 6, 2022 at 10:48 AM

This message was sent securely using Zix®

Perfect, Austen, thanks.

Ron

[Quoted text hidden]

This email has been scanned for spam and viruses by Proofpoint Essentials. Click [here](#) to report this email as spam.

[Quoted text hidden]

Ronald N. Ward <RWard@dwmlaw.com>
To: Austen Davis <austentd@portlandmaine.gov>

Fri, Jun 10, 2022 at 11:44 AM

This message was sent securely using Zix®

Hi Austen- we're seeing no action on the conditional site plan permitting, so I'm just checking in for guidance on a bit of research on this property-

We're told by a Church member that the now- dilapidated boundary fence was originally installed in the 1990s as a condition of the City's site plan approval for development of the property. Do City records on site plan approvals extend back that far and accessible by the general public? We're thinking, of course, that the fence should be maintained to remain consistent with the site plan approval. If this is not something within your dept, please send along to the appropriate contact.

Thanks- Ron

From: Austen Davis <austentd@portlandmaine.gov>
Sent: Friday, May 6, 2022 10:47 AM

[Quoted text hidden]

[Quoted text hidden]

This email has been scanned for spam and viruses by Proofpoint Essentials. Click [here](#) to report this email as spam.

[Quoted text hidden]

Ronald N. Ward <RWard@dwmlaw.com>
To: Austen Davis <austentd@portlandmaine.gov>

Tue, Jun 28, 2022 at 1:56 PM

This message was sent securely using Zix®

Austen- did you have a chance to check on this? Thanks.

[Quoted text hidden]

[Quoted text hidden]



Austen Davis <austentd@portlandmaine.gov>

1498 Westbrook St

3 messages

Ed Goddin <egoddin@gmail.com>

Mon, Apr 25, 2022 at 8:55 AM

To: austentd@portlandmaine.gov

Cc: Patty Goddin <pattygoddin@gmail.com>, planningboard@portlandmaine.gov

Austen:

Wee received a Notice from the Portland Planning division today and we very surprised. We have not received any information regarding the Stroudwater Christian Church wanting to add a food pantry to their property. Given that we are located next door to them I would think that we would have received a site plan and had some input into the decision as we are within 500 ft. of the subject property as out land abuts to subject property. I also have questions as to why a food kitchen would be allowed in an R2 & R3 residential area.

I look forward to receiving the documentation that it appears we should already have in or posession. I also would like to know about the zoning and why this would be allowed. Please advise our path forward to address these concerns.

Ed & Patty Goddin

jrather@portlandmaine.gov <jrather@portlandmaine.gov>

Mon, Apr 25, 2022 at 3:58 PM

To: egoddin@gmail.com, austentd@portlandmaine.gov

Cc: Patty Goddin <pattygoddin@gmail.com>, planningboard@portlandmaine.gov

Hi Ed and Patty,

Information on the [1498 Westbrook Street](#) site plan application, including the site plan drawings and other materials uploaded by the applicant, can be found at [this link](#). As the application was filed recently, it is still in an initial fact-finding phase of review, and staff have yet to make any findings on the consistency of the application with the City's [Land Use Code](#); this will occur in the coming weeks and as we review the materials. You can send any additional questions or comments you have on the materials to myself and to Austen.

Best,

-James

James J. Rather, AICP
Development Review Manager
Planning & Urban Development Department
[389 Congress Street](#)
[Portland, Maine 04101](#)
jrather@portlandmaine.gov
Ph: (207) 874-8699

[Quoted text hidden]

Ed Goddin <egoddin@gmail.com>

Mon, Apr 25, 2022 at 4:35 PM

To: jrather@portlandmaine.gov

Cc: austentd@portlandmaine.gov, [Patty Goddin <pattygoddin@gmail.com>](mailto:pattygoddin@gmail.com), planningboard@portlandmaine.gov

James:

I wanted to thank you for your response. I am not in support of having a modular building placed on a property next to ours in a R2 - R3 residential area for a commercial purpose.. This would increase the traffic and noise level in the parking right next to our house and have a negative impact on the value of our house. Please keep us posted on how we can continue provide our input to the approval process.

Thanks for your help.

Ed Goddin

[Quoted text hidden]

[Quoted text hidden]

Notice: Under Maine law, documents - including e-mails - in the possession of public officials or city employees about government business may be classified as public records. There are very few exceptions. As a result, please be advised that what is written in an e-mail could be released to the public and/or the media if requested.

July 7, 2022

SENT VIA EMAIL: austentd@portlandmaine.gov

City of Portland Planning Board
389 Congress Street, Fourth Floor
Portland, ME 04101

Re: Conditional Site Plan Application - 1498 Westbrook Street

Dear Board Members:

I represent Richard and Suzanne Mailman whose home located at 75 Partridge Circle abuts the subject property. This application has been the subject of many conversations with the owners of the subject property, as outlined in the Mailman letter to Austen Davis dated July 2, 2022, a copy of which is attached. We submit the enclosed to leave no uncertainty as to what we seek from the Planning Board and, hopefully, to help accelerate the Applicant's process.

We take no issue with the uses proposed in the pending application. Our issues focus upon the impacts upon the Mailmans' home, conditions which have existed for several years. These continue to be the source of conversation with the owner Church. The dilapidated and dangerous security fence owned by the Applicant needs to come down and be replaced. We understand that fence was a requirement imposed by the City when the use of the property changed to a larger congregate meeting site many years ago. The intensity of the use is now projected to accelerate and the need for a respectful replacement fence is ever more important.

The surface water runoff on the Mailman property has accelerated over the years. They have taken many measures on their property to manage the intrusion of the water, but the level of runoff is now beyond their capacity. We fully expect that the new construction, with additional parking and more impervious surfaces will accelerate that trend. We seek a condition that assures the flow on the Mailman home will not increase as the result of this new construction, with provisions that the drainage facilities be regularly maintained.

Our suggestions for the Conditions of Approval we have in mind would be as follows:

1. The pre-existing, dilapidated security fence along the common boundary with 75 Partridge Circle be removed and replaced by a new fence of similar materials and dimensions before a Certificate of Occupancy issues for the proposed new use. The specifications for that replacement fence would be as discussed and agreed between the adjoining property owners.

City of Portland Planning Board
July 7, 2022
Page 2

2. The surface water control on the Project site be engineered and constructed to assure the flow of surface water on and across the adjoining property at 75 Partridge Circle shall not exceed that which currently exists; the Owner of the Project site shall maintain the drainage ways located on adjoining public streets and ways to assure optimal flows outside of the 75 Partridge Circle premises.

Thank you for your consideration. The Mailmans stand ready to address any questions you may have.

Sincerely,



Ronald N. Ward

Enclosure

cc: Richard and Suzanne Mailman via email (rpmail@maine.rr.com)

July 2, 2022

Austin Torres Davis
City of Portland
Planning and Urban Development Department
389 Congress Street
Portland, Maine 04103

Dear Sir

Regarding: 1974 Westbrook Street, Portland, Maine, expansion plan.
Our home is located at 75 Partridge Circle, Portland, Maine. Our property abuts 350 feet of the Church's property. Both property lines are to the back side of each property. Presently there is a 6feet high and 240feet long stockade fence between the properties. The fence belongs to the Church.

Previously In 1990 the Church appeared before the Portland Planning Board to consider expansion plans. The plan for that expansion was granted. A part of the original site plan approval for the expansion plans in 1990 was the installation of a PRIVACY fence to be erected between the Church and our property at the expense of the Church. For the last three years I have been trying to get representatives of the Church to repair or replace the now dangerous fence, to no avail.

On June 6, 2022, I finally met with the Church's head trustee Adam Pitcher. I firstly told Mr. Pitcher I want to be a good neighbor. I told him about two problems we are having concerning the Church's property. First is the collapsing fence onto our property, secondly serious water runoff from the Church's property onto ours. Together we walked the properties as I pointed out my concerns. Mr. Pitcher asked me if we would allow the Church to remove the fence. I said NO, we want the fence for Privacy and added SECURITY. Regarding paved area water runoff onto our property he had no positive answer. I have not heard back from Mr. Pitcher since June 6, 2022.

I recently reached out to the Permitting Administration of the City of Portland. On June 29, 2022, I received an e-mail from Evan Dunkle. He inspected the fence and I believe he told the Church's representative Robb Gossen to do something regarding the fence. Robb Gossen said he would have the fence cleared in a month. The reply we received from the city was very vague, we have no idea how we stand regarding our PRIVACY fence.

I would have no problem erecting our own fence, unfortunately the rules and regulations on my deed says no fences are allowed in Stroudwater Woods.

As for the Church's new expansion plan, we would like to see a new PRIVACY fence and a resolve for the water runoff as part of the new site plan for the Church.

Regards

Richard and Suzanne Mailman

75 Partridge Circle

Portland, Maine

04102



Austen Davis <austentd@portlandmaine.gov>

1498 Westbrook St Portland- Food Pantry home

Maryann Cocca-Leffler <mcleffler@aol.com>

Tue, Jul 5, 2022 at 3:14 PM

Reply-To: Maryann Cocca-Leffler <mcleffler@aol.com>

To: "austentd@portlandmaine.gov" <austentd@portlandmaine.gov>

Hi Austen-

I received a postcard about an upcoming meeting regarding the food pantry home on 1498 Westbrook St.

I live at [18 Black Sparrow Drive](#). ([Stroudwater](#) Preserves new subdivision). The back of my lot abuts the church land. There are lots of trees between us and the church.

Question:

1. Is there a map to show where on the Church site the food Pantry home will sit? (Is it West or East of the Church?)
2. will they be clearing trees behind me? I hope a buffer of trees remain wherever the house sits.

Thank you for your time

Maryann Cocca-Leffler

[18 Black Sparrow Dr](#)

207-245-2332