

CITY OF PORTLAND, MAINE

PLANNING BOARD



Brandon Mazer, Chair
Maggie Stanley, Vice Chair
Marpheen Chann
Sean Dundon
Bob Dunfey
David Silk
Austin Smith

AGENDA PORTLAND PLANNING BOARD MEETING

The Planning Board will hold a remote meeting on Tuesday, May 11, 2021, 4:30 p.m. This meeting will take place using Zoom.

Virtual meetings are allowed using emergency legislation approved by LD 2167; 1 M.R.S. §403-A, that authorizes cities and towns to conduct meetings online.

Allow your computer to install the free Zoom app to get the best meeting experience.

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 un-muted by the host when it is time for public comment.

ZOOM MEETING INSTRUCTIONS

You are invited to a Zoom webinar.

When: May 11, 2021 04:30 PM Eastern Time (US and Canada)

Topic: Planning Board Workshop and Public Hearing 5-11-2021

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/84145949875>

Or One tap mobile :

US: +19292056099,,84145949875# or +13017158592,,84145949875#

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

US: +1 929 205 6099 or +1 301 715 8592 or +1 312 626 6799 or +1 669 900 6833 or +1 253 215 8782
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Webinar ID: 841 4594 9875

International numbers available: <https://us02web.zoom.us/j/84145949875>

For more information on how to use Zoom, please go to:

<https://www.portlandmaine.gov/remotePUD>

Public comments will be taken for each item on the agenda and written comments should be submitted to planningboard@portlandmaine.gov

WORKSHOP - 4:30 PM

- i. Zoning Map Amendment; 99 Winter Street and 160 State Street; Thanos, LLC., Applicant. (estimated time 4:30 – 6:00 p.m.) The Planning Board will hold a remote workshop to consider a zoning map amendment to map an R-7 Compact Urban Residential Overlay Zone onto a parcel located at 99 Winter Street and 160 State Street. The subject property is 28,953 square feet in size and is zoned R-6 Residential.

PUBLIC HEARING - 6:00 PM

- 1. ROLL CALL AND DECLARATION OF QUORUM**
- 2. COMMUNICATION AND REPORTS**
- 3. REPORT OF ATTENDANCE AT THE MEETING HELD ON 4-27-2021**

Afternoon Workshop

144 State Street: Chann, Dundon, Dunfey, Mazer, Smith present; Silk and Stanley recused.

132 Brackett Street: Chann, Dundon, Dunfey, Mazer, Silk, and Stanley present; Smith recused.

Evening Hearing

48 Brown Street: Dundon, Dunfey, Mazer, Silk, Smith, and Stanley present; Chann recused.

- 4. REPORTS OF DECISIONS AT THE MEETING HELD ON 4-27-2021**

- i. Level III Site Plan Amendment; 48 Brown Street; Ocean Gate, LLC., Applicant.
Stanley moved and Dundon seconded a motion to find the site plan amendment in conformance with the site plan standards of the Land Use Code and the Downtown Design Guidelines. Vote 6-0, Chann recused.

- 5. NEW BUSINESS**

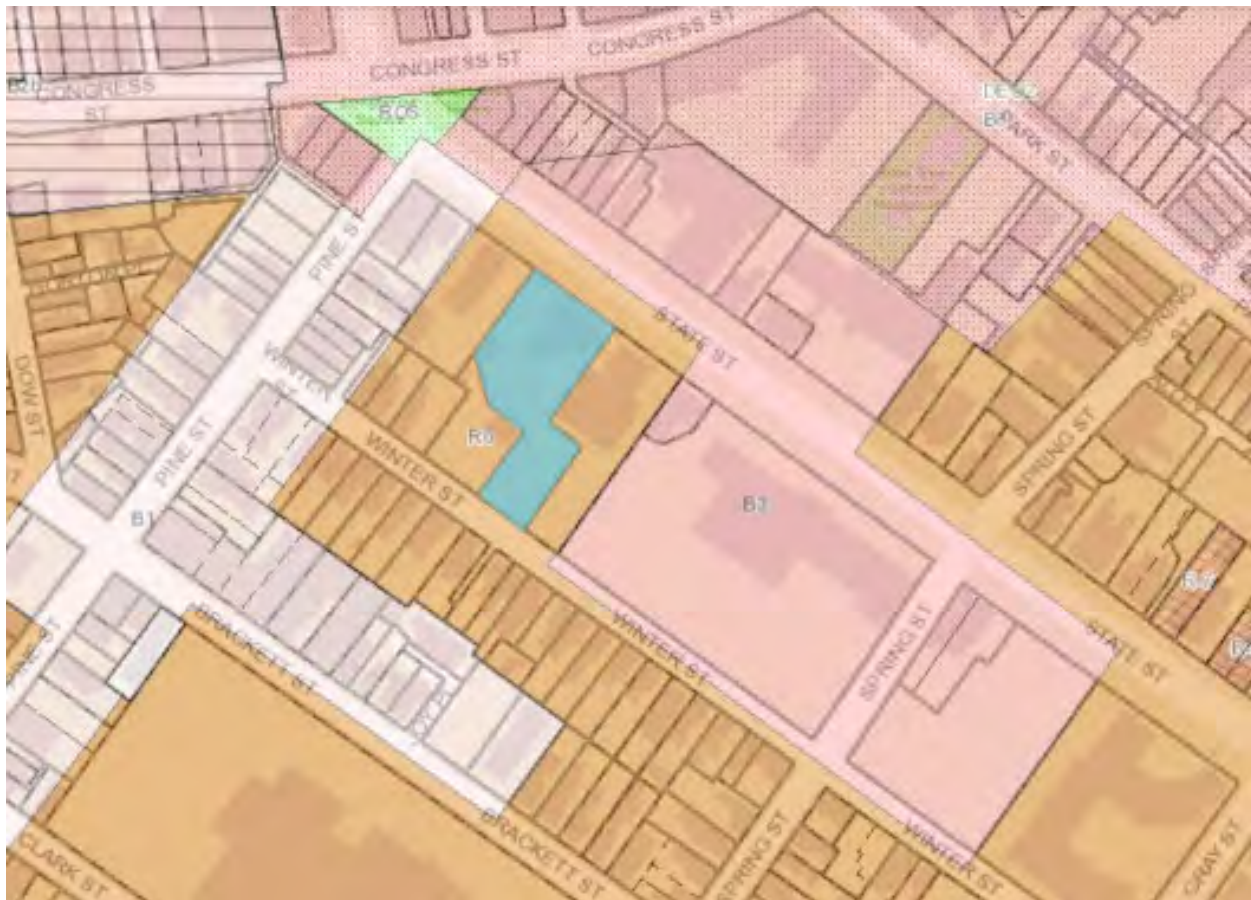
- i. Level III Site Plan and Conditional Use; 69 Presumpscot Street; Portland Public School Department, Applicant. (estimated time 6:00 – 7:00 p.m.) The Planning Board will hold a remote public hearing on a Level III site plan and conditional use application for a 15,750 square foot addition to the rear of the Presumpscot Elementary School to be used as a cafeteria and classroom space, along with an additional 2,160 square foot expansion to the front of the building for use as administrative and security space as well as associated site improvements. The subject property is 7 acres in size and is zoned I-M Industrial and R-5 Residential.
- ii. Conditional Use; 132 Brackett Street; City of Portland School Department, Applicant. (estimated time 7:00 p.m.) The Planning Board will hold a remote public hearing to consider a Conditional Use Permit application to facilitate a 670 square foot conference room and stairwell expansion to the Reiche Elementary School building at 132 Brackett Street, along with the construction of a new entry vestibule. The subject property is 5.34 acres in size and is zoned R-6 Residential.

Memorandum

Planning and Urban Development Department



To: Chair Mazer, Members of the Planning Board
From: Andrew Tufts, Planner
Date: May 7, 2021
Re: Proposed Rezoning: 160 State Street/99 Winter Street
Project ID: ZN-001021-2020
Meeting: May 11, 2021
CBL: 045 Coo4



Existing zoning context of 99 Winter Street and 160 State Street. Site highlighted in blue

I. INTRODUCTION

Thanos LLC, seeks a zoning map amendment to map an R-7 Compact Urban Residential Overlay Zone onto a parcel located at 99 Winter Street and 160 State Street (parcel 045 Coo4) in the West End neighborhood. The subject property is approximately 28,953 square feet in size and is currently zoned R-6 Residential. Based on feedback obtained at the January 12 and March 23, 2021 workshops, the applicant has indicated that they would like to revise their zoning map amendment request and now proposes to map a B-3 Downtown Business zone at the subject parcel rather than the original R-7 Residential request.

The Planning and Urban Development Department mailed 196 notices advertising this meeting to property owners within 500 feet of the site. A legal advertisement ran in the May 1 and 2, 2021 editions of the *Portland Press Herald*.

Owner/Applicant: Thanos, LLC

Applicant Team: Peter Heil (Applicant), Acorn Engineering; Josh Soley, Owner

II. PROJECT DATA

Existing Zoning	R-6 Residential
Proposed Zoning	B-3 Downtown Business (R-7 Zone was formerly proposed)
Existing Use(s)	Lodging House (along State Street frontage)
Proposed Use	Multifamily Residential (along Winter Street frontage) Lodging House to remain (along State Street frontage)

III. BACKGROUND & EXISTING CONDITIONS

a. Current Land Uses and Zoning

The site is comprised of a single parcel that is bounded by Winter Street to the south and State Street to the north. The section of parcel abutting State Street is addressed as 160 State Street while the Winter Street frontage is addressed as 99 Winter Street. The existing three-story Greek-Revival building at 160 State Street was built in 1807 as a private residence. In 1934 the building was purchased by the Bishop of Portland and operated as a nunnery (The Sisters of Precious Blood Convent) for 84 years. On February 7, 2020, the applicant, Thanos, LLC, received a Level II Site Plan approval from the City of Portland Planning Authority to redevelop the former monastery into a 40-room lodging house.

At the rear of the lodging house, the property connects to a large walled-garden abutting Winter Street, and is the section of the parcel being considered for redevelopment. The area of the parcel on which the future development would be constructed is entirely porous and is roughly 9,100 square-feet, with 70 feet of frontage along Winter Street. In late 2018, the owner of the property elected to remove certain trees from the Winter Street parcel. The City Council has since adopted a Heritage Tree Preservation Ordinance (Order 26-20/21) which added restrictions and new processes for tree removal in historic districts moving forward.

In addition to the applicant's property, the immediate vicinity includes State Street, a wide, historic thoroughfare identified as a priority corridor in the City's Comprehensive Plan that has wide sidewalks and established street trees lined with a variety of building types. The buildings fronting along State Street range from residential, retail, and large institutional uses such as Mercy Hospital to historic mansions converted to other uses including a funeral home, the Portland Club, and offices. Two historic landmark church complexes with garden spaces are located across the street and include community centers, a day care, and places of assembly. Further to the east, beyond the church properties the context becomes increasingly residential with a variety of scales and eras of buildings.

Spring Street has an intact historic fabric, as does the southwest side of Winter Street. The character of Spring and Winter streets is predominantly small-scale residential, with some exceptions. Most of these properties are protected by historic districts. A large portion on the north side of Winter Street between Spring and Pine streets is occupied by the 1943 Mercy Hospital complex that was recently the subject of a

zoning map amendment (ZN-001163-2020) to rezone the project site and adjacent parcels from R-6 to B-3, which was recommended for approval to the City Council by the Planning Board on December 15, 2020 and adopted by the City Council on February 22, 2021. Further down Winter Street to the east is 100 State Street, a six-story tower in the park style multi-family building constructed in 1979 and a large surface parking lot.

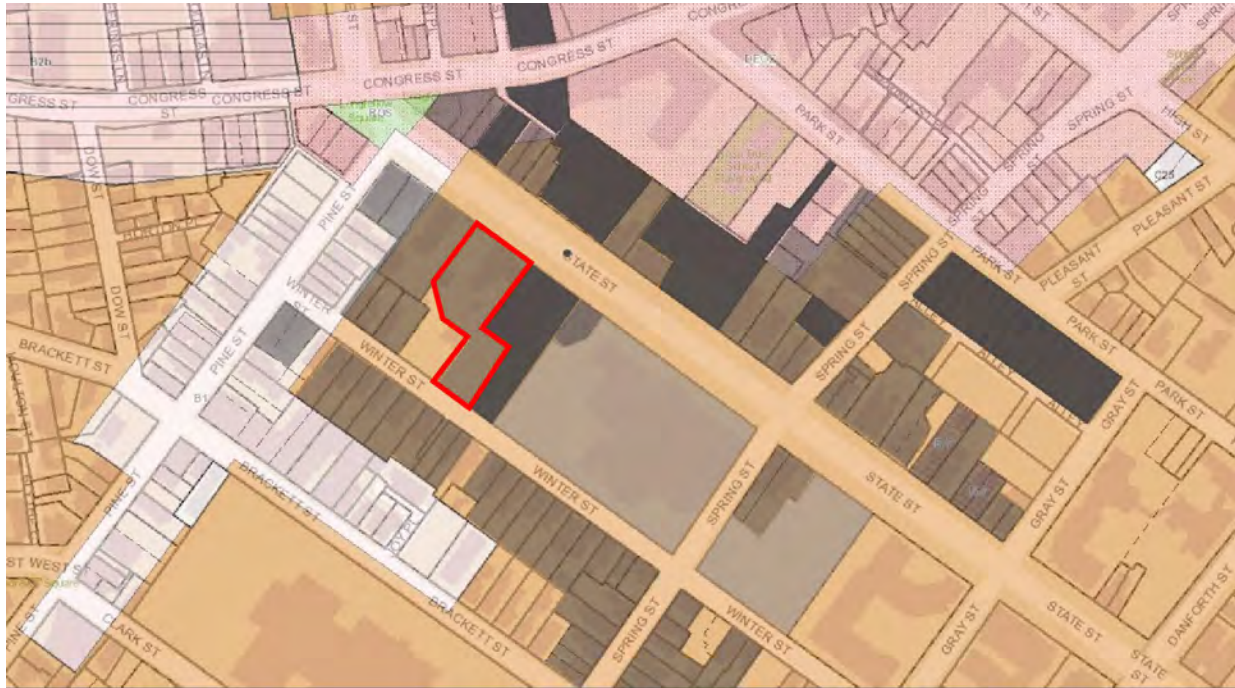
Nearby Pine and Congress streets are mapped with mixed-use B-1 and B-3 zones, respectively. Congress Street, Portland's main thoroughfare, is located one block to the north of the subject property and is lined with a mix of dense, residential, commercial, and mixed-use buildings ranging between two to eight stories. Pine Street is generally characterized by a mix of residential, commercial, and mixed-use buildings with ground floor retail, including 40 Pine Street a four story residential building with a ground floor market. The majority of the West End neighborhood is zoned R-6.



99 Winter Street Existing conditions

b. Historic Resources

The area under review is within the West End Historic District and is adjacent to the Congress Street Historic District. The applicant's property is a contributing structure. Any alterations, additions, or new construction contemplated at the subject property or adjacent sites would require historic preservation staff or Board-level review.



Historic Resources (Landmarks – black; Contributing – dark grey; Mercy Proposal – light grey; Proposed Site – outlined in red)

IV. PROPOSED ZONING MAP AMENDMENT

It should be noted that the applicant's original application requested a zoning map amendment to R-7. However, based on feedback received during prior Planning Board workshops, the applicant has revised their request and is now seeking a zoning map amendment to change their site at 99 Winter Street and 160 State Street from the existing R-6 Residential zone to a B-3 Downtown Business zone. The proposed rezoning would facilitate the development of a new multifamily workforce housing building on the Winter Street portion of the property, which currently contains no structures.

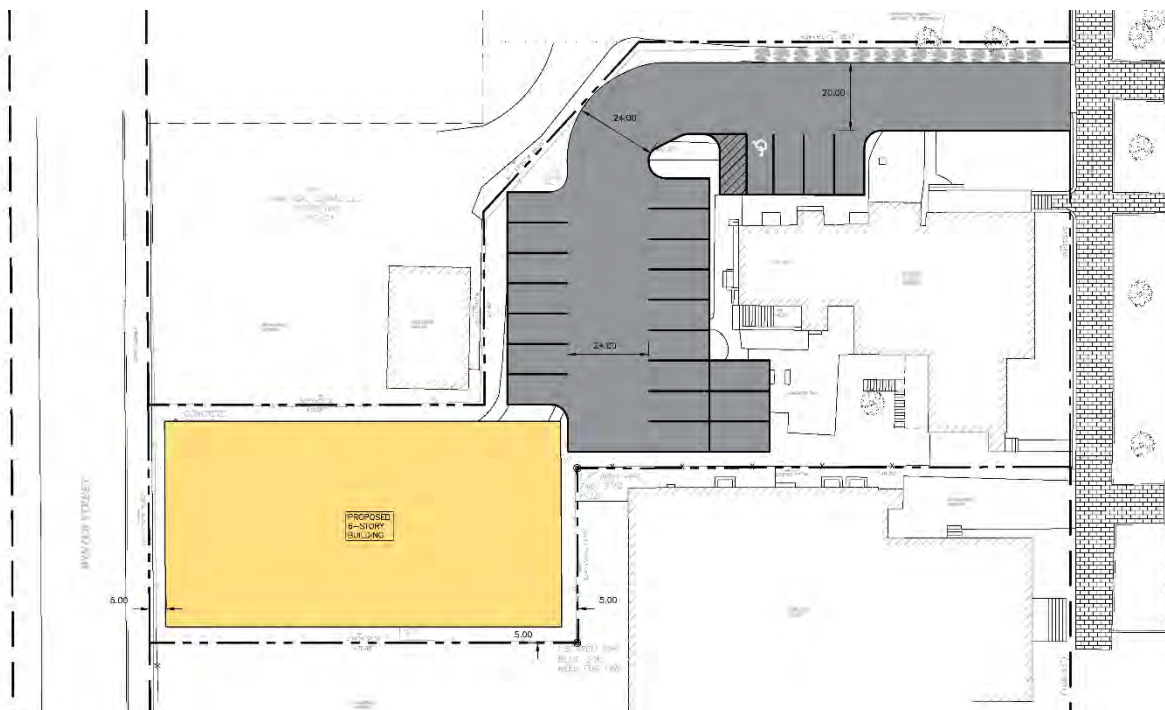
B-3 is a high-density mixed-use zone mapped on the Portland Peninsula. Building heights in B-3 are governed by the Downtown Height Overlay Map, which specifies maximum base and overall building heights. In order to encourage low-income and workforce housing units in designated growth areas, eligible projects as defined under Subsection 18.2.2 located in the B-3 zone may receive a height bonus up to an additional 25 feet with the inclusion of affordable housing. Off-street parking is optional for developments within $\frac{1}{4}$ mile of fixed route transit service.

The proposed zoning map amendment to B-3 would result in an increase in density and would permit a broader range of uses within the proposed rezoning area allowing for additional development of commercial and residential uses than could be provided under existing R-6 conditions. In addition to the zoning map amendment the applicant would need to modify the Downtown Height Overlay Map, which regulates the height of parcels within the B-3 zone. A 65 foot height maximum facing State Street and a 35 foot height maximum to a depth of 65 feet along the smaller-scale, historic residential fabric of Winter Street is proposed.

TABLE 18-C: BONUSES FOR ELIGIBLE PROJECTS

% Low-income Units	% Workforce Units	Density Permitted ¹	Additional Height Permitted ²	Setback Reductions ³
10%	20%	1.1 x base	N/A	N/A
20%	40%	1.2 x base	10 ft.	N/A
30%	60%	1.3 x base	10 ft.	5 ft.
50%	100%	2.0 x base	15 ft.	5 ft.
75%	N/A	2.5 x base	25 ft.	10 ft.

Article 18 Housing: Table 18-C Bonuses for Eligible Projects



Approximate 99 Winter Street buildable area shown in yellow under the previous R-7 zoning proposal.

V. ZONING ANALYSIS

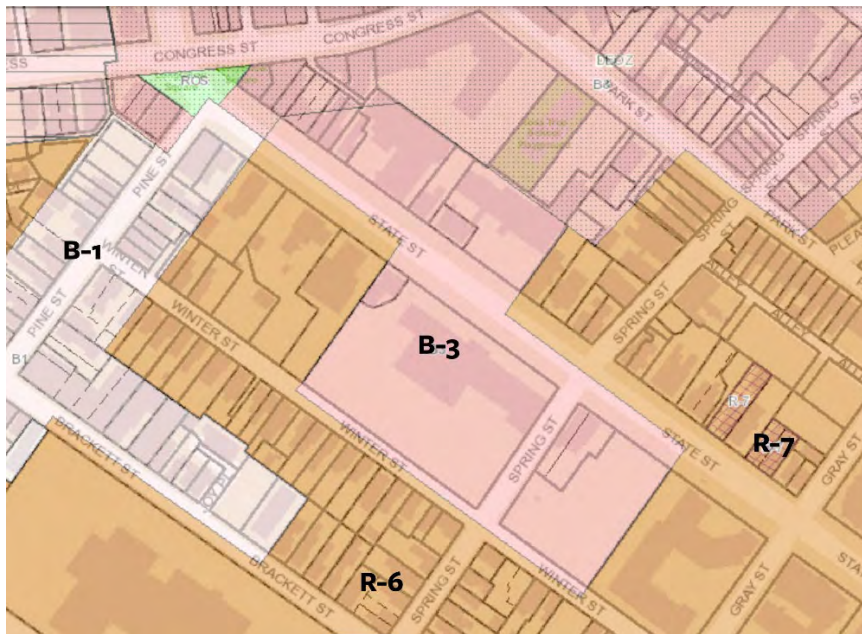
A. Overview

City staff have previously provided a comprehensive analysis of potential zoning designations, including a comparison of purposes, permitted uses, and dimensional requirements under the existing R-6 zoning, the originally-proposed R-7 zoning, and the subsequently modified rezoning request to B-3. The subject block has been the site of other recent zoning actions; On December 15, 2020, the Planning Board reviewed and approved a zoning map amendment from R-6 Residential to B-3 Downtown Business for the nearby Mercy Hospital and Morrison House property, the boundaries of which stretches from State Street to Winter Street.

During public review, there was discussion and agreement that the R-7 zone was not appropriate along Winter Street due to the zone's significantly more intensive dimensional standards, particularly in the

context of the residential portions of Winter Street. R-7 dimensional standards allow maximum building heights of 50 feet with no stepback requirement. In addition, R-7 is the only residential zone in the city that allows eligible projects to receive a height bonus of up to an additional 25 feet with the provision of affordable housing. Therefore, a building in the R-7 zone may be able to achieve a theoretical maximum building height of 75 feet without a stepback, potentially yielding development out of context with the existing built pattern along Winter Street.

To avoid the R-7 scale concerns along Winter Street, Planning staff recommended that the Board consider rezoning the entire Mercy Hospital site and nearby parcels to B-3 due to the flexibility to control height provided by the Downtown Height Overlay Map and the ability to increase density in a transit oriented location within walking distance to many services and employment centers. Below is the B-3 zoning boundary and height overlay map recommended by the Planning Board on December 15, 2020 and adopted by the City Council in February of 2021 for the Mercy Hospital rezoning.



B-3 map amendment boundary approved by the Planning Board on December 15, 2020 and adopted by City Council February 2021.



Downtown Height Overlay Map amendment approved by the Planning Board on December 15, 2020 and adopted by City Council February 2021.

B. Existing Zoning: R-6 Residential

The proposed sites current R-6 Residential zoning encourages high-density residential development at a maximum density of 725 square feet per dwelling unit. R-6 allows a lot coverage of 60% and poses setback requirements of five feet on the front yard, 10 feet on the rear yard, and five feet on the side yard that can be reduced to zero provided that the cumulative side yards are not less than 10 feet. A maximum height of 45 feet is allowed with 10 foot side property line and 15 foot rear property line stepbacks after a base height of 35 feet.

According to the City's zoning code, the R-6 Residential zone is intended to:

"To set aside areas on the peninsula for housing characterized primarily by multifamily dwellings at a high density providing a wide range of housing for differing types of households; and to conserve the existing housing stock and residential character of neighborhoods by controlling the scale and external impacts of professional offices and other nonresidential uses."

"In cases of qualifying small, vacant, underutilized lots located in the urban residential and business zone, to encourage new housing development consistent with the compact lot development pattern typically found on the peninsula."

C. Proposed Zoning: B-3 Downtown Business Zone

The proposed B-3 Downtown Business zone encourages increased housing opportunity by promoting dense urban housing characteristics. The purpose statement reads:

To maintain and enhance the role of the downtown as the business and commercial center of the region; to enhance and promote the orderly expansion of retail and service businesses downtown, satisfying the related needs of the city's resident, working, and visitor populations; to encourage increased housing opportunity downtown for a diverse residential population; to enhance the pedestrian environment

through the encouragement of intensive mixed-use activities, through the enhancement and maintenance of public and private open space, and through the enlivenment and increased attractiveness of the street environment; to encourage excellence in urban design; to preserve and capitalize on the unique character and historic fabric of the downtown through the encouragement of reuse of significant existing structures; to provide opportunity for an enhanced presence and integration of the arts and cultural activities; to reinforce the role of the downtown as a meeting place for community residents and visitors alike from all walks of life and all socio- economic groups; to provide adequate parking and transportation facilities which promote accessibility, enhance and encourage development opportunity, and enhance and protect the pedestrian environment; In the Pedestrian Activities District (PAD) Overlay Zone, to create continuity of pedestrian-oriented uses along streets where such uses predominate and along streets which, over time, will establish and maintain a strong retail and pedestrian-oriented use pattern; and to provide for the relocation of residents who are displaced by development.

B-3 zoning would allow an increase in density, with no limit on residential density, permitting more dwelling units per lot area in a walkable and transit oriented location. B-3 allows a lot coverage of 100% and poses no setback requirements. The Downtown Height Overlay Map governs building heights.

Table 1 provides a comparison of the dimensional requirements for zones under consideration.

Table 1: Zoning Requirements	R-6 (existing)	B-3 (current proposal)
Lot Size (min)	Between 2,000 sf and 43,560 sf (one acre) depending on use	None
Density (min)	725 sf land area/du 250 sf land area/rooming unit, intermediate care facility, hostel	None
Street Frontage (min)	20'	15'
Front Yard (min)	5' – principal + accessory structure	None
Front Yard (max)	None	5' street wall build-to line
Rear Yard (min)	10' – principal structures	None
Side Yard (min)	None	None
Side Yard (max)	5'-0' for attached townhouses on individual lots	None
Side Yard (Side Street, min)	None	None

Stepbacks	10' side; 15' rear above 35' height	Downtown Height Overlay Map
Lot Coverage (max)	60%	100%
Impervious Area (max)	n/a	n/a
Landscaped Open Space (min)	20%	n/a
Lot Width (min)	20' o' for attached townhouses	None
Building Height (max)	45'	Downtown Height Overlay Map
Building Height (min)	n/a	35' within 50' of street
Floor Area (max)	n/a	Limited for buildings 125' in height or greater
Garage Door Opening (max)	9' or 40% façade width, not to exceed 20'	n/a
Undifferentiated Blank Wall (max)	n/a	30'
External Effects	n/a	Enclosed structure, noise, vibration/heat, smoke, materials/waste
Height Bonus eligible		Y

Table 2 provides a comparison of the permitted uses for zones under consideration. Uses marked with a 'P' are permitted uses in the zone. A 'C' indicates a conditional use.

Table 2: Permitted Uses (P=use is permitted within zone) (C = Conditional use within zone)	R-6 (existing)	B-3 (current proposal)
Single and two-family Family Residential	P	P
Multi-Family Residential (3-or more units)	P	P
Handicapped Family Units	P	P
Single-family Manufactured Housing	P	
Lodging houses	P (*conversion of existing duplex or multi-family only)	P
Live/Work		P
Cemetery	P	
Parks/Recreation Use	P	

Home Occupation	P	
Municipal Buildings and Uses	P	P (*county/municipal)
Governmental Offices		P
Special Needs Independent Living Units	P (*may not include other residential or permitted uses)	
Bed and Breakfast	P (*up to 4 guest rooms; conversion of existing building only)	P
Hostels	P (*10 guests or fewer)	P
Wind energy systems	P/C	P
Accessory uses	P	
Bed and Breakfast (5 to 9 guest rooms)	C (*conversion of existing building only)	
Sheltered care group homes (up to 12 residents, 500' radius between group homes)	C	
Elementary, middle , and secondary	C	P (*public/private school of any type)
Intermediate care facility (13 or more persons, long-term/extended care)	C	
Places of assembly	C	P
Hospital	C	
College, university, trade schools	C	P
Utility substations	C	C
Professional office	C	P
Chancellery	C	
Nursery school and kindergarten	C	P (*public/private school of any type)
Off-street passenger car parking	C (*for permitted uses)	P (parking garages)
Surface Parking (with limitations)		C
Day care facility/ Home baby-sitting services	C	P
Private Club		
Funeral Home		
Hostels (no more than 20 guests)	C	
Business services		P
Personal services		P
Offices of Building Tradesmen		P

Retail Establishments (excluding drive-through, gas station, lumber)		P
Drinking Establishment		P
Beverage dealers		
Artist Studios		P
Clinics		P
Restaurants		P (*excludes drive-through)
Neighborhood Center		
Billiard Parlors		P
Miscellaneous Repair (excluding auto repair)		P
Communications Studios/Broadcast Facilities		P
Health Clubs/Gymnasiums		P
Theater/Performance/Exhibition Halls		P
Convention/Meeting Facilities		P
Hotels		P
Galleries		P
Registered Dispensary		P
Marijuana Retail Store		P
Small-scale marijuana caregiver		P
Museums		P
Printing/Publishing		P
Banking Services (drive-up)		C
Light Industrial (with limitations)		C
Emergency Shelters		C
Temporary wind anemometer towers	C	C

VI. POLICY ANALYSIS

Goals and policies of both the state and the city, as described in Portland's Comprehensive Plan, [Portland's Plan 2030](#), relevant to the proposed map amendment have been included below.

Several aspects of the proposed map amendment are supported by Portland's Plan, including an emphasis on the need for housing, and particularly affordable housing; residential density that supports walkability and transit; the proximity of the development site to employment centers; the principle of complete neighborhoods; and the adjacency to State Street a priority corridor identified in the Comprehensive Plan as a major arterial that can serve as an area of additional mixed-use, higher-density growth to take advantage of the transit benefits and services offered.

The applicant has highlighted two specific components of the Comprehensive Plan:

- Economy: A Vibrant City

The Economy Policy Guide says that the City actions should: *“Evaluate zoning and the condition of existing infrastructure in priority areas — downtown, identified neighborhood nodes, and along transit corridors — to ensure that employment and housing growth can be supported.”*

The applicant has argued that while the current zoning does allow for a degree of density, it falls short of the requirements that would enable private financing. A rezoning that results in the reduction of setbacks, maximization of building coverage, and increased building heights would adequately change the economics of the project so as to facilitate the applicant’s desired housing program.

- **Housing: A Livable City**

The Housing Policy Guide similarly calls for City actions to: *“Evaluate whether current zoning allows for new development consistent with historic patterns of form, density, and/or use, as well as whether it allows for priority growth areas.”*

The policy guide states that those who work in Portland should be able to live in Portland. Production of housing at this location would make this goal economically feasible by allowing for production of new units immediately downtown, near employment opportunities and excellent access to public transit.

The plan also highlights the importance of good design, contextual development, and sensitivity to neighborhood context as well as ensuring an appropriate balance of continuity and change in our historic districts as Portland grows; finding the balance of those goals is where the crux of the review of this proposal will be focused. Relevant Comprehensive Plan goals have been excerpted below:

Vision Statements

- Sustainable: Portland has been built and rebuilt to endure; we will balance our historic fabric, sound infrastructure, and the best of new technology and design for the future.
- Sustainable: Portland will grow in order to sustain our community, infrastructure, and economy.
- Sustainable: Growth should respect and seek to preserve our spectacular natural resources.
- Secure: We will be committed to accessible housing and healthy food for all our residents.
- Authentic: The uniqueness and integrity of our neighborhoods will be maintained and enhanced.

Environment

- Adopt sustainable land use and transportation policies that support connectivity, walkable neighborhoods, and multi-modal transportation.
- Continue to develop land use policies which support complete neighborhoods.

An Enduring City – Historic Preservation

- Stabilize and enhance historic areas of the city by ensuring quality investment in existing structures and compatible infill development.
- Ensure an appropriate balance of continuity and change as Portland grows and evolves.

A Livable City: Housing

- Increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences and financial capabilities of all Portland residents.

- Encourage additional contextually appropriate housing density in and proximate to neighborhood centers, concentrations of services, and transit nodes and corridors as a means of supporting complete neighborhoods.
- Pursue policies to enable people who work in Portland to have the option to live in Portland.
- Encourage quality, sustainable design in new housing development.

An Accessible City – Transportation

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

Future Land Use

- Complete Neighborhoods
- Reinforce the Center

The applicant has also provided additional analysis of consistency with the comprehensive plan (**Attachment D**).

VII. DISCUSSION

Workshop I

At the first Planning Board workshop, the applicant requested that the Planning Board consider a rezoning request to an R-7 zone to facilitate the development of a six-story residential building. The Planning Board and staff expressed concerns with the scale of an R-7 zone for this portion of Winter Street, specifically because the R-7 has no stepback requirements and is eligible for height and density bonuses with the provision of affordable housing. These same concerns were raised during the Mercy Hospital rezoning proposal. During the workshop, Staff also presented the option of mapping a B-3 zone. The Planning Board voiced support for the B-3 zone, and encouraged the applicant and Staff to explore this further. The R-7 zone was eliminated as an option, with B-3 now as the preferred alternative.

B-3 is more intensive than the existing zoning both dimensionally and in terms of permitted uses. Although the applicant's indication of what uses are planned there in a future development includes only residential uses on Winter Street, there exists the possibility of some non-residential B-3 uses being introduced.

Workshop II

Following the first workshop, Planning staff met remotely with neighborhood residents to provide an opportunity for open dialogue and allow neighborhood concerns to be heard. During that meeting neighbors expressed opposition to rezoning the site. In general, many of the questions and concerns expressed focused on issues of scale, compatibility with existing residential buildings on Winter Street, traffic generation, parking capacity, and the loss of vegetation/street trees. Some residents also questioned why the applicant needed to seek a rezoning at all, as a version of the proposed project could be constructed under the existing R-6 zoning. Historic Preservation (HP) staff also provided input on the proposed zone change. HP staff recommended that height limitations be considered carefully, specifically in the proposed 65 foot portion of the site nearest State Street due to the historic architectural value of the existing buildings that could potentially be impacted by future development if undertaken in a non-contextual manner.

At the second workshop, staff presented the B-3 zone alternative. In light of the recommendation by Historic Preservation staff to carefully consider future height impacts along State Street, Staff suggested that the portion of the site nearest State Street be mapped with a height limit of 45 feet and that a 35 foot

height limit be mapped along Winter Street on the Downtown Height Overlay Map. The applicant explained that because the additional height would be restricted to the interior of the site due to the proposed 65 foot stepback from Winter Street, the building floorplate would be reduced and they would only be able to add seven additional units, which would not be enough to make the project financially viable and would limit the amount of new housing created in a transit oriented location. Various members of the Board spoke in favor of exploring additional allowable height beyond the stepback to encourage additional housing units.

Staff Analysis

Following Board feedback at the second workshop, Planning staff revisited the proposed height limitations and stepbacks. The crux of the analysis was to carefully evaluate the appropriate height at which to map B-3 along State Street. This analysis took into consideration the built environment in the surrounding area, which includes a mix of building types that range in scale from single-family homes to multi-family buildings and, large institutions, as well as the recently approved zoning actions on this block undertaken as part of the Mercy Hospital rezoning application. Through this zoning analysis, Planning staff have been careful to evaluate any proposed height increases and its effect on the surrounding neighborhood. With respect to height, the adopted Mercy Hospital rezoning mapped building heights of 35 feet along Winter Street and 85 feet along State Street. Furthermore, the rezoning mapped 65 foot and 85 foot heights across State Street to the north of the proposed rezoning area. The analysis also took the proposed rezoning area's transit oriented location and frontage along State Street into consideration, as the latter is a wide thoroughfare capable of accommodating additional height and density.

Workshop III: Staff Recommendation

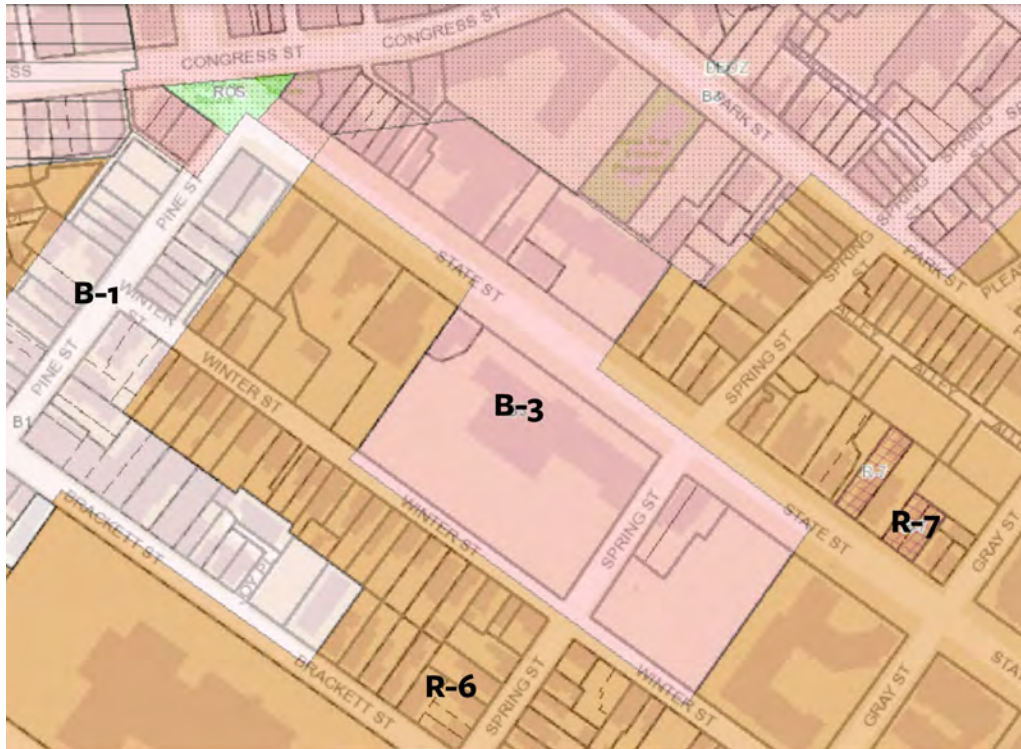
Based on the above factors, Planning staff recommend B-3 as an appropriate zone here. The Downtown Height Overlay Map, which would also be amended under this alternative, provides the needed flexibility to curate and control the maximum heights in this location on a granular level.

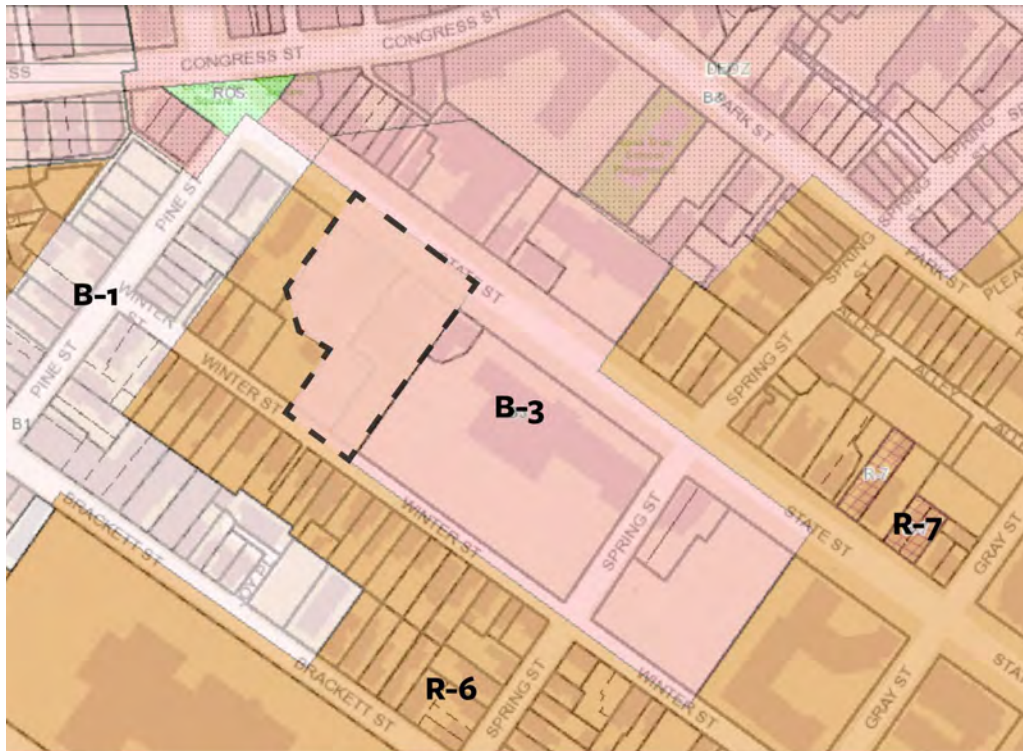
Staff also recommends that a height limitation of 35 feet be maintained to a depth of 65 feet within the block along Winter Street while adjusting the interior height to 65 feet. By maintaining a height limit of 35 feet to a depth of 65 feet along Winter Street, the majority of height from a future building would be pushed towards the interior of the site nearest State Street. It should be noted that concerns raised by the public regarding neighborhood traffic, parking capacity, lack of street trees, and building scale and design will require careful consideration under future Major Site Plan review. As mentioned previously, any future development would also require Historic Preservation review, which would help to ensure that the building's character is contextually appropriate.

As is customary, staff also considered whether the proposed designation is potentially warranted for a broader area than the 99 Winter/160 State Street site. In this instance, staff are recommending that the Planning Board consider extending the proposed B-3 zone across the applicant's parcels (99 Winter/160 State streets) and to encompass one additional lot at 152 State Street that is currently improved with the historically landmarked Portland Club. Incorporating 152 State Street into the rezoning area will connect the recently adopted B-3 zone at the Mercy Hospital property with the applicant's parcels and will bring the 152 State Street site into greater conformance with zoning use standards.

Parcels	Existing	B-3	R-6
152 State Street	Portland Club	Permitted Use	Conditional Use

	(Place of Assembly)		
99 Winter/160 State Street	Lodging House	Permitted Use	Permitted Use

*Existing Zoning Map*



Proposed Zoning Map Amendment

To maintain an appropriate height along Winter Street, staff recommend that the Downtown Height Overlay Map be amended within the proposed rezoning area to have a 35 foot height maximum to a depth of 65 feet from the parcel line fronting Winter Street and to map the remaining portions of the lots nearest State Street with a 65 foot height maximum. This would allow the Winter Street side to maintain a lower-scale while allowing the applicant to increase the height of a building towards State Street beyond the 65 foot step back area.



VII. Neighborhood Outreach, Public Comment

The applicant held the required neighborhood meeting virtually on Tuesday, June 2, 2020, via Zoom. Approximately 33 members of the public were in attendance. Project team attendees included:

- Jessica James (JJ): Communications/Presenter – (Longfellow)
- Peter Heil (PH): Civil Engineer/Presenter (Acorn Engineering)
- Zachary Stevens (ZS): Civil Engineer/Note Taker (Acorn Engineering)
- Harry Hepburn (HH): Architect/Presenter (Briburn)
- Dan Soley (DS): Owner/Applicant (Thanos LLC)
- Josh Soley (JS): Owner/Applicant (Thanos LLC)

The meeting began at 5:30 pm. Peter Heil, Jessica James, and Harry Hepburn provided an overview of the project, highlighting the proposed dimensional changes from the R-6 to R-7 zones. A variety of public comments were received and are included as an attachment to this report.

At the time of this writing, the Planning Department received sixteen public comments against the proposed rezoning.

IX. Next Steps

Staff are seeking Planning Board feedback regarding the appropriateness for the mapping of the B-3 Zone at the subject property and adjacent lot and the proposed amendments to the Downtown Height Overlay Map. Any proposed rezoning would need to be recommended by the Planning Board at a future public hearing, then approved by City Council vote.

Report Attachments

1. Public Comment
2. R-7 Analysis

Applicant Submittals

- A. Cover Letter
- B. Zoning Map Amendment
- C. Map Amendment Application Checklist
- D. Consistency with Comprehensive Plan
- E. Right, Title, and Interest
- F. Vicinity Map
- G. Neighborhood Character & Building Heights
- H. Proposed Map Amendment
- I. B-3 Massing Diagram
- J. Civil Plan Set

Zoning Context: Nearby R-7 Overlay Parcels



R-7 zones mapped proximate to the subject property (indicated in red hatching)

There are a small number of parcels in the vicinity of 160 State Street that have been rezoned to R-7 from R-6. Each of these sites differs from the subject property in key ways, and there are several distinctions to make between these sites.

99 State Street



In 2003, the property owner of 99 State Street received Planning Board approval in order to be able to convert the brick carriage house at the rear of the property from its existing use as a garage to a single-family residential structure. The applicant requested an R-7 designation because the development did not meet the R-6 setback

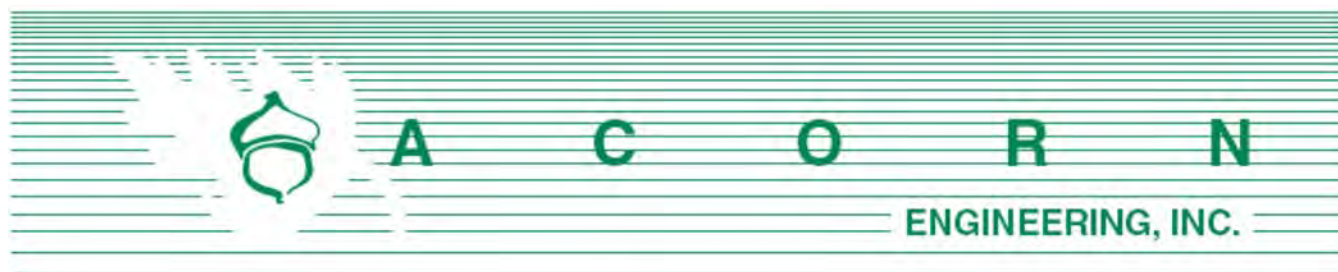
requirements. The rezoning allowed the carriage house to be utilized and converted to an additional unit on the site. The property could accommodate the required number of parking spaces for the four (4) residential units.

91-93 State Street



In 2013, the property owner of 91 State Street applied for a zoning map amendment to map an R-7 overlay at this site in order to allow the existing building to be converted to market-rate residential space, resulting in ten (10) residential units. R-7 designation was requested because the proposed project could not meet the R-6 minimum land area per dwelling unit and the applicant was seeking to create compact living units. The dimensional requirements in R-6 call for 725 square feet of land area per dwelling unit, thus only five residential units are allowed under the R-6 zone. The R-7 zone has a maximum residential density of 435 square feet per residential unit, permitting a maximum of twelve (12) units on this site. Additionally, the R-6 zone states that alteration to multifamily dwellings shall not result in additional dwelling units of less than 600 square feet of floor area in size. The R-7 minimum dwelling unit size is 400 square feet of habitable floor area.

Of the two sites described above, both are fundamentally distinct from 160 State Street. Both properties include existing buildings of historic significance which were not to be altered externally or effect setbacks. The changes made to 99 State Street were to bring an existing legally nonconforming structure into conformance and add housing. The changes made to 91 State Street were strictly internal and based on added density to the existing structure. In contrast, the changes proposed at 99 Winter Street involve the construction of an entirely new structure on a vacant lot abutting residential buildings of a more modest scale.



Planning and Urban Development Department
 Planning Division
 City of Portland, Maine
 389 Congress Street, 4th Floor
 Portland, ME 04101

February 18, 2020

Subject: Map Amendment Application
 99 Winter Street / 160 State Street

To Whom It May Concern,

On behalf of Thanos, LLC (c/o Josh Soley & Dan Soley), we are pleased to submit the accompanying package of submission materials for the proposed rezoning of the property located at 99 Winter Street / 160 State Street. The property is located in the R6 Residential Zoning District and proposes the designation of the R7 Compact Urban Residential Overlay Zone to the parcel.

The proposed project site is comprised of a single parcel, Chart 45, Block C, Lot 4, bounded by Winter & State Streets. The site has frontage on both State St & Winter St. The use of the existing convent building to a lodging house along State Street recently received Level II Site Plan approval. The 99 Winter Street project proposes to build a new 50-unit workforce apartment building on the Winter Street portion of the property, which currently contains no structures. The property has been surveyed by Spurwink Surveying and the project team.

The City's Code of Ordinances, Division 30, Affordable Housing, states the division's purpose is to promote an adequate supply of affordable housing for the city's residents. The purpose of this division is to offer incentives to developers to include units of affordable housing within development projects, thereby mitigating the impact of market rate housing construction, or the demonstrated increase in affordable housing needs resulting from the creation of new lower-income jobs, on the limited supply of available land for suitable housing, and helping to meet the housing needs of all economic groups within the city. By proposing workforce apartments, the project meets this divisions goals and assist in meeting the city's comprehensive goals for affordable housing, in the prevention of overcrowding and deterioration of the limited supply of affordable housing.

Per the City Ordinance, within the R6 Zone, the parcel is currently subject to the following dimension requirements (complete list requirements per City Ordinance are not provided):

R6 Dimension Requirements	
Min. Front Yard Setback	5 ft
Min. Rear Yard Setback	10 ft
Min. Side Yard Setback	5 ft
Structure Stepbacks above 35 ft	10 ft - side / 15 ft - rear
Max. Lot Coverage	60%
Max. Height	45 ft
Landscaped Open Space	20%

This application proposes is to re-zone the parcel to include the R-7 Compact Urban Residential Overlay Zone. The change in zoning would allow development within the parcel to maximize building potential to accommodate compact residential development and to foster increased opportunities for compact in-city living representing a variety of income levels and household types and would reflect Comprehensive Plan's current goals related to housing production. The attached Consistency with Comprehensive Plan narrative further describes the project's conformance with the Comprehensive Plan.

If permitted, the R7 Dimension Requirements are:

R7 Dimension Requirements	
Min. Front Yard Setback	None
Min. Rear Yard Setback	5 ft
Min. Side Yard Setback	5 ft (no change)
Structure Stepbacks above 35 ft	N/A
Max. Lot Coverage	100%
Max. Height	50 ft
Landscaped Open Space	N/A

By designating the parcel with the R7 Compact Urban Residential Overlay Zone, the project would also be eligible to the density, parking and dimensional bonuses and reductions, as specified in the Code, Section 14-488. Specifically, by providing a minimum 60% workforce units encouraged in the designated growth areas, the project would be eligible for the bonuses associated with having a minimum 60% workforce units, including 1.3 x base density and additional 10-foot height permitted (up to 60 feet).

This submission package is intended to meet the City's Submission Requirements as outlined in the Map Amendment Checklist and corresponding application. The following documents and drawings are to be uploaded onto the City's electronic submission site per the procedure outlined in the application:

Documents:

- A. Zoning Map Amendment Application
- B. Map Amendment Checklist
- C. Consistency with Comprehensive Plan
- D. Right, Title, and Interest

Drawings:

- E. Vicinity Map
- F. Proposed Map Amendment
- G. Civil Site Plan, Dated 1/31/20



Thanos, LLC and the design team look forward to your review of this project. If you have any questions regarding these materials or the completeness of the application materials, please contact us within the next five (5) days.

Sincerely,



Peter F. Heil, P.E., CPESC
Project Manager
Acorn Engineering, Inc.



Attachment A

Zoning Map/Text Amendment Application



Zoning Map/Text Amendment Application Portland, Maine

Planning and Urban Development Department
Planning Division and Planning Board

Portland's Planning and Urban Development Department coordinates the development review process for requests for zoning map amendments, zoning text amendments and contract or conditional re-zoning. The Division also coordinates site plan, subdivision and other applications under the City's Land Use Code. The **Application Process for a Zone Change** is summarized below under Section I and the associated costs for reviews are found under Section II, **Development Review Fees, Public Notices and Guarantees**, and are listed on the fee structure sheet.

I. APPLICATION SUBMITTAL

Pre-application meeting

Prior to submitting a zoning amendment application, the Planning Division recommends that the applicant or the designated representative schedule a pre-application meeting to discuss the review process and applicable standards for a proposal. Please contact Barbara Barhydt, Development Review Services Manager at 874-8699 to schedule a meeting.

Zoning Amendment Application

All plans and written application materials must be uploaded to a website for review. At the time of application, instructions for uploading the plans will be provided to the applicant. One paper set of the plans, written materials and application fee must be submitted to the Planning Division Office to start the review process.

- Submit one (1) complete paper set of the zoning amendment application with a concept plan and a written narrative. Contract and conditional rezoning applications must include site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood. Applications may be submitted between 8 a.m. and 4:30 p.m. Monday through Friday at the Planning Division on the 4th floor of City Hall, 389 Congress Street, Portland.
- All applications are processed in the order in which they are received.
- In order for the Planning Division's Administrative Staff to accept and log-in an application, the application form must be complete, it shall be signed by the applicant's or the applicant's designated representative, and all applicable fees paid at the time of submittal.
- The Land Use Code is available on the City's website at www.portlandmaine.gov.
- If the application is found to be incomplete, the applicant will be informed in writing of the required plans and materials.

II. DEVELOPMENT REVIEW FEES, PUBLIC NOTICES AND GUARANTEES

Zoning Application Fees

- Each application must be submitted with the applicable fees as listed in the fee structure on page 4. The fees cover general administrative processing costs.
- Application fees may be paid in cash or by check (addressed to the City of Portland).
- An application will not be processed without the required application fees.

Fee for City Review Services

- The City of Portland charges fees for service to cover the cost of reviews by Planning and Legal staff members. The charges will be billed at an hourly rate and will be invoiced monthly for reimbursement.
- Current billing rates: Planning services, \$40.00/ hour and Legal services: \$75.00/hour.

Fee for Third Party Review

- Portland contracts with local engineering firms to conduct engineering reviews of development proposals. The direct cost of all engineering services or third-party consultant reviews, such as the civil engineering review of stormwater management plans, traffic impact reviews and such other reviews as required under the City's Ordinances, will be included in the monthly invoices for reimbursement.

Public Notices

- Public notices must be sent to property owners within 500 for all proposals at the time an application is received. Zoning map amendments for Industrial zones require notices to be sent to property owners within 1,000 feet.
- In advance of a Planning Board workshop or public hearing, public notices for projects must be sent to property owners and are posted in a legal ad in the Portland Press Herald and on the City's web site.
- In addition, zoning map amendments, text amendments and conditional rezoning agreements require individual notices to be posted in the Portland Press Herald.
- The Planning Division mails public notices and posts notices in the newspaper. The applicant will be billed for actual or apportioned costs for advertising and sending mailed notices.
- The applicant is required to hold a neighborhood meeting under the City's regulations for zone change requests. The mailing labels must be purchased from the Planning Division for the neighborhood meeting invitation. A request for labels requires a minimum of two business days to generate the mailing labels and a charge of \$1.00 per sheet will be payable upon receipt of the labels.

Third Party Review Fees

- Engineer and Third Party Review Fees - The fees are assessed by the Consulting Engineers and Third Party Reviewers.
- Inspection Fee - This fee is 2% of the Performance Guarantee or as assessed by Planning or Public Works Engineer with \$300.00 being the minimum.

Noticing/Advertisements Planning Board/City Council Review

- Legal Advertisement: Percent of total bill
- Notices: .75 cents each
(notices are sent to neighbors upon receipt of an application, workshop and public hearing meetings for Planning Board and public hearing meeting for City Council)

Planning Division
Fourth Floor, City Hall
389 Congress Street
(207) 874-8721 or 874-8719

Office Hours
Monday thru Friday
8:00 a.m. – 4:30 p.m.

PROJECT ADDRESS: 99 Winter Street

CHART/BLOCK/LOT: 45/C/4

DESCRIPTION OF PROPOSED ZONE CHANGE AND PROJECT:

Proposed R7 Compact Urban Residential Overlay Zone to parcel ID
045 C004001 (160 State St/99 Winter St), currently in R6 Zone.

CONTACT INFORMATION:	Applicant's Contact for electronic plans Name: e-mail Address work #
Applicant – must be owner, Lessee or Buyer Name: Josh Soley & Dan Soley Business Name, if applicable: Thanos, LLC Address: 100 Commercial Street, Suite 202 City/State :Portland, ME Zip Code: 04101	Applicant Contact Information Work # 207-744-3084, Ext. 301 Home# Cell # Fax# e-mail: josh@mainerealtyadvisors.com
Owner – (if different from Applicant) Name: Same as applicant Address: City/State : Zip Code:	Owner Contact Information Work # Home# Cell # Fax# e-mail:
Agent/ Representative Name: Address: City/State : Zip Code:	Agent/Representative Contact information Work # Cell # e-mail:
Billing Information Name: Same as applicant Address: City/State : Zip Code:	Billing Information Work # Cell # Fax# e-mail:
Engineer Name: Peter F. Heil, PE, CPESC - Acorn Engineering Address: P.O. Box 3372 City/State : Portland, ME Zip Code: 04101	Engineer Contact Information Work # 207-775-2655 Cell # 802-238-7409 Fax# e-mail: pheil@acorn-engineering.com

Surveyor Name: James Mullen, PLS - Spurwink Surveying Address: 182 Spurwink Road City/State : Scarborough, ME Zip Code: 04074	Surveyor Contact Information Work # 207-799-2654 Cell # Fax# e-mail: spurwinksurveying@gmail.com
Architect Name: Lucas Greco, RA - Briburn Address: 28 Maple Street, Suite 202 City/State : Portland, ME Zip Code: 04101	Architect Contact Information Work # 207-774-8482 Cell # 918-261-3002 Fax# e-mail: lgreco@briburn.com
Attorney Name: Mary Costigan - Bernstein Shur Address: 100 Middle Street, PO Box 9729 City/State : Portland, ME Zip Code: 04101	Attorney Contact Information Work # 207-228-7147 Cell # Fax# 207-774-1127 e-mail: mcostigan@bernsteinshur.com

Right, Title, or Interest: Please identify the status of the applicant's right, title, or interest in the subject property:

The applicant is the current owner of the property.

Provide documentary evidence, attached to this application, of applicant's right, title, or interest in the subject property. (For example, a deed, option or contract to purchase or lease the subject property.)

Vicinity Map: Attach a map showing the subject parcel and abutting parcels, labeled as to ownership and/or current use. (Applicant may utilize the City Zoning Map or Parcel Map as a source.)

Existing Use: Describe the existing use of the subject property:

The use of the existing convent building to a lodging house along State Street recently received Level II Site Plan approval. The Winter Street portion of the property currently contains no structures.

Current Zoning Designation(s):

R-6 Residential Zone

Proposed Use of Property: Please describe the proposed use of the subject property. If construction or development is proposed, please describe any changes to the physical condition of the property.

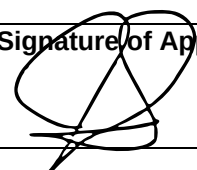
The project proposes to build a new 50 unit workforce apartment building on the Winter Street portion of the property.

Site Plan: On a separate sheet, please provide a site plan of the property showing existing and proposed improvements, including such features as buildings, parking, driveways, walkways, landscape and property boundaries. This may be a professionally drawn plan, or a carefully drawn plan, to scale, by the applicant. (Scale to suit, range from 1" = 10' to 1" = 50'.) Contract and conditional rezoning applications may require additional site plans and written material that address physical development and operation of the property to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood.

APPLICATION FEE:

Check the type of zoning review that applies. Payment may be made in cash or check payable to the City of Portland.

Zoning Map Amendment <u> X </u> \$2,000.00 (from <u> R6 </u> zone to <u> R7 </u> zone) Zoning Text Amendment <u> </u> \$2,000.00 (to Section 14- <u> </u>) (For a zoning text amendment, attach on a separate sheet the exact language being proposed, including existing relevant text, in which language to be deleted is depicted as crossed out (<u>example</u>) and language to be added is depicted as underline (<u>example</u>)) Combination Zoning Text Amendment and Zoning Map Amendment <u> </u> \$3,000.00 Conditional or Contract Zone <u> </u> \$3,000.00 (A conditional or contract rezoning map be requested by an applicant in cases where limitations, conditions, or special assurances related to the physical development and operation of the property are needed to ensure that the rezoning and subsequent development are consistent with the comprehensive plan, meet applicable land use regulations, and compatible with the surrounding neighborhood. Please refer to Division 1.5, Sections 14-60 to 62.)	Fees Paid (office use) _____ _____ _____ _____	The City invoices separately for the following: • Notices (\$.75 each) (notices are sent to neighbors upon receipt of an application, workshop and public hearing meetings for Planning Board and public hearing meeting for City Council) • Legal Ad (% of total Ad) • Planning Review (\$40.00 hour) • Legal Review (\$75.00 hour) Third party review is assessed separately.
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Signature of Applicant: 	Date: 2/19/2020
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Further Information

In the event of withdrawal of the zoning amendment application by the applicant, a refund of two-thirds of the amount of the zone change fee will be made to the applicant as long as the request is submitted to the Planning Division prior to the advertisement being submitted to the news paper.



A Guide to Holding Neighborhood Meetings Portland, Maine

Planning and Urban Development Department
Planning Division and Planning Board

In order to improve communication between development applicants and neighbors, the City of Portland requires applicants, proposing certain types of projects, to hold a neighborhood meeting.

What type of development proposal requires a neighborhood meeting?

Neighborhood meetings, organized and hosted by the applicant, are required for the following development proposals:

- Proposed zone changes, contract zones and zoning text amendments that would result in major development;
- Subdivisions of five or more units or lots; and
- Level III site plan proposals for preliminary or final site plans:
 - Portland's new site plan ordinance went into effect in August, 2010. It now includes provisions for preliminary and final plans. Neighborhood meetings are to be held three weeks after submitting a preliminary plan or within two weeks of submitting a final plan, if a preliminary plan was not submitted.

Who must be invited to a neighborhood meeting?

Property owners within 500 feet of the proposed development (1000 feet for proposed industrial subdivisions and zone changes) as well as those people on a list of interested citizens and neighborhood groups must be invited to the planned neighborhood meeting.

The Planning Division provides the mailing labels for the neighborhood meeting invitation. We require at least 48 hours notice to generate the mailing labels and a charge of \$1.00 per sheet will be payable upon receipt of the labels.

When and where must the neighborhood meeting be held?

The neighborhood meeting must be held within three weeks of submitting a preliminary site plan. If an applicant chooses only to submit a final site plan, then the neighborhood meeting must be held within two weeks of submitting the final plan and not less than seven days prior to the Planning Board public hearing.

The meeting should be held in the evening, during the week, at a convenient location within the Portland neighborhood surrounding the proposed site. Community meeting spaces at libraries, schools or other places of assembly are recommended. Neighborhood schools are usually available for evening meetings.

Meetings should not be held on the same day as scheduled Planning Board or City Council meetings. The City Council generally meets on the first and third Monday of each month and the Planning Board generally meets on the second and fourth Tuesday of each month; however additional meetings may be scheduled. An updated schedule may be found on the City's website: www.portlandmaine.gov

When must invitations be sent?

Invitations to a neighborhood meeting must be sent no less than ten days (to include weekends) prior to the neighborhood meeting. If the notice is for a final site plan, then the neighborhood meeting must be held no less than seven days (to include weekends) prior to the public hearing. Notices may be sent by regular mail and do not need to be sent by certified mail.

What information should the invitation include?

A recommended invitation format is included in this packet of material.

Sign-up Sheets and Meeting Minutes

At the meeting, the applicant must circulate a sign-up sheet for those in attendance. The applicant must also keep accurate minutes of the meeting.

After holding the neighborhood meeting, the applicant must submit the sign-up sheet and meeting minutes to the Planning Division. The meeting minutes and sign-up sheet will be attached to the Planning Board report. A public hearing will not be scheduled until the meeting minutes and sign-up sheet are submitted to the Planning Division.

Certification

Included with this packet is a Certification to be completed and signed by the applicant. The applicant is required to certify when the invitations were sent out.

Please call the Planning Division at 874-8721 or 874-8719 if you have any questions.

Attachments

1. Neighborhood Meeting Invitation Format
2. Neighborhood Meeting Certification

~Applicant/Consultant: Please include all of the information listed below in the notice sent to neighbors~

Neighborhood Meeting Invitation Format

Applicant/Consultant Letterhead

(Date)

Dear Neighbor:

Please join us for a neighborhood meeting to discuss our plans for a (development proposal) located at (location/number and street address).

Meeting Location: _____

Meeting Date: _____

Meeting Time: _____

The City code requires that property owners within 500 feet of the proposed development and residents on an "interested parties list", be invited to participate in a neighborhood meeting. A sign-in sheet will be circulated and minutes of the meeting will be taken. Both the sign-in sheet and minutes will be submitted to the Planning Board.

If you have any questions, please call (telephone number of applicant or consultant).

Sincerely,

(Applicant)

Note:

Under Section 14-32(C) and 14-525 of the City Code of Ordinances, an applicant for a Level III development, subdivision of over five lots/units, or zone change is required to hold a neighborhood meeting within three weeks of submitting a preliminary application or two weeks of submitting a final site plan application, if a preliminary plans was not submit. The neighborhood meeting must be held at least seven days prior to the Planning Board public hearing on the proposal. Should you wish to offer additional comments on this proposed development, you may contact the Planning Division at 874-8721 or send written correspondence to the Planning and Urban Development Department, Planning Division 4th Floor, 389 Congress Street Portland, ME 04101 or by email: to bab@portlandmaine.gov

Neighborhood Meeting Certification

I, (applicant/consultant) hereby certify that a neighborhood meeting was held on (date) at (location) at (time).

I also certify that on (date at least seven days prior to the neighborhood meeting), invitations were mailed to all addresses on the mailing list provided by the Planning Division, including property owners within 500 feet of the proposed development or within 1000 feet of a proposed industrial subdivision or industrial zone change and the residents on the "interested parties" list.

Signed,

_____ (date)

Attached to this certification are:

1. Copy of the invitation sent
2. Sign-in sheet
3. Meeting minutes

Attachment B

Map Amendment Checklist

CITY OF PORTLAND
Planning & Urban Development Department

MAP AMENDMENT SUBMISSION CHECKLIST Please submit each document as a separate PDF file Please confirm by electronically checking the boxes to the left	
GENERAL APPLICATION DOCUMENTS	
☒	Project Description Cover Letter with detailed project description
☒	Consistency with Comprehensive Plan Analysis of the consistency of the zone change request with the goals, policies and land use plan of Portland's Comprehensive Plan.
☒	Completed Checklist – Map Amendment Application (this document)
☒	Right, Title and Interest Deeds, leases, or purchase and sales agreements
PLANS	
☒	Vicinity Map
☒	Proposed Map Amendment (please use the Portland zoning map as a reference)
☒	Site Plan (if applicable) Provide a site plan of the property showing existing and proposed improvements, including such features as buildings, parking, driveways, walkways, landscape and property boundaries.

Attachment C

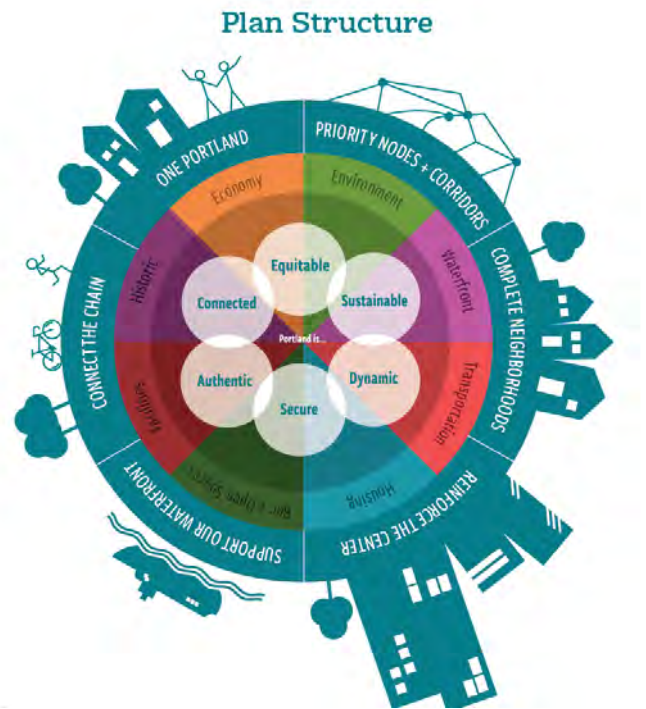
Consistency with Comprehensive Plan

COMPREHENSIVE PLAN REVIEW

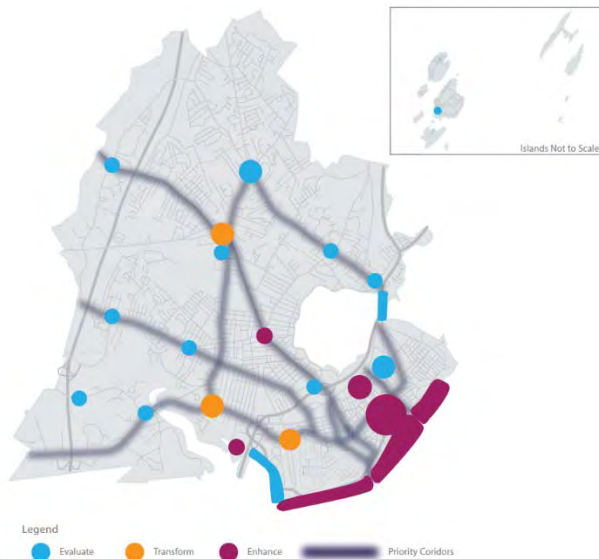
The 2017 Comprehensive Plan has a number of policy goals related to sustainable development and housing. This request to revise the dimensional requirements in this location on the peninsula helps meet those goals.

The Plan's Executive Summary emphasizes the need to "Reinforce the Center" through better housing and transportation. This location, on the peninsula, is extremely well located for housing that takes advantage of multimodal transportation options. By locating housing near job opportunities and other commercial activities, it also emphasizes downtown walkability. This strategy is emphasized later in the Future Land Use section as well.

This proposal also meets specific goals in the Plan's policy guides.



MEETING THE CITY'S HOUSING PRODUCTION GOALS



At the core of Portland's Plan is housing production. The plan references the zoning ordinance amendments to allow for greater residential density in various zones, expand applicability of an existing 25% density bonus, increase allowable heights in some parts of downtown, reduce parking requirements to eliminate barriers to development, and incentivize residential and mixed-use development. Other recent changes to the ordinance have spoken directly to affordability: mandating the inclusion of affordable workforce housing within all residential development projects of 10 or more units. The Plan calls for production of a variety of housing types and

locations, with a focus on key nodes and corridors. The largest node of development is Downtown Portland. The Plan further sets a specific, but achievable, goal of reaching a population of 72,000 by 2027. That target will require production of 2,557 housing units, or almost 300 per year. While a change in the dimensional requirements in this location will not meet that goal by itself, it is part of an overall strategy to produce housing in a sustainable way that supports this primary development node.

OTHER POLICY GOALS

Economy: A Vibrant City

The Economy Policy Guide says that the City actions should: *“Evaluate zoning and the condition of existing infrastructure in priority areas — downtown, identified neighborhood nodes, and along transit corridors — to ensure that employment and housing growth can be supported.”*

The current zoning in this area, while allowing for some density, falls a little short of the requirements needed to make housing developments viable with private financing. By reducing/eliminating the setback requirements, maximizing coverage and allowing additional height, the economics of a project change and a significant housing development can be supported.

Housing: A Livable City

The Housing Policy Guide similarly calls for City actions to: *“Evaluate whether current zoning allows for new development consistent with historic patterns of form, density, and/or use, as well as whether it allows for priority growth areas.”* In order to support the priority growth area of downtown Portland with private financing, some additional density is needed. This policy guide also states that those who work in Portland should be able to live in Portland. Production of housing at this location will make this goal economically feasible by allowing for production of new units immediately downtown, near employment opportunities.

OTHER PLANS

The requested map change is also generally consistent with planning related to dimensional requirements in downtown and the inner ring neighborhoods, including the West End.

The R-7 Compact Urban Residential Overlay Zone encourages compact residential development on appropriate locations on the Portland peninsula, pursuant to the New Vision for Bayside element of the comprehensive plan and housing plans of the City of Portland. As desired in the Code, the site is a prime example for in-city living within walking distance of downtown and other workplaces, shopping and community facilities and have access to public or private off-site parking or transit service.



25 Projected Skyline with Recommended Height Limits

Additionally, the R-7 Zone is intended to be located on the peninsula, including existing R-6 locations characterized by moderate to high density multi-family housing in a form and density exceeding that allowed in the R-6 Zone and where infill development opportunities exist. The difference in the variations between the R-6 and R-7 zones are minor but have a significant impact on the development potential for the site.

Attachment D

Right, Title & Interest

DLN: 1001940060328

KNOW ALL BY THESE PRESENTS,

THAT, the Roman Catholic Bishop of Portland, a body politic and corporation sole, created and existing under the laws of the State of Maine, and having its chancery in Portland, County of Cumberland and State of Maine, in consideration of One Dollar (\$1.00) and other valuable considerations paid by Thanos LLC, a Maine limited liability company with an address of 100 Commercial Street, Suite 214, Portland, Maine 04101, the receipt of which consideration it does hereby acknowledge, does hereby remise, release, and convey, and forever quit-claim unto the said Thanos LLC, with Quitclaim Covenant, the following described real estate:

See attached Exhibit A.

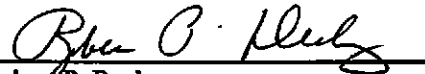
To have and to hold the same, together with all the privileges and appurtenances thereunto belonging to the said Grantee, its successors and assigns forever.

In Witness Whereof, the said Roman Catholic Bishop of Portland, a body politic and corporation sole, has caused this instrument to be sealed with its corporate seal and signed in its corporate name by Robert P. Deeley, Roman Catholic Bishop of Portland, thereunto duly authorized, according to the discipline and government of the Roman Catholic Church and the laws of the State of Maine, this 1 day of June, in the year of our Lord Two Thousand and Nineteen.

**SIGNED, SEALED AND DELIVERED
IN PRESENCE OF**



ROMAN CATHOLIC BISHOP OF PORTLAND

By: 

Robert P. Deeley
Roman Catholic Bishop of Portland

STATE OF Maine
County of Cumberland, ss.

June 7, 2019

Personally appeared the above named Robert P. Deeley in his capacity as the Roman Catholic Bishop of Portland, a corporation sole, 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 sole.

Before me,

Christine T. Pitteroff
Notary Public

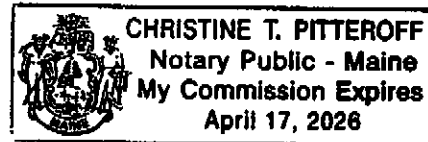


Exhibit A

All that certain parcel of land, with the buildings thereon, situated on the Southwesterly side of State Street in said Portland, bounded southerly by land formerly of George F. Shepley; Easterly by said State Street; Northerly by land formerly of E. A. Norton, and Westerly by a line one hundred (100) feet from and parallel with Winter Street as it existed March 12, 1897.

EXCEPTING from the above described parcel that portion conveyed to CON-TUL, Inc., by deed of Sisters of the Precious Blood of Portland, Maine, dated October 31, 1974 and recorded in Cumberland County Registry of Deeds in Book 3618, Page 78.

Being a portion of the premises conveyed to Sisters of the Precious Blood of Portland, Maine by deeds of The King's Academy dated August 10, 1960 and recorded in Cumberland County Registry of Deeds in Book 2556, Page 401; and dated September 22, 1963 and recorded in said Registry of Deeds in Book 2918, Page 327.

Also, a certain lot or parcel of land with the buildings thereon situated on the Northeasterly side of Winter Street, in the City of Portland, in the County of Cumberland and State of Maine, bounded and described as follows:

Beginning at the Westerly corner of land conveyed by Nehemiah Cram to Ether Shepley by deed dated October 17, 1837, and recorded in Cumberland County Registry of Deeds, in Book 155, Page 484; thence Southwesterly by land now or formerly of the Roman Catholic Bishop of Portland and land formerly of Heller M. Manning 7 rods 17 links to the Northeasterly side line of Winter Street; thence Southeasterly by Winter Street fifty-three (53) feet, more or less, to the Westerly corner of land conveyed by Nehemiah Cram to Lorenzo D. Mason by deed dated August 31, 1844, and recorded in said Registry of Deeds, in Book 187, Page 373; thence Northeasterly by said Mason land 7 rods 17 links to the Southwesterly side line of said Shepley land, now or formerly of The Portland Club; thence Northwesterly by The Portland Club land fifty (50) feet, more or less, to the point of beginning.

Being the premises conveyed to Sisters of the Precious Blood of Portland, Maine by Mercy Hospital by deed dated April 8, 1971 and recorded in Cumberland County Registry of Deeds in Book 3165, Page 771.

Also, a certain lot or parcel of land situated on the northerly side of Winter Street in the City of Portland, County of Cumberland and State of Maine bounded and described as follows:

Beginning on said northerly sideline of Winter Street at the most southerly corner of the parcel of land conveyed by the Roman Catholic Bishop of Portland to Con-Tul, Inc., by deed dated April 10, 1964, and recorded in Cumberland County Registry of Deeds in Book 2815, Page 75; thence by said northerly sideline of Winter Street N 40° 10' 30" W twenty (20) feet to a point;

thence through land now or formerly of Con-Tul, Inc., N 49° 49' 30" E one hundred (100) feet to land now or formerly of Sisters of the Precious Blood of Portland, Maine; thence by land now or formerly of Sisters of the Precious Blood of Portland, Maine S 40° 10' 30" E twenty (20) feet to land formerly of the Mercy Hospital and now or formerly of Sisters of the Precious Blood of Portland, Maine; thence by said land now or formerly of Sisters of the Precious Blood of Portland, Maine, S 49° 49' 30" W one hundred (100) feet to the point of beginning.

The area of the above described parcel being two thousand (2,000) square feet.

The above described courses being magnetic and of the year 1957.

That certain easement for use of an adjacent parking lot on land now or formerly of Con-Tul, Inc., for purposes of ingress and egress, which easement is expressly set forth in Quitclaim Deed with Covenant from the Sisters of the Precious Blood of Portland, Maine to Roman Catholic Bishop of Portland, dated August 13, 2018, and recorded in the Cumberland County Registry of Deeds at Book 35081, Page 287, has terminated and is not conveyed hereby.

Being the premises conveyed to Sisters of the Precious Blood of Portland, Maine by Con-Tul, Inc., by deed dated October 21, 1974 and recorded in Cumberland County Registry of Deeds in Book 3618, Page 56.

FOR SOURCE OF TITLE, reference may be had to Quitclaim Deed with Covenant from the Sisters of the Precious Blood of Portland, Maine to Roman Catholic Bishop of Portland, dated August 13, 2018, and recorded in the Cumberland County Registry of Deeds at Book 35081, Page 287.

The above-described premises are conveyed SUBJECT to the restrictions that the Grantee, Grantee's successors and assigns, shall not use the premises in any way relating to: 1) counseling regarding or performance of abortions; 2) sale of pornographic materials; or 3) erotic displays or activities. The burden of this restriction shall run with the land conveyed hereby to the Grantee. The benefit of this restriction is held by the Roman Catholic Bishop of Portland, corporation sole, its successors and assigns.

Attachment F

Vicinity Map



THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.	FILE: 1123.1_CIVIL	 ACORN ENGINEERING, INC. ACORN ENGINEERING, INC. P.O. BOX 3372 PORTLAND, MAINE 04104 (207) 775-2655	DRAWING NAME:	ISSUED FOR	BY
	DATE: 2/17/20		VICINITY MAP	CITY REVIEW	DATE
	JN: 1123.1				2/17/20
	SCALE: 1"=2,000'				
	DESIGN BY: PFH				
DRAWN BY: PFH			99 WINTER STREET		REV
CHECKED BY: WHS			CLIENT:		DATE
			THANOS, LLC		



WINTER STREET - SOUTH SIDE



WINTER STREET - NORTH SIDE



STATE STREET - SOUTH SIDE



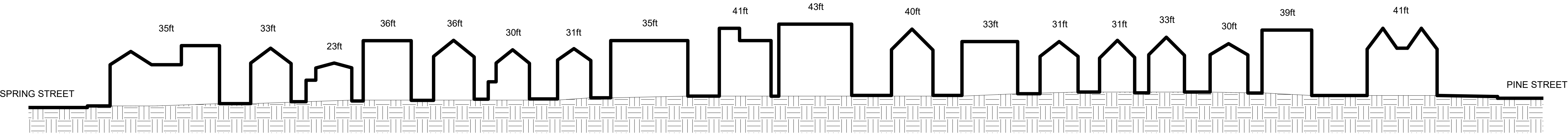
STATE STREET - NORTH SIDE

PHOTO MONTAGE - WINTER STREET & STATE STREET FACADES

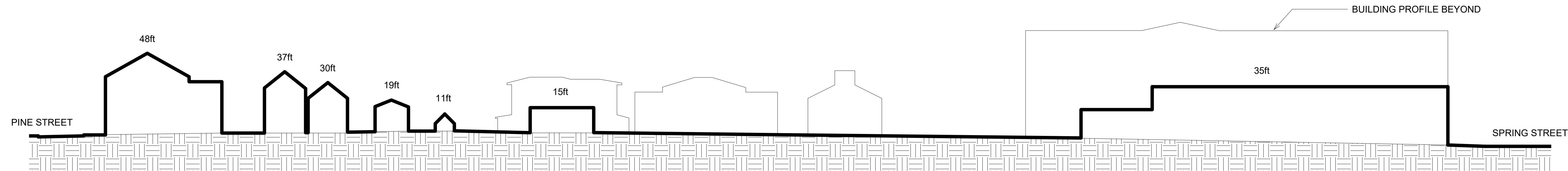
WINTER STREET HOUSING

99 Winter Street

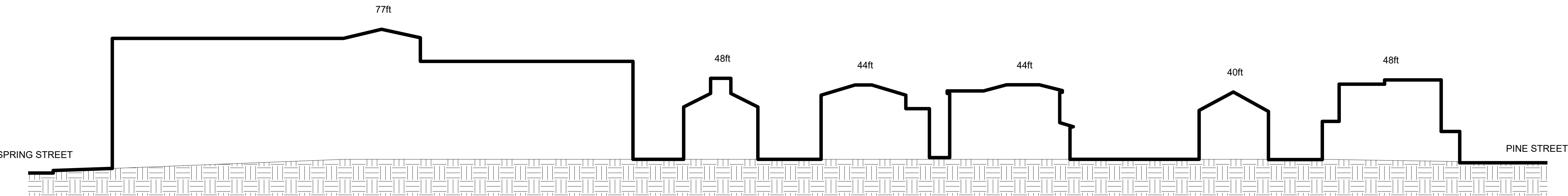
New Workforce Apartment Housing 03.04.2021



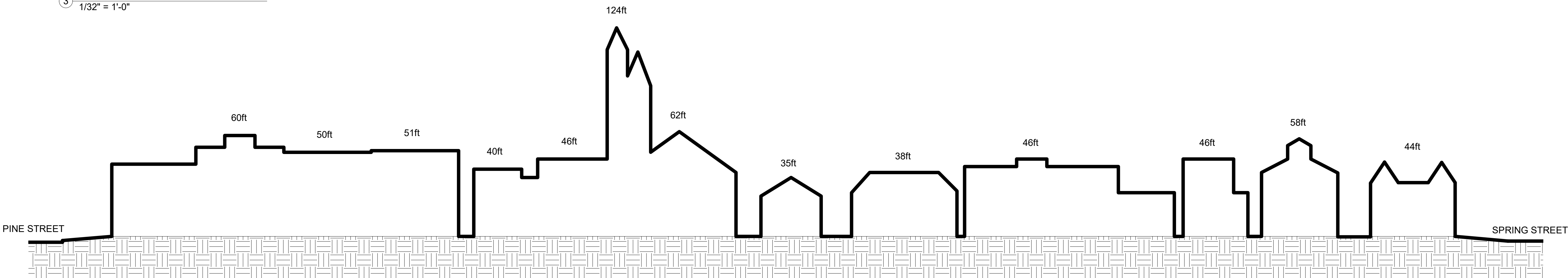
① WINTER STREET - SOUTH ELEVATION
1/32" = 1'-0"



② WINTER STREET - NORTH ELEVATION
1/32" = 1'-0"



③ STATE STREET - SOUTH ELEVATION
1/32" = 1'-0"



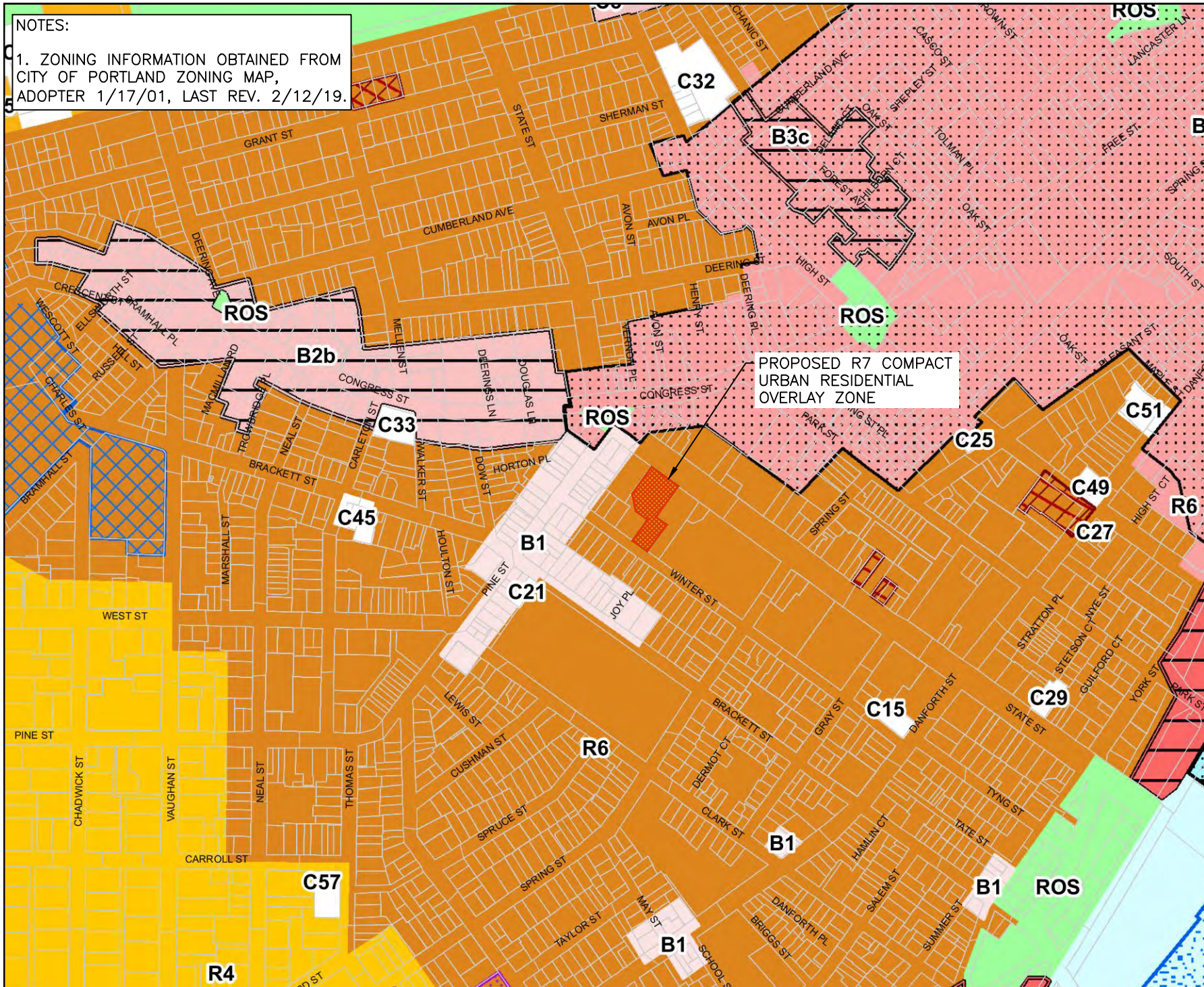
④ STATE STREET - NORTH ELEVATION
1/32" = 1'-0"

NOTE:
BUILDING HEIGHT INFORMATION
OBTAINED USING GOOGLE EARTH.
HEIGHTS ARE BELIEVED TO BE
ACCURATE WITHIN 5FT.

Attachment G

Proposed Map Amendment

NOTES:
1. ZONING INFORMATION OBTAINED FROM CITY OF PORTLAND ZONING MAP, ADOPTED 1/17/01, LAST REV. 2/12/19.



ISSUED FOR		BY DATE
MAP AMENDMENT		WHS 10/30/19
		REV DATE
DRAWING NAME:		
PROPOSED MAP AMENDMENT		
PROJECT NAME:		99 WINTER STREET
CLIENT:		THANOS, LLC
		
FILE: 200 FEDERAL DATE: 10/30/2019 JN: 200 FEDERAL SCALE: 1"=500' DESIGN BY: KRB DRAWN BY: KRB CHECKED BY: WHS		
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACORN ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACORN ENGINEERING, INC.		
DRAWING NO. EX-2		

B-3 ZONING PROVIDES:

±49 UNITS, MAJORITY WORKFORCE

45'- 0" MAX HEIGHT (35'- 0" + 10'- 0") EXTENDING 65' FROM WINTER STREET PROPERTY LINE. 85'-0" MAX HEIGHT AT REAR OF SITE.

NO SETBACKS REQUIRED. NO STEPBACK REQUIRED. (5' SETBACKS INTENDED ON FRONT, SIDES & REAR).

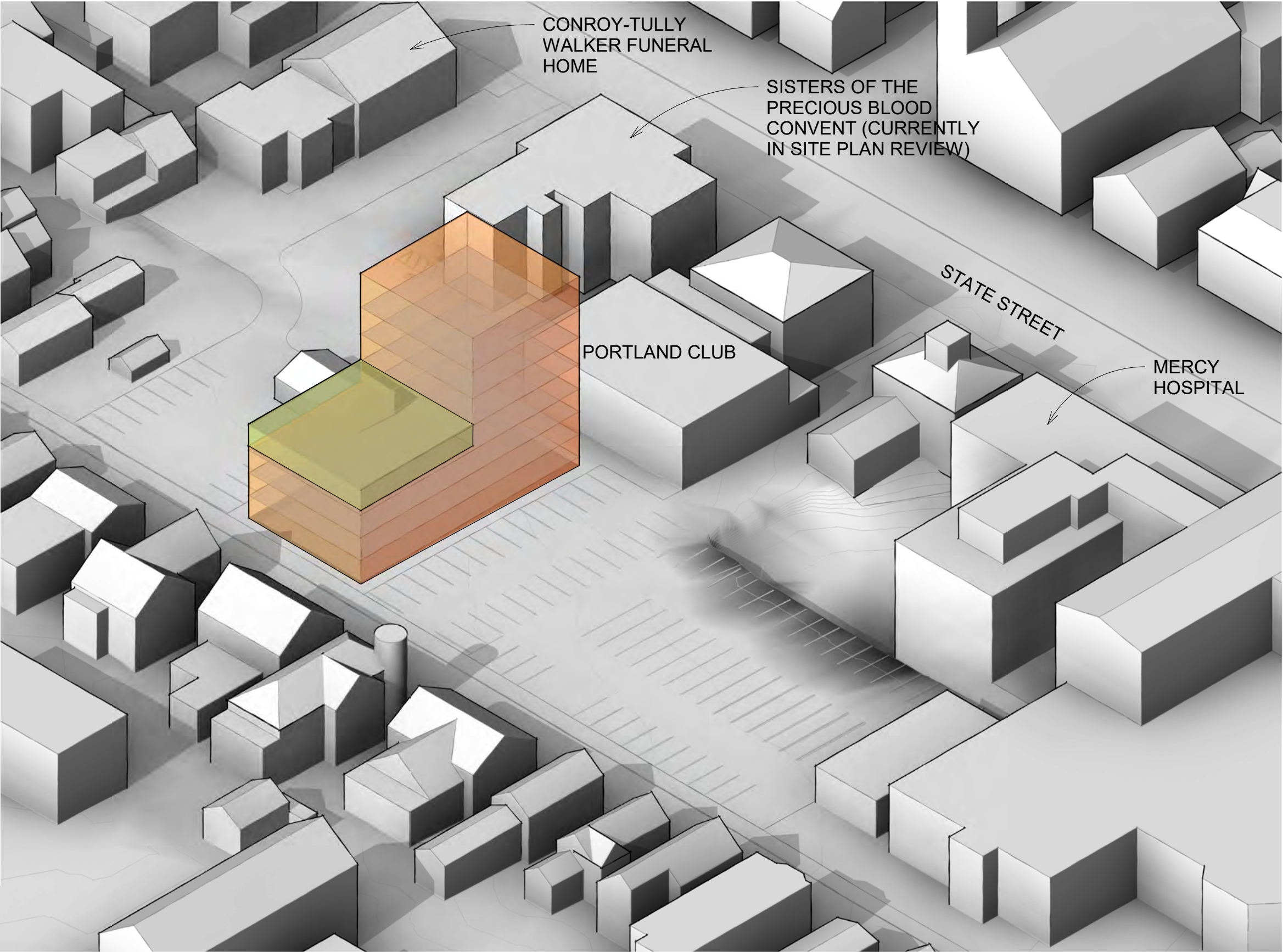
IMPROVED ECONOMICS OF PROJECT RESULTING IN GREATER FLEXIBILITY FOR BUILDING DESIGN, GREATER ABILITY TO DESIGN FINAL BUILDING THAT WILL NEGOTIATE THE SCALE OF EXISTING BUILDINGS ON WINTER AND STATE STREETS

OPEN SPACE - ADDITIONAL BUILDING VOLUME CREATES OPPORTUNITY FOR MORE OPEN SPACE

INCREASED DENSITY OF WORKFORCE HOUSING

CLOSER ALIGNMENT WITH PORTLAND COMPREHENSIVE PLAN GOALS

RECENTLY APPROVED FOR MERCY REDEVELOPMENT, POTENTIAL FOR SYNERGY BETWEEN DEVELOPMENT AND NEIGHBORHOOD



WINTER STREET HOUSING

Portland, ME | 01-12-21

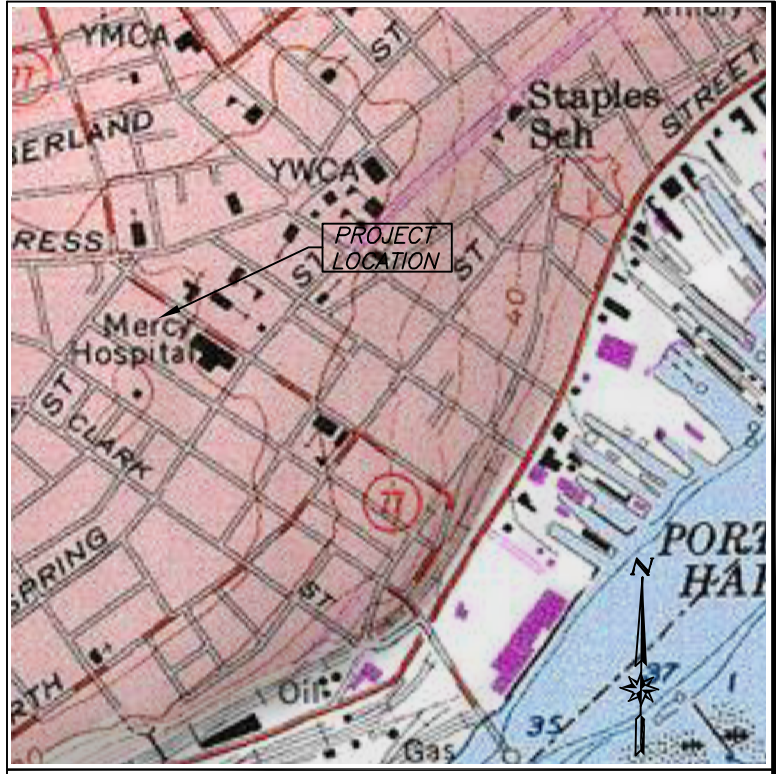
B-3 AXONOMETRIC



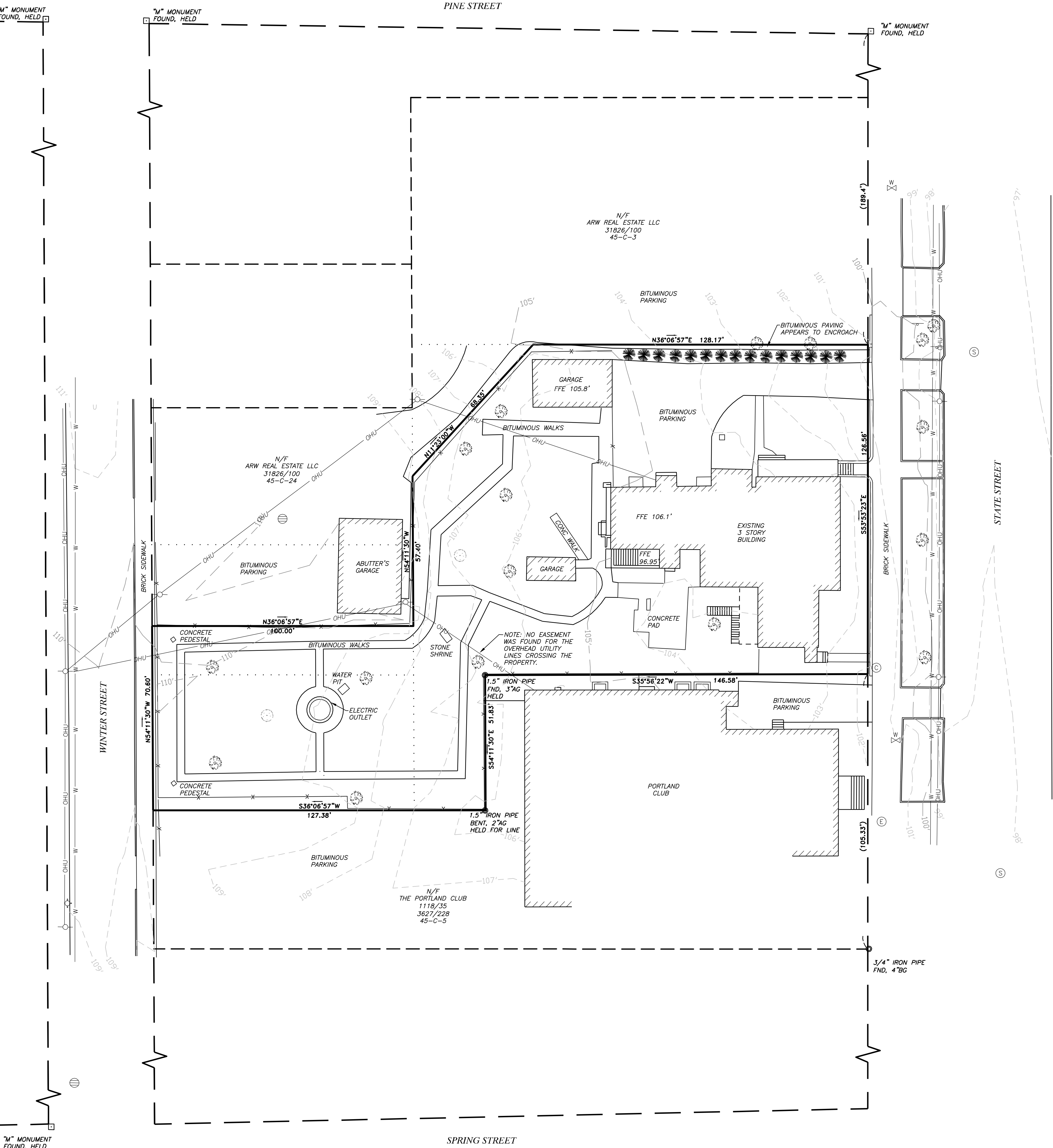
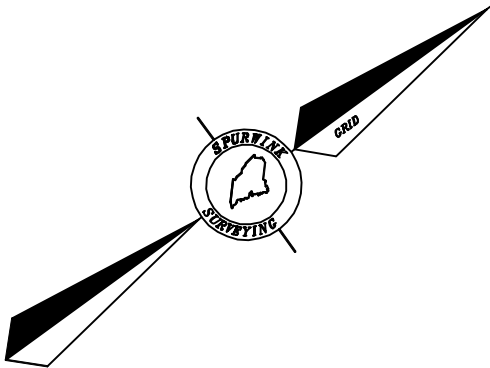
Att. H

Attachment H

Civil Site Plan



VICINITY MAP
N.T.S.



CERTIFICATION
SPURWINK SURVEYING HEREBY CERTIFIES TO FIRST AMERICAN TITLE INSURANCE COMPANY, THANOS LLC AND STARK INDUSTRIES LLC THAT THIS PLAN IS BASED ON, AND THE RESULT OF, AN ON THE GROUND SURVEY AND TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, IT CONFORMS TO THE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS CURRENT PRACTICE AND STANDARDS. THE SURVEYED LAND AS DEPICTED HEREON IS THE SAME LAND AS DESCRIBED IN THE DEED TO ROMAN CATHOLIC BISHOP OF MAINE RECORDED IN BOOK 35081, PAGE 287.

LEGEND

- #5 REBAR WITH PLASTIC CAP STAMPED P.L.S. #2028
- FOUND IRON PIPE (SIZE & TYPE AS NOTED)
- FOUND IRON ROD
- FOUND CAPPED IRON ROD (NUMBER AS NOTED)
- UTILITY POLE (NUMBER AS NOTED)
- FOUND TREE
- FIRE HYDRANT
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- GUY
- BOUNDARY LINE
- EDGE OF PAVEMENT
- RIGHT-OF-WAY LINE
- SETBACK LINE
- INTERIOR LOT LINE
- ABUTTER LINE
- OVERHEAD UTILITY
- STOCKADE FENCE
- CHAIN LINK FENCE
- NOW OR FORMERLY OWNED BY
- DEED BOOK AND PAGE (CCRD)
- TAX MAP-BLOCK-LOT
- PARENTHESIS DENOTE RECORD DATA

NOTES

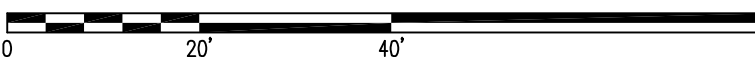
- THE BASIS OF BEARING FOR THIS SURVEY IS MAINE STATE COORDINATE SYSTEM, WEST ZONE. CONTOURS AND ELEVATIONS ARE REFERENCED TO NGVD1929.
- DEED AND PLAN BOOK REFERENCES ARE TO THE CUMBERLAND COUNTY REGISTRY OF DEEDS.
- RECORD OWNERSHIP OF THE PARCEL SURVEYED CAN BE FOUND IN A DEED FROM SISTERS OF THE PRECIOUS BLOOD OF PORTLAND, MAINE TO ROMAN CATHOLIC BISHOP OF PORTLAND DATED AUGUST 13, 2018 AND RECORDED IN DEED BOOK 35081, PAGE 287.
- REFERENCE IS MADE TO THE FOLLOWING PLANS:
 - a. "PLAN OF LAND IN SOUTH PORTLAND, MAINE MADE FOR JOHN C. JACOBSON" BY RALPH P. CUMMINGS, C.E. RECORDED AT CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 23, PAGE 55.
 - b. VARIOUS STREET LINE SHEETS AND UTILITY PLANS ON FILE AT CITY OF PORTLAND ENGINEERING OFFICE.
- THE SURVEYED PARCEL CONTAINS 29,333 SQUARE FEET OR 0.67 ACRES.
- THE SURVEYED PARCEL APPEARS ON FEMA FLOOD MAP 230051 0013 B AND IS NOT IN A FLOOD HAZARD ZONE.
- THE UTILITIES SHOWN ON THIS PLAN WERE FROM FIELD OBSERVATION ONLY. THERE MAY BE OTHER UTILITIES EXISTING THAT ARE NOT SHOWN. CONTACT DIG-SAFE (888)DIG-SAFE PRIOR TO ANY EXCAVATION WORK.

Revised:	By:	Date:	Change:
PROJECT: 2019016		PROJECT NAME: 160 STATE STREET.DWG	
DATE: APRIL 22, 2019		SCALE: 1"=20'	FB # 13 E. FB Y
FIELD BY: J.A.M. & J.B.P.		FIELD DATE: APRIL, 2019	DRAWN BY: J.A.M.
Drawing Name and Location:			
BOUNDARY SURVEY/EXISTING CONDITIONS PLAN			
160 STATE PORTLAND, MAINE			
Owner:			
ROMAN CATHOLIC BISHOP OF PORTLAND			
510 OCEAN AVENUE, PORTLAND, MAINE 04103			
Prepared For:			
THANOS LLC & STARK INDUSTRIES LLC			
100 COMMERCIAL STREET, PORTLAND, MAINE 04101			

SURVEYING LAND PLANNING
Spurwink Surveying

182 SPURWINK ROAD, SCARBOROUGH, MAINE

tel 207.799.2654 cell 207.321.8966 e-mail spurwinksurveying@gmail.com

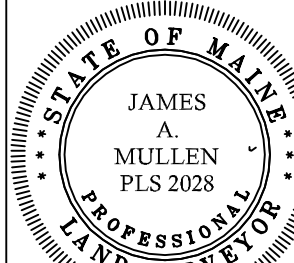


STAMP AND SIGNATURE

James A. Mullen APRIL 30, 2019

JAMES A. MULLEN
MAINE P.L.S. No. 2028

DATE



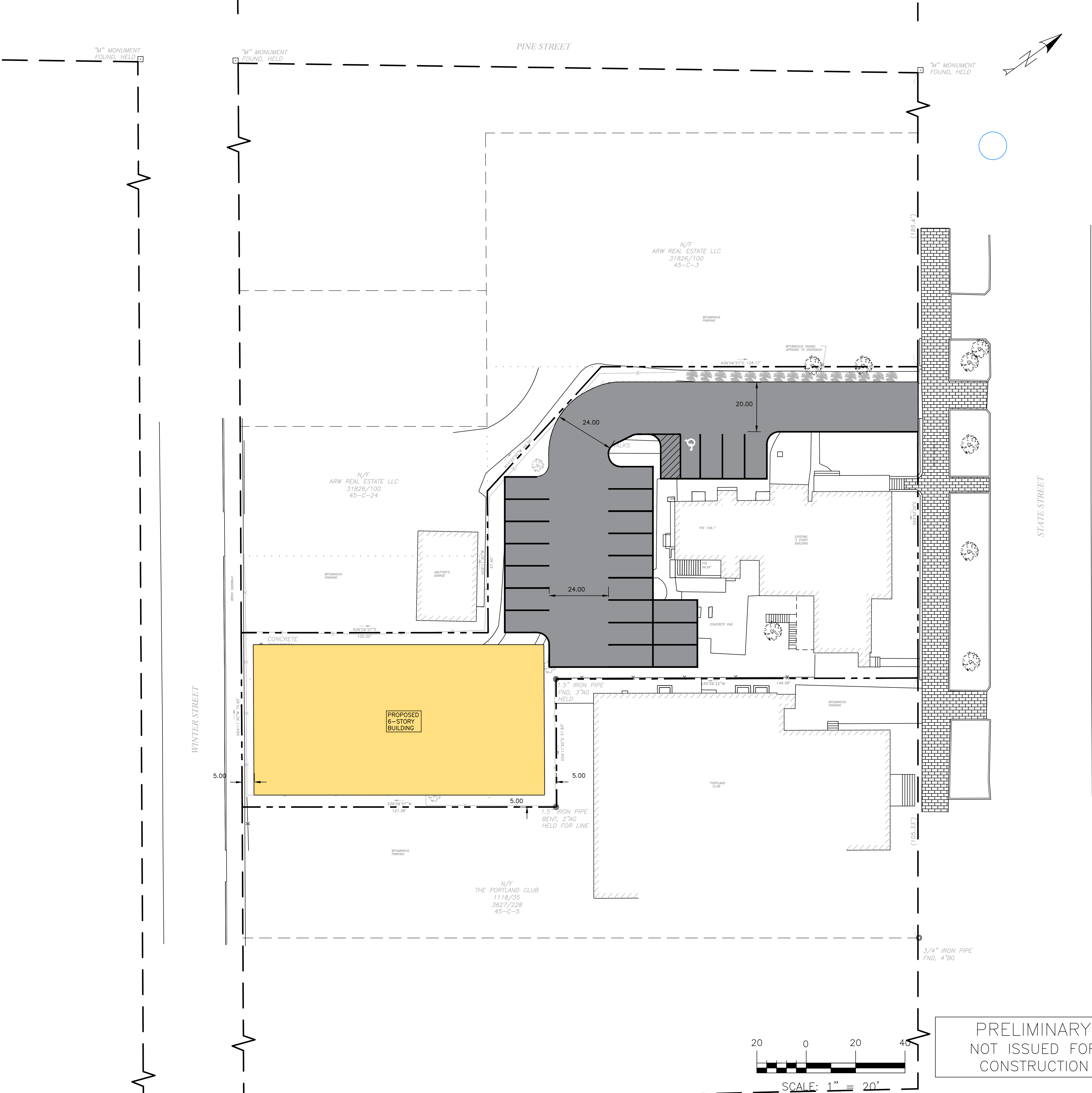
IF THIS PLAN DOES NOT CONTAIN AN EMBOSSED SEAL, IT IS NOT AN ORIGINAL AND MAY BE VOID.

EMBOSSED SEAL ABOVE

SPACE AND BULK STANDARDS		
R-6 ZONE	EXISTING	ALLOWED
MINIUM LOT SIZE	29,333 SF	2,000 SF
MINIMUM LOT AREA/LODGING HOUSE ROOMING UNIT	733 SF	250 SF*
STREET FRONTAGE		
	STATE ST - 126' WINTER ST - 70'	20'
MINIMUM FRONT YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	10.5'	5'
MINIMUM REAR YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	10'	10'
MINIMUM SIDE YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	4.5'	5'
MAXIMUM LOT COVERAGE	37%	60%
MINIMUM LOT WIDTH	71'	20'
MAXIMUM HEIGHT, PRINCIPAL AND ATTACHED ACCESSORY STRUCTURE	<45'	45'
MAXIMUM HEIGHT, DETACHED ACCESSORY STRUCTURE	<18'	18'
LANDSCAPED OPEN SPACE REQUIRED		20%
OFF-STREET PARKING	4	1 SPACE FOR EACH 5 ROOMING UNITS = 8 SPACES
* 29,333 SF LOT SIZE / 250 SF/ROOMING UNIT = 117 ROOMING UNITS ALLOWED		

SPACE AND BULK STANDARDS			
R-7 ZONE	EXISTING	PROPOSED	ALLOWED
MINIUM LOT SIZE	29,333 SF	29,333 SF	NONE
MINIMUM LOT AREA/LODGING HOUSE ROOMING UNIT (250 SF/ROOMING UNIT)	40 ROOMING UNITS	40 ROOMING UNITS	117 ROOMING UNITS
MAX. RESIDENTIAL DENSITY/DWELLING UNIT (435 SF/DWELLING UNIT)	NA	50 DWELLING UNITS	87 DWELLING UNITS*
STREET FRONTAGE			
	STATE ST - 126' WINTER ST - 70'	STATE ST - 126' WINTER ST - 70'	NONE
MINIMUM FRONT YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	NA	0'	NONE
MINIMUM REAR YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	NA	5'	5'
MINIMUM SIDE YARD SETBACK FOR PRINCIPAL AND ACCESSORY STRUCTURES	NA	5'	5'
MAXIMUM LOT COVERAGE	NA	< 100%	100%
MINIMUM LOT WIDTH	NA	STATE ST - 32' WINTER ST - 71'	20'
MAXIMUM HEIGHT, PRINCIPAL AND ATTACHED ACCESSORY STRUCTURE	<45'	<60'	60'**
MAXIMUM HEIGHT, DETACHED ACCESSORY STRUCTURE	<18'	<18'	18'
LANDSCAPED OPEN SPACE REQUIRED	NA		NA
OFF-STREET PARKING	4	23***	1 SPACE FOR EACH 5 ROOMING UNITS = 8 SPACES 1 SPACE FOR EACH DWELLING UNIT = 50 SPACES TOTAL = 58 SPACES
* 1.3 X 67 (BASE) DENSITY PERMITTED PER SEC. 14-488 W/ 60% WORKFORCE HOUSING			
** 50' MAX. BUILDING HEIGHT IN R7 + ADDITIONAL 10' PERMITTED PER SEC. 14-488 W/ 60% WORKFORCE HOUSING			
*** SEC. 14-332.2 (b): PLANNING BOARD MAY ESTABLISH A PARKING REQUIREMENT FOR AFFORDABLE HOUSING UNITS FOR RENT OR SALE WITHIN AN ELIGIBLE PROJECT THAT IS LESS THAN ONE (1) PARKING SPACE PER AFFORDABLE HOUSING UNIT, REGARDLESS OF THE SIZE OF THE STRUCTURE.			

PARKING SUMMARY	
	# PARKING SPACES
EXISTING	4
STANDARD (9'X18')	22
ADA (8'X18')	1
TOTAL PROPOSED SPACES	23



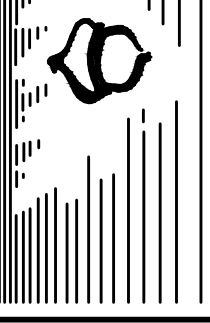
ISSUED FOR
ATTORNEY REVIEW

BY
DATE
MPB
05/14/19

PHASE II CONCEPT

PROJECT NAME
160 STATE STREET / 99 WINTER STREET

CLIENT
JOSH SOLEY
100 COMMERCIAL STREET, SUITE 214

ACOENGINEERING, INC.

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM ACOB ENGINEERING, INC. ANY ALTERATIONS, AUTHORIZED OR UNAUTHORIZED, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO ACOB ENGINEERING, INC.

ACOENGINEERING, INC.
65 HANOVER ST, PORTLAND MAINE 04101
(207) 775-2655

FILE: 1123.1_CIVIL

JN: 1123.1

SCALE: AS NOTED

DESIGNED BY: WHS

DRAWN BY: ZMS

CHECKED BY: WHS

DRAWING NO.

EX-1

Letter to the Planning Board Re: 99 Winter Street/ 160 State

Amy Grommes Pulaski <amygrommes@gmail.com>

Jun 17, 2020 9:21 AM

Posted in group: **Planning Board**

Hello Andrew,

I am submitting to you, and the members of the planning board, a letter on behalf of the residents and neighbors of Winter Street regarding the zone change request for 99 Winter Street/ 160 State Street.

Please share with members of the planning board.

Also, when will this item be on the agenda?

Thank you.

Amy Grommes Pulaski
68 Winter Street

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

June 16, 2020

RE: 99 Winter Street Development

To the City of Portland Planning Board members:

Chair Brandon Mazer, Vice Chair Maggie Stanley, Marpheen Chann, Sean Dundon, Bob Dunfrey, David Silk, and Austin Smith.

Cc: Andrew Tufts, of the Planning Department

We, the neighbors of Winter Street, are aware of a zoning overlay request before you regarding 99 Winter Street. ***We request that the development adhere to the R-6 residential zone and reflect the design and scale of Winter Street, and that the R-7 overlay request be denied,*** for the following reasons.

- The "yellow zone" or urban core contains the Old Port and extends toward the West End but ends at State Street. The State street side of the property could handle increased density, typical of the R-7 zone. However, the Winter Street side of the property is smaller and residential in nature. The large developments that do exist on Winter Street – 100 State Street and Mercy Hospital - have design qualities that are consistent with the R-6 zone. Namely, these properties do not exceed the 45' height requirement of R-6, and are considerably stepped back from the edge of the street. The new building, under the R-7 overlay zone, would both exceed 45' height required of R-6, and, without required setback of the R-6 zone, would likely be located at/ on the sidewalk. This scale of development in the R-7 zone would be inconsistent with what currently exist on Winter Street.
- A notable concern between R-6 and R-7 is a significant change in lot coverage from 80% in R-6, to 100% in R-7. This too, is inconsistent with the current design and scale of Winter Street.
- The R-6 zone has setback requirements that are appropriate to the scale on Winter Street for larger developments, the R-7 zone does not require setbacks.
- The existing housing heights on Winter street are up to 3.5 stories in height, or less than 45', also consistent with the R-6 zone. If the R-7 overlay zone is approved, and the project pursues affordable housing as intended, and receives the density bonus allowed, the project could be allowed additional 25' in height. Buildings heights of 65' to 70' are not consistent with the current design and scale of the Winter Street streetscape.
- A density bonus, allowed under affordable housing developments, could allow up to 49 units in the R-6 zone, or 166 in R-7, depending on how deep the subsidy, would seem to overwhelm the site and the neighborhood.

Additionally, at the neighborhood meeting, the developers shared that they would have more design opportunities under the R-7 that would be constrained under the R-6. However, within any guidelines, skilled architects (such as the ones hired for this project) have endless options as to what the final design can and will be. It's simply not true that one set of guidelines (R-7) allows for more creative solutions over any other set of guidelines (R-6), as put forth by the developers in the neighborhood meeting.

We appreciate your work in ensuring consistency with Portland's Comprehensive Plan. We welcome a discussion and open dialogue on this development, and other developments on Winter Street. Thank you for your time and consideration of our request.

Submitted on behalf of,

The residents and neighbors of Winter Street, including:

1. Suzanne Hunt, 36 Winter St
2. Chrystal Wing, 36 Winter Street
3. Elizabeth Parsons, 44 Winter Street
4. Amy Grommes Pulaski, 68 Winter Street
5. Michael Pulaski, 68 Winter Street
6. Lauren Guite , 70 Winter St.
7. Regan Sweeney, 70 Winter St.
8. Katherine Gilbert, 92 Winter Street
9. Charles Morris, 92 Winter Street
10. Nathan Kimble, 100 Winter Street
11. David Shedd, 104 Winter St
12. Rose Marasco, 108 Winter Street
13. Honour Mack, 112 Winter Street
14. David Marsden, 112 Winter Street

THE RESIDENTS AND NEIGHBORS OF WINTER STREET

15. Seth White, 113 Winter St.
16. Lurette Saul, 113 Winter Street
17. Jennifer Rosenthal, 116 Winter Street
18. Casey Rosenthal, 116 Winter Street
19. Mary Clews, 117 Winter Street
20. Jennifer Defilipp, 119 Winter
21. Marc Smith, 119 Winter.
22. Heather Carlisle, 22 Pine Street # 1
23. Bob Brittingham, 22 Pine Street # 2
24. Pam Brittingham, 22 Pine Street # 2
25. Brooke Porter, 22 Pine Street # 4
26. Karen Farrell, 22 Pine St. #5
27. Maya Burton, 22 Pine St, #6
28. Sarah S Saul, Danforth Street
29. Mark Rossnagel, 766 Congress St. #11
30. Trisha Cobb as President of The Portland Club, 156 State Street
31. Laurence Reinhartsen, 59 State Street # 3
32. Gretchen Langner, 59 State Street # 3

David Shedd
P. O. Box 11375
Portland, ME 04104
(207) 838-1068
portlandmerentals@gmail.com

April 24, 2020

Brandon Mazer, Chair
Planning Board City of Portland
389 Congress Street
Portland, Maine 04101

Dear Mr. Mazer:

I have looked carefully at the documents submitted by: Thanos, LLC. re: the proposed application of changes to 160 State Street and 99 Winter Street.

I have a number of concerns about the submitted proposal and the developer which I would like you to evaluate and consider. With Mercy Hospital leaving and with the significant changes to this site and the neighborhood, we're looking at significant changes to an historic district. The city allowed buildings to be razed to create parking lots in that district, and that blighted the neighborhood for decades. These two projects will change this block as well...we need to make sure that we don't create MORE problems.

I purchased 104 Winter St. in 2002. At that point, it was a near-derelict that had been a known crack house a number of years earlier. Over the last 18 years, I have done major renovations and improvements to the house and grounds, and developed great tenants in an open, welcoming neighborhood. That has included installing and reworking a fence to remove a "corridor" from Brackett Street to Winter Street that had people sleeping in our yards, hallways, and basements...not a nice scenario. Overall, it has been a lot of work, but worth it.

Over the last few years, our neighborhood had been working to increase the quality of the area; more trees, better lighting, better walkability. Rose Marasco (my neighbor) and Elizabeth Parsons have been leading that charge, with the goal of making the neighborhood fit in better with what the West End is trying to be...more neighborhood, less "commercial." We've had significant problems with owners/tenants of buildings on State Street, and the neighborhood organization has been in regular meetings to try to resolve the issues.

.

I know they have met several times with Jeff Tarling, who is working to get tree replacements. And then, Thanos, LLC started cutting trees without notice or discussion; not exactly the definition of “good neighbors” (although fitting, given the name). Clearly, they have little understanding of the neighborhood and the character that both exists and that we are working toward, and also clearly no interest in finding out and being part of it.

That makes their request to reduce the required landscape space to zero, from the standard 20%, even more shocking and unacceptable than it would have been. As a general practice, it’s a bad idea to reward bad actors with concessions; they’ll keep taking advantage, not just in this situation but in every other opportunity with the city. They tried to do much of this without approval; now they want to get approval for it. I’m sorry, but that isn’t even reasonable.

Then, there is their request for a 50% height increase. My building, which is basically directly across from there, is in a historic district. I have had to work around various regulations, including paying thousands of dollars more for windows that met the district requirements...and now the goal is to have a huge, modern building directly facing it? That also makes no sense whatsoever, and would be a slap in the face to all of us who have worked hard to stay within the bounds of the district requirements.

I hope you will take my comments, as well as those of the other residents, into consideration. All of us have the good of the city in mind, not just that of our own pockets...we’re trying to create “homes,” not just apartments. Allowing major changes that void the work of us, and of Historic Preservation, does not move the city forward.

Sincerely,

David Shedd

CC:

Ms. Jennifer Munson, Planning Department
Councilor Spencer Thibodeau, Chair, Sustainability & Transportation Committee
Mr. Andrew Tufts, Planning Department
& the Planning Board City of Portland

**Elizabeth C. Parsons
44 Winter Street
Portland, ME 04102**

22 April 2020

Mr. Brandon Mazer, Chair
Planning Board c/o City of Portland
389 Congress Street
Portland, ME 04101

RE: Requested rezoning of 160 State/99 Winter; Plan Number: ZN-001021-2020

Dear Mr. Mazer:

The following concerns two points related to current zoning laws; to *Portland's Plan 2030*; and to the joint planning process: *One Climate Future*. These points support my contention that granting this request *would negatively affect the existing neighborhood and adjacent property*—something disallowed under R7 provisions. It would also *run counter to values stated in the two planning documents*.

Land use

The zoning change request from R6 to R7 involves new construction out of scale in height and width to the neighborhood's context. This envisioned size would require reducing the amount of landscaped open space on the 99 Winter plot from 20% or zero. The proposed new construction would run basically to Winter Street and lot lines on either side of the property.

This area, though bounded by a fence, has been one of the largest pieces of open space in the neighborhood for decades. In fact, it was open for so long that approximately eight trees reached maturity there. By contrast, the rest of the upper and mid-Winter blocks have lost almost all tree cover due to replacement of housing by parking lots; municipal neglect; and over salting. If you visit 99 Winter now, you will see only three or four mature trees still standing there. This is because the new owners pre-emptively felled the rest last summer until a group of neighbors intervened. Had we not done so, the other trees—including a 150+ year old sugar maple—would have come down.

This incident was the impetus for a tree protection ordinance currently wending its way through City processes. The final draft should come before the entire Council very soon. Meanwhile, the City Arborist has deemed all the remaining trees at 99 Winter healthy. But it appears unlikely any would survive if the application as presented goes forward. This is particularly disturbing since an earlier renovation request for 160 State specifically notes protective measures for the sugar maple.

As both the City Arborist and Councilor Thibodeau can attest, Winter Street neighbors have been working for over three years to improve the quality of life in an area that has come to resemble an industrial back alley to businesses and organizations fronting on State Street. One of our main

aims has been to restore drastically depleted tree canopy. Progress has been very slow for reasons I won't go into here. Meanwhile, the respite to humans and wildlife provided by the Monastery's trees has been particularly prized.

So, allowing open space loss as the envisioned project requests would represent disregard for the City's comprehensive plan and current climate action planning. See, for example:

- the statement on complete neighborhoods (comp plan, p 79)
- the statement on urban design (comp plan, p 82)
- the statement on future land use policy (comp plan, p 88)
- the list of climate vulnerabilities in relation to transportation/land use and resilience planning components (oneclimatefuture.org).

Transportation

Submitted plans also indicate the property owners intend to take advantage of provisions within the City's land use code that allow a reduced number of parking spaces for certain types of housing. Yet, the plan still calls for 23 parking spaces in an area where the sugar maple stands.

There are, however, numerous reasons for radically reducing the number of surface parking units:

- The comp plan highlights State Street as a priority corridor for enhanced public transit, access to which would be adjacent to 99 Winter.
- A chief objective of One Climate Future's transportation component is reducing single passenger car travel. Some strategies for doing so could include disincentives for driving. Reducing the parking requirement here would accord with that objective.
- Section 14-332.1 k. 3 of the City's code indicates the Board has flexible discretion to reduce parking requirements.
- It is questionable how many inhabitants of workforce housing would need or could afford private vehicles, especially as the recession we're now entering deepens.
- It is generally known that parking spaces cost developers money they'd rather not spend that way. Reducing the number of required spaces would help take pressure off the desire to build such a massive structure at 99 Winter.

So, tell the applicant "No. Figure out a way to make your project work within current regulations and visions." That's why we have these things. Grant leeway on parking requirements in favor of public transit options and open space. Specify that all mature trees remaining on the property be preserved and protected.

Sincerely,

Elizabeth Parsons

cc: Mr. Troy Moon, Sustainability Office
Ms. Jennifer Munson, Planning Dept.
Mr. Jeff Tarling, City Arborist
Councilor Spencer Thibodeau, Chair, Sustainability & Transportation Committee
Mr. Andrew Tufts, Planning Dept.

Elizabeth Parsons <ecparsons33@hotmail.com>

Dec 9, 2020, 7:26:11 AM (yesterday)



to planningboard@portlandmaine.gov, Andrew Tufts

Dear Planning Board members:

Several months have passed since I wrote to you about this planned project located a block from where I live (see copy of earlier letter attached). In the intervening time, nothing has happened to change my mind about the inappropriateness of imposing a little-used zoning designation on this neighborhood.

At the time of purchase, the applicant knew this property was zoned R6. So, some creative thinking and consideration of the context could undoubtedly yield a good project that would work within the current zoning. It's been done elsewhere in this neighborhood in recent years. Avesta's Carleton Street complex is one example; the project to be built next to the former Catholic Charities building at State and Danforth is another.

I respectfully urge the Board to deny this requested rezoning.

Sincerely,
Elizabeth Parsons
44 Winter Street

proposed rezoning of 160 State Street

GABEL Landis <landis.gabel@insead.edu>

Apr 24, 2020 4:57 PM

Posted in group: **Planning Board**

Dear Planning Board members,

I am writing to oppose the rezoning relevant to the proposed development of what was formerly the Precious Blood Monastery at 160 State Street.

The purpose of zoning regulations is to afford a secure barrier to the unending pressure for the sorts of development that would harm the esthetic, historic, or cultural assets of a neighborhood. That pressure is especially high in Portland now. If those responsible for zoning enforcement give way to the pressure, those values and the character of the city which drew many to it, will be irrevocably lost. It may be argued that the proposed development will contribute to the economic prosperity of the city, but that would ignore the loss of value felt by the neighborhood, both in the abstract and in terms of its property values.

I am a relatively new resident of Portland. I moved here to the West End in good part because of the very things threatened by this proposed development. It is out of scale (which is why the rezoning is needed), unattractive, and it will necessitate the removal of trees that the city needs more, not fewer, of. Indeed, there is an initiative underway to increase the tree cover within the city. This tree protection ordinance may go before the City Council in May. It would be a shame should trees be lost, including a notable old sugar maple, just as the city moves the other direction.

Thank you for considering my concern.

H. Landis Gabel

Emeritus Professor of Economics and Management

The Novartis Chair in Management and the Environment, Emeritus

INSEAD

E-mail: landis.gabel@insead.edu

Development plan for Precious Blood Monastery.

Katherine Gilbert <kittyandcharles@gmail.com>

Apr 16, 2020 2:42 PM

Posted in group: **Planning Board**

Good morning Jennifer Munson and Andrew Tufts and other members of the Planning Board.

I am writing to register my concern regarding plans for the development of Precious Blood Monastery into a six-story, 50 unit, residential building with limited parking and no green space.

The height of six-stories, while even with the nearby hospital, is otherwise not in keeping with the surrounding buildings, resident or commercial. I would like to register my strong opposition to the height variance above the current 3 floors. In addition, I would ask that a minimum green space requirement be maintained in our 'Forest City'. Green space is not something we can regain once overbuilt. The green space standards are in keeping with Portland's long term goals with regard to climate maintenance. Similar variances have created darkened corridors in the East End of the City. State Street is one of Portland's Grand Boulevards. We need to consider carefully changes to this vibrant part of town and sponsor only development which enhances the city's character.

I live in a home on Winter street which has been in my husband's family for more than 100 years. My father-in-law grew up on a tree-lined street overlooking a public open space which is now a Mercy Hospital parking lot. He used to be able to see Casco Bay from third-floor. Now we face the back of Mercy and the parking area. We deal with the incumbent year-round noise from the hospital's industrial ventilation, idling emergency vehicles, night gas emissions, waste removal, deliveries, and seasonal snow clearing. We often feel as if Winter Street is treated as an alley rather than as the vital residential neighborhood that it is.

Over the past several years, Winter street residents have been working together to urge our State Street neighbors to take steps to improve their appearance on our street. To this end, we have encouraged our State Street neighbors to remove waste containers and replace hurricane fencing with plantings and/or architectural enhancements more in keeping with the residential nature of our street. In addition, we have met with the city arborist and are working to restore the trees along our sidewalks.

We are not opposed to development. In fact, many of us are looking forward to the proposed conversion of Mercy Hospital to a mixed-use residential and commercial development with green space. Our neighborhood has benefitted from the addition of much-needed housing with crosswalks, and local businesses where empty lots once stood. But we have also seen an explosion in construction and are witness to some of the negative consequences as well.

We urge you to consider the impact of a six-story, shadow casting, curb hugging, 50 unit structure, with limited parking, and no green space on our neighborhood. Maintaining even one of the zoning restrictions may be enough to help the planned construction fit into our fair Forest city, Portland. Please maintain the current zoning rules.

Please keep us posted regarding future public hearing and/or options for further discussion.
Thank you for your consideration.
Be safe and stay well.

Kitty and Charles

-- Katherine Gilbert and Charles Morris
92 Winter Street
Portland, ME 04102
207-773-9009

Google Groups

160 State Street

Lurette Saul <lmsaul@yahoo.com>

Apr 20, 2020 1:24 PM

Posted in group: **Planning Board**

To whom it may concern,

I'm writing in regards to the property on 160 State Street and the requests to rezone it. We are the closest neighbors on the side of the street on which the lot is located. Affordable housing is a critical need and I support and applaud efforts to create it. However I fail to see why rezoning this particular parcel of land, on a street which will shortly be entirely residential, is a good idea. Keep the parcel zoned as it is, so that Winter Street can remain a lovely place, without a towering building looming down on the homes below, blocking the sun from our yard.

Furthermore, though this is not specifically what is being addressed, I would like to mention the nearly 200 year old maple tree that is on the 160 State Street property. The Soleys cut down several other large canopy trees (suddenly, and without notifying the neighbors), and it was only through direct intervention that we were able to save the maple. Approving any action that would allow that maple to be cut down would be a stunning act of hypocrisy from a city claiming a 'climate action initiative' of the type detailed on your webpage.

I'm including a photo, from our living room window, of the maple as it stands now, just beginning to leaf out. 160 State Street, the former convent, is visible also. This is how close we are! We see squirrels nesting, and once in a while a hawk comes to sit in the branches look over the neighborhood. Some of our young daughters' first words were "big tree"!

PLEASE think this all the way through before you allow anything to happen that could affect this venerable tree.

Respectfully,

Lurette Saul
lmsaul@yahoo.com
415.577.4193
113 Winter Street



May 15, 2020

Brandon Mazer, Chair
Planning Board City of Portland
389 Congress Street
Portland, Maine 04101

Re: Thanos, LLC. proposed application of changes to 160 State Street and 99 Winter Street.

Dear Mr. Mazer:

I have looked at the documents submitted by: Thanos, LLC. Im trying to keep an open mind to the project but several pieces just don't seem to be fitting...

- 39 Units at 160 State
- 50 Units at 99 Winter
- Zero open space
- Height increase of 50%

Placing a six story building in what is now a neighborhood of two and three stores single and multi family properties, cramming 100 plus occupants on a small lot, little parking and no open space. This really seems like trying put the square piece in the circular hole. Great idea if you're the one collecting rent, not so great for neighborhood. Winter Street is a narrow one-way road with very limited parking. I currently can't see any merit to these requests. If this is approved I will be requesting to raze my property and build a six story 50 unit with zero landscaping. There's a good reason for zoning. Let's stay with it.

Sincerely,

Nathan Kimble
100 Winter St
Portland, ME 04102
(207) 650-2487
nathankimble@gmail.com

CC:

Ms. Jennifer Munson, Planning Department
Councilor Spencer Thibodeau, Chair, Sustainability & Transportation Committee
Mr. Andrew Tufts, Planning Department
& the Planning Board City of Portland









99 Winter Street / 160 State Street Zoning Change Request

Rosanne Graef <rgraef@gwi.net>

May 18, 2020 7:09 PM

Posted in group: **Planning Board**

To Whom It May Concern,

I am writing to express my opposition to the request for a change from R-6 to R-7 zoning for this parcel. Approval of this request would result in significant negative impact on the neighborhood and its residents, as well as on prospective residents of buildings to be remodeled or constructed on this lot. If you visit Winter Street, you'll be struck by the paucity of street trees and the poor condition of those few that are barely hanging on. The lot in question was graced, until last summer, by mature deciduous trees which provided summer cooling, shade, pleasant views and a welcome natural respite for those living there and in the immediate surroundings. In addition, these trees provided habitat for birds and other creatures. When the lot changed hands, one of the first acts of the new owners was the sudden, unannounced cutting down of several of these large, healthy trees. Understandably their removal led to much despair among residents who developed a resolve to try to protect the remaining trees on this lot, as well as others, from unthinking and unnecessary destruction. Over the past few months, this proposed heritage tree protection ordinance has been making its progress through the review process of the Sustainability & Transportation Committee and hopefully will be moved forward to the full City Council.

It is my belief that this zoning request should be rejected, or at least tabled, until the tree protection ordinance has been thoroughly considered and voted upon by the members of the S & T Committee and, ultimately, the City Council. With 100% lot coverage allowed in the R-7, this application is an attempt to squeeze as much out of this development as possible and will undoubtedly result in the removal of the remaining trees on the lot. Actions such as this do not square with Portland's desire to be a livable city that demonstrates concern for the environment and the overall well-being of its current and future residents. Please reject this zoning change request.

Sincerely,

Rosanne Graef
30 Salem St.

108 Winter Street
Portland, Maine 04102
April 22, 2020

Mr. Brandon Mazer, Chair
Planning Board City of Portland
389 Congress Street
Portland, Maine 04101

Dear Mr. Mazer:

I have looked carefully at the documents submitted by: Thanos, LLC. re: the proposed application of changes to 160 State Street and 99 Winter Street.

I have a number of questions and concerns on the submitted proposal which I would like you to evaluate and consider. With Mercy Hospital leaving and with the significant changes to this site, the importance of proceeding slowly, carefully, and wisely with this project, is a matter of major importance. These two projects will change this block of Winter Street forever. We need to get this right.

I live on this block, at 108 Winter Street. I bought my house in 2003 on auction from Mercy Hospital. It was quite a neglected house, but the integrity of the house had not been compromised and I have enjoyed restoring it. I moved to Portland when I was 29 years old (somehow, I am now 71) to establish the photography program at the University of Southern Maine. Portland is a city I love and over the years I have served on various city committees, representing the arts and the arts district.

A few years ago, I joined with Elizabeth Parsons, who was then President of the West End Neighborhood Association (WENA), to address some of the issues on the two blocks of Winter Street (from Pine Street to Gray Street) that needed improvement. Liz and I formed a very active group of 23 participants.

The group started by advocating for trees. Since 2003, many of the Winter St. trees (some very large) have died, and/or were removed. These trees were not replaced, and the tree wells were simply bricked over.

Next, we addressed the severe blight on Winter Street. This too has gotten much worse since 2003. Several of the businesses whose property fronts on State Street, started using their backyard, if you will, (meaning the streetscape of Winter Street), for the placement of their dumpsters, including food waste (in the summer the smell is pretty much unbearable), winter salt storage in a shipping container, (we did work with Mercy hospital to relocate this item), un-shovelled walkways, cigarette butts, and other blight.

These clear signs of neglect, combined with the highly visible trash and metal containers, seem to give permission to individuals to use these objects and spaces, as: a tagging site, a place to dump their no longer wanted furniture, large branches, and other garbage anywhere near the dumpster. I have seen this happen countless times. I watched two men dump a sofa off a truck, from my living room window. These places have also been sites, where because of the neglect and "cover" provided by the dumpster, encourages highly intoxicated individuals to gather. This

past Sunday there was someone passed out on the street in front of the parking lot across from me.

Our group of 23 has met several times with Jeff Tarling, who is working to get us tree replacements. But, our progress is very slow. Therefore, when several of us heard the chainsaws and watched a large streetscape being cut down on the 99 Winter Street side of the Thanos, LLC property, we immediately convened a meeting with the developer and several city officials.

Present at that meeting were: Spencer Thibodeau, Councilor District 2, Christine Grimando, Director, Planning Department, Ian Jacob, Historic Preservation, several members of our Winter Street group, including Elizabeth Parsons, and myself. It was a very emotional meeting. Several residents were crying and very distraught with what appeared to be to us: a removal of significant trees before a plan had been submitted and approved by the city. We did lose one large tree and several smaller that day. We were told the remaining major tree on the property, a 150 year-old sugar maple was also slated to come down. Shortly after the meeting, I was still on the property talking to the owner when Jeff Tarling came by, examined the tree and found it to be healthy.

To address the request from Thanos, LLC to reduce the required landscape space to zero, from the standard 20%, is completely unacceptable. They have already blighted the neighborhood and to further grant them a reduction to 0 % is really an insult to all who work for and care about this city. To me this seems especially so, in light of their skirting the rules and taking down trees before a plan was submitted. And, frankly, seeing my neighbors be so distraught, seeing the tree trimmers stop the cutting, and walk off the job that day, speaks to the intensity of this issue. If we did not act and come together, the site would now be completely felled of all trees. Exactly what they are asking you to do.

Regarding Thanos LLC, second request for the 50% increase of proposed building height over the guidelines, of the R6 zone. I also see no merit or reason for this request on this site. And I urge you to deny this request. It would set a really bad example for Portland. We have requirements because many of you and others have taken the time and care to think these issues through and have come up with standards that makes sense and take into account the greater good, and not the selfish good. Additionally, as I'm sure you are aware, Winter Street is in the West End Historic District. Many of us who own homes in the district, have filled out our forms, met with Preservation officials and have complied with the regulations. Developers, who are also individuals, should be held to the same highest standards within the Historic District.

I thank you for reading and considering my thoughts and observations. If I may provide you with any additional information please contact me.

Rose Marasco
Visual Artist + Distinguished Professor Emerita of Art

207-780-1965
info@rosemarasco.com
www.rosemarasco.com

Mr. Troy Moon, Sustainability Office
Ms. Jennifer Munson, Planning Department
Mr. Jeff Tarling, City Arborist
Councilor Spencer Thibodeau, Chair, Sustainability & Transportation Committee
Mr. Andrew Tufts, Planning Department
& the Planning Board City of Portland

Sarah Conly <sconly@bowdoin.edu>

Dec 31, 2020, 11:40:59 AM (6 days ago)



to planning@portlandmaine.gov, Elizabeth Parsons

To whom it may concern:

In point of fact, this concerns all of us. All of us on Winter St., on State St., on Pine and Spring Streets, and anyone in Portland who doesn't want their neighborhood sold to the highest bidder.

The Solely Brothers, not content with already planning to make a huge profit by developing the old monastery at 99 Winter St., want to change the zoning to R7. Good-bye sunlight on Winter St., good-bye quiet, and good-bye, neighborhood once a massive new building is here where there is at present a garden. There are plenty of places in Portland that could benefit from a bit of development, even a large development. Winter Street is not one of them. The West End is a historic residential neighborhood. Huge, soulless apartment buildings will destroy this. *Is this what you want?* You know if you enact this zoning change they will take full advantage of it and cram every square foot with as much construction as they can possibly fit in. Livability does not mean cramming as many people as possible into a small space. It's about preserving quality of life. Please do not allow this change.

Sarah Conly

110 Winter St., #4

Portland, ME 04102

ZN-001021-2020

Seth White <whiteseth04@gmail.com>

Apr 21, 2020 6:44 AM

Posted in group: **Planning Board**

Dear Members of the Planning Board,

I live two lots down from the proposed project on the same side of the street. I am very much for affordable housing being built on this lot. I am very much against allowing this zoning amendment for this lot.

I suspect in these letters from neighbors you are hearing about a healthy 150 year old sugar maple at the heart of this project. I suspect you are hearing about the developers' covert modus operandi both in eliminating the only canopy on this stretch of Winter St. with zero community outreach (the venerable maple was spared only by direct action from residents), and in dealing with the resulting fallout with residents. Now these developers are essentially asking taxpayers to reward them with a variance that allows a six story building on a stretch of Winter St. with no buildings above three stories, and a 0% landscaped footprint in the name of workforce housing. I understand the city has certain incentives for developers to create workforce housing with a caveat that the project must remain affordable housing for the "longest period allowable under federal, state, and local law," but I've been unable to find out how long that actually is. Are we really to allow a permanent footprint that flies in the face of any sort of "climate action plan" for a tenuous short term promise of affordability?

Further, we are likely facing a very large recession or worse. It seems to my mind a particularly poor time to be awarding higher density residential variances until we as a community have a sense of how this crisis is playing out.

Please, please reject this application. Thank you for reading this.

Sincerely,

Seth White
113 Winter St.

99 Winter Street aka 160 State Street

Shawn Hunt <hunt_shawn@hotmail.com>

Apr 17, 2020 7:28 PM

Posted in group: **Planning Board**

Hello:

I'm just writing a quick note regarding a concern with the proposed 99 Winter Street/160 State Street development (former Precious Blood Monastery). This is a big change for our street. I am not writing fully opposed, but I have concerns.

I want to hear a *specific plan* about how trash/recycling and pet waste (if applicable) will be handled by the property management. What about cigarette butts?

With 50 new units (more than 50 people?) I am sure that without a plan this will get out of hand. With potentially high turnover in the many units, I anticipate a problem with abandoned furniture, junk, etc.

What is the plan?

With that number of units, I want strong reassurance that waste will be handled by a reputable private company -- or at the very least with strong and enforced guidelines from the property management. We will not tolerate poor waste management at this property.

Thank You,
Shawn Hunt
Pine Winter Condos



Jennifer Munson <jmy@portlandmaine.gov>

Fwd: 99 Winter Street/160 State Street Development

1 message

Suzanne Hunt <shuntadoherty@gwi.net>

Thu, May 28, 2020 at 7:14 PM

To: atufts@portlandmaine.gov, planningboard@portlandmaine.gov

Cc: jmy@portlandmaine.gov

Subject: 99 Winter Street/160 State Street Development

City Staff and Planning Board Members;

First off, thank you for all you do, and thank you for your careful review of the proposed development at [99 Winter Street/160 State](#). In 1998 I was very fortunate to be part of the New Neighbors Program which allowed me to become the happy owner of a 3 unit apartment building at 36 Winter Street. Over these 22 years I have worked with the Historic Preservation Board and the Planning Department learning to follow all zoning requirements. I have witnessed many of my neighbors paying the same attention to zoning requirements.

Therefore when I received the proposed plans for 99 Winter Street I was dismayed. The proposal completely ignores the existing height and open space requirements for this zone. A professional developer surely was aware of the existing zoning requirements when the property was purchased. I see no reason why this development should be granted any variances. If a developer can ignore all pre existing zoning requirements why are the rest of us obeying them?

The height of the proposed apartment building is totally out of scale with Winter Street. The idea of reducing the green space from 20% to 0% seems ridiculous. Winter Street is a residential neighborhood and should be treated as such.

Thank you,

Suzanne Hunt
[36 Winter Street](#)
[Portland, Maine. 04102](#)
772 6695

Sent from my iPad



Jennifer Munson <jmy@portlandmaine.gov>

Developers & Portland Assets

Wayne@redhookdesignalliance.com <Wayne@redhookdesignalliance.com>

Wed, Apr 22, 2020 at 1:20 PM

To: atufts@portlandmaine.gov, jmy@portlandmaine.gov, planningboard@portlandmaine.gov

Cc: Anne Pringle <oldmayor@maine.rr.com>, vestal@chesterandvestal.com, karsny@yahoo.com, sarahmichniewicz@me.com, Larry Julie <jlarry@portlandlandmarks.org>

Andrew, Jennifer, and Members of The Portland Planning Board,

I'm taking a moment to write a note questioning why situations like this have become business as usual in Portland. The Soley brothers have recently submitted a development proposal for the 99 Winter side of the Monastery lot. They are asking for a zoning waiver to build a significantly larger structure than current zoning allows. The plans as they stand now would definitely involve taking down the 150+ year old sugar maple near the old Monastery building (to be replaced by surface parking) and would almost certainly take out the other remaining trees that were spared last summer.

The summation, as I read it, is that a 60' tall building will be erected in a zone where structures are limited to 45', by virtue of a "work force" housing exemption, a number of trees will be forever removed, including one of significant age and stature, and the Soley brothers will do well for themselves at the expense of the neighborhood. I think it will be interesting to observe the evolution of Portland without a cruise ship industry, with a significant decline in tourism, with a decimated restaurant population, and a workforce without work. A very interesting turn of events !!!

I guess my point is that while economies grow and decline, and the same for populations (Portland's population is in decline after all), it would be comforting to feel assured that you will protect our right to live in a green, pleasant, and human scaled city. I ask you to rise to the challenge.

Thanks for your stewardship,

Wayne Valzania

27 Merrill Street

Portland, ME 04101

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

March 22, 2021

RE: 99 Winter Street Development, Again.

To the City of Portland Planning Board members: Chair Brandon Mazer, Vice Chair Maggie Stanley, Marpheen Chann, Sean Dundon, Bob Dunfey, David Silk, and Austin Smith.

We, the neighbors of Winter Street, request that the development located at 99 Winter Street adhere to the R-6 residential zone and that the B-3 zone extension BE DENIED.

The size, height, and the scale of the B-3 is inappropriate for Winter Street.

Why the B-3 Is Inappropriate for Winter Street

The concerns that Winter Street neighbors raised for the R-7 zone are the exact same concerns that being raise for the B-3 (See memo attached dated 6/14/2020)

- The existing housing heights on Winter street are up to 3.5 stories in height, or less than 45', also consistent with the R-6 zone. If the B-3 overlay zone is approved, and the project pursues affordable housing as intended, and receives the density bonus as allowed, the project could be allowed additional 25' in height, the same height bonus as the R-7. **Buildings heights of 65' to 70' are not consistent with the current design and scale of the Winter Street streetscape, even with the 45' overlay zone for the entire site, building heights could still sore up to 70'.**
- The "yellow zone" or urban core contains the Old Port and extends toward the West End but ends at State Street. The State street side of the property could handle increased density, typical of the B-3 zone. However, the Winter Street side of the property is smaller and residential in nature. The large developments that do exist on Winter Street – 100 State Street and Mercy Hospital - have design qualities that are consistent with the R-6 zone. Namely, these properties do not exceed the 45' height requirement of R-6, and are considerably stepped back from the edge of the street. The new building, under the B-3 overlay zone, could exceed 45' height required of R-6, and, without required setback of the R-6 zone, would likely be located at/ on the sidewalk. **This size and scale of development in the B-3 zone would be inconsistent with what currently exist on Winter Street.**
- A notable concern between R-6 and B-3 is a significant change in **lot coverage to 100% in B-3 zone**, up from 80% in the R-6. This too, is inconsistent with the current design and scale of Winter Street.
- The R-6 zone has setback requirements that are appropriate to the scale on Winter Street for larger developments, the B-3 zone does not require setbacks.
- A density bonus, allowed under affordable housing developments, could allow up to 49 units in the R-6 zone, **with the B-3 this project could build 166 units on that site**, depending on how deep the subsidy, would seem to overwhelm the site and the neighborhood.

The notion that offering the B-3 zone as a compromise for denying the R-7 zone for this parcel seems to heavily favor the developer and are not responsive to the community concerns. *We remain vigilant, the R-6 zone is most appropriate for Winter Street.*

Why the Planning Board is Considering the B-3 Zone

The B-3 is being proposed because it was recently approved for the Mercy Redevelopment project down the street. The New Height Redfern project was granted the B-3 zone for Winter Street for the following reasons:

- 1) The project is proposing congregate care, a use not allowed in the R-6 zone.
- 2) The project is proposing to match the height of the existing Mercy Hospital building on state street and required a zone with increased heights to reflect what is already built, as part of this campus.
- 3) The planning office discouraged the board to split a parcel into two zones (B-3 and R-6).

This was a specific project, and a specific use, that required a creative zoning response. New Height Red Fern and CHOM also agreed that B-3 was not appropriate for Winter Street and have maintained the dimensional requirements of the R-6 on Winter Street, including a 5' setback and 45' height restrictions (35' overlay height zone and a 10' affordable housing bonus).

How Developers Differ

New Height Red Fern and CHOM have worked tirelessly with the neighborhood to design their buildings to fit into the streetscape and respond to the concerns of the neighbors on this regard. They have enhanced community assets by adding front stoops and front doors, that enter directly into apartments and not stairwells. They have also created a pocket park for neighbors to use. The extra neighborhood meetings, and responsive design decisions of the developers New Height Redfern and CHOM and are the actions of a responsible developer, who want to make Portland a better place to live and work.

This has not been our experience or interactions with **Thanos Inc, developers of 99 Winter Street, who hosted only one required community meeting, and for which the developers themselves and have not directly communicated with neighbors at all** but instead hired an intermediary to do so. In addition, the applicant's stated desires for a rezone have consistently been about making the numbers/the economies of scale work. **Making the numbers work for a developer is NOT grounds for granting a rezoning request.**

It is a vast over reach of the planning office and the board to then offer the B-3 to Thanos Inc, and to stretch this zone beyond the original project to include other properties along Winter Street.

Winter Street Neighbors Welcome Development & Housing

Please let us be clear. We welcome development and affordable housing. Winter Street neighbors are already welcoming over 300 *new* units within the two square blocks between Winter and State Street that are already underway:

- Approximately 68 single occupancy rooms, efficiency and one-bedroom affordable units being constructed by Developer's Collaborative at 66 State Street;
- 99 affordable units between the two CHOM and PHA buildings that comprise part of the Mercy Hospital site redevelopment;
- 18 affordable units within the old Mercy building itself; and
- Over 150 market rate units, (in addition to the senior housing project by Monarch slated for the large Mercy parking lot)

It is not necessary to solve all of the regions housing crisis on Winter Street. The applicant could construct approximately 33 units within the current zoning.

Size & Scale Matters

We believe that size and scale of development matters.

We believe retaining appropriate zoning in residential areas, is important to the planning board, the planning staff, and to Portland and the comprehensive plan.

We believe the size and scale of the R-6 zone is appropriate for Winter Street.

Therefore, we ask that you reject the expansion of the B-3 zone and retain the R-6 zoning for Winter Street and require the developer to develop this parcel by right and in the zone for which they purchased the property.

We appreciate your work in ensuring consistency with Portland's Comprehensive Plan. We welcome a discussion and open dialogue on this development, and other developments on Winter Street. Thank you for your time and consideration of our request.

Submitted on behalf of,

The residents and neighbors of Winter Street, including:

Fred Clarke, 24 Winter Street

Chrystal Wing, 36 Winter Street

Suzanne Hunt, 36 Winter Street

Elizabeth Parsons, 44 Winter Street

Lin Parsons, 44 Winter Street

Michael Pulaski, 68 Winter Street

Amy Grommes Pulaski, 68 Winter Street
David Shedd, 104 Winter Street
Rose Marasco, 108 Winter Street
Sarah Conly, 110 Winter St., #4
Honour Mack, 112 Winter Street
David Marsden, 112 Winter Street
Lurette Saul, 113 Winter Street
Seth White, 113 Winter Street
Henry Clews, 117 Winter Street
Mary Clews, 117 Winter Street
Jennifer Defilipp, 119 Winter Street
Marc Smith, 119 Winter Street
Ginger Raspiller 150 Spring Street #5
Kenneth Swanberg 150 Spring Street #5
Kent Avery, 188 Spring Street
Demetra Giatas, 188 Spring Street
Gretchen Langner, 59 State Street
Larry Reinhartsen, 59 State Street
Ian Jacob, Past President of the West End Neighborhood Association.

PLANNING BOARD REPORT PORTLAND, MAINE

Level III Site Plan & Conditional Use
Presumpscot Elementary School Addition & Renovations
Project PL-001297-2020, CU-001329-2020
Portland Public Schools, Applicant



Submitted to: Portland Planning Board:
Public Hearing Date: May 11, 2021

Prepared by: Jimmy Dealaman, Planner
Date: May 7, 2021

I. INTRODUCTION

Portland Public Schools is seeking Conditional Use and Level III Site Plan approval to facilitate the development of two new building additions, totaling 17,910 square feet, to the existing Presumpscot Elementary School located at 69 Presumpscot Street in the East Deering neighborhood.

The seven-acre site (Figure 1) is made up of three City-owned parcels, and situated in the R-5 Residential Zone.

The proposed expansion of the existing institutional use (elementary school) in the R-5 zone requires a Conditional Use Permit to be reviewed by the Planning Board for compliance with the Conditional Use standards in Section 6.5.2 as well as the requirements of the R-5 Conditional Use standards listed in Section 6.5.6(F).



Figure 1: Development Site at Presumpscot Street Elementary School

Owner: City of Portland
Applicant: Portland Public Schools
Agent and Engineer: Frank Crabtree, Harriman
Landscape Architect: Howard Snyder, Harriman
Architect: Lisa Sawin, Harriman
Surveyor: Nick Elliston, Titcomb Associates

II. REQUIRED REVIEWS

<i>Applicant's Proposal</i>	<i>Applicable Standards</i>
New Structure with Floor Area > 10,000 SF	Level III Site Plan (Section 14.6)
Conditional Use (Institutional Use in R-5 zone)	Conditional Use in the R-5 zone (Section 6.5.6(F)) General Conditional Use (Section 6.5.2)

WAIVER REQUESTS

<i>Waivers</i>	<i>Citation</i>
Lighting Standards – (below 0.2 fc minimum)	<i>Technical Manual, Section 12.3.2 Illumination Levels</i>



Figure 2: Aerial View of Development Site Existing Conditions – Source: Google Earth

III. PROJECT DATA

<i>Subject</i>	<i>Data</i>
Total area of the site	306,738 sf
Total Disturbed Area	56,628 sf
Existing Zoning	R-5 (small portion I-M)
Existing Use	Institutional (Elementary School)
Proposed Use	No Change

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Impervious Surface Area	88,078 sf	116,098 sf	+28,020 sf
Building Floor Area	25,875 sf	43,691 sf	+17,816 sf
Parking Spaces	50 spaces	No Change	No Change
Bicycle Parking Spaces	18 spaces	No Change	No Change

IV. BACKGROUND

The proposed project is part of Portland Public Schools' "Building for Our Future", which is an initiative to renovate four of Portland's oldest elementary schools. In 2017, City voters approved a \$64 million Building for our Future Bond to renovate four elementary schools (Lyseth Elementary School, Longfellow Elementary School, Presumpscot Elementary School, and Reiche Elementary School). The Planning Board approved the Lyseth Elementary School building additions and related site work on April 23, 2019 (Application #: PL-000481-2019) and the project is currently in the final stages of construction.

V. EXISTING CONDITIONS



Figure 3: Existing Conditions (Image from Building Front) Source: Google

Presumpscot Elementary School was constructed in 1962 and currently has approximately 275 students and 42 staff. The existing building contains 21 classrooms/instruction rooms. The site contains a playground, athletic field, three classroom modulars at the rear of the school, and 50 parking spaces in four (4) small surface parking lots around the building.

The site fronts on Presumpscot Street, and is bounded by Sherwood Street to the south, and the Grand Trunk Cemetery and residential Dalton Street to the east. The school is accessed via a circular driveway off of Presumpscot Street which also bifurcates into the designated staff parking area and one-way unaccepted street, “E Street,” that connects to Sherwood Street. The school is primarily surrounded by residential properties to the east, south, and west. Immediately to the north is 125 Presumpscot Street, which is an office building with a number of tenant-leased commercial spaces including the Maine Bureau of Motor Vehicles. The lot also features the publicly-accessible Presumpscot School Trail along the northern boundary. The lot is primarily situated within the R-5 Residential Zone with a small northeast portion falling within the I-M Moderate Impact Zone.

VI. PROPOSED DEVELOPMENT

The applicant is proposing a building addition which includes a new cafeteria and five new classrooms (15,750 SF) placed behind the existing building. The applicant is also proposing a new administration addition and security vestibule (2,160 SF) added to the front entry area of the existing building. Furthermore, the project will involve other associated renovation work to the existing building to improve the security and fire safety systems.

Portland Public Schools has proposed to minimize queuing and congestion at the school’s main drive off of Presumpscot Street with a new permanent bus pick-up and drop-off location for students on Sherwood Street at the end of the staff vehicle exit drive. As a result, student pick-up and drop-off at the front drive would be limited to parent vehicles picking up and dropping off students. The applicant plans to repair the deteriorated sidewalk and create an accessible route from the Sherwood Street bus pick-up and drop-off location to the school entry.

According to the applicant the school has been operating at an enrollment that requires three portable classrooms to accommodate the student population. The proposed building addition would create permanent classroom capacity to accommodate the current enrollment. During construction the applicant proposes relocating the three existing modular classrooms and gas tank to the athletic field and will be temporarily occupying this new location until the project is concluded (in approximately two years). No additional students or staff are anticipated as a result of the main facility improvements.

Additional site work proposed includes modifying the existing fire lane drive to wrap around the entire perimeter of the new building, new service drive at the front entrance, repaving and recurbing along the main drive, new ADA

School doorways are proposed to be lit with wall-mounted lights or canopy mounted lights for security.

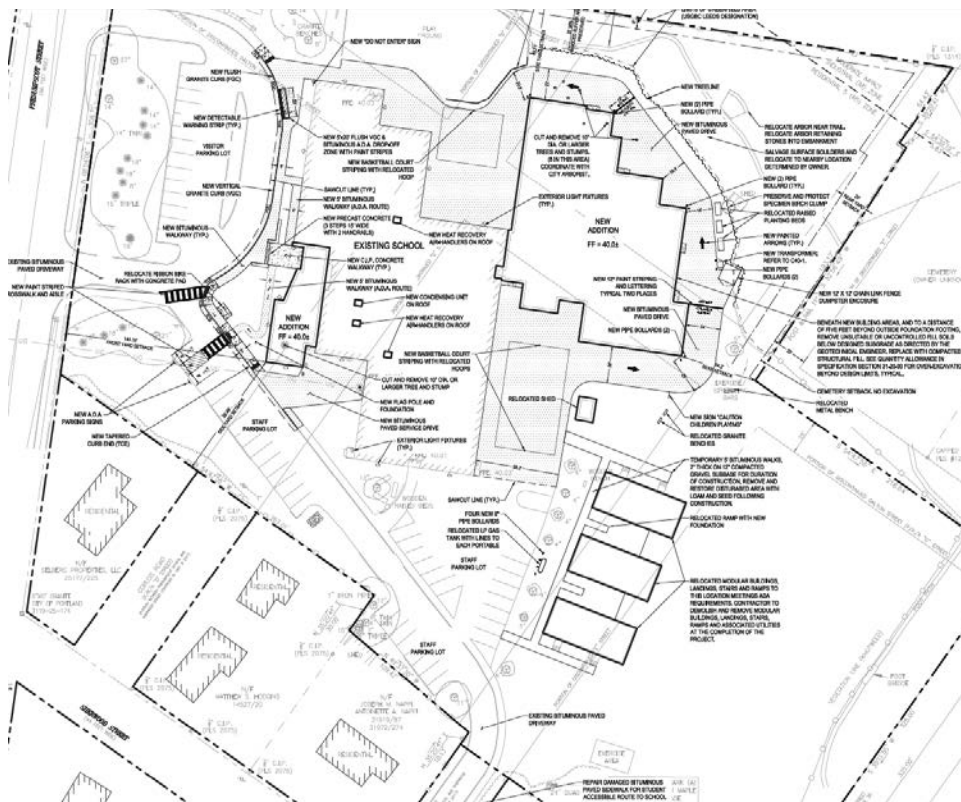


Figure 4: Screenshot from Current Site Plan

The applicant's development team, Harriman, an architectural and engineering firm, has also submitted a statement speaking to their background in consulting services, resumes and relevant experience to complete the proposed development (Attachment E).

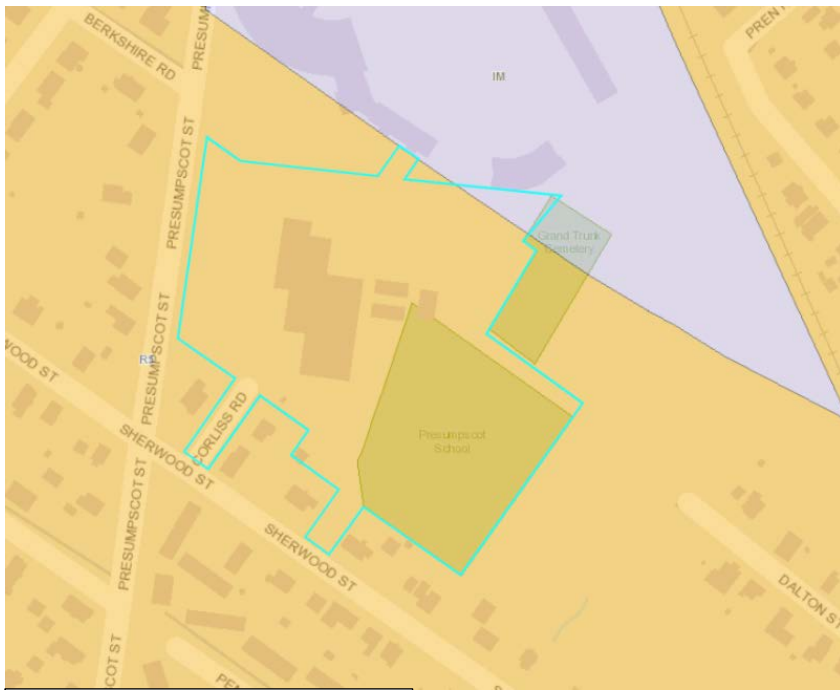


Figure 5: Screenshot of Zoning Map

VIII. ZONING ANALYSIS

A. DIMENSIONAL AND USE REQUIREMENTS

The parcel is located primarily in the R-5 Residential Zone with a small portion in the rear in the Moderate Impact Industrial Zone (I-M). However, the development area is located solely within the R-5 zone, and no work is proposed within the I-M zone; therefore, the proposal is subject solely to the requirements of the R-5 zone. Due to the location of the expanded institutional use within the R-5 zone, the project is considered a conditional use and is required to meet the zoning specific conditional use standards (Section 6.5.6(F)) as well as the general conditional use standards (Section 6.5.2) which are reviewed in Section B and C respectively below.

The following table is provided to summarize the dimensional requirements of the R-5 zone (City Code Sec. 7.3) which are met.

	<i>Permitted</i>	<i>Proposed</i>
Lot Size	30,000 sq.ft.	306,738 sq. ft.
Area Per Dwelling Unit	N/A	N/A
Minimum Street Frontage	50 ft.	308 feet
Lot Width	60 feet	491 feet
Front Yard Minimum	20 feet	140.33 feet
Rear Yard Minimum	20 feet	54.2 feet
Side Yard (left)	12 feet	67.11 feet
Side Yard (right)	12 feet	89.49 feet
Maximum Lot Coverage	40%	16%
Minimum Lot Width	60 feet	496.32 feet
Maximum Structure Height	35 feet	24 feet

B. ZONE-SPECIFIC CONDITIONAL USE STANDARDS – SEC. 6.5.6(F)

Elementary schools are permitted in the R-5 zone as a conditional use, requiring review by the Planning Board. The applicant has submitted an analysis addressing how the proposal meets the R-5 Conditional Use Standards (Attachment Z) and staff confirm that the project meets the requirements of the conditional use standards as follows:

Sec. 6.5.6 Supplemental use-specific conditional use standards:

In addition to the general conditional use standards, the following standards shall apply to specific conditional uses:

(F) Institutional uses (excluding preschools):

1. *The Planning Board shall be the review authority.*

Staff Comments: The application has been referred to the Planning Board as the reviewing authority.

2. *In the case of expansion of existing institutional uses onto land other than the lot on which the principal use is located, it shall be demonstrated that the proposed use cannot reasonably be accommodated on the existing site through more efficient utilization of land or buildings, and will not cause significant physical encroachment into established residential areas.*

Staff Comments: The proposal does not involve any expansion outside the existing school lot.

3. *The proposed use will not cause significant displacement or conversion of residential uses existing as of June 1, 1983, or thereafter.*

Staff Comments: The proposal does not displace or convert any residential uses.

4. *In the case of a use or use expansion which constitutes a combination of the above-listed uses with capacity for concurrent operations, the applicable minimum lot sizes shall be cumulative.*

Staff Comments: No other use is present, so this provision does not apply to the subject proposal.

Standards 5-8. **Staff Comments:** These provisions do not apply to the subject proposal.

C. GENERAL CONDITIONAL USE STANDARDS – SEC. 6.5.2

The following standards in Section 6.5.2 apply to all conditional uses:

Sec. 6.5.2 General conditional use standards:

The review authority shall, after review of the application, approve a conditional use upon a finding that the proposed conditional use, at the size and intensity contemplated at the proposed location, will not have substantially greater negative impacts than would normally occur from surrounding uses or other allowable uses in the same zone. The review authority shall find that this standard is satisfied if it finds that:

- A. *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.*

Staff comment: The proposal is not expected to generate additional traffic as the applicant has stated that no additional students or staff are anticipated (Attachment Z). Similarly, the hours of operation are not expected to change. Review of the application package shows that the addition aims to upgrade the current facility and create adequate space for the current student population.

The number of parking spaces is not proposed to change, however, the amount of new extent of pavement wrapping around the proposed site is proposed to ensure adequate emergency vehicle access to the building. Some delivery is expected to occur at the kitchen doorway at the rear of the new building addition, however, given that the student population is not expected to change, the new delivery drop off location is not expected to create substantially greater traffic from existing conditions. Staff review has found any of the measurable changes proposed not to be substantially greater than would normally occur at the allowable school use permitted in the R-5 zone.

- B. 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.*

Staff comment: The applicant's Conditional Use analysis (Attachment Z) demonstrates that the impact of the new HVAC systems noise will be minimal, all new lighting will be shielded to prevent glare impact at property lines, that there are adequate dust control measures shown in the plans, and that there are no changes proposed to the existing air emissions, litter, odor, and anticipated wastewater flows. Staff finds that the proposal will not create unsanitary or harmful conditions in any of the above impact area categories.

- C. 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.*

Staff comment: The design and operation of the expanded use is anticipated to have the same effects/impacts on the surrounding properties as the existing elementary school use. There is a slight increase in new bus and pedestrian traffic on Sherwood Street around the staff exit-drive due to the bus pick-up and drop-off area being relocated to this new location. Several specific areas staff review focused on are described below.:

Access Lane

Staff found that the access lane would have minimal impacts on surrounding properties due to its proximity being nearest to commercial uses to the north. Staff review also examined the new location of the fire lane to observe if the expanded use would have substantially greater negative impacts than would normally occur for a school use. Preliminary staff comments raised some concerns about doors on the north and east of the addition with a potential to spill out into the vehicle area. These doors along the paved perimeter are expected to be used for exit and entry to the playgrounds. The applicant indicated that school staff monitor the movement of students in and out of all doors of the building. In response to review feedback the applicant has added "Caution Children Playing" signage as well as paint lettering with 18" striping to alert potential vehicles. In addition, a 24" diameter traffic mirror to help with visibility. Please see staff review comments of the access lane under Section IX.B.I below. Overall, staff found that these features would minimize negative impacts from the school expansion.

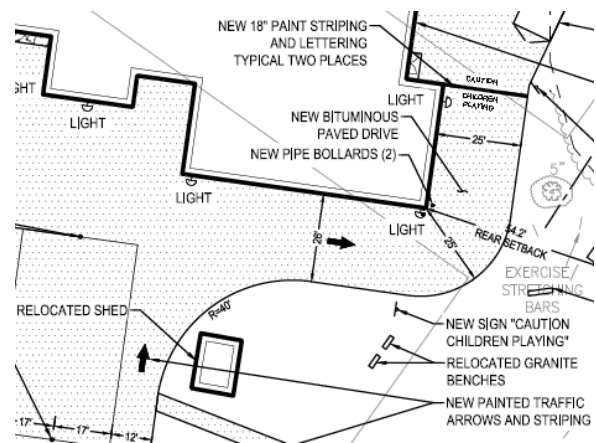


Figure 6: Screenshot of Access Lane

Rooftop Appurtenances

Although institutional uses in the R-5 zone are not subject to zone specific design standards, staff examined the visual impacts of the proposed rooftop mechanicals to better understand the impacts on the surrounding

uses. Please refer to *Site Design Standards* additional comments (Section IX.B.4.) listed under Site Plan Review below. Given that the height of any rooftop mechanicals was not dissimilar or substantially greater than those present on the existing structure, staff found no visual impacts on the surrounding uses.

Other Design Comments

The proximity of the new addition was found to have minimal impact on nearby commercial uses due to the new structure's location, which is approximately 10 feet closer to the shared property line to the north than the existing school structure. Also, the new addition is significantly set back from any residences (over 300 feet), which limits the visual impact.

Sherwood Street Bus Pick-up/Drop-off Location

The applicant proposes having a new bus pick-up/drop-off location on Sherwood Street at the end of the staff vehicle exit drive. Students would be escorted by staff to and from the new bus pick-up/drop-off area to the school. While this relocated operation proposes a slight increase in bus and pedestrian traffic at this new location, overall, bus utilization is not increasing from the current operation, and the school expects having only one bus utilizing that location twice per day. Staff review of the relocated pick-up/drop-off area finds that this will not have a substantially greater effect/impact on surrounding uses due to the low volume of bus trips to this new location and based on the fact that the route is already utilized by pedestrians accessing the site.

- D. 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.*

Staff comment: Please see Section VIII.A. above for zone specific standards; staff finds that these standards are met.

IX. DEVELOPMENT REVIEW

Summary of Planning Board Workshop – March 9, 2021

A workshop was held on March 9, 2021. At that meeting Planning Board members suggested that the applicant submit a lighting plan to assess what new lighting is being introduced, and to understand what waivers might be necessary if site lighting was not intended at unaffected areas of the site. Members of the Planning Board were also interested in hearing feedback from the City's Parks and Recreation staff about outcomes the project will have on the open space area and new access route for service vehicles.

Board members also expressed concerns that the new delivery route did not take into account the basketball court area, and suggested revisiting. Additionally, the board asked if the two-hoop basketball court could potentially be relocated to another location within the campus to minimize conflict. Additional feedback from the board asked if it was necessary for a bus shelter on Sherwood Street.

A. SITE PLAN SUBMISSION REQUIREMENTS (Section 14.5.2)

The applicant has submitted all necessary documentation with the exception of two items requiring finalization:

- Due to additional staff concerns (Attachment 1) about pedestrian circulation and parking impacts during the construction phases, staff are recommending that the Construction Management Plan be approved by the Planning Authority and Public Works Department prior to issuance of a building permit.
- The applicant reported that the modulars would each have lighting fixtures attached to the structure, the lighting details of which were not readily available and the applicant will need to submit so staff can confirm fixtures are acceptable based on Section 12 Technical Manual standards. Staff recommend a condition of approval that the applicant submit the lighting cut sheets to be reviewed and approved by

the Planning Authority prior to issuance of a building permit in order to confirm that this requirement is met.

B. SITE PLAN STANDARDS (Section 14.6)

1. Transportation Standards (Section 14.6.1)

Impact on Surrounding Street Systems, Access and Circulation:

Access to the site by staff and students arriving by single-occupancy vehicle is not expected to change from the current operation. Vehicles access the site via a one-way southerly drive from Presumpscot Street. Visitor's cars then turn left in front of the school to the car drop-off drive or visitor parking lot, and then exit onto Presumpscot Street through the northerly driveway. Staff vehicles proceed with turning right in-front of the school to a restricted staff-only parking area and one-way exit drive exiting on Sherwood Street.

Buses have historically picked up and dropped off students along the drive immediately in front of the school, however the applicant indicates that to lessen congestion and vehicles queuing in front of the school, a bus pick-up and drop-off location for students at the Sherwood Street sidewalk leading to the school is a preferable alternative. According to the applicant this relocation has been successful during the recent pandemic procedures. The applicant proposes the relocated bus pick-up/drop-off area to this new location on Sherwood Street to be a permanent bus arrangement. The applicant has stated that there is only one school bus, so they do not anticipate queuing to be a significant problem.

Along the northern property line runs the Portland Presumpscot School Trail, which starts at the northern playground and runs through the wooded area to the cemetery site. Before starting work, the applicant intends to coordinate with a representative from Portland Trails.

There are no changes to the parking layout, however, the existing one-way emergency access drive around the building which exits to the north of the building is proposed to extend around the new perimeter of the building addition to maintain adequate access. The applicant has provided a Fire Truck Turning Template to demonstrate sufficient turn radius (Plan 22) as well as template for trash truck access (Plan 23). It should be noted that while the access lane is intended to be primarily sized to accommodate emergency vehicles, the access way would also now accommodate deliveries and trash pick-up, as described below.

Deliveries are currently dropped off in the service area at the front of the building. The proposed changes include adding a primary delivery point at the kitchen doorway at the rear of the new building addition. It is expected that most deliveries will occur at the rear of the new addition (east side), approximately one-to-two times per day, and will still generally occur in the early morning prior to school opening.

Additionally, the existing dumpster in front of the building is proposed to be relocated to the rear within a fenced enclosure, so it is expected that trash pick-up will also utilize the access lane around the building. Trash pick-up routinely occurs once per week.

The fire lane is described to serve multiple functions for the school. Doors fronting along the paved perimeter of the addition may be used as an exit and entry to the playgrounds. It was reported that school staff monitor the movement of students in and out of all doors of the building.

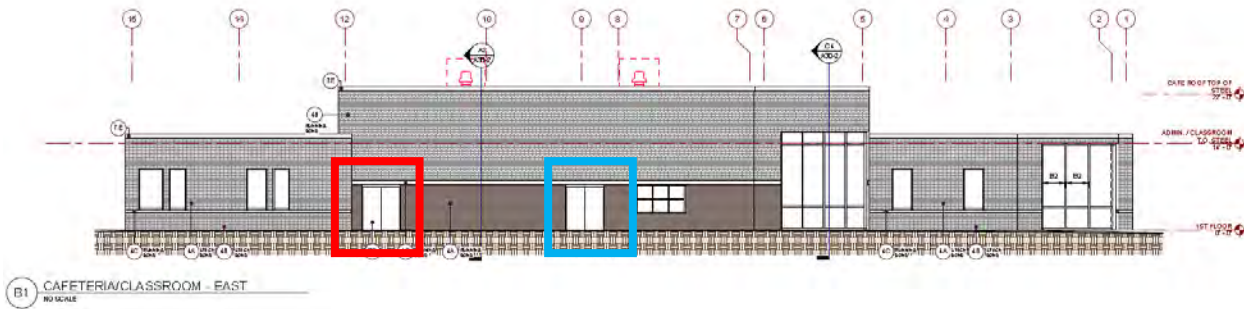


Figure 7: East elevation showing rear of the proposed addition, illustrating one area in question with potential for pedestrian traffic to spill from exterior door (on left) in red into the perimeter access lane. The entrance to the warming kitchen (on right) in blue is identified for reference to show where deliveries will occur.

Staff Comment: Staff have reviewed the proposal and find that the applicant has provided a number of features to the design to help improve the proposed conditions for safe and reasonable access and circulation for users of the site including a new sidewalk from Sherwood Street to the school entrance, and repaving, regrading, recurbing at the main drop-off area to meet accessibility guidelines, as well as adding new traffic signage and crosswalk striping.

Updates to Basketball Court Areas:

To the rear of the school are two existing basketball courts (i) full-court, two-hoop basketball court (ii) half-court, one-hoop basketball court. To address staff and board concerns about minimizing the potential for service vehicle routes to conflict with play spaces throughout the site, the applicant has taken the following steps:

The applicant has provided two turning templates to show vehicle movements through the site.

Recreation staff walked the site with Portland Schools staff on March 26th and found that the basketball hoops should be kept away from the building to the extent possible, both to minimize potential damage to the windows and for distraction to the children in the classrooms. Recreation staff do not support moving the basketball full court to the multi-use green space due to the limited number of large fields available in the area and the high use of the fields, which is currently used by various age groups. To reduce the impacts of vehicles within the proximity of the two-hoop basketball court, the applicant has proposed relocating the posts to within 15 feet of the school, as recommended by Recreation Staff and the school principal (See Figure 8). Three (3) feet of additional width of paved area and the turning radius curve has been enlarged to create a 12-foot clearance from edge of pavement to the court to help accommodate vehicles.

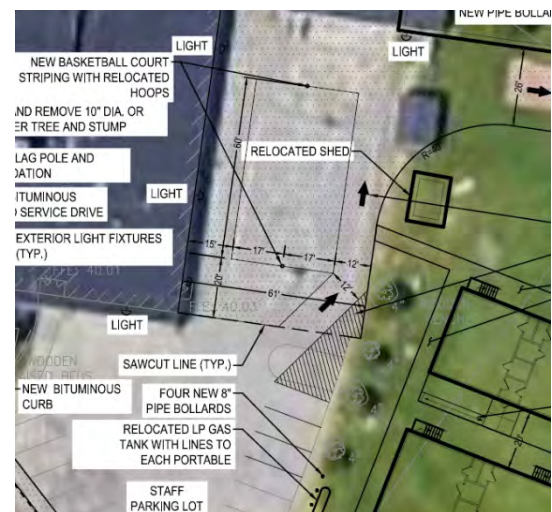


Figure 8: Screenshot Site Plan with Aerial Showing Relocated Basketball Full Court

Recreation staff preferred to see as little of encroachment as possible within the playground area to the north from the relocated basketball half-court, citing: (i) there are equipment fall zones that could potentially be infringed upon which would result in non-compliance to playground standards and; (ii) a playground woodchip perimeter barricade under the hoop would be problematic, creating an obstacle for users attempting to safely use the recreational facility (Attachment 5). Therefore, keeping the single-hoop post away from the building and against the playground was determined to be necessary. To improve the vehicle circulation by the single-hoop basketball court, the applicant has agreed to pull the basketball post three feet closer to the playground curb, with pavement extended to give more space between the basketball court and turning truck traffic (See Figure 9). Staff finds that this helps to minimize obstructions and improves access for vehicles.



Figure 9: Screenshot Site Plan with Aerial Showing Relocated Basketball Half Court

Pedestrian Safety and Vehicle Circulation:

The rerouted access lane location around the new building was identified by staff as having overlap between vehicle routes and pedestrian circulation on the site.

The applicant has explained: *“School children move in and out of the school all day, beginning at 9:00 AM, with school staff supervision to play on the hard-surface and soft-surface play areas. Recess occurs at staggered times for the various grade levels throughout the day. After-hours and on non-school days, the public uses the playgrounds, hard-surface areas, and sports field at various times.”*

Given that doors along the paved perimeter of the new addition may be used for exit and entry to the playgrounds, staff identified the potential for pedestrians to spill out from the external doors (at rear) into the vehicle lane. While new traffic movement is anticipated to use the perimeter lane with around 1-2 deliveries per day and a weekly trash pick-up being now directed to the rear of the building, the frequency of these trips is generally minimal or occurring before the hours of operation when students would be primarily using the outdoor space. Also, during the hours of operation, staff monitor the movement of students in and out of all doors of the building which also helps to improve safety conditions.

Overall, there is appropriate existing signage restricting access to the sides and rear of the building to discourage unauthorized vehicles from accessing this area. To further improve safety of users and circulation, the applicant has also added a post-mounted traffic mirror to improve visibility, which will be installed in the grass area opposite the recessed rear easterly doorway. Additionally, to help alert vehicles of children playing in the area, the applicant has also increased the width of the paint stripe to be 18 inches in addition to providing the painted lettering (at two locations) and signage alerting vehicles “Caution Children Playing.”

The City’s consulting traffic engineer has reviewed the applicant’s response about how the play area will be managed and operate, and finds that the safety features are reasonable to address the potential conflict between delivery vehicles circulating around the building and students playing, but overall, the activity of students exiting the building will continue to be managed by staff (Attachment 4). Additionally, the City’s consulting traffic engineer has commented that the grading in front of the staff parking lot front allow for potential vehicle encroachment in the sidewalk, and suggests adding wheel stops or considering some other barrier to prevent overhanging vehicles from

impacting the sidewalk. Staff have added a condition of approval that prior to issuance of a building permit that the site plan be revised and reviewed by city staff.

Staff have also reviewed the proposed bus pick-up and drop-off location on Sherwood Street. The applicant has proposed paving the internal sidewalk to improve the walking route for students arriving/departing via bus. While staff prefer to see the that bus arrival remain at the front entrance to reduce distance from drop-off area to the building entrance, relocating the bus area will reduce the potential for queuing during car drop-offs to the front of the school, and the sidewalk conditions will be improved to create better walkability to the site.

Sidewalks

No changes are proposed to the existing sidewalk which runs along the front of the site, which are confirmed by Public Works to be in relatively good condition.

The site includes an internal pedestrian path which connects the sidewalk on Presumpscot Street to the service drive in front of the building. The internal path also runs to Sherwood Street where staff vehicles exit.

The current proposal plans to repave and curb the walkway which runs along the front of the building (Figure 7), as well as adding additional access route improvements to the proposed front addition entrance and connecting to the sidewalk on Sherwood Street.

Public Works have provided comments that if pedestrian access is intended to occur along “E” Street along the south of the site, then the internal walk will need to be made accessible. The site plan submission (Plan 1) noted that the sidewalk route connecting the school to Sherwood Street will be repaired and made accessible as part of this project. The applicant also indicated that this work will occur separately from the work detailed in this plan set. To ensure that this improvement meets City standards, staff plan to recommend a condition of approval that the details of the sidewalk improvement first be reviewed and approved by Public Works to ensure the project provides sufficient pedestrian access.

Public Transit Access

Greater Portland METRO Bus lines routes 9A and B stop at the Presumpscot Street intersection on Washington Avenue several times a day for service to the school. According to the applicant, the Presumpscot Elementary School building is a walk of approximately 1,000 feet from the bus stop.

The institutional development gross floor area totals less than 20,000 square feet, therefore no transit shelter is required adjacent or within the public right-of-way. Additionally, the applicant reports that the school bus driver confirms with the main office when arriving to pick-up students, so students are escorted to a bus ready to pick up students.

Parking

Current parking standards (TABLE 19-A: Off-Street Parking Minimums) require one (1) parking space for each room used for the purposes of instruction. The proposed project will increase the number of classrooms to 26, requiring 26 parking spaces. The current number of parking existing on the site (50 spaces) exceeds the minimum requirement, therefore meeting the parking requirements.



Figure 9: Screenshot Walkway Improvements on Site Plan

2. Environmental Quality Standards

Landscaping, Preservation of Significant Natural Features and Landscape

The applicant reports that there are no significant natural features within the vicinity of the proposed development activities on the site (Attachment N).

During a site visit conducted on November 30th, 2020, City staff discussed elements of the proposal with the development team, among which focused on landscaping. Some areas of discussion included relocating an existing arbor present on the site, making sure the clearing limits were clearly shown on the plan, as well as having the City Arborist inspect the vegetation proposed to be cleared.

The applicant has indicated that no tree-clearing will occur beyond what is necessary for the required paved fire lane and embankment grading slopes (Attachment DD). The plans (Plan 2) show the proposed tree clearing line as well as the nine (9) trees that are over 10" caliper proposed to be removed. Where all of these trees proposed to be removed are outside the setback area, no replanting for removed trees is required (Per Section 14.6.2 (B)).

The applicant is proposing to plant a total of 15 trees throughout the site, as well as a significant number of shrubs. It was noted by the applicant during the required neighborhood meeting that no neighbors requested any additional plantings. The proposed location of the new dumpster/recycling area is proposed to be screened from view by fencing at the rear of the property and is a significant distance away from nearby properties to minimize visual impacts.

Additionally, the applicant will provide a silt fence during construction to offer tree protection to existing trees onsite.

The City's Arborist reviewed the proposal and finds that the mix of shade and evergreen trees along the frontage is adequate. All other comments from the City Arborist have been addressed.

Water Quality, Stormwater Management and Erosion Control

The proposed building additions and paving adds 28,020 square feet of impervious surface to the site. The proposal includes a stormwater system comprising of a roof drain, catch basin, storm drain pipes, and a subsurface chamber sand filter to treat stormwater runoff from the new building roof and some associated walks. The treated stormwater is then piped under the large playfield and discharged into the wooded swale to the south east

The City's peer/consulting engineer has reviewed the applicant's plans (Plans 5, 6, 7) and Stormwater Report (Attachment Q), and provided staff and the applicant with comments (Attachment 3) regarding the proposed treatment system's as well as erosion control measures.

The applicant's most recent plan submission was reviewed again by the City's consulting engineer and determined to address all outstanding comments (Attachment 6). The plan shows adequate erosion and sedimentation control and proposes a treatment system of stormwater acceptable to meet all applicable City standards.

3. Public Infrastructure and Community Safety Standards

Availability and Adequate Capacity of Public Utilities

The applicant has provided an ability to serve letter (Attachment BB) from the Portland Water District as well as Wastewater Capacity Authorization from Public Works (Attachment CC), demonstrating adequate capacity of public utilities to support the project. The Public Works Water Resources division has also reviewed the proposed system connection to City infrastructure, and find it acceptable (Attachment 7).

Public Safety & Fire Prevention

The applicant has provided a turning template to demonstrate sufficient fire truck turning movement around the site.

A fire and life safety review of the site has been conducted of the project and the applicant has addressed all comments provided by life safety staff. The buildings will also undergo a life safety code review when applying for a permit.

To further the building meeting the public safety principles of Crime Prevention through Environmental Design (CPTED), the applicant indicates that the design of the front entry addition will enhance security by providing full visibility for staff to observe those seeking entry to the building, and will be well lit.

Staff find that all public safety and & fire prevention standards to be met.

Consistency with City Master Plans

There's much in this proposal that is supported by Portland's Plan 2030, including an emphasis on making strategic investments in school facilities to modernize and update buildings and grounds that ensure student safety. The plan also highlights the importance of maintaining and supporting a quality educational system as well as making investments in sidewalk maintenance, accessibility improvements, and trail and path connections. Therefore, staff have found that the proposal is consistent with the goals and policies of the city's comprehensive plan, [Portland's Plan 2030](#), and have identified some additional pertinent sections and goals that are relevant to the proposal highlighted below:

A Full Service City

- Maintain and support a quality educational system that is responsive to the educational needs of our community.

An Accessible City

- Support livability by improving the quality of life in neighborhoods and improving the public health of residents.



4. Site Design Standards

Massing, Ventilation and Wind Impact / Noise and Vibration

The applicant proposes adding two (2) rooftop HVAC/mechanical units which are approximately 4.5 feet tall and six feet tall, respectively, and are set back away from the roof edge. These units are set back approximately 157 feet from the south property line at the nearest point, where there are residential uses in the vicinity. The applicant has indicated the noise levels to be low (Attachments X, Z), as well as other ventilating fans and louvers to have minimal noise and will be primarily operated during the daytime hours. The plan also calls for two (2) new air-handler rooftop units on the existing building.

The nearest of these four (4) HVAC units is set back approximately 163 feet from the nearby commercial uses to the north and is not expected to have negative impacts visual or otherwise.

Based on the applicant's assessment, staff finds that the new HVAC and venting mechanisms are adequately distanced from abutting residential properties to minimize any impacts which might require additional screening.

Shadows

The proposed addition to the existing building will be one-story and is not anticipated to result in shadow impacts. Landscaping in the vicinity will be coordinated with the City Arborist, to ensure viability of plantings in the vicinity of the building.

Snow and Ice Loading

The existing and proposed building has been designed to have building wings with flat-roofs, so snow will slowly melt and flow down the roof drain pipes into the storm sewer. If snow accumulates on the rooftop to a significant point,

the applicant has indicated that the School Department will hire a roofing contractor to move snow to the ground. The snow will then be removed from the site.

View Corridors

The site is not located within any corridors identified in the *Downtown Vision View Corridor Protection Plan*

Historic Resources

The development is not located within a designated historic district. Due to the proximity to the nearby cemetery, Planning Staff confirmed with the historic preservation program manager, Deb Andrews, that Grand Trunk Cemetery is not designated under Portland's historic preservation ordinance.

Exterior Lighting:

The applicant has indicated the presence of two existing street lights/spotlights on Presumpscot Street that light the front school parking lot. Other existing building-mounted lights also help to light the parking areas around the building.

No additional site lighting poles are proposed. The applicant has proposed some wall-mounted and canopy mounted light fixtures for security and submitted accompanying catalog sheets which meet the City's technical standards. Staff reviewed the submitted lighting plan and found that the lighting fixtures around the building perimeter provide ample lighting to nearby surrounds. However, there were a few areas on site where illumination levels did not meet minimal levels; one just off the north access drive sidewalk on Presumpscot Street; one in the existing southerly parking area; and one in internal portions of the sidewalk that lead to Sherwood Street, which were not proposed to add lighting to these areas. Given that there is existing street lighting on Presumpscot Street and Sherwood Street, the primary hours of school operations occur during daylight hours (9:00 am – 3:30 pm) and that the school leadership report there is sufficient lighting within the parking lot area for staff, staff recommend a waiver to the illumination level standards for those parts of the site not meeting standards of providing 0.2 fc in lighting levels.

The applicant has also indicated that the temporary modulars will be lit for security. However, the details of these fixtures are not yet available, and will need to be submitted and reviewed by staff prior to being installed. Staff are also recommending a condition of approval that the cut sheets for any fixtures attached to the modular classrooms be submitted to staff for review and approval prior to the issuance of a building permit for the modulars.

Signage and Wayfinding:

The proposal does not intend to propose any new identification signs. There are several directional traffic control "Do Not Enter" signs provided to prevent access against the one-way route around the building. There is also a "Caution Children Playing" sign with paint striping to alert vehicles entering the access route around the building.

X. PUBLIC COMMENT

A notice of this Public Hearing was sent to one hundred thirty (130) property owners within 500 feet and interested citizens, and appeared in the May 1st and 2nd, 2021 editions of the *Portland Press-Herald*. A Neighborhood Meeting was held on October 21st, 2020 at 8:00 pm attended by twenty-six (26) people.

At the time of writing this memo, the Planning Department has not received any public comments.

XI. PROPOSED MOTIONS

A. WAIVERS

On the basis of the application, plans, reports and other information submitted by the applicant, findings and recommendations contained in the Planning Board report for the public hearing on May 11, 2021 for application PL-001297-2020 relevant to Portland's technical and design standards and other regulations; and the testimony presented at the Planning Board hearing:

1. Illumination Levels:

The Planning Board **[finds/does not find]** that extraordinary conditions exist or undue hardship may result from strict compliance with the Technical Manual Section 12.3.2 Illumination Levels, that substantial justice and the public interest are secured with the proposed variation in these standards, and that variation is consistent with the intent of the ordinance. The Planning Board **[waives/does not waive]** Technical Manual Section 12.3.2.

B. CONDITIONAL USE

On the basis of the application, plans, reports and other information submitted by the applicant, the findings and recommendations contained in the Planning Board Report for the public hearing on May 11, 2021 for application CU-001329-2020 relevant to Portland's Conditional Use Standards and other regulations, and the testimony presented at the Planning Board hearing:

The Planning Board **[finds/does not find]** that the proposed conditional use for the expansion of the institutional use is in conformance with Sections 6.5.6(F) and 6.5.2 of the Land Use Code.

C. SITE PLAN

On the basis of the application, plans, reports and other information submitted by the applicant; findings and recommendations contained in the Planning Board Report for PL-001297-2020 relevant to the site plan regulations; and the testimony presented at the Planning Board hearing, the Planning Board **[finds/ does not find]** that the plan is in conformance with the site plan standards of the Land Use code, subject to the following conditions of approval:

PRIOR TO ISSUANCE OF A BUILDING PERMIT

1. The applicant shall submit a revised construction management plan for review and approval by the Planning Authority and the Department of Public Works.
2. The applicant shall submit to the Planning Authority for review and approval the associated catalog cut sheets for any lighting fixtures attached to the modular classroom units.
3. The applicant shall submit details of the sidewalk improvement to the Department of Public Works for review and approval to ensure the project provides sufficient pedestrian accessibility.
4. The applicant shall submit a revised site plan to the Planning Authority for review and approval providing wheel stops or another acceptable barrier to guard against vehicle encroachment from the rear staff parking lot into the adjacent sidewalk.

PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY

5. Upon completion of construction, the applicant shall remove the three (3) temporary modular classroom units from the site and restore any impacted areas to the pre-development condition as indicated on the site plan dated May 6, 2021. The applicant shall notify the Planning Authority within six months of project completion to schedule a final inspection to confirm the area has satisfactorily been restored.

XII. ATTACHMENTS**PLANNING BOARD REPORT ATTACHMENTS**

1. Department of Public Works Comments (email dated 4.30.2021)
2. City Arborist Comments (email dated 2.16.2021)
3. Consulting Civil Engineer Review (email dated 2.12.2021)
4. Consulting Traffic Engineer Comments (email dated (email dated 05.06.2021)
5. Department of Parks, Recreation and Facilities Comments (email dated 05.06.2021)
6. City's Consulting Stormwater Engineer (email dated 05.07.2021)
7. Public Works Water Resources Comments (dated 05.06.2021)

APPLICANT'S SUBMITTAL

- A. Project Summary
- B. Right Title Interest
- C. Zoning Assessment
- D. Financial Capability
- E. Technical Capability
- F. Traffic
- G. Access & Circulation
- H. Loading and Servicing
- I. Sidewalks
- J. Public Transit
- K. Off-Street Parking
- L. Bicycle Parking
- M. Snow Storage
- N. Significant Natural Features
- O. Landscape Preservation
- P. Site Landscaping
- Q. Water Quality, Stormwater, Erosion Control
- R. Consistency with Master Plans
- S. Public Safety and Fire Prevention
- T. Public Utilities
- U. Massing Venting Wind
- V. Snow and Ice Loading
- W. Exterior Lighting
- X. Noise and Vibration
- Y. Signage Wayfinding
- Z. Conditional Use
- AA. Historic Resources
- BB. Water District Ability to Serve Letter
- CC. Wastewater Capacity Authorization
- DD. Response to Staff Comment (dated 12.11.2020)
- EE. Response to Staff Comment (dated 03.4.2021)
- FF. Response to Staff Comment (dated 04.16.2021)
- GG. Response to Staff Comment (dated 05.06.2021)

PLANS

- | | |
|--------|-------------------------------|
| Plan 1 | SITE-PLAN-LAYOUT |
| Plan 2 | EXISTING-SITE-CONDITIONS-PLAN |

Plan 3	SITE-UTILITY-PLAN
Plan 4	SITE-NOTES
Plan 5	SITE-EROSION-CONTROL-NOTES
Plan 6	PRE-DEVELOPMENT-DRAINAGE-PLAN
Plan 7	POST-DEVELOPMENT-DRAINAGE-PLAN
Plan 8	SITE-GRADING-AND-EROSION-CONTROL-PLAN
Plan 9	SITE-DETAILS 1
Plan 10	SITE-DETAILS 2
Plan 11	STORMWATER-DETAILS
Plan 12	PLANTING-PLAN
Plan 13	PLANTING-DETAILS 1
Plan 14	PLANTING-DETAILS 2
Plan 15	FIRST-FLOOR-PLAN – AREA-A
Plan 16	SECOND-FLOOR-PLAN-AREA-B
Plan 17	EXTERIOR-ELEVATIONS
Plan 18	EXTERIOR-ELEVATIONS 2
Plan 19	BOUNDARY-SURVEY
Plan 20	CONSTRUCTION MANAGEMENT PLAN
Plan 21	SNOW PLAN
Plan 22	FIRE TRUCK TURNING PLAN
Plan 23	TRASH TRUCK TURNING PLAN
Plan 24	PHOTOMETRICS-PLAN



Jimmy Dealaman <jdealaman@portlandmaine.gov>

Longfellow and Presumpscot school projects

Mike Tremblay <mtremblay@portlandmaine.gov> Fri, Apr 30, 2021 at 1:05 PM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Cc: Kevin Kraft <kkraft@portlandmaine.gov>, Jeremiah Bartlett <jbartlett@portlandmaine.gov>

Jimmy,

As discussed, for both of these projects, I continue to have concerns about pedestrian circulation and parking impacts during the construction phases of both school projects at Longfellow and Presumpscot. As such, I'm recommending that these projects be approved with a condition that the CM plans be approved by DPW prior to the issuance of a building permit. I am recommending that the projects' contractor(s) be selected, and their input/recommendations factored in, before CM plans are resubmitted for approval.

For Longfellow, the impacts to parking remain somewhat unclear, and construction vehicle routes to the work zone should be clarified. If staff parking is displaced during construction, replacement parking should be identified in a location with a safe pedestrian route to the school. If the School Dept. wants to reserve spaces on-street for longer-term staff parking (i.e. while the modulars are in place), the exact location and number of spaces needs to be worked out with Jeremiah Bartlett, who is already in touch with Doug. Those changes may need to be approved by City Council. In any case, this would not be something that could be approved through the minor site plan process, so it should not affect Planning's approval (with conditions) of this project.

For Presumpscot, we are concerned about the proposed student route to the modular classrooms, which will take several minutes to walk and is not an accessible route. As noted, once the contractor is selected, they may be able to provide an alternative solution. It is encouraged that this be explored further before the CM plan is finalized.

Thank you,
Mike

Mike Tremblay, P.E.

Senior Engineer

Engineering Division

Department of Public Works

City of Portland, ME

mtremblay@portlandmaine.gov

P. 207.874.8881 F. 207.874.8852





Jimmy Dealaman <jdealaman@portlandmaine.gov>

69 Presumpscot Street - Landscape Plan (PL-001297-2020)

Jeff Tarling <jst@portlandmaine.gov>

Tue, Feb 16, 2021 at 9:00 AM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Hi Jimmy -

The street tree question, knowing the site well, the mix of shade trees and evergreen trees along the frontage should be adequate. Knowing this is a school and seeing into the site is also important for safety reasons as well as traffic visibility this looks good as presented. The only landscape question is on the Serbian Spruce size showing a very large 14-16' tree and we would like to see a smaller 7-8' size tree as it will be easier to establish and care for. All too often those big trees which do have a quick impact, can decline if not well watered etc. A 7-8' tree should be more than fine.

Thanks

Jeff

Jeff Tarling

City Arborist - City of Portland Maine

Parks, Recreation & Facilities Department

Forestry & Horticulture

212 Canco Road - Suite A

Portland, ME. 04103

(207) 808-5400

jst@portlandmaine.gov

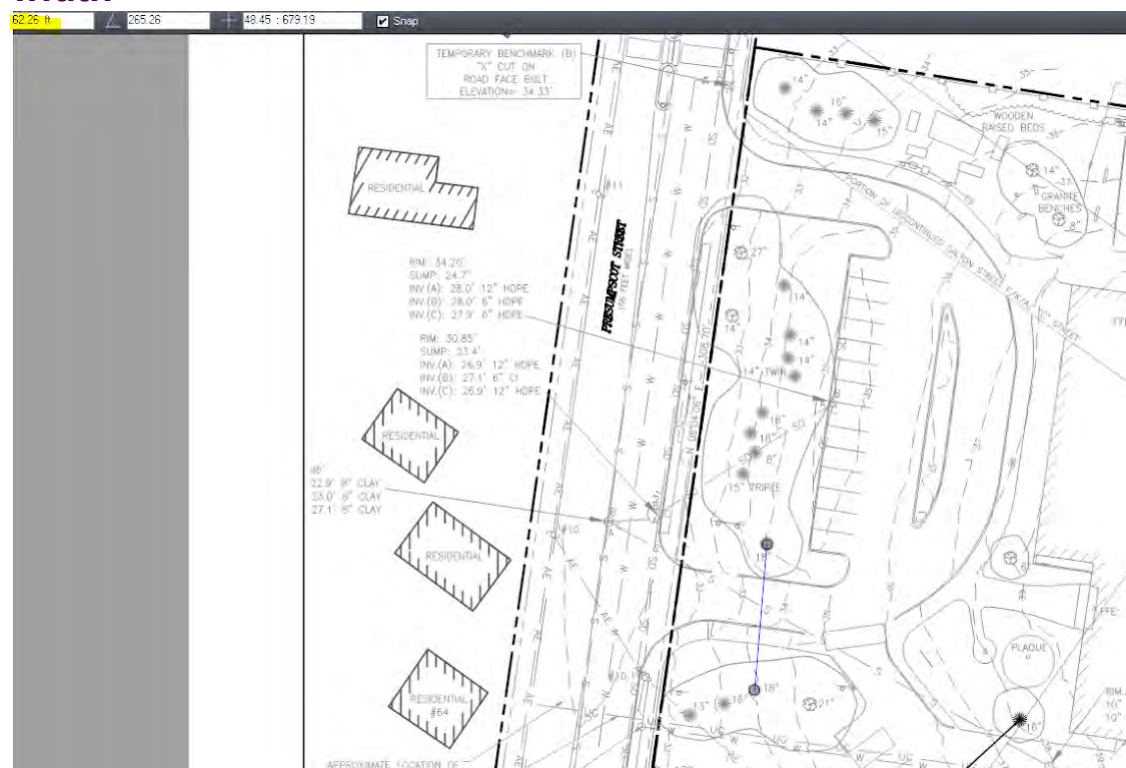
On Mon, Feb 15, 2021 at 7:15 PM Jimmy Dealaman

<jdealaman@portlandmaine.gov> wrote:

One more question! The Technical Manual asks for street trees for institutional uses to be thirty (30) to forty five (45) feet apart on center in the City right of way along all street frontages unless otherwise approved (by reviewing authority). Looking at the frontage (see image

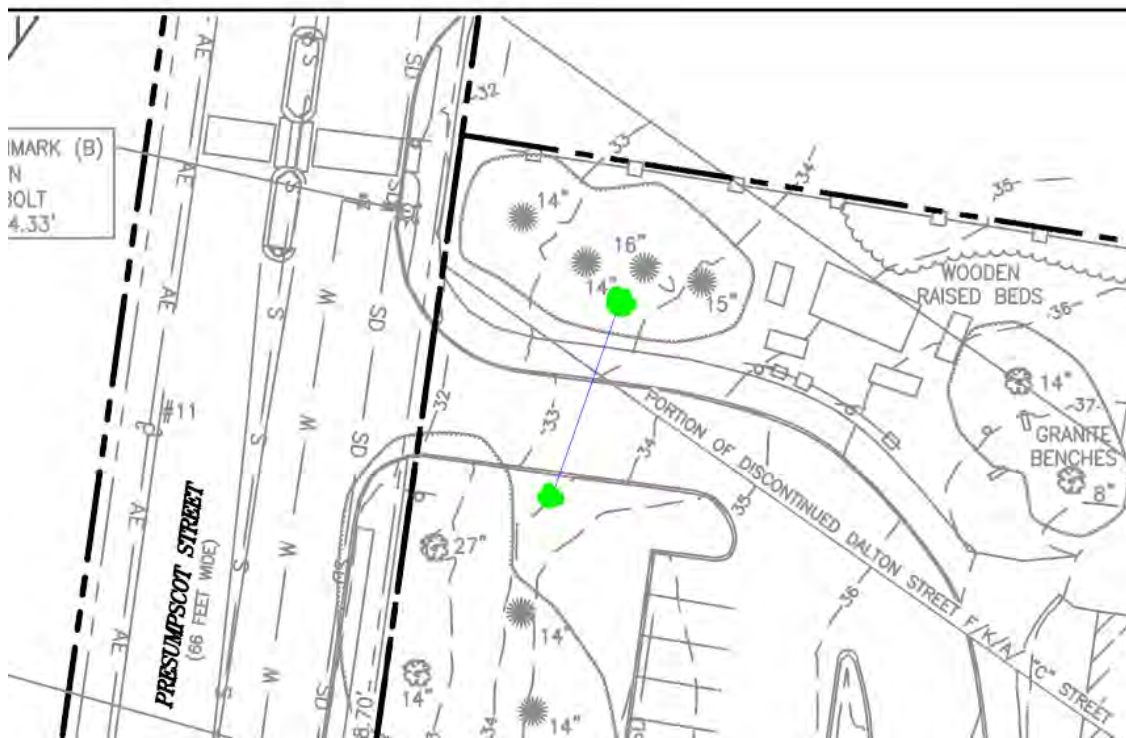
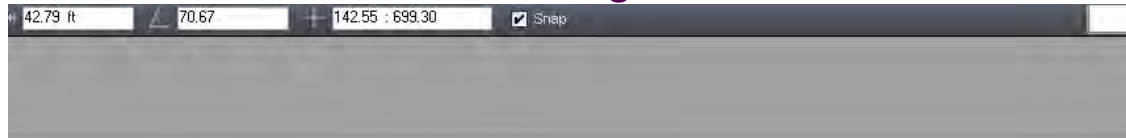
below) I think this means the applicant will need a waiver unless they plant about 3 trees to achieve this 45' apart rule.

Ex. image showing 63 feet in distance between trees separated by drive width



In order for the applicant to avoid needing a waiver, do you recommend adding 3 trees in the frontage (somewhere) to complete the uninterrupted 45' apart requirement? Below are locations I'm putting out there for your consideration, which are about 45' away from the next tree.

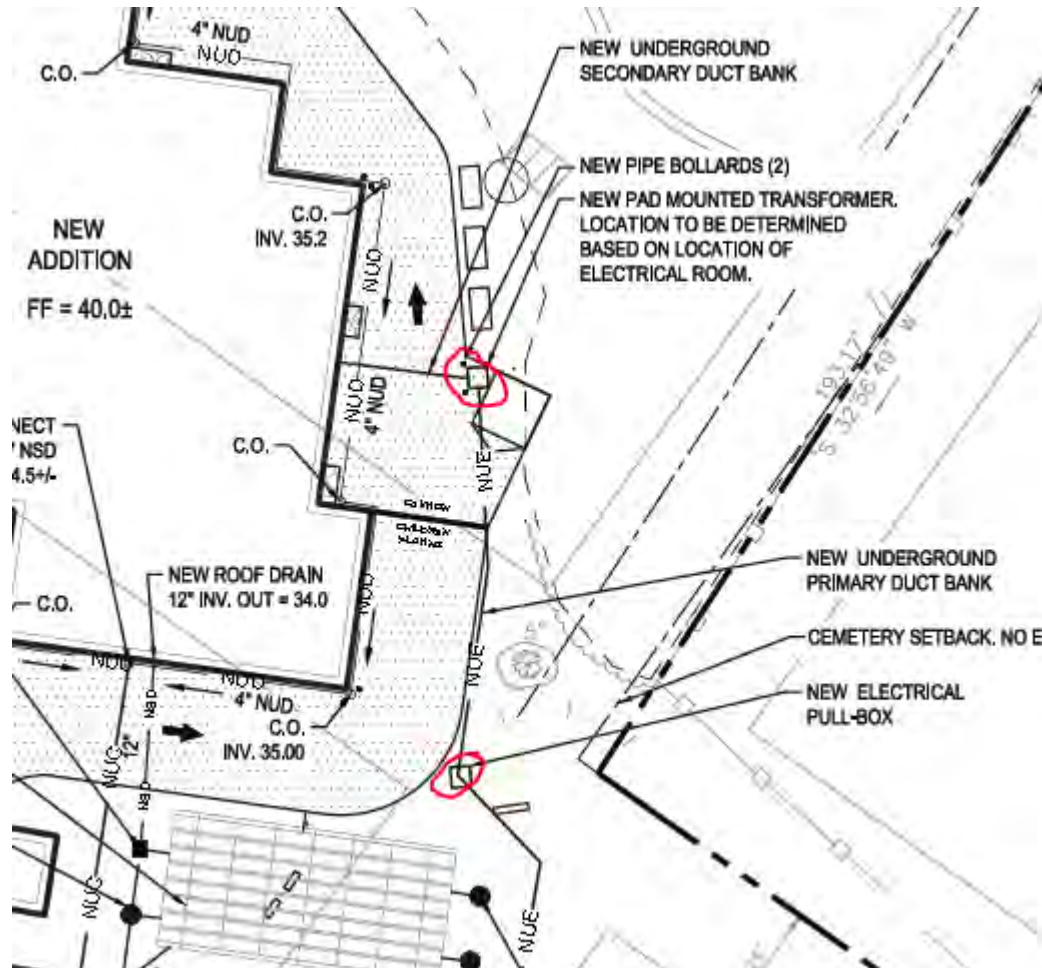
x1 added to south side of frontage



On Mon, Feb 15, 2021 at 6:41 PM Jimmy Dealaman

<jdealaman@portlandmaine.gov> wrote:

Hi Jeff, also, I'm not sure if the location of the electrical transformer now also circled in image below will change, but wondering your thoughts about screening that as well.



On Mon, Feb 15, 2021 at 3:34 PM Jimmy Dealaman

<jdealaman@portlandmaine.gov> wrote:

Hi Jeff,

I'm hoping to also touch early this week about 69 Presumpscot for some comments to include in my report. Again we toured this site back on November 30th. To recap, they're removing 9 trees outside the required setback (not triggering any requirements but are planting 15 trees. So any comments you have about the placement would be appreciated for the board and/or applicant.

Looking back at my notes there was one big question I had about the understory planting requirement which requires the project to have 41

shrubs. Unfortunately the planting plan doesn't really show an actual # of shrubs and instead more of an area (is this OK)?

Do you think the proposed combination of deciduous, evergreen, groundcovers (if we can count those) on site can be counted to fully satisfy this requirement of 41 shrubs? Or what is shown combined with the existing vegetation on the site perhaps? I will reach out to the applicant to get an updated planting plan. But in the meantime is an attached original planting plan. This should still be what's intended for the front anyways - a majority of plantings. The dumpster will change locations and be fenced in for screening as you will see on the updated site plan.

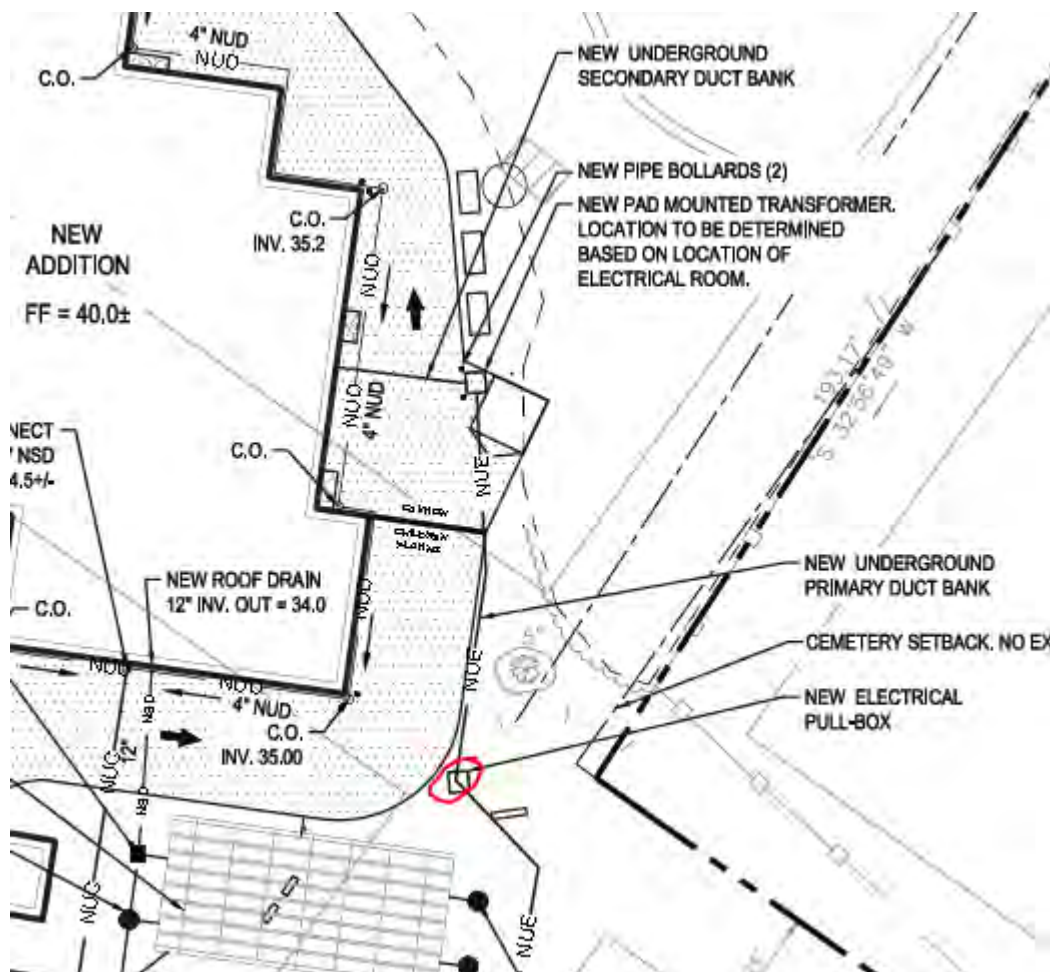


Also, they appear to be planting 15 trees (see screenshot below) what are your thoughts on these?

PLANT LEGEND

SHADE TREES		SIZE	NOTES	QTY
	Existing Tree to Remain Preserve and Protect in Place			Verify in Field
	Acer rubrum 'Redpointe' Red Maple variety	2.0" - 2.5" Cal.	Zone: 3 CPRTL	1
	Acer x freemanii 'Armstrong' Freeman Maple (Fastigate)	2.0" - 2.5" Cal.	Zone: 3	2
	Carpinus caroliniana American Hornbeam	2.0" - 2.5" Cal.	Zone: 3a CPRTL	2
	Ginkgo biloba 'Princeton Sentry' Maidenhair Tree (Male only)	2.0" - 2.5" Cal.	Zone: 3 CPRTL	--
ORNAMENTAL TREES		SIZE	NOTES	QTY
	Amelanchier arborea Downey Serviceberry	1.5" - 2.0" Cal.	Zone: 4 CPRTL	1
	Malus Snowdrift Snowdrift Crabapple	1.5" - 2.0" Cal.	Zone: 4 CPRTL	1
CONIFER TREES		SIZE	NOTES	QTY
	Picea omorika Serbian Spruce	14' - 16'	Zone: 4 CPRTL	1
	Thuja occidentalis Eastern Arborvitae	8' - 10'	Zone: 2	7

I do plan to have them show what screening they intend for a utility box at the rear of the property which is only shown on the updated Utility plan. Any recommendations on type of planting to screen this?



Thanks for any feedback!

Attachments:

- Planing Plan and Details** (what was originally submitted - will obtain updated version and resend)
- Existing Conditions Plan** (this plan has been updated to show a line of clearing and to coordinate with City Arborist)
- Site Layout Plan** (this plan has been updated)
- Site Utility Plan** (this plan has been updated)

On Thu, Oct 29, 2020 at 11:36 AM Jeff Tarling <jst@portlandmaine.gov> wrote:

Hi James -

The tree removal proposed looks fine, the large triple stem Oak has a defect and we considered removal in the future.

We do have a landscape question in regards to the number of plants and varieties... we typically like to see groves of plant types vs lots of different types. I would like to meet with the project landscape person to go over these details as some of the spec's are not up to current standards and the tree sizes incorrect, for example the Serbian Spruce, shown at 14' to 16' is way too big to move ! There are a lot of perennial plantings as well that typically in school grounds do not fare well, groundcover might be better suited.

Can we review with them?

Thanks

Jeff

This is a start in regards to current landscape details -

<https://www.isa-arbor.com/education/onlineresources/cadplanningspecifications>

Jeff Tarling
City Arborist - City of Portland Maine
Parks, Recreation & Facilities Department
Forestry & Horticulture
212 Canco Road - Suite A
Portland, ME. 04103
(207) 808-5400
jst@portlandmaine.gov

On Wed, Oct 28, 2020 at 1:47 PM James Dealaman
<jdealaman@portlandmaine.gov> wrote:

Hi Jeff,

Trying to get caught up on comments - so many projects!

Could you possibly get eyes on the attached landscape plan this week? It appears they are removing the following trees (highlighted in screenshots below).

16" Unknown

[illegible]

100

https://mail.google.com/mail/u/0?ik=5951378fe7&view=pt&search=all&permmsgid=msg-f%3A1691860670955467427&dsqt=1&simpl=msg-f%3A169... 9/10

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Jimmy Dealaman, Planner
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Jimmy Dealaman <jdealaman@portlandmaine.gov>

69 Presumpscot Street

Lauren Swett <lswett@woodardcurran.com>

Fri, Feb 12, 2021 at 10:22 AM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Hi Jimmy,

My comments for 69 Presumpscot are below. Generally the same comments, but their stormwater system looks OK for the redevelopment standard here.

- The project is required to provide for stormwater management in compliance with the Maine DEP Chapter 500 and Section 5 of the City of Portland's Technical Manual. This project is specifically a redevelopment project, and the impacted area doesn't meet the threshold for a DEP permit, but is required to meet the City's standards. I think there's a bit of confusion on what is required for the redevelopment standard that I'll get into below.
 - Basic Standard – The project is providing for adequate erosion and sedimentation control on their plans.
 - Flooding Standard – The project does result in small increases in stormwater flow at some locations. At Watershed Analysis Points 3, 4, and 5, the increases are less than a tenth of a CFS, and are not to closed drainage systems, and the increase is insignificant. The increase at the Watershed Analysis Point 1 however should be confirmed with Water Resources as this drains to the City's infrastructure in Presumpscot Street.
 - Redevelopment/General Standard – The project does not meet the thresholds for a MaineDEP stormwater project so it is required to provide stormwater treatment in accordance with the City's Redevelopment standard. This requires treatment of 50% of any non-roof redeveloped impervious area proposed as part of the project, with the goal of providing treatment for the areas of the site that have greater pollution. If site layout is such that they can't provide treatment of the newly redeveloped impervious surface, we've also allowed for treatment of existing impervious surface as well. In looking at their proposed system, their non-roof impervious redeveloped area appears totals 10,110 SF.

The treatment system treats 2,110 SF of newly created non-roof impervious surface, and 3,370 SF of existing impervious surface. This would be acceptable to meet the requirement, and in addition the system has also been sized to treat the roof, and other non-impervious areas, also likely helping to meet the Flooding Standard.

- The subsurface sand filter is not shown with an impervious liner. If this type of system is to be used, the applicant should confirm the groundwater and bedrock depth in the area. If there is groundwater or bedrock, an impervious liner should be added to the proposed nonwoven geotextile fabric lining.
- Additional information should be provided on the proposed portables. The area where the portables are proposed is relatively flat, and only minor grading is proposed, however no utilities have been proposed to the buildings. The impact of the portables on the existing condition of the site should be shown, and if they are intended to be temporary, the plan should identify how the site will be restored following removal of the portables.

Let me know if you have any questions.

Thanks,

Lauren

All Woodard & Curran consulting employees are currently working from home. I do not have regular access to mail or other deliveries made to the office. You can still reach me via email or at my direct or cell phone numbers.

Lauren Swett, P.E.*

Technical Manager

Woodard & Curran

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Email: lswett@woodardcurran.com

*Licensed in Maine and Wisconsin

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M.ASCE

Chair, Leader Training Committee

American Society of Civil Engineers

<http://regions.asce.org/leader-training-committee/>



Jimmy Dealaman <jdealaman@portlandmaine.gov>

69 Presumpscot Street - Final Traffic Comments

Tom Errico <thomas.errico@tylin.com>

Thu, May 6, 2021 at 2:24 PM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Cc: Michael Tremblay <mtremblay@portlandmaine.gov>

Hi Jimmy – The following are my final traffic comments based on previously emails.

- The Fire Truck turning template looks fine (it is tight on some building corners) and trucks can avoid the basketball posts. My question, which may have been noted previously, is will all fire trucks accessing the rear of the building arrive from E Street? The template assumes this, and FD should confirm this is acceptable.

Status: The project has revised the basketball posts and fire trucks do enter via E Street. I have no further comment.

- I think a condition of approval that requires upgrading the sidewalk from the bus drop off to the building makes sense.

Status: The plans include upgrades to the sidewalk, and I have no further comment.

- I would suggest that a turning template for truck movements at the side service area be provided, particularly as it relates to the one-way circulation system and avoiding opposite flow movements.

Status: The requested information has been provided and I have no further comment.

- I do think they attempt to address the potential conflict between delivery vehicles circulating around the building and students playing. This activity should be managed.

Status: The applicant provides information on how the play area will be managed and operate. The plans also include safety features including pavement markings, warning signs and a mirror. I find conditions to be reasonable and I have no further comment.

- What are the grades of the sidewalk that fronts the staff parking lot(see image)? Will vehicles potentially encroach on the sidewalk, and if there is potential for encroachment, have wheel stops or some other barrier considered.

Status: The applicant has noted that the sidewalk and parking area are at the same grade and thus encroachment is possible (although they do note that it has not been a problem). To prevent encroachment on this important pedestrian facility, I suggest wheel stops be installed.

- Please provide a turning template for the garbage truck route entering the parking area, which appears to potentially be problematic with staff parking area.

Status: The applicant has provided the requested information and I have no further comment.

Please contact me if you have any questions.

Best regards,

Thomas A. Errico, PE

Senior Associate

Traffic Engineering Director

TYLININTERNATIONAL

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Jimmy Dealaman <jdealaman@portlandmaine.gov>

19151: Presumpscot Elementary School - File Transfer - 19151-Presumpscot-Plan-Bd-Revs

Alex Marshall <amarshall@portlandmaine.gov>

Thu, May 6, 2021 at 3:44 PM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Hey Jimmy,

Thanks for the discussion. Happy to weigh in whenever needed.

Single Hoop next to playground: This should not be moved into the playground space as there is equipment fall zones that could potentially be infringed upon, which would result in non-compliance to playground standards. The second reason would be you do not want a woodchip perimeter barricade, such as what exists there, to be underneath the hoop itself. This would result in injuries as kids can run in for layups or everyone's dream of dunking and land on that obstacle.

The multi-use field: This field gets heavy use and is actually heavily impacted by the modular units being temporarily placed there. The normal spacing allows for a large field used by many age groups whereas the spacing with the modulars in place results in a field that only a select few groups can use which has a greater impact on all our other limited fields around town as we need to find homes for these groups. The grassy area will need to be fully restored once the modulars are removed and there is no desire from the Parks and Recreation side to move the basketball court, an impermeable surface, to the green space.

Alex

[Quoted text hidden]



Jimmy Dealaman <jdealaman@portlandmaine.gov>

19151: Presumpscot Elementary School - File Transfer - 19151-Presumpscot-Plan-Bd-Revs

Lauren Swett <lswett@woodardcurran.com>

Fri, May 7, 2021 at 8:31 AM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Hi Jimmy,

I've reviewed the material provided and have no further comments on what they are providing.

I reviewed the Flooding Standard with Brad Roland, and we are in agreement that the slight increase in flow to the City's infrastructure in Presumpscot Street is minor, and will be acceptable here.

One additional note for your conditions of approval, their stormwater treatment system will require a stormwater maintenance agreement.

If you have any questions, please let me know!

Thanks,

Lauren

[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.



Jimmy Dealaman <jdealaman@portlandmaine.gov>

Sewer Connections -69 Presumpscot St

Benjamin Pearson <bnp@portlandmaine.gov> Thu, May 6, 2021 at 7:42 AM
To: Jimmy Dealaman <jdealaman@portlandmaine.gov>, Bradley Roland
<brad@portlandmaine.gov>

Hi Jimmy,

I have no issues with the proposed sanitary connections. It appears to follow our standards with the use of manholes at the bends and connection to the existing sewer. The Construction Management Template needs to be updated to the 2017 template which includes a different section L for Dewatering:

<https://www.portlandmaine.gov/DocumentCenter/View/18030/General-Construction-Management-Template>

I would also note that a warming kitchen should still have grease control equipment depending on what level of washing is getting done. I can reach out to Harriman to get their fit out plans so it can be addressed in the building permit. I don't think a large external unit will be necessary so it shouldn't change the site plan. Are Wendi/Frank/Lisa my best contacts for the kitchen equipment/fitout like Longfellow?

Thanks,

Ben

[Quoted text hidden]

--

Benjamin Pearson, PE
Compliance Coordinator
Water Resources, Public Works
bnp@portlandmaine.gov
207-874-8843



PROJECT SUMMARY

PRESUMPCOT ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS SITE PLAN LEVEL III REVIEW AND CONDITIONAL USE

August 2020

The single-story Presumpscot Elementary School, at 69 Presumpscot Street in Portland, is proposed to have two building additions, together with major renovations, to enhance the available facilities for the current student population. The purpose of the project is to transform the elementary school into a 21st century center of learning, update the security and fire safety systems, and preserve the 'neighborhood school', ensuring the children stay connected to their local community.

The school, located near the intersection of Presumpscot Street and Sherwood Street, consists of the main building and three detached, portable buildings at the rear of the main building, each housing two classrooms. The portables were installed in 2006, and are connected by a raised wood deck/ramp that doubles as an outdoor classroom. The portables will be relocated on-site for the construction duration, but will be removed from the site after the new additions are completed.

For many years, the school has been operating at an enrollment that requires the portable classroom units to accommodate the student population. In addition to these chronic capacity issues, the building lacks appropriately sized classrooms and Special Education (SpEd) spaces. Many of the rooms support multiple programs. Set-up time, scheduling and disruptions/distractions compromise these educational programs.

Currently there are approximately 275 students and 42 staff. No additional students or staff are anticipated, due to these facility improvements. The major building addition includes a cafeteria and classrooms, of approximately 15,750 sq.ft. ground area, placed behind the existing building. An Administration addition and new security vestibule, of approximately 2,160 sq.ft. ground area, will also be added to the front entry area of the existing building.

Paved drives, parking, and play areas surrounding the existing school will remain, where they are not disturbed by the construction of the new additions. Any paved areas that are disturbed will be fully reconstructed with new gravel base and bituminous pavement. The current 50 parking spaces in four small lots around the building will remain, including 2 ADA-accessible spaces. The fire lane drive around the north and east sides of the building will be relocated around the new Cafeteria/classroom addition.

A new storm drainage collection and treatment system will be installed to capture and treat the rainfall from the large addition to the east side of the school, together with some of the new and existing paved areas. A subsurface chamber sand filter will be installed utilizing 64 plastic stormwater chambers in a crushed stone bed, beneath the outdoor play area south of the building addition. The stormwater will be detained in the chambers and stone bed, and filtered down through the underlying sand filter. Once cleaned, the discharge water will be channeled through a buried storm drain pipe to discharge into the woods behind the grass playfield.



25. HISTORIC RESOURCES

Historic Resources – (14-526 (d) 5)

- The proposed new single-story Cafeteria and Classroom building addition to the Presumpscot Elementary School will be constructed partially within the Historic Landscape “Presumpscot School” zone playfield adjacent to the historic “Grand Trunk Cemetery”, as shown on the attached Historic Landscape Overlay Plan HL-1. There will be no disturbance to the cemetery, which is outside the property line of the Portland Public Schools. Permanent construction within the “Presumpscot School” playfield zone consists of approximately 1,620 sq.ft. of the school building addition and approximately 2,160 sq.ft. of bituminous paved fire lane. Temporary construction within the playfield zone will be relocation of the three modular classroom buildings and their wood stairs and ramps, covering an area of approximately 9,600 sq.ft. These three classroom buildings and their accessories will be fully removed after the new building construction is occupied. The disturbed area will then be returned to a grassed playfield. The remainder of the grassed playfield will continue to be useable for recreation during and after construction.
- A Certificate of Appropriateness is hereby requested.
- A small portion of the Cafeteria and Classroom building addition will be within 100’ of the Historic Landscape of the “Grand Trunk Cemetery”. The cemetery property will not be disturbed by this construction project.
- No archeological resources are known to exist on the Presumpscot Elementary School site.



HARRIMAN

PRESUMPCOT
ELEMENTARY SCHOOL

PORTLAND, MAINE	
Harriman Project No.	19151
Key Plan	Proj North



PLANNING BOARD
SEPTEMBER 16, 2020

Rev Date	Revision Description

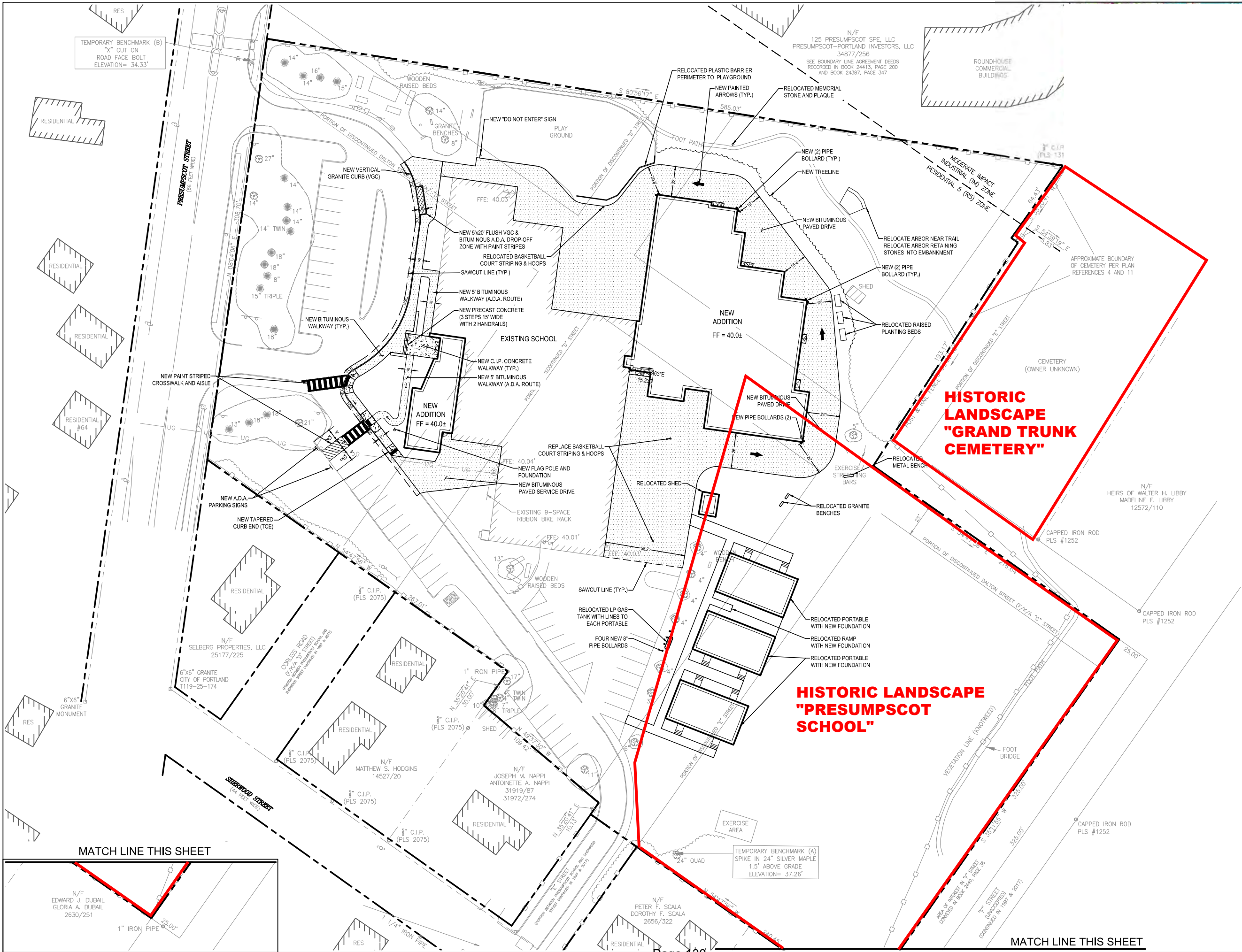
PRELIMINARY
NOT FOR
CONSTRUCTION

Drawing Scales	0 15' 30'
1" = 30'	

PA / PE:	FLC	© 2020
Drawn By:	BAW / HAS	Harriman Associates

HISTORIC
LANDSCAPE
OVERLAY PLAN

HL-1





2a. RIGHT, TITLE, & INTEREST

A deed for the Presumpscot Elementary School property is attached.

Known All Men by These Presents,

That WE, FRANCIS C. LAPPIN and ANNE M. LAPPIN, both of Portland in the County of Cumberland and State of Maine,

Lappin &

to

Portland
City of

War

in consideration of Four Hundred (\$400.00) Dollars

paid by the CITY OF PORTLAND, a body politic and corporate, located in said County and State,

the receipt whereof we do hereby acknowledge, do hereby give, grant, bargain, sell and convey unto the said CITY OF PORTLAND, its successors

and assigns forever, ~~the following described premises~~

a certain lot or parcel of land situated on the easterly side of a proposed street, known as Corliss Road, which proposed street runs in a northeasterly direction from Sherwood Street in the City of Portland and being lot no. 74 as shown on a plan known as "Plan of Land Located in East Deering, Maine, formerly owned by Mary S. Lunt", said plan being recorded in the Cumberland County Registry of Deeds in Plan Book 2, Page 51, also in Plan Book 8, Page 91.

Also all right, title, and interest, if any, of the said Francis C. Lappin and Anne M. Lappin in and to so much of Corliss Road (shown on said plan as "D" Street) as lies adjacent to the above described lot.

Said above described lot being one of the four lots conveyed to Francis C. Lappin and Anne M. Lappin by deed from Effie F. Graffam dated May 5, 1952 and recorded in said Registry of Deeds in Book 2085, Page 113.



\$.55

On have and in hold the aforegranted and bargained premises with all the 213
privileges and appurtenances thereof, to the said CITY OF PORTLAND,

its successors

~~WIFE~~ and assigns, to it and their use and behoof forever.

And we do covenant with the said Grantee ^{its successors} / ~~WIFE~~ and assigns,
that we are lawfully seized in fee of the premises, that they are
free of all incumbrances;

that we have good right to sell and convey the same to the said
Grantee to hold as aforesaid; and that we and our heirs
shall and will Warrant and Defend the same to the said Grantee ,
^{its successors}
~~WIFE~~ and assigns forever, against the lawful claims and demands of
all persons.

In Witness Whereof, we the said Francis C. Lappin and Anne M. Lappin,
being husband and wife,

~~WIFE~~

~~WIFE~~ of the ~~WIFE~~

joining in this deed as Grantors, and
relinquishing and conveying our right by descent and all other
rights in the above described premises, have hereunto set our
hands and seals this nineteenth day of ~~August~~ December
in the year of our Lord one thousand nine hundred and sixty-one.

Signed, Sealed and Delivered
in presence of

John D. Monahan
John D. Monahan

Francis C. Lappin
Anne M. Lappin

State of Maine.

CUMBERLAND

on December 19 19 61.

Personally appeared the above named

Francis C. Lappin and Anne M. Lappin

and acknowledged the foregoing instrument
to be their free act and deed.

Before me,

John D. Monahan

Justice of the Peace

DEC 20 1961

REGISTRY OF DEEDS, CUMBERLAND COUNTY, MAINE

Received at 11 H 10 M A M, and recorded in

BOOK 2650 .PAGE 212

Edward P. Thayer

Register

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2b. EASEMENTS

One existing easement is listed on the enclosed Existing Conditions and Boundary Survey, by Titcomb Associates, dated June 25, 2020. The description is an access easement to the Cemetery parcel to the east abutting the school site, through a discontinued City street (Dalton or 'C' Street). The proposed building

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Portland Water District
FROM SEBAGO LAKE TO CASCO BAY

September 22, 2020

Richard O. Marchessault
HARRIMAN

Re: 69 Presumpscot Street, PO
Ability to Serve with PWD Water

Dear Mr. Marchessault:

The Portland Water District has received your request for an Ability to Serve Determination for the noted site submitted on September 1, 2020. Based on the information provided and per the Approved as Noted plan dated September 22, 2020, 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 6-inch fire service may be installed from the water main in Presumpscot Street. The service should enter through the properties frontage on Presumpscot Street at least 10-feet from any side property lines.
- Our records show that the property is currently served with a 2.25-inch domestic water service with a 2-inch meter. The existing service line and meter at this site may be used to provide domestic water to the building.
- An approved backflow prevention device must be installed on the fire service line before the sprinkler riser prior to service activation. Please refer to the PWD website for more information on cross-connection control policies.
- 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 make an appointment to complete a service application form and pay all necessary fees. The appointment shall be requested through MEANS@pwd.org or by calling 207-774-5961 ext. 3199. Please allow (3) business days to process the service application paperwork. PWD will guide the applicant through the new development process during the appointment.



Existing Site Service

According to District records, the project site does currently have existing water service. A 2.25-inch diameter cast iron 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 8-inch diameter cast iron water main in Presumpscot Street and a public fire hydrant located adjacent to the site. The most recent static pressure reading was 96 psi.

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 City of 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



4. ZONING ASSESSMENT

The Presumpscot Elementary School is in the R5 Zone. Schools are a Conditional Use in the R5 residential zone.

The Zoning Analysis Table is attached.



ZONING ANALYSIS Relevant Zone(s) R5 Residential

All Projects:

	Required	Proposed
Lot Size	30,000 sq.ft.	273,556 sq.ft.
Area Per Dwelling Unit	NA	NA
Minimum Street Frontage	50 ft.	308 ft.
Front Yard Minimum	20 ft.	140 ft.
Front Yard Maximum	NA	NA
Rear Yard	20 ft.	60 ft.
Yard Right	8 ft.	90 ft.
Yard Left	8 ft.	65 ft.
Side Street Setback	NA	NA
Step Back	NA	NA
Maximum Lot Coverage	40%	16%
Minimum Lot Coverage	NA	NA
Maximum Height	35 ft.	24 ft.
Open Space	6,000 sq.ft.	164,000 sq.ft.
Maximum Impervious Area	NA	NA
Pavement Setback	NA	NA
Floor Area Ratio	NA	NA
Off Street Parking Spaces	NA	NA
Loading Bays	NA	NA
Other 1		
Other 2		
Other 3		



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

Date: September 30, 2020

Re: Wastewater Capacity Authorization

Address: 69 Presumpscot Street

Applicant: Portland Public Schools – Frank Crabtree, Harriman Assoc.

Planner: James Dealman

Anticipated Wastewater Flow:

Estimate of Anticipated Design Flows				
Development	Unit Size	Number of Units	Gallons per Day per Unit	Total Gallons per Day
Existing Flows to Remain				
School with Cafeteria	# Employees	42	12 GPD/Employee	504
School with Cafeteria	# Students	275	13 GPD/Student	3575
Proposed Additional Flows				
School with Cafeteria	# Employees	0	12 GPD/Employee	0
School with Cafeteria	# Employees	0	13 GPD/Student	
Net Change				+ 0
*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. It has been identified there will be no additions to the existing flows.

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

Sincerely,

CITY OF PORTLAND

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



6. FINANCIAL CAPABILITY

Portland Public Schools has furnished the attached Statement of Financial Capacity for the Presumpscot Elementary School additions and renovations.



PORTLAND PUBLIC SCHOOLS
prepared & empowered

Portland Public Schools
Executive Director of Budget & Finance 353
Cumberland Avenue
Portland, Maine 04101
September 9, 2020

The City of Portland Planning and Transportation Division
389 Congress Street
Portland, Maine 04101

Statement of Financial Capacity: The City of Portland, Portland Public Schools, and the Presumpscot Elementary School Renovation Project has available the sum of \$13,000, 000 as of this date. We confirm that these funds are entirely free of any liens, debts and/or encumbrances and are available in the form of City of Portland General Obligation Bonds. Should you require verification of the above- mentioned funds, please contact me at your convenience.

Respectfully,

Miranda Fagulo
Portland Public Schools

Executive Director of Budget & Finance



December 11, 2020

James Dealaman, Planner
Planning and Urban Development Department
City Hall, 389 Congress Street, 4th Floor
Portland, Maine 04101

Re: Presumpscot Elementary School Additions
69 Presumpscot Street
Portland, ME
No. 19151
Response to Comments, dated 11-23-20

Dear Jim,

Thank you for providing these comments for review. I am responding to them in their original bulleted order since they are not numbered. I am however, assigning numbers to track them more easily. Please let me know if you have any further questions.

Submittal Requirements:

1. Distances from the new building additions to the front, rear, and both side property lines have been added to drawing C00-1 Site Layout Plan.
2. The intersection of Presumpscot Street and Sherwood Street has been completed on drawing C00-1 Site Layout Plan.
3. Corliss Road and E Street are both shown on drawing C00-1 Site Layout Plan, but I am not sure where 'Shaw Road' is located. The three school driveway entrances have also been noted.
4. Being all flat-roof building wings, both existing and proposed, the snow does not fall off the roof, but slowly melts and flows down the roof drain pipes into the storm sewer. On the rare occasion that it is deemed necessary, the School Department will hire a roofing contractor to carefully shovel or scoop the snow from the roof to the ground in designated areas. Then the hired snow removal contractor will remove the snow from the site, using a bucket-loader and dump trucks.
5. Section 17 discusses Public Safety and Fire Prevention. The School Department has emergency response procedures for every anticipated event. The attached Fire response page appears on the School Department website.
6. The existing fire hydrants located on Presumpscot Street are shown on drawing C00-1 Site Layout Plan.

AUBURN

BOSTON

PORTLAND

PORTSMOUTH



James Dealaman, Planner
December 11, 2020
Page 2 of 4

7. The existing dumpster in front of the existing building will be removed and relocated in a new fenced dumpster enclosure to the rear of the school, near the new kitchen, and be screened by solid fence webbing. The fenced enclosure will be large enough to accommodate a recycling container also.
8. Two outside HVAC or mechanical units were noted to be placed on the existing building roof and the front Administrative addition roof. Two additional small condensing fan units 2.5' tall by 3' wide have been added to the new Cafeteria addition roof.
9. The drawn square at the end of E Street is a short painted crosswalk, as shown in better detail on drawing C00-1 Site Layout Plan.
10. Yes, the Portland Water District had sent the attached Ability to Serve letter in September.

Access and Circulation:

11. Deliveries are currently dropped-off in the front service area. Following completion of the building additions, deliveries will primarily be dropped-off at the kitchen doorway at the rear of the new large building addition. Deliveries are often early in the morning, prior to school opening; however, occasional deliveries may occur at various times of the day.
12. The 9' wide accessible parking space next to the 9' wide cross-hatched loading area makes the spaces "van-accessible".
13. The single school bus travels down Sherwood Street and drops students off on the E-Street sidewalk leading to the school. The bus does not drive onto the school campus.
14. The parent cars enter the southerly drive from Presumpscot Street and turn left in-front of the school to the car drop-off drive or visitor parking lot, then exit onto Presumpscot Street through the northerly driveway. There is only one school bus, which typically does not enter the site, so the queuing is not a significant problem.
15. The Portland Presumpscot School Trail starts at the northern playground and runs through the wooded area to the Cemetery site. A note has been placed on drawing C00-1 Site Layout Plan to coordinate with the Portland Trails representative.

Other:

16. The setback lines have been shown on drawing C00-1 Site Layout Plan.
17. On the rare occasion that it is deemed necessary, the School Department will hire a roofing contractor to carefully shovel or scoop the snow from the roof to the ground in designated areas. Then the hired snow removal contractor will remove the snow from the site, using a bucket-loader and dump trucks.



Landscaping and Landscape Preservation:

18. A site visit with the Harriman landscape architect and civil engineer was conducted on Monday November 30, 2020 by Jeff Tarling, City Arborist and Jim Dealaman, City Planner. Also attending were Steve Stilphen of the School Department; Angela Taylor, School Principal; Dave Morrill, City Maintenance; and Mike Tremblay, Public Works. Many items of landscaping, preservation, and site planning were discussed.
19. A new pad-mounted transformer will be placed behind the new school addition, and will be screened from view by the school building to the west, existing woods to the north and east, and a new enclosed and screened fenced dumpster enclosure to the south. No additional plantings are needed near the transformer.
20. A Neighborhood Meeting was held for the Level III Site Plan Review on October 21, 2020 at 8:00 pm. None of the neighbors requested any additional plantings.
21. The tree-clearing limits are shown as no more than necessary for the required paved fire lane and embankment grading slopes.
22. Trees to be removed that are 10" diameter or larger have been added to drawing C10-1 Existing Conditions Plan.
23. The additional Conditional Use standards of 14-118 have been added to the attached Revised Conditional Use Standards exhibit #24.
24. A list of existing and proposed parking spaces has been added to the drawing C00-1 Site Layout Plan, along with notations for staff parking areas.

Related to General Conditional Use Standards (Section 14-474):

25. The paved fire lane serves multiple functions for the elementary school. The doors along the paved perimeter of the new addition may be used for exit and entry to the playgrounds. School staff monitors the movement of students in and out of all doors of the building.
26. The fire lane will be open for access for delivery vehicles and will not be gated. Signs and paint striping will be provided to caution drivers about the potential of children playing in the area.
27. The Portland Presumpscot School Trail starts at the northern playground and runs through the wooded area to the Cemetery site. This is part of the Portland Trails system.
28. The two larger rooftop HVAC/mechanical units are approximately 4.5' tall and 6' tall and set back away from the roof edge. There is no plan to provide added screening of these two individual units.
29. The first school employee arrives on weekdays at 6:30 am and the last employee closes the building at 10:00 pm.



James Dealaman, Planner
December 11, 2020
Page 4 of 4

CPTED / Lighting:

30. There are currently two street lights/spotlights in Presumpscot Street that light the front school parking lot. Building-mounted lights help light this lot as well as other parking areas around the building. The school principal has stated that the existing parking is sufficiently lit. The last employee leaves the building at 10:00 pm.
31. No additional site lighting poles are proposed. The proposed building-mounted exterior light fixture catalogue sheets were included in Section 20 Exterior Lighting of the initial submission.

Public Safety:

32. During design of the first of the four renovated schools, Lyseth Elementary School in 2018, the City Fire Chief furnished the required fire truck size/configuration for turning movement studies. A copy of that e-mail and truck dimensional sheet is attached.

We trust these noted revisions and revised documents address all the concerns. Let us know if you need any further documentation.

Thank you very much.

Sincerely,
Harriman

Frank L. Crabtree, P.E., LEED AP BD+C
Associate
fcrabtree@harriman.com

Enclosures: Revised Drawings and Reference Documents



7. TECHNICAL CAPABILITY

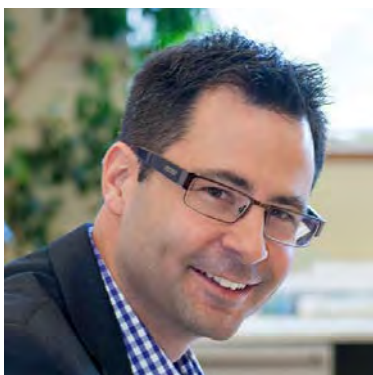
Portland Public Schools are managed by experienced staff who currently care for the physical and financial needs of the Presumpscot Elementary School, together with many other schools throughout the City of Portland.

Portland Public Schools engaged Harriman Architects and Engineers of Portland and Auburn, Maine, to design the building and site improvements to the Presumpscot Elementary School. Harriman is a full-service architectural/engineering firm with a 140- year history of successful consulting services. All architectural and engineering is being provided by Harriman employees.

Key personnel of Harriman include:

Mark Lee, AIA – Principle-in-Charge; Lisa Sawin, AIA – Project Manager/Lead Architect; Howard Snyder, ASLA – Landscape Architect; and Frank Crabtree, PE – Civil Engineer.

Key personnel resumes are attached.



EDUCATION

Boston Architectural College
Master of Architecture

Drexel University
Bachelor of Science in Civil Engineering
Bachelor of Science in
Architectural Engineering

REGISTRATIONS

ME, NH, MA, CT, NY
NCARB IDP Certification
EI

ACCREDITATIONS

Leadership in Energy and Environmental
Design Accredited Professional (LEEDAP)

Massachusetts Certified Public Purchasing Official
(MCPPO)

AFFILIATIONS

American Institute of Steel Construction Member
American Society of Civil Engineers, Member
Association of College & University
Housing Officers International, Member
U.S. Green Building Council
Society of College and University Planning

PRESENTATIONS

2010 - EACUBO Annual Meeting
"Attainable Goals: Breaking Down a
Long-Term Master Plan Can Help
Streamline Short-Term Decision Making"

2009 - ERAPPA Annual Conference "Attainable Goals:
Breaking Down a Master Plan"

2009 - Museum L-A Lecture Series, "Lewiston
Transforms: Adaptive Reuse of Architectural
Landmarks,"

2009 - Tri-State ASBO Conference, "How to Promote
and Organize A Successful School Construction
Project,"

2006 - Maine Library Association Annual Conference,
"Fryeburg Academy Library: A Collaborative Story,"

MARK D. LEE, AIA, LEED AP, MCPPO

PRINCIPAL, ARCHITECT

Mark D. Lee has experience in both structural engineering and architectural design, encompassing over 20 years and providing him a truly multidisciplinary perspective on building design.

Over the years, Mark has gained significant educational design experience on a variety of projects for public and private K-12 schools. Projects have included new construction, additions and renovations to existing facilities, as well as master plans and space/programming studies.

Before joining Harriman as an architectural designer, Mark was a structural engineering designer in Philadelphia and New York. In addition to working on projects with the Greater Philadelphia Transportation Authority, he has also worked on projects built in Indonesia and China. Mark has bachelor's degrees in both civil engineering and architectural engineering, as well as a master's degree in architecture.

RELEVANT EXPERIENCE:

Portland Public Schools – Portland, Maine

Lyseth Elementary School Addition and Renovations

Auburn School Department – Auburn, Maine

Planning, Design and Construction for new Edward Little High School

Beatrice Rafferty Elementary School – Perry, Maine

New Elementary School

South Portland School Department – South Portland, Maine

South Portland High School Addition and Renovations | Master Plan |
Secondary School Study

Camden Hills Regional High School – Rockport, Maine

New 800-Student School and 800-Seat Performing Arts Center

Biddeford High School – Biddeford, Maine

Addition and Renovations

Biddeford Middle School – Biddeford, Maine

New 780-Student School and 900-Seat Performing Arts Center

Maine Academy of Natural Science at Good Will-Hinckley – Hinckley, Maine

Moody School Historic Study, Addition and Renovation

Lewiston School Department – Lewiston, Maine

Master Plan | Geiger Elementary School, New 624-Student School | Lewiston
Regional Technical Center, The Green Ladle Culinary Arts Center

Mount Desert Island High School – Mount Desert, Maine

Addition and Renovations

Cheverus High School – Portland, Maine

Gymnasium Addition | Addition and Renovations | Master Plan

St. Dominic Regional High School – Auburn, Maine

New 450-Student School

MARK D. LEE, AIA, LEED AP, MCPPO

PUBLICATIONS

Building Design + Construction: Lighting Technology
"It's Still the Wild West Out There," April 2017

High Profile Focus: Institution & Schools
featuring SCUP North Atlantic Region, "The University
Library is the Hub of Student Collaboration and
Learning," March 2017

School Planning & Management "Acoustical
Considerations for 21st-Century K-12 Learning
Environments," June 2017

High Profile: New England Facilities Development
News, "Innovation on Campus: Five Trends in Higher
Education," August 2016

Kennebunk Elementary School – Kennebunk, Maine
New 600-Student School

Bridgton Academy – Bridgton, Maine
New Athletic Center | Master Plan

Fryeburg Academy – Fryeburg, Maine
Leura Hill Eastman Performing Arts Center | Master Plan | Harvey Dow Gibson
Athletic Center | Bion R. Cram Library | Athletic Fields | Hastings Dorm Masters
House

Bath School Department – Bath, Maine
Master Plan and Renovations

Hebron Academy – Hebron, Maine
Master Plan

Sacopee Valley High School – Hiram, Maine
ADA Upgrades

Buxton Elementary – Buxton, Maine
New 850-Student School

Westbrook Middle School – Westbrook, Maine
New 600-Student School

Nashua School District – Nashua, New Hampshire
Broad Street Elementary School Renovation | Sunset Heights Elementary
School Renovation | Mount Pleasant School Study | Elm Street School Study

Dover School District – Dover, New Hampshire
Garrison Elementary School Facilities Study | Garrison Elementary School,
Renovations

Hopkinton School District – Contoocook, New Hampshire
Facilities Planning Study

Exeter High School – Exeter, New Hampshire
New 2,000-Student School and 1,000-Seat Performing Arts Center



LISA D. SAWIN, AIA, NCARB, LEED AP BD+C, MCPPO
SENIOR ASSOCIATE, SENIOR ARCHITECT

Lisa Sawin, a licensed architect, brings nearly 15 years of professional experience in architectural design for a variety of K-12 and Higher Educational clients. Prior to joining Harriman, Lisa served as Project Manager and Project Architect providing design, detailing, marketing and project delivery skill-set.

Passionate about developing learning environments that support educators and students alike, Lisa is a hands-on project leader, working directly with school leadership, administration, and facilities personnel to provide meaningful solutions to operational and functional challenges.

EDUCATION

Norwich University
Masters in Architecture

Norwich University
Bachelor of Science in
Architectural Studies

REGISTRATIONS

ME, MA, VT

National Council of Architectural Registration Boards
(NCARB)

ACCREDITATIONS

Leadership in Energy and Environmental Design
Accredited Professional
(LEED AP BD+C)

Massachusetts Certified Public Purchasing Official
(MCPPO)

AFFILIATIONS

American Institute of Architects

U.S. Green Building Council, Maine
Chapter Member

RELEVANT EXPERIENCE:

RSU 21 - Kennebunk, Kennebunkport, and Arundel, Maine

Facilities and Educational Planning for all District Schools

Mildred L. Day Elementary School (RSU 21) - Arundel, Maine

Addition and Renovations

Kennebunk High School (RSU 21) - Kennebunk, Maine

Addition and Renovations

Auburn School Department - Auburn, Maine

Planning, Design and Construction for new Edward Little High School

Portland Public Schools - Portland, Maine

Lyseth Elementary School Addition and Renovations

Westbrook School Department - Westbrook, Maine

Saccarappa Elementary School Additions and Renovations

Sanford School Department - Sanford, Maine

K-8 Restructuring Study | Margaret Chase Smith Elementary School, Addition and Renovations | Converted Elementary School from former Middle School | Converted Middle School from former High School

Scarborough School Department - Scarborough, Maine

Long Range Facility Planning

Town of Wellesley - Wellesley, Massachusetts

Middle School Building Study

Twin Rivers School District* - McClellan, California

25-Year Master Plan of 63 Campuses | Professional Learning Community Center (P.L.C.C.)

Fresno United School District* - Fresno, California

Addicott Modernization | Turner Elementary School Classroom and Administration Building | Hoover High School Addition

Merced Unified School District* - Merced, California

Merced S.T.E.A.M. Center

Madera School District* - Madera, California

Madera Elementary School

**Experience prior to joining Harriman.*



EDUCATION

University of Maine
Bachelor of Science Civil Engineering

REGISTRATIONS

ME, MA, NH, VT, CT, RI

ACCREDITATIONS

Leadership in Energy and Environmental
Design Accredited Professional
(LEED AP BD+C)

Maine Department of Transportation Local Project
Administration (LPA)

AFFILIATIONS

American Society of Civil Engineers

U.S. Green Building Council
Maine Chapter Member

FRANK L. CRABTREE, P.E., LEED AP BD+C

ASSOCIATE, SENIOR CIVIL ENGINEER
USGBC - LEED PROJECT ADMINISTRATOR

Frank L. Crabtree's 40 years of experience includes a wide range of civil, environmental and site engineering for large and small sites for many governmental and educational clients. He has extensive experience in environmental storm water management and in managing the permitting and approval process required by state, federal, and municipal agencies.

Frank also coordinates Harriman's sustainability processing for the office and for our clients. Beginning with the certification of Maine's first LEED Certified university building, Frank has managed the process for many public and private sustainable projects over the past 15 years. He has extensive experience managing the team of designers, owner, and contractor through the various stages of the sustainability planning, designing, constructing, and certifying. Frank's work has been primarily with the US Green Building Council (USGBC) LEED Certification process, which is the benchmark standard in the U.S.

RELEVANT EXPERIENCE:

Portland Public Schools – Portland, Maine

Lyseth Elementary School Addition and Renovations

Auburn School Department – Auburn, Maine

Planning, Design and Construction for new Edward Little High School

Beatrice Rafferty Elementary School – Perry, Maine

New Elementary School

Lewiston Public Schools – Lewiston, Maine

Robert V. Connors, New 900± Student Elementary School, State and City Permitting | McMahon Elementary School, Site Design, Roadway Expansion, Natural-gas Extension, and State/City Permits | Raymond A. Geiger Elementary School, Site Selection, Stormwater, and Permitting | Lewiston High School Regional Technical Center, Site Design, Parking Expansion, Stormwater Treatment, Utilities for Constrained Site, City Permitting

RSU #21 – Kennebunk, Maine

Kennebunk High School Addition | Mildred L. Day Elementary School Addition and Renovation

York School Department – York, Maine

750-Seat Community Auditorium and Main Entry Addition, Site Design, Parking, Town of York Permitting

Noble High School – North Berwick, Maine

New Site Master Plan and Development | 11 Sports Fields | Six Parking Lots | State/Town Permits

Scarborough School Department – Scarborough, Maine

Wentworth Intermediate School, New 800-Student School | Scarborough High School Addition and Renovations

Scarborough Schools and Community Park – Scarborough, Maine

Reconstruction of High School and Town Park, New Pond/Fountain | Play Fields | Pedestrian Walks | Stormwater Treatment | State/Town Permits

FRANK L. CRABTREE, P.E., LEED AP BD+C

PRESENTATIONS

2013 – U.S. Green Building Council Maine Chapter,
"Rainwater Management: Rooftop to Pavement"

2010 – American Society of Professional Estimators,
"LEED Changes"

2009 – U.S. Green Building Council Maine Chapter,
"Site Design for LEED and DEP Standards"

2008 – Society for College and University Planning,
North Atlantic Region Symposium, Sustainability as
an Economic Driver: "Pathways to Success, "Pathways
to Green"

2007 – Northern New England Chapter of the
American Planning Association "LEED Certified
Construction"

Buxton Center Elementary School – Buxton, Maine
New 850-Student School

Cheverus High School – Portland, Maine
New Urban Sports Field and Tennis Court Complex | Parking Lots | Permitting

South Portland School Department – South Portland, Maine
Site Renovation | Relocate Sports Fields and Tennis Courts | New Parking Lots

St. Dominic Academy – Auburn, Maine
New 450-Student School

Westbrook Middle School – Westbrook, Maine
New 600-Student School, Traffic and Pedestrian Circulation | New Planning
and Site Development | Three Sports Fields | Stormwater Management | State/
Town Permits

Durham Community School – Durham, Maine
New 505-Student School

Biddeford High School - Biddeford, Maine
Addition and Renovations

Biddeford Middle School – Biddeford, Maine
New 780-Student School and 900-Seat Performing Arts Center

Bridgton Academy – Bridgton, Maine
Master Plan New Sports Fields | Fundraising Images

Fryeburg Academy – Fryeburg, Maine
New Sports Field Facility, Sports Fields | Leura Hill Eastman Performing Arts
Center | Site Parking/Utilities | Stormwater Treatment | State/Town Permits

Pemetic Elementary School – Southwest Harbor, Maine
Addition and Renovations

Broad Street School – Nashua, New Hampshire
Reconstructed Drives, Parking, Storm Drainage, Playground, and City/State
Permits

Idlehurst Elementary School – Somersworth, New Hampshire
New 530-Student School - NECHPS Sustainability Certification Management



HOWARD A. SNYDER, ASLA, CLARB

LANDSCAPE ARCHITECT

Howard Snyder, ASLA, CLARB is a landscape architect and planner with nearly twenty years of experience. He has worked on a range of project types considering civic, institutional, landscape planning, residential, resort, urban and public space developments in the United States and abroad. His work allows for an ability to synthesize a project's design process from the appropriate perspective and an ability to work with a staff of professionals from a variety of disciplines to provide outstanding design and service to clients. Prior to rejoining Harriman in early 2016, Howard served as Town Planner of Georgetown, Massachusetts.

EDUCATION

Master of Urban Planning and Public Policy
New York University, Robert F. Wagner Graduate School
of Public Service

Bachelor of Landscape Architecture
State University of New York, College of Environmental
Science & Forestry

REGISTRATIONS

MA, ME, CT

AFFILIATIONS

American Society of Landscape Architects

Boston Society of Landscape Architects

American Planning Association

RELEVANT EXPERIENCE:

Jewish Community Alliance – Portland, Maine

Landscape Architecture for a Community Center

City of Augusta – Augusta, Maine

Site Layout and Landscape Design for Adaptive Reuse of Mill Park Brick Building

Town of Kennebunk – Kennebunk, Maine

Streetscape Master Plan in the Lower Village District

University of Maine System – Maine

Campus Master Planning for Seven Campuses

University of New England – Biddeford, Maine

Campus Master Plan

Maplewood Avenue - Complete Streets – Portsmouth, New Hampshire

Streetscape Design

City of Rochester – Rochester, New Hampshire

Downtown Master Plan and Comprehensive Rezoning

Town of Raymond – Raymond, New Hampshire

Site Layout and Design for Police Facility

Atlantic Wharf – Boston, Massachusetts

Urban Design and Planning for Redevelopment of Atlantic Wharf

Beverly Farms Improvement Society – Beverly, Massachusetts

Facade and Streetscape Improvement Plan

Beverly Farms Improvement Society – Beverly, Massachusetts

Parking Strategy for Beverly Farms Business District

Bridgeport and Port Jefferson Steamship Authority – Bridgeport, Connecticut

Bridgeport Barnum Landing Ferry Terminal Site Design

Canaveral Port Authority – Port Canaveral, Florida

Port Canaveral Land Use and Development Plan

Canaveral Port Authority – Port Canaveral, Florida

On-call Services | Land Planning, Urban Design, and Market Analysis for Port Canaveral

City of Boston – Boston, Massachusetts
Cleveland Circle Streetscape Plan

City of Brockton – Brockton, Massachusetts
Comprehensive Master Plan

City of Haverhill – Haverhill, Massachusetts
Park Concept Design for Riverside Park

City of Newburyport – Newburyport, Massachusetts
Landscape Restoration for Bartlet Mall

City of Norwalk – Norwalk, Connecticut
Wall Street Area Master Plan

Department of Conservation and Recreation – Boston, Massachusetts
Landscape Design for Lederman Memorial

Duxbury Bay Maritime School – Duxbury, Massachusetts
Site Planning for Three Marine Based Facilities

Falmouth Yacht Club – Falmouth, Massachusetts
Renovation, Expansion and Landscape Architecture

Hingham Shipyard – Hingham, Massachusetts
Landscape Design and Signage Programming

Lawrence Mills – Lowell, Massachusetts
Urban Design, Site Design, and Landscape Architecture for Redevelopment

Malden Mills – Lawrence, Massachusetts
Schematic Designs for Reuse and Redevelopment Options

Steamship Authority – Oak Bluffs and Woods Hole, Massachusetts
Site Layout and Design for Ferry Terminals

Town of Burlington – Burlington, Massachusetts
Comprehensive Master Plan

Town of Nahant – Nahant, Massachusetts
Nahant Gateway Park and War Memorial

Town of Randolph – Randolph, Massachusetts
Comprehensive Master Plan

Town of Shutesbury – Shutesbury, Massachusetts
Community Visioning

Town of Truro – Truro, Massachusetts
Landscape Design for Civic Center and Residential Development

Village at Bailey's Pond – Amesbury, Massachusetts
Permitting and Landscape Design for Residential Development

Village of Newtonville – Newton, Massachusetts
Streetscape Design



March 4, 2021

James Dealaman, Planner
Planning and Urban Development Department
City Hall, 389 Congress Street, 4th Floor
Portland, Maine 04101

Re: Presumpscot Elementary School Additions
69 Presumpscot Street
Portland, ME
No. 19151
Response to Comments, dated 03-04-21

Dear Jim,

Thank you for providing this summary of the comments for review. I am responding to them in their original order since they are not numbered. I am however, assigning numbers to track them more easily. Please let me know if you have any further questions.

1. Site Lighting:

We would like to request a Waiver to Section 12.6 of the Technical Manual for the site lighting plan with photometric lighting levels. No new site lighting poles are proposed for this building addition project. The existing and new school doorways will be lit with wall-mounted lights or canopy-mounted lights for security. There are currently two streetlights/spotlights in Presumpscot Street that light the front school parking lot. Building-mounted lights help light this lot as well as other parking areas around the building. The school principal has stated that the existing parking is sufficiently lit. Any lighting level photometric plan could not include these existing lights, since their light level characteristics are not known. This would produce a plan that appeared to have much less light than actually exists. We therefore, believe the Waiver is justified.

Attached as Section 20 in the application binder are light fixture catalogue sheets for the selected building-mounted exterior light fixtures.

2. Neighborhood Meeting Information:

The Presumpscot Elementary School's neighborhood meeting was held on October 21, 2020, by a virtual Zoom meeting. The advertisement flyer for the meeting is attached. All three Portland Public Schools' neighborhood meetings were held on the same evening, with Presumpscot starting at 8:00 pm. Twenty-six people were in attendance at the Presumpscot meeting.

3. Site Access:

The Sherwood Street bus drop-off location is the intended point for student access from

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PORTLAND

PORTSMOUTH



Page 2 of 2

busses, as a permanent condition. During the proposed construction duration, any deteriorated sidewalk pavement will be repaired in order to provide an accessible route from Sherwood Street to the school entry.

Once the new school addition is complete, most deliveries and all trash pickup will occur at the rear of the new addition(east side). The fire lane around the building will be open for access for delivery vehicles and will not be gated. Signs and paint striping will be provided to caution drivers about the potential of children playing in the area. The doors along the paved perimeter of the new addition may be used for exit and entry to the playgrounds. School staff monitors the movement of students in and out of all doors of the building.

The two larger rooftop HVAC/mechanical units near the front of the existing building are approximately 4.5' tall and 6' tall and set back away from the roof edge, as shown on the attached C00-1 Site Layout Plan. There are also two shorter 2.5' tall air-handler units on the roof, shown on the same drawing. There is no plan to provide added screening of these individual units.

We trust these noted revisions and revised documents address all the concerns. Let us know if you need any further documentation.

Thank you very much.

Sincerely,
Harriman

Frank L. Crabtree, P.E., LEED AP BD+C
Associate
fcrabtree@harriman.com

Enclosures: Revised drawing and flyer



8a. TRAFFIC

Transportation Analysis – (14-526 (a)1)

- The proposed Presumpscot Elementary School building additions and minor site renovations will not impact vehicular or pedestrian circulation on the adjacent streets. The site modifications will be occurring near the school building and will not affect the driveways, parking lots, or sidewalks between the school and Presumpscot Street or Sherwood Street.
- Since there is no student or staff population increase anticipated from this building project, there will be no significant change in traffic generation, and no need for a traffic study.

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May 6, 2021

James Dealaman, Planner jdealaman@portlandmaine.gov
Planning and Urban Development Department
City Hall, 389 Congress Street, 4th Floor
Portland, Maine 04101

Re: Presumpscot Elementary School Additions
69 Presumpscot Street
Portland, ME
No. 19151
Response to Comments, dated 04-30-2021

Dear Jim,

Thank you for providing comments for review. I am responding to them in their original order since they are not numbered. I am however, assigning numbers to track them more easily. Please let me know if you have any further questions.

Follow-up Final Comments:

- a. At the site walk on March 26, the Superintendent and school personnel asked that the basketball hoops be kept as far from the building as possible. This was also reiterated in a follow-up discussion about the single basketball hoop on the north side of the building. Therefore, since moving the court to the north would get close to the proposed building addition, the hoops should be kept in the proposed locations.
- b. The parking spaces are flush with the paved sidewalk, which is approximately 6" higher than the paved driveway, separated by a 6" curbing. This configuration is not proposed to change since no encroachment issues have been identified by the school staff.
- c. A typical front-loading garbage truck turning template is attached. There will be no interference with parked cars since the triangular painted island provides a buffer. See attached Trash Truck Turning Plan TT-1.

Stormwater(Lauren Swett dated 2-12-21):

- d. The reviewer noted agreement with the stormwater treatment plan and felt that it met the City standards. An impervious liner will be placed beneath the proposed subsurface sand filter, as requested, and is shown on the updated C60-1 Stormwater Details drawing. Also, notes have been added to the site plans for restoration of the grass playfield area, after the temporary modular buildings have been removed, as shown on the revised C00-1 Site Plan.

Lighting:

- e. The lighting fixtures will be changed to the WDS-D-24L-30-**3K7**-3-UNV-BL. This will be a 3000K fixture meeting the City requirement to be less than 3500K. See the revised C00-4 Photometrics Plan.

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James Dealaman, Planner
May 6, 2021
Page 2 of 2

- f. Each time the Presumpscot School staff has been asked about exterior lighting levels, they have noted that there is no sense of needing additional exterior light fixtures. The school staff feels the existing lighting levels from on-site and off-site light fixtures are adequate for safety, comfort, and convenience. The sidewalk to the Sherwood Street bus drop-off area is utilized only in the daytime, and therefore additional site lighting is not necessary.

Landscaping:

- g. The larger size Serbian Spruce tree has been replaced with a smaller size Serbian Spruce on the revised L40-1 Planting Plan.

Construction Management Plan:

- h. The Construction Management Plan has been re-written on the updated City template, as attached. The Construction Management Drawing will be updated when a contractor is selected and coordinated with the School Department.

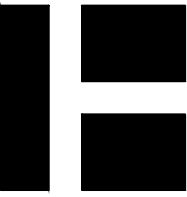
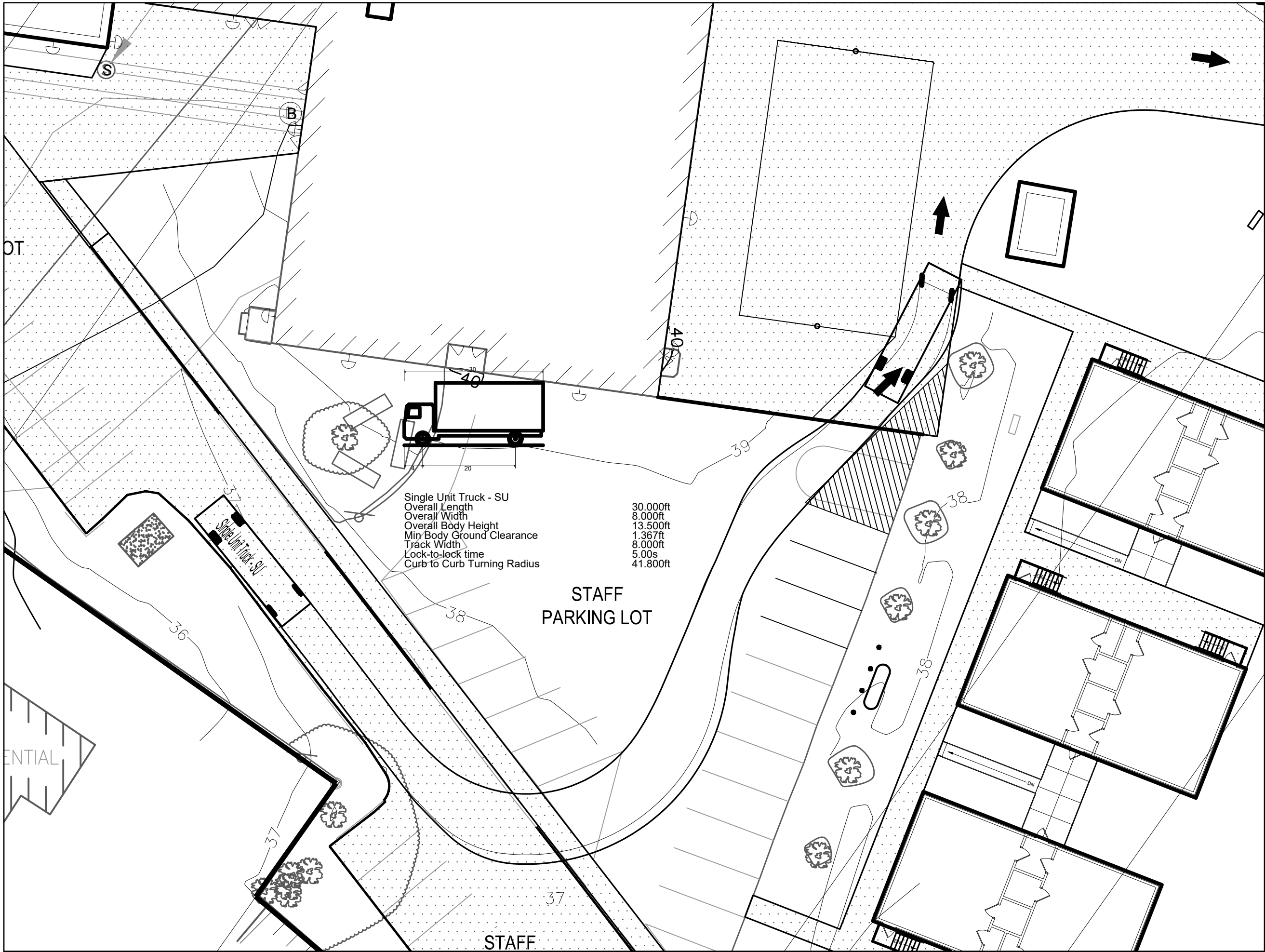
We trust these noted revisions and revised documents address all the concerns. Let us know if you need any further documentation.

Thank you very much.

Sincerely,
Harriman

Frank L. Crabtree, P.E., LEED AP BD+C
Associate
fcrabtree@harriman.com

Enclosures: TT-1 – Trash Truck Turning Plan
Construction Management Plan General Template for
Portland Public Schools
Presumpscot Elementary School Additions and Renovations
April 2021
Revised Drawings



HARRIMAN

PRESUMPCOT
ELEMENTARY SCHOOL

PORTLAND, MAINE

HA Project No. 19151

PLANNING BOARD

MAY 6, 2021

Rev Date	Revision Description

PRELIMINARY
NOT FOR
CONSTRUCTION

PA / PE: FLC Drw By: HAS

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TRASH TRUCK
TURNING PLAN

TT-1

**Construction Management Plan
General Template
for
Portland Public Schools
Presumpscot Elementary School
Additions and Renovations
April 2021**

Applicant: Portland Public Schools
Preparer: Harriman

Construction Management Plans shall depict the overall planning, coordination, and control of a construction site, including phases as applicable, from beginning to completion. The City's goal for a construction management plan is to support a safe construction site and protect the public safety, accessibility (including preserving accessible pedestrian, bicycle, and vehicular modes of transport throughout the city), and welfare during construction. In addition, the construction management plan shall minimize construction impacts in their duration and magnitude to the surrounding area and develop an effective communication process for resolving concerns and conflicts.

The Construction Management Plan will be submitted as part of the Site Plan Review and it shall address the construction logistics for a project. The Construction Management Plan shall include the following submissions:

- 1) a construction management site plan;
- 2) a construction schedule (time frame); and
- 3) a written narrative addressing the categories below.

A. Construction Management Principles

The following narrative provides an overview of the construction management principles that Portland Public Schools has identified to minimize impacts from the construction, such as noise, vibrations, ground movement, truck traffic, and other construction related factors to the surrounding building and communities.

The school is at 69 Presumpscot Street in Portland near the intersection of Sherwood Street. To separate construction traffic from daily school bus and parent traffic, it is intended to have the contractors enter and exit through the Sherwood Street driveway, while the school students and staff enter and exit through the Presumpscot Street driveways. To maintain the full number of existing classrooms through the construction duration, the three temporary modular classroom buildings will be relocated to the grass playfield, away from the new building construction area. These modulares will be removed following completion of the school facilities.

The selected Contractor will provide the City with a plan that indicates site access constraints, and signage/barriers to access at points of entry to the public, prior to construction. A general approach to phases of the work has been included in the attached Construction Management Plan.

A final site access map prepared by the Contractor cannot be provided as part of this

submission, since the project will be bid publicly in order to select the Contractor. The Site Plan Review process must proceed before the Contractor has been selected.

B. Development Review of Construction Management Plan

Portland Public Schools shall submit a construction management plan that provides a comprehensive logistics and safety program for the construction project, which will be reviewed and approved as part of the site plan review process. Minimizing impacts to areas surrounding the building/construction site will be primary considerations in the process.

The Planning Authority and the Department of Public Works have the right to seek revisions to an approved Construction Management Plan or require a condition of approval that states an applicant shall coordinate a project's construction schedule with the timing of nearby construction activity, in order to avoid cumulative impacts on a neighborhood. Such a condition may involve a delay in commencement of construction, if necessary.

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.

C. Performance Guarantees, Inspection Fees, Preconstruction Meeting, and Permits

Prior to scheduling a preconstruction meeting and the issuance of any city required permits, Portland Public Schools shall meet all of the requirements contained in Section 14-530. Development review fees and post approval requirements and 14-532. General requirements and enforcement of Portland's Land Use Code.

Other permits, as applicable, include

1. **Street Opening and Street Occupancy Permits:** Construction activity in the public right-of-way are controlled by Chapter 25 and sewer and stormwater system connections are controlled by Chapters 24 and 32 of the Land Use Code. All required permits shall be obtained through the Department of Public Works and the requests shall conform with the approved construction management plan.
2. **Blasting:** Blasting, if required, shall conform with all measures of Article VIII. Regulation of Explosives in the Land Use Code and Section 3.7 Standards for Blasting and Regulation of Explosives in Portland's Technical Manual.
3. **Building Code:** Employ the best practices, as applicable, of Chapter 33 Safeguards During Construction, from the 2009 International Building Code.

D. Construction Administration and Communication

Portland Public Schools 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 adjacent abutters, businesses, nearby construction sites, and all parties informed, as far in advance as possible, of scheduled work, particularly work anticipated to cause significant noise, vibrations, or dust. The final construction management plan shall provide for the following:

1. Contact Person and contact information for Portland Public Schools and 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.

E. Construction Schedule

1. The contractor shall submit a schedule or time line for the construction project, including any Phasing.
2. Hours of Construction. Construction may occur during the daytime hours as defined in Section 17-18. Construction Activities for Building permit (Attachment 1) and Section 25-129. Noise, dust and debris (Attachment 2).
3. Extended Hours or Night Work: Pursuant to Section 17-18, this section not apply to emergency utility work or “Situations where the public works authority or the office of building inspections determines that the construction activity is of a unique character which cannot reasonably be completed or performed during the permitted hours and which is not of a recurring nature, provided that prior to engaging in such activity the contractor or his representatives gives notice of the time and scope of such proposed activity, the notice to be given in a manner approved by the public works authority.”
4. Material Deliveries: Schedule and designated location for delivery of materials and boxed goods.
5. The Presumpscot Elementary School project anticipates a general schedule as follows:

Summer 2021 –Fall/Winter 2021/2022

- a. Install erosion control measures
- b. Establish contractor and school occupant traffic routes, and install temporary construction fencing and gates
- c. Install drainage east of Presumpscot School through ballfield area
- d. Install electrical primary ductbank through easterly ballfield area
- e. Relocate modular classroom buildings to east side of Presumpscot School
- f. Demolish trees, pavements, etc
- g. Install remaining drainage, sewer, and utilities
- h. Excavate and install building foundations
- i. Install subsurface storm treatment bed/ connect to storm drain
- j. Begin construction of Cafeteria/Classroom Building and Administration/Entry building additions

Spring 2022 – Fall 2022

- a. Maintain erosion control and remove where stabilization is complete
- b. Maintain erosion control and remove sediment as needed
- c. Complete building construction.
- d. Construct finish pavements adjacent to finished building additions and along north and east fire lane
- e. Install landscaping and finished grass areas throughout the school site
- f. Remove temporary construction fence
- g. Remove temporary erosion control measures, remove captured sediments, and clean storm drain system

F. Security & Public Safety

1. The Construction Management Plan will depict all proposed fencing or other barriers and access gates (with knox locking devices) with the intent of separating pedestrian

and vehicle circulation from the construction site.

2. Structures undergoing construction, alteration, or demolition operations, including those in underground locations, shall comply with NFPA 1 Chapter 16. *Safeguarding Construction, Alteration, and Demolition Operations*.
3. Fire Safety Program. An overall construction of demolition fire safety program shall be developed. Essential items to be emphasized include the following:
 - o Good Housekeeping
 - o On-site security
 - o Installation of new fire protection systems as construction progresses
 - o Preservation of existing systems during demolition
 - o Organization and training of an on-site fire brigade
 - o Development of a pre-fire plan with the local fire department
 - o Rapid communication
 - o Consideration of special hazards resulting from previous occupancies
 - o Protection of existing structures and equipment from exposure fires resulting from construction, alteration, and demolition operations
4. Blasting, if required, shall conform with all measures of Article VIII. Regulation of Explosives in the Land Use Code and Section 3.7 Standards for Blasting and Regulation of Explosives in Portland's Technical Manual.
5. Any proposed temporary security lighting shall be shown on CMP and all fixtures shall be full cutoffs.

G. Construction Permitting and Traffic Control Plans

1. Construction Activity in Public Streets: Construction activity in the public right-of-way is controlled by Chapter 25 Article VII of the City Code of Ordinances. Required licenses and permits, restrictions on activity, and fees & area are outlined in that Chapter. Rules and Regulations for Excavation Activity are available through the Street Opening Clerk at the Department of Public Works. At no time can construction activity including delivery vehicles close or block streets or affect public safety access without prior notice and approval of the Department of Public Works.
2. Sewer and Stormwater: Sewer and stormwater water system connections are controlled by Chapters 24 and 32 of the City Code of Ordinance. Required permits for new connections and/or abandonment of existing connections are available through the Street Opening Clerk at the Department of Public Works. Rules and Regulations for these utility systems are available through the City Engineer's office of the Department of Public Works and in Section II of the Technical Manual.
3. Traffic Control Plans: Construction activity that impacts the existing public street system must be controlled to protect the safety of the construction workers and all modes of the traveling public. Projects are required to submit a satisfactory 'maintenance of traffic' (MOT) plan prior to any site plan, subdivision, or street opening permit approval. MOT plans may be required for projects that have impacts on local streets.

Maintenance of Traffic (MOT) plans shall provide for the safe passage of the public through or along the construction work zone. On a case-by-case basis, applicants may be allowed to close a street and/or detour a mode of traffic when absolutely necessary

for safety. MOT plans shall employ the appropriate techniques and devices as called for in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). In addition:

- Construction speed signing may be used as needed to slow traffic
- Traffic Control signs shall not be placed where they are an obstruction to bicycles or pedestrians.
- In some situations, flaggers may be required.
- Police details may be required at lighted intersections and may be requested by the City's transportation engineer or his designee.

All existing modes of travel in work zone area shall be accommodated if impacted by the activity. The safe passage of pedestrians, bicyclists, transit providers, and motorists are of equal importance when planning out the work zone; no pre-existing travel mode may be eliminated without the express approval of the Department of Public Works. The MOT should also address on-street parking impacts, including deliveries and parking for adjoining businesses and property owners, analysis of roadway capacity or diversion capacity if street closure or change to roadway capacity is required, and coordination with other on-going or future construction or utility projects in the vicinity.

- Traffic control of bicycle and pedestrian facilities or routes through work zones shall be maintained until the bicycle and pedestrian facilities or routes are ready for safe operation. Traffic control will not be removed to allow auto travel at the expense of bicycle and pedestrians.
- Barrier systems utilized to separate the construction activity from the public street and /or sidewalk shall not inhibit sight distances, particularly for visibility of pedestrians and bicyclists.
- ADA compliance shall be maintained.

Use of public parking spaces or the blockage of any portion of sidewalk for the purpose of construction activity shall require an occupancy permit and appropriate fee as assessed by the Department of Public Works.

H. Site Management and Controls

The final Construction Management Plan will address maintaining the site in a safe condition and will include the following:

1. Regular trash and debris removal
2. Street cleaning and damage controls
3. Dust controls- The construction shall comply with Portland's requirements under Section 25-129 on Noise, dust and debris (Attachment 2).
4. Noise: The construction shall comply with Portland's requirements under Section 17-18 of the City Code (Attachment 1) and Section 25-129 on Noise, dust and debris (Attachment 2).
5. Rodent Control will be provided, if applicable, by a professional exterminator and consistent with Chapter 22 of the City Code.
6. Snow Removal: Pursuant to Section 25-173 Contractors to ensure a safe means of

travel within the work zone.

- 1) Snow/ice removal or commence automatically from (1" of snow and up) or Ice
- 2) Remove snow as needed within the work zone, including parking spaces & not to block any driveways or sight lines with the piles of snow.
- 3) Clear all walks & ramps with the work zone
- 4) Sand or Salt as needed
- 5) Clear all basin or drainage to help snow melt
- 6) This would include Monday-Friday Sat/Sunday/Holidays

I. Erosion Control and Preservation of Trees

1. The contractor shall install all erosion and sedimentation controls as depicted on the approved erosion and sedimentation control plan prior to the pre-construction meeting for inspection by the City. The contractor shall regularly inspect the control measures, no less than weekly and after significant storm events, and maintain any installed temporary or permanent stormwater management systems in working order. The contractor shall document all inspection activities and corrective actions and be prepared to provide these documents for inspection by the City, Maine Department of Environmental Protection or the U.S. Environmental Protection Agency upon request.
2. The contractor shall maintain all tree and landscaping preservation measures as depicted on the landscaping plan (Exhibit) within the area of construction.
3. The storage of materials shall be identified and avoid being located under/near trees.

J. Construction Staging Area

1. The Construction Management Plan shall depict location of the material staging areas, the location on onsite temporary construction trailers, the location on onsite truck delivery holding areas, the location onsite truck washing stations, masonry mixing stations, the general location of the construction security fence and the general location of temporary construction dumpsters. An open storage areas shall be shown on the plan.
2. Delivery Truck Holding Areas On-Site: The delivery holding area shall be shown on the plan and shall not be blocked during construction. On days when the construction activities require multiple truck deliveries, these deliveries will be carefully scheduled so that there is always adequate on-site area for the holding of the trucks until they can be unloaded. Once at the site all vehicles well be brought within the fence line and will make every attempt to avoid queueing on public streets.
3. Delivery Truck Holding Areas Off-Site: In the event that adequate on-site area for holding of trucks is not available, an off-site marshalling area will be utilized for trucking. The designated off-site location will be identified in the construction management plan.

K. Parking During Construction

1. Construction Parking: Adequate parking for construction workers shall be provided on site or arrangements for off-street parking at an off-site location shall be provided. The parking arrangements shall be included in the construction management plan.
2. Parking: Where existing facilities are remaining in operation during construction, the construction management plan shall identify how the parking for employees and others shall be managed.
3. Truck Routes and Volumes: The Construction Management Plan shall address the

designated truck routes and expected truck volumes.

L. Dewatering Plans

A basic dewatering plan for any construction work is required. The plan must cover construction sites where groundwater is not expected but the impact of rainwater may require dewatering. The plan must include operating procedures, equipment to be used, including filters, erosion and sediment control measures, or other methods of removing sediment from approved discharges.

For construction work that will require frequent dewatering of groundwater from site, a dewatering plan must be prepared and approved by the Department of Public Works. Groundwater and/or soil testing may be required to determine course of action if treatment is necessary. Approval for all discharges to City infrastructure is required.

The proposed plan must address the following:

- Project duration, discharge location, storage equipment on-site, dewatering schematic, and emergency contact.
- General requirements include trained staff on-site for all approved discharges and required site log for documentation of all discharges.
- Storage and/or treatment process should include proper settling time and maintain proper use of filtering medium as required.
- Contingency/maintenance plan for all dewatering equipment devices and filtration mediums.

Any water that is removed from an excavation must be pumped from a perforated device buried in crush stone prior discharge and/or prior to storage and treatment. There will be no discharge allowed during precipitation events.

M. Special Measures as Necessary

For construction work that will take place over a long period (e.g. 12 months or more), involve major demolition/ deep excavation/ piling and/or special construction techniques, or are located near sensitive uses (e.g. medical care facilities, schools), the Construction Management Plan should provide details and demonstrate that all appropriate special measures have been taken to avoid, minimize, or possibly compensate for potential impacts. This may include taking baseline measurements before construction, such as arranging to photograph the foundations of nearby properties upon consent of the owners, in order to assess any future impacts of vibration, noise, etc.



8b. ACCESS AND CIRCULATION

Access and Circulation – (14-526 (a) 2a)

- Currently some of the school building doorways have exterior walks with slopes that cause them to not meet the ADA accessibility guidelines. The pavements around the building will be reconstructed to meet the ADA standards at all of the required egress doorways. The ADA standards will also be met at all of the walkways and curb ramps, and an accessible route will be constructed from the current ADA parking spaces to the new front entry vestibule.
- The site renovations around the Presumpscot Elementary School will maintain all of the current vehicular and pedestrian traffic flows. The bus and parent drop-off loop drives are staying in the same locations. The access/exit drive to Sherwood Street will remain unchanged. Emergency vehicle access around all sides of the building will be maintained by the expanded fire lane drive.
- No 'drive-up' features are incorporated into this elementary school.

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May 6, 2021

James Dealaman, Planner jdealaman@portlandmaine.gov
 Planning and Urban Development Department
 City Hall, 389 Congress Street, 4th Floor
 Portland, Maine 04101

Re: Presumpscot Elementary School Additions
 69 Presumpscot Street
 Portland, ME
 No. 19151
Response to Comments, dated 04-30-2021

Dear Jim,

Thank you for providing comments for review. I am responding to them in their original order since they are not numbered. I am however, assigning numbers to track them more easily. Please let me know if you have any further questions.

Follow-up Final Comments:

- a. At the site walk on March 26, the Superintendent and school personnel asked that the basketball hoops be kept as far from the building as possible. This was also reiterated in a follow-up discussion about the single basketball hoop on the north side of the building. Therefore, since moving the court to the north would get close to the proposed building addition, the hoops should be kept in the proposed locations.
- b. The parking spaces are flush with the paved sidewalk, which is approximately 6" higher than the paved driveway, separated by a 6" curbing. This configuration is not proposed to change since no encroachment issues have been identified by the school staff.
- c. A typical front-loading garbage truck turning template is attached. There will be no interference with parked cars since the triangular painted island provides a buffer. See attached Trash Truck Turning Plan TT-1.

Stormwater(Lauren Swett dated 2-12-21):

- d. The reviewer noted agreement with the stormwater treatment plan and felt that it met the City standards. An impervious liner will be placed beneath the proposed subsurface sand filter, as requested, and is shown on the updated C60-1 Stormwater Details drawing. Also, notes have been added to the site plans for restoration of the grass playfield area, after the temporary modular buildings have been removed, as shown on the revised C00-1 Site Plan.

Lighting:

- e. The lighting fixtures will be changed to the WDS-D-24L-30-**3K7**-3-UNV-BL. This will be a 3000K fixture meeting the City requirement to be less than 3500K. See the revised C00-4 Photometrics Plan.

AUBURN

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James Dealaman, Planner
May 6, 2021
Page 2 of 2

- f. Each time the Presumpscot School staff has been asked about exterior lighting levels, they have noted that there is no sense of needing additional exterior light fixtures. The school staff feels the existing lighting levels from on-site and off-site light fixtures are adequate for safety, comfort, and convenience. The sidewalk to the Sherwood Street bus drop-off area is utilized only in the daytime, and therefore additional site lighting is not necessary.

Landscaping:

- g. The larger size Serbian Spruce tree has been replaced with a smaller size Serbian Spruce on the revised L40-1 Planting Plan.

Construction Management Plan:

- h. The Construction Management Plan has been re-written on the updated City template, as attached. The Construction Management Drawing will be updated when a contractor is selected and coordinated with the School Department.

We trust these noted revisions and revised documents address all the concerns. Let us know if you need any further documentation.

Thank you very much.

Sincerely,
Harriman

Frank L. Crabtree, P.E., LEED AP BD+C
Associate
fcrabtree@harriman.com

Enclosures: TT-1 – Trash Truck Turning Plan
Construction Management Plan General Template for
Portland Public Schools
Presumpscot Elementary School Additions and Renovations
April 2021
Revised Drawings



PORTLAND, MAINE

HA Project No.	19151
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MAY 6, 2021

Rev	Date	Revision Description

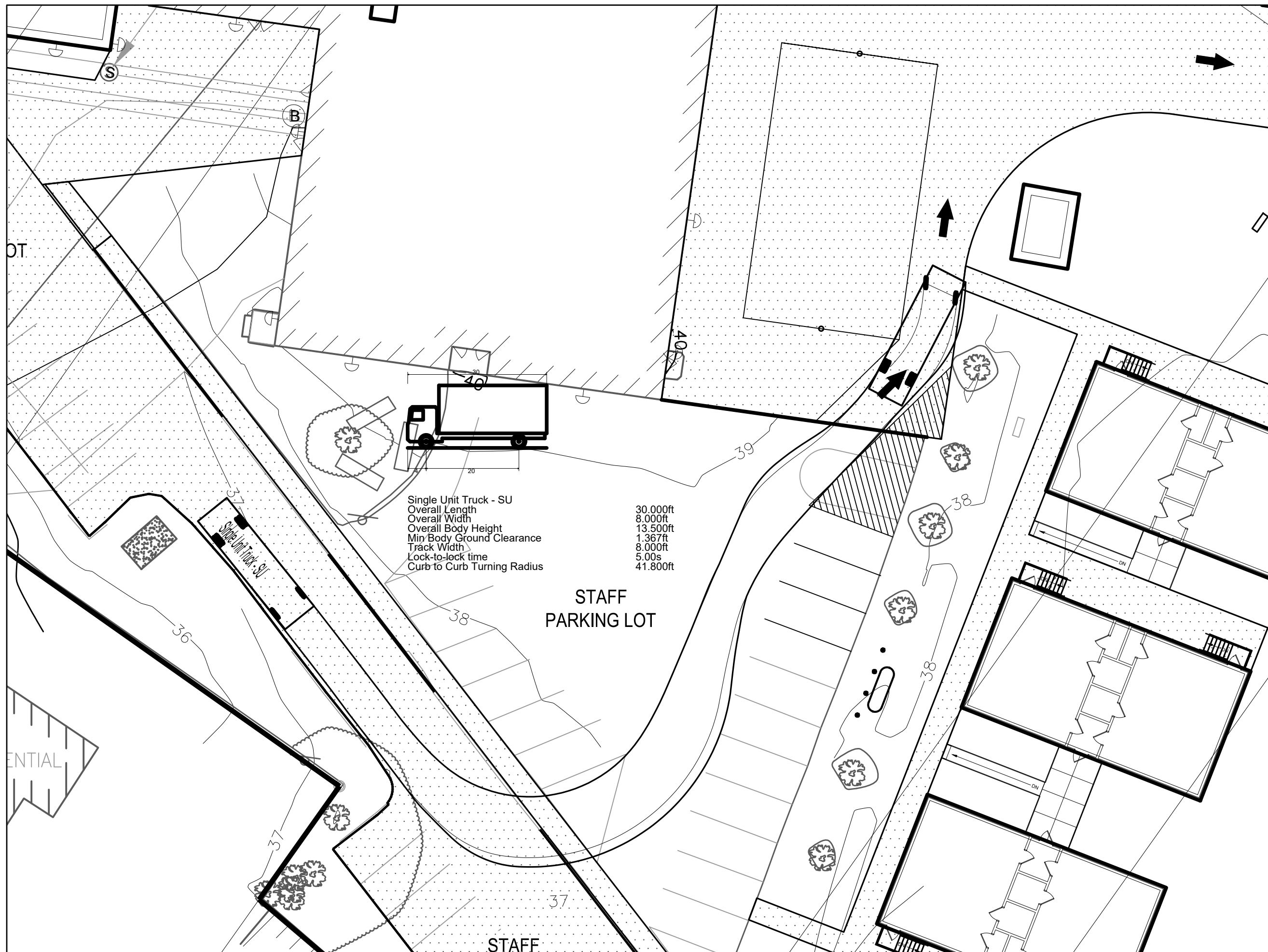
PRELIMINARY
NOT FOR
CONSTRUCTION

PA / PE: FLC Drw By: HAS

© 2021 Harriman Associates

TRASH TRUCK TURNING PLAN

TT-1



**Construction Management Plan
General Template
for
Portland Public Schools
Presumpscot Elementary School
Additions and Renovations
April 2021**

Applicant: Portland Public Schools
Preparer: Harriman

Construction Management Plans shall depict the overall planning, coordination, and control of a construction site, including phases as applicable, from beginning to completion. The City's goal for a construction management plan is to support a safe construction site and protect the public safety, accessibility (including preserving accessible pedestrian, bicycle, and vehicular modes of transport throughout the city), and welfare during construction. In addition, the construction management plan shall minimize construction impacts in their duration and magnitude to the surrounding area and develop an effective communication process for resolving concerns and conflicts.

The Construction Management Plan will be submitted as part of the Site Plan Review and it shall address the construction logistics for a project. The Construction Management Plan shall include the following submissions:

- 1) a construction management site plan;
- 2) a construction schedule (time frame); and
- 3) a written narrative addressing the categories below.

A. Construction Management Principles

The following narrative provides an overview of the construction management principles that Portland Public Schools has identified to minimize impacts from the construction, such as noise, vibrations, ground movement, truck traffic, and other construction related factors to the surrounding building and communities.

The school is at 69 Presumpscot Street in Portland near the intersection of Sherwood Street. To separate construction traffic from daily school bus and parent traffic, it is intended to have the contractors enter and exit through the Sherwood Street driveway, while the school students and staff enter and exit through the Presumpscot Street driveways. To maintain the full number of existing classrooms through the construction duration, the three temporary modular classroom buildings will be relocated to the grass playfield, away from the new building construction area. These modulares will be removed following completion of the school facilities.

The selected Contractor will provide the City with a plan that indicates site access constraints, and signage/barriers to access at points of entry to the public, prior to construction. A general approach to phases of the work has been included in the attached Construction Management Plan.

A final site access map prepared by the Contractor cannot be provided as part of this

submission, since the project will be bid publicly in order to select the Contractor. The Site Plan Review process must proceed before the Contractor has been selected.

B. Development Review of Construction Management Plan

Portland Public Schools shall submit a construction management plan that provides a comprehensive logistics and safety program for the construction project, which will be reviewed and approved as part of the site plan review process. Minimizing impacts to areas surrounding the building/construction site will be primary considerations in the process.

The Planning Authority and the Department of Public Works have the right to seek revisions to an approved Construction Management Plan or require a condition of approval that states an applicant shall coordinate a project's construction schedule with the timing of nearby construction activity, in order to avoid cumulative impacts on a neighborhood. Such a condition may involve a delay in commencement of construction, if necessary.

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.

C. Performance Guarantees, Inspection Fees, Preconstruction Meeting, and Permits

Prior to scheduling a preconstruction meeting and the issuance of any city required permits, Portland Public Schools shall meet all of the requirements contained in Section 14-530. Development review fees and post approval requirements and 14-532. General requirements and enforcement of Portland's Land Use Code.

Other permits, as applicable, include

1. **Street Opening and Street Occupancy Permits:** Construction activity in the public right-of-way are controlled by Chapter 25 and sewer and stormwater system connections are controlled by Chapters 24 and 32 of the Land Use Code. All required permits shall be obtained through the Department of Public Works and the requests shall conform with the approved construction management plan.
2. **Blasting:** Blasting, if required, shall conform with all measures of Article VIII. Regulation of Explosives in the Land Use Code and Section 3.7 Standards for Blasting and Regulation of Explosives in Portland's Technical Manual.
3. **Building Code:** Employ the best practices, as applicable, of Chapter 33 Safeguards During Construction, from the 2009 International Building Code.

D. Construction Administration and Communication

Portland Public Schools 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 adjacent abutters, businesses, nearby construction sites, and all parties informed, as far in advance as possible, of scheduled work, particularly work anticipated to cause significant noise, vibrations, or dust. The final construction management plan shall provide for the following:

1. Contact Person and contact information for Portland Public Schools and 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.

E. Construction Schedule

1. The contractor shall submit a schedule or time line for the construction project, including any Phasing.
2. Hours of Construction. Construction may occur during the daytime hours as defined in Section 17-18. Construction Activities for Building permit (Attachment 1) and Section 25-129. Noise, dust and debris (Attachment 2).
3. Extended Hours or Night Work: Pursuant to Section 17-18, this section not apply to emergency utility work or “Situations where the public works authority or the office of building inspections determines that the construction activity is of a unique character which cannot reasonably be completed or performed during the permitted hours and which is not of a recurring nature, provided that prior to engaging in such activity the contractor or his representatives gives notice of the time and scope of such proposed activity, the notice to be given in a manner approved by the public works authority.”
4. Material Deliveries: Schedule and designated location for delivery of materials and boxed goods.
5. The Presumpscot Elementary School project anticipates a general schedule as follows:

Summer 2021 –Fall/Winter 2021/2022

- a. Install erosion control measures
- b. Establish contractor and school occupant traffic routes, and install temporary construction fencing and gates
- c. Install drainage east of Presumpscot School through ballfield area
- d. Install electrical primary ductbank through easterly ballfield area
- e. Relocate modular classroom buildings to east side of Presumpscot School
- f. Demolish trees, pavements, etc
- g. Install remaining drainage, sewer, and utilities
- h. Excavate and install building foundations
- i. Install subsurface storm treatment bed/ connect to storm drain
- j. Begin construction of Cafeteria/Classroom Building and Administration/Entry building additions

Spring 2022 – Fall 2022

- a. Maintain erosion control and remove where stabilization is complete
- b. Maintain erosion control and remove sediment as needed
- c. Complete building construction.
- d. Construct finish pavements adjacent to finished building additions and along north and east fire lane
- e. Install landscaping and finished grass areas throughout the school site
- f. Remove temporary construction fence
- g. Remove temporary erosion control measures, remove captured sediments, and clean storm drain system

F. Security & Public Safety

1. The Construction Management Plan will depict all proposed fencing or other barriers and access gates (with knox locking devices) with the intent of separating pedestrian

and vehicle circulation from the construction site.

2. Structures undergoing construction, alteration, or demolition operations, including those in underground locations, shall comply with NFPA 1 Chapter 16. *Safeguarding Construction, Alteration, and Demolition Operations*.
3. Fire Safety Program. An overall construction or demolition fire safety program shall be developed. Essential items to be emphasized include the following:
 - o Good Housekeeping
 - o On-site security
 - o Installation of new fire protection systems as construction progresses
 - o Preservation of existing systems during demolition
 - o Organization and training of an on-site fire brigade
 - o Development of a pre-fire plan with the local fire department
 - o Rapid communication
 - o Consideration of special hazards resulting from previous occupancies
 - o Protection of existing structures and equipment from exposure fires resulting from construction, alteration, and demolition operations
4. Blasting, if required, shall conform with all measures of Article VIII. Regulation of Explosives in the Land Use Code and Section 3.7 Standards for Blasting and Regulation of Explosives in Portland's Technical Manual.
5. Any proposed temporary security lighting shall be shown on CMP and all fixtures shall be full cutoffs.

G. Construction Permitting and Traffic Control Plans

1. Construction Activity in Public Streets: Construction activity in the public right-of-way is controlled by Chapter 25 Article VII of the City Code of Ordinances. Required licenses and permits, restrictions on activity, and fees & area are outlined in that Chapter. Rules and Regulations for Excavation Activity are available through the Street Opening Clerk at the Department of Public Works. At no time can construction activity including delivery vehicles close or block streets or affect public safety access without prior notice and approval of the Department of Public Works.
2. Sewer and Stormwater: Sewer and stormwater water system connections are controlled by Chapters 24 and 32 of the City Code of Ordinance. Required permits for new connections and/or abandonment of existing connections are available through the Street Opening Clerk at the Department of Public Works. Rules and Regulations for these utility systems are available through the City Engineer's office of the Department of Public Works and in Section II of the Technical Manual.
3. Traffic Control Plans: Construction activity that impacts the existing public street system must be controlled to protect the safety of the construction workers and all modes of the traveling public. Projects are required to submit a satisfactory 'maintenance of traffic' (MOT) plan prior to any site plan, subdivision, or street opening permit approval. MOT plans may be required for projects that have impacts on local streets.

Maintenance of Traffic (MOT) plans shall provide for the safe passage of the public through or along the construction work zone. On a case-by-case basis, applicants may be allowed to close a street and/or detour a mode of traffic when absolutely necessary

for safety. MOT plans shall employ the appropriate techniques and devices as called for in the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). In addition:

- Construction speed signing may be used as needed to slow traffic
- Traffic Control signs shall not be placed where they are an obstruction to bicycles or pedestrians.
- In some situations, flaggers may be required.
- Police details may be required at lighted intersections and may be requested by the City's transportation engineer or his designee.

All existing modes of travel in work zone area shall be accommodated if impacted by the activity. The safe passage of pedestrians, bicyclists, transit providers, and motorists are of equal importance when planning out the work zone; no pre-existing travel mode may be eliminated without the express approval of the Department of Public Works. The MOT should also address on-street parking impacts, including deliveries and parking for adjoining businesses and property owners, analysis of roadway capacity or diversion capacity if street closure or change to roadway capacity is required, and coordination with other on-going or future construction or utility projects in the vicinity.

- Traffic control of bicycle and pedestrian facilities or routes through work zones shall be maintained until the bicycle and pedestrian facilities or routes are ready for safe operation. Traffic control will not be removed to allow auto travel at the expense of bicycle and pedestrians.
- Barrier systems utilized to separate the construction activity from the public street and /or sidewalk shall not inhibit sight distances, particularly for visibility of pedestrians and bicyclists.
- ADA compliance shall be maintained.

Use of public parking spaces or the blockage of any portion of sidewalk for the purpose of construction activity shall require an occupancy permit and appropriate fee as assessed by the Department of Public Works.

H. Site Management and Controls

The final Construction Management Plan will address maintaining the site in a safe condition and will include the following:

1. Regular trash and debris removal
2. Street cleaning and damage controls
3. Dust controls- The construction shall comply with Portland's requirements under Section 25-129 on Noise, dust and debris (Attachment 2).
4. Noise: The construction shall comply with Portland's requirements under Section 17-18 of the City Code (Attachment 1) and Section 25-129 on Noise, dust and debris (Attachment 2).
5. Rodent Control will be provided, if applicable, by a professional exterminator and consistent with Chapter 22 of the City Code.
6. Snow Removal: Pursuant to Section 25-173 Contractors to ensure a safe means of

travel within the work zone.

- 1) Snow/ice removal or commence automatically from (1" of snow and up) or Ice
- 2) Remove snow as needed within the work zone, including parking spaces & not to block any driveways or sight lines with the piles of snow.
- 3) Clear all walks & ramps with the work zone
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8c. LOADING AND SERVICING

Loading and Servicing – (14-526 (a) 2b)

- No changes are anticipated for the loading and servicing vehicular access to the building. The current layout of driveways near the school will remain virtually unchanged. The driveway to the south of the entry drive will continue to carry all the service vehicles.
- No turning templates for service vehicles are needed since the driveway configurations will not significantly change. A fire truck turning template is enclosed for the reconfigured fire lane around the new building addition to the east.

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9. SIDEWALKS

Sidewalks – (14-526 (a) 2c)

- No sidewalks along public streets will be affected by this school project. Sidewalks near the school building will be reconstructed in virtually the same locations. Walks along the front of the building, connecting the new building entry addition to the bus and parent drop-off areas will be graded at 5% or less to meet ADA accessibility standards.
- Engineered details of the sidewalks and curb ramps, which meet the City Standards in the Technical Manual, are included in the drawings.

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10. PUBLIC TRANSIT

Public Transit – (14-526 (a) 3)

- Greater Portland Metro Bus lines routes 9A and B stop at the Presumpscot Street intersection on Washington Avenue several times a day, for service to the school. The Presumpscot Elementary School is a walk of approximately 1000 feet to the bus stop.
- The current public-school bus access drive will not be changed.

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Att. K

11a. OFF-STREET PARKING

Off-Street Parking – (14-526 (a) 4a and c)

- The parking demand will remain unchanged since no additional staff are anticipated for this school. The number of parking spaces around the school will not change from the existing 50 spaces. Two of those spaces are designated for ADA parking, with the appropriate drop-off aisle between.
- The existing drive and parking layout is being mostly maintained, and no new curb cuts are being developed.

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11b. BICYCLE PARKING

Bicycle Parking – (14-526 (a) 4b)

- The required bicycle parking for non-residential buildings is 2 spaces for every 10 vehicle parking spaces, up to the first 100 vehicle spaces. The Lyseth Elementary School will continue to have 50 parking spaces in four lots around the building. Therefore, 10 bike parking slots would be required [$2 \times (50) / 10 = 10$].
- Two existing nine-bike racks are located near the building, which provide space for up to 18 bicycles. See drawing C00-1. These racks will remain on the site but may be slightly relocated for better use.
- The existing bike racks consist of 'Wave' or 'Ribbon'-style, meeting the City Technical Standards.

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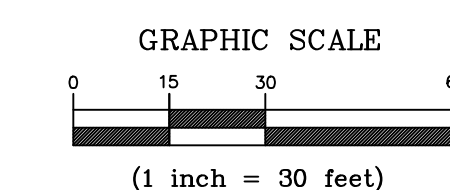
12. SNOW STORAGE

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

- Snow plowing and removal around the Presumpscot Elementary School will continue in the same manner as it has been, with storage located generally as shown on the attached Snow Plan SP-1. When snow is greater than the available storage space, the snow will be loaded into trucks and removed from the site.



PORTLAND, MAINE



AUGUST 31, 2020

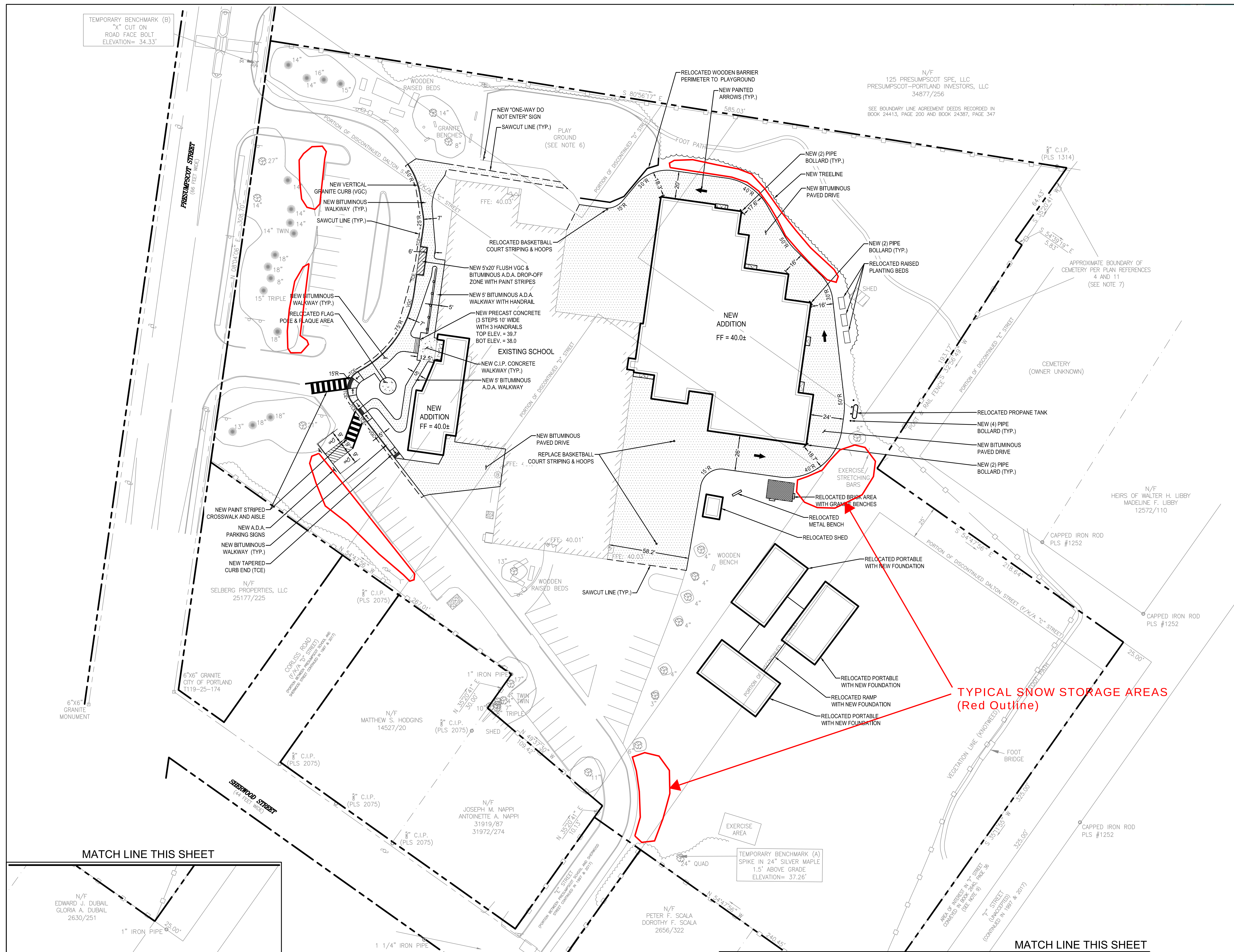
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PRELIMINARY
NOT FOR
CONSTRUCTION

1" = 30'		© 2020 Harriman Associates
PA / PE:	FLC	
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SNOW PLAN

SP-1





13. SIGNIFICANT NATURAL FEATURES

Preservation of Significant Natural Features – (14-526 (b) 1)

- There are no significant natural features in the vicinity of the reconstruction activities on this developed Presumpscot School site. No wetlands are evident in the vicinity of the site.

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14a. LANDSCAPING AND LANDSCAPE PRESERVATION

Landscaping and Landscape Preservation –§14-526 (b) 2a

- Site development consists of expanding the footprint of an existing school. Proposed building addition will occur in an area that is mostly cleared and where temporary modular classrooms are currently situated.
- The new addition and associated paved fire lane will claim this cleared area but necessitate the removal of trees with caliper sizes above the 16" thresholds noted in 14-526-2A-iv(a) and the 10" threshold noted in 14-526-2A-iv(b). These trees are noted on sheet C10-1.
- There are two trees that are required to be removed; one tree has a triple trunk with a combined caliper size of 34" and a second tree has a triple trunk with a combined caliper size of 12".
- Replacement trees are shown on Sheet 40-1 Planting Plan.
- Tree species specified are selected from the *City of Portland Recommended Tree List, 2018*.
- During construction, existing plant material within the area of construction that is not designated for removal will be protected by measures consistent with *City of Portland Technical Manual, Section 4*.

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14b. SITE LANDSCAPE DESIGN

Site Landscaping – §14-526 (b) 2b

- Areas of the site around the renovated school building will be landscaped as shown on the Planting Plan L10.0. This planting plan notes location of proposed plant material and specifies species and sizes. The proposed planting design follows the standards outlined in the *City of Portland Technical Manual, Section 4*.
- Proposed site improvements currently do not consider a new service area.
- Existing dumpsters will be enclosed with privacy screening.

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STORMWATER MANAGEMENT REPORT

STORMWATER MANAGEMENT:

The Presumpscot Elementary School was built in 1962, and due to overcrowding, three temporary classroom modular buildings were added to the site in 2006. The existing single-story school is 25,650 SF. The overall site is 6.28 acres and is located within the R5 Residential Zone.

The proposed single-story 15,750 SF addition to the east side of the school is comprised of classrooms, Cafeteria, workrooms, mechanical/ electrical, toilet rooms and storage. The proposed Administration addition and renovation of 2,160 SF will include a new secure vestibule with administration offices. The additional impervious pavements, extending the fire lane around the new addition, total approximately 10,110 sq.ft. The total additional impervious campus coverage will be 28,020 sq.ft.(0.64-acre). The three modular classroom buildings are considered temporary, and thus have not been included in either the Pre-development or Post-development calculations.

Since the added impervious area is less than one acre, the project does not require either a DEP Site Location or Stormwater Permit application. However, because the additions classify as a City Level III Site Plan review, the DEP Chapter 500 stormwater standards must be met.

Setting on a localized high point, the Presumpscot Elementary School shed runoff in all directions off the site. Each sub-watershed area is designated as a Subcatchment, and each point of exit of the stormwater from the site is designated as a Watershed Analysis Point. The existing school building and the westerly portion of the site sheds stormwater westerly to Presumpscot Street, where it is intercepted by the City storm drainage catch basins and piping(designated as Watershed Analysis Point WAP-1. Runoff from the north side of the school and playgrounds crosses the north property line, shown on the drainage plans as Watershed Analysis Point WAP-2. Runoff from the wooded northeast corner of the site crosses the property line to a small cemetery, as WAP 3. The southerly portion of the playground, together with the large grass playfield behind the school sheds stormwater across the field to the east property line, designated as WAP-4. Parking and access drives to the south of the school shed stormwater to the southwest property line, designated as WAP-5.

The site will drain in the same directions in the Post-development condition, as in the Pre-

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development. Existing drainage channels will not be changed.

City Regulatory Standards

Stormwater will be designed to meet the Maine Department of Environmental Protection(MDEP) Chapter 500 rules. Basic Standards, General Standards, and Flooding Standards will be met. Basic standards include erosion and sedimentation control, inspection and maintenance, and general housekeeping. These are detailed on drawings C00.3 Site Erosion Control Notes, C30.1 Site Grading and Erosion Control Plan, and C50.1 Site Details. The attached written Site Maintenance Plan describes maintenance and housekeeping procedures for the school site. General Standards require that new impervious and developed areas are treated for both stormwater quality and quantity.

Soils mapping was obtained from the Medium Intensity Soil Survey for Cumberland County as shown on the attached Natural Resources Conservation Service soil mapping. As indicted on the attached soils map the primary hydrological soils group(HSG) covering the site are Lyman-Tunbridge complex(HSG-C), Lamoine silt loam(HSG-C), or Suffield silt loam(HSG-C). Therefore, the site around the Presumpscot School in the Hydrocad model uses HSG-C.

Stormwater Quantity (Flooding Standard)

The overall impact of this development on the adjacent properties will be negligible and undetectable. The Drainage Summary table below shows that the tabulated Post-Development peak flow rates at the property line analysis points are unchanged, with only minor increases or decreases. The slight increase in WAP-1 at the City street infrastructure is less than 0.2 cfs, which is negligible and well within margins of error of the modeling methods and assumptions. The method responsible for controlling the flow rate to WAP-4, which includes runoff from the larger building addition, is the use of a new subsurface underdrained chamber sand filter(Pond 2). The filter is located to treat the new building roof and some associated walks (Subcatchments 7 and 8). The treated stormwater is then piped under the large playfield to discharge in the wooded swale to the southeast.

The Pre-development and Post-development runoff calculations were modeled by the Hydrocad computer program (version 10.0), which uses the Natural Resource Conservation Service TR-55 and TR-20 methods. The 24-hour rainfall for Cumberland County is 5.8" for 25-year, 4.6" for 10-year, and 3.1" for 2-year. Runoff for the 24-hour Type 3 storm was modeled for 25-year, 10-year, and 2-year frequencies for both Pre-development and Post-development conditions, and compared in the following summary.

Drainage Summary			
Watershed Analysis Point	Pre-Development	Post-Development	Peak Flow Change
'WAP1' City Storm System at Presumpscot Street (P1)	25 Year = 5.20 cfs 10 Year = 3.99 2 Year = 2.46	25 Year = 5.35 cfs 10 Year = 4.17 2 Year = 2.63	+ 0.15 cfs + 0.18 + 0.17
'WAP2' North Property Line(R2)	25 Year = 3.82 cfs 10 Year = 2.67 2 Year = 1.32	25 Year = 3.27 cfs 10 Year = 2.30 2 Year = 1.16	- 0.55 cfs - 0.37 - 0.16
'WAP3' East Property Line at Cemetery(R3)	25 Year = 1.36 cfs 10 Year = 0.89 2 Year = 0.37	25 Year = 1.32 cfs 10 Year = 0.88 2 Year = 0.40	- 0.04 cfs - 0.01 + 0.03
'WAP4' East Property Line at Ballfield(R4)	25 Year = 6.30 cfs 10 Year = 4.32 2 Year = 2.03	25 Year = 6.37 cfs 10 Year = 4.09 2 Year = 1.74	+ 0.07 cfs - 0.23 - 0.29
'WAP5' South Property Line (R1)	25 Year = 4.45 cfs 10 Year = 3.35 2 Year = 1.98	25 Year = 4.42 cfs 10 Year = 3.35 2 Year = 2.00	- 0.03 cfs - 0.00 + 0.02

In summary, the redevelopment project will have no significant effect on storm water quantity at downstream properties or drainage areas.

Stormwater Quality (General Standards)

Since this school renovation and construction is a 'redevelopment' project, the DEP Chapter 500 standards require a comparison of both the Pre-development surfaces and the Post-development surfaces. The attached Redevelopment Treatment Calculations sheet itemizes the total surface areas on the site, and calculates an impact rating based on DEP-assigned pollutant

rankings. These Pre and Post weighed averages are then compared to determine the percentage of water quality treatment required for this property. The tabulation concludes that 60% of the proposed developed site area must receive treatment. The attached Stormwater Quality Summary Worksheet tabulates the treatment of the various new developed surfaces in the subcatchment areas. The notes below the table explain that the treatment ratio of the new impervious roof and paved areas is 63.7% of the new impervious areas, which meets the calculated 60% requirement of the Chapter 500 redevelopment standards. Combining the treatment of both new and existing impervious and vegetated 'developed' areas yields a treatment ratio of 65.9%, which also exceeds the 60% requirements of the Standards.

The storm water quality will be controlled primarily by the underdrained subsurface sand filter(Pond 2). The proposed treatment will reduce the pollutants draining off the site to meet the DEP requirements. The new subsurface sand filter will capture runoff from the roof, pavement, and grass in the two subcatchment areas, store the first-flush in the chamber and stone system, and overflow the excess inflow to the outfall. The system is designed with 'StormTech' SC-310 plastic chambers bedded in crushed stone, with an 18" sand filter and underdrain pipes beneath. The filtered water captured in the underdrain pipes is considered cleaned of pollutants, and will be directed to the wooded swale outfall. The attached Stormwater Quality Treatment Sizing worksheets include these calculations. Details, designs, and specifications for the filter beds are provided in the attached application package.

REDEVELOPMENT TREATMENT CALCULATIONS
Presumpscot Elementary School
Portland, ME

26-Aug-20

Parcel Area - 6.28 Acres
Area of Evaluation = 4.993 Acres
Project 19151

Pre-Development

Surface type	Pollutant Ranking	Area (Acres)	Impact rating
Med. Used Parking, other roads	4	0.81	3.24
Other Parking	3		3
Walkways Pedestrian Tennis Courts, Track	2	0.618	1.236
Roofs	2	0.594	1.188
Grass	2	2.82	5.64
Treatment Areas	1		1
Woods/Forest	0	0.151	0
Totals		4.993	15.304
Weighted Average			3.066

Post Development

Surface Type	Pollutant Ranking	Area (Acres)	Impact rating
Med. Used Parking, Other Roads	4	0.819	3.276
Other Parking	3		3
Walkways Pedestrian Tennis Courts, Track	2	0.685	1.37
Roofs	2	1.003	2.006
Grass	2	2.486	4.972
Treatment Areas	1		1
Woods/ Forest	0		0
Total		4.993	15.624
Weighted Average			3.134
		Rating Difference= Proposed-Existing	0.068 < 1

From Table 3 of Chapter 500 - Required Treatment is 60%.

STORMWATER QUALITY SUMMARY - DEP CHAPTER 500

Project: Presumpscot Elementary School
Portland, ME

Date 8/26/2020

Project No. 19151

Watershed Subcatchments - Quality Treatment:

Subcatch	New Impervious Area		New Lawn on Exg. Woods or meadow	New Impervious Area Treated	New Vegetated Area Treated	Exg. Impervious Area Treated	Exg. Vegetated Area Treated	Treated by:
	New Building	New Pavement						
	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.	
1		900						
2	2,160							
3		4,360	3,970					
4		2,880	1,430					
5		410						
6		350						
7	15,750			15,750				Subsurface Sand Filter
8		2,110		2,110		3,370	800	Subsurface Sand Filter
Totals =	17,910	10,110	5,400	17,860	0	3,370	800	
				Treated	Treated	Treated	Treated	

NOTES

- Total New Impervious area requiring treatment is $17,910 + 10,110 = 28,020$ sq. ft.
The amount of New Impervious area receiving treatment is 17,860 sq.ft.
Percent of the total **New Impervious** area being treated is $17860/28020 = 63.7 \%$
- Total New Developed area requiring treatment is $17,910 + 10,110 + 5,400 = 33,420$ sq. ft.
Total New Developed area being treated is 17,860 sq. ft.
Percent of the total **New Developed** area being treated is $17,860/33,420 = 53.4 \%$
- Considering the added treatment of existing vegetated and impervious areas:
Total New Developed area requiring treatment is $17,910 + 10,110 + 5,400 = 33,420$ sq. ft.
Total New and Existing Developed area being treated is $17,860 + 3,370 + 800 = 22,030$ sq. ft.
Percent of the total **New Developed** area being treated is $22,030/33,420 = 65.9 \%$
- Conclusion: Percentage of treatment required under DEP Chapter 500 Section 4(C)(2)(d) is **60%**. (see attached redevelopment calculations)
Since the proposed treatment exceeds the required redevelopment treatment level, the project is in compliance with Chapter 500.

STORMWATER QUALITY - TREATMENT SIZING

Project: Presumpscot Elementary School
Portland, Maine
Project No. 19101

Date 8/26/2020

Underdrained Subsurface Soil Filter

NE Building Addition + New Parking/walks

IMPERVIOUS AREAS CAPTURED: (proposed) = 21,230 sf

GRASS AREAS CAPTURED:(proposed) = 800 sf

MIN. FILTER BED SIZE:

(1"/12") 21230 + (0.4"/12") 800 = 1,796 cf min. bed Water Quality Vol.(WQV)

5% 21,230 + 2% 800 = 1,078 sf minimum bed area

Actual Bed Volume Proposed @ Water Quality Volume Depth = **1,984 cf**

Actual Bed Area Proposed = **1,624 sf**

Use StormTech SC 310

Each chamber 7.1' x 3.3' = 31 CF storage with 6" crushed stone base (23.5 sf/chamber)

8 Rows of 8 Chambers = 64 Chambers at 31 CF = 1984 CF

Bed size = 28' x 58' = 1624 sf

)

Soil Map—Cumberland County and Part of Oxford County, Maine
(Presumpscot Elementary School)



Soil Map—Cumberland County and Part of Oxford County, Maine
(Presumpscot Elementary School)

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
BuB	HSG-'C'	Lamoine silt loam, 3 to 8 percent slopes	1.2	13.6%
HrB	HSG-'C'	Lyman-Tunbridge complex, 0 to 8 percent slopes, rocky	5.3	62.0%
SuD2	HSG-'C'	Suffield silt loam, 15 to 25 percent slopes, eroded	2.1	24.4%
Totals for Area of Interest			8.6	100.0%

**POST-CONSTRUCTION STORM WATER MANAGEMENT PLAN
&
SITE MAINTENANCE PLAN
FOR
PRESUMPCOT ELEMENTARY SCHOOL**

**69 PRESUMPCOT STREET
PORTLAND, MAINE**

September 2020

Site Description

The site as referenced in this document refers to the Presumpscot Elementary School at 69 Presumpscot Street in Portland, ME. Refer to the site plans prepared by Harriman Architects and Engineers dated September 2020 for referenced site locations. The stormwater treatment system as referenced within this document refers to the system of catch basins, storm drain pipes, and subsurface chamber sand filter toward the northeast side of the property, designed to collect, convey, and treat stormwater runoff from the site.

Facility Contacts

Facility:	Presumpscot Elementary School Additions and Renovations 69 Presumpscot Street Portland, ME
Owner:	Portland Public Schools 353 Cumberland Avenue Portland, ME 04101 Telephone: 207- 842-5315
Maintenance Responsibility:	Steven Stilphen, Director of Facilities Telephone: 207-842-5315 (stilps@portlandschools.org)
Consultant/Designer:	Harriman Architects and Engineers 46 Harriman Drive Auburn, ME 04210 Telephone: 207-784-5100 Frank L. Crabtree, P.E. (fcrabtree@harriman.com)

Overview and Objectives

The Site Maintenance Plan (SMP) is an important component of the overall stormwater management system for the site. The SMP addresses various maintenance activities that should occur after construction and site stabilization. Proper implementation of the SMP can minimize pollutant generation and transport and maintain the stormwater treatment system to ensure proper operation. This SMP includes three primary components:

1. Site Management Practices
2. Inspections
3. Routine Maintenance and Corrective Actions

1. Site Management Practices

Site management practices are aimed at reducing pollutants by minimizing use of certain materials, using alternative materials, or removing pollutants prior to discharge to the stormwater treatment system. These practices shall include:

- a. Use slow release sulfur or plastic coated ureaform fertilizers (e.g., Nutralene).
- b. Do not fertilize vegetated swales or detention areas once vegetation is established.
- c. Minimize use of pesticides by using a sound integrated pest management (IPM) approach to monitor and control the actual pests present.
- d. Collect and remove autumn leaves to minimize transport to the stormwater treatment system.
- e. Minimize use of de-icing materials and sand.
- f. Routine sweeping of parking areas and driveways.
- g. Fertilizers, pesticides and other hazardous materials should be stored in enclosed areas to avoid exposure to precipitation. Material handling should be conducted to minimize risk of spillage and release to the storm water treatment system.

2. Inspections

A series of routine inspections shall be completed to allow for the early identification of potential problems, and to guide routine maintenance activities. Inspections shall be carried out in accordance with the Site Inspection Schedule (Table 1). Dates and observations shall be recorded for each inspection on the attached 'Inspection Log'.

3. Routine Maintenance and Corrective Actions

Routine maintenance activities are designed to ensure proper function of the stormwater management system and minimize pollutant transport from the site. Routine maintenance activities must be completed according to the schedule (Table 1) provided in this plan. This schedule is the minimum amount of maintenance required, and more frequent maintenance may be needed when indicated by the inspections. Corrective actions (supplemental maintenance activities or repairs) should be completed within 7 days of the inspection identifying the problem. Each maintenance activity will be recorded on the attached 'Maintenance and Repair Log'.

During construction, the Sitework Contractor, (not yet selected by Bid process) shall be responsible for cleaning and maintaining stormwater components on the schedule outlined in Table 2.

Following completion of construction, Portland staff will be responsible for cleaning and maintaining stormwater components on the schedule outlined in Table 1.

The following describes specific stormwater facilities maintenance requirements and minimum schedule of inspection and maintenance.

1. Vegetated drainage areas should be mowed at least once during the growing season. Larger brush or trees must not be allowed to become established in the channel. Any areas where the vegetation fails will be subject to erosion and should be repaired and revegetated.
2. If sediment in culverts or piped drainage systems exceeds 20% of the diameter of the pipe, it should be removed. This may be accomplished by hydraulic flushing or other mechanical means; however, care should be taken to not flush the sediments into the filter basins, or retention/detention pond as it will reduce the pond's capacity and hasten the time when it must be cleaned. Storm pipes should be inspected on an annual basis.
3. Catch basin sumps and the outlet control structures shall be cleaned of debris and sediment at least annually to minimize clogging and transportation of sediment during rainfall events.
4. Paved surfaces shall be swept or vacuumed at least annually in the spring to remove winter sand and periodically during the year on an as-needed basis to minimize the transportation of sediment during rainfall events.
5. Underdrained Subsurface Sand Filter shall be inspected semi-annually and following major storm events. The system should be inspected after every major storm in the first few months to ensure proper function. Thereafter the filter should be inspected at least once every six months to ensure that it is draining within 24 hours to 48 hours. Cleaning of the pre-treatment device shall be done as needed. When the average depth of sediment throughout the length of the Isolator Row exceeds 3 inches, clean-out must be performed.

Table 1 PRESUMPCOT ELEMENTARY SCHOOL Long-Term Inspection & Maintenance Plan				
	Spring	Fall or Yearly	After a Major	Every 2- 5 Years
Vegetated Areas				
Inspect all slopes and embankments	X		X	
Replant bare areas or areas with sparse growth	X		X	
Armor areas with rill erosion with an appropriate lining or divert the erosive flows to on-site areas able to withstand concentrated flows.	X		X	
Stormwater Channels				
Inspect ditches, swales and other open stormwater channels	X	X	X	
Remove any obstructions and accumulated sediments or debris	X	X		
Control vegetated growth and woody vegetation		X		
Repair any erosion of the ditch lining		X		
Mow vegetated ditches		X		
Remove woody vegetation growing through riprap		X		
Repair any slumping side slopes		X		
Replace riprap where underlying filter fabric or underdrain gravel is showing or where stones have dislodged		X		
Culverts				
Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit	X	X	X	
Repair any erosion damage at the culvert's inlet and outlet	X	X	X	
Catch Basin Systems				
Remove and legally dispose of accumulated sediments and debris from the bottom of the basin, inlet grates, inflow channels to the basin, and pipes between basins	X	X		
Remove floating debris and floating oils (using oil absorptive pads) from any trap designed for such, and dispose in a legal manner	X	X		
Roadways and Paved Surfaces				
Clear accumulated winter sand in parking lots and along roadways	X			
Sweep pavement to remove sediment	X			
Grade road shoulders and remove excess sand either manually or by front-end loader	X			

Table 1 PRESUMPSCOT ELEMENTARY SCHOOL Long-Term Inspection & Maintenance Plan				
	Spring	Fall or Yearly	After a Major	Every 2- 5 Years
Ensure that stormwater is not impeded by accumulations of material or false ditches in the shoulder	X			
Subsurface Sand Filter – Isolator Rows				
Inspect isolator rows at each manhole and inspection port to see if collected sediment is 3" or deeper.	X	X		
Clean sediment out of sediment chamber with Jet-Vacuum equipment. If sediment is not at least 3" deep, the cleanout can be postponed until sediment build-up is at this level.		X		
Remove accumulated floating oils and trash. Use absorbent pads to remove oils, if sediment removal by vacuum truck is not concurrent.		X		
Inspect drainage rate to verify the system drains between 24 to 36 hours.	X	X		

The maintenance needs for most vegetative and stabilization measures may be found in the Maine Erosion and Sediment Control BMPs manual, latest published date.

PRESUMPCOT ELEMENTARY SCHOOL

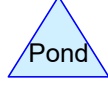
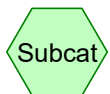
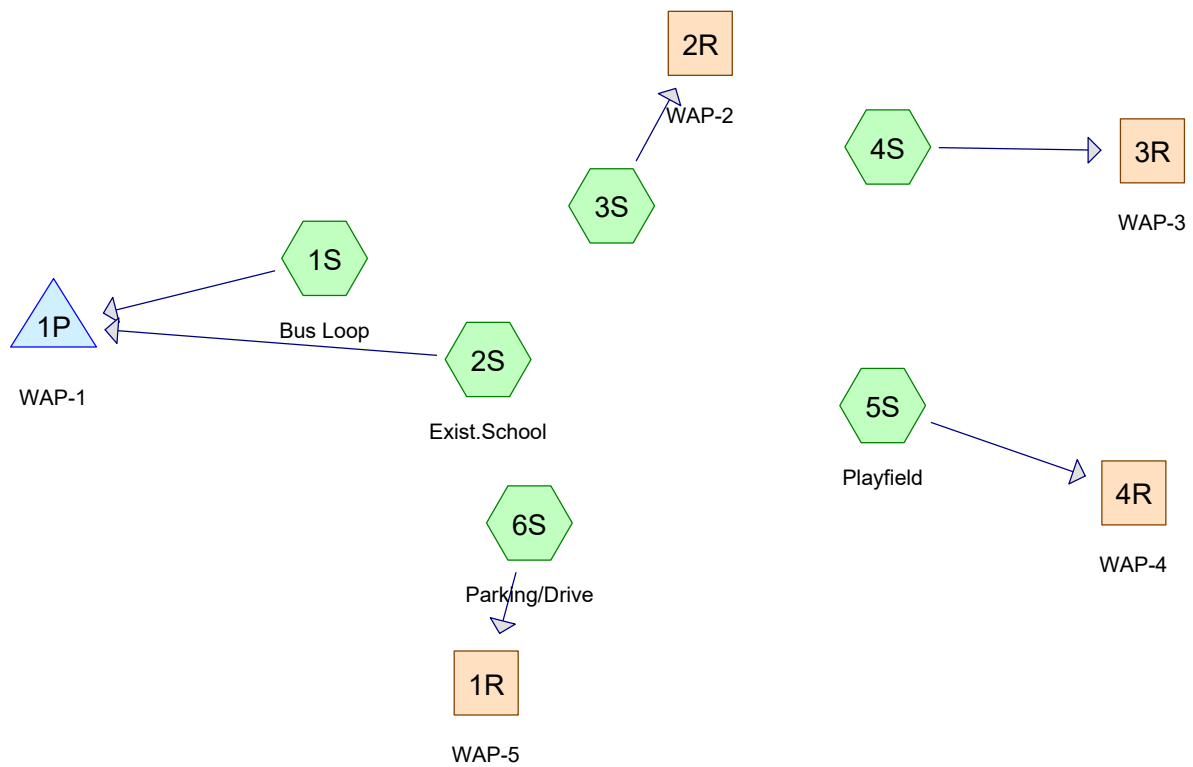
INSPECTION LOG

[illegible]

PRESUMPCOT ELEMENTARY SCHOOL

MAINTENANCE LOG

Date	Device or Area Maintained/ Repaired	Maintenance / Repair Completed By	Maintenance Completed/Corrective Actions Taken



Routing Diagram for Presumpscot ES Pre-Development
 Prepared by {enter your company name here}, Printed 8/28/2020
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Presumpscot ES Pre-Development

Type III 24-hr 2 Year Rainfall=3.10"

Prepared by {enter your company name here}

Printed 8/28/2020

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Time span=2.00-23.00 hrs, dt=0.05 hrs, 421 points

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

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

Subcatchment1S: Bus LoopRunoff Area=41,400 sf 47.22% Impervious Runoff Depth>1.57"
Flow Length=140' Tc=18.5 min CN=84 Runoff=1.23 cfs 0.124 af**Subcatchment2S: Exist.School**Runoff Area=25,650 sf 100.00% Impervious Runoff Depth>2.84"
Tc=5.0 min CN=98 Runoff=1.78 cfs 0.139 af**Subcatchment3S:**Runoff Area=42,780 sf 24.57% Impervious Runoff Depth>1.18"
Flow Length=175' Tc=6.2 min CN=78 Runoff=1.32 cfs 0.096 af**Subcatchment4S:**Runoff Area=27,380 sf 0.73% Impervious Runoff Depth>0.80"
Flow Length=130' Slope=0.0450 '/' Tc=19.5 min CN=71 Runoff=0.37 cfs 0.042 af**Subcatchment5S: Playfield**Runoff Area=95,040 sf 9.12% Impervious Runoff Depth>1.06"
Flow Length=400' Tc=14.2 min CN=76 Runoff=2.03 cfs 0.193 af**Subcatchment6S: Parking/Drive**Runoff Area=38,830 sf 60.49% Impervious Runoff Depth>1.88"
Flow Length=105' Tc=5.3 min CN=88 Runoff=1.98 cfs 0.140 af**Reach 1R: WAP-5**Inflow=1.98 cfs 0.140 af
Outflow=1.98 cfs 0.140 af**Reach 2R: WAP-2**Inflow=1.32 cfs 0.096 af
Outflow=1.32 cfs 0.096 af**Reach 3R: WAP-3**Inflow=0.37 cfs 0.042 af
Outflow=0.37 cfs 0.042 af**Reach 4R: WAP-4**Inflow=2.03 cfs 0.193 af
Outflow=2.03 cfs 0.193 af**Pond 1P: WAP-1**Peak Elev=27.82' Storage=12 cf Inflow=2.46 cfs 0.263 af
12.0" Round Culvert n=0.010 L=290.0' S=0.0103 '/' Outflow=2.46 cfs 0.263 af

Presumpscot ES Pre-Development

Type III 24-hr 2 Year Rainfall=3.10"

Prepared by {enter your company name here}

Printed 8/28/2020

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Summary for Subcatchment 1S: Bus Loop

Runoff = 1.23 cfs @ 12.26 hrs, Volume= 0.124 af, Depth> 1.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	19,550	98	Paved
	12,580	74	>75% Grass cover, Good, HSG C
	9,270	70	Woods, Good, HSG C
	41,400	84	Weighted Average
	21,850		52.78% Pervious Area
	19,550		47.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	70	0.0430	0.21		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
13.0	70	0.0360	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
18.5	140	Total			

Summary for Subcatchment 2S: Exist.School

Runoff = 1.78 cfs @ 12.07 hrs, Volume= 0.139 af, Depth> 2.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	25,650	98	Roof
	25,650		100.00% Impervious Area

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

Summary for Subcatchment 3S:

Runoff = 1.32 cfs @ 12.10 hrs, Volume= 0.096 af, Depth> 1.18"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

Presumpscot ES Pre-Development

Type III 24-hr 2 Year Rainfall=3.10"

Prepared by {enter your company name here}

Printed 8/28/2020

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	Area (sf)	CN	Description
*	10,510	98	Paved
	15,470	74	>75% Grass cover, Good, HSG C
	16,800	70	Woods, Good, HSG C
	42,780	78	Weighted Average
	32,270		75.43% Pervious Area
	10,510		24.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	70	0.0200	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
4.1	45	0.0370	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
1.2	60	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.2	175	Total			

Summary for Subcatchment 4S:

Runoff = 0.37 cfs @ 12.31 hrs, Volume= 0.042 af, Depth> 0.80"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	200	98	Paved
	6,660	74	>75% Grass cover, Good, HSG C
	20,520	70	Woods, Good, HSG C
	27,380	71	Weighted Average
	27,180		99.27% Pervious Area
	200		0.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.5	130	0.0450	0.11		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"

Summary for Subcatchment 5S: Playfield

Runoff = 2.03 cfs @ 12.21 hrs, Volume= 0.193 af, Depth> 1.06"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

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Type III 24-hr 2 Year Rainfall=3.10"

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	Area (sf)	CN	Description
*	8,670	98	Paved/Roof
	74,530	74	>75% Grass cover, Good, HSG C
	11,840	70	Woods, Good, HSG C
	95,040	76	Weighted Average
	86,370		90.88% Pervious Area
	8,670		9.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	60	0.0200	1.22		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
8.4	90	0.0250	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
4.6	220	0.0130	0.80		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	30	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.2	400	Total			

Summary for Subcatchment 6S: Parking/Drive

Runoff = 1.98 cfs @ 12.08 hrs, Volume= 0.140 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	23,490	98	Paved
	13,590	74	>75% Grass cover, Good, HSG C
	1,750	70	Woods, Good, HSG C
	38,830	88	Weighted Average
	15,340		39.51% Pervious Area
	23,490		60.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	40	0.0500	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.6	45	0.0250	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
1.4	20	0.1000	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
5.3	105	Total			

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Type III 24-hr 2 Year Rainfall=3.10"

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Summary for Reach 1R: WAP-5

Inflow Area = 0.891 ac, 60.49% Impervious, Inflow Depth > 1.88" for 2 Year event
 Inflow = 1.98 cfs @ 12.08 hrs, Volume= 0.140 af
 Outflow = 1.98 cfs @ 12.08 hrs, Volume= 0.140 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 2R: WAP-2

Inflow Area = 0.982 ac, 24.57% Impervious, Inflow Depth > 1.18" for 2 Year event
 Inflow = 1.32 cfs @ 12.10 hrs, Volume= 0.096 af
 Outflow = 1.32 cfs @ 12.10 hrs, Volume= 0.096 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 3R: WAP-3

Inflow Area = 0.629 ac, 0.73% Impervious, Inflow Depth > 0.80" for 2 Year event
 Inflow = 0.37 cfs @ 12.31 hrs, Volume= 0.042 af
 Outflow = 0.37 cfs @ 12.31 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 4R: WAP-4

Inflow Area = 2.182 ac, 9.12% Impervious, Inflow Depth > 1.06" for 2 Year event
 Inflow = 2.03 cfs @ 12.21 hrs, Volume= 0.193 af
 Outflow = 2.03 cfs @ 12.21 hrs, Volume= 0.193 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: WAP-1

Inflow Area = 1.539 ac, 67.41% Impervious, Inflow Depth > 2.05" for 2 Year event
 Inflow = 2.46 cfs @ 12.09 hrs, Volume= 0.263 af
 Outflow = 2.46 cfs @ 12.09 hrs, Volume= 0.263 af, Atten= 0%, Lag= 0.1 min
 Primary = 2.46 cfs @ 12.09 hrs, Volume= 0.263 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 27.82' @ 12.09 hrs Surf.Area= 13 sf Storage= 12 cf

Plug-Flow detention time= 0.2 min calculated for 0.263 af (100% of inflow)

Center-of-Mass det. time= 0.2 min (788.5 - 788.3)

Volume	Invert	Avail.Storage	Storage Description
#1	26.90'	54 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

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Type III 24-hr 2 Year Rainfall=3.10"

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
26.90	13	0	0
30.85	13	51	51
31.00	20	2	54

Device	Routing	Invert	Outlet Devices
#1	Primary	26.90'	12.0" Round Culvert L= 290.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 26.90' / 23.90' S= 0.0103 '/ Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

Primary OutFlow Max=2.44 cfs @ 12.09 hrs HW=27.81' (Free Discharge)

↑**1=Culvert** (Inlet Controls 2.44 cfs @ 3.25 fps)

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Type III 24-hr 10 Year Rainfall=4.60"

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Time span=2.00-23.00 hrs, dt=0.05 hrs, 421 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Bus Loop	Runoff Area=41,400 sf 47.22% Impervious Runoff Depth>2.86" Flow Length=140' Tc=18.5 min CN=84 Runoff=2.24 cfs 0.226 af
Subcatchment2S: Exist.School	Runoff Area=25,650 sf 100.00% Impervious Runoff Depth>4.31" Tc=5.0 min CN=98 Runoff=2.66 cfs 0.212 af
Subcatchment3S:	Runoff Area=42,780 sf 24.57% Impervious Runoff Depth>2.34" Flow Length=175' Tc=6.2 min CN=78 Runoff=2.67 cfs 0.191 af
Subcatchment4S:	Runoff Area=27,380 sf 0.73% Impervious Runoff Depth>1.78" Flow Length=130' Slope=0.0450 '/' Tc=19.5 min CN=71 Runoff=0.89 cfs 0.093 af
Subcatchment5S: Playfield	Runoff Area=95,040 sf 9.12% Impervious Runoff Depth>2.17" Flow Length=400' Tc=14.2 min CN=76 Runoff=4.32 cfs 0.394 af
Subcatchment6S: Parking/Drive	Runoff Area=38,830 sf 60.49% Impervious Runoff Depth>3.25" Flow Length=105' Tc=5.3 min CN=88 Runoff=3.35 cfs 0.241 af
Reach 1R: WAP-5	Inflow=3.35 cfs 0.241 af Outflow=3.35 cfs 0.241 af
Reach 2R: WAP-2	Inflow=2.67 cfs 0.191 af Outflow=2.67 cfs 0.191 af
Reach 3R: WAP-3	Inflow=0.89 cfs 0.093 af Outflow=0.89 cfs 0.093 af
Reach 4R: WAP-4	Inflow=4.32 cfs 0.394 af Outflow=4.32 cfs 0.394 af
Pond 1P: WAP-1	Peak Elev=28.51' Storage=21 cf Inflow=3.98 cfs 0.438 af 12.0" Round Culvert n=0.010 L=290.0' S=0.0103 '/' Outflow=3.99 cfs 0.438 af

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Type III 24-hr 10 Year Rainfall=4.60"

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Summary for Subcatchment 1S: Bus Loop

Runoff = 2.24 cfs @ 12.25 hrs, Volume= 0.226 af, Depth> 2.86"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

	Area (sf)	CN	Description
*	19,550	98	Paved
	12,580	74	>75% Grass cover, Good, HSG C
	9,270	70	Woods, Good, HSG C
	41,400	84	Weighted Average
	21,850		52.78% Pervious Area
	19,550		47.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	70	0.0430	0.21		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
13.0	70	0.0360	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
18.5	140	Total			

Summary for Subcatchment 2S: Exist.School

Runoff = 2.66 cfs @ 12.07 hrs, Volume= 0.212 af, Depth> 4.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

	Area (sf)	CN	Description
*	25,650	98	Roof
	25,650		100.00% Impervious Area

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

Summary for Subcatchment 3S:

Runoff = 2.67 cfs @ 12.10 hrs, Volume= 0.191 af, Depth> 2.34"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

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Type III 24-hr 10 Year Rainfall=4.60"

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	Area (sf)	CN	Description
*	10,510	98	Paved
	15,470	74	>75% Grass cover, Good, HSG C
	16,800	70	Woods, Good, HSG C
	42,780	78	Weighted Average
	32,270		75.43% Pervious Area
	10,510		24.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	70	0.0200	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
4.1	45	0.0370	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
1.2	60	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.2	175	Total			

Summary for Subcatchment 4S:

Runoff = 0.89 cfs @ 12.28 hrs, Volume= 0.093 af, Depth> 1.78"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

	Area (sf)	CN	Description
*	200	98	Paved
	6,660	74	>75% Grass cover, Good, HSG C
	20,520	70	Woods, Good, HSG C
	27,380	71	Weighted Average
	27,180		99.27% Pervious Area
	200		0.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.5	130	0.0450	0.11		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"

Summary for Subcatchment 5S: Playfield

Runoff = 4.32 cfs @ 12.20 hrs, Volume= 0.394 af, Depth> 2.17"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

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Type III 24-hr 10 Year Rainfall=4.60"

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	Area (sf)	CN	Description
*	8,670	98	Paved/Roof
	74,530	74	>75% Grass cover, Good, HSG C
	11,840	70	Woods, Good, HSG C
	95,040	76	Weighted Average
	86,370		90.88% Pervious Area
	8,670		9.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	60	0.0200	1.22		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
8.4	90	0.0250	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
4.6	220	0.0130	0.80		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	30	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.2	400	Total			

Summary for Subcatchment 6S: Parking/Drive

Runoff = 3.35 cfs @ 12.08 hrs, Volume= 0.241 af, Depth> 3.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

	Area (sf)	CN	Description
*	23,490	98	Paved
	13,590	74	>75% Grass cover, Good, HSG C
	1,750	70	Woods, Good, HSG C
	38,830	88	Weighted Average
	15,340		39.51% Pervious Area
	23,490		60.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	40	0.0500	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.6	45	0.0250	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
1.4	20	0.1000	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
5.3	105	Total			

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Type III 24-hr 10 Year Rainfall=4.60"

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Summary for Reach 1R: WAP-5

Inflow Area = 0.891 ac, 60.49% Impervious, Inflow Depth > 3.25" for 10 Year event
 Inflow = 3.35 cfs @ 12.08 hrs, Volume= 0.241 af
 Outflow = 3.35 cfs @ 12.08 hrs, Volume= 0.241 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 2R: WAP-2

Inflow Area = 0.982 ac, 24.57% Impervious, Inflow Depth > 2.34" for 10 Year event
 Inflow = 2.67 cfs @ 12.10 hrs, Volume= 0.191 af
 Outflow = 2.67 cfs @ 12.10 hrs, Volume= 0.191 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 3R: WAP-3

Inflow Area = 0.629 ac, 0.73% Impervious, Inflow Depth > 1.78" for 10 Year event
 Inflow = 0.89 cfs @ 12.28 hrs, Volume= 0.093 af
 Outflow = 0.89 cfs @ 12.28 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 4R: WAP-4

Inflow Area = 2.182 ac, 9.12% Impervious, Inflow Depth > 2.17" for 10 Year event
 Inflow = 4.32 cfs @ 12.20 hrs, Volume= 0.394 af
 Outflow = 4.32 cfs @ 12.20 hrs, Volume= 0.394 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: WAP-1

Inflow Area = 1.539 ac, 67.41% Impervious, Inflow Depth > 3.41" for 10 Year event
 Inflow = 3.98 cfs @ 12.10 hrs, Volume= 0.438 af
 Outflow = 3.99 cfs @ 12.10 hrs, Volume= 0.438 af, Atten= 0%, Lag= 0.1 min
 Primary = 3.99 cfs @ 12.10 hrs, Volume= 0.438 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 28.51' @ 12.10 hrs Surf.Area= 13 sf Storage= 21 cf

Plug-Flow detention time= 0.2 min calculated for 0.437 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (780.6 - 780.5)

Volume	Invert	Avail.Storage	Storage Description
#1	26.90'	54 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

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Type III 24-hr 10 Year Rainfall=4.60"

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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
26.90	13	0	0
30.85	13	51	51
31.00	20	2	54

Device	Routing	Invert	Outlet Devices
#1	Primary	26.90'	12.0" Round Culvert L= 290.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 26.90' / 23.90' S= 0.0103 '/ Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

Primary OutFlow Max=3.99 cfs @ 12.10 hrs HW=28.51' (Free Discharge)

↑**1=Culvert** (Inlet Controls 3.99 cfs @ 5.08 fps)

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Type III 24-hr 25 Year Rainfall=5.80"

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Time span=2.00-23.00 hrs, dt=0.05 hrs, 421 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Bus Loop	Runoff Area=41,400 sf 47.22% Impervious Runoff Depth>3.95" Flow Length=140' Tc=18.5 min CN=84 Runoff=3.07 cfs 0.313 af
Subcatchment2S: Exist.School	Runoff Area=25,650 sf 100.00% Impervious Runoff Depth>5.49" Tc=5.0 min CN=98 Runoff=3.37 cfs 0.269 af
Subcatchment3S:	Runoff Area=42,780 sf 24.57% Impervious Runoff Depth>3.35" Flow Length=175' Tc=6.2 min CN=78 Runoff=3.82 cfs 0.274 af
Subcatchment4S:	Runoff Area=27,380 sf 0.73% Impervious Runoff Depth>2.68" Flow Length=130' Slope=0.0450 '/' Tc=19.5 min CN=71 Runoff=1.36 cfs 0.141 af
Subcatchment5S: Playfield	Runoff Area=95,040 sf 9.12% Impervious Runoff Depth>3.15" Flow Length=400' Tc=14.2 min CN=76 Runoff=6.30 cfs 0.573 af
Subcatchment6S: Parking/Drive	Runoff Area=38,830 sf 60.49% Impervious Runoff Depth>4.38" Flow Length=105' Tc=5.3 min CN=88 Runoff=4.45 cfs 0.325 af
Reach 1R: WAP-5	Inflow=4.45 cfs 0.325 af Outflow=4.45 cfs 0.325 af
Reach 2R: WAP-2	Inflow=3.82 cfs 0.274 af Outflow=3.82 cfs 0.274 af
Reach 3R: WAP-3	Inflow=1.36 cfs 0.141 af Outflow=1.36 cfs 0.141 af
Reach 4R: WAP-4	Inflow=6.30 cfs 0.573 af Outflow=6.30 cfs 0.573 af
Pond 1P: WAP-1	Peak Elev=29.59' Storage=35 cf Inflow=5.22 cfs 0.582 af 12.0" Round Culvert n=0.010 L=290.0' S=0.0103 '/' Outflow=5.20 cfs 0.582 af

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Type III 24-hr 25 Year Rainfall=5.80"

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Summary for Subcatchment 1S: Bus Loop

Runoff = 3.07 cfs @ 12.25 hrs, Volume= 0.313 af, Depth> 3.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

	Area (sf)	CN	Description
*	19,550	98	Paved
	12,580	74	>75% Grass cover, Good, HSG C
	9,270	70	Woods, Good, HSG C
	41,400	84	Weighted Average
	21,850		52.78% Pervious Area
	19,550		47.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	70	0.0430	0.21		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
13.0	70	0.0360	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
18.5	140	Total			

Summary for Subcatchment 2S: Exist.School

Runoff = 3.37 cfs @ 12.07 hrs, Volume= 0.269 af, Depth> 5.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

	Area (sf)	CN	Description
*	25,650	98	Roof
	25,650		100.00% Impervious Area

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

Summary for Subcatchment 3S:

Runoff = 3.82 cfs @ 12.09 hrs, Volume= 0.274 af, Depth> 3.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

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Type III 24-hr 25 Year Rainfall=5.80"

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	Area (sf)	CN	Description
*	10,510	98	Paved
	15,470	74	>75% Grass cover, Good, HSG C
	16,800	70	Woods, Good, HSG C
	42,780	78	Weighted Average
	32,270		75.43% Pervious Area
	10,510		24.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	70	0.0200	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
4.1	45	0.0370	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
1.2	60	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
6.2	175	Total			

Summary for Subcatchment 4S:

Runoff = 1.36 cfs @ 12.28 hrs, Volume= 0.141 af, Depth> 2.68"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

	Area (sf)	CN	Description
*	200	98	Paved
	6,660	74	>75% Grass cover, Good, HSG C
	20,520	70	Woods, Good, HSG C
	27,380	71	Weighted Average
	27,180		99.27% Pervious Area
	200		0.73% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.5	130	0.0450	0.11		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"

Summary for Subcatchment 5S: Playfield

Runoff = 6.30 cfs @ 12.20 hrs, Volume= 0.573 af, Depth> 3.15"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

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Type III 24-hr 25 Year Rainfall=5.80"

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	Area (sf)	CN	Description
*	8,670	98	Paved/Roof
	74,530	74	>75% Grass cover, Good, HSG C
	11,840	70	Woods, Good, HSG C
	95,040	76	Weighted Average
	86,370		90.88% Pervious Area
	8,670		9.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	60	0.0200	1.22		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
8.4	90	0.0250	0.18		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
4.6	220	0.0130	0.80		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	30	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.2	400	Total			

Summary for Subcatchment 6S: Parking/Drive

Runoff = 4.45 cfs @ 12.08 hrs, Volume= 0.325 af, Depth> 4.38"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

	Area (sf)	CN	Description
*	23,490	98	Paved
	13,590	74	>75% Grass cover, Good, HSG C
	1,750	70	Woods, Good, HSG C
	38,830	88	Weighted Average
	15,340		39.51% Pervious Area
	23,490		60.49% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	40	0.0500	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.6	45	0.0250	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
1.4	20	0.1000	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
5.3	105	Total			

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Type III 24-hr 25 Year Rainfall=5.80"

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Summary for Reach 1R: WAP-5

Inflow Area = 0.891 ac, 60.49% Impervious, Inflow Depth > 4.38" for 25 Year event
 Inflow = 4.45 cfs @ 12.08 hrs, Volume= 0.325 af
 Outflow = 4.45 cfs @ 12.08 hrs, Volume= 0.325 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 2R: WAP-2

Inflow Area = 0.982 ac, 24.57% Impervious, Inflow Depth > 3.35" for 25 Year event
 Inflow = 3.82 cfs @ 12.09 hrs, Volume= 0.274 af
 Outflow = 3.82 cfs @ 12.09 hrs, Volume= 0.274 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 3R: WAP-3

Inflow Area = 0.629 ac, 0.73% Impervious, Inflow Depth > 2.68" for 25 Year event
 Inflow = 1.36 cfs @ 12.28 hrs, Volume= 0.141 af
 Outflow = 1.36 cfs @ 12.28 hrs, Volume= 0.141 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 4R: WAP-4

Inflow Area = 2.182 ac, 9.12% Impervious, Inflow Depth > 3.15" for 25 Year event
 Inflow = 6.30 cfs @ 12.20 hrs, Volume= 0.573 af
 Outflow = 6.30 cfs @ 12.20 hrs, Volume= 0.573 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: WAP-1

Inflow Area = 1.539 ac, 67.41% Impervious, Inflow Depth > 4.54" for 25 Year event
 Inflow = 5.22 cfs @ 12.10 hrs, Volume= 0.582 af
 Outflow = 5.20 cfs @ 12.11 hrs, Volume= 0.582 af, Atten= 0%, Lag= 0.3 min
 Primary = 5.20 cfs @ 12.11 hrs, Volume= 0.582 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 29.59' @ 12.10 hrs Surf.Area= 13 sf Storage= 35 cf

Plug-Flow detention time= 0.2 min calculated for 0.582 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (776.0 - 775.9)

Volume	Invert	Avail.Storage	Storage Description
#1	26.90'	54 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

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Type III 24-hr 25 Year Rainfall=5.80"

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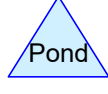
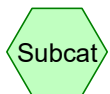
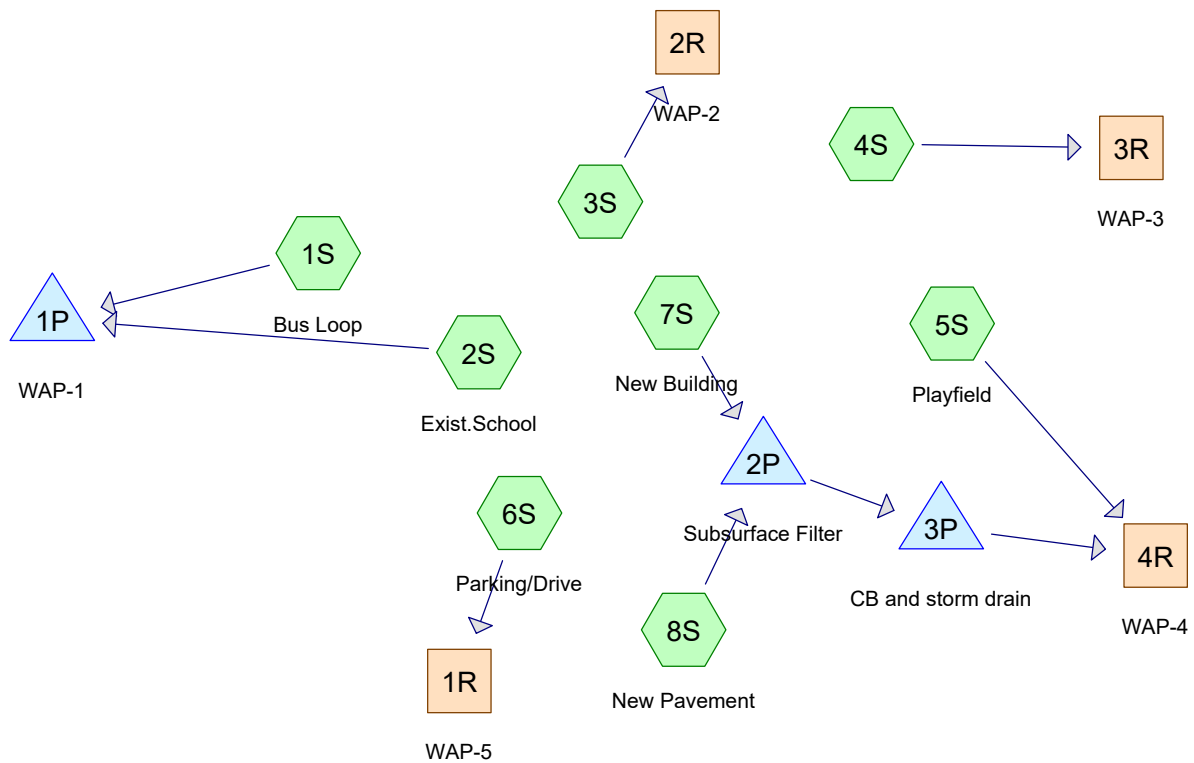
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Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
26.90	13	0	0
30.85	13	51	51
31.00	20	2	54

Device	Routing	Invert	Outlet Devices
#1	Primary	26.90'	12.0" Round Culvert L= 290.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 26.90' / 23.90' S= 0.0103 '/ Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

Primary OutFlow Max=5.17 cfs @ 12.11 hrs HW=29.54' (Free Discharge)

↑**1=Culvert** (Barrel Controls 5.17 cfs @ 6.59 fps)



Routing Diagram for Presumpscot ES Post-Development
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Presumpscot ES Post-Development*Type III 24-hr 2 Year Rainfall=3.10"*

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Time span=2.00-23.00 hrs, dt=0.05 hrs, 421 points

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

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

Subcatchment1S: Bus Loop	Runoff Area=38,790 sf 50.99% Impervious Runoff Depth>1.64" Flow Length=140' Tc=18.5 min CN=85 Runoff=1.21 cfs 0.122 af
Subcatchment2S: Exist.School	Runoff Area=27,720 sf 100.00% Impervious Runoff Depth>2.84" Tc=4.0 min CN=98 Runoff=2.01 cfs 0.150 af
Subcatchment3S:	Runoff Area=36,920 sf 28.03% Impervious Runoff Depth>1.24" Flow Length=165' Tc=7.4 min CN=79 Runoff=1.16 cfs 0.088 af
Subcatchment4S:	Runoff Area=23,860 sf 12.07% Impervious Runoff Depth>0.95" Flow Length=130' Slope=0.0450 '/' Tc=19.5 min CN=74 Runoff=0.40 cfs 0.043 af
Subcatchment5S: Playfield	Runoff Area=83,890 sf 4.03% Impervious Runoff Depth>0.95" Flow Length=360' Tc=10.7 min CN=74 Runoff=1.74 cfs 0.153 af
Subcatchment6S: Parking/Drive	Runoff Area=37,870 sf 63.08% Impervious Runoff Depth>1.96" Flow Length=105' Tc=5.3 min CN=89 Runoff=2.00 cfs 0.142 af
Subcatchment7S: New Building	Runoff Area=15,750 sf 100.00% Impervious Runoff Depth>2.84" Tc=4.0 min CN=98 Runoff=1.14 cfs 0.085 af
Subcatchment8S: New Pavement	Runoff Area=6,280 sf 87.26% Impervious Runoff Depth>2.52" Tc=2.0 min CN=95 Runoff=0.44 cfs 0.030 af
Reach 1R: WAP-5	Inflow=2.00 cfs 0.142 af Outflow=2.00 cfs 0.142 af
Reach 2R: WAP-2	Inflow=1.16 cfs 0.088 af Outflow=1.16 cfs 0.088 af
Reach 3R: WAP-3	Inflow=0.40 cfs 0.043 af Outflow=0.40 cfs 0.043 af
Reach 4R: WAP-4	Inflow=1.74 cfs 0.153 af Outflow=1.74 cfs 0.153 af
Pond 1P: WAP-1	Peak Elev=27.87' Storage=13 cf Inflow=2.63 cfs 0.272 af 12.0" Round Culvert n=0.010 L=290.0' S=0.0103 '/' Outflow=2.63 cfs 0.272 af
Pond 2P: Subsurface Filter	Peak Elev=34.59' Storage=1,767 cf Inflow=1.57 cfs 0.116 af Discarded=0.18 cfs 0.116 af Primary=0.00 cfs 0.000 af Outflow=0.18 cfs 0.116 af
Pond 3P: CB and storm drain	Peak Elev=29.10' Storage=0 cf Inflow=0.00 cfs 0.000 af Outflow=0.00 cfs 0.000 af

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Type III 24-hr 2 Year Rainfall=3.10"

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Summary for Subcatchment 1S: Bus Loop

Runoff = 1.21 cfs @ 12.26 hrs, Volume= 0.122 af, Depth> 1.64"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	19,780	98	Paved
	9,740	74	>75% Grass cover, Good, HSG C
	9,270	70	Woods, Good, HSG C
	38,790	85	Weighted Average
	19,010		49.01% Pervious Area
	19,780		50.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	70	0.0430	0.21		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
13.0	70	0.0360	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
18.5	140	Total			

Summary for Subcatchment 2S: Exist.School

Runoff = 2.01 cfs @ 12.06 hrs, Volume= 0.150 af, Depth> 2.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	27,720	98	Roof
	27,720		100.00% Impervious Area

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

Summary for Subcatchment 3S:

Runoff = 1.16 cfs @ 12.11 hrs, Volume= 0.088 af, Depth> 1.24"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

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	Area (sf)	CN	Description
*	10,350	98	Paved
	14,980	74	>75% Grass cover, Good, HSG C
	11,590	70	Woods, Good, HSG C
	36,920	79	Weighted Average
	26,570		71.97% Pervious Area
	10,350		28.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	80	0.0170	1.21		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
6.0	70	0.0350	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.3	15	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
7.4	165	Total			

Summary for Subcatchment 4S:

Runoff = 0.40 cfs @ 12.30 hrs, Volume= 0.043 af, Depth> 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	2,880	98	Paved
	1,890	74	>75% Grass cover, Good, HSG C
	19,090	70	Woods, Good, HSG C
	23,860	74	Weighted Average
	20,980		87.93% Pervious Area
	2,880		12.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.5	130	0.0450	0.11		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"

Summary for Subcatchment 5S: Playfield

Runoff = 1.74 cfs @ 12.16 hrs, Volume= 0.153 af, Depth> 0.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

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	Area (sf)	CN	Description
*	3,380	98	Paved/Roof
	68,670	74	>75% Grass cover, Good, HSG C
	11,840	70	Woods, Good, HSG C
	83,890	74	Weighted Average
	80,510		95.97% Pervious Area
	3,380		4.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	65	0.0170	1.16		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
5.1	60	0.0380	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
4.3	205	0.0130	0.80		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	30	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.7	360	Total			

Summary for Subcatchment 6S: Parking/Drive

Runoff = 2.00 cfs @ 12.08 hrs, Volume= 0.142 af, Depth> 1.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	23,890	98	Paved
	12,230	74	>75% Grass cover, Good, HSG C
	1,750	70	Woods, Good, HSG C
	37,870	89	Weighted Average
	13,980		36.92% Pervious Area
	23,890		63.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	40	0.0500	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.6	45	0.0250	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
1.4	20	0.1000	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
5.3	105	Total			

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Summary for Subcatchment 7S: New Building

Runoff = 1.14 cfs @ 12.06 hrs, Volume= 0.085 af, Depth> 2.84"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	15,750	98	Roof
	15,750		100.00% Impervious Area

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

Summary for Subcatchment 8S: New Pavement

Runoff = 0.44 cfs @ 12.03 hrs, Volume= 0.030 af, Depth> 2.52"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 2 Year Rainfall=3.10"

	Area (sf)	CN	Description
*	5,480	98	Paved
	800	74	>75% Grass cover, Good, HSG C
	6,280	95	Weighted Average
	800		12.74% Pervious Area
	5,480		87.26% Impervious Area

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

Summary for Reach 1R: WAP-5

Inflow Area = 0.869 ac, 63.08% Impervious, Inflow Depth > 1.96" for 2 Year event

Inflow = 2.00 cfs @ 12.08 hrs, Volume= 0.142 af

Outflow = 2.00 cfs @ 12.08 hrs, Volume= 0.142 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 2R: WAP-2

Inflow Area = 0.848 ac, 28.03% Impervious, Inflow Depth > 1.24" for 2 Year event

Inflow = 1.16 cfs @ 12.11 hrs, Volume= 0.088 af

Outflow = 1.16 cfs @ 12.11 hrs, Volume= 0.088 af, Atten= 0%, Lag= 0.0 min

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Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 3R: WAP-3

Inflow Area = 0.548 ac, 12.07% Impervious, Inflow Depth > 0.95" for 2 Year event
 Inflow = 0.40 cfs @ 12.30 hrs, Volume= 0.043 af
 Outflow = 0.40 cfs @ 12.30 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 4R: WAP-4

Inflow Area = 2.432 ac, 23.23% Impervious, Inflow Depth > 0.75" for 2 Year event
 Inflow = 1.74 cfs @ 12.16 hrs, Volume= 0.153 af
 Outflow = 1.74 cfs @ 12.16 hrs, Volume= 0.153 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: WAP-1

Inflow Area = 1.527 ac, 71.42% Impervious, Inflow Depth > 2.14" for 2 Year event
 Inflow = 2.63 cfs @ 12.07 hrs, Volume= 0.272 af
 Outflow = 2.63 cfs @ 12.07 hrs, Volume= 0.272 af, Atten= 0%, Lag= 0.1 min
 Primary = 2.63 cfs @ 12.07 hrs, Volume= 0.272 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 27.87' @ 12.07 hrs Surf.Area= 13 sf Storage= 13 cf

Plug-Flow detention time= 0.2 min calculated for 0.272 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (784.6 - 784.4)

Volume	Invert	Avail.Storage	Storage Description
#1	26.90'	54 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
26.90	13	0	0
30.85	13	51	51
31.00	20	2	54

Device	Routing	Invert	Outlet Devices
#1	Primary	26.90'	12.0" Round Culvert L= 290.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 26.90' / 23.90' S= 0.0103 ' / S= 0.0103 ' Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

Primary OutFlow Max=2.55 cfs @ 12.07 hrs HW=27.85' (Free Discharge)↑**1=Culvert** (Inlet Controls 2.55 cfs @ 3.31 fps)

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Summary for Pond 2P: Subsurface Filter

Inflow Area = 0.506 ac, 96.37% Impervious, Inflow Depth > 2.75" for 2 Year event
 Inflow = 1.57 cfs @ 12.05 hrs, Volume= 0.116 af
 Outflow = 0.18 cfs @ 11.80 hrs, Volume= 0.116 af, Atten= 88%, Lag= 0.0 min
 Discarded = 0.18 cfs @ 11.80 hrs, Volume= 0.116 af
 Primary = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 34.59' @ 12.61 hrs Surf.Area= 3,274 sf Storage= 1,767 cf

Plug-Flow detention time= 70.8 min calculated for 0.116 af (100% of inflow)

Center-of-Mass det. time= 69.9 min (824.6 - 754.7)

Volume	Invert	Avail.Storage	Storage Description
#1	33.50'	117 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
#2	33.00'	325 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			812 cf Overall x 40.0% Voids
#3	33.50'	1,689 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			2,111 cf Overall x 80.0% Voids
#4	34.80'	325 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			812 cf Overall x 40.0% Voids
2,456 cf			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.50	26	0	0
38.00	26	117	117

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.00	1,624	0	0
33.50	1,624	812	812

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.50	1,624	0	0
34.80	1,624	2,111	2,111

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
34.80	1,624	0	0
35.30	1,624	812	812

Device	Routing	Invert	Outlet Devices
#1	Discarded	33.00'	2.400 in/hr Exfiltration over Surface area
#2	Primary	34.80'	12.0" Round Culvert L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 34.80' / 33.00' S= 0.0900 '/' Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

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Type III 24-hr 2 Year Rainfall=3.10"

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Discarded OutFlow Max=0.18 cfs @ 11.80 hrs HW=33.51' (Free Discharge)↑**1=Exfiltration** (Exfiltration Controls 0.18 cfs)**Primary OutFlow** Max=0.00 cfs @ 2.00 hrs HW=33.00' (Free Discharge)↑**2=Culvert** (Controls 0.00 cfs)**Summary for Pond 3P: CB and storm drain**

Inflow Area = 0.506 ac, 96.37% Impervious, Inflow Depth = 0.00" for 2 Year event
 Inflow = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af
 Outflow = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.00 cfs @ 2.00 hrs, Volume= 0.000 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs / 2

Peak Elev= 29.10' @ 2.00 hrs Surf.Area= 13 sf Storage= 0 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)

Center-of-Mass det. time= (not calculated: no inflow)

Volume	Invert	Avail.Storage	Storage Description
#1	29.10'	90 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 15.0" Round Pipe Storage L= 280.0' S= 0.0050 '/'
#2	29.10'	344 cf	
#3	30.70'	92 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
		526 cf	
			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
29.10	13	0	0
36.00	13	90	90

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
30.70	13	0	0
37.80	13	92	92

Device	Routing	Invert	Outlet Devices
#1	Primary	29.10'	3.7" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.00 cfs @ 2.00 hrs HW=29.10' (Free Discharge)↑**1=Orifice/Grate** (Controls 0.00 cfs)

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Type III 24-hr 10 Year Rainfall=4.60"

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Time span=2.00-23.00 hrs, dt=0.05 hrs, 421 points

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

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

Subcatchment1S: Bus LoopRunoff Area=38,790 sf 50.99% Impervious Runoff Depth>2.95"
Flow Length=140' Tc=18.5 min CN=85 Runoff=2.17 cfs 0.219 af**Subcatchment2S: Exist.School**Runoff Area=27,720 sf 100.00% Impervious Runoff Depth>4.31"
Tc=4.0 min CN=98 Runoff=3.00 cfs 0.229 af**Subcatchment3S:**Runoff Area=36,920 sf 28.03% Impervious Runoff Depth>2.42"
Flow Length=165' Tc=7.4 min CN=79 Runoff=2.30 cfs 0.171 af**Subcatchment4S:**Runoff Area=23,860 sf 12.07% Impervious Runoff Depth>2.01"
Flow Length=130' Slope=0.0450 '/' Tc=19.5 min CN=74 Runoff=0.88 cfs 0.092 af**Subcatchment5S: Playfield**Runoff Area=83,890 sf 4.03% Impervious Runoff Depth>2.01"
Flow Length=360' Tc=10.7 min CN=74 Runoff=3.88 cfs 0.323 af**Subcatchment6S: Parking/Drive**Runoff Area=37,870 sf 63.08% Impervious Runoff Depth>3.35"
Flow Length=105' Tc=5.3 min CN=89 Runoff=3.35 cfs 0.243 af**Subcatchment7S: New Building**Runoff Area=15,750 sf 100.00% Impervious Runoff Depth>4.31"
Tc=4.0 min CN=98 Runoff=1.71 cfs 0.130 af**Subcatchment8S: New Pavement**Runoff Area=6,280 sf 87.26% Impervious Runoff Depth>3.98"
Tc=2.0 min CN=95 Runoff=0.68 cfs 0.048 af**Reach 1R: WAP-5**Inflow=3.35 cfs 0.243 af
Outflow=3.35 cfs 0.243 af**Reach 2R: WAP-2**Inflow=2.30 cfs 0.171 af
Outflow=2.30 cfs 0.171 af**Reach 3R: WAP-3**Inflow=0.88 cfs 0.092 af
Outflow=0.88 cfs 0.092 af**Reach 4R: WAP-4**Inflow=4.09 cfs 0.341 af
Outflow=4.09 cfs 0.341 af**Pond 1P: WAP-1**Peak Elev=28.61' Storage=22 cf Inflow=4.18 cfs 0.448 af
12.0" Round Culvert n=0.010 L=290.0' S=0.0103 '/' Outflow=4.17 cfs 0.448 af**Pond 2P: Subsurface Filter**Peak Elev=35.21' Storage=2,324 cf Inflow=2.37 cfs 0.178 af
Discarded=0.27 cfs 0.159 af Primary=0.66 cfs 0.018 af Outflow=0.93 cfs 0.178 af**Pond 3P: CB and storm drain**Peak Elev=30.55' Storage=222 cf Inflow=0.66 cfs 0.018 af
Outflow=0.41 cfs 0.018 af

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Type III 24-hr 10 Year Rainfall=4.60"

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Summary for Subcatchment 1S: Bus Loop

Runoff = 2.17 cfs @ 12.25 hrs, Volume= 0.219 af, Depth> 2.95"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

	Area (sf)	CN	Description
*	19,780	98	Paved
	9,740	74	>75% Grass cover, Good, HSG C
	9,270	70	Woods, Good, HSG C
	38,790	85	Weighted Average
	19,010		49.01% Pervious Area
	19,780		50.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	70	0.0430	0.21		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
13.0	70	0.0360	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
18.5	140	Total			

Summary for Subcatchment 2S: Exist.School

Runoff = 3.00 cfs @ 12.06 hrs, Volume= 0.229 af, Depth> 4.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

	Area (sf)	CN	Description
*	27,720	98	Roof
	27,720		100.00% Impervious Area

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

Summary for Subcatchment 3S:

Runoff = 2.30 cfs @ 12.11 hrs, Volume= 0.171 af, Depth> 2.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

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Type III 24-hr 10 Year Rainfall=4.60"

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	Area (sf)	CN	Description
*	10,350	98	Paved
	14,980	74	>75% Grass cover, Good, HSG C
	11,590	70	Woods, Good, HSG C
	36,920	79	Weighted Average
	26,570		71.97% Pervious Area
	10,350		28.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	80	0.0170	1.21		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
6.0	70	0.0350	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.3	15	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
7.4	165	Total			

Summary for Subcatchment 4S:

Runoff = 0.88 cfs @ 12.28 hrs, Volume= 0.092 af, Depth> 2.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

	Area (sf)	CN	Description
*	2,880	98	Paved
	1,890	74	>75% Grass cover, Good, HSG C
	19,090	70	Woods, Good, HSG C
	23,860	74	Weighted Average
	20,980		87.93% Pervious Area
	2,880		12.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.5	130	0.0450	0.11		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"

Summary for Subcatchment 5S: Playfield

Runoff = 3.88 cfs @ 12.16 hrs, Volume= 0.323 af, Depth> 2.01"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

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Type III 24-hr 10 Year Rainfall=4.60"

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	Area (sf)	CN	Description
*	3,380	98	Paved/Roof
	68,670	74	>75% Grass cover, Good, HSG C
	11,840	70	Woods, Good, HSG C
	83,890	74	Weighted Average
	80,510		95.97% Pervious Area
	3,380		4.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	65	0.0170	1.16		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
5.1	60	0.0380	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
4.3	205	0.0130	0.80		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	30	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.7	360	Total			

Summary for Subcatchment 6S: Parking/Drive

Runoff = 3.35 cfs @ 12.08 hrs, Volume= 0.243 af, Depth> 3.35"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

	Area (sf)	CN	Description
*	23,890	98	Paved
	12,230	74	>75% Grass cover, Good, HSG C
	1,750	70	Woods, Good, HSG C
	37,870	89	Weighted Average
	13,980		36.92% Pervious Area
	23,890		63.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	40	0.0500	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.6	45	0.0250	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
1.4	20	0.1000	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
5.3	105	Total			

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Type III 24-hr 10 Year Rainfall=4.60"

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Summary for Subcatchment 7S: New Building

Runoff = 1.71 cfs @ 12.06 hrs, Volume= 0.130 af, Depth> 4.31"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

Area (sf)	CN	Description
* 15,750	98	Roof
15,750		100.00% Impervious Area

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

Summary for Subcatchment 8S: New Pavement

Runoff = 0.68 cfs @ 12.03 hrs, Volume= 0.048 af, Depth> 3.98"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 10 Year Rainfall=4.60"

Area (sf)	CN	Description
* 5,480	98	Paved
800	74	>75% Grass cover, Good, HSG C
6,280	95	Weighted Average
800		12.74% Pervious Area
5,480		87.26% Impervious Area

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

Summary for Reach 1R: WAP-5

Inflow Area = 0.869 ac, 63.08% Impervious, Inflow Depth > 3.35" for 10 Year event

Inflow = 3.35 cfs @ 12.08 hrs, Volume= 0.243 af

Outflow = 3.35 cfs @ 12.08 hrs, Volume= 0.243 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 2R: WAP-2

Inflow Area = 0.848 ac, 28.03% Impervious, Inflow Depth > 2.42" for 10 Year event

Inflow = 2.30 cfs @ 12.11 hrs, Volume= 0.171 af

Outflow = 2.30 cfs @ 12.11 hrs, Volume= 0.171 af, Atten= 0%, Lag= 0.0 min

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Type III 24-hr 10 Year Rainfall=4.60"

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Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 3R: WAP-3

Inflow Area = 0.548 ac, 12.07% Impervious, Inflow Depth > 2.01" for 10 Year event
 Inflow = 0.88 cfs @ 12.28 hrs, Volume= 0.092 af
 Outflow = 0.88 cfs @ 12.28 hrs, Volume= 0.092 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 4R: WAP-4

Inflow Area = 2.432 ac, 23.23% Impervious, Inflow Depth > 1.68" for 10 Year event
 Inflow = 4.09 cfs @ 12.16 hrs, Volume= 0.341 af
 Outflow = 4.09 cfs @ 12.16 hrs, Volume= 0.341 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: WAP-1

Inflow Area = 1.527 ac, 71.42% Impervious, Inflow Depth > 3.52" for 10 Year event
 Inflow = 4.18 cfs @ 12.07 hrs, Volume= 0.448 af
 Outflow = 4.17 cfs @ 12.07 hrs, Volume= 0.448 af, Atten= 0%, Lag= 0.2 min
 Primary = 4.17 cfs @ 12.07 hrs, Volume= 0.448 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 28.61' @ 12.07 hrs Surf.Area= 13 sf Storage= 22 cf

Plug-Flow detention time= 0.2 min calculated for 0.448 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (776.8 - 776.6)

Volume	Invert	Avail.Storage	Storage Description
#1	26.90'	54 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
26.90	13	0	0
30.85	13	51	51
31.00	20	2	54

Device	Routing	Invert	Outlet Devices
#1	Primary	26.90'	12.0" Round Culvert L= 290.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 26.90' / 23.90' S= 0.0103 '/' Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

Primary OutFlow Max=4.05 cfs @ 12.07 hrs HW=28.55' (Free Discharge)↑**1=Culvert** (Inlet Controls 4.05 cfs @ 5.16 fps)

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Type III 24-hr 10 Year Rainfall=4.60"

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Summary for Pond 2P: Subsurface Filter

Inflow Area = 0.506 ac, 96.37% Impervious, Inflow Depth > 4.22" for 10 Year event
 Inflow = 2.37 cfs @ 12.05 hrs, Volume= 0.178 af
 Outflow = 0.93 cfs @ 12.25 hrs, Volume= 0.178 af, Atten= 61%, Lag= 11.7 min
 Discarded = 0.27 cfs @ 12.15 hrs, Volume= 0.159 af
 Primary = 0.66 cfs @ 12.25 hrs, Volume= 0.018 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs / 3

Peak Elev= 35.21' @ 12.25 hrs Surf.Area= 4,898 sf Storage= 2,324 cf

Plug-Flow detention time= 74.6 min calculated for 0.177 af (100% of inflow)

Center-of-Mass det. time= 74.0 min (821.0 - 747.0)

Volume	Invert	Avail.Storage	Storage Description
#1	33.50'	117 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
#2	33.00'	325 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			812 cf Overall x 40.0% Voids
#3	33.50'	1,689 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			2,111 cf Overall x 80.0% Voids
#4	34.80'	325 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			812 cf Overall x 40.0% Voids
2,456 cf			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.50	26	0	0
38.00	26	117	117

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.00	1,624	0	0
33.50	1,624	812	812

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.50	1,624	0	0
34.80	1,624	2,111	2,111

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
34.80	1,624	0	0
35.30	1,624	812	812

Device	Routing	Invert	Outlet Devices
#1	Discarded	33.00'	2.400 in/hr Exfiltration over Surface area
#2	Primary	34.80'	12.0" Round Culvert L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 34.80' / 33.00' S= 0.0900 ' / Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

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Type III 24-hr 10 Year Rainfall=4.60"

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Discarded OutFlow Max=0.27 cfs @ 12.15 hrs HW=35.10' (Free Discharge)↑**1=Exfiltration** (Exfiltration Controls 0.27 cfs)**Primary OutFlow** Max=0.65 cfs @ 12.25 hrs HW=35.21' (Free Discharge)↑**2=Culvert** (Inlet Controls 0.65 cfs @ 2.17 fps)**Summary for Pond 3P: CB and storm drain**

Inflow Area = 0.506 ac, 96.37% Impervious, Inflow Depth = 0.44" for 10 Year event

Inflow = 0.66 cfs @ 12.25 hrs, Volume= 0.018 af

Outflow = 0.41 cfs @ 12.42 hrs, Volume= 0.018 af, Atten= 38%, Lag= 10.6 min

Primary = 0.41 cfs @ 12.42 hrs, Volume= 0.018 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs / 2

Peak Elev= 30.55' @ 12.42 hrs Surf.Area= 255 sf Storage= 222 cf

Plug-Flow detention time= 6.5 min calculated for 0.018 af (100% of inflow)

Center-of-Mass det. time= 6.5 min (747.4 - 741.0)

Volume	Invert	Avail.Storage	Storage Description
#1	29.10'	90 cf	Custom Stage Data (Prismatic) Listed below (Recalc) 15.0" Round Pipe Storage L= 280.0' S= 0.0050 '/'
#2	29.10'	344 cf	
#3	30.70'	92 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
		526 cf	
			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
29.10	13	0	0
36.00	13	90	90

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
30.70	13	0	0
37.80	13	92	92

Device	Routing	Invert	Outlet Devices
#1	Primary	29.10'	3.7" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.41 cfs @ 12.42 hrs HW=30.55' (Free Discharge)↑**1=Orifice/Grate** (Orifice Controls 0.41 cfs @ 5.47 fps)

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Type III 24-hr 25 Year Rainfall=5.80"

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Time span=2.00-23.00 hrs, dt=0.05 hrs, 421 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1S: Bus Loop	Runoff Area=38,790 sf 50.99% Impervious Runoff Depth>4.05" Flow Length=140' Tc=18.5 min CN=85 Runoff=2.94 cfs 0.301 af
Subcatchment2S: Exist.School	Runoff Area=27,720 sf 100.00% Impervious Runoff Depth>5.49" Tc=4.0 min CN=98 Runoff=3.80 cfs 0.291 af
Subcatchment3S:	Runoff Area=36,920 sf 28.03% Impervious Runoff Depth>3.45" Flow Length=165' Tc=7.4 min CN=79 Runoff=3.27 cfs 0.244 af
Subcatchment4S:	Runoff Area=23,860 sf 12.07% Impervious Runoff Depth>2.96" Flow Length=130' Slope=0.0450 '/' Tc=19.5 min CN=74 Runoff=1.32 cfs 0.135 af
Subcatchment5S: Playfield	Runoff Area=83,890 sf 4.03% Impervious Runoff Depth>2.97" Flow Length=360' Tc=10.7 min CN=74 Runoff=5.77 cfs 0.476 af
Subcatchment6S: Parking/Drive	Runoff Area=37,870 sf 63.08% Impervious Runoff Depth>4.49" Flow Length=105' Tc=5.3 min CN=89 Runoff=4.42 cfs 0.325 af
Subcatchment7S: New Building	Runoff Area=15,750 sf 100.00% Impervious Runoff Depth>5.49" Tc=4.0 min CN=98 Runoff=2.16 cfs 0.165 af
Subcatchment8S: New Pavement	Runoff Area=6,280 sf 87.26% Impervious Runoff Depth>5.16" Tc=2.0 min CN=95 Runoff=0.87 cfs 0.062 af
Reach 1R: WAP-5	Inflow=4.42 cfs 0.325 af Outflow=4.42 cfs 0.325 af
Reach 2R: WAP-2	Inflow=3.27 cfs 0.244 af Outflow=3.27 cfs 0.244 af
Reach 3R: WAP-3	Inflow=1.32 cfs 0.135 af Outflow=1.32 cfs 0.135 af
Reach 4R: WAP-4	Inflow=6.37 cfs 0.517 af Outflow=6.37 cfs 0.517 af
Pond 1P: WAP-1	Peak Elev=29.84' Storage=38 cf Inflow=5.44 cfs 0.592 af 12.0" Round Culvert n=0.010 L=290.0' S=0.0103 '/' Outflow=5.35 cfs 0.592 af
Pond 2P: Subsurface Filter	Peak Elev=35.58' Storage=2,393 cf Inflow=3.00 cfs 0.227 af Discarded=0.27 cfs 0.184 af Primary=1.94 cfs 0.041 af Outflow=2.21 cfs 0.225 af
Pond 3P: CB and storm drain	Peak Elev=35.69' Storage=494 cf Inflow=1.94 cfs 0.041 af Outflow=0.91 cfs 0.041 af

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Type III 24-hr 25 Year Rainfall=5.80"

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Summary for Subcatchment 1S: Bus Loop

Runoff = 2.94 cfs @ 12.25 hrs, Volume= 0.301 af, Depth> 4.05"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

	Area (sf)	CN	Description
*	19,780	98	Paved
	9,740	74	>75% Grass cover, Good, HSG C
	9,270	70	Woods, Good, HSG C
	38,790	85	Weighted Average
	19,010		49.01% Pervious Area
	19,780		50.99% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.5	70	0.0430	0.21		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
13.0	70	0.0360	0.09		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
18.5	140	Total			

Summary for Subcatchment 2S: Exist.School

Runoff = 3.80 cfs @ 12.06 hrs, Volume= 0.291 af, Depth> 5.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

	Area (sf)	CN	Description
*	27,720	98	Roof
	27,720		100.00% Impervious Area

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

Summary for Subcatchment 3S:

Runoff = 3.27 cfs @ 12.11 hrs, Volume= 0.244 af, Depth> 3.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

Presumpscot ES Post-Development

Type III 24-hr 25 Year Rainfall=5.80"

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	Area (sf)	CN	Description
*	10,350	98	Paved
	14,980	74	>75% Grass cover, Good, HSG C
	11,590	70	Woods, Good, HSG C
	36,920	79	Weighted Average
	26,570		71.97% Pervious Area
	10,350		28.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	80	0.0170	1.21		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
6.0	70	0.0350	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.3	15	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
7.4	165	Total			

Summary for Subcatchment 4S:

Runoff = 1.32 cfs @ 12.27 hrs, Volume= 0.135 af, Depth> 2.96"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

	Area (sf)	CN	Description
*	2,880	98	Paved
	1,890	74	>75% Grass cover, Good, HSG C
	19,090	70	Woods, Good, HSG C
	23,860	74	Weighted Average
	20,980		87.93% Pervious Area
	2,880		12.07% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.5	130	0.0450	0.11		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"

Summary for Subcatchment 5S: Playfield

Runoff = 5.77 cfs @ 12.15 hrs, Volume= 0.476 af, Depth> 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

Presumpscot ES Post-Development

Type III 24-hr 25 Year Rainfall=5.80"

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	Area (sf)	CN	Description
*	3,380	98	Paved/Roof
	68,670	74	>75% Grass cover, Good, HSG C
	11,840	70	Woods, Good, HSG C
	83,890	74	Weighted Average
	80,510		95.97% Pervious Area
	3,380		4.03% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.9	65	0.0170	1.16		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
5.1	60	0.0380	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
4.3	205	0.0130	0.80		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	30	0.0500	1.12		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
10.7	360	Total			

Summary for Subcatchment 6S: Parking/Drive

Runoff = 4.42 cfs @ 12.08 hrs, Volume= 0.325 af, Depth> 4.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

	Area (sf)	CN	Description
*	23,890	98	Paved
	12,230	74	>75% Grass cover, Good, HSG C
	1,750	70	Woods, Good, HSG C
	37,870	89	Weighted Average
	13,980		36.92% Pervious Area
	23,890		63.08% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.3	40	0.0500	0.20		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
0.6	45	0.0250	1.26		Sheet Flow, Smooth surfaces n= 0.011 P2= 3.10"
1.4	20	0.1000	0.23		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
5.3	105	Total			

Presumpscot ES Post-Development

Type III 24-hr 25 Year Rainfall=5.80"

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Summary for Subcatchment 7S: New Building

Runoff = 2.16 cfs @ 12.06 hrs, Volume= 0.165 af, Depth> 5.49"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

Area (sf)	CN	Description
* 15,750	98	Roof
15,750		100.00% Impervious Area

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

Summary for Subcatchment 8S: New Pavement

Runoff = 0.87 cfs @ 12.03 hrs, Volume= 0.062 af, Depth> 5.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs
Type III 24-hr 25 Year Rainfall=5.80"

Area (sf)	CN	Description
* 5,480	98	Paved
800	74	>75% Grass cover, Good, HSG C
6,280	95	Weighted Average
800		12.74% Pervious Area
5,480		87.26% Impervious Area

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

Summary for Reach 1R: WAP-5

Inflow Area = 0.869 ac, 63.08% Impervious, Inflow Depth > 4.49" for 25 Year event

Inflow = 4.42 cfs @ 12.08 hrs, Volume= 0.325 af

Outflow = 4.42 cfs @ 12.08 hrs, Volume= 0.325 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 2R: WAP-2

Inflow Area = 0.848 ac, 28.03% Impervious, Inflow Depth > 3.45" for 25 Year event

Inflow = 3.27 cfs @ 12.11 hrs, Volume= 0.244 af

Outflow = 3.27 cfs @ 12.11 hrs, Volume= 0.244 af, Atten= 0%, Lag= 0.0 min

Presumpscot ES Post-Development

Type III 24-hr 25 Year Rainfall=5.80"

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Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 3R: WAP-3

Inflow Area = 0.548 ac, 12.07% Impervious, Inflow Depth > 2.96" for 25 Year event
 Inflow = 1.32 cfs @ 12.27 hrs, Volume= 0.135 af
 Outflow = 1.32 cfs @ 12.27 hrs, Volume= 0.135 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Reach 4R: WAP-4

Inflow Area = 2.432 ac, 23.23% Impervious, Inflow Depth > 2.55" for 25 Year event
 Inflow = 6.37 cfs @ 12.17 hrs, Volume= 0.517 af
 Outflow = 6.37 cfs @ 12.17 hrs, Volume= 0.517 af, Atten= 0%, Lag= 0.0 min

Routing by Stor-Ind+Trans method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Summary for Pond 1P: WAP-1

Inflow Area = 1.527 ac, 71.42% Impervious, Inflow Depth > 4.65" for 25 Year event
 Inflow = 5.44 cfs @ 12.07 hrs, Volume= 0.592 af
 Outflow = 5.35 cfs @ 12.08 hrs, Volume= 0.592 af, Atten= 2%, Lag= 0.6 min
 Primary = 5.35 cfs @ 12.08 hrs, Volume= 0.592 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs

Peak Elev= 29.84' @ 12.08 hrs Surf.Area= 13 sf Storage= 38 cf

Plug-Flow detention time= 0.2 min calculated for 0.592 af (100% of inflow)

Center-of-Mass det. time= 0.1 min (772.3 - 772.2)

Volume	Invert	Avail.Storage	Storage Description
#1	26.90'	54 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
26.90	13	0	0
30.85	13	51	51
31.00	20	2	54

Device	Routing	Invert	Outlet Devices
#1	Primary	26.90'	12.0" Round Culvert L= 290.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 26.90' / 23.90' S= 0.0103 ' / Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

Primary OutFlow Max=5.27 cfs @ 12.08 hrs HW=29.72' (Free Discharge)

↑1=Culvert (Barrel Controls 5.27 cfs @ 6.72 fps)

Presumpscot ES Post-Development

Type III 24-hr 25 Year Rainfall=5.80"

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Summary for Pond 2P: Subsurface Filter

Inflow Area = 0.506 ac, 96.37% Impervious, Inflow Depth > 5.40" for 25 Year event
 Inflow = 3.00 cfs @ 12.05 hrs, Volume= 0.227 af
 Outflow = 2.21 cfs @ 12.12 hrs, Volume= 0.225 af, Atten= 26%, Lag= 3.9 min
 Discarded = 0.27 cfs @ 12.05 hrs, Volume= 0.184 af
 Primary = 1.94 cfs @ 12.12 hrs, Volume= 0.041 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs / 3
 Peak Elev= 35.58' @ 12.12 hrs Surf.Area= 4,898 sf Storage= 2,393 cf

Plug-Flow detention time= 76.3 min calculated for 0.224 af (99% of inflow)
 Center-of-Mass det. time= 69.8 min (813.2 - 743.3)

Volume	Invert	Avail.Storage	Storage Description
#1	33.50'	117 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
#2	33.00'	325 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			812 cf Overall x 40.0% Voids
#3	33.50'	1,689 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			2,111 cf Overall x 80.0% Voids
#4	34.80'	325 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
			812 cf Overall x 40.0% Voids
2,456 cf			Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.50	26	0	0
38.00	26	117	117

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.00	1,624	0	0
33.50	1,624	812	812

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
33.50	1,624	0	0
34.80	1,624	2,111	2,111

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
34.80	1,624	0	0
35.30	1,624	812	812

Device	Routing	Invert	Outlet Devices
#1	Discarded	33.00'	2.400 in/hr Exfiltration over Surface area
#2	Primary	34.80'	12.0" Round Culvert L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 34.80' / 33.00' S= 0.0900 ' / Cc= 0.900 n= 0.010, Flow Area= 0.79 sf

Presumpscot ES Post-Development

Type III 24-hr 25 Year Rainfall=5.80"

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Discarded OutFlow Max=0.27 cfs @ 12.05 hrs HW=35.10' (Free Discharge)↑**1=Exfiltration** (Exfiltration Controls 0.27 cfs)**Primary OutFlow** Max=1.74 cfs @ 12.12 hrs HW=35.52' (Free Discharge)↑**2=Culvert** (Inlet Controls 1.74 cfs @ 2.89 fps)**Summary for Pond 3P: CB and storm drain**

Inflow Area = 0.506 ac, 96.37% Impervious, Inflow Depth = 0.97" for 25 Year event
 Inflow = 1.94 cfs @ 12.12 hrs, Volume= 0.041 af
 Outflow = 0.91 cfs @ 12.27 hrs, Volume= 0.041 af, Atten= 53%, Lag= 9.1 min
 Primary = 0.91 cfs @ 12.27 hrs, Volume= 0.041 af

Routing by Stor-Ind method, Time Span= 2.00-23.00 hrs, dt= 0.05 hrs / 2

Peak Elev= 35.69' @ 12.27 hrs Surf.Area= 26 sf Storage= 494 cf

Plug-Flow detention time= 9.2 min calculated for 0.041 af (100% of inflow)

Center-of-Mass det. time= 9.0 min (746.0 - 737.0)

Volume	Invert	Avail.Storage	Storage Description
#1	29.10'	90 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
#2	29.10'	344 cf	15.0" Round Pipe Storage L= 280.0' S= 0.0050 '/'
#3	30.70'	92 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
		526 cf	Total Available Storage

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
29.10	13	0	0
36.00	13	90	90

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
30.70	13	0	0
37.80	13	92	92

Device	Routing	Invert	Outlet Devices
#1	Primary	29.10'	3.7" Vert. Orifice/Grate C= 0.600

Primary OutFlow Max=0.91 cfs @ 12.27 hrs HW=35.61' (Free Discharge)↑**1=Orifice/Grate** (Orifice Controls 0.91 cfs @ 12.14 fps)



16. CONSISTENCY WITH CITY MASTER PLANS

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

- Expanded development at the Presumpscot Elementary School is accomplishing initiatives of 'Portland's Plan 2030' for educational enhancement. The 'Buildings for Our Future' report of 2013 contained recommendations for reconstruction and renovation of the City's elementary schools. The Presumpscot Elementary School is one of several that will be accomplishing these goals.
- No off-site infrastructure development is proposed.

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17. PUBLIC SAFETY AND FIRE PREVENTION

Public Safety and Fire Prevention – (14-526 (c))

- The renovated school discourages crime by the design of the new front entry Administration addition, which places windows for full visibility of staff to observe those seeking to enter the building. Doors will be operated by the attending staff person to control access as appropriate. The new front entry will be well lit by building-mounted exterior lights for a welcoming safe front area. Building-mounted exterior lights will provide light around the building to prevent dark hiding places. Throughout the site, landscaping will be primarily deciduous trees and shrubs to minimize dense evergreen hiding areas. Evergreens that may be selected will be low-growing in form and used in any disturbed areas with lower sunlight conditions.
- Access to the school building by emergency vehicles, including fire trucks, is maintained by the renovated site design to function the same as current access, and provide access around all four sides of the building. Relocated fire lanes are at least 16' wide. The fire truck template, furnished by the City Fire Department, has been placed on the site plan by the Autoturn /Vehicle Tracking computer program at the revised drive. This shows that a fire truck can access the south side of the school and drive around counter-clockwise to exit the north side of the school yard. See the attached Autoturn sketch FTT-1, that shows the drives and curves are sized appropriately for the larger fire trucks.
- The new building additions and renovations, together with the renovated site, have been designed consistent with Public safety standards of Technical Manual, Section 3. Pedestrian movements are improved by providing accessible routes and sidewalks for ADA access to the school's renovated front entry.
- Code Summary – attached Fire Department Checklist.



August 31, 2020

**Portland Fire Department
Site Review
Fire Department Checklist**

1. *Name of Applicant:*
Steven Stilphen
Portland Public Schools
353 Cumberland Avenue
Portland, ME 04101
207-842-5315
2. *Name of Architect:*
Lisa Sawin, AIA
Harriman
46 Harriman Drive
Auburn, Maine 04210
207-784-5162
3. *Proposed Use of Structure:*
Education
4. *Square footage of proposed structure (total and per story):*
One-Story Additions = 17,910 SF; Existing building – One story = 25,400 SF;
Total Ground Floor= 43,310 SF
Total with Mech. Mezznine (1390 SF) = 44,700 SF
5. *Elevation of Structures*
See A20.1, A20.2, A20.3, A20.4 Exterior Elevations
6. *Proposed Fire Protection of All Structures*
Construction: NFPA II (000), IBC 2B
Addressable Fire Alarm System (New Additions)
Sprinkled in accordance with NFPA 101 9.7/NFPA 13 (New Additions)



August 31, 2020

7. *Code Summary (NFPA 1)*

Chapter 6: Use and Classification, See above for Proposed Use of Structure

Chapter 10: General Safety Requirements

10.1.2 Building designed to NPFA 101 2018 with City of Portland Amendment (10-7-13) for the above listed occupancy uses

10.18.3.2 18" min clearance from sprinkler deflector to obstructions

Chapter 11: Building Services

11.1.2.1 Building designed to NFPA 70 NEC

11.2.1 Building designed to NFPA 90A, NFPA 90B

11.3 Single story building does not have an elevator

Chapter 12: Features of Fire Protection

12.2 Building designed to NPFA 101 2018 with City of Portland Amendment (10-7-13) for the above listed occupancy uses. Applicable section of this code (NFPA 1) will be addressed by compliance with NFPA 101.

Chapter 13: Fire Protection Systems

13.1 Building plans will be submitted to the City of Portland for review and approval with the building permit application.

Chapter 14: Means of Egress

14.1 Building designed to NPFA 101 2018 and Maine Uniform Building and Energy Code (MUBEC). Respective code summary will be provided with the building permit application.

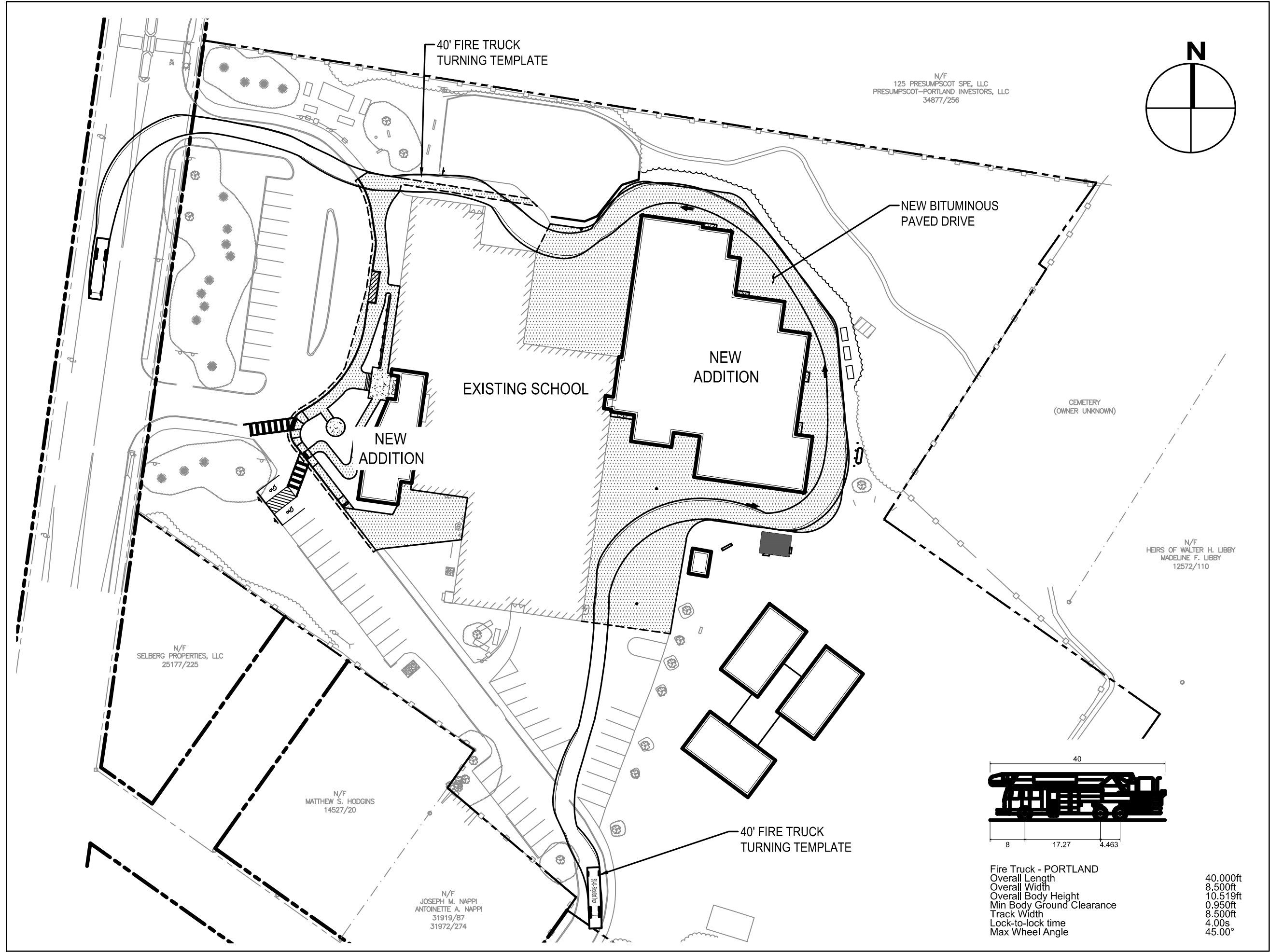
Chapter 16: Safeguarding Construction, Alteration, and Demolition Operations

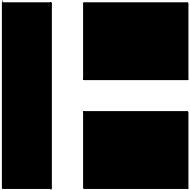
16.1.1 General Contractor for the project will contact the City of Portland Fire Department to coordinate necessary requirements under this Chapter prior to construction.

Chapter 18 Fire Department Access and Water Supply

18.1.3 Plans

Knox Box will be provided at the building entrance. See site plans for access drive and water supply.





HARRIMAN

PRESUMPCOT
ELEMENTARY SCHOOL

PORTLAND, MAINE

HA Project No.	19151
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AUGUST 31, 2020

Rev Date	Revision Description

PRELIMINARY
NOT FOR
CONSTRUCTION

0 30 60 120
(1 inch = 60 feet)

PA / PE:	Drw By:
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FIRE TRUCK
TURNING PLAN

FTT-1

18. PUBLIC UTILITIES AVAILABILITY

Availability and Adequacy of Public Utilities – (14-526 (c) 3)

- Electrical service to the new Cafeteria addition will be extended from the overhead lines on the southwest side of the building, to a new transformer located on the east side of the new addition. An extension of the overhead lines will be made in the parking area, then the electrical lines across the playfield to the new transformer will be underground.
- Existing and proposed utilities connections to the school building are shown on drawing C40.1. The existing sanitary sewer connection will remain in-place to the existing school building. One new sanitary sewer connection will be made to the new Cafeteria building addition, around the north end of the existing building. The existing steam heating lines will remain in-place, to service the new Cafeteria addition. The domestic water line fed from Presumpscot Street will remain in-place. A new 6" fire-suppression water line will be extended across the site from the main in Presumpscot Street to connect with the existing building. As noted above, electrical service will be extended around the south side of the building to a new transformer located on the east side of the new Cafeteria building addition. Communication lines will be extended to the new additions within the existing building.
- Proposed sewer line connection is being made to the existing on-site sewer service line, and no new connections to sewer mains in the public way are proposed.
- Solid waste will be collected, stored, and disposed as it is currently. The trash dumpster located in the service yard on the south side of the school will be moved slightly to a new concrete pad and chain-link fence enclosure. The dumpster will be screened with privacy inserts in the chain-link fence. Access to the service yard and dumpster will be the same as existing.
- Communications with the public utility agencies are included. The enclosed letters of request have been sent to the Portland Water District and the City Public Works Department for water and sewer coordination. The attached Water District table was requested and returned to the Water District.



September 4, 2020

Chris Branch cbranch@portlandmaine.gov
Portland Public Works
212 Canco Road, Suite B
Portland, ME 04103

Re: Presumpscot Elementary School
Additions and Renovations
Project No. 19151
Capacity Letter Request

Dear Chris:

We are assisting the Portland Public Schools with the design of additions and renovations of the Presumpscot Elementary School at 69 Presumpscot Street. The additions will consist of a 15,750 sq.ft. Cafeteria and Classrooms single-story wing on the east side of the existing school; and a 2,290 sq.ft. administrative single-story addition to the front entry (west side) of the school. These building additions will enhance the daily experience for the students but will not increase the population of students or staff at the school.

Domestic water will continue to be served by the existing water line from Presumpscot Street. The current building occupants are approximately 275 students and 42 staff. Table 4C, Design Flows, of the Maine Subsurface Wastewater Disposal Rules, latest edition, shows daily flow for elementary school students of 13 gallons/day for a school with a cafeteria; and staff of 12 gallons/day. The gymnasium space has no shower facilities. The estimated daily water use for the renovated school is: 275 (13 gpd) + 42 (12 gpd) = 4,079 GPD.

An existing 8" diameter sewer line apparently carries sanitary flow from the building to the sewer main on Presumpscot Street. None of the new building addition roof drains will connect to any sanitary sewer line but will drain to the new on-site subsurface stormwater treatment system, with on-site stormwater discharge. A new 4" diameter sanitary sewer service from the new building addition to the east will extend around the north end of the existing building to connect into the existing 8" on-site sewer.

For inclusion in the Planning Board site application, please send me a letter stating the adequacy of the wastewater system to continue supplying the needs of the school. Please let me know if you have other concerns or suggestions that we should know about.

Thank you very much.

Sincerely,
Harriman

Frank L. Crabtree, P.E., LEED AP BD+C
Associate
fcrabtree@harriman.com

AUBURN

BOSTON

PORTLAND

PORTSMOUTH

harriman.com

cc: Steven Stilphen (stilps@portlandschools.org)



August 25, 2020

Heather Smith hsmith@pwd.org
MEANS Group
Portland Water District
225 Douglass Street
PO Box 3553
Portland, ME 04104-3553

Re: Presumpscot Elementary School
Additions and Renovations
Project No. 19151
Capacity Letter Request

Dear Heather:

We are assisting the Portland Public Schools with the design of additions and renovations to the Presumpscot Elementary School at 69 Presumpscot Street. The additions will consist of a 15,750 sq.ft. Cafeteria and Classrooms single-story wing on the east side of the existing school; and a 2,290 sq.ft. administrative single-story addition to the front entry (west side) of the school. These building additions will enhance the learning experience for the students, but will not increase the population of students or staff at the school.

Domestic water will continue to be served by the existing water line from Presumpscot Street. The current building occupants are approximately 275 students and 42 staff. Table 4C, Design Flows, of the Maine Subsurface Wastewater Disposal Rules, latest edition, shows daily flow for elementary school students of 13 gallons/day for a school with a cafeteria; and staff of 12 gallons/day. The gymnasium space has no shower facilities. The estimated daily water use for the renovated school is: 275 (13 gpd) + 42 (12 gpd) = 4,079 GPD.

Please send me a letter stating the adequacy of the water system to continue supplying the needs of the school, to include in a Planning Board site application.

Thank you very much.

Sincerely,
Harriman

Frank L. Crabtree, P.E., LEED AP BD+C
Associate
fcrabtree@harriman.com

cc: Steven Stilphen (stilps@portlandschools.org)

AUBURN

BOSTON

PORTLAND

PORTSMOUTH

harriman.com

Peak Flow Based on Fixture Count

Adapted from 2009 Maine State Internal Plumbing Code

Customer
Street Address
City

Portland Public Schools
69 Presumpscot Street
Portland

Fixture	Fixture Value 60 psi		No. of Fixtures		Fixture Value
Bathtub	4	x		=	0
Bidet	1	x		=	0
Dental Unit	1	x		=	0
Drinking Fountain - Public	0.5	x	16	=	8
Kitchen Sink	1.5	x		=	0
Bathroom Sink	1	x	18	=	18
Showerhead (Shower Only)	2	x	1	=	2
Service Sink	3	x	1	=	3
Toilet -Flushometer(high pressure)	5	x	24	=	120
-Tank Type	2.5	x		=	0
Urinal -Flushometer Valve	5	x	4	=	20
-Tank Type	2	x		=	0
Wash Sink (Each Set of Faucets)	2	x	6	=	12
Dishwasher	1.5	x		=	0
Washing Machine	4	x	1	=	4
Hose (outdoor spigot) <3/4 in.	2.5	x	4	=	10

Combined Fixture Value Total

197

Customer Peak Demand From Fig. 4-2 or 4-3
Pressure Factor From Table 4-1

Fire Sprinkler System(Yes/No)?

Yes

Irrigation(Yes/No)?

No

If yes, gpm required by
irrigation designer:

0

Total Fixed Demand (Peak Flow)

0

**Customer only needs to complete
the cells highlighted in blue**

19a. MASSING, VENTILATION, AND WIND IMPACT

Massing, Ventilations and Wind Impact – (14-526 (d) 1)

- The size and height of the new Cafeteria/Classroom building addition is typical for a single-story elementary school, and will not cause health or safety problems from changes in ventilation or wind effects on nearby structures. The building addition at 24' height and a setback of 65' from the north property line is within the zoning dimensional requirements.
- The existing Presumpscot Elementary School heating system is dual fuel, using either #2 oil or natural gas, as they choose. The new building additions will be served by a hot water heat exchanger using steam from the existing boiler, with outdoor air heat recovery units, finned tube radiation, and miscellaneous other small hot water heating units. No additional fuel-burning equipment will be installed in the school.
- Proposed additional ventilation units are an air-conditioning condensing unit and an air handler on the new Administration building roof. The units are approximately 120 ft. from the south property line. The air handler is approximately 4.5' tall, and the calculated maximum sound level from the air handler at the property line is only 40 decibels. The condensing unit on the same new Administration addition is 100 ft. from the south property line. It is approximately 6' tall, and its calculated sound level at the property line is only 21 decibels. Other ventilating fans and louvers located on the roof or building walls have minimal noise from the air they are venting. These air-handling fans operate primarily during the daytime, when the building spaces are occupied.

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19b. SNOW AND ICE LOADING

Snow and Ice Loading – (14-526 (d) 3)

- The Presumpscot Elementary School building additions have flat roofs that do not shed rainwater, snow, or ice to the ground. The roof structures are designed for the snow/ice loadings. The building design therefore prevents ice or snow from falling off the roof onto adjacent public ways or properties.

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20. EXTERIOR LIGHTING

Exterior Lighting – (14-526 (d) 6)

- No new site lighting poles are proposed for this Presumpscot School building addition project. The school doorways will be lit with wall-mounted lights or canopy- mounted lights for security. Attached are light fixture catalogue sheets for the selected building-mounted exterior light fixtures.
- There are no lights proposed in any street right-of-way.

JOB _____ TYPE _____

NOTES _____ APPROVALS _____

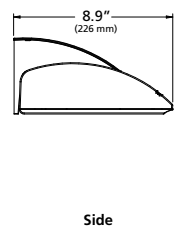
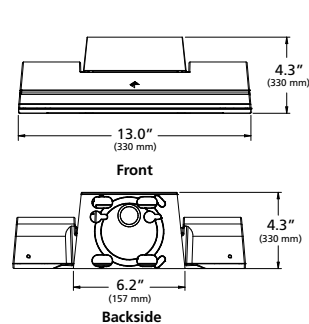
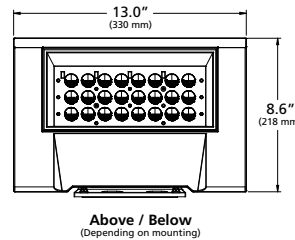
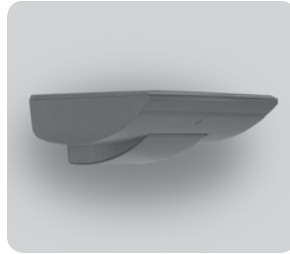
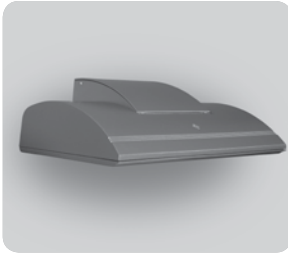
FEATURES

- -5° to +10° tilt adjustment
- High performance optics deliver up to 8,500 lumens
- up or down mountable without modification
- Diffused lens option
- Programmable occupancy sensor (dimming)
- NX and SiteSync wireless controls
- Up to 130 lumens per watt

Certifications



SPECIFICATIONS



Weight: 20 lbs

ORDERING CODE

Fixture	Mounting	Source	Wattage	Light Engine	Distribution	Voltage	Fixture Finish
WDS Wall Director Small	D Down U ¹ Up	24L 24 LEDs	30 30 Watts 40 40 Watts 60 60 Watts 75 75 Watts	3K7 3000K/70CRI 3K8 3000K/80CRI 4K7 4000K/70CRI 4K8 4000K/80CRI 5K7 5000K/70CRI	1 Type I 2 Type II 3 Type III 4W Type IV Wide 4F Type IV Forward WG ² Wall Graze SP Spot/Column FTD ² Forward Throw Diffuse WTD ² Wide Throw Diffuse	UNV 120-277V 347 ³ 347V 480 ³ 480V	BL Black DB Dark Bronze GT Graphite LG Light Gray PS Platinum Silver TT Titanium WH White CC Custom Color, consult representative
Control Options		Options		Accessories			
PC Button Photocell SCP-8F Programmable Occ. Sensor (<9' height) SCP-20F Programmable Occ. Sensor (9' - 20' height) SWP ⁴ SiteSync Wireless Pre-Commission NXWE ⁵ NX Wireless Enabled		EM ⁴ Internal Emergency Battery Backup SF Single Fuse & Fuse holder DF Double Fuse & Fuse holder		SCPREMOTE SCP configuration tool SWUSB SiteSync Software on USB SWTAB SiteSync Windows® Tablet SWBRG SiteSync Software Bridge Node			

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¹ Not available with EM option or with SCP & SWPM sensor options.
² WG, FTD, and WTD come with a diffused lens.
³ 60 and 75 watt versions only
⁴ Universal voltage only (120-277), not available with PC option.
⁵ 120-347V only

LUMINAIRE PERFORMANCE

LED #	Nominal Lumen Package	Nominal Wattage	Lens Options	Distribution	3000K					4000K					5000K				
					Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w	Lumen	BUG Rating			lm/w
						B	U	G			B	U	G			B	U	G	
24L	3,000	29	Clear Lens	1	3433	1	0	0	119	3519	1	0	0	122	3560	1	0	0	123
				2	3351	1	0	1	116	3436	1	0	1	119	3475	1	0	1	120
				3	3340	1	0	1	116	3424	1	0	1	119	3463	1	0	1	120
				4F	3343	1	0	1	116	3427	1	0	1	119	3466	1	0	1	120
				4W	3172	1	0	1	110	3252	1	0	1	113	3289	1	0	1	114
				SP	3600	3	0	0	125	3691	3	0	0	128	3733	3	0	0	129
			Diffuse Lens	WG	3372	2	0	1	117	3456	2	0	1	120	3496	2	0	1	121
				FTD	2855	1	0	1	99	2927	1	0	1	101	2960	1	0	1	103
				WTD	3151	1	0	1	109	3230	1	0	1	112	3267	1	0	1	113
	4,500	42	Clear Lens	1	4593	1	0	0	111	4708	1	0	0	113	4762	1	0	0	115
				2	4484	1	0	1	108	4596	1	0	1	111	4649	1	0	1	112
				3	4468	1	0	1	108	4581	1	0	1	110	4633	1	0	1	112
				4F	4472	1	0	1	108	4585	1	0	1	110	4637	1	0	1	112
				4W	4244	1	0	1	102	4350	1	0	1	105	4400	1	0	1	106
				SP	4817	3	0	0	116	4938	3	0	0	119	4994	3	0	0	120
			Diffuse Lens	WG	4511	2	0	1	109	4624	2	0	1	111	4677	2	0	1	113
				FTD	3819	1	0	1	92	3915	1	0	1	94	3960	1	0	1	95
				WTD	4215	1	0	1	102	4321	1	0	1	104	4371	1	0	1	105
	6,000	59	Clear Lens	1	6333	1	0	1	108	6492	1	0	1	111	6566	1	0	1	112
				2	6182	1	0	1	106	6338	1	0	1	108	6410	1	0	1	110
				3	6161	1	0	2	105	6316	1	0	2	108	6388	1	0	2	109
				4F	6166	1	0	2	105	6321	1	0	2	108	6393	1	0	2	109
				4W	5851	1	0	2	100	5998	1	0	2	103	6067	1	0	2	104
				SP	6641	4	0	0	114	6808	4	0	0	116	6886	4	0	0	118
			Diffuse Lens	WG	6219	3	0	1	106	6376	3	0	1	109	6449	3	0	1	110
				FTD	5266	1	0	1	90	5398	2	0	1	92	5460	2	0	1	93
				WTD	5812	1	0	1	99	5958	1	0	1	102	6026	1	0	1	103
	7,500	74	Clear Lens	1	7879	1	0	1	106	8077	1	0	1	109	8170	1	0	1	110
				2	7692	1	0	1	104	7885	1	0	1	107	7975	1	0	2	108
				3	7665	1	0	2	104	7858	1	0	2	106	7948	1	0	2	107
				4F	7672	1	0	2	104	7865	1	0	2	106	7955	1	0	2	107
				4W	7280	1	0	2	98	7463	1	0	2	101	7548	1	0	2	102
				SP	8263	4	0	0	112	8471	4	0	0	114	8567	4	0	0	116
			Diffuse Lens	WG	7738	3	0	1	105	7933	3	0	1	107	8023	3	0	1	108
				FTD	6552	2	0	1	89	6717	2	0	1	91	6793	2	0	2	92
				WTD	7231	2	0	1	98	7413	2	0	1	100	7498	2	0	1	101

Electrical Characteristics											Dimming					
System Watts	Current	Line Voltage		Amps AC						Min. Power Factor	Max THD (%)	Dimming Range	Source current out		Absolute voltage	
		VAC	Hz	120	208	240	277	347	480				Min	Max	Min	Max
29	350mA	120-480	50/60	0.24	0.14	0.12	0.10	0.08	0.06	>0.9	20	10% to 100%	0mA	1mA	0V	10V
42	500mA			0.38	0.22	0.19	0.16	0.13	0.09							
59	725mA			0.48	0.27	0.24	0.21	0.16	0.12							
74	925mA			0.67	0.39	0.34	0.29	0.23	0.17							

TM-21 LIFETIME CALCULATION

Projected Lumen Maintenance (25°C / 77°F)						
HOURS	0	25,000	36,000	50,000	100,000	Reported L70
Projected Lumen Maintenance	100%	97%	95%	93%	86%	> 60,000 hrs

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SPECIFICATIONS

Housing

- Optical housing is a one-piece, die-cast low copper (<0.6%) aluminum alloy with integral heat sink. The housing rotates against mounting arm housing to provide -5° to 10° of adjustment with degree markers cast into the housing. At 0 adjustment, lens is totally concealed from view above horizontal with fixture mounted in the downward position.
- Mounting arm housing is one-piece die-cast, low copper (<0.6%) aluminum alloy with provisions for tilt mechanism. Mounting arm fastens to the mounting plate with keyhole slots freeing both hands for securing and wiring. One stainless steel socket-head screw on the tilt mechanism frees the optical housing to rotate for aiming. Tightening the screws locks the housing and lens frame together with sealing provided by a silicone gasket. For visual aiming, adjustment may be accomplished with the fixture on.
- Lens Frame is a one-piece, die-cast low copper (<0.6%) aluminum alloy with integral cooling fins to dissipate driver thermal.
- Luminaire housing shall be free of any visible heat fins, hardware or fasteners.
- Bracketry and hardware shall be stainless steel.

Optical Array

- LEDs shall be mounted to a metal printed circuit board assembly (MCPCB).
- Optical lenses shall be clear injection molded PMMA acrylic.
- Secondary lens is impact resistant 1/8" tempered glass with anti-reflective coating.

Electronic Module

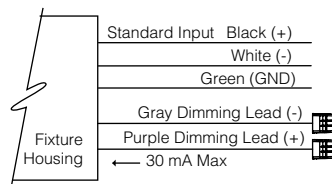
- Drivers shall be in direct contact with the die-cast aluminum lens frame across the entire surface area of the widest face for maximum thermal transfer.
- "Thermal Shield", secondary side, thermistor provides protection for the sustainable life of LED module and electronic components.
- Drivers shall have greater than a 0.9 power factor, less than 20% harmonic distortion, and be suitable for operation in -40°C to 40°C ambient environments
- Luminaires shall have integral surge protection that shall be U.L. recognized and have a surge current rating of 10,000 Amps using the industry standard 8/20uSec wave and surge rating of

372J. Surge protection device shall be wired in series.

- Drivers shall be U.L. recognized.
- Drivers shall not be compatible with current sourcing dimmers, consult factory for current list of known compatible dimming systems approved dimmers include Lutron Diva AVTV, Lutron Nova NFTV and NTFTV.

Dimming

- 10% to 100% dimming by the use of standard 0-10V interface driver.
- The thermal shield works in conjunction with the control system to assure that overheating will not harm the LEDs.
- The wiring harness is connected with the use of the Purple lead as the positive (+) and the Grey lead as the negative (-) to an available control signal (by others).



Specifications

- Luminaire shall be capable of operating at 100% brightness in a 40°C environment. Both driver and optical array shall have integral thermal protection that will dim the luminaire upon detection of temperatures in excess of 85°C.
- Luminaires not configured with a control system shall be provided with 0-10 purple and gray dimming leads.

Controls

- Optional universal voltage (120-277V) button photocontrol for dusk to dawn energy savings. Photocontrol is factory installed inside the housing with a fully gasketed sensor on the side wall. For multiple fixture mountings, one fixture is supplied with a photocell to operate the others.
- Occupancy Sensor shall be programmable and use passive infrared (PIR) sensing technology that reacts to changes in infrared energy (moving body heat) within the coverage area. Careful consideration must be given to obstructions that may block the sensor's line of sight.
- Factory default settings for SCP option shall be:
- High mode: 10V - Low mode: 1V - Ramp-up

rate: disabled - Fade-down rate: disabled - Photocell: Off - Sensitivity: Full - Time Delay: Fade to low: 5 minutes - Time Delay: Fade to off: 1 hour

- The SCP enables any wall mounted luminaire, in excess of 30 watts, to meet California Title 24 requirements with integral 10KA surge protection for added reliability and serviceability. For more detail: http://www.aal.net/products/sensor_control_programmable
- SiteSync™ wireless control system for reduction in energy and maintenance cost while optimizing light quality 24/7. See ordering information or visit www.hubbellighting.com/products/sitesync for more details.
- Hubbell Control Solutions' NX Distributed Intelligence™ lighting control platform utilizes a Distributed Network Architecture (DNA) that connects intelligent devices including luminaires, controllers, panels, occupancy sensors, photocells, wall switches and dimmers, creating a system with an unmatched level of reliability, scalability and simplicity

Options

- Integral battery backup provides emergency path of egress lighting for the required 90 minutes for 0°C ambient environments or -20°C with thermal jacket.

- Fusing:

SF for 120, 277 and 347 Line Volts

DF for 208, 240 and 480 Line Volts

High temperature fuse holders factory installed inside the fixture housing. Fuse is included.

Mounting and Installation

- JUNCTION BOX: Standard with steel, quick-mount junction box plate that mounts directly to 4" J-Box
- Mounting plate is stainless steel and features a one-piece EPDM gasket on back side of plate to firmly seal fixture to wall surface, forbidding entry of moisture and particulates.

Servicing

- Housing shall be able to hang freely in an open service position for inspection of primary wire connections. Once in service position, the housing shall be able to be removed for service by sliding the assembly to the left (for down mounting) or to the right (for up mounting) and disconnecting the wiring plugs.

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SPECIFICATIONS

- Driver assembly shall be mounted to a prewired internal tray with quick disconnects for removal. Fusing SF for 120, 277, and 347 line volts DF for 208, 240, and 480 line volts high temperature fuse holders factory installed inside the fixture housing. Fuse is included.

Finish:

- Luminaire finish shall consist of a five stage pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish.
- Luminaire finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.
- Standard colors include (BL) Black, (DB) Dark Bronze, (GT) Graphite, (LG) Light Gray, (PS) Platinum Silver, (TT) Titanium, (WH) White, and (CC) Custom Color (Include RAL#).

Certifications and Listings

- UL1598, UL 8750 and Canadian CSA Std. C22.2 no.250.
- IDA approved, down light only, 3000K and warmer CCTs only.
- 1.5G rated
- IP65 Compliant

CAUTION:

- Fixtures must be grounded in accordance with national, state and/or local electrical codes, Failure to do so may result in serious personal injury.

WARRANTY:

- For full warranty see <http://www.hubbellighting.com/resources/warranty>

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21. NOISE AND VIBRATION

Noise and Vibration – (14-526 (d) 7)

- The only exterior mechanical equipment being added to the Presumpscot School are an air-conditioning condensing unit and an air handler on the new Administration building roof. Catalogue specifications and sound data for the units are attached. The units are approximately 120 ft. from the south property line. The calculated maximum sound level from the air handler at the property line is only 40 decibels. The condensing unit on the same new Administration addition is 100 ft. from the south property line. Its calculated sound level at the property line is only 21 decibels. These noise levels at the nearest property line are quite low, and would be similar to general background noise levels.
- There is no new emergency generator for this school.

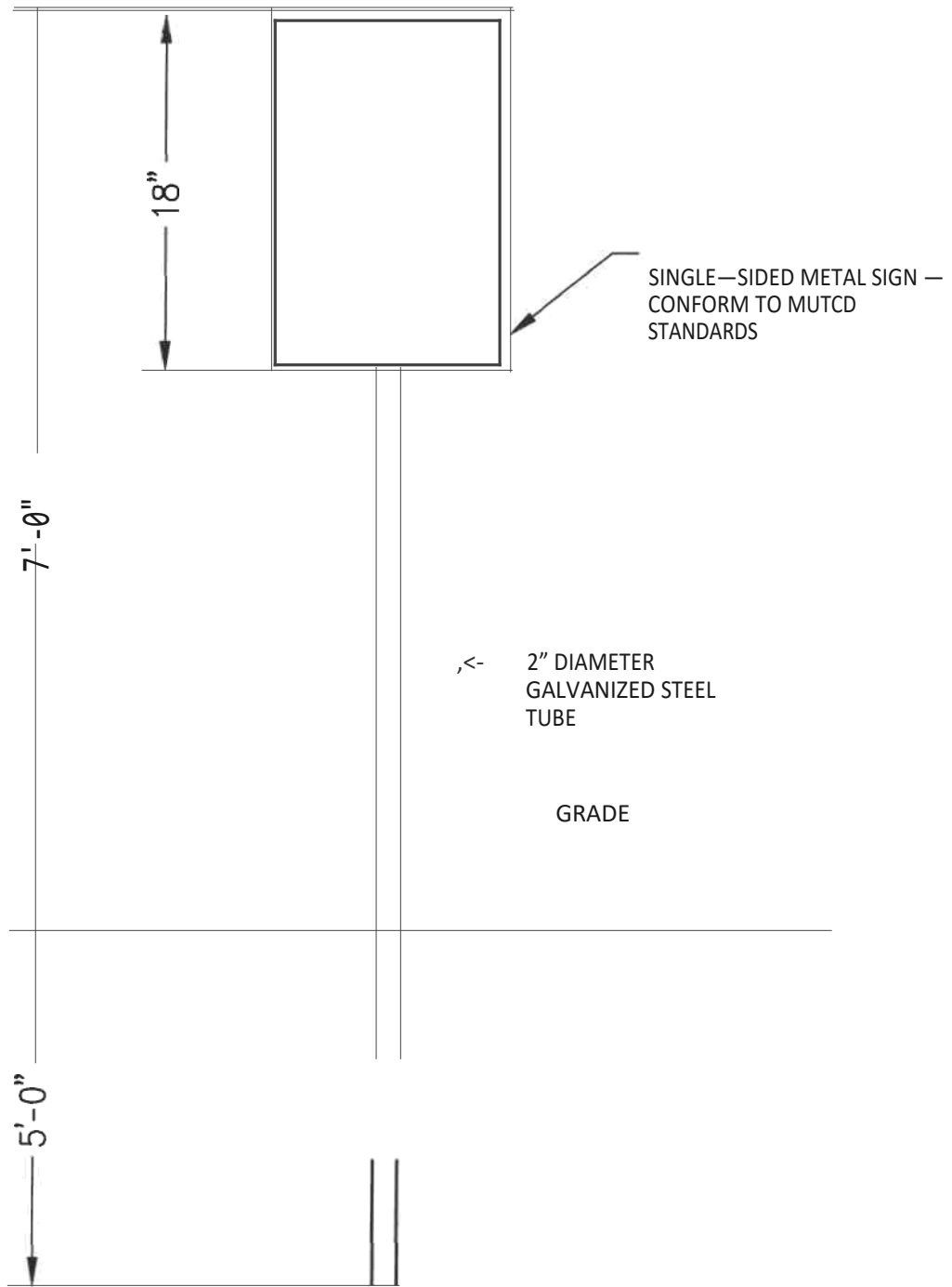
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22. SIGNAGE AND WAYFINDING

Signage and Wayfinding - (14-526 (d) 8)

- There are no new identification signs or monument signs proposed for the Presumpscot Elementary School.
- Any additional directional traffic control signs are shown on the Site Plan C00.1. Typical standard directional sign detail is attached.



TYPICAL

SIGN

NOT TO SCALE

B4

24. CONDITIONAL USE

Conditional Use Standards – (14-474)

- **Traffic:** The Presumpscot Elementary School building additions and renovations will provide a new cafeteria and classrooms, and will enhance the administrative spaces and the front entry to the school. No additional students or staff are anticipated. Therefore, no additional traffic is anticipated to be generated by this building project. Parking will remain unchanged. Relocation of the fire lane surrounding the building will result in a small increase in pavement.
- **Environmental Impacts:** The building additions and site renovations at the existing elementary school will not cause harmful conditions to the students, staff, or surrounding neighborhood.
 1. **Noise:** Two rooftop units will be located outdoors on the building roof. These units will more than 100' away from the nearest property line, and the sound levels measured at the nearest property line will be approximately 40 decibels, which is a minimal background noise level. See attachment 21.
 2. **Glare:** No new pole-mounted site lights will be added. The building-mounted site/security lighting will be shielded cut-off fixtures that will not produce glare at streets or property lines.
 3. **Dust:** During construction the contractor will control dust as specified on drawing C00.3. The completed reconstructed paved and grass surfaces will not produce dust.
 4. **Sewage Disposal:** The existing sanitary sewer will be used for the new school building additions. No on-site sewage disposal will occur.
 5. **Air Emissions:** The existing Presumpscot Elementary School receives its heat through a dual-fuel boiler using either #2 fuel-oil or natural gas. The new additions will utilize the existing heating system, so no additional fuel-burning equipment will be added to the elementary school.
 6. **Odor:** There are no activities or equipment at this renovated existing elementary school that will produce offensive odors.
 7. **Lighting:** No new site lighting poles are proposed for this Presumpscot School building addition project. The school doorways will be lit with wall-mounted lights or canopy-mounted lights.

8. Litter: None of the building additions or renovations will contribute litter to the project site.

- **Design and Operation:** The building additions and site renovation to the elementary school will operate the same as the existing school, and will not have substantially greater impact on surrounding properties. The Site Plan Level III attachments explain in detail how the proposed modifications have negligible impact to the neighborhood, and are consistent with the typical school development.
- **Zone Specific Criteria:** Residential Zone R5. Elementary Schools are noted as an institutional conditional use.

Additional Conditional Use Standards – (14-118(b))

- a. All expansion of the existing elementary school will be done on the same lot as the existing principal school.
- b. There are no residential uses on the existing school property.
- c. The proposed school expansion will not cause a combination of impacts regarding 'a' and 'b', above.
- d. The school additions are subject to site plan articles, which have been addressed and submitted under Level III Site Plan.
- e. The school additions are not 'community halls'.
- f. The school additions will not serve alcoholic beverages.
- g. The elementary school additions are not part of a college, university, or trade school; and the building height will be less than 55'.

PLANNING BOARD REPORT PORTLAND, MAINE

Conditional Use
Reiche Elementary School Addition & Renovations
Project CU-001407-2020
Portland Public Schools, Applicant



Submitted to: Portland Planning Board:
Public Hearing Date: May 11, 2021

Prepared by: Jimmy Dealaman, Planner
Date: May 7, 2021

I. INTRODUCTION

Portland Public Schools is seeking Conditional Use approval to expand the existing institutional use at 132 Brackett Street in order to facilitate the development of a new single-story, 670 square foot addition to the existing Reiche Elementary School located in the West End neighborhood.

The 5.3-acre parcel (Figure 1) is situated within the R-6 Residential Zone.

The proposed expansion of the existing institutional use (elementary school) in the R-6 zone requires a Conditional Use Permit to be reviewed by the Planning Board for compliance with the Conditional Use standards in Section 6.5.2 as well as the requirements of the R-6 Conditional Use standards in Section 6.5.6(F).

Pursuant to site plan review thresholds, a separate Level II Site Plan application (PL-001364-2020) is under review by Planning staff for conformance with the standards of Portland's site plan ordinance. Additionally, due to the project's location in the West End historic district, the Historic Preservation Board is concurrently conducting a review of the exterior design changes (HPBR-001560-2021).



Figure 1: Reiche Elementary School (highlighted)

Owner: City of Portland
Applicant: Portland Public Schools
Agent and Engineer: Frank Crabtree, Harriman
Landscape Architect: Howard Snyder, Harriman
Architect: Lisa Sawin, Mark Lee, Harriman
Surveyor: Nick Elliston, Titcomb Associates

II. REQUIRED REVIEWS

<i>Review</i>	<i>Applicable Standards</i>
New Structure Under 10, 000 SF	Level II Site Plan (Section 14.6)
Conditional Use (Institutional Use in R-6 zone)	Conditional Use in the R-6 zone (Section 6.5.6(F) & 6.5.2)

III. PROJECT DATA

Total area of the site (campus)	232,550 SF
Total Disturbed Area (development)	19,000 SF
Existing Zoning	R-6 Residential
Existing Use	Institutional (School)
Proposed Use	Institutional (School)

Longfellow Elementary School	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Impervious Surface Area	151,160 SF	149,360 SF	-1,800 SF
Building Floor Area	56,340 SF	57,010 SF	+670 SF
Estimated Cost of Project	\$15.75 million (construction budget), \$20.3 million (total project cost)		



Figure 2: Aerial View of Development Site Existing Conditions – Source: Google Earth

IV. BACKGROUND

The proposed project is part of Portland Public Schools’ “Building for Our Future”, which is an initiative to renovate four of Portland’s oldest elementary schools. In 2017, City voters approved a \$64 million Building for our Future Bond to renovate four elementary schools (Lyseth Elementary School, Longfellow Elementary School, Presumpscot Elementary School, and Reiche Elementary School). On March 9, 2021, the Planning Board approved the Longfellow Elementary School conditional use application (Application #: CU-001340-2020) to facilitate construction of a new addition and site work to the existing school. The Planning Board also approved the Lyseth Elementary School building additions and related site work on April 23, 2019 (Application #: PL-000481-2019) and the project is currently in the final stages of construction.

V. EXISTING CONDITIONS

Reiche Elementary School, constructed in 1972, currently has approximately 461 students and 68 staff. The existing two-story building contains 37 classrooms and instruction rooms. The existing building also contains a public community center that fronts on Clark Street and includes a pool, gymnasium, as well as auditorium and

cafeteria space. The school's primary entrance plaza fronts on Brackett Street, which is primarily a residential side street with a mix of commercial uses to the northwest. The existing Reiche School parcel includes a playfield and basketball court to the north. To the south is open green space, which surrounds a hard surface play area and playground. The site also contains two surface parking areas on either side of the building. The north parking lot is accessible from Brackett Street and contains 19 spaces, and the parking lot accessible from Clark Street contains 16 spaces.

The school is primarily accessible via an access drive bus loop on Brackett Street, which receives two buses daily as well as occasional supply deliveries. Clark Street also includes a widened parallel parking strip area that accommodates approximately 16 on-street parking spaces.

The surrounding area consists primarily of residential uses, with a mix of commercial uses to the north generally along Pine Street.

The current school hours of operation (due to COVID restrictions) are between 8:45 am and 1:25 pm, however the typical school day is between 9:00 am and 3:30 pm, which is anticipated to resume this fall. According to the applicant staff arrive before 8:00 am and typically leave at 4:00 pm.



Figure 3: Existing Conditions (Image from Front of Reiche Elementary School) – Source: Google Earth

VI. PROPOSED DEVELOPMENT

The proposal seeks to add a new single-story 670 square foot addition to the front of the existing elementary school as well as interior renovations to update the current facilities (Attachment A). The addition will consist of an approximately 510 square foot single-story conference/administrative office space adjacent to a new canopy and main entry vestibule within the existing building to improve security and provide an improved accessible entry point to the building. Also proposed is a new 160 square foot stairwell addition (Figure 4, 5).

The proposed site work also includes reconstructing the curbing, stairs, walkways and curb ramps primarily within the plaza space on Brackett Street. Currently, the front access doorway to the school on Brackett Street has an exterior walk with slopes that do not meet ADA accessibility guidelines. The applicant plans to reconstruct the pavements around the building in this area, as well as at the required egress doorways, in order to meet ADA standards. Other site improvements include a new eight (8) space bike rack, trellis, bench, relocated flagpole, gated outdoor classroom area, a reconfigured landscaped area, and wall-mounted or canopy mounting lights for security. The project also involves planting two new trees as well as perennials, groundcovers, and deciduous and evergreen shrubs at the building front.

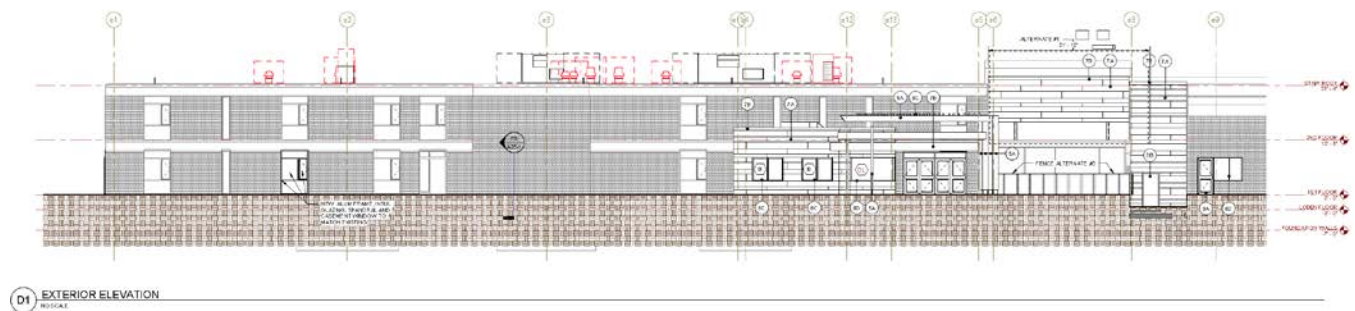


Figure 4: North Elevation Showing Proposed Addition

There are also three (3) temporary modular classroom units proposed to be placed in the play area to the east during construction, which is expected to begin in June of 2021 and end in the fall 2023. These will be removed at the end of the construction phase and the area will be restored to the existing condition. Each of these modular units will have wall-mounted lights at exterior doors for security. To access the modular units, the applicant has also provided a new temporary bituminous sidewalk, ramps, stairs, and a platform.

The level of student population and staff are not expected to increase as a result of these facility improvements.

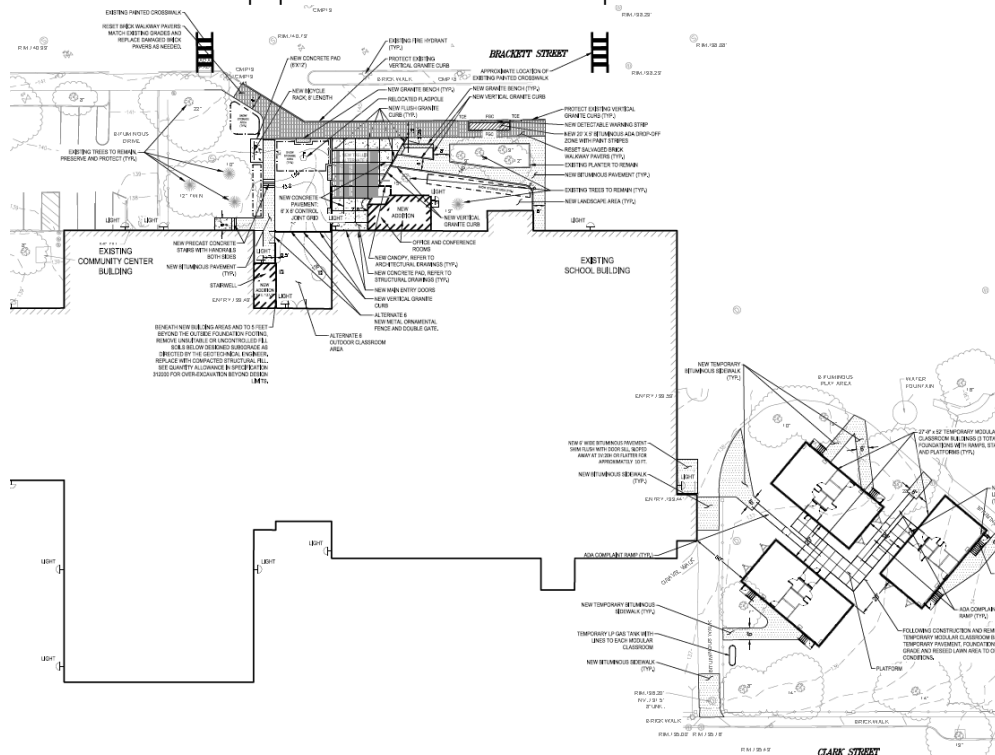


Figure 5: Site Plan

IV. RIGHT, TITLE AND INTEREST AND FINANCIAL/TECHNICAL CAPACITY

The owner of the property is the City of Portland. The applicant has provided a copy of quitclaim deed, recorded at the Cumberland County Registry of Deeds (Book 8844 Page 0327), which demonstrates their right, title and interest in the property (Attachment B).

The estimated cost of the construction is \$20.3 million. The applicant has submitted a Statement of Financial Capacity letter (Attachment C) from their director of budget and finance, as demonstration of their financial capacity.

The applicant's development team, Harriman, an architectural and engineering firm, has also submitted a statement speaking to their background in consulting services, resumes and relevant experience to complete the proposed development (Attachment D)

V. STAFF REVIEW

A. ZONING ASSESSMENT

The proposed institutional use (elementary school) is a conditional use in the R-6 zone and meets all of the R-6 dimensional requirements.

B. ZONE-SPECIFIC CONDITIONAL USE STANDARDS – SEC. 6.5.6(F)

Elementary schools are permitted in the R-6 zone as a conditional use, requiring review by the Planning Board. The applicant has submitted an analysis addressing how the proposal meets the R-6 Conditional Use Standards (Attachment E) and staff confirm that the project meets the requirements of the conditional use standards as follows:

Sec. 6.5.6 Supplemental use-specific conditional use standards:

In addition to the general conditional use standards, the following standards shall apply to specific conditional uses:

(F) Institutional uses (excluding preschool):

1. *The Planning Board shall be the review authority.*

Staff Comments: The application has been referred to the Planning Board as the reviewing authority.

2. *In the case of expansion of existing such uses onto land other than the lot on which the principal use is located, it shall be demonstrated that the proposed use cannot reasonably be accommodated on the existing site through more efficient utilization of land or buildings, and will not cause significant physical encroachment into established residential areas.*

Staff Comments: The proposal does not involve any expansion outside the existing school lot.

3. *The proposed use will not cause significant displacement or conversion of residential uses existing as of June 1, 1983, or thereafter.*

Staff Comments: The proposal does not involve any expansion outside of the existing school lot and does not displace or convert any residential uses.

4. *In the case of a use or use expansion which constitutes a combination of the above-listed uses with capacity for concurrent operations, the applicable minimum lot sizes shall be cumulative.*

Staff Comments: The only other use present at the site is a community center, which is considered an accessory use to the elementary school. No other principal use is present on the site, so this provision does not apply to the subject proposal. The elementary school use exceeds the minimum lot size requirements (30,000 square feet) for the school use and therefore complies with this standard.

Standards 5-8. **Staff Comments:** These provisions do not apply to the subject proposal.

C. GENERAL CONDITIONAL USE STANDARDS – SEC. 6.5.2

The following standards in Section 6.5.2 apply to all conditional uses:

Sec. 6.5.2 General conditional use standards:

The review authority shall, after review of the application, approve a conditional use upon a finding that the proposed conditional use, at the size and intensity contemplated at the proposed location, will not have substantially greater negative impacts than would normally occur from surrounding uses or other allowable uses in the same zone. The review authority shall find that this standard is satisfied if it finds that:

- A. 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.*

Staff comment: Based on the plans (Plans 1-18) and documents (Attachments A, E, G) the proposal is not expected to generate additional traffic as the applicant has stated that no additional students or staff are anticipated. Similarly, the hours of operation and number of parking spaces are not expected to change as a result of the project based on the fact that the upgrades seek to improve the existing facilities (Plan 16). The application package shows a current impervious area of 151,160 square feet and a proposed reduction in impervious area of 1,800 square feet.

Deliveries to the school occurs on the bus loop along Brackett Street and at a loading dock accessed via the staff parking lot to the north. The proposed project is not expected to increase deliveries to the site. During the construction period, deliveries and student drop-off/pick-up to the front bus loop will be temporarily relocated to the southwest side of the building along Clark Street.

As currently proposed, staff review found that this conditional use standard is sufficiently met due to anticipated traffic, hours of operation, expanse of pavement, and parking not being substantially greater or having a substantial impact on adjacent properties compared to its current use. Additional staff review comments are attached to this report indicating no concerns with the conditional use standards (Attachments 1, 2, 3).

- B. 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.*

Staff comment: The project is not expected to create unsanitary or harmful conditions from any of the above impact area categories. The applicant's Conditional Use analysis (Attachment E) provides that the impact of new HVAC systems noise is minimal, all new lighting will be shielded to prevent glare impact to pedestrians, there are adequate dust control measures shown in the plans, and there are no changes proposed to the existing air emissions, odor and sewage disposal systems of the site. Staff have found the proposal would not create unsanitary or harmful conditions.

- C. 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.*

Staff comment: The applicant has stated that the project will operate as a component of the existing school, and will not have a substantially greater impact on the surrounding properties (Attachment E). While there are a number of site improvements (See Section VI above for a summarized list of site improvements) proposed for the existing school, staff find that the proposal does not contribute to increasing the intensity of the existing school use and that the changes are all consistent with the existing function of the elementary school use which is allowed in this zone.

- D. 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.

Staff comment: Please see Section V.B. above for zone specific standards

VI. PUBLIC COMMENT

A notice of this workshop was sent to four hundred sixty-three (463) property owners within 500 feet and interested citizens, and appeared in the May 1st and 2nd, 2021 editions of the *Portland Press-Herald*. A Neighborhood Meeting is not required for this project. The Planning Department received one (1) public comment by the time of posting this report, which requested that the proposal expand the scope of work to include screening around the vehicle parking area on Brackett Street to minimize the impacts of parked vehicle headlights.

Additionally, in response to a question the Planning Board asked at the previous workshop held on April 27th, the applicant has shared that eight (8) percent of the construction budget is expected to be utilized on exterior improvements. As stated earlier in the report the construction budget was reported to be approximately \$15.75 million.

VII. STAFF RECOMMENDATION

Planning Department staff recommend that the Planning Board approve the proposed conditional use for the expansion of the existing school at 132 Brackett Street. Staff review finds the conditional use application meets all relevant standards.

VIII. PROPOSED MOTIONS

A. CONDITIONAL USE

On the basis of the application, plans, reports and other information submitted by the applicant, the findings and recommendations contained in the Planning Board Report for the public hearing on May 11, 2021 for application CU-001407-2020 relevant to Portland's Conditional Use Standards and other regulations, and the testimony presented at the Planning Board hearing:

The Planning Board **[finds/does not find]** that the proposed conditional use is in conformance with Sections 6.5.6(F) and 6.5.2 of the Land Use Code.

VIII. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Department of Public Works Comments (email dated 4.22.2021)
2. Consulting Traffic Engineer Comments (email dated 4.22.2021)
3. City Arborist Comments (email dated 4.7.2021)

APPLICANT'S SUBMITTAL

- A. Project Summary
- B. Right Title Interest
- C. Financial Capability
- D. Technical Capability
- E. Response to Conditional Use Sections
- F. Zoning Assessment
- G. Response to Staff Comment

PLANS

- Plan 1 SITE PLAN (updated on 4.14.2021)

Plan 2	SITE-NOTES
Plan 3	SITE-EROSION-CONTROL-NOTES
Plan 4	EXISTING-SITE-CONDITIONS-PLAN
Plan 5	SITE-GRADING-AND-EROSION-CONTROL-PLAN (updated on 4.14.2021)
Plan 6	SITE-UTILITY-PLAN (updated on 4.14.2021)
Plan 7	SITE-DETAILS 1
Plan 8	SITE-DETAILS 2
Plan 9	PLANTING-PLAN
Plan 10	PLANTING-DETAILS 1
Plan 11	PLANTING-DETAILS 2
Plan 12	FIRST-FLOOD-PLAN
Plan 13	EXTERIOR-ELEVATIONS 1
Plan 14	EXTERIOR-ELEVATIONS 2
Plan 15	EXISTING-CONDITIONS-SURVEY
Plan 16	CONSTRUCTION MANAGEMENT PLAN
Plan 17	PHOTOMETRICS PLAN

PUBLIC COMMENT

PC1 - Kim Roseberry 4-19-2021



Jimmy Dealaman <jdealaman@portlandmaine.gov>

132 Brackett Street - Review Comments

Mike Tremblay <mtremblay@portlandmaine.gov> Thu, Apr 22, 2021 at 8:23 AM
To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Jimmy,

Pertaining to the conditional use application, DPW finds that this project will not have substantial negative impacts than would normally occur at the school site.

The drop-off area on the Brackett Street side is proposed to consist of a patch of bituminous in an otherwise brick sidewalk. The sidewalk along the drop-off area is used as the public sidewalk along this side of Brackett Street, and thus must meet City material standards for sidewalks, which call for brick in this district.

Additionally, material changes in sidewalk material within the cross-section of a sidewalk can result in an uneven surface over time, as material settle differently. As such, brick should be retained at this location. DPW suggests that a different brick pattern or color be considered at this location to differentiate the drop-off zone, or simply designate this zone with signage.

Your comments on the CM plan look good. Nothing to add.

-Mike

Mike Tremblay, P.E.

Senior Engineer

Engineering Division

Department of Public Works

City of Portland, ME

mtremblay@portlandmaine.gov

P. 207.874.8881 F. 207.874.8852



[Quoted text hidden]



Jimmy Dealaman <jdealaman@portlandmaine.gov>

132 Brackett Street - Conditional Use Application

Tom Errico <thomas.errico@tylin.com>

Thu, Apr 22, 2021 at 7:25 AM

To: James Dealaman <jdealaman@portlandmaine.gov>

Cc: Michael Tremblay <mtremblay@portlandmaine.gov>

Jimmy – as it relates to the following standard, the project would not be expected to have a substantial impact on traffic and parking given no change in student population or staffing, or an increase in parking supply. If you need additional information, please let me know.

Thanks

Section 14-474

“a. 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; and”

Thomas A. Errico, PE

Senior Associate

Traffic Engineering Director

TYLIN INTERNATIONAL

12 Northbrook Drive

Falmouth, ME 04105

+1.207.781.4721 main

+1.207.347.4354 direct

+1.207.400.0719 mobile

thomas.errico@tylin.com

Visit us online at www.tylin.com

Twitter | Facebook | LinkedIn | Instagram



Jimmy Dealaman <jdealaman@portlandmaine.gov>

132 Brackett Street - Site Plan Landscaping Comments

Jeff Tarling <jst@portlandmaine.gov>

Wed, Apr 7, 2021 at 1:49 PM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Hi Jimmy -

This looks OK, Reiche is a smaller project.

Thanks for checking back with me !

Jeff

Jeff Tarling

City Arborist - City of Portland Maine

Parks, Recreation & Facilities Department

Forestry & Horticulture

212 Canco Road - Suite A

Portland, ME. 04103

(207) 808-5400

jst@portlandmaine.gov

[Quoted text hidden]



PROJECT SUMMARY

**REICHE ELEMENTARY SCHOOL
ADDITIONS AND RENOVATIONS
SITE PLAN LEVEL II REVIEW AND CONDITIONAL USE**

November 2020

Owner/Applicant:

**Portland Public Schools
353 Cumberland Avenue
contact: Steven Stilphen
stilps@portlandschools.org
874-8100**

Preparer/Architect:

**Harriman
46 Harriman Drive
Auburn, ME
Contact: Frank L. Crabtree, PE
fcrabtree@harriman.com
(207) 784-5100**

The purpose of the project is to transform the Reiche Elementary School into a 21st century center of learning, update the security and fire safety systems, and preserve the ‘neighborhood school’, ensuring the children stay connected to their local community. This project is intended to enhance the available facilities for the current student population. The Reiche School building additions will consist of approximately 510 sq.ft. single-story conference/administration addition on the north side of the existing school. Also nearby will be a small 160 sq.ft. stairwell addition. The additional building area totals 670 sq.ft. Together with the reconstructed impervious pavement in the area of the new building additions, the project will result in a net reduction of impervious area of 1,800 sq.ft.

The school is located on a 5.3-acre educational campus, including the community center, playfields and playgrounds. No additional students or staff are anticipated, due to these facility improvements. The existing two-story school has a ground coverage area of approximately 56,340 SF, and a total floor area of approximately 91,325 SF. The additions, as noted above, will consist of a new conference room and a new office. The total post-construction ground floor coverage will be 57,010 SF. These will be adjacent

to a new main entry vestibule within the existing building, to improve security and provide better accessible entry to the building. These building additions will enhance the learning experience for the students, but will not increase the population of students or staff at the school.

Paved drives, parking, and play areas surrounding the existing school will remain, where they are not disturbed by the construction of the new additions. Any paved areas that are disturbed will be fully reconstructed with new gravel base and bituminous pavement or other surface enhancement. The current 19 parking spaces in the parking lot north of the building will remain, including 2 ADA-accessible spaces. The current on-street parking on the Clark Street side of the school in a widened parallel parking strip of approximately 16 spaces will remain undisturbed.

Since the small building additions and site modifications reduce the overall impervious area, no stormwater treatment or quantity control is required, and no stormwater management report is included.



2a. RIGHT, TITLE, & INTEREST

A deed for the Longfellow Reiche Elementary School property is attached.

034954

KNOW ALL MEN BY THESE PRESENTS,

THAT THE MAINE SCHOOL BUILDING AUTHORITY, a body corporate and politic, and a public instrumentality of the State of Maine, created and established by the Maine School Building Authority Act (Public Laws, 1951, Chapter 405), does hereby remise, release, bargain and convey and forever quit-claim unto THE INHABITANTS OF PORTLAND, a municipal body corporate and politic, located in Portland, County of Cumberland, State of Maine, its successors and assigns forever, a certain lot or parcel of land with the buildings thereon, situated in Portland bounded and described as follows to wit:

Beginning at the intersection formed by the easterly sideline of Clark Street and the northerly sideline of Spruce Street in said City; thence by said easterly sideline of Clark Street crossing the westerly terminus of Varnum Street and continuing by said easterly sideline of Clark Street N 37°41'10"W 400.78 feet to the southerly sideline of Bradford Street; thence by said southerly sideline of Bradford Street N 51°52'40" E 315.05 feet to the westerly sideline of Brackett Street; thence by said westerly sideline of Brackett Street crossing the easterly terminus of Varnum Street and continuing by said westerly sideline of Brackett Street S 37°59'20" E 404.07 feet to the northerly sideline of Spruce Street; thence by said northerly sideline of Spruce Street S 52°28'20" W 317.18 feet to said easterly sideline of Clark Street and the point of beginning, containing 127,212.0 square feet, or 2.93 acres.

Meaning and intending to convey the same premises conveyed to the Maine School Building Authority by the Inhabitants of the City of Portland by deed dated June 8, 1972 and recorded in Cumberland County Registry of Deeds.

This deed is delivered by the Grantor and accepted by the Grantee subject to all the conditions, covenants, and restrictions relating to the development of the above described premises set forth in a certain contract between the City of Portland and the Portland Renewal Authority, dated June 7, 1972, recorded in the records of the City Clerk of the City of Portland, in Volume 188, Page 129 and as also set forth in a certain Indenture Deed to the City of Portland from the Portland Renewal Authority, dated June 7, 1972, to be recorded in the Cumberland County Registry of Deeds; to which contract and Indenture Deed reference is hereby made for a more particular statement of said conditions, covenants, and restrictions.

IN WITNESS WHEREOF, the Maine School Building Authority has caused this instrument to be executed in its name and on its behalf by Eve M. Bither its Chairman, and Linda L. Sawyer, its Secretary-Treasurer, this 23rd day of May in the year of our Lord one thousand nine hundred and eighty-nine.

Signed, and Delivered
In the presence of

SEAL

Martha Butler

Martha Butler

THE MAINE SCHOOL BUILDING AUTHORITY

By: *Eve M. Bither*
its Chairman

By: *Linda Sawyer*
its Secretary-Treasurer

STATE OF MAINE
KENNEBEC, SS.

Personally appeared the above-named Eve M. Bither and Linda L. Sawyer who stated they are the Chairman and Secretary-Treasurer, respectively, of the Maine School Building authority, and acknowledged the execution of the foregoing deed for and on behalf of the Maine School Building Authority.

1989 JUL 28 AM 11:01

CUMBERLAND COUNTY

Alan B. York

Before me,

Alan B. York, Notary Public

SEAL



6. FINANCIAL CAPABILITY

Portland Public Schools has furnished the attached Statement of Financial Capacity for the Reiche Elementary School additions and renovations.



PORTLAND PUBLIC SCHOOLS
prepared & empowered

Portland Public Schools
Executive Director of Budget & Finance
353 Cumberland Avenue
Portland, Maine 04101
September 9, 2020

The City of Portland Planning and Transportation Division
389 Congress Street
Portland, Maine 04101

Statement of Financial Capacity: The City of Portland, Portland Public Schools, and the Reiche Elementary School Renovation Project has available the sum of \$21,000, 000 as of this date. We confirm that these funds are entirely free of any liens, debts and/or encumbrances and are available in the form of City of Portland General Obligation Bonds. Should you require verification of the above-mentioned funds, please contact me at your convenience.

Respectfully,

Miranda Felsky
Portland Public Schools
Executive Director of Budget & Finance



7. TECHNICAL CAPABILITY

Portland Public Schools are managed by experienced staff who currently care for the physical and financial needs of the Reiche Elementary School, together with many other schools throughout the City of Portland.

Portland Public Schools engaged Harriman Architects and Engineers of Portland and Auburn, Maine, to design the building and site improvements to the Reiche Elementary School. Harriman is a full-service architectural/engineering firm with a 140- year history of successful consulting services. All architectural and engineering is being provided by Harriman employees.

Key personnel of Harriman include:

Mark Lee, AIA – Principle-in-Charge; Lisa Sawin, AIA – Project Manager/Lead Architect; Howard Snyder, ASLA – Landscape Architect; and Frank Crabtree, PE – Civil Engineer.

Key personnel resumes are attached.



MARK D. LEE, AIA, LEED AP, MCPPO

PRINCIPAL, ARCHITECT

Mark D. Lee has experience in both structural engineering and architectural design, encompassing over 20 years and providing him a truly multidisciplinary perspective on building design.

Over the years, Mark has gained significant educational design experience on a variety of projects for public and private K-12 schools. Projects have included new construction, additions and renovations to existing facilities, as well as master plans and space/programming studies.

Before joining Harriman as an architectural designer, Mark was a structural engineering designer in Philadelphia and New York. In addition to working on projects with the Greater Philadelphia Transportation Authority, he has also worked on projects built in Indonesia and China. Mark has bachelor's degrees in both civil engineering and architectural engineering, as well as a master's degree in architecture.

EDUCATION

Boston Architectural College
Master of Architecture

Drexel University
Bachelor of Science in Civil Engineering
Bachelor of Science in
Architectural Engineering

REGISTRATIONS

ME, NH, MA, CT, NY
NCARB IDP Certification
EI

ACCREDITATIONS

Leadership in Energy and Environmental
Design Accredited Professional (LEED AP)

Massachusetts Certified Public Purchasing Official
(MCPPO)

AFFILIATIONS

American Institute of Steel Construction Member
American Society of Civil Engineers, Member
Association of College & University
Housing Officers International, Member
U.S. Green Building Council
Society of College and University Planning

PRESENTATIONS

2010 - EACUBO Annual Meeting
"Attainable Goals: Breaking Down a
Long-Term Master Plan Can Help
Streamline Short-Term Decision Making"

2009 - ERAPPA Annual Conference "Attainable Goals:
Breaking Down a Master Plan"

2009 - Museum L-A Lecture Series, "Lewiston
Transforms: Adaptive Reuse of Architectural
Landmarks,"

2009 - Tri-State ASBO Conference, "How to Promote
and Organize A Successful School Construction
Project,"

2006 - Maine Library Association Annual Conference,
"Fryeburg Academy Library: A Collaborative Story,"

RELEVANT EXPERIENCE:

Portland Public Schools – Portland, Maine

Lyseth Elementary School Addition and Renovations

Auburn School Department – Auburn, Maine

Planning, Design and Construction for new Edward Little High School

Beatrice Rafferty Elementary School – Perry, Maine

New Elementary School

South Portland School Department – South Portland, Maine

South Portland High School Addition and Renovations | Master Plan |
Secondary School Study

Camden Hills Regional High School – Rockport, Maine

New 800-Student School and 800-Seat Performing Arts Center

Biddeford High School – Biddeford, Maine

Addition and Renovations

Biddeford Middle School – Biddeford, Maine

New 780-Student School and 900-Seat Performing Arts Center

Maine Academy of Natural Science at Good Will-Hinckley – Hinckley, Maine

Moody School Historic Study, Addition and Renovation

Lewiston School Department – Lewiston, Maine

Master Plan | Geiger Elementary School, New 624-Student School | Lewiston
Regional Technical Center, The Green Ladle Culinary Arts Center

Mount Desert Island High School – Mount Desert, Maine

Addition and Renovations

Cheverus High School – Portland, Maine

Gymnasium Addition | Addition and Renovations | Master Plan

St. Dominic Regional High School – Auburn, Maine

New 450-Student School

MARK D. LEE, AIA, LEED AP, MCPPO

PUBLICATIONS

Building Design + Construction: Lighting Technology
"It's Still the Wild West Out There," April 2017

High Profile Focus: Institution & Schools
featuring SCUP North Atlantic Region, "The University
Library is the Hub of Student Collaboration and
Learning," March 2017

School Planning & Management "Acoustical
Considerations for 21st-Century K-12 Learning
Environments," June 2017

High Profile: New England Facilities Development
News, "Innovation on Campus: Five Trends in Higher
Education," August 2016

Kennebunk Elementary School – Kennebunk, Maine
New 600-Student School

Bridgton Academy – Bridgton, Maine
New Athletic Center | Master Plan

Fryeburg Academy – Fryeburg, Maine
Leura Hill Eastman Performing Arts Center | Master Plan | Harvey Dow Gibson
Athletic Center | Bion R. Cram Library | Athletic Fields | Hastings Dorm Masters
House

Bath School Department – Bath, Maine
Master Plan and Renovations

Hebron Academy – Hebron, Maine
Master Plan

Sacopee Valley High School – Hiram, Maine
ADA Upgrades

Buxton Elementary – Buxton, Maine
New 850-Student School

Westbrook Middle School – Westbrook, Maine
New 600-Student School

Nashua School District – Nashua, New Hampshire
Broad Street Elementary School Renovation | Sunset Heights Elementary
School Renovation | Mount Pleasant School Study | Elm Street School Study

Dover School District – Dover, New Hampshire
Garrison Elementary School Facilities Study | Garrison Elementary School,
Renovations

Hopkinton School District – Contoocook, New Hampshire
Facilities Planning Study

Exeter High School – Exeter, New Hampshire
New 2,000-Student School and 1,000-Seat Performing Arts Center



LISA D. SAWIN, AIA, NCARB, LEED AP BD+C, MCPPO
SENIOR ASSOCIATE, SENIOR ARCHITECT

Lisa Sawin, a licensed architect, brings nearly 15 years of professional experience in architectural design for a variety of K-12 and Higher Educational clients. Prior to joining Harriman, Lisa served as Project Manager and Project Architect providing design, detailing, marketing and project delivery skill-set.

Passionate about developing learning environments that support educators and students alike, Lisa is a hands-on project leader, working directly with school leadership, administration, and facilities personnel to provide meaningful solutions to operational and functional challenges.

EDUCATION

Norwich University
Masters in Architecture

Norwich University
Bachelor of Science in
Architectural Studies

REGISTRATIONS

ME, MA, VT

National Council of Architectural Registration Boards
(NCARB)

ACCREDITATIONS

Leadership in Energy and Environmental Design
Accredited Professional
(LEED AP BD+C)

Massachusetts Certified Public Purchasing Official
(MCPPO)

AFFILIATIONS

American Institute of Architects

U.S. Green Building Council, Maine
Chapter Member

RELEVANT EXPERIENCE:

RSU 21 - Kennebunk, Kennebunkport, and Arundel, Maine

Facilities and Educational Planning for all District Schools

Mildred L. Day Elementary School (RSU 21) - Arundel, Maine

Addition and Renovations

Kennebunk High School (RSU 21) - Kennebunk, Maine

Addition and Renovations

Auburn School Department - Auburn, Maine

Planning, Design and Construction for new Edward Little High School

Portland Public Schools - Portland, Maine

Lyseth Elementary School Addition and Renovations

Westbrook School Department - Westbrook, Maine

Saccarappa Elementary School Additions and Renovations

Sanford School Department - Sanford, Maine

K-8 Restructuring Study | Margaret Chase Smith Elementary School, Addition and Renovations | Converted Elementary School from former Middle School | Converted Middle School from former High School

Scarborough School Department - Scarborough, Maine

Long Range Facility Planning

Town of Wellesley - Wellesley, Massachusetts

Middle School Building Study

Twin Rivers School District* - McClellan, California

25-Year Master Plan of 63 Campuses | Professional Learning Community Center (P.L.C.C.)

Fresno United School District* - Fresno, California

Addicott Modernization | Turner Elementary School Classroom and Administration Building | Hoover High School Addition

Merced Unified School District* - Merced, California

Merced S.T.E.A.M. Center

Madera School District* - Madera, California

Madera Elementary School

**Experience prior to joining Harriman.*



EDUCATION

University of Maine
Bachelor of Science Civil Engineering

REGISTRATIONS

ME, MA, NH, VT, CT, RI

ACCREDITATIONS

Leadership in Energy and Environmental
Design Accredited Professional
(LEED AP BD+C)

Maine Department of Transportation Local Project
Administration (LPA)

AFFILIATIONS

American Society of Civil Engineers

U.S. Green Building Council
Maine Chapter Member

FRANK L. CRABTREE, P.E., LEED AP BD+C

ASSOCIATE, SENIOR CIVIL ENGINEER
USGBC - LEED PROJECT ADMINISTRATOR

Frank L. Crabtree's 40 years of experience includes a wide range of civil, environmental and site engineering for large and small sites for many governmental and educational clients. He has extensive experience in environmental storm water management and in managing the permitting and approval process required by state, federal, and municipal agencies.

Frank also coordinates Harriman's sustainability processing for the office and for our clients. Beginning with the certification of Maine's first LEED Certified university building, Frank has managed the process for many public and private sustainable projects over the past 15 years. He has extensive experience managing the team of designers, owner, and contractor through the various stages of the sustainability planning, designing, constructing, and certifying. Frank's work has been primarily with the US Green Building Council (USGBC) LEED Certification process, which is the benchmark standard in the U.S.

RELEVANT EXPERIENCE:

Portland Public Schools – Portland, Maine

Lyseth Elementary School Addition and Renovations

Auburn School Department – Auburn, Maine

Planning, Design and Construction for new Edward Little High School

Beatrice Rafferty Elementary School – Perry, Maine

New Elementary School

Lewiston Public Schools – Lewiston, Maine

Robert V. Connors, New 900± Student Elementary School, State and City Permitting | McMahon Elementary School, Site Design, Roadway Expansion, Natural-gas Extension, and State/City Permits | Raymond A. Geiger Elementary School, Site Selection, Stormwater, and Permitting | Lewiston High School Regional Technical Center, Site Design, Parking Expansion, Stormwater Treatment, Utilities for Constrained Site, City Permitting

RSU #21 – Kennebunk, Maine

Kennebunk High School Addition | Mildred L. Day Elementary School Addition and Renovation

York School Department – York, Maine

750-Seat Community Auditorium and Main Entry Addition, Site Design, Parking, Town of York Permitting

Noble High School – North Berwick, Maine

New Site Master Plan and Development | 11 Sports Fields | Six Parking Lots | State/Town Permits

Scarborough School Department – Scarborough, Maine

Wentworth Intermediate School, New 800-Student School | Scarborough High School Addition and Renovations

Scarborough Schools and Community Park – Scarborough, Maine

Reconstruction of High School and Town Park, New Pond/Fountain | Play Fields | Pedestrian Walks | Stormwater Treatment | State/Town Permits

FRANK L. CRABTREE, P.E., LEED AP BD+C

PRESENTATIONS

2013 – U.S. Green Building Council Maine Chapter, "Rainwater Management: Rooftop to Pavement"

2010 – American Society of Professional Estimators, "LEED Changes"

2009 – U.S. Green Building Council Maine Chapter, "Site Design for LEED and DEP Standards"

2008 – Society for College and University Planning, North Atlantic Region Symposium, Sustainability as an Economic Driver: "Pathways to Success, "Pathways to Green"

2007 – Northern New England Chapter of the American Planning Association "LEED Certified Construction"

Buxton Center Elementary School – Buxton, Maine

New 850-Student School

Cheverus High School – Portland, Maine

New Urban Sports Field and Tennis Court Complex | Parking Lots | Permitting

South Portland School Department – South Portland, Maine

Site Renovation | Relocate Sports Fields and Tennis Courts | New Parking Lots

St. Dominic Academy – Auburn, Maine

New 450-Student School

Westbrook Middle School – Westbrook, Maine

New 600-Student School, Traffic and Pedestrian Circulation | New Planning and Site Development | Three Sports Fields | Stormwater Management | State/Town Permits

Durham Community School – Durham, Maine

New 505-Student School

Biddeford High School - Biddeford, Maine

Addition and Renovations

Biddeford Middle School – Biddeford, Maine

New 780-Student School and 900-Seat Performing Arts Center

Bridgton Academy – Bridgton, Maine

Master Plan New Sports Fields | Fundraising Images

Fryeburg Academy – Fryeburg, Maine

New Sports Field Facility, Sports Fields | Leura Hill Eastman Performing Arts Center | Site Parking/Utilities | Stormwater Treatment | State/Town Permits

Pemetic Elementary School – Southwest Harbor, Maine

Addition and Renovations

Broad Street School – Nashua, New Hampshire

Reconstructed Drives, Parking, Storm Drainage, Playground, and City/State Permits

Idlehurst Elementary School – Somersworth, New Hampshire

New 530-Student School - NECHPS Sustainability Certification Management



HOWARD A. SNYDER, ASLA, CLARB

LANDSCAPE ARCHITECT

Howard Snyder, ASLA, CLARB is a landscape architect and planner with nearly twenty years of experience. He has worked on a range of project types considering civic, institutional, landscape planning, residential, resort, urban and public space developments in the United States and abroad. His work allows for an ability to synthesize a project's design process from the appropriate perspective and an ability to work with a staff of professionals from a variety of disciplines to provide outstanding design and service to clients. Prior to rejoining Harriman in early 2016, Howard served as Town Planner of Georgetown, Massachusetts.

EDUCATION

Master of Urban Planning and Public Policy
New York University, Robert F. Wagner Graduate School
of Public Service

Bachelor of Landscape Architecture
State University of New York, College of Environmental
Science & Forestry

REGISTRATIONS

MA, ME, CT

AFFILIATIONS

American Society of Landscape Architects

Boston Society of Landscape Architects

American Planning Association

RELEVANT EXPERIENCE:

Jewish Community Alliance – Portland, Maine

Landscape Architecture for a Community Center

City of Augusta – Augusta, Maine

Site Layout and Landscape Design for Adaptive Reuse of Mill Park Brick
Building

Town of Kennebunk – Kennebunk, Maine

Streetscape Master Plan in the Lower Village District

University of Maine System – Maine

Campus Master Planning for Seven Campuses

University of New England – Biddeford, Maine

Campus Master Plan

Maplewood Avenue - Complete Streets – Portsmouth, New Hampshire

Streetscape Design

City of Rochester – Rochester, New Hampshire

Downtown Master Plan and Comprehensive Rezoning

Town of Raymond – Raymond, New Hampshire

Site Layout and Design for Police Facility

Atlantic Wharf – Boston, Massachusetts

Urban Design and Planning for Redevelopment of Atlantic Wharf

Beverly Farms Improvement Society – Beverly, Massachusetts

Facade and Streetscape Improvement Plan

Beverly Farms Improvement Society – Beverly, Massachusetts

Parking Strategy for Beverly Farms Business District

Bridgeport and Port Jefferson Steamship Authority – Bridgeport, Connecticut

Bridgeport Barnum Landing Ferry Terminal Site Design

Canaveral Port Authority – Port Canaveral, Florida

Port Canaveral Land Use and Development Plan

Canaveral Port Authority – Port Canaveral, Florida

On-call Services | Land Planning, Urban Design, and Market Analysis for Port
Canaveral

City of Boston – Boston, Massachusetts

Cleveland Circle Streetscape Plan

City of Brockton – Brockton, Massachusetts

Comprehensive Master Plan

City of Haverhill – Haverhill, Massachusetts

Park Concept Design for Riverside Park

City of Newburyport – Newburyport, Massachusetts

Landscape Restoration for Bartlet Mall

City of Norwalk – Norwalk, Connecticut

Wall Street Area Master Plan

Department of Conservation and Recreation – Boston, Massachusetts

Landscape Design for Lederman Memorial

Duxbury Bay Maritime School – Duxbury, Massachusetts

Site Planning for Three Marine Based Facilities

Falmouth Yacht Club – Falmouth, Massachusetts

Renovation, Expansion and Landscape Architecture

Hingham Shipyard – Hingham, Massachusetts

Landscape Design and Signage Programming

Lawrence Mills – Lowell, Massachusetts

Urban Design, Site Design, and Landscape Architecture for Redevelopment

Malden Mills – Lawrence, Massachusetts

Schematic Designs for Reuse and Redevelopment Options

Steamship Authority – Oak Bluffs and Woods Hole, Massachusetts

Site Layout and Design for Ferry Terminals

Town of Burlington – Burlington, Massachusetts

Comprehensive Master Plan

Town of Nahant – Nahant, Massachusetts

Nahant Gateway Park and War Memorial

Town of Randolph – Randolph, Massachusetts

Comprehensive Master Plan

Town of Shutesbury – Shutesbury, Massachusetts

Community Visioning

Town of Truro – Truro, Massachusetts

Landscape Design for Civic Center and Residential Development

Village at Bailey's Pond – Amesbury, Massachusetts

Permitting and Landscape Design for Residential Development

Village of Newtonville – Newton, Massachusetts

Streetscape Design



24. CONDITIONAL USE

Revised 4-13-21

Conditional Use Standards – (14-474)

- **Traffic:** The Reiche Elementary School building additions and renovations will provide a new conference room and stairwell, and will enhance the administrative spaces and relocate the front entry to the school. No additional students or staff are anticipated. Therefore, no additional traffic is anticipated to be generated by this building project. Parking will remain unchanged.
- **Environmental Impacts:** The building additions and site renovations at the existing elementary school will not cause harmful conditions to the students, staff, or surrounding neighborhood.
 1. Noise: Three added rooftop air-handler/energy-recovery units will be located outdoors on the existing building roof and new addition roof. These units will be more than 60' away from the nearest street/property line, and the sound level measured at that point will be approximately 34 to 38 decibels, which is a minimal background noise level. See attachment 21.
 2. Glare: No new pole-mounted site lights will be added. The building-mounted site/security lighting will be shielded cut-off fixtures that will not produce glare at streets or property lines.
 3. Dust: During construction the contractor will control dust as specified on drawing C00.3. The completed reconstructed paved and grass surfaces will not produce dust.
 4. Sewage Disposal: No additional sanitary sewer lines will be extended to the City sewer main. No on-site sewage disposal will occur.
 5. Air Emissions: The existing Reiche Elementary School receives its heat through the existing heating system. The new additions will utilize the existing heating system, so no additional fuel-burning equipment will be added to the elementary school.
 6. Odor: There are no activities or equipment at this renovated existing elementary school that will produce offensive odors.
 7. Lighting: No new site lighting poles are proposed for this school building addition project. The school doorways will be lit with wall-mounted lights or canopy-mounted lights.

8. Litter: None of the building additions or renovations will contribute litter to the project site.

- **Design and Operation:** The building additions and site renovation to the elementary school will operate the same as the existing school, and will not have substantially greater impact on surrounding properties. The Site Plan Level II attachments explain in detail how the proposed modifications have negligible impact to the neighborhood, and are consistent with the typical school development.
- **Zone Specific Criteria:** Residential Zone R6. Elementary Schools are noted as an institutional conditional use.

Additional Conditional Use Standards – (14-137)

- a. All expansion of the existing elementary school will be done on the same lot as the existing principal school.
- b. There are no residential uses on the existing school property.
- c. The proposed school expansion will not cause a combination of impacts regarding 'a' and 'b', above.
- d. The school additions are subject to site plan articles, which have been addressed and submitted under Level II Site Plan.
- e. The school additions are not 'community halls'.
- f. The school additions will not serve alcoholic beverages.



4. ZONING ASSESSMENT

The Reiche Elementary School is in the R6 Zone. Schools are a Conditional Use in the R6 residential zone.

The Zoning Analysis Table is attached.



ZONING ANALYSIS Relevant Zone(s) R6 Residential

All Projects:

	Required	Proposed
Lot Size	30,000 sq.ft.	232,550 sq.ft.
Area Per Dwelling Unit	NA	NA
Minimum Street Frontage	20 ft.	720 ft.
Front Yard Minimum	5 ft.	50 ft.
Front Yard Maximum	NA	NA
Rear Yard	10 ft.	20 ft.
Yard Right	5 ft.	160 ft.
Yard Left	5 ft.	200 ft.
Side Street Setback	NA	NA
Step Back	NA	NA
Maximum Lot Coverage	60%	25%
Minimum Lot Coverage	NA	NA
Maximum Height	45 ft.	27 ft.
Open Space	20%	35%
Maximum Impervious Area	NA	NA
Pavement Setback	NA	NA
Floor Area Ratio	NA	NA
Off Street Parking Spaces	NA	NA
Loading Bays	NA	NA
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):			



April 15, 2021

James Dealaman, Planner jdealaman@portlandmaine.gov
 Planning and Urban Development Department
 City Hall, 389 Congress Street, 4th Floor
 Portland, Maine 04101

Re: Reiche Elementary School Additions
 132 Brackett Street
 Portland, ME
 No. 19152
Response to Comments, received 4-7-2021

Dear Jim,

Thank you for providing these comments for review. I am responding to them in their original order since they are not all numbered. I am however, assigning numbers to track them more easily. Please let me know if you have any further questions.

Historic Preservation

1. An application for Historic Preservation Board Review for Small Projects has been submitted in the CSS Portal and subsequently in the e-plan portal.

Landscaped Open Space

1. The school parcel will have approximately 82,000 sq.ft. of landscape open space, not including paved areas or the temporary modular area. For the lot area of 232,550 sq.ft., the landscape open space equals approximately 35%.

Conditional Use

1. The attached revised Conditional Use narrative has been updated by adding the zone-specific requirements of Section 14-137 for Zone R6, described in Section 14-118.

Submission Requirements

1. The walks are shown on the attached revised Construction Management Plan CM-1.
2. The crosswalks are shown on the attached revised Site Plan C00-1.
3. The existing bike rack is being removed, and a new bike rack is being installed on a new concrete pad, as shown on the Site Plan C00-1.
4. Approximate snow storage areas are shown on the attached revised Site Plan C00-1.
5. Existing fire hydrants are shown on the attached revised Site Plan C00-1 and the revised Construction Management Plan CM-1.
6. Utility lines to the three modular classroom buildings will be installed as shown on the attached revised Site Utility Plan C40-1.

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James Dealaman, Planner
April 15, 2021
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7. The approximate location of the single solid waste dumpster at the westerly corner of the existing school is shown on the attached revised Construction Management Plan CM-1.

Lighting Plan

1. The attached Photometric Site Plan C00-4 shows the light levels from the proposed building-mounted exterior lights. There are no proposed light poles in this renovation.

Transportation

1. There are no site improvements being made to either of the two delivery areas of the school. The original Construction Management Plan CM-1 was based on an out-of-date drawing that at one time contemplated upgrading the existing loading area on Brackett Street. However, that was determined to be outside the scope of this project budget and has been removed, as shown on the attached revised Construction Management Plan CM-1.
2. There are currently 37 instructional spaces in the school.
3. The loading area from Clark Street is not used by the school for regular deliveries, but by the Community Center occasionally. The primary delivery point is the bus loop on Brackett Street, which handles two busses daily. This space also has two deliveries per day for food service, daily mail deliveries, and two deliveries per week for milk. The loading dock adjoining the on-site staff parking lot off Brackett Street, just before the bus loop, takes custodial supplies two times per month and other occasional larger loads. There is no anticipated increase in deliveries due to this renovation project.

Construction Management Plan

1. The two school busses will drop-off and pick-up at the Clark Street sidewalk for the construction duration only. Following construction, they will return to the renovated Brackett Street bus loop area. The number of parent vehicles dropping-off is uncertain.
2. The current school hours are 8:45 AM until 1:25 PM. When the school returns to normal operations, expected in the fall, it will most likely revert to the previous schedule of 9:00 AM to 3:30 PM.
3. Most staff currently arrive before 8:00 AM and do not leave until 4:00 PM, though many will stay later depending on the demands of the day.

Screening

1. No work is proposed to that westerly area of the Community Center or site, and no changes or improvements to the dumpster area are included in this current project.

Landscaping

1. The note to restore the area when the temporary modular buildings are removed has been added to the attached revised Site Plan C00-1.



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April 15, 2021
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Stormwater

1. The silt fence has been revised around the revised modular building layout area, as shown on the attached revised Grading and Erosion Control Plan C30-1.

Access to Modulares

1. The existing decorative metal fencing surrounding the school and playground area forms an important safety barrier for children in the school yard. Providing an opening in the fence will reduce the effectiveness of the school yard safety. If necessary, the Fire Department could quickly extend a hose across the smooth top rail of the fence.

Modulars Placement

1. The attached revised Site Plan C00-1 shows the revised modular orientation with 20' setbacks, ramps, platform, and stairs.

Additional Life Safety Notes(Modular Classrooms)

1. Each classroom has been shown with ADA accessible ramps and landings on the attached revised Site Plan C00-1.
2. Maximum travel distance from the furthest modular classroom to the existing school building bathroom is less than 400 ft.
3. The modular buildings are heated by an LP propane gas cylinder with individual gas lines to each building. The tank will be installed with standard safety procedures.

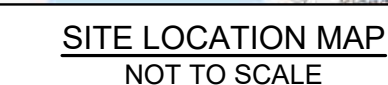
We trust these noted revisions and revised documents address the concerns. Let us know if you need any further documentation.

Thank you very much.

Sincerely,
Harriman

Frank L. Crabtree, P.E., LEED AP BD+C
Associate
fcrabtree@harriman.com

Enclosures: Conditional Use Standards Document and Revised Drawings



STANDARD PLAN NOTES:

OWNER	CITY OF PORTLAND 389 CONGRESS STREET PORTLAND, MAINE 04101
LOT LOCATION:	REICHE SCHOOL 166 BRACKETT STREET PORTLAND, MAINE 04102
LAND USE TYPE:	GOVERNMENTAL
PARCEL ID:	056 - E001001
MAP / LOT:	56 - E - 1
ZONING DISTRICT:	R6 RESIDENTIAL
TOTAL SITE AREA:	5.33 ACRES
SITE IS SERVED BY MUNICIPAL SEWER AND WATER	

REICHE ELEMENTARY SCHOOL ADDITIONS AND RENOVATION

PORTLAND, MAINE

Harriman Project No.	19152
Key Plan	Proj North 



Rev Date	Revision Description
04-15-2021	Planning Board Revisions

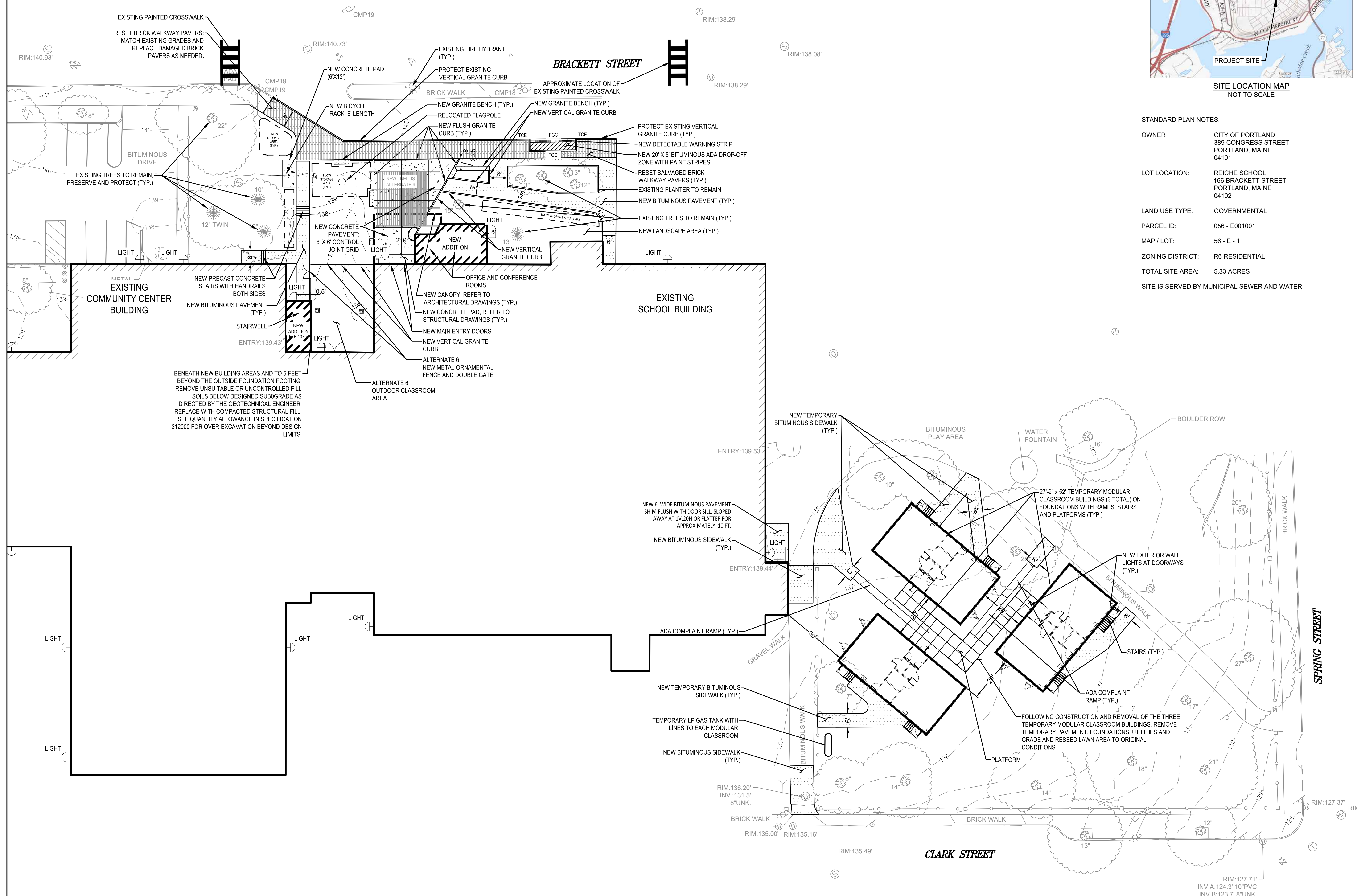
PRELIMINARY
NOT FOR
CONSTRUCTION

1" = 20' - 0"

PA / PE:	FLC	© 2021 Harriman Associates
Drawn By:	HAS	

SITE PLAN

C00-1



- C2 LANDSCAPING NOTES**
SCALE: N.T.S

- C1** **UTILITY NOTES**
SCALE: N.T.S

B3 **DIG SAFE NOTES**
SCALE: N.T.S

- B2 GRADING NOTES
SCALE: N.T.S

- B1** GENERAL SITE NOTES
SCALE: N.T.S

A1 STANDARD SITE LEGEND

- A4 SURVEYOR NOTES
SCALE: N.T.S

- ## STANDARD SITE ABBREVIATIONS
- SCALE: N.T.S

- # A1 STANDARD SITE LEGEND



A. PLAN THE SEQUENCE OF CONSTRUCTION SO THAT THE SMALLEST PRACTICAL AREA OF LAND IS EXPOSED AT ANY ONE TIME DURING CONSTRUCTION. SCHEDULE THE WORK SUCH THAT SEDIMENTATION BARRIERS AND DETENTION PONDS ARE INSTALLED EARLY IN THE CONSTRUCTION SEQUENCE TO PREVENT SEDIMENTS FROM UPHILL AREAS REACHING STREAMS, WETLANDS OR PROPERTY LINES. THE AREA DISTURBED BY STRIPPING OF VEGETATION, SOIL REMOVAL, AND REGARDING SHALL BE THE MINIMUM NECESSARY AT ANY ONE TIME. THE DURATION OF EXPOSURE OF THE DISTURBED AREA SHALL BE KEPT TO A PRACTICAL MINIMUM. UNTIL A DISTURBED AREA IS STABILIZED, SEDIMENT IN RUN-OFF SHALL BE TRAPPED BY THE USE OF DEBRIS BASIN, SEDIMENT BASINS, SILT TRAPS OR OTHER ACCEPTABLE METHODS.

B. TAKE NECESSARY STEPS TO PREVENT SOIL EROSION. REFER TO PUBLICATION OF MAINE DEP PARTICULARLY CHAPTER 500, AND THE MAINE SOIL AND WATER CONSERVATION COMMISSION FOR ADDITIONAL PREVENTION MEASURES TO STOP SOIL EROSION AND FOLLOW DEP MAINE EROSION AND SEDIMENT CONTROL BMPs. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN CONFORMITY WITH ALL FEDERAL AND STATE PERMIT REQUIREMENTS CONCERNING WATER, AIR OR NOISE POLLUTION, OR THE DISPOSAL OF CONTAMINATED OR HAZARDOUS MATERIALS. EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE MINIMUM ONLY. SATISFY THE CURRENT REQUIREMENTS OF THE REGULATORY AGENCIES. REPAIR ALL AREAS OF INSTABILITY AND EROSION IMMEDIATELY AND MAINTAIN UNTIL THE SITE IS FULLY STABILIZED.

C. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 30 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITH 7 DAYS.

D. EROSION CONTROL MESH: INTENDED AS A TEMPORARY EROSION CONTROL MEASURE THAT WILL DECOMPOSE AFTER STABILIZATION. OPEN WEAVE, SINGLE JUTE YARN OF LOOSELY TWISTED CONSTRUCTION, NOT VARYING IN THICKNESS BY MORE THAN 1/4 INCH NOMINAL DENSITY. THE WOVEN MATERIALS SHALL WEIGH 0.9 POUNDS PER SQUARE YARD. SYNTHETIC MESH MATERIAL MAY BE USED AS APPROVED. STAPLES NO. 11 (OR HEAVIER) PLAIN IRON WIRE, MADE 6 INCHES IN LENGTH.

E. EROSION CONTROL BLANKET: INTENDED AS A PERMANENT EROSION CONTROL MEASURE THAT WILL REINFORCE THE TOPSOIL AND VEGETATION AGAINST EROSION AFTER CONSTRUCTION. SYNTHETIC FIBER MATRIX SANDWICHED BETWEEN HEAVY DUTY UV STABILIZED NETTING. BLANKET SHALL WEIGH NOT LESS THAN 0.9 POUNDS PER SQUARE YARD. NORTH AMERICAN GREEN P300 OR APPROVED EQUAL. STAPLES NO. 11 (OR HEAVIER) PLAIN IRON WIRE, MADE 6 INCHES IN LENGTH.

SILT FENCE:

POST: 1"X1" HARDWOOD POST, 4.5 FEET IN LENGTH.

FABRIC: PERFORATE 36" WIDE SHEET OF SYNTHETIC POLYMER OF 12-MILL THICKNESS, SUCH AS MIRAFIX 100X, TERRA-TEX OR APPROVED EQUAL. THE BOTTOM OF THE FABRIC SHALL BE TRENCHED INTO THE EXISTING GROUND A MINIMUM OF 6 INCHES. IN ADDITION, HAY BALES OR DITCH CHECKS SHALL BE INSTALLED ALONG THE SILT FENCE TO CREATE SEDIMENTATION POOLS IN LOW AREAS WHERE RUN-OFF CONCENTRATES.

G. EROSION CONTROL SOILBARK MIX: SHALL CONSIST OF A MIX OF RECYCLED COMPOSTED BARK, FLUME GRIT, AND FRAGMENTED WOOD GENERATED FROM WATER-FLUME LOG HANDLING SYSTEMS, CONFORMING TO THE FOLLOWING:

1. PH - 5.0 TO 6.0.
2. SCREEN SIZE - 6 INCHES MINUS.
3. NO LESS THAN 25 PERCENT ORGANIC MATERIAL.
4. NO STONES LARGER THAN 2 INCHES IN DIAMETER.
5. APPROVE BY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION FOR USE IN WETLANDS AND NEAR WATERWAYS.

H. HAY BALES: BALES SHALL BE AT LEAST 14' X 18' X 30' IN SIZE, STAKED TWICE PER BALE. STAKES SHALL BE 1' X 1' X 36" WOODEN, PLACE BALES WITH TWINE ON SIDES OF BALE, NOT TOP OR BOTTOM.

I. CATCH BASIN SEDIMENT FILTER SACK: A FILTER FABRIC BAG WHICH HANGS UNDER THE GRATE TO CATCH SEDIMENTS. PROVIDE "STREAMGUARD MODEL 3003," "BASIN BAG" BY EMOO DISTRIBUTION, "SILT SACKS HIGH FLOW" BY ACF ENVIRONMENTAL, OR APPROVED EQUAL.

INSTALL THE BAG DEVICE PER MANUFACTURER'S RECOMMENDATION.

J. BEFORE EARTHWORK IS STARTED, A SILT FENCE, FILTER BERM, OR STONE SEDIMENT PILE SHALL BE INSTALLED ALONG THE DOWN-SLOPE SIDE OF THE CONSTRUCTION SITE, AS NECESSARY, TO PREVENT SOIL SEDIMENT MIGRATION AWAY FROM THE SITE. INSTALL SILT FENCE OR FILTER BERM ALONG THE DOWN-SLOPE SIDE OF ALL TOP-SOIL AND SUBSOIL STOCKPILES.

K. EROSION CONTROL BARRIERS SHALL BE REMOVED AFTER CONSTRUCTION IS COMPLETE, BUT NOT UNTIL FINISH GRADING, FINAL SEEDING, AND MULCHING HAS BEEN COMPLETED AND THE ESTABLISHED GRASS HAS STABILIZED THE SOIL. MAINTAIN BARRIERS IN GOOD CONDITION UNTIL REMOVED.

L. INSPECT EROSION AND SEDIMENTATION CONTROL WEEKLY AND AFTER STORM AND MAINTAIN IN GOOD WORKING CONDITION FOR PROJECT DURATION. REMOVE SILT DEPOSITS FROM THE SITE, PLACE IN AN AREA OF LOW EROSION POTENTIAL, SO IT WILL NOT WASH INTO A WETLAND OR WATER BODY. SEED WITH EROSION CONTROL MIX AND MULCH.

M. FILTER BERM: PLACE UNCOMPACTED EROSION CONTROL MIX IN A WINDOW AT LOCATIONS SHOWN ON THE PLAN OR AS DIRECTED BY THE ARCHITECT. AT A MINIMUM THE BERM SHALL BE 3 FEET WIDE AT THE BASE AND 2 FEET HIGH AT THE CENTER OF ALL POINTS ALONG ITS LENGTH. BERM MATERIAL, WHERE THE BERMS ISLIT REQUIRED, WHICH HAS DECOMPOSED, CLOGGED WITH SEDIMENT, ERODES, OR BECOMES INEFFECTIVE, SHALL BE REPLACED. THE BERM SHALL BE REMOVED FROM THE SITE OR RAKED INTO NEARBY WOODS TO A DEPTH NO GREATER THAN 1", WHEN NO LONGER REQUIRED, AS APPROVED BY THE ARCHITECT.

N. TEMPORARY STABILIZATION: WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS, STABILIZE EXPOSED SOIL WITH MULCH, OR OTHER NON-ERODIBLE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERWAY WITHIN 30 HOURS OF THE INITIAL DISCLOSURE OF THE SOIL OR PRIOR TO A STORM EVENT. WHENEVER POSSIBLE, FIRST, REMOVE TEMPORARY EROSION CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE. MAINTAIN TEMPORARY EROSION CONTROL MEASURES FOR THE FULL DURATION OF CONSTRUCTION. INSPECT WEEKLY AND AFTER EACH STORM AND REPAIR AS NEEDED. REMOVE SEDIMENTS FROM THE SITE. PLACE IN AREA OF LOW EROSION POTENTIAL, AND STABILIZE WITH SEED AND MULCH.

P. PERMANENT STABILIZATION: IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING, SO, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUBBASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS. AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS; AND SCHEDULE SOODING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS." NEWLY SEED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDIMETER TRAFFIC, AND CONCENTRATED RUNOFF UNTIL VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESEEDIFIED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. PERMANENT STABILIZATION IS DEFINED AS FOLLOWS:

1. SEEDED AREAS: PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
2. SODDED AREAS: PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOO ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
3. PERMANENT MULCH: PERMANENT MULCHING MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
4. RIPRAP: PERMANENT STABILIZATION MEANS THAT SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.
5. PAVED AREAS: PERMANENT STABILIZATION MEANS PLACEMENT OF THE COMPACTED SUBBASE GRAVEL IS COMPLETED, PROVIDED IT IS FREE OF FINE MATERIALS THAT MAY RUNOFF WITH A RAIN EVENT.
6. DITCHES, CHANNELS, AND SWALES: PERMANENT STABILIZATION MEANS THE CHANNELS IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL-GRADED RIPRAP LINING, TURF REINFORCEMENT MAT, OR WITH ANOTHER NON-EMSVIE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS OR DOWN-CUTTING OF THE CHANNEL.

	Seed Type	% Weight	% Purity	% Germination
C. EXPOSED EARTHWORK AREAS WHICH WILL NOT BE WORKED ON FOR ONE WEEK SHALL BE MULCHED WITH PERENNIAL RYE GRASS SEED AT A RATE OF 3 POUNDS PER 1,000 SQ. FT. AND MULCHED WITH STRAW. APPLY STRAW MULCH AT THE RATE OF 75 POUNDS PER 1,000 SQ. FT.	Perennial Rye	30	85	80
D. UNDISCLOSED AREAS WHICH ARE NOT TO BE WORKED ON FOR ONE WEEK OR WILL BE WINTERED SHALL BE SEED WITH EROSION CONTROL MIX AT A RATE OF 3 POUNDS OF SEED PER 1,000 SQ. FT. AND MULCHED WITH STRAW. APPLY STRAW MULCH AT THE RATE OF 75 POUNDS PER 1,000 SQ. FT. AND MULCH TO PREVENT WIND BLOWN MOVEMENT.	Perennial Rye	30	85	80
E. IN SENSITIVE AREAS (WITHIN 25 FT. OF STREAM OR WET AND EDGE) TEMPORARY MULCH MUST BE APPLIED AT THE END OF EACH WORK DAY AND PRIOR TO ANY STORM EVENT. NO FILL SHALL BE PLACED ON HAY MULCH.	Perennial Rye	30	85	80

Seed Type	% Weight	% Purity	% Germination
Chewing Fescue	35	85	80
Creeping Red Fescue	35	85	80
Perennial Rye	30	85	80

A. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL BEST MANAGEMENT PRACTICES (BMPs), MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A RAIN EVENT AND PRIOR TO COMPLETING PERMANENT STABILIZATION. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL AND STANDARDS AND CONDITIONS OF THE PERMIT, SHALL CONDUCT THE INSPECTIONS.

B. UPON DISCOVERY OF A PROBLEM, REPAIR BMPs NO LATER THAN THE END OF THE NEXT WORK DAY. IF ADDITIONAL BMPs OR SIGNIFICANT REPAIRS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO A RAIN EVENT.

C. KEEP A LOG (REPORT, SUMMARIZING THE INSPECTIONS AND CORRECTIVE ACTION TAKEN, INCLUDING THE NAME AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE OF THE INSPECTIONS AND MAJOR OBSERVATIONS OF OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREA AND VEHICLES ACCESS POINTS TO THE PARCEL, MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT FAIL TO OPERATE AS DESIGNED OR PERMITTED INADEQUATE FOR A PARTICULAR LOCATION AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN. THE LOG MUST BE MADE ACCESSIBLE TO THE OWNER, ARCHITECT AND REGULATORY AGENCIES STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTED SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.



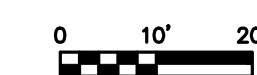
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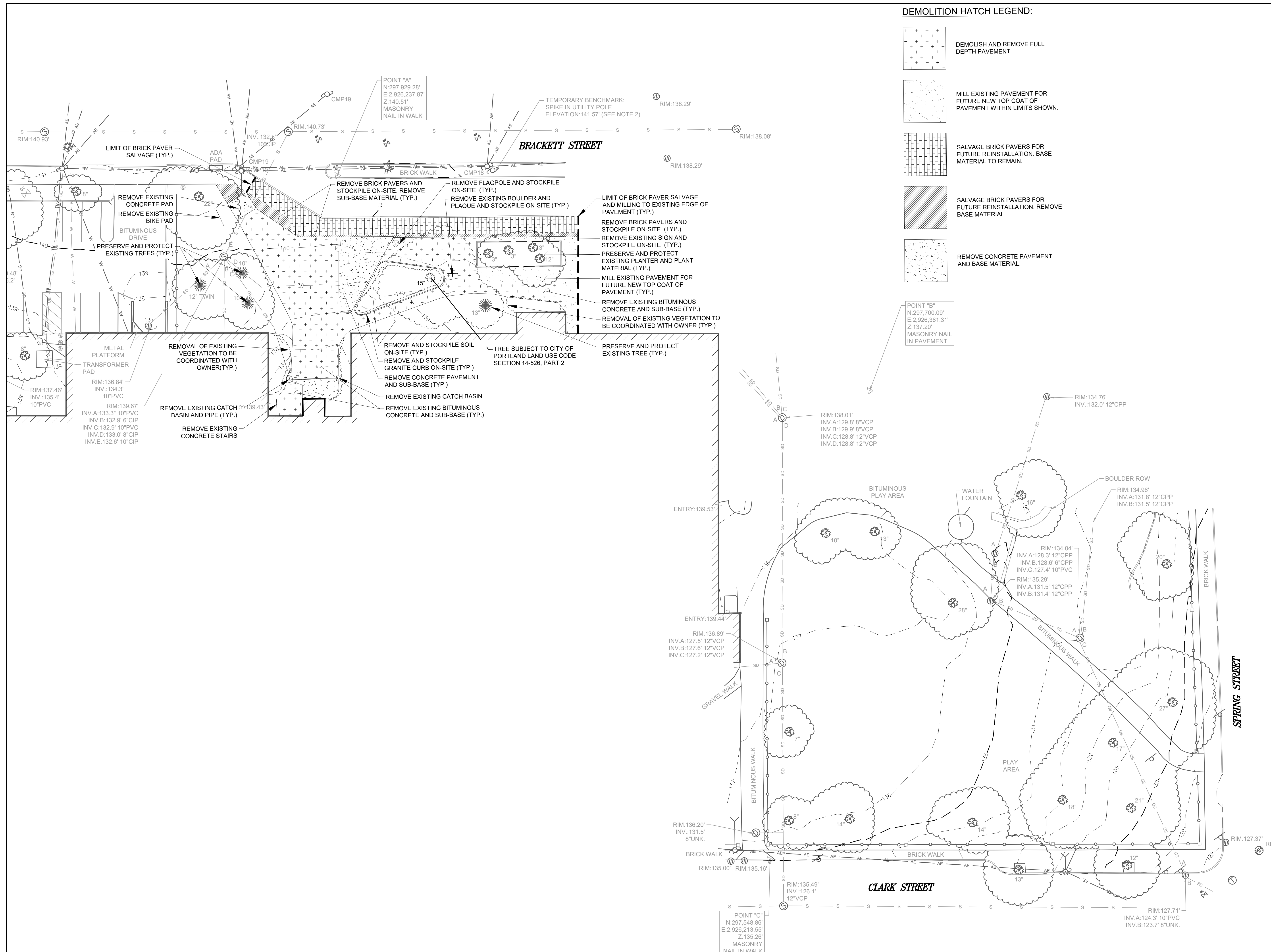
NOVEMBER 05, 2020

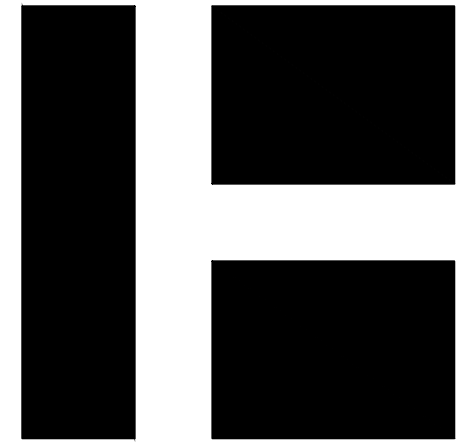
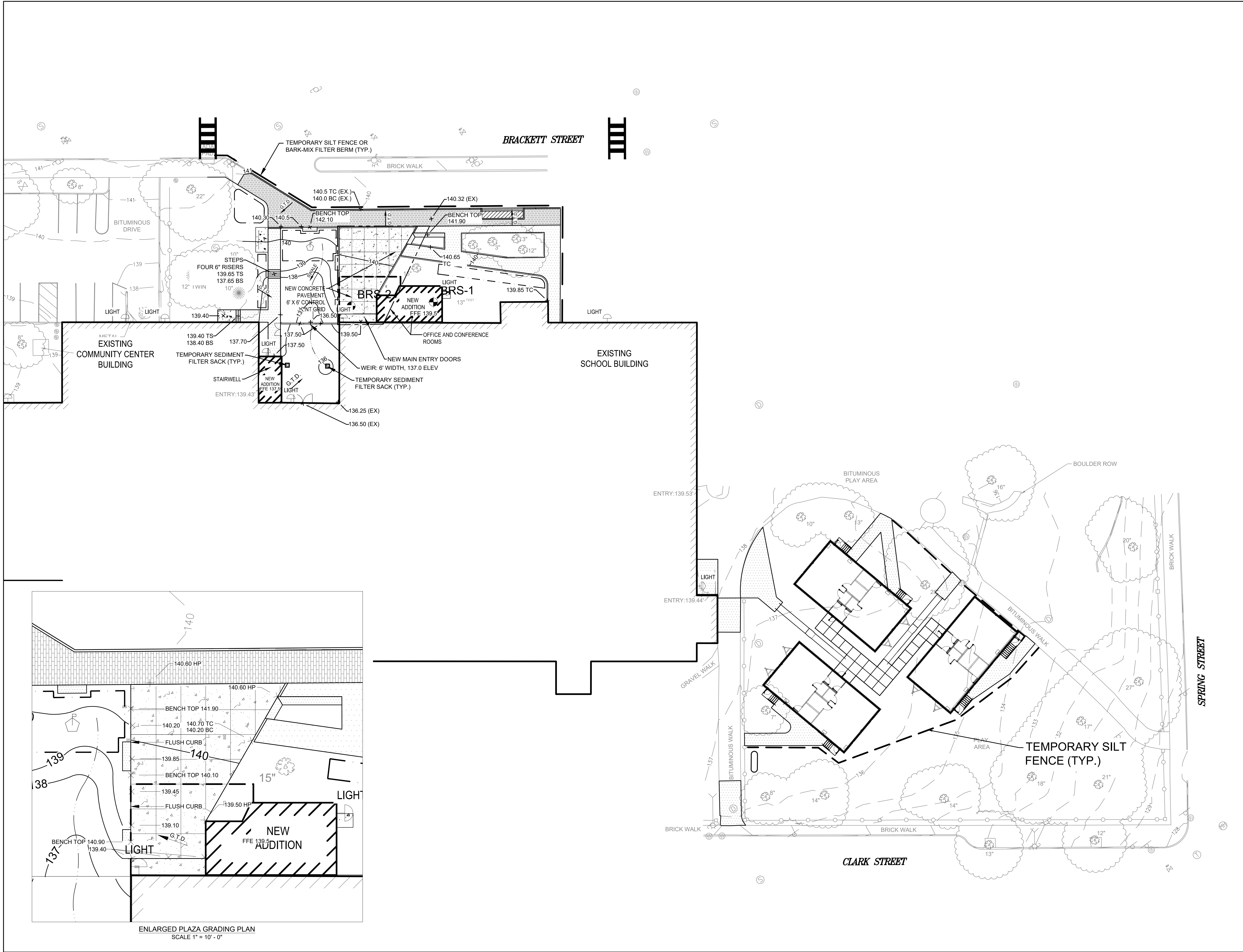
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$$1'' = 20' - 0$$


EXISTING SITE CONDITIONS AND DEMOLITION PLAN

C10-1





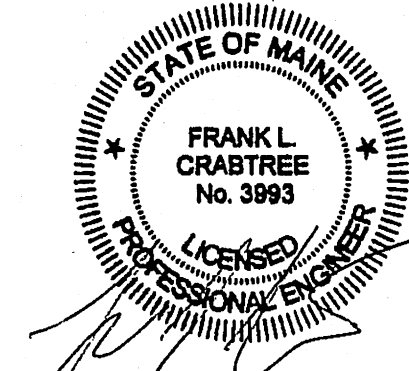
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SCHOOL ADDITIONS AND
RENOVATION

PORTLAND, MAINE

Harriman Project No. 19152

Key Plan Proj North



PLANNING BOARD
NOVEMBER 5, 2020

Rev Date	Revision Description
04-15-2021	Planning Board Revisions

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1" = 20' - 0"	0 10' 20'
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1" = 10' - 0"	0 5' 10'
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SITE GRADING AND
EROSION CONTROL PLAN

C30-1



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C40-1





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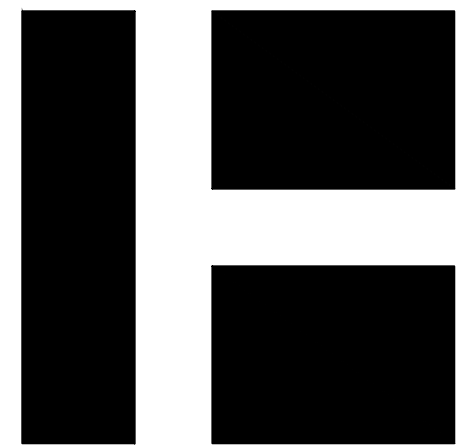
SITE DETAILS

C50-1



B3 **TAPERED CURB END DETAIL (TCE)**
SCALE: N.T.S.

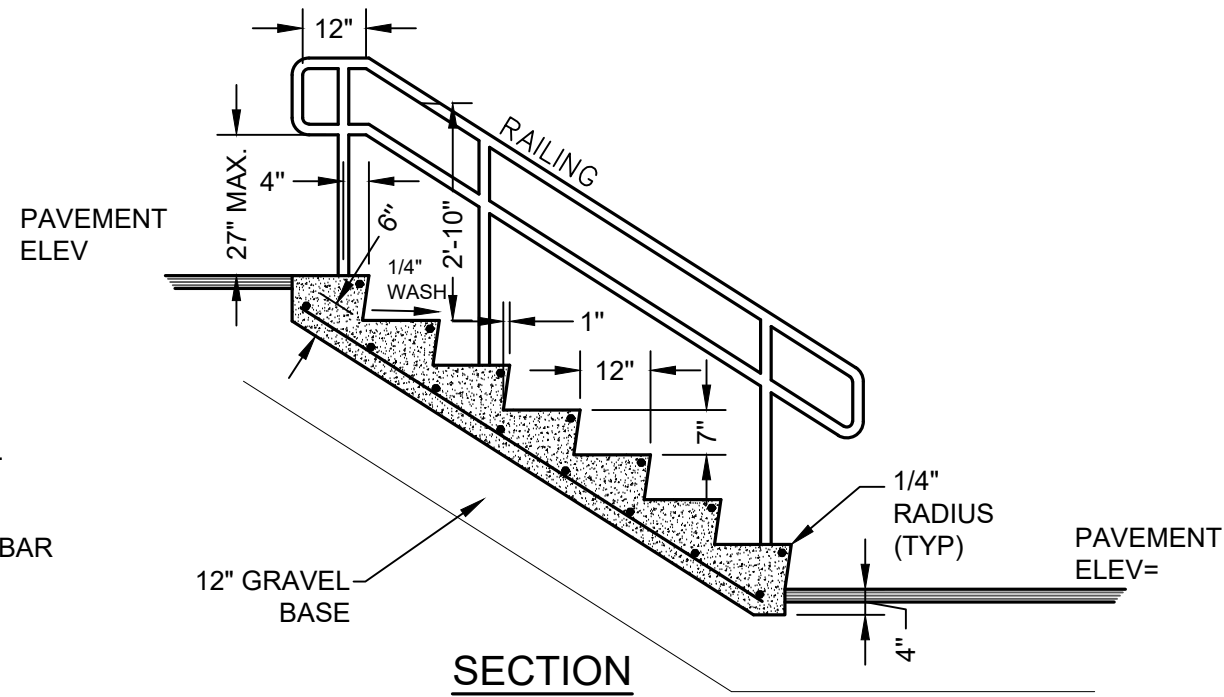




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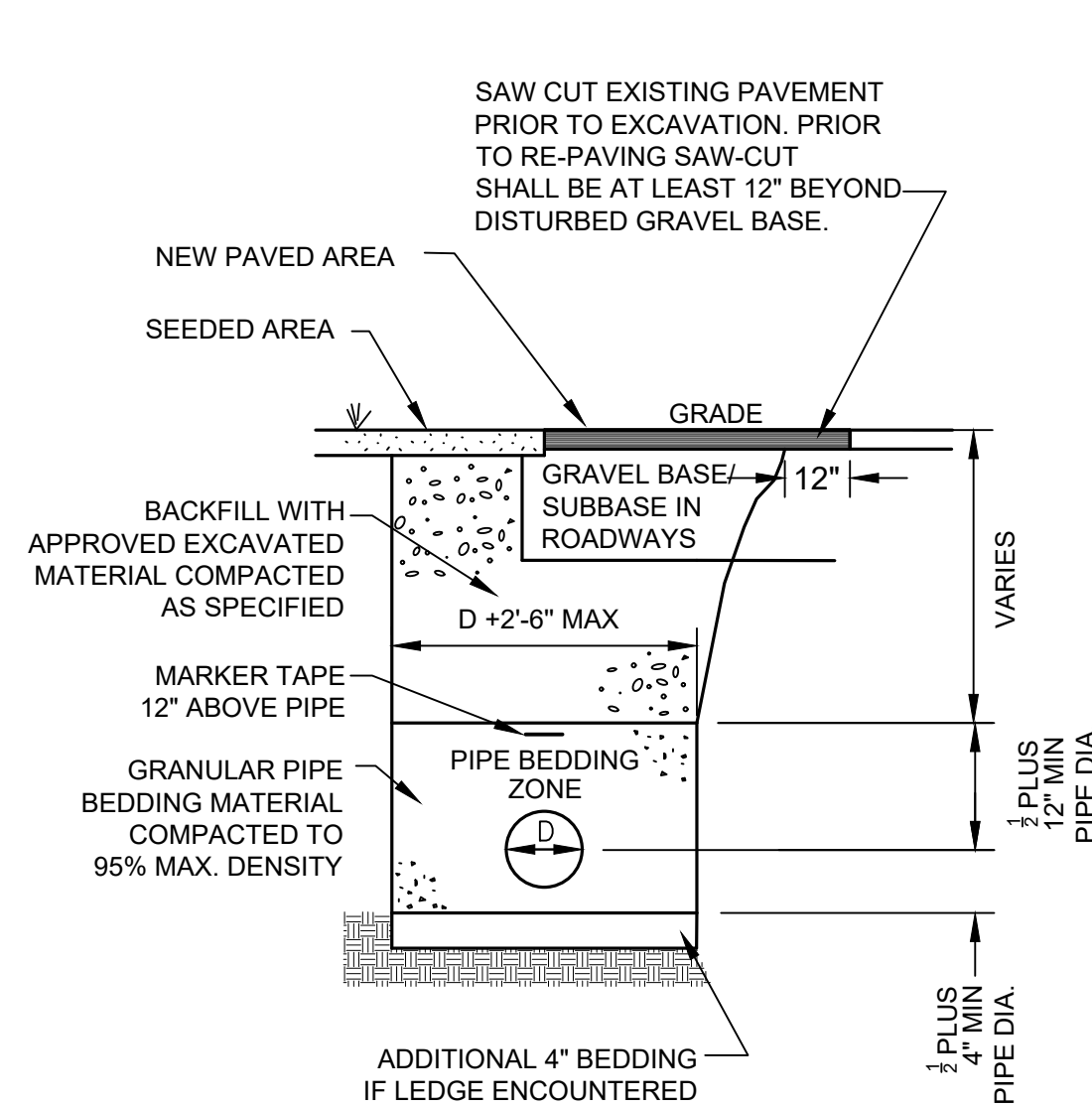
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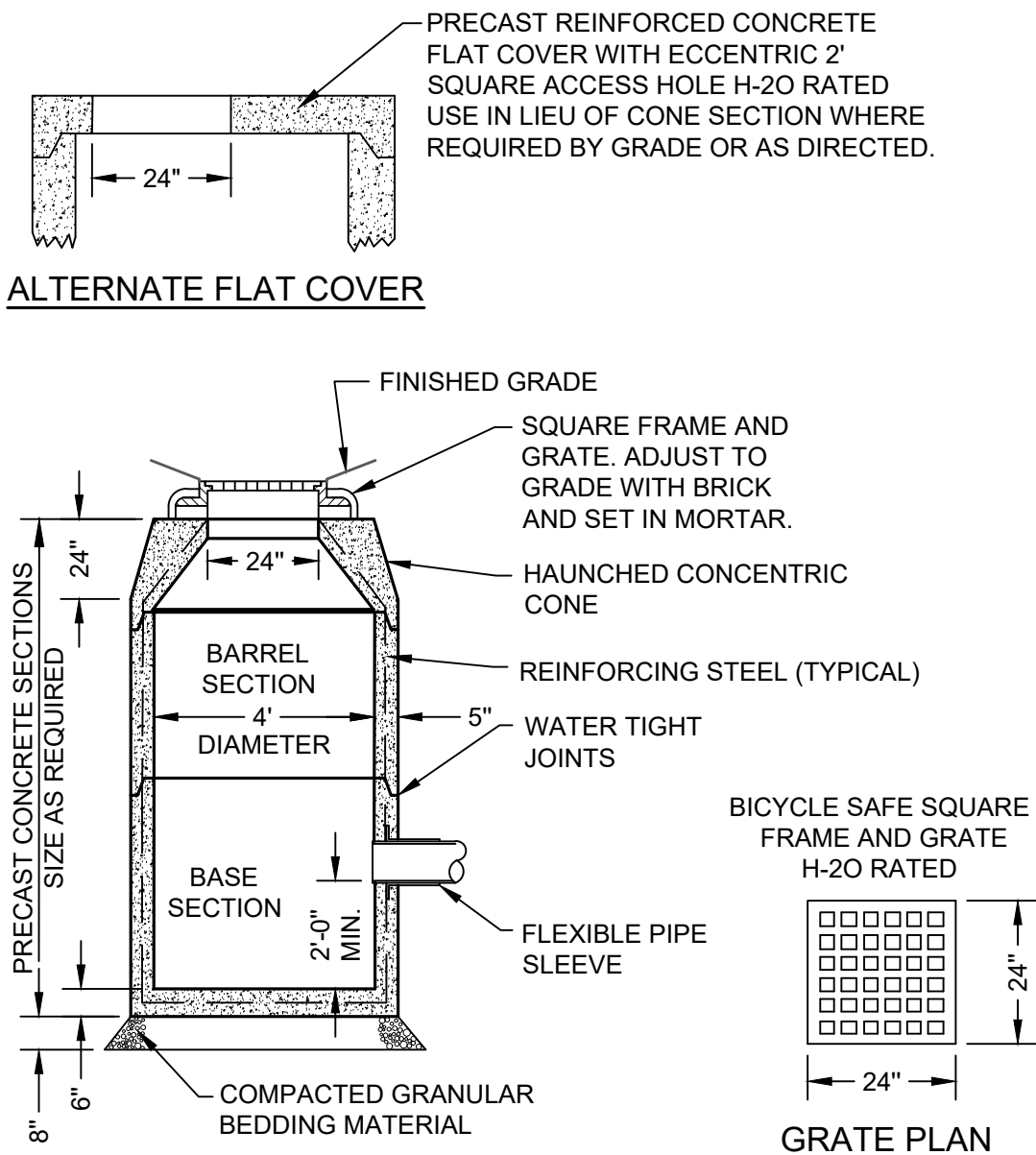


- NOTES:
- 4000 PSI CONCRETE AT 28 DAYS.
 - STAIR IS CHEM-TREATED PRIOR TO INSTALLATION.
 - STAIR WILL HAVE (4) LIFTING INSERTS. CAP AFTER INSTALLATION.
 - RAILINGS ARE 1 1/4" INSIDE DIAMETER ALUMINUM PIPE. SCHEDULE 40, 6063 ALLOY, WITH A CLEAR ANODIZED FINISH.
 - PLACE RAIL POSTS IN 4 1/2" DEEP HOLE AND GROUT WITH NON-SHRINK MORTAR.
 - REINFORCING: #5 BARS AT 12" O.C., BOTH WAYS WITH (1) #4 BAR IN EACH NOSE.
 - SEE SITE PLAN FOR NUMBER OF RISERS.

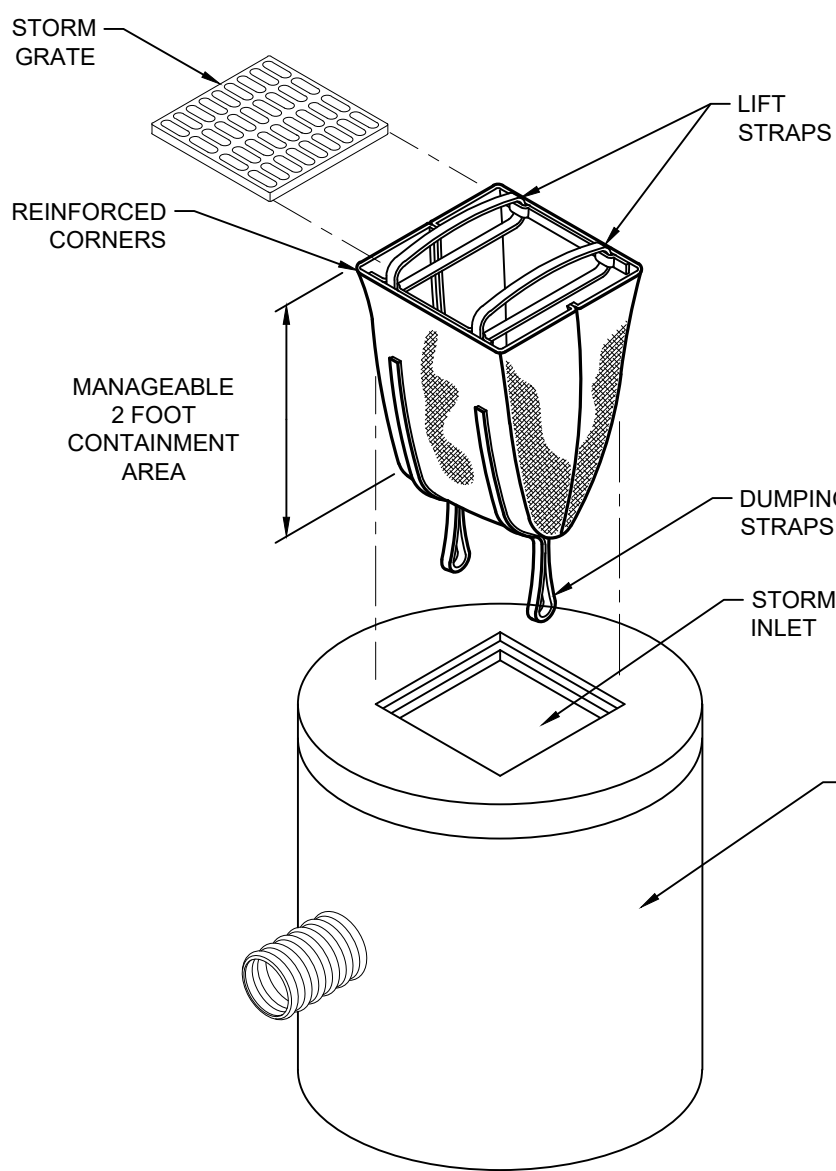
C1 TYP. PRECAST CONCRETE STEP
SCALE: N.T.S



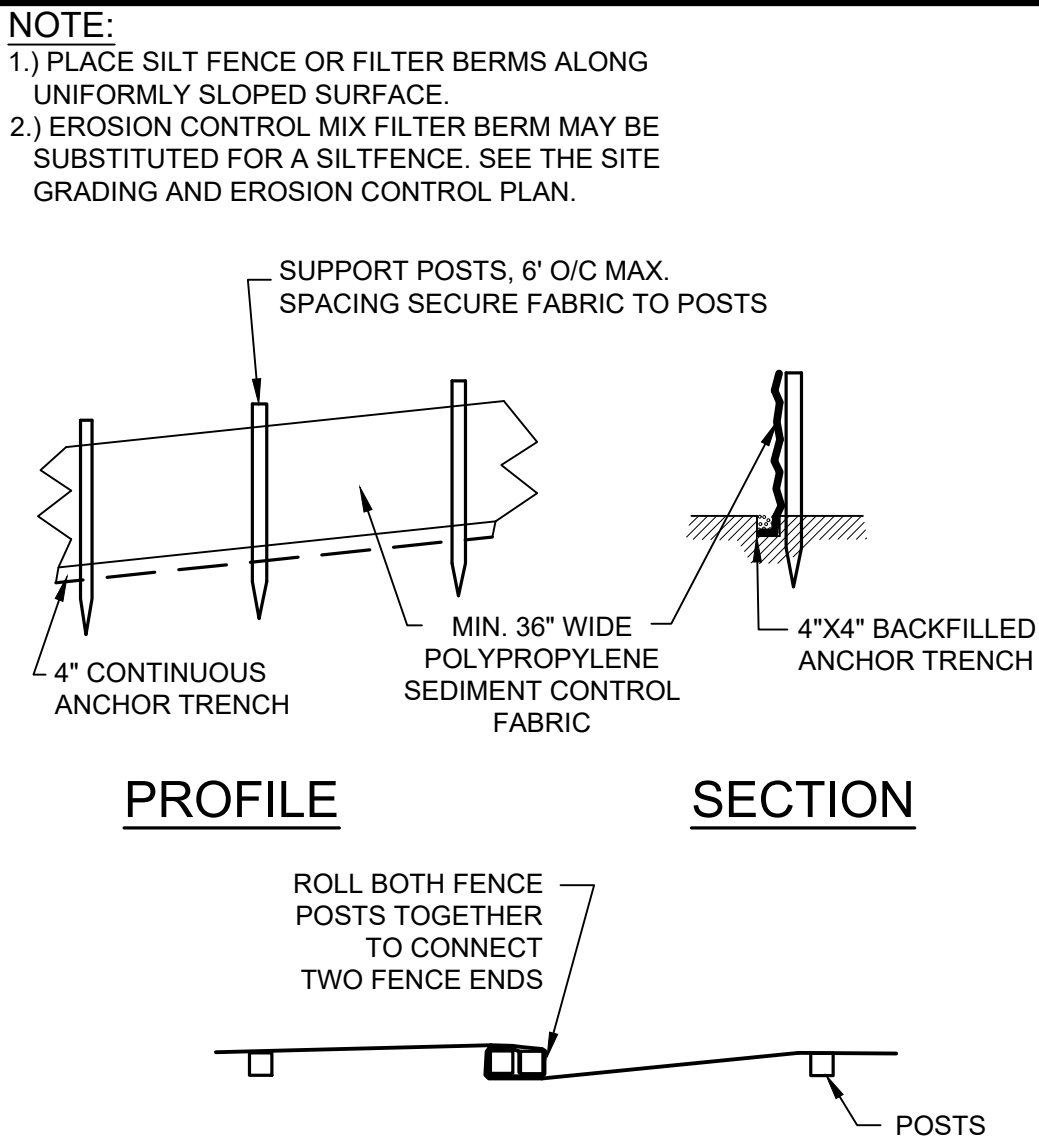
B2 PIPE TRENCH DETAIL
SCALE: N.T.S



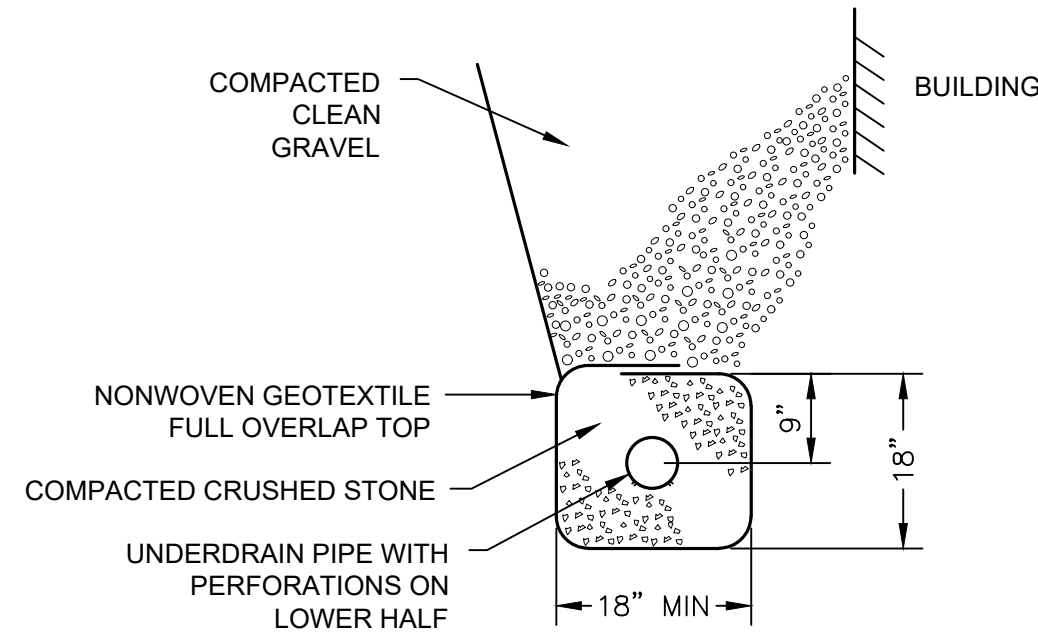
B1 PRECAST CONCRETE CATCH BASIN
SCALE: N.T.S



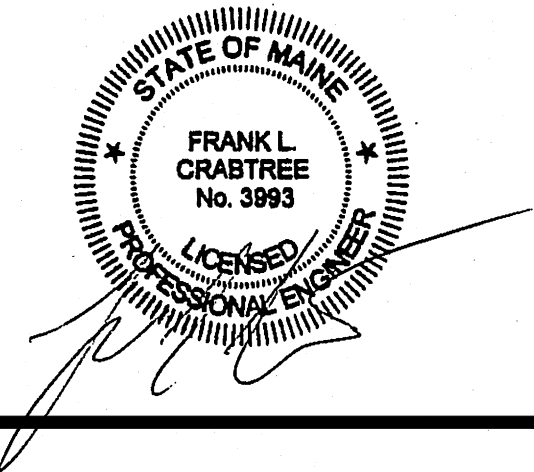
A3 SEDIMENT FILTER SACK
SCALE: N.T.S



A2 SILT FENCE
SCALE: N.T.S



A1 UNDERDRAIN OR FOUNDATION DRAIN
SCALE: N.T.S



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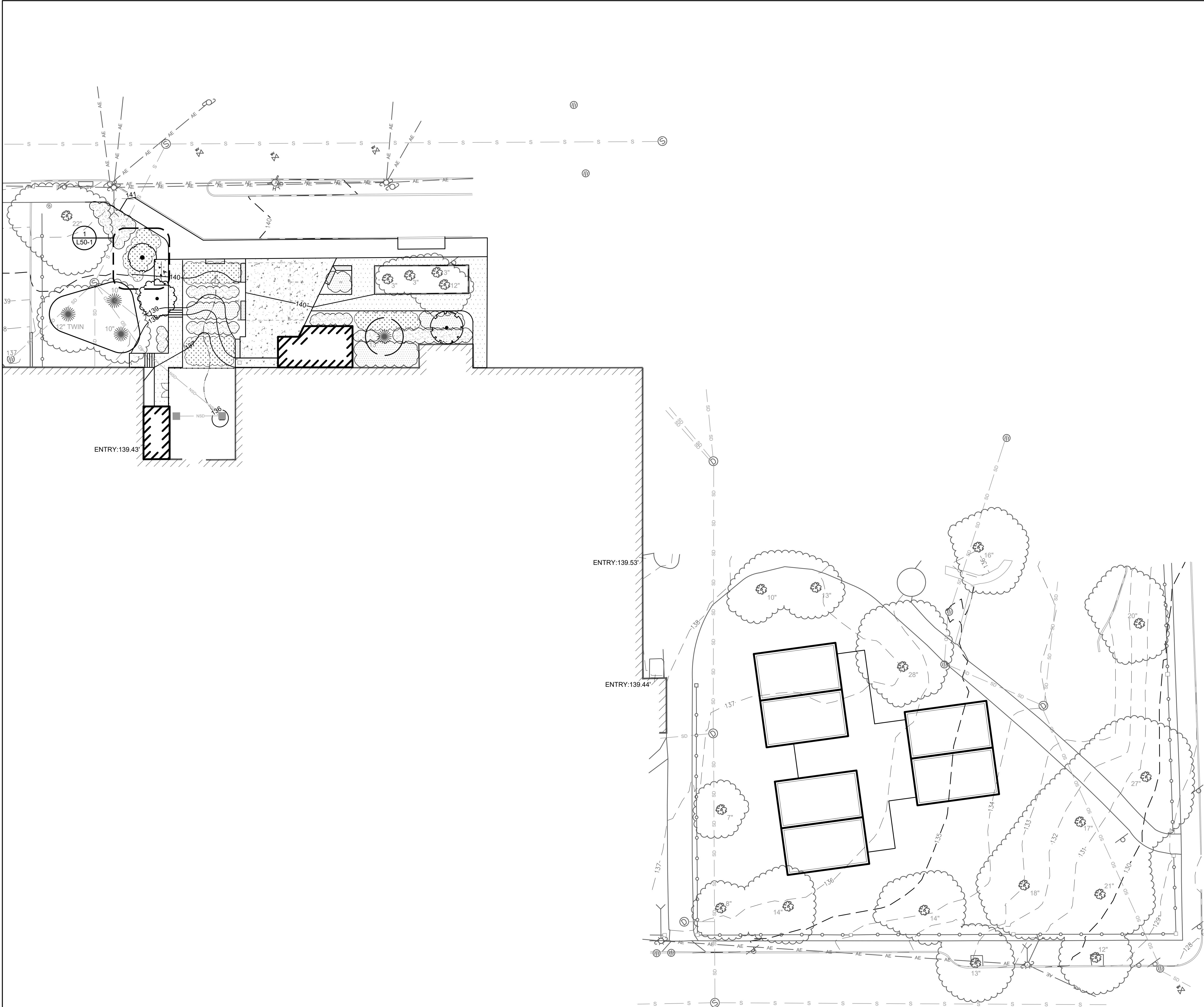
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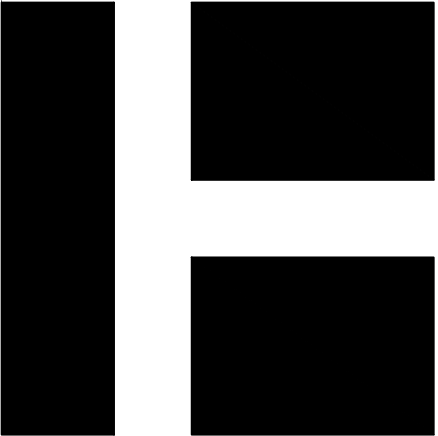
C50-2



PLANT LEGEND

EXISTING TREES	SIZE	NOTES	QTY
Existing Deciduous Tree to Remain Preserve and Protect in Place			Verify in Field
Existing Conifer Tree to Remain Preserve and Protect in Place			Verify in Field
ORNAMENTAL TREES	SIZE	NOTES	QTY
Amelanchier arborea Downy Serviceberry	2.0' - 2.5' Cal.	Zone: 4 CPRTL	--
Prunus serotina Black Cherry	2.0' - 2.5' Cal.	Zone: 4	--
Malus x Baldwin Apple Tree var. Baldwin	2.0' - 2.5' Cal.	Zone: 4	--
DECIDUOUS SHRUBS	SIZE	NOTES	QTY
Cephalanthus occidentalis Butterbush	2 Gallon	Zone: 5	--
Cornus sericea Redosier Dogwood	2 Gallon	Zone: 3	--
Clethra alnifolia Coastal Sweet Pepperbush	2 Gallon	Zone: 3	--
Ilex verticillata Winterberry	2 Gallon	Zone: 3	--
Ledum groenlandicum Labrador Tea	2 Gallon	Zone: 2	--
Lindera benzoin Spicebush	2 Gallon	Zone: 3	--
Viburnum trilobum Cranberry bush	2 Gallon	Equal male and female Zone: 2	--
EVERGREEN SHRUBS	SIZE	NOTES	QTY
Juniperus communis Common Juniper	2 Gallon	Zone: 2	--
GROUNDCOVERS	SIZE	NOTES	QTY
Arctostaphylos uva-ursi Kinnikinnick	SP #2	Zone: 2	--
Carex pensylvanica Pennsylvania Sedge	SP #2	Zone: 3	--
Pulmonaria 'Baby Blue' Lungwort	SP #2	Zone: 4	--
Vaccinium angustifolium Low Sweet Blueberry	SP #2	Zone: 2	--
PERENNIALS	SIZE	NOTES	QTY
Astible var. 'Snowdrift' Snowdrift Astible	SP #2	Zone: 4	--
Aquilegia canadensis Eastern Columbine	SP #2	Zone: 3	--
Coreopsis grandiflora Large Flowered Tickseed	SP #2	Zone: 4a	--
Echinacea magna Purple Cone Flower	SP #2	Zone: 4a	--
Helianthus salicifolius Table Mountain Helianthus	SP #2	Zone: 5	--
Hemerocallis fulva Orange Daylily	SP #2	Zone: 3	--
Liatris spicata Liatris	SP #2	Zone: 3	--
Monarda didyma Beebalm	SP #2	Zone: 4	--
Packera aurea Golden Ragwort	SP #2	Zone: 3	--
Polygonatum odoratum Solomon's Seal	SP #2	Zone: 3	--
Rudbeckia fulgida Orange Coneflower	SP #2	Zone: 3	--
Symphyotrichum novae-angliae New England Aster	SP #2	Zone: 4	--
VINE			QTY
Lonicera sempervirens Trumpet Honeysuckle	SP #2	Zone: 4	--
Passiflora incarnata Purple passionflower	SP #2	Zone: 5b	--
LANDSCAPE MATERIALS			QTY
Bark Mulch	3" depth	-- S.F.	
Shredded Organic Bark Mulch		all planting areas	
Landscape Border		-- LN. FT.	
Landscape edging material			

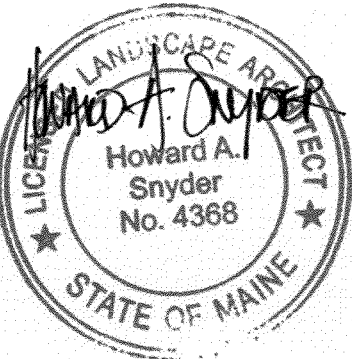
- Plant material symbols represent anticipated size at 75% maturity.
- CPRTL = City of Portland Recommended Tree List, 2018 edition
- Not all plant material species and quantities shown will be used. Final plant material specifications dependent on conformance to, and approval by, local and state regulations and agencies.
- Plant material specified shall conform to ANLA American Standard for Nursery Stock, ANSI Z60.1 current edition.
- No permanent irrigation system is proposed.



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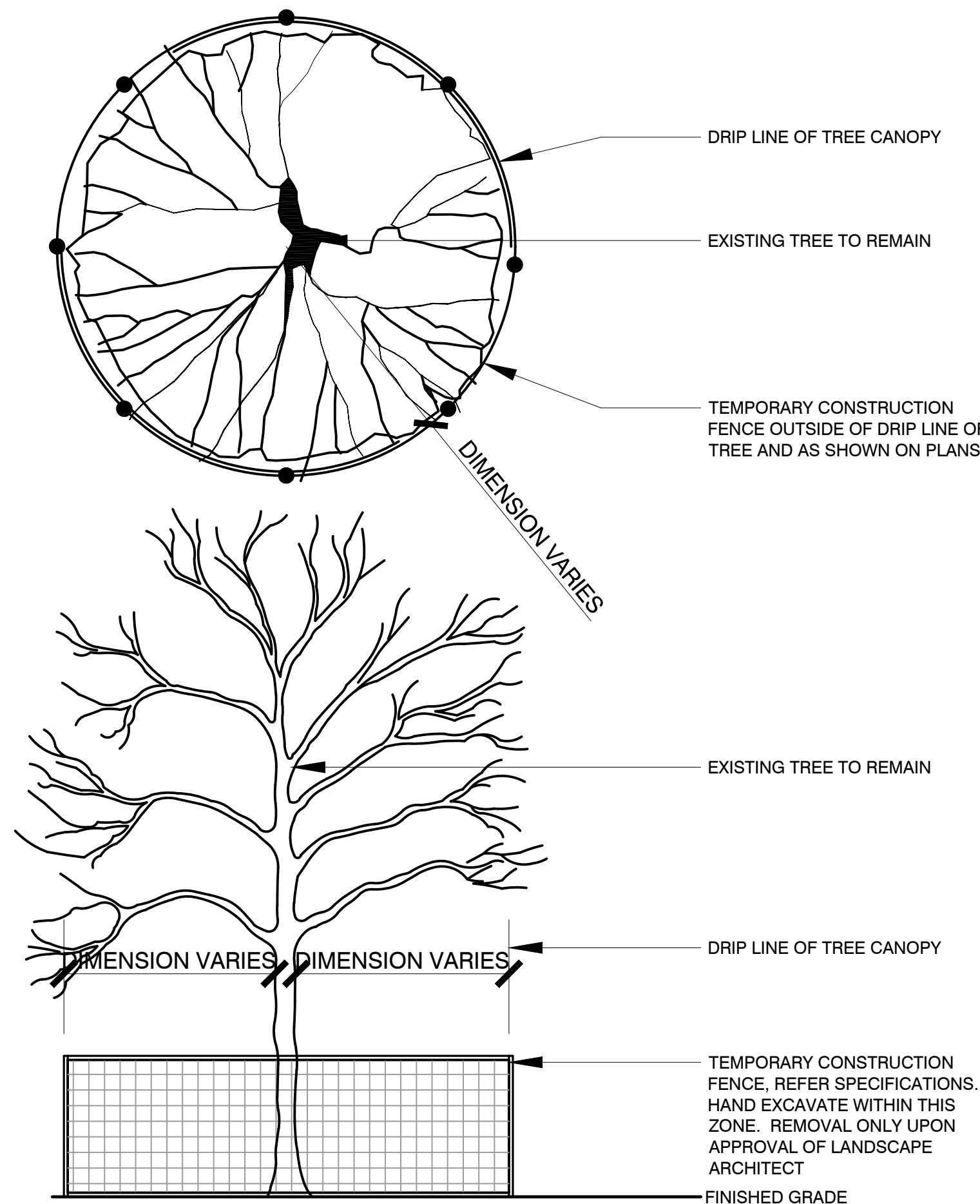
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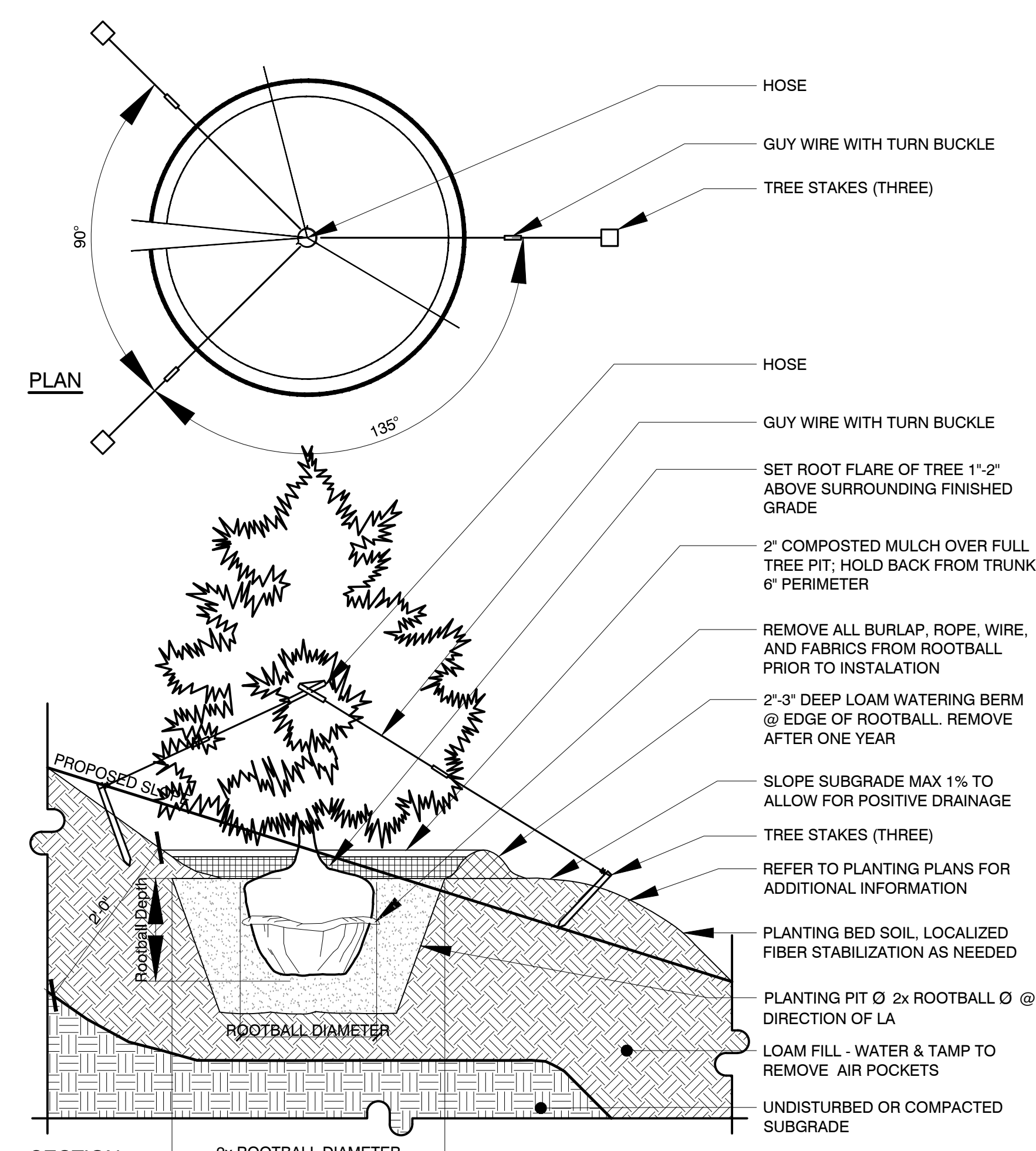
PLANTING
PLAN

L40-1

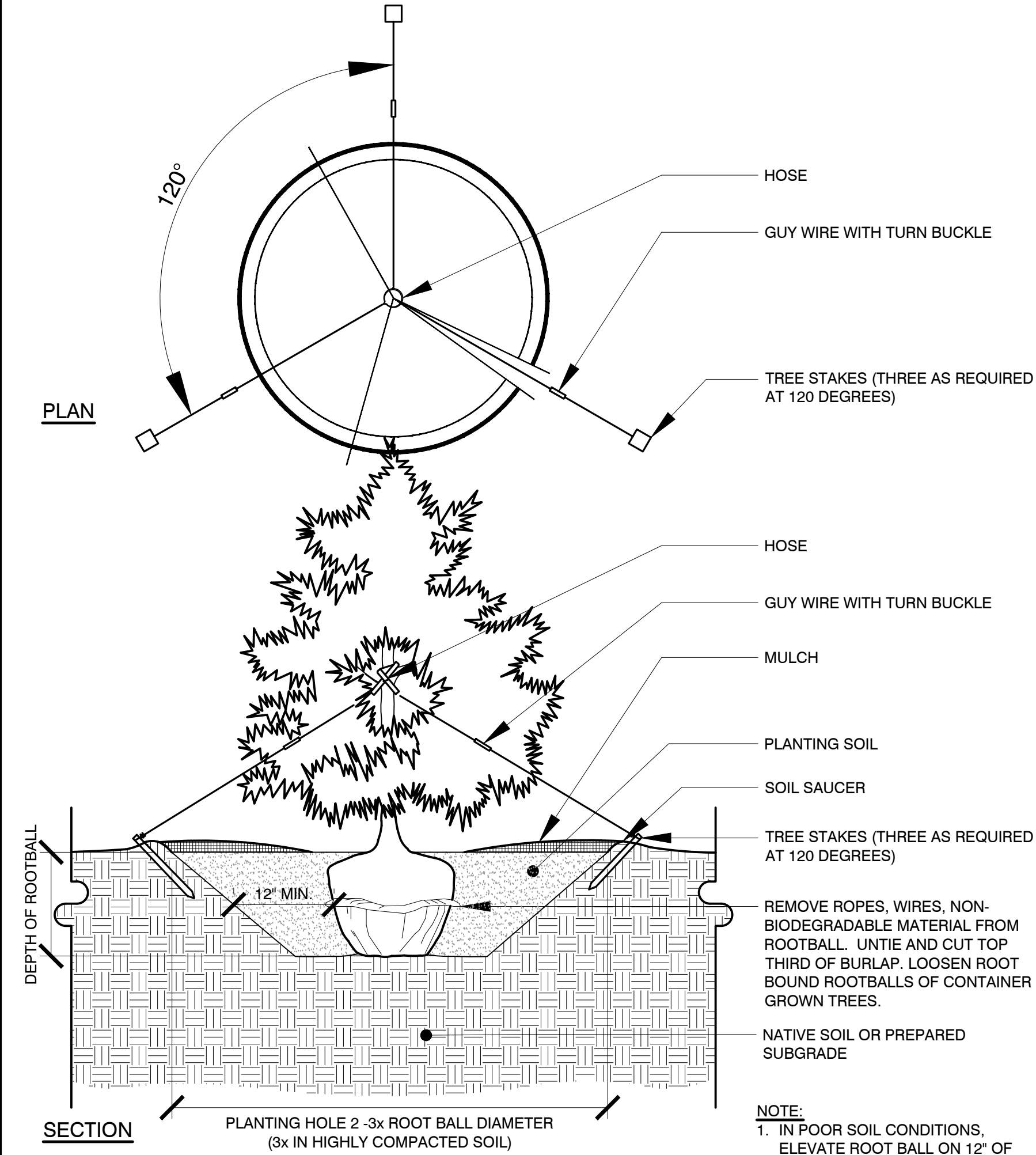


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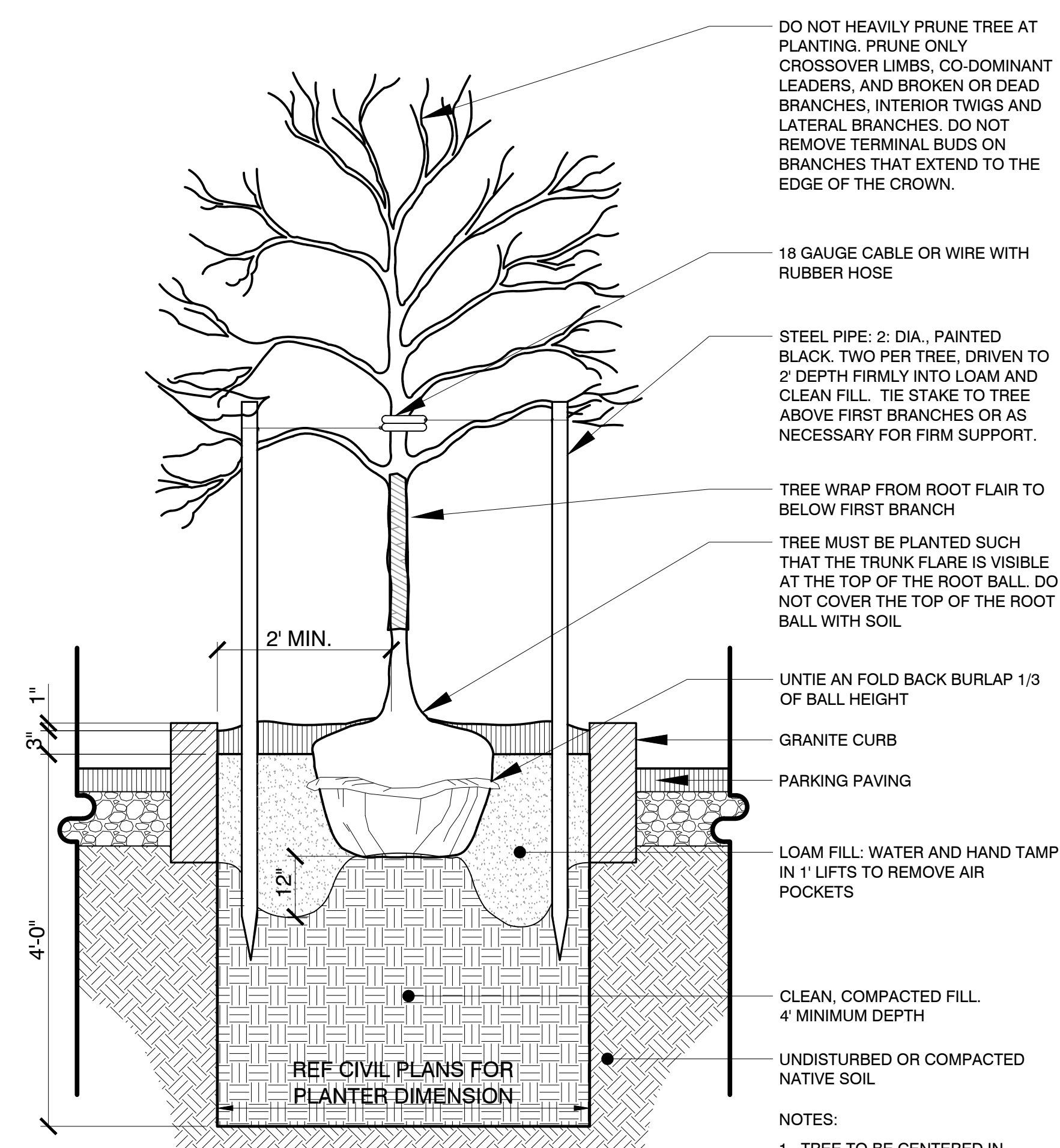
SECTION
B3 PROTECTION FOR EXISTING TREES
Scale: Not To Scale



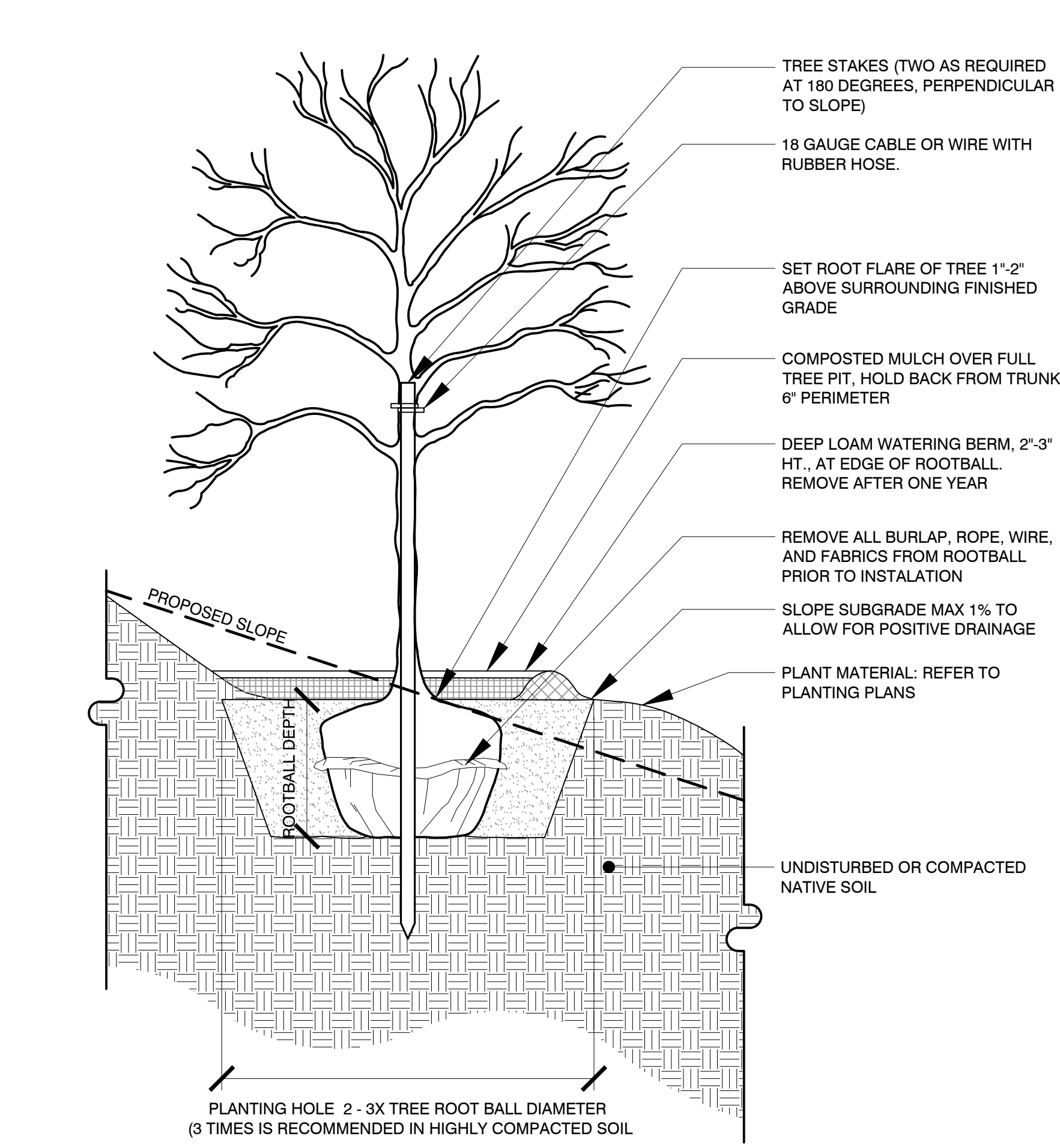
SECTION
B2 EVERGREEN TREE PLANTING, STEEP TO MODERATE SLOPES
Scale: Not To Scale



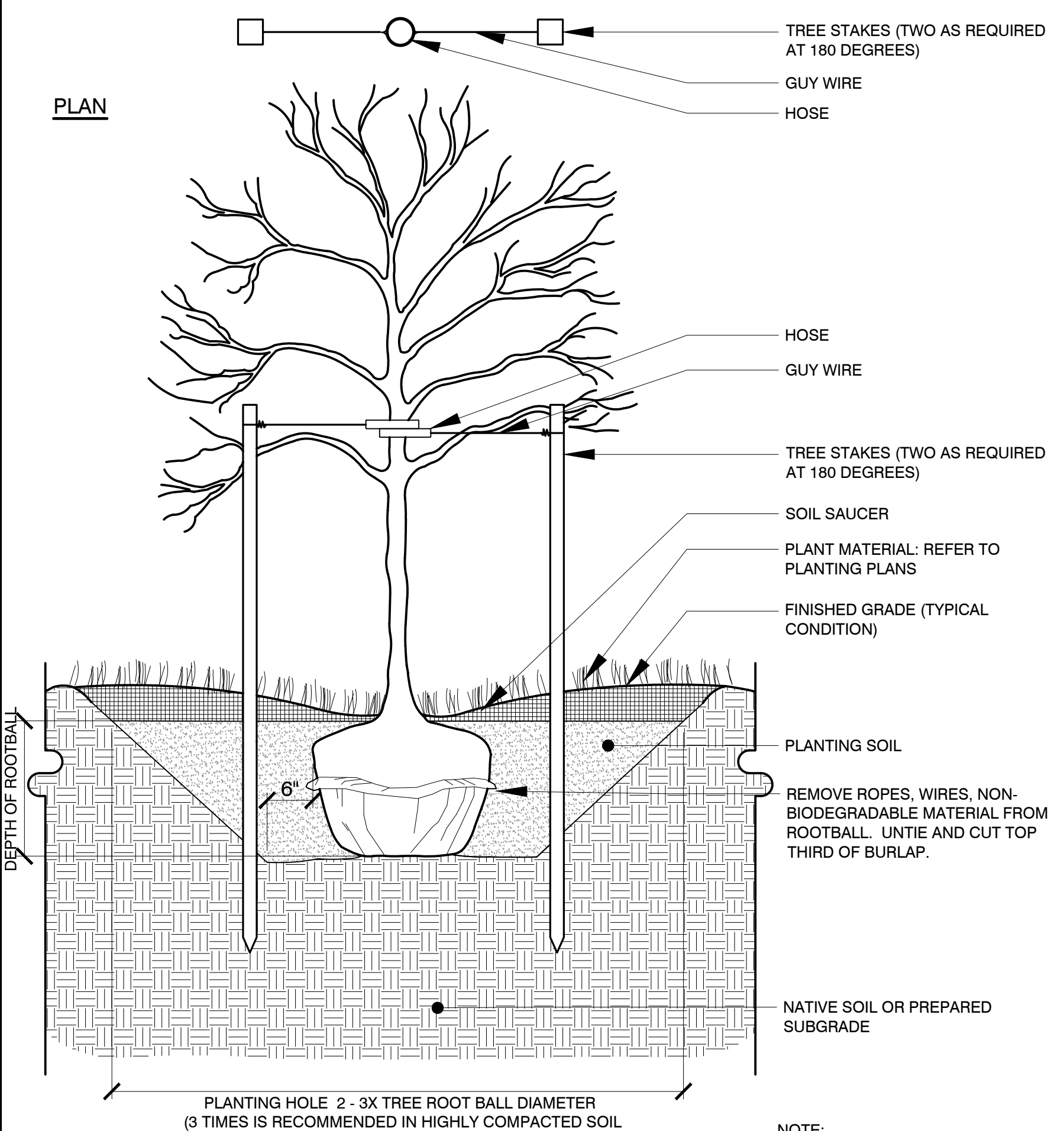
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B1 CONIFER TREE PLANTING
Scale: Not To Scale



A3 DECIDUOUS TREE PLANTING: PARKING ISLAND
Scale: Not To Scale



A2 DECIDUOUS TREE PLANTING: MODERATE TO STEEP SLOPES
Scale: Not To Scale

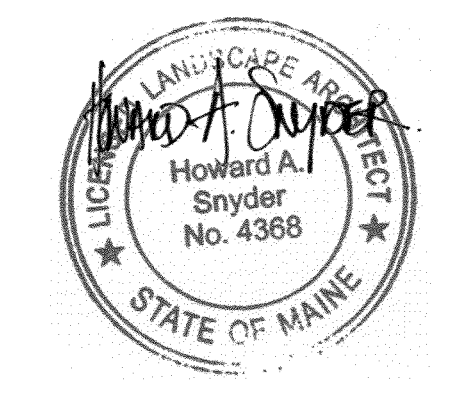


A1 DECIDUOUS TREE PLANTING
Scale: Not To Scale



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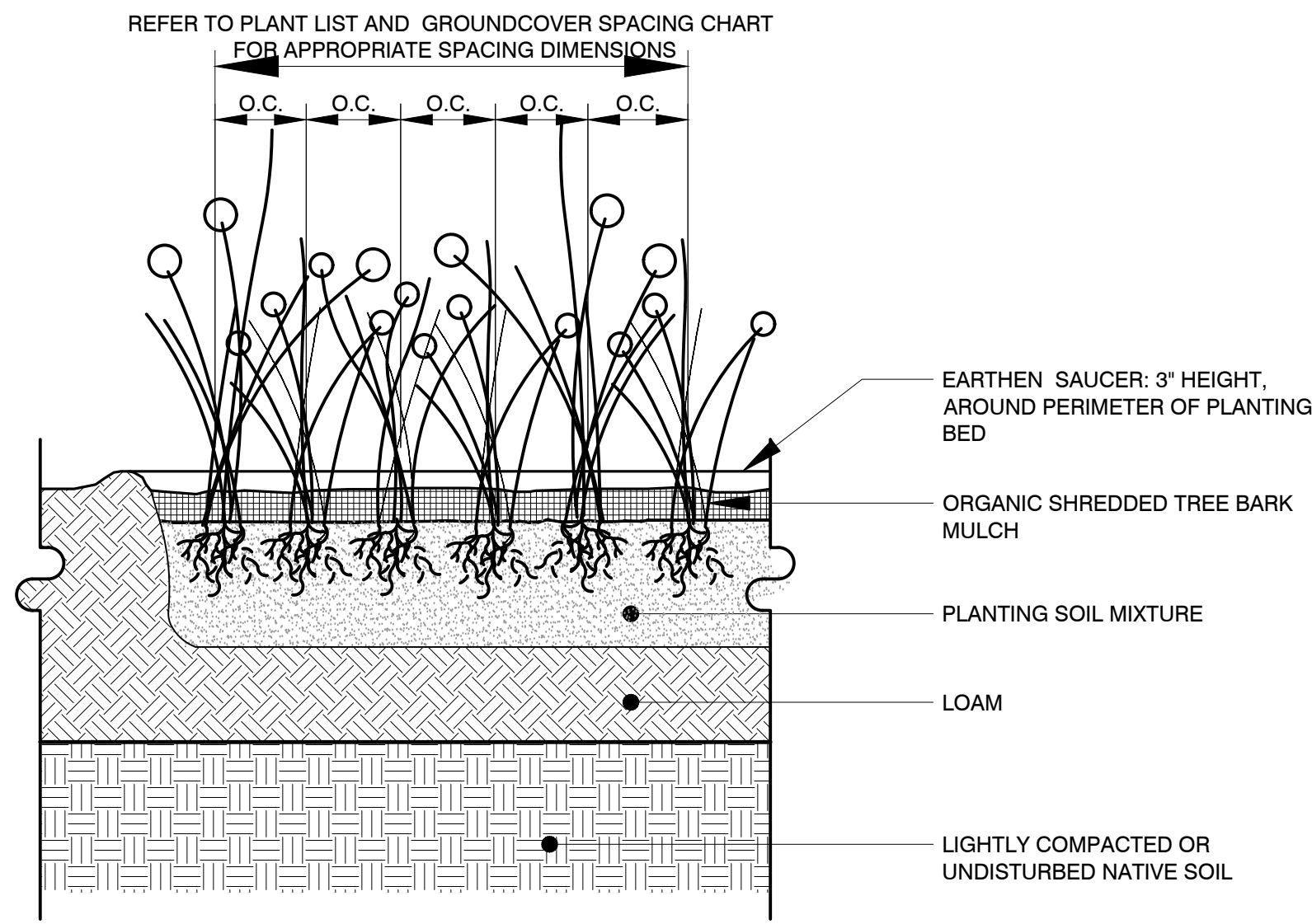
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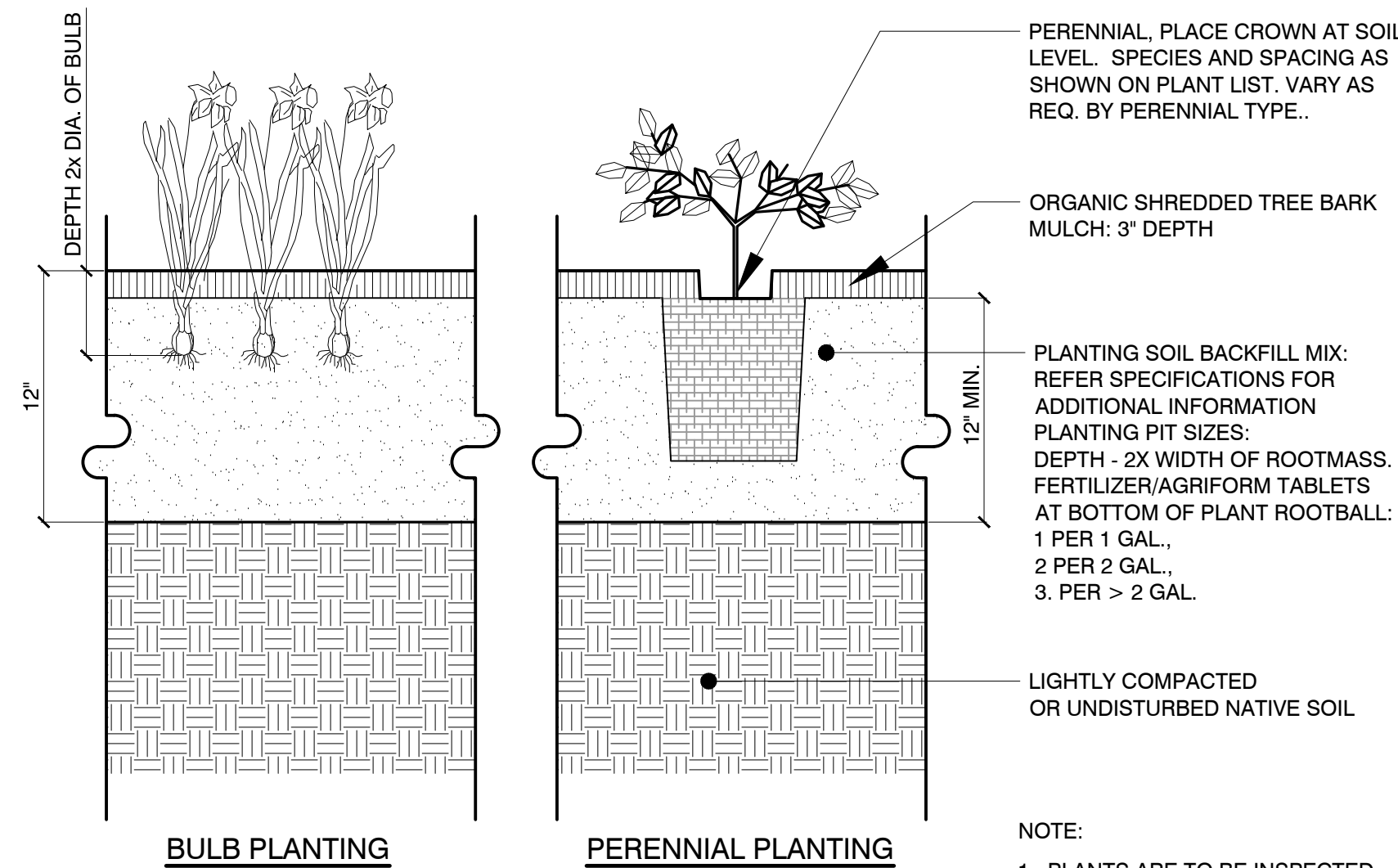
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PLANTING
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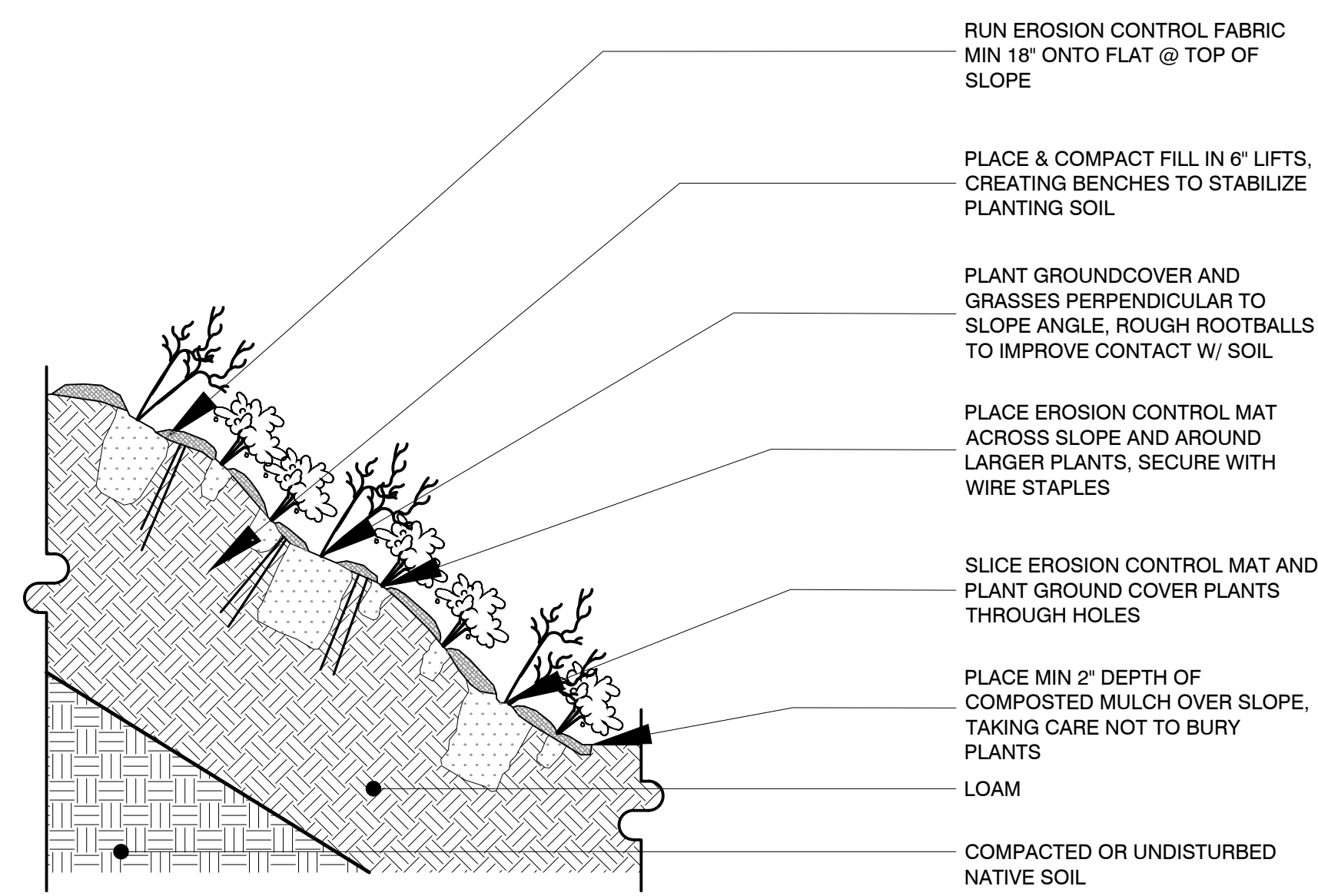
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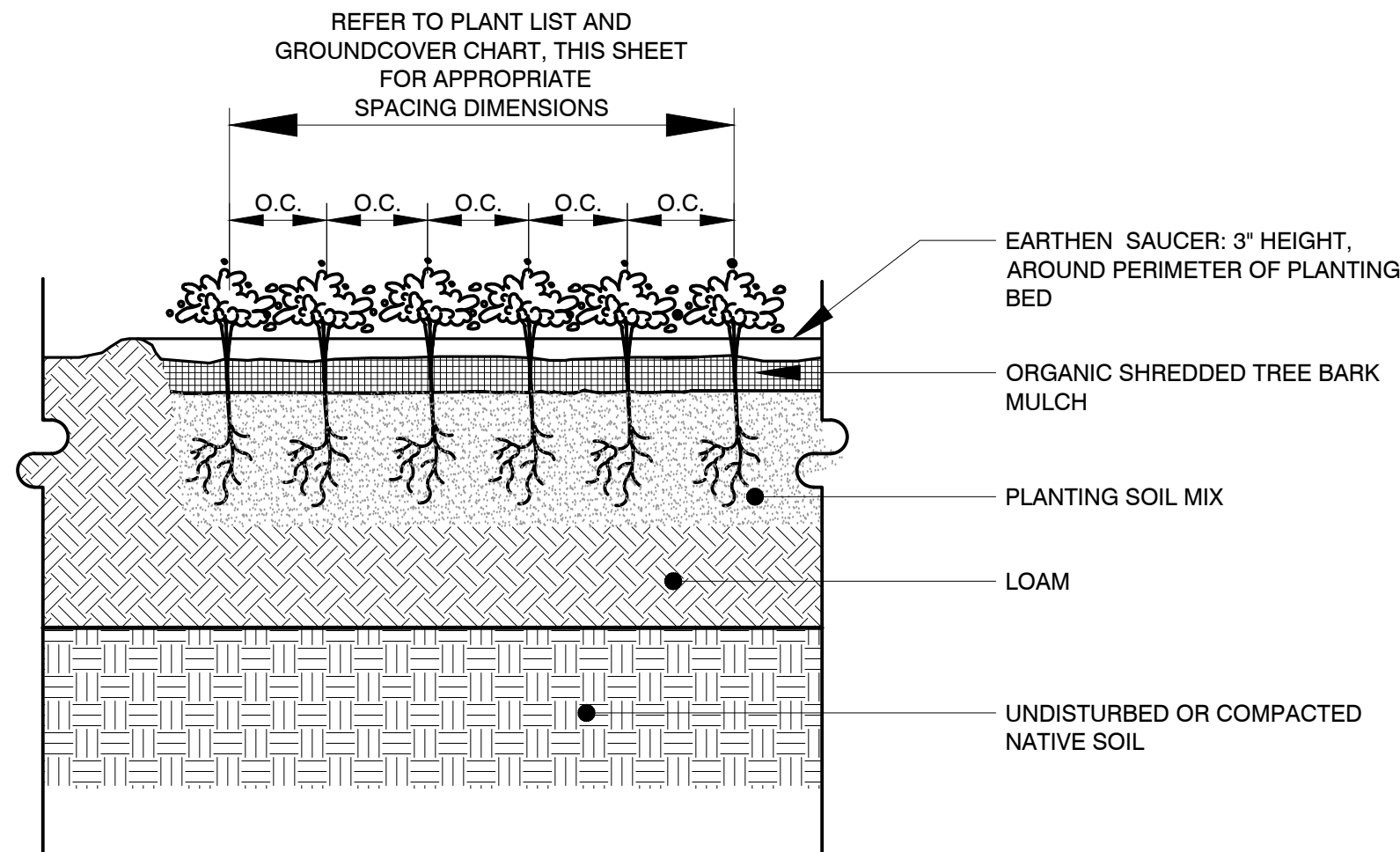
C3 ORNAMENTAL GRASS PLANTING
Scale: Not To Scale



C2 BULB AND PERENNIAL PLANTING
Scale: Not to Scale



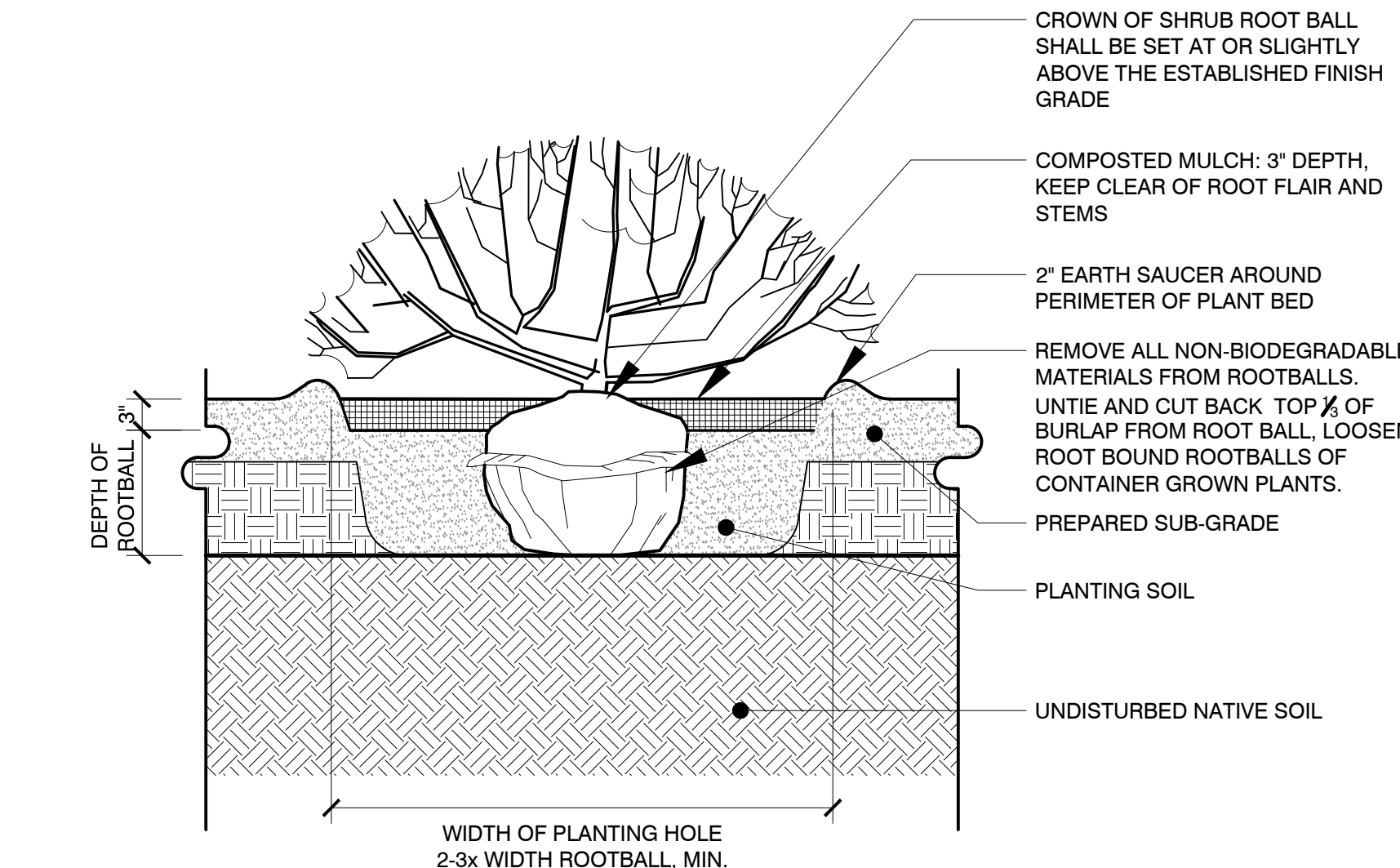
C1 GROUND COVER PLANTING: 3:1 SLOPE OR GREATER
Scale: Not to Scale



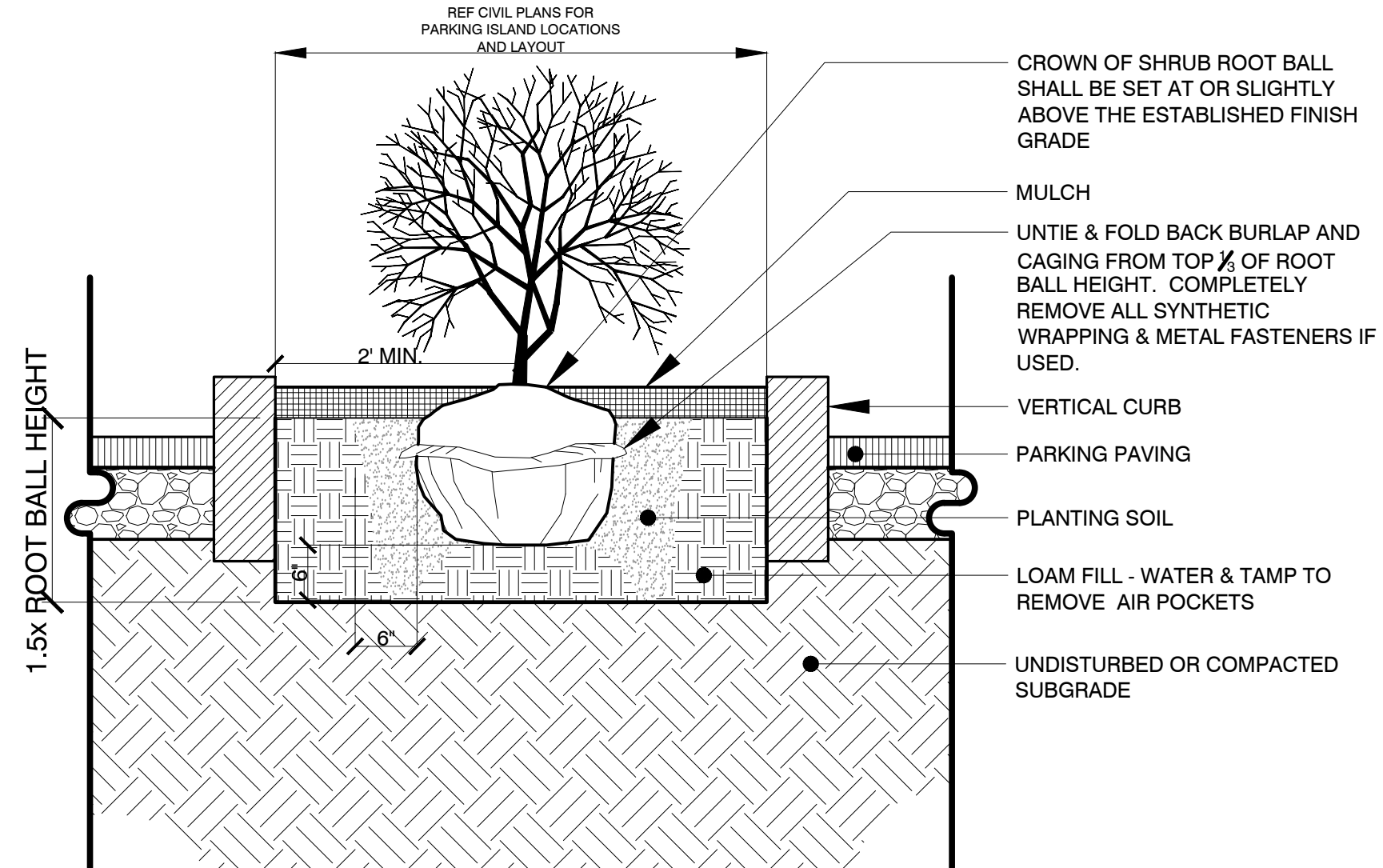
B3 GROUND COVER PLANTING
Scale: Not To Scale

PLANT SPACING ('A')	ROW SPACING ('B')
6 IN. O.C.	5 IN. O.C.
8 IN. O.C.	7 IN. O.C.
10 IN. O.C.	8 ½ IN. O.C.
12 IN. O.C.	10 ½ IN. O.C.
15 IN. O.C.	13 IN. O.C.
18 IN. O.C.	16 IN. O.C.
24 IN. O.C.	21 IN. O.C.
30 IN. O.C.	26 IN. O.C.
36 IN. O.C.	30 IN. O.C.
48 IN. O.C.	42 IN. O.C.
54 IN. O.C.	48 IN. O.C.
60 IN. O.C.	54 IN. O.C.

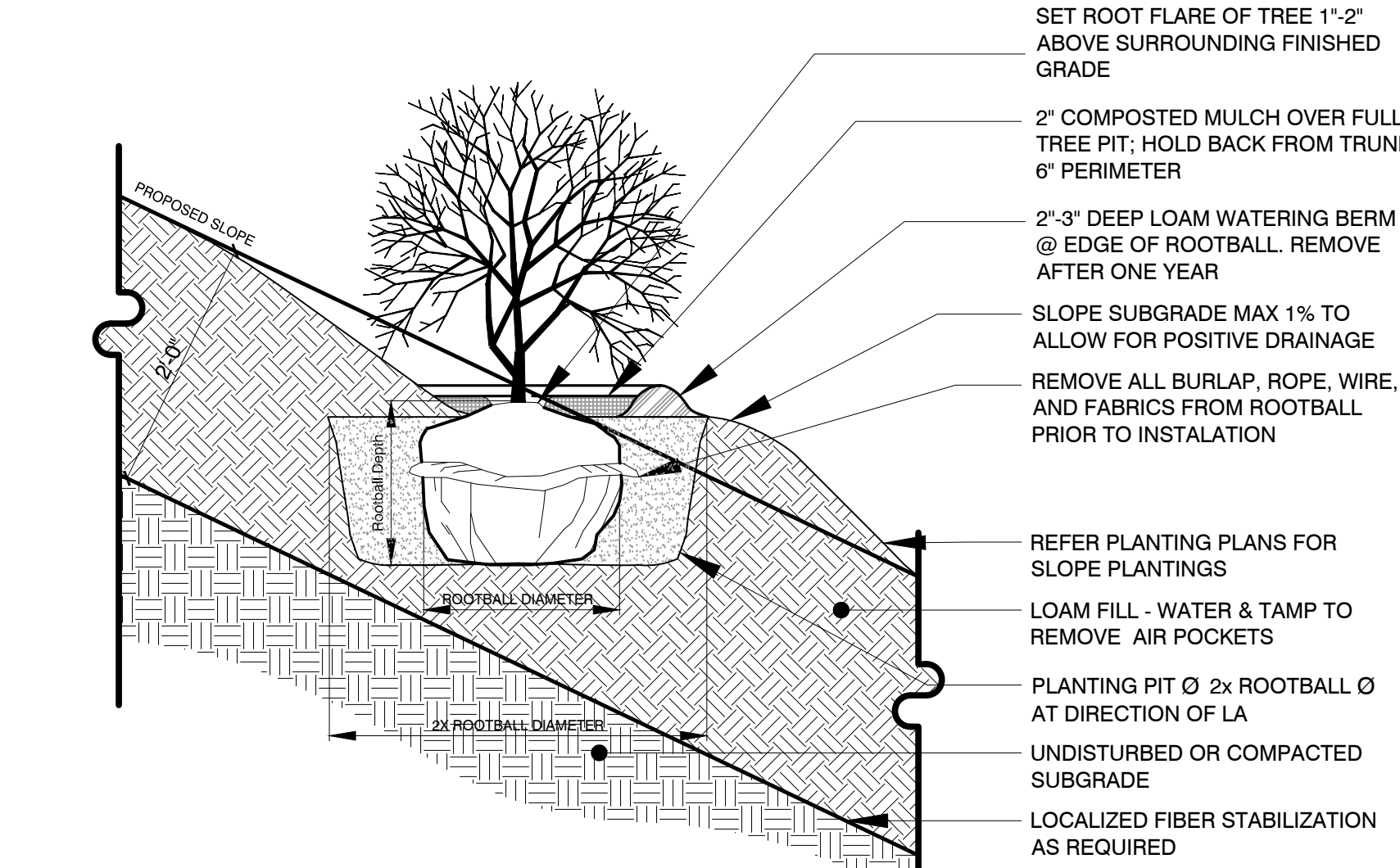
B2 GROUND COVER, PERENNIAL AND ORNAMENTAL GRASS SPACING CHART
Scale: Not to Scale



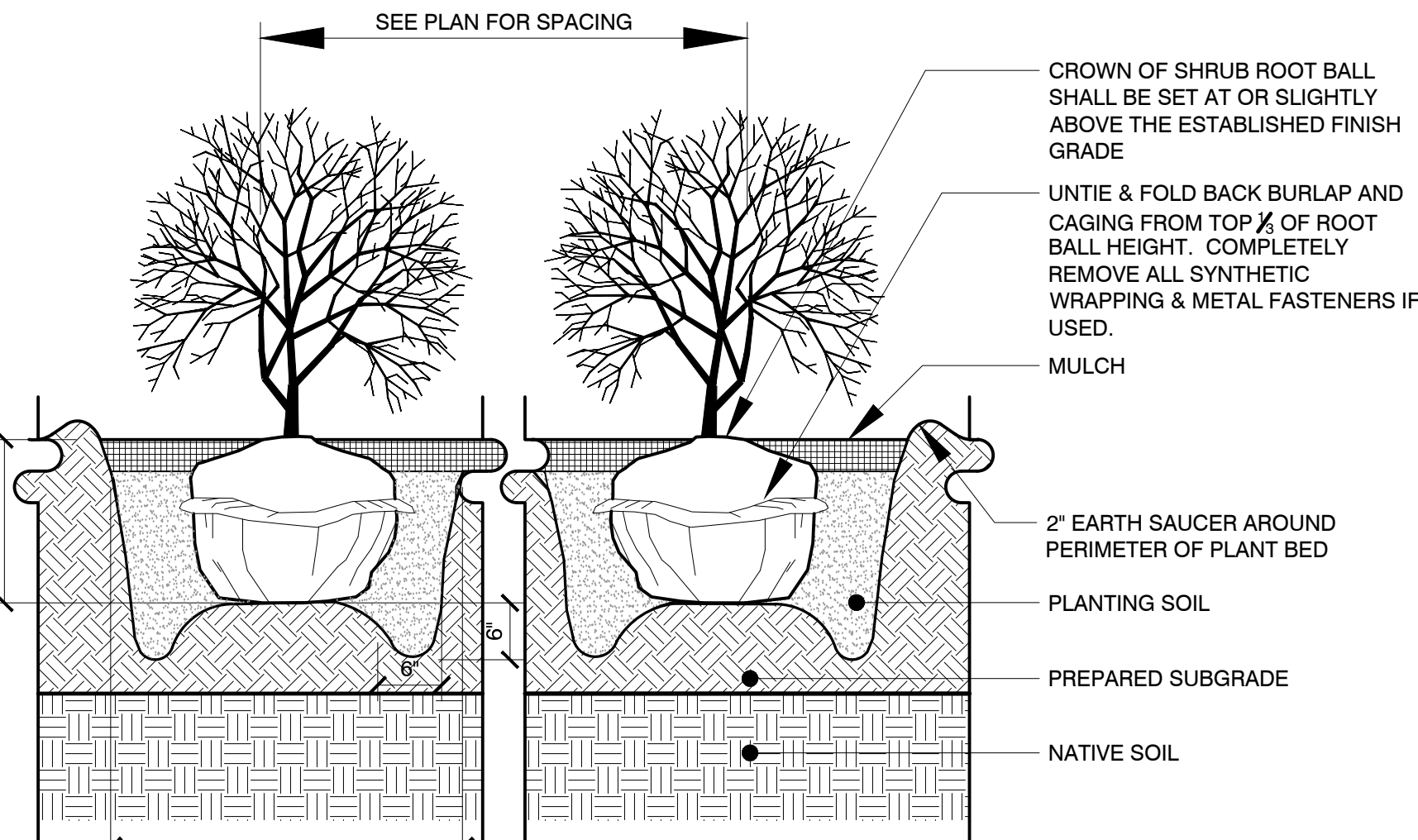
B1 CONIFER SHRUB PLANTING
Scale: Not To Scale



A3 SHRUB PLANTING: PARKING ISLAND
Scale: Not To Scale



A2 SHRUB PLANTING: STEEP TO MODERATE SLOPES
Scale: Not to Scale

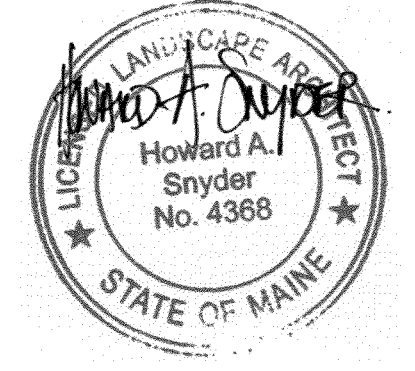


A1 DECIDUOUS SHRUB PLANTING
Scale: Not To Scale



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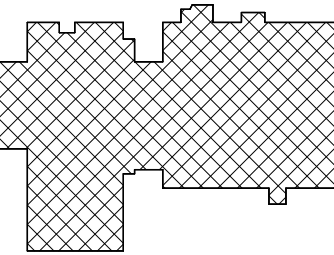
L50-2



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GENERAL NOTES

- SEE DRAWING A01.1 FOR PARTITION TYPES.
- DIMENSIONS LOCATING INTERIOR PARTITIONS ARE TO FACE OF GROW OR CMU UNLESS NOTED OTHERWISE.
- SEE DRAWING A01.1 FOR DOOR SCHEDULE.
- SEE DRAWING A01.1 FOR ROOM FINISH SCHEDULE. NEW WALLPAPER AND PATCHING OF EXISTING WALLPAPER NOT LABELED SHALL BE PAINTED TO MATCH EXISTING ADJACENT WALLS, U.N.O.
- SEE EXTERIOR ELEVATIONS ON DRAWINGS A01.1, A01.2 & A01.3 FOR WINDOW TYPES.
- PROVIDE CONTROL JOINTS IN GROW PARTITIONS AT A MAX SPACING OF 30'-0" UNLESS NOTED OTHERWISE. MAX SPACING AT ABUSE GROW IS 26'-0" UNO. LOCATE AT EDGE OF DOOR FRAME UP TO CEILING WHERE PRACTICAL. REVIEW LOCATIONS WITH THE ARCHITECT.
- AT REMOVED FIXTURES, PARTITIONS, EQUIPMENT, CASEWORK, ETC. THAT WILL BECOME EXPOSED TO VIEW, PATCH AND PAINT PARTITIONS TO CREATE A SMOOTH SURFACE. PAINT TO MATCH EXISTING ADJACENT U.N.O.
- PATCH ALL OPENINGS CREATED FOR INSTALLATION OF NEW MECH. PLUMB, ELEC., ETC. WITH MATERIALS TO MATCH ADJACENT CONSTRUCTION.
- REFER TO A01.1 CODE PLAN FOR DH, CR, AND ADA PUSH BUTTON LOCATIONS.

SYMBOLS LEGEND

- PARTITION TAG
SEE A01.1 FOR PARTITION TAG KEY & PARTITION DEFINITION DETAILS
- ROOM NAME
SEE A01.1 FOR SCHEDULE
- DOOR & BORROWED LITE NUMBERS
SEE A01.1 FOR SCHEDULE
- MISCELLANEOUS ITEMS MARKER
SEE SCHEDULE ON A00.1

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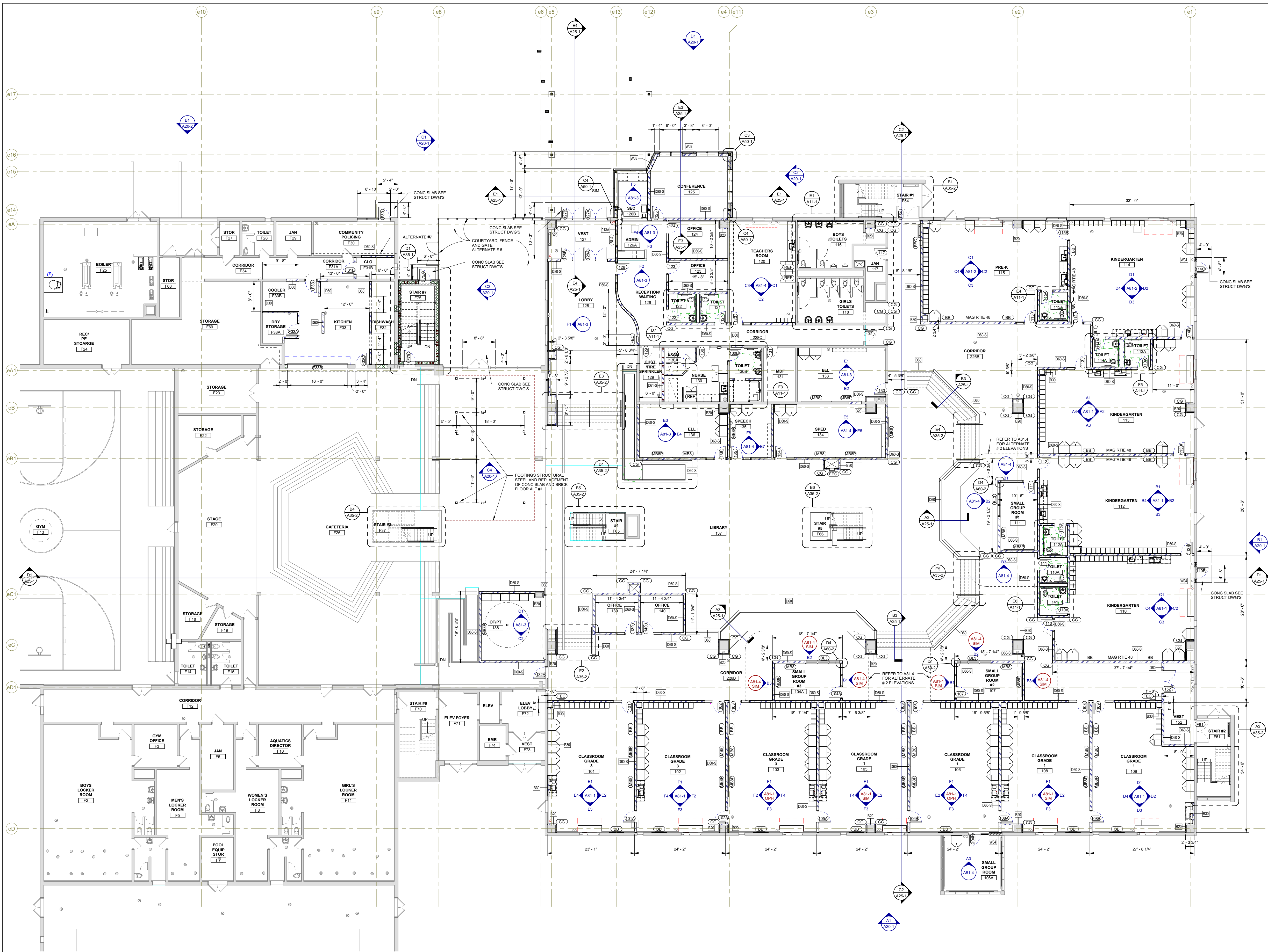
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FIRST FLOOR PLAN

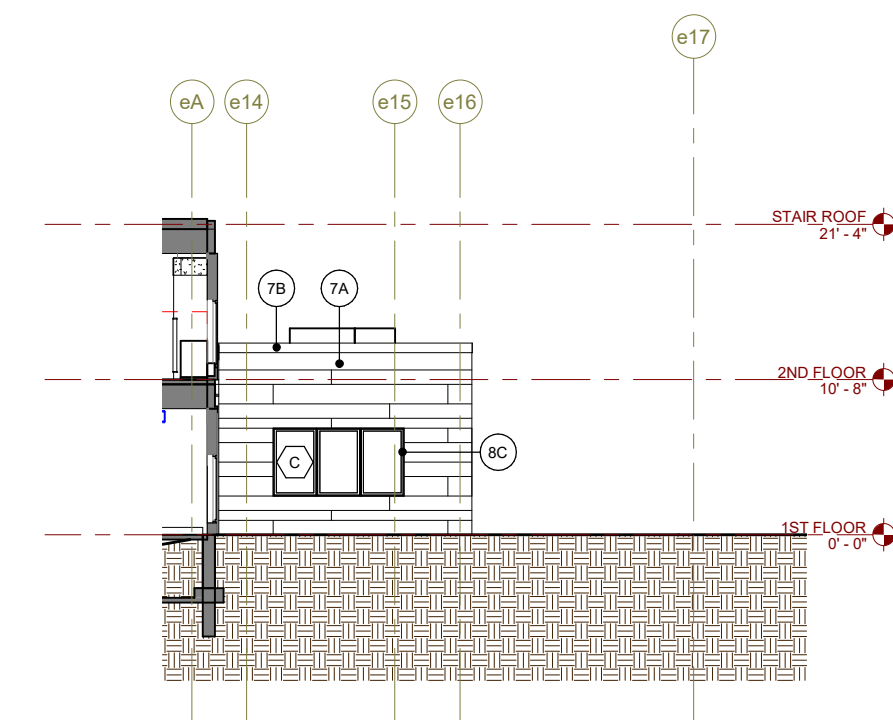
A10-1



A1 FIRST FLOOR PLAN
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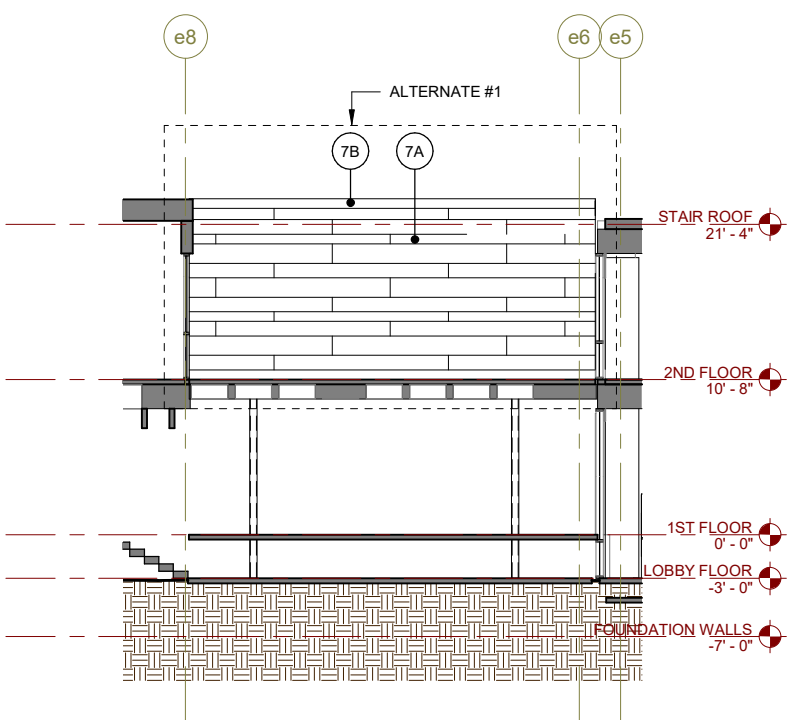


D1 EXTERIOR ELEVATION
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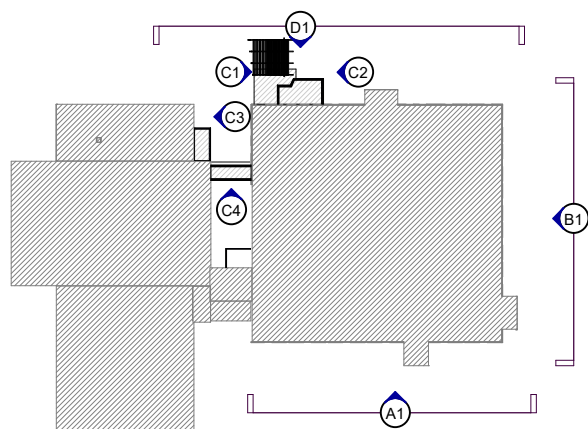
C1 EXTERIOR ELEVATION
NO SCALE

C2 EXTERIOR ELEVATION
NO SCALE



C3 EXTERIOR ELEVATION
NO SCALE

C4 EXTERIOR ELEVATION
NO SCALE



A1 EXTERIOR ELEVATION
NO SCALE

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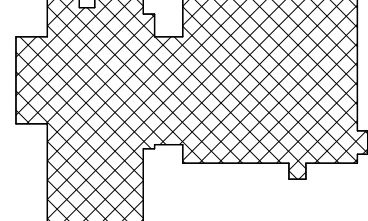
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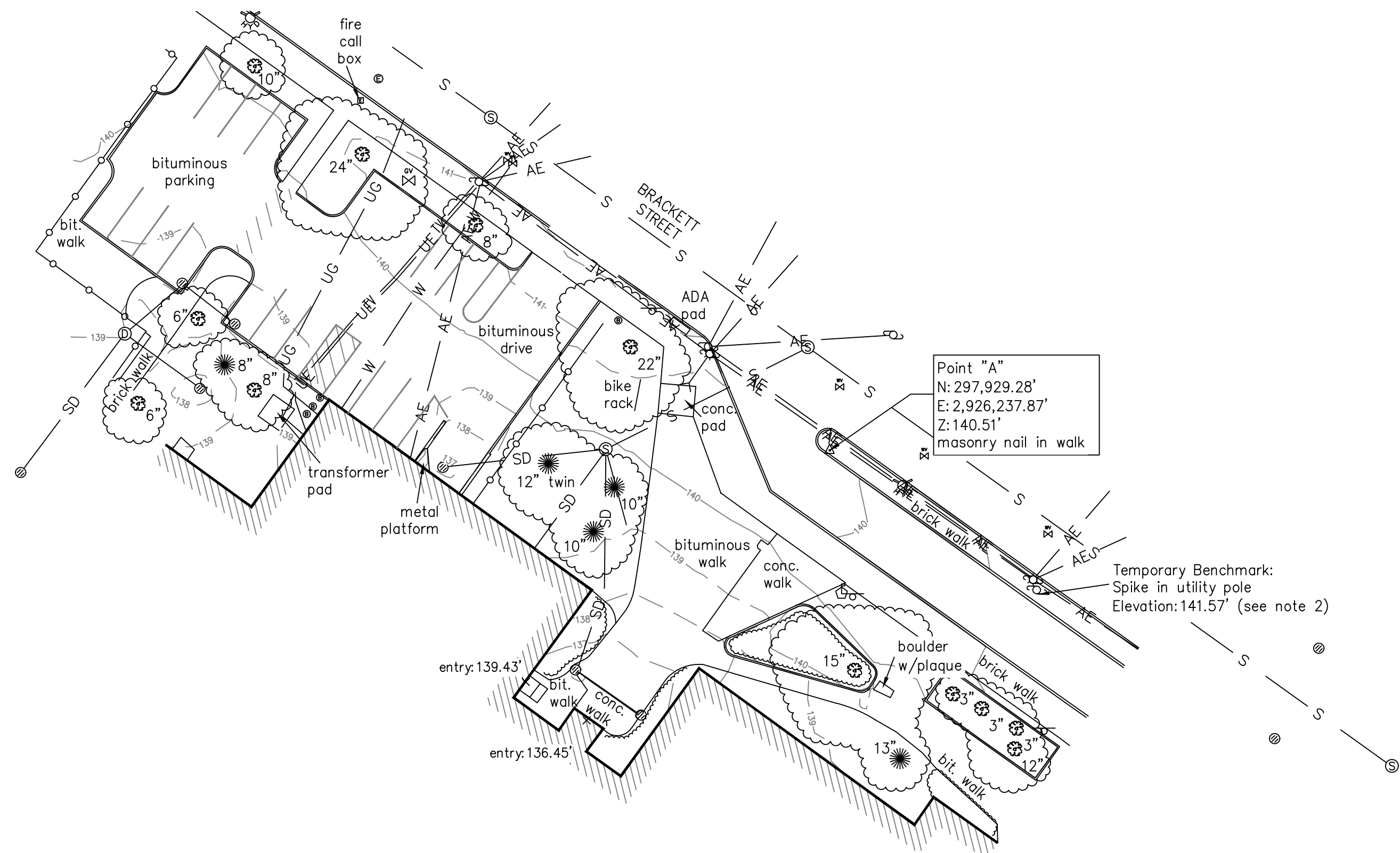
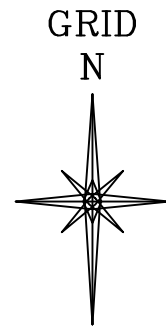
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CONSTRUCTION

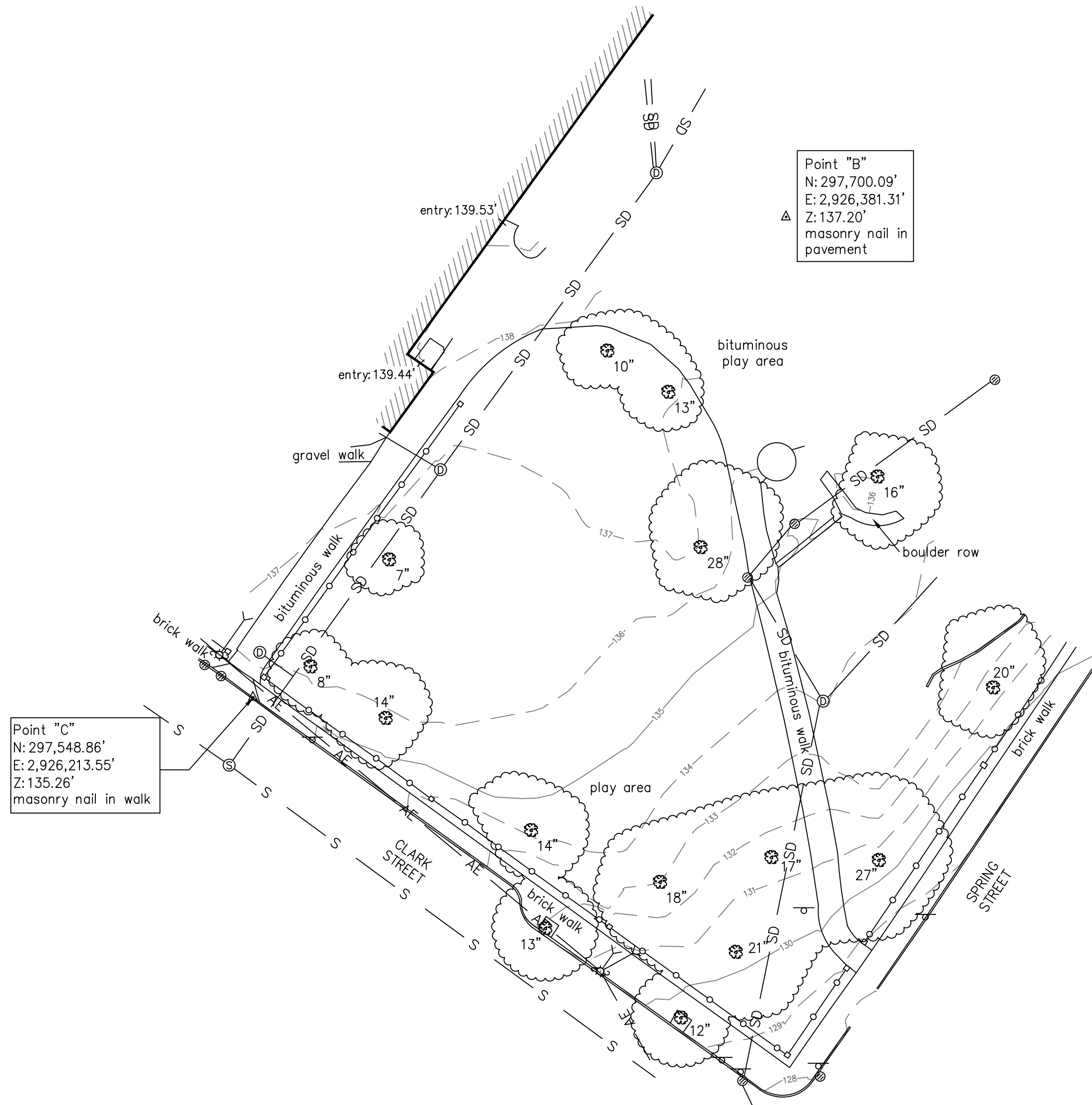
PA / PE: MDL	© 2020
Drawn By: SJF	Harriman Associates

EXTERIOR ELEVATIONS

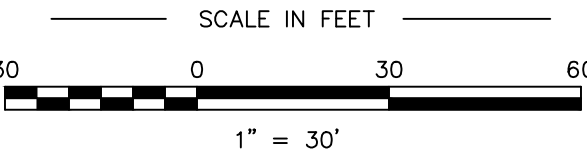
A20-1



LEGEND	
	Metal fence
	Edge of pavement
	Striping
	Curb
	Sign
	Lamp or light pole
	Utility pole
	Guy wire
	Bollard
	Gas valve
	Water valve
	Water shutoff
	Fire hydrant
	Catch basin (round)
	Drain manhole
	Sewer manhole
	Electric manhole
	Manhole
	Telephone manhole
	Utility box
	Overhead utility line
	Sewer line
	Storm drain
	Underground water line
	Underground gas line
	Underground electric line
	Underground telephone line
	Contours (1ft)
	Contours (5ft)
	Hedge/vegetation line
	Existing building
	Deciduous tree/diameter/canopy spread
	Coniferous tree/diameter/canopy spread
	Flag pole



- NOTES**
- 1) North is referenced to grid north. Coordinates are referenced to Maine State Plane Coordinate System, West Zone, NAD83, as derived from City of Portland control points (units: U.S. Survey Feet).
 - 2) Elevations are based on City of Portland datum as derived from City of Portland control points. To adjust elevations to NAVD88, subtract 0.84' (based on GNSS observations).
 - 3) Utility information on this plan is approximate, based on location of visible features and markings provided by others. DigSafe and/or the appropriate utilities should be contacted prior to any construction.



CERTIFICATION
Certification is to existing conditions only.

Nicholas S. Elliston
Nicholas S. Elliston, P.L.S. #2518

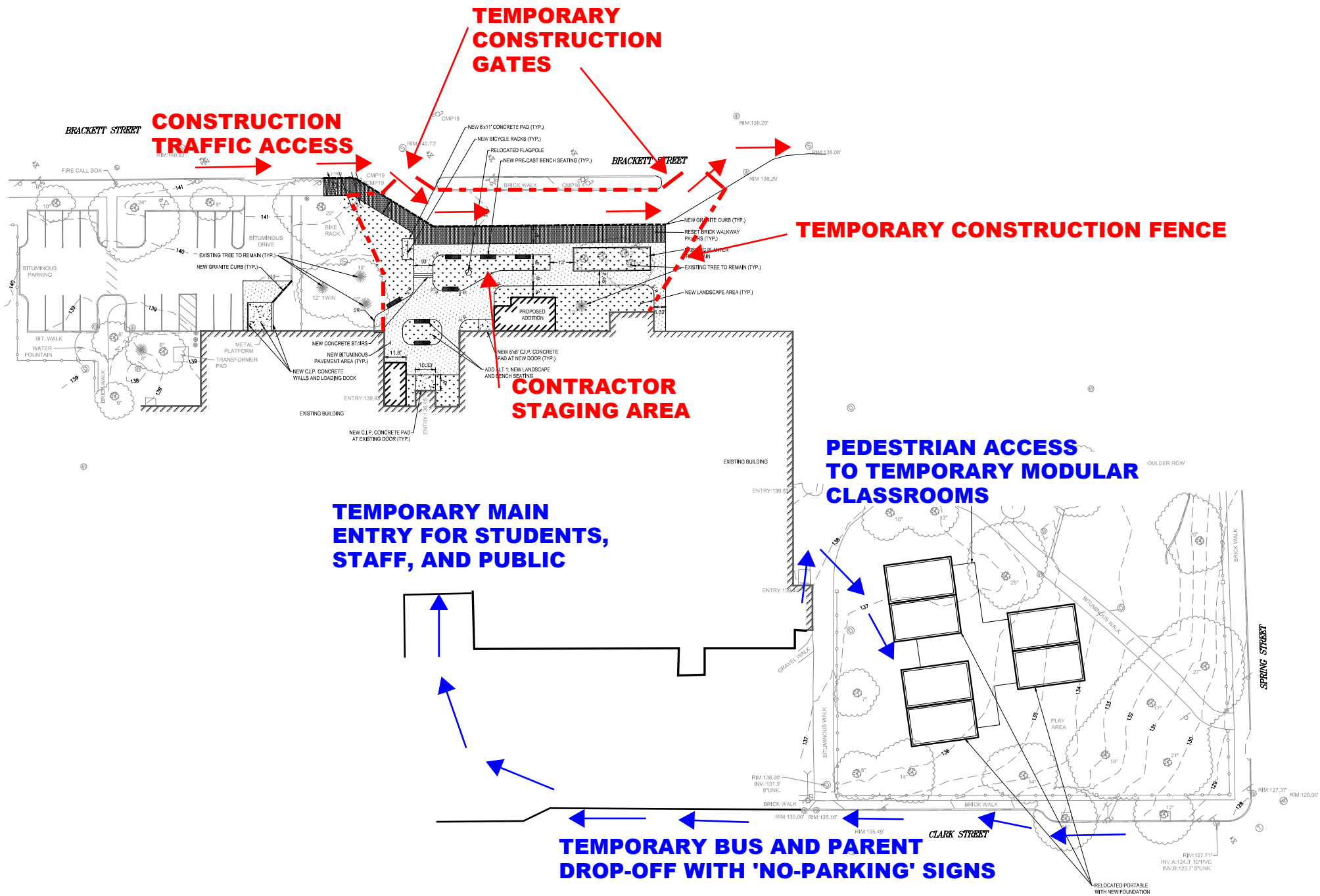
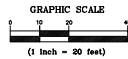


PLAN OF Existing Conditions Survey 166 Brackett Street Reiche Elementary School Portland, Maine		
MADE FOR Portland Public Schools 353 Cumberland Avenue Portland, Maine		
JOB #220039	DATE: July 8, 2020	SCALE: 1" = 30'
BOOK #922	 Titcomb Associates 133 Gray Road, Falmouth, Maine 04105 (207)797-9199 www.titcombsurvey.com	
220039.dwg		
Sheet 1 of 1		



REICHE ELEMENTARY
SCHOOL

PORTLAND, MAINE	
Hamman Project No.	19152
Key Plan	Proj North



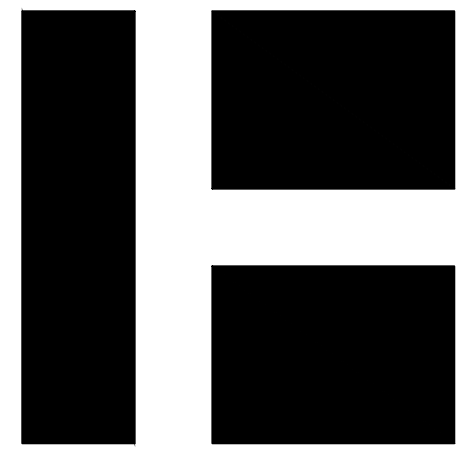
Rev	Date	Revision Description

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Rev		FLC
Drawn By	BAW	© 2020 Harriman Associates

CONSTRUCTION
MANAGEMENT
PLAN - 1

CM-1



HARRIMAN

REICHE ELEMENTARY
SCHOOL ADDITIONS AND
RENOVATION

PORTLAND, MAINE

Harriman Project No.	19152
Key Plan	Proj North



PLANNING BOARD REVISIONS
APRIL 15, 2021

Rev Date	Revision Description

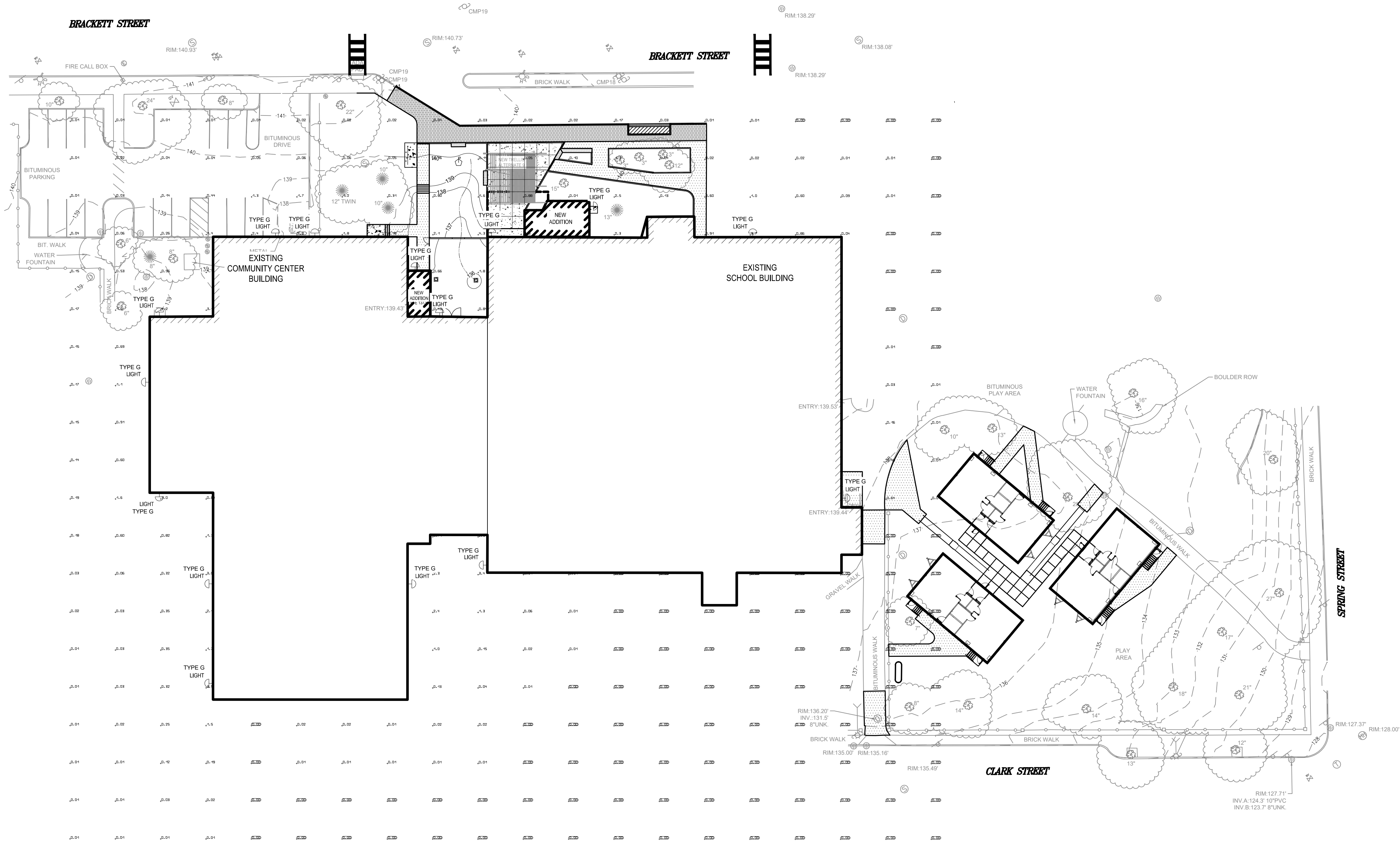
PRELIMINARY
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CONSTRUCTION

1" = 30' - 0"	
PA / PE: FLC	© 2021 Harriman Associates
Drawn By: HAS	

PHOTOMETRIC
PLAN

C00-4

Luminaire list (Site 1)								
Index	Manufacturer	Article name	Item number	Fitting	Luminous flux	Light loss factor	Connected load	Quantity
1	KIM LIGHTING	WDS	WDS-D-24L-3 0-4K7-3	1x C-70-CRI DATA SHOWN IS ABSOLUTE	3424 lm	0.80	28.8 W	16
#	Name	Parameter	Min	Max	Average	Min/average	Min/max	
1	Workplane (Outdoor space 2)	Perpendicular Illuminance (Adaptive)	0.000 fc	5.46 fc	0.33 fc	0.00	0.00	



Kim Roseberry <roseberry00@gmail.com>
to planningboard@portlandmaine.gov

Apr 19, 2021, 12:16:17 PM (2 days ago)



Dear Planning Board,

I am writing in regards to the Reiche Elementary School building at 132 Brackett Street, and the construction of a new entry vestibule. I would like to request that the project consider an addition to the scope of work.

I live directly across from the school at 169 Brackett, and have an additional two unit, also directly across from the school, located at 173 Brackett. Vehicles parked in the parking lot often sit for long periods of time with their headlights on. Due to the proximity and ground slope, the headlights shine directly into the living room spaces of my house and the adjacent first floor unit of my duplex. With the increased use of LED headlights, the light can be very strong and literally shine through the entire length of the house, to my back door.

It would be wonderful if the school could consider plantings, or a fence line that would help prevent this. Thank you for considering this proposal.

Best,
Kim Roseberry
169 Brackett St
Portland
[207-332-4193](tel:207-332-4193)