

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, February 23, 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: Feb 23, 2021 04:30 PM Eastern Time (US and Canada)

Topic: Planning Board Workshop and Public Hearing 2/23/2021

Please click the link below to join the webinar:

<https://us02web.zoom.us/j/89143485407>

Or iPhone one-tap :

US: +13126266799,,89143485407# or +19292056099,,89143485407#

Or Telephone:

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

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

Webinar ID: 891 4348 5407

International numbers available: <https://us02web.zoom.us/j/89143485407>

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. Level III Site Plan and Subdivision; 387 (383) Commercial Street; DPD Lot 3 LLC., Applicant. (estimated time 4:30 – 6:00 p.m.) The Planning Board will hold a workshop on a proposal for the development of a seven-story, 35,100 square foot mixed-use building at 387 Commercial Street. The proposed project is Phase 3 of the 383 Commercial Street Master Development Plan which was approved by the Planning Board on December 13, 2017. The subject property is 34,957 square feet in size and is zoned B-5b Urban Commercial Mixed Use.
- ii. Conditional Use; 432 Stevens Avenue; Portland Public School Department, Applicant. (estimated time 6:00 – 7:00 p.m.) The Planning Board will hold a workshop on a conditional use permit application for building additions totaling 9,300 square feet and associated site drainage improvements at the Longfellow Elementary School. The subject property is 2.8 acres in size and is zoned R-5 Residential.
- iii. Conditional Use; 69 Presumpscot Street; Portland Public School Department, Applicant. **THIS ITEM IS BEING POSTPONED** The Planning Board will hold a workshop on a conditional use permit 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 6.3 acres in size and is zoned I-M and R-5.

PUBLIC HEARING - 8:00 PM

1. ROLL CALL AND DECLARATION OF QUORUM

2. COMMUNICATION AND REPORTS

3. REPORT OF ATTENDANCE AT THE MEETING HELD ON FEBRUARY 9, 2021

Evening Hearing

100 W. Commercial Street: Chann, Dundon, Dunfey, Mazer, Silk, Smith present; Stanley absent.

1844 Forest Avenue: Chann, Dundon, Dunfey, Mazer, Silk, Smith present; Stanley absent.

0 House Island: Chann, Dundon, Dunfey, Mazer, Silk, Smith present; Stanley absent.

4. REPORTS OF DECISIONS AT THE MEETING HELD ON FEBRUARY 9, 2021

- i. Level III Site Plan and Subdivision; 1844 Forest Avenue; Forest 1844 LLC., Applicant. Dundon moved and Dunfey seconded a motion to find the proposed conditional use for workforce housing to meet the standards of Section 14-484 of the land use code with two conditions of approval. Vote 6-0, Stanley absent. Dundon moved and Dunfey seconded a motion to approve the subdivision with one condition of approval. Vote 6-0, Stanley absent. Dundon moved and Dunfey seconded a motion to approve the site plan with two conditions of approval. Vote 6-0, Stanley absent.
- ii. Level II Site Plan; 0 House Island; Fortland, LLC., Applicant. Dundon moved and Dunfey seconded a motion to approve the site plan with one condition of approval. Vote 6-0, Stanley absent.

5. NEW BUSINESS

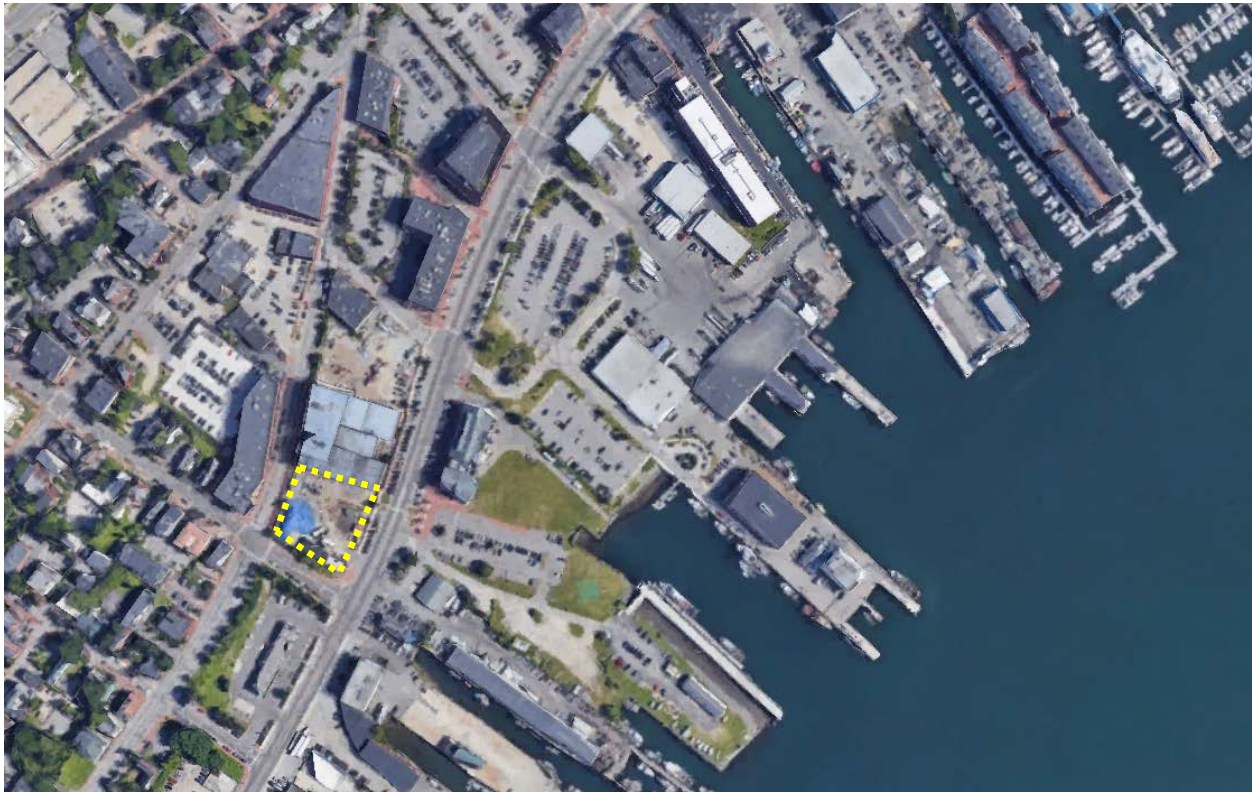
- i. Housing Trust Fund Renaming; City of Portland, Applicant. (estimated time 8:00 p.m.) The Planning Board will hold a public hearing to consider a text amendment renaming the City's Housing Trust Fund as the Jill C. Dusen Housing Trust Fund. The sponsor of this text amendment is the City of Portland. The text amendment is subject to review and recommendation from the Planning Board to the City Council.

Memorandum

Planning and Urban Development Department



To: Chair Mazer & Members of the Planning Board
From: Andrew Tufts, Planner
Date: February 19, 2021
Re: 387 Commercial Street Development
Project ID: PL-001348-2020
Meeting Date: February 23, 2021
CBL: 042 A002001



The surrounding context of 387 Commercial Street, outlined in yellow

I. INTRODUCTION

DPD Lot 3, LLC, has submitted a Level III Site Plan application to facilitate the development of a seven-story, 35,100 square foot mixed-use building with 64 residential units (Condos) and 8,857 square feet of ground-floor retail space at 387 Commercial Street. The 34,957 square foot subject property is located on the corner of Commercial, York and High streets and is zoned B-5b Urban Commercial Mixed Use. The applicant has also submitted a related Conditional Use permit application (CU-1435-2020) for the residential element of the project in reference to the City's Inclusionary Zoning Ordinance.

Notices for the Planning Board workshop were sent to 181 property owners and a legal advertisement was published in the February 12th and February 13th editions of the Portland Press Herald.

Owner/Applicant: DPD Lot 3, LLC

Applicant Representatives: Joseph Dasco, Applicant; Richard Meek, Sebago Technics; Ginny Stanley, Archetype PA

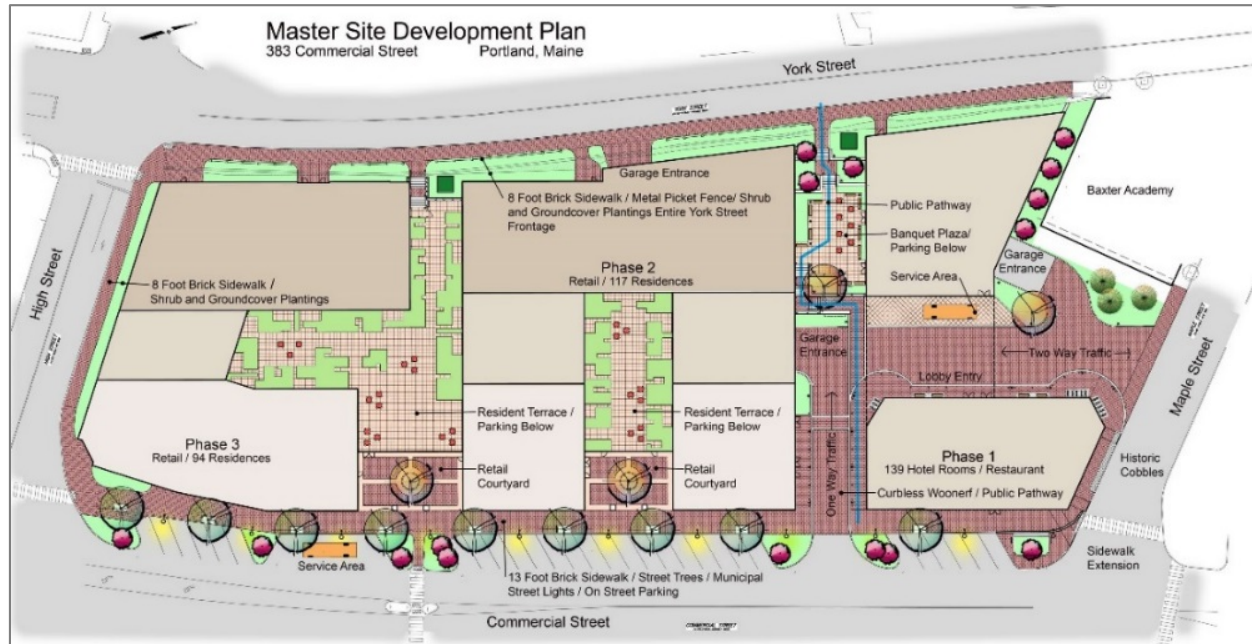
II. REQUIRED REVIEWS

<i>Review</i>	<i>Applicable Standards</i>
Site Plan	<i>Section 14-526</i>
Subdivision	<i>Section 14-497</i>
Conditional Use - Inclusionary Zoning	<i>Section 14-487</i>
Design Review	B-5b Urban Commercial Mixed Zone Standards 14-526 (d) 5

III. PROJECT DATA

Existing Zoning	B-5b Urban Commercial Mixed Zone
Existing Use	Office/ Vacant lot
Proposed Use	Residential/ Commercial
Proposed Development Program	Ten (10) one-bedroom residential units, forty five (45) two-bedroom residential units, nine (9) three bedroom residential units, and an undetermined number of commercial spaces on the lower level.
Parcel Size	.806 Acres
Total Area of Site (SF)	34,957.64 SF
Disturbed Area	34,957.64 SF

	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Building Footprint	2,870 SF	35,100 SF	+ 32,230 SF
Building Floor Area	2,870 SF	Commercial: 8,857 SF Residential: 89,403 SF	+ 95,390 SF
Impervious Surface Area	30,479 SF	34,339 SF	+ 3,860 SF
Parking Spaces	0	130	+ 130
Bicycle Parking Spaces	0	13	+ 13



III. BACKGROUND

The Rufus Deering site is a prominent parcel on Commercial Street and was formerly occupied by Rufus Deering Lumber Company. The proposed project is Phase 3 of the larger 383 Commercial Street Master Development Plan (MDP), which was approved in its entirety by the Planning Board on December 13, 2017.

On June 26, 2018, the Planning Board approved the Level III Phase I & II developments of the Rufus Deering Site, located on the two eastern-most lots of the three lots comprising the MDP approved in December 2017. The approval comprised of a hotel and public passageway on Lot 1 nearest to Maple Street, and 89 condominiums above four retail units along with structured parking on Lot 2.

A Traffic Movement Permit (TMP) was required as part of the MDP. A Transportation Demand Management Plan (TDM) was also required for the Hotel portion of the development.

It should be noted that the MDP and associated requirements established the general parameters for the development, including the supporting documentation for overall dimensions, general types of uses, building coverage, generalized open space plans and infrastructure systems. It is not a final authorization for development but it does confer pending proceeding status upon the development with the effect of maintaining the applicability of regulations in effect at the time of the approval for as long as the MDP approval remains valid (six years initially), including permissible extensions up to 10 years. All Level III site plans for each phase shall be in general conformance with the approved MDP.

West Commercial Street Multi-Modal Corridor Study: In 2016, the City released the West Commercial Street Multi-Modal Corridor Study, which identified the City's vision to safely accommodate all modes of transportation along an important gateway corridor into Portland's waterfront. To support this vision the original MDP approval included conditions that would facilitate the extension of the West Commercial Street Pathway in front of the proposed Phase III building. These conditions are discussed in detail in the Master Development Plan and Transportation Standards sections.

IV. EXISTING CONDITIONS



Existing Conditions – Source: Google Earth

The overall MDP site is 2.58 acres and is bounded by Commercial, Maple, York and High streets in the B-5b zone. The overall site has approximately 600 feet of frontage on Commercial Street and abuts the Old Port Historic District to the north. To the south is a gas station and to the north is the Marriot Courtyard Hotel. To the west across York Street is a new five story mixed use development. To the west (across Commercial Street) is the Gulf of Maine Research Institute and the waterfront.

The Phase 3 development site is 0.806 acres in size and is currently utilized by the applicant for office space, show rooms, and staging areas. Phases 1 & 2, approved in 2018, are currently under construction and are both nearing completion. The adjacent condominium project (Phase 2) will have a shared parking program with the proposed Phase III building.



Proposed Full Build Out Rendering

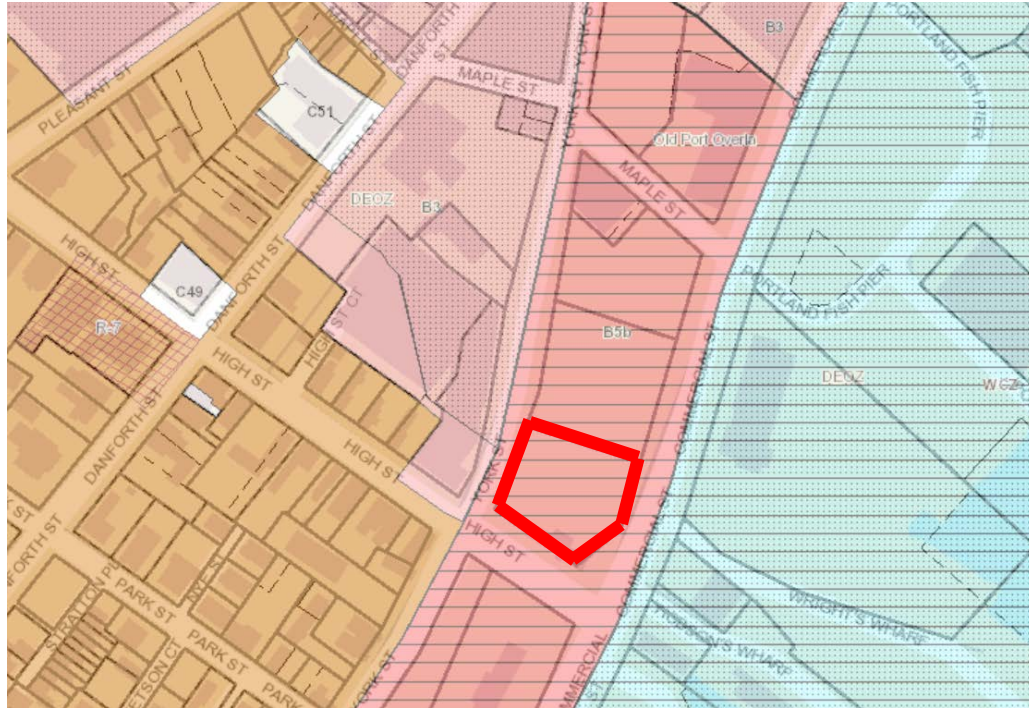
V. DEVELOPMENT PROPOSAL

As part of the Phase III proposal the existing two-story building on the western edge of the site would be demolished and the lot would be redeveloped into a new seven-story, mixed-use building totaling approximately 35,100 square feet. The building would include 64 residential units (Condos) and 8,857 square feet of retail space located along the Commercial Street frontage. The proposed building would encompass the majority of the lot and would have a maximum building height of 61 feet along Commercial Street and 65 feet on York Street. 160 covered parking spaces will be provided onsite accessed by driveway entrances on Commercial Street. The residential component is subject to the City's Inclusionary Zoning Ordinance and the developer has chosen to pay the fee-in-lieu rather than provide affordable units on site. The \$690,230.40 in-lieu fee will be paid into the City's Housing Trust Fund.

VI. RIGHT, TITLE, & INTEREST AND FINANCIAL AND TECHNICAL CAPACITY

The owner of the property is DPD Lot 3, LLC. The applicant has provided a copy of the Deed, which is recorded at the Cumberland County Registry of Deeds in CCRD Book 35343 page 112, which demonstrates their right, title, and interest in the property.

Additionally, documentation has been provided by the applicant team citing their technical capacity to design and construct the project, as well as a letter from the applicant's bank describing the applicant's financial capacity to undertake the project.



Existing Zoning Map – Phase III Site outlined in red

VII. ZONING ANALYSIS

A. DIMENSIONAL AND USE REQUIREMENTS

As the Master Development Plan for this project was approved in 2017, this application is subject to the Land Use Code that was in effect prior to December 1, 2020, and all code references in this memo will be cited accordingly. The subject property is located within the B-5b Urban Commercial Mixed Zone. Below is an excerpt from the land-use code providing the purpose of the B-5b zone.

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

The proposed uses of multifamily housing and general retail establishments are permitted uses in this zone. The project is subject to the dimensional requirements of the B-5b zone. The project was assessed by City staff and was determined to meet the dimensional requirements of the B-5b zone. The zoning requirements and staff analysis are summarized below.

Zoning Requirements	B-5b	Provided	+/-
Minimum Lot Size	None	0.806 AC	+ 0.806 AC
Area Per Dwelling Unit	435 SF	548 SF	113 SF
Dwelling Units	-	64 units	64 units

Minimum Street Frontage	None	546 ft	+ 546 ft
Front Yard Maximum	10 ft.	0 ft	None
Min. Rear Yard	None	0 ft	None
Min. Yard Right	None	0 ft	None
Min. Yard Left	None	0 ft	None
Side Street Setback	None	None	None
Step Back	None	None	None
Maximum Lot Coverage	100%	100%	
Minimum Lot Coverage	N/A	N/A	N/A
Maximum Height	65 ft	65 ft	
Maximum Impervious Area	None	95%	N/A
Parking Minimum	0 spaces	130 spaces	+ 130 spaces
Bicycle Parking	13 spaces	13 spaces	0 spaces

B. CONDITIONAL USE – INCLUSIONARY ZONING

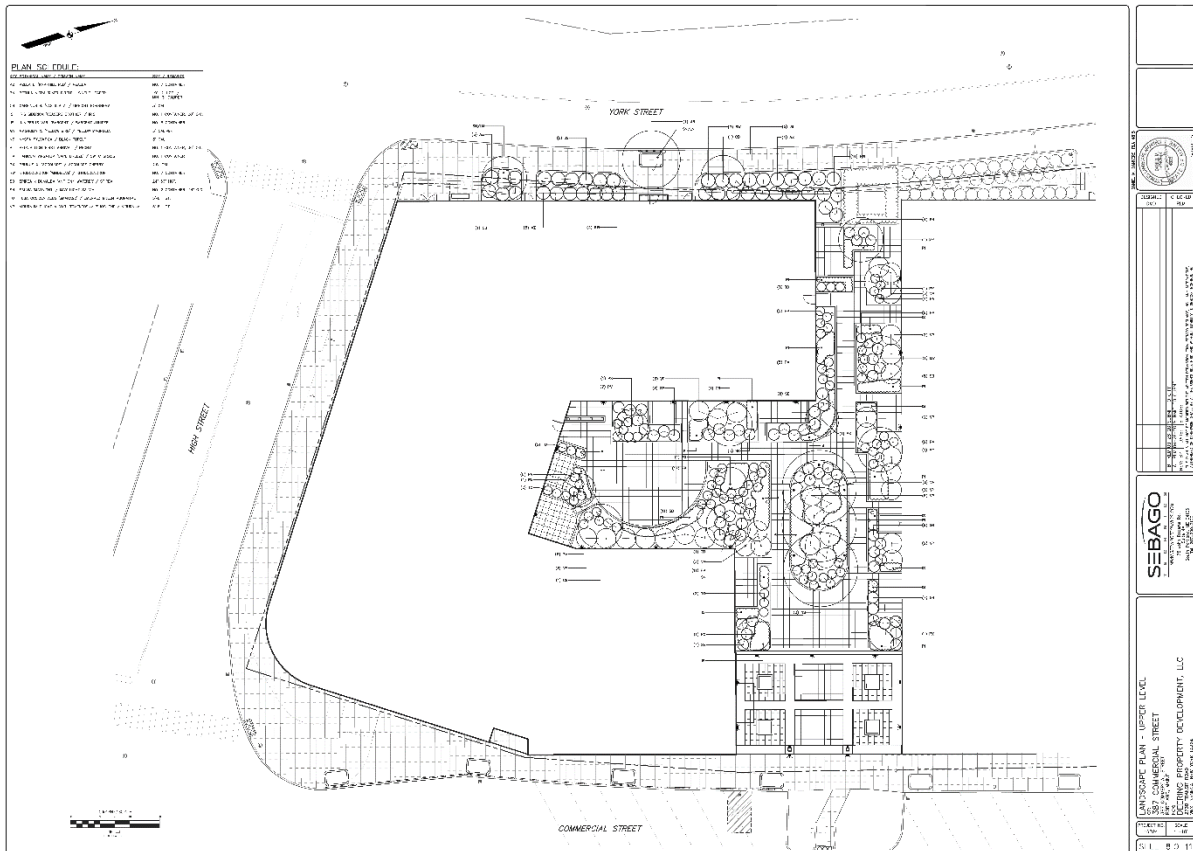
As required by Division 30, Section 14-487, the City's Inclusionary Zoning Ordinance, residential developments with ten or more units are required to provide a minimum of ten percent of the dwelling units as Workforce Housing units, and the units themselves must contain in total, ten percent of the total bedroom count for the entire development. Alternatively, the applicant may pay a fee-in-lieu for those units.

The City's Housing Program Manager reviewed the application (Attachment 1) and determined the following:

387 Commercial Street is proposing a mixed-use building containing 64 residential units as Phase III of the Master Development Plan for 383 Commercial Street. All developments of ten units or more are conditional uses subject to Planning Board review. 387 Commercial Street is entitled to consideration under Division 30 regulations in effect at the time of approval of the Master Development Plan which was December 13, 2017.

Subsequently, the applicant is required to provide at least ten percent (10%) of the dwelling units in the development as Workforce Housing units for sale and requires the number of bedrooms in the Workforce unit to be at least 10% of the total number of bedrooms made available as part of the development, or as an alternative to providing workforce housing units, the project may pay a fee-in-lieu of some or all of the units. The fee for affordable units not provided shall be \$100,000 per unit, adjusted annually in the same way as the fee under Division 29 for Housing Replacement.

The developer has chosen to pay the fee-in-lieu of providing affordable units. The fee-in-lieu is $6.4 \times \$108,786 = \$690,230.40$. The in-lieu fee shall be paid into the Housing Trust Fund as defined in Section 14-489 on or before the date upon which the certificate of occupancy is issued.



VIII. DEVELOPMENT REVIEW

A. SITE PLAN SUBMISSION REQUIREMENTS (Section 14-527) and SUBDIVISION PLAT AND RECORDING PLAT REQUIREMENTS (Section 14-496)

MASTER DEVELOPMENT PLAN REQUIREMENTS

In 2017, a Master Development Plan was approved by the Planning Board with a number of conditions of approval which applies to Phase III. One outstanding condition that remains to be addressed is in regard to the Commercial Street sidewalk frontage. Staff is working with the applicant on revising the proposed frontage to meet the following condition:

Condition of Approval:

"xii. (carried forward from the MDP conditions of approval): That the applicant shall contribute \$50,000 to the implementation of future phases of the West Commercial Street Shared Use Path, or other bicycle/pedestrian amenities in the area of the project, in association with the last phase of the MDP development, prior to the issuance of a building permit for the western-most phase, along with the provision of a bicycle connection between any path and the other side of Commercial Street."

"iii. Revisions to on-street parking: That the applicant shall provide a revised parking schedule to document the approved revisions to the on-street parking on Commercial and Maple Streets as they relate to Lots 1 and 2 respectively, and work with staff to finalize the City's approval prior to the issuance of a certificate of

Occupancies for Lots 1 and 2 respectively. It should be noted that the on-street parking near High Street is likely to be revised to provide a commercial loading zone as part of the Lot 3 final phase development.

B. SUBDIVISION (Section 14-497)

Staff have reviewed the proposed development for conformance with the relevant review standards of Portland's Subdivision Ordinance and applicable regulations. While review is still ongoing, review notes are provided below for the board's reference:

1. Will Not Result in Undue Water or Air Pollution (Section 14-497 (a) 1)

Since the site was previously developed, the site was evaluated based on the Maine DEP Chapter 500 Standards for redevelopment as well as other applicable stormwater standards. The City's consulting civil engineer has reviewed the application materials and provided preliminary comments (Attachment 2) concerning the erosion and sedimentation control measures and stormwater treatment. Public Works staff will continue to review the submitted materials in conjunction with the City's consultant to ensure the above standard is met.

2. Sufficient Water Available For The Reasonably foreseeable needs of the subdivision

The applicant is awaiting an ability to serve letter (Attachment P) from the Portland Water District. City Staff is awaiting a response from the applicant regarding comments from the City's stormwater consultant.

Lauren Swett, Consulting Civil Engineer, provided the following comments:

The water service entrance is shown partially crossing through a tree planting area. The fire water service line crosses under the planter, and the associated 6" gate valve is very close to the planter's curb edge. I'd recommend adjusting the layout to avoid conflict with the planter.

3. Will not cause unreasonable burden on an existing water supply

The applicant is awaiting an ability to serve letter from the Portland Water District.

4. Will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result

Overall staff finds the proposed development to be in conformance with the standard.

Lauren Swett, Consulting Civil Engineer, provided the following comments:

The grading plan should be clarified with regards to the drainage connection to High Street. The demolition plan shows this as existing to remain, and the grading plan appears to show two connection locations (one bold double line, one lighter single line). I believe it has already been installed, but the plan should clarify.

5. Will not cause unreasonable highway or public road congestion or unsafe conditions with respect to use of the highway or public roads existing or proposed

The applicant was required to submit both a TMP and TDM for earlier phases as part of the MDP. The requirements of these studies are being reviewed by staff in regard to the implications for Phase III.

6. Will provide for adequate sanitary waste and storm water disposal and will not cause an unreasonable burden on municipal services if they are utilized

The applicant has submitted a capacity to serve request for wastewater/sewer to Public Works. The approval is pending.

7. Will not cause an unreasonable burden on the ability of the City to dispose of solid waste and sewage if municipal services are to be utilized

The proposed dumpster location is shown on the Site Plan. Solid waste removal will be handled privately, and included in the Condominium documents.

8. Will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, significant wildlife habitat identified by the Department of Inland Fisheries and Wildlife or by the City, rare and irreplaceable natural areas, or any public rights for physical or visual access to the shoreline. For subdivisions within local historic districts, the Planning Board shall apply the standards of Subsection 17.8.3(C). The Planning Board may request that the Historic Preservation Board prepare an evaluation of the proposed subdivision based upon the standards of Subsection 17.8.3(C).

The proposed project is not in or proximate to a historic district and is located on a previously developed site and is not deemed to have an adverse impact on the scenic beauty of the area.

9. Is in conformance with the Comprehensive Plan or its successor.

Staff find that the current proposal is consistent with the housing policy goals listed in [Portland's Plan 2030](#) to "increase, preserve, and modify the overall supply of housing city-wide to meet the needs, preferences, and financial capabilities of all Portland residents," and to "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."

10. The subdivider has adequate financial and technical capacity to meet the standards of this subsection.

Please refer to Section VI above summarizing how the applicant team has both financial and technical capacity required under this section.

11. Will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater.

Please see subdivision item 1, above.

12. Is or is not in a flood prone area, based on the Federal Emergency Management Agency's flood boundary and floodway maps and flood insurance rate maps, and information presented by the applicant. If the subdivision, or any part of it, is in such an area, the subdivider shall determine the 100-year flood elevation and flood hazard boundaries within the subdivision. The proposed subdivision plan must include a condition of plan approval requiring that principal structures in the subdivision will be constructed with their lowest floor, including the basement, at least one foot above the 100-year flood elevation.

Per the City's existing flood maps, the site is not located in a flood zone.

13. Will provide for adequate stormwater management.

There are no anticipated impacts to wetlands or water bodies. The applicant has provided a stormwater report which has been reviewed by City Staff and Consultants. The project falls under Redevelopment standards and therefor is in conformance.

C. SITE PLAN STANDARDS (Section 14-526)

The proposed development has been reviewed by staff for conformance with the relevant review standards of the City of Portland's site plan ordinance. While review is still ongoing, staff comments are provided below.

a) Transportation Standards**Impact on Surrounding Street Systems**

The provisions for vehicular loading and unloading, parking, and vehicular and pedestrian circulation on the site and onto adjacent public streets and ways and the incremental volume of traffic will not:

- 1. Create or aggravate any significant hazard to safety on the surrounding street network.*
- 2. Substantially increase congestion on any street which is already at a level of service below Level "D" without mitigation proportionate to the level of impact*

The applicant submitted and underwent a review for both a TMP and TDM in earlier phases of the overall development site. These reviews encompassed the potential buildout of the Phase III development currently under review.

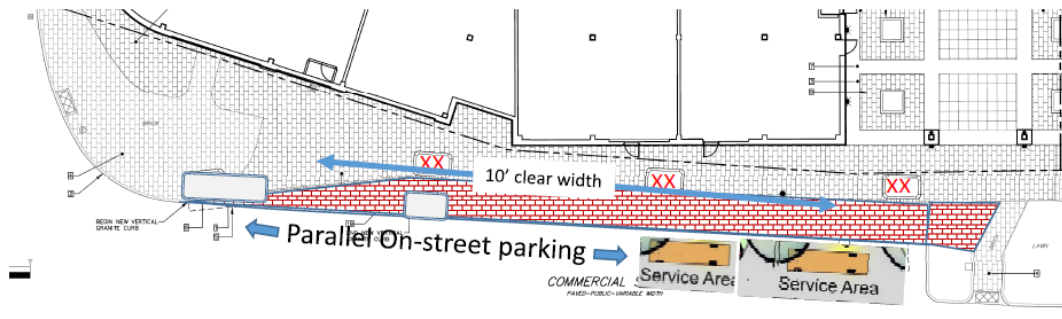
Tom Errico, City Transportation Consultant, provided the following comment:

In my review of the civil site plan, the project will be impacting the traffic signal equipment at the High Street/York Street intersection (the southeast corner). The applicant shall provide a traffic signal modification design plan for review and approval. This shall include equipment replacement, location and documentation that the proposed design meets MUTCD standards.

Access and Circulation

- 1. In general*
- 2. Loading and servicing. All developments served by delivery or other service vehicles shall provide access that permits safe turning and backing for all vehicles that would service the development. Loading and servicing access shall not impede vehicle circulation, bicycle or pedestrian movements, or parking.*
- 3. Curb and sidewalks*

The site is accessible to vehicles via an existing driveway off Commercial Street that was built to also provide access to the Phase II condominiums. The site is surrounded by existing sidewalks which will be replaced or reused. Pedestrian entrances are located along Commercial and York streets. Initial comments from the Department of Public Works are provided below:



Bruce Hyman, City Transportation Program Manager, provided the following comments:

A review of the most recent site plan (Civil Sheet 03) for Phase III frontage of Hobson's Landing (PL1348-2020) shows that the design does not address a Condition of Approval from the Master Development Plan. That condition calls for the frontage to facilitate the West Commercial Street Pathway's extension to the enhanced crossing (curb extensions, refuge island and RRFB flashing beacons which is mid-block on its frontage).

From High Street to the crossing, a minimum 10' clear width should be provided and the transition to the crossing should facilitate smooth and direct movements by bicyclists and pedestrians alike (tapered, not right angles). This will likely necessitate the relocation of the curb line, light poles and tree wells and reconfiguration of the on-street parking and commercial loading zone.

Mike Tremblay, DPW Senior Engineer, provided the following comments:

- *The Applicant should show on the site plan where loading and delivery activities for the site will occur, as well as solid waste pick-up.*
- *The site plan indicates that brick sidewalks will only be partially rebuilt on all three frontages, and that some existing sidewalk will remain. It is unlikely that brick sidewalks adjacent to staging and laydown areas will remain in good condition throughout construction. Matching existing and new brick walkways may prove difficult, especially in the vicinity of pedestrian ramps. At the corner of Commercial and High streets, the breaks between new and existing sidewalk are curved and cannot be a realistic depiction of what is expected to be constructed. Breaks in grade along such sidewalks will not be permitted. It is strongly recommended that the Applicant show all new brick sidewalks along all frontages. Otherwise, the site plan should indicate that any damaged or heaved sections of brick sidewalk along the project's frontages shall be reconstructed (regardless of whether the damage was caused by construction activity). It is acceptable to remove and reuse existing bricks that are in good condition.*
- *5-foot x 8-foot tree planters are large, and pinch the available sidewalk space to undesirable levels in some locations. The Applicant should work with DPW and Jeff Tarling to determine the appropriate size and material of these tree planters.*
- *One tree planter appears to be located directly in front of the entrances of two of the units in the proposed site. This tree planter should be moved elsewhere to avoid a pinch point where thru pedestrian traffic is not forced to walk through the door-opening zone of the building.*
- *All curbs are shown to be existing-to-remain with the exception of a short segment on Commercial Street. Similar to brick sidewalks, it is possible that construction activity damages, sinks, or shifts existing granite curbs. The Applicant shall be responsible for resetting, and possibly replacing, any failing curb or any curb*

that has less than 5 inches of reveal along the project's three frontages, regardless of whether the issue was caused by the project.

- *The 5-foot pedestrian path crosses into the project ROW at several locations, typically at tree planters. Sidewalk access agreements will be required.*
- *It is unclear what is being proposed for the area where the existing driveway is being closed. The curb tapers in from a diagonal/perpendicular parking area to the existing curb line. Is this area intended for loading? The applicant should clarify.*

Public Transit Access

1. All residential development consisting of 20 or more dwelling units and all commercial and institutional developments of at least 20,000 square feet gross floor area shall provide a transit shelter adjacent to or within the public right-of-way along its frontage when the following criteria are met:

a. The development is proposed along an existing public transit route on a principal or minor arterial roadway, as shown in the Federal Street Classification Map.

b. The nearest existing transit shelter on the route is more than ¼ mile from the site, measured along rights-of-way. 2. Transit facilities shall be connected to the public sidewalk system.

There are three South Portland bus lines that travel past the site and make a loop around Monument Square. There is also a Portland bus route (8-line, peninsula loop) that runs north of the project site with the closest stop being near the intersection of High and Danforth Streets. The proposed transit access requirement is ongoing staff review.

Parking

1. Vehicular parking

The proposal would provide 130 vehicle parking spaces to be contained within the buildings two-story parking deck. There would be 67 spaces on level 1 and 63 spaces on level two. Meter parking will be provided along the sites frontage on Commercial Street.

2. Bicycle parking

The proposed development would include 13 bicycle spaces which is the required number of spaces per zoning. City Staff encourages the applicant to consider options for additional spaces.

Bruce Hyman, City Transportation Program Manager, provided the following comments:

The site frontage would benefit from the addition of bicycle racks to serve the retail customers and visitors to the residents of the development.

3. Snow storage

Snow collection will be handled internally and outlined in Condo Documents.

4. Electric Vehicle (EV) charging

The proposed development includes a charging station on the first level within the two-level garage.

Mike Tremblay, DPW Senior Engineer, provided the following comments related to the parking standards:

- *Any proposed changes to on-street parking shall be documented on the site plan. City-standard parking signs shall be installed in coordination with the Traffic Operations division.*
- *While 6 ADA spaces are provided, it does not appear that any of them are van-accessible spaces. One of every 6 ADA spaces (rounded up) is required to be van-accessible, with 11 feet in width adjacent to a 5-foot landing or 8 feet in width adjacent to an 8-foot landing.*
- *A summary of the total number of parking spaces provided on-site, (numbers of standard, compact, and ADA spaces) should be provided.*
- *Parking space dimensions should not be inclusive of any width taken up by columns. Spaces adjacent to columns are likely 8.5 feet in width or less, depending on the true size of the column. Parking space lines should be shifted so that columns do not occupy any portion of parking spaces. The true dimension of the parking space should be assessed and reflected on the table discussed in the above comment. The Applicant should confirm that the column sizes are representative of the actual columns that will be present in the parking area. If the actual columns are larger, than adjacent spaces will be narrowed even further. Note that ADA spaces cannot be smaller than 8 feet x 18 feet, exclusive of intrusion by columns or other vertical elements.*

Transportation Demand Management (TDM)

A TDM was submitted as part of the approval process for Phase I & II.

b) Environmental Quality Standards

Preservation of Significant Natural Features

Not Applicable.

Landscape Preservation

The applicant has elected to build out to the maximum footprint. The City Arborist has encouraged the applicant to include street trees along High Street in lieu of the existing vegetation along the High Street frontage.

Site landscaping and buffers

All loading and servicing areas, trash and recycling areas, storage areas, and roof- and ground-mounted utility structures, except for renewable energy systems, shall be screened from view from public sidewalks

The proposal calls for five street trees along the Commercial Street frontage, and one Red Maple along York Street. Given the widening of the High Street sidewalk, Staff encourages the applicant to include street trees along the sites High Street frontage. Staff would also request that the applicant explore methods for including additional landscaping along the Commercial Street frontage.

With 64 proposed residential units, the applicant is required to account for 64 street trees or acceptable alternatives. The current landscaping plan proposes planting six street trees, and the

applicant is expected to pay \$23,200 into the City's street tree fund (\$400 per additional required tree).

Water Quality, Storm Water Management and Erosion Control

Please refer to Subdivision standards above.

c) Public Infrastructure and Community Safety Standards

Consistency with City master plans

See Item 9 of Subdivision above.

Public safety and fire prevention

The site has been designed to allow for proper surveillance of walkways, entrances, and parking areas. There is adequate access to the site for emergency vehicles. The plans are ongoing review from the City's Life Safety Division.

Public utilities

The proposed developments electrical service has been designed to be underground.

Lauren Swett, Consulting Civil Engineer, Provided the following comments:

Letters from utilities verifying ability have not been included as part of this application, and have likely been included with prior phases. The Applicant should still provide verification from utilities for the current design. My experience in particular with the Portland Water District is that any changes from prior plans will need to be reviewed and approved by the district.

d) Site Design Standards

Massing, Ventilation and Wind Impact

The applicant has shown on the proposed site plan that the building would not result in health or safety problems from a reduction in ventilation. Additionally, the proposed building is in keeping with the neighborhood scale in regard to massing and height.

Shadows

The design review found the proposed development to be in conformance with standards relating to building shadows. The proposed building will have a maximum height of 65 feet, similar to adjacent buildings. The site is located within a B-5b zone a moderate to high-density zone mapped along arterials.

Snow and Ice Loading

The applicant has indicated that snow removal will be the responsibility of the owner and a note has been added to the plat and site plan to state the burden of responsibility. The final language on the plat will be reviewed by Corporation Counsel prior to a plat being finalized.

View Corridors

The project site is not located within any view corridors.

Historic Resources

The site is not located within a historic district, though it is in the vicinity of both the West End and Old Port Historic Districts.

Exterior Lighting

Planning staff continue to review the photometric plan and lighting cutsheets (Attachment N), and comments will be shared with the applicant following this workshop.

Noise and Vibration

The applicant indicates in their response to comments (Attachment 7) that any rooftop mechanical equipment installed on the new building will be screened from view. Any residential HVAC equipment will be within the unit or on the roof.

Signage and Wayfinding

No signage is currently contemplated by the application and the site is not located within a historic district.

Zoning Related Design Standards

The project at 387 Commercial Street, Phase III for multi-family residential buildings was reviewed according to the approved Master Development Plan criteria, the B-5 Design Standards, and the multi-family design standards.

This project was previously subject to the *Master Development Plan Standards of Review*. The project is also within 100' of a historic district and included an advisory design review by the Historic Preservation Board.

The City's Urban Designer reviewed the proposal based on the criteria outlined above and is included as an attachment to this report.

Construction Management Plan

The construction management plan and narrative were submitted and are currently undergoing review by City staff.

Mike Tremblay, DPW Senior Engineer, provided the following comments related to the construction management plan:

- *The CM plan shows jersey barriers extending entirely across the westbound travel lanes. The CM plan should show how traffic will be managed in areas where construction equipment occupies travel lanes.*

- *Jersey barriers in the ROW shall be installed with the appropriate end treatment, such as a tapered approach, crash attenuation, etc. These details should be shown in the CM plan.*
- *The CM plan shows a sidewalk closure on High Street, with pedestrian access on the west side of High Street. There is no pedestrian access currently provided on this side of High Street. The Applicant should construct a temporary bituminous sidewalk to complete this connection, to remain after construction is completed. This CM plan does not work without an adequate pedestrian connection up High Street.*
- *The CM plan indicates that all construction traffic entering the site will come from Commercial Street eastbound. It seems likely that some traffic will arrive via Commercial Street eastbound; this traffic may have difficulty entering the angled site fence.*
- *The CM plan shows a staging and laydown area. It may be advantageous if this area could be accessed from both sides. The area could be shortened somewhat to allow an easterly gate. This could potentially serve traffic arriving from Commercial Street eastbound as well.*
- *The CM plan indicates that all traffic will arrive from Commercial Street WB and depart on Commercial Street EB or along York Street to the east. The applicant should clarify the regional traffic routes for construction vehicles; notably, the intersection of York/Center/Pleasant streets experiences congestion and safety issues and should be avoided.*
- *The CM plan should include all necessary vehicular and pedestrian detour signage, including, but not necessarily limited to, SIDEWALK CLOSED (Ahead) \ \ CROSS HERE signs for pedestrians, vehicle detour signs as needed, DO NOT ENTER signs on High Street near Gate 2 facing southbound, and any regional signage that may help the public navigate around the site. All signage shall be MUTCD-standard to the extent possible.*
- *Gate 2 includes a jersey barrier that juts into the York Street EB travel lane (or comes close). Traffic should be tapered using striping and/or vertical delineators to guide traffic around barriers. Barriers nearest to traffic should be made more visible using retroreflective tape or other means. This barrier also appears to make it quite difficult for vehicles, especially non-passenger vehicles, to make a right turn. The applicant should revisit.*
- *The Applicant should indicate the size of trucks that they expect to use Gate 1. It appears trucks will need to back in in order to utilize the staging and laydown area; this may cause additional traffic congestion and safety issues.*

IX. NEIGHBORHOOD MEETING & PUBLIC NOTICE/COMMENT

The applicant hosted a neighborhood meeting on February 2, 2021. Approximately eight members of the public attended. Meeting minutes and materials were submitted by the applicant for the public record.

At the time of writing this memo only two written public comments have been received. Primary concerns were focused on traffic impacts and construction management.

X. NEXT STEPS

1. Address staff comments
2. Address additional comments from the Planning Board

3. Prepare final plan submission, including site plan submittal requirements as included in 14-527(e) and (f) for review by the Planning Board
4. Hold Planning Board Hearing

XI. ATTACHMENTS

Planning Board Report Attachments

1. Public Comments
2. Design review comments
3. Development review comments

Applicant's Submittal

- a. Project Summary
- b. Location Map
- c. Checklist
- d. Deed
- e. Purchase & Sales Agreement
- f. Evidence of Approvals
- g. Zoning Table
- h. Inclusionary Zoning
- i. Existing Easements
- j. Waivers
- k. Financial Capability
- l. Technical Capability
- m. Standards
- n. Stormwater Report
- o. Construction Management Narrative
- p. Neighborhood Meeting Certification with attachments

Plans

- P1. Cover
- P2. Existing Conditions
- P3. Demolition
- P4. Site Plans
- P5. Grading & Utility Plans
- P6. Landscape Plans
- P7. Construction Management Plan
- P8. Architectural Drawings
- P9. Notes & Details
- P10. Neighborhood Meeting

Planning and Urban Development Department Planning Division



Subject: B-5 Design Review – 387 Commercial Street
Written by: Caitlin Cameron, Urban Designer
Date of Review: Thursday, February 12, 2021

The project at 387 Commercial Street, Phase III for multi-family residential buildings was reviewed according to the approved Master Plan criteria, the B-5 Design Standards, and the multi-family design standards.

This project was previously subject to the *Master Development Plan Standards of Review*. The project is also within 100' of a historic district and included an advisory design review by the Historic Preservation Board.

Questions/Request for Clarification:

- Staff request images that show the phase III building in context with the previous phases to evaluate cohesiveness.
- Staff question whether additional pedestrian amenities should be included here at the expanded sidewalk for scale and comfort.
- Material labels are missing from elevations
- The coherent character of the Commercial Street streetscape is compromised by the number and arrangement of rooftop appurtenances which are numerous and visually disruptive to creating a consistent overall form that relates to the context.
- Will there be comfort and scale introduced with canopies or other elements to emphasize the entrances?

MDP Design Standards (adopted as part of the Master Plan to be applied to subsequent Site Plan applications)

The following architectural characteristics are integral to the approved Master Development Plan:

- *Mid-block breaks* – Met - The physical break in the residential building facing Commercial Street creating a light court and courtyard on the upper level for residents and breaking the massing of the building on Commercial Street.
- *Stepped roof forms* – Met - the stepped roof forms appear on the residential building. However, as described in the historic preservation review, a key characteristic of buildings on Commercial Street is the horizontal proportions of the buildings with a strong and clear flat roof line. **This character is compromised by the number and arrangement of rooftop appurtenances which are numerous and visually disruptive to creating a consistent overall form that relates to the context.**
- *Consistent and cohesive character among the residential buildings* – the residential building has a consistent treatment across the project creating a cohesiveness. **Please provide confirmation of consistency of materials and character with renderings that**

show the new building in relationship with the previous building. The roof forms and massing should also be consistent including placement and integration of rooftop elements on Commercial and York streets. This is especially critical for long-views approaching on York and Commercial.

- *Street-facing, emphasized building entrances* – Met - this standard is met through highly transparent ground floors on Commercial, street-facing entries, and entry court. On York Street, the residential entry is indicated with a canopy and massing variation. **Will there be comfort and scale introduced with canopies or other elements to emphasize the entrances?**
- *Commercial Street: Strong, articulated building bases that follow the proportion and character of the historic Commercial Street buildings* – Met – details and openings articulate the base of each building that continues the established pattern of a tall base on Commercial Street.
- *Commercial Street: Active ground floor* – Met – high level of fenestration, active uses (commercial/retail), direct entries, entry courts.
- *Commercial Street: Regular pattern of windows* - Met

Materials

- **Commercial Street** – *Material placement, detail, and articulation should emphasize the established historic Commercial Street patterns of massing, proportions, and façade composition regulating lines and building base. Material selection on the residential buildings will predominantly use red brick and granite with glass curtain wall as an accent.*

Staff Comment: These guidelines established in the MDP above have been carried through in the Site Plan application. **Please confirm the material selection, label in elevations.**

- **York, High, and Maple Streets** – *These streets are not part of the historic district and the context is varied. Residential building materials should be consistent and be rationally placed based on interior uses or massing variation. A consistent base line is recommended to be carried through the residential buildings.*

Staff Comment: There is a consistency on each street-facing façade of the buildings that reflects the cohesive and simple approach to the traditional buildings in the context. Materials are placed according to their nature, to create the base and floor delineation, and to add visual interest.

- **Quality Exterior Materials** *includes the detailing, articulation, transition, durability, and visual interest of the materials, not only their selection and placement. These aspects will be reviewed with special attention to the ground floors and areas most visible to pedestrians.*

Staff Comment: **Material labels are missing from elevations.** Project proposes to use granite and brick with storefront on the ground levels (traditional and time-tested materials). The ground floor materials will provide texture, reveal, and a grounded, durable base. **Metal panel accents should be thick gauge to avoid oil canning or rippling effects.**

Façade Composition - In Site Plan review the design shall provide depth, articulation, visual interest, and quality transitions. Historic buildings in the surrounding context should be considered precedent examples, especially on Commercial Street.

- ***Commercial Street*** - Commercial Street has a strong, consistent pattern of a tall base story, overall horizontal proportion, and regular window patterns. Commercial Street facades will continue these characteristics with contemporary interpretation. The ground floors will consider pedestrian comfort and scale, especially in the placement of doors, windows, canopies, and details in the materials and articulation. The residential buildings should have a cohesive visual relationship with material palette, window type and pattern, roofline, and articulation elements. Simple and consistent material type and color will be used across the Commercial Street streetscape.

Staff Comment: This standard is met.

- ***York Street*** – Window and material placement should follow a rationale tied to the building uses or changes in massing. Visual interest should be provided through articulation, façade plane changes, and fenestration.

Staff Comment: This standard is met.

Streetscape Design

Lighting: The City is in the process of revising the Technical Manual Street Light section. The project should follow the proposed new fixture selection which for this site will be the City standard LED cobraheads. The decorative lighting on Commercial Street will not be continued.

Staff will work with the applicant to determine the correct specification and spacing for these fixtures on all streets.

- ***Commercial, High, and Maple Streets*** – Character = Predominantly commercial, active uses fronting the street. The sidewalk should be as wide as possible. Where the sidewalk is at least 13' wide, street trees should be provided in raised granite planters in the furnishing zone. Planters or landscape areas should not be placed between the sidewalk and the building – this is not consistent with the established urban streetscape. Final design shall be coordinated with City staff, especially to ensure viability of street trees and ease of maintenance.

Staff comment: Commercial Street continues to have a commercial character with the strong street wall and highly transparent and active storefront along most frontages. Regular street trees provided with a 13' sidewalk on Commercial. Maple Street sidewalks too narrow to provide the trees. Some curb extensions are also proposed where street tree and landscape will be provided per the standards. The sky bridge was removed from the project thus potentially helping the level of activity on the street.

- ***York Street*** – Character = predominantly residential uses fronting the street. The private uses justify a landscape buffer between the street and the residential use. Landscape areas should be raised with either a curb or a seating wall. The sidewalk width should be consistent for the whole block.

Staff Comment: These standards are met. Refer to the detail sheets – planted buffer areas provided between sidewalk and building, shall have a raised granite curb, 8' wide sidewalk, and buried landscape.

- ***Interior Passages, Plazas, Courtyards, or Entrances*** –Interactive building edges should employ CPTED principles as a best practice to make spaces that are safe, active, and inviting. Material selection and design should indicate private or public access. Design shall be legible and intuitive for pedestrians and cars, especially for wayfinding.

Staff comment: In the woonerf, the applicant provides bollard lighting and active ground floor interface to address the CPTED design principles. At the York Street side of the mid-block permeability, the space is open at the street and provides clear visibility through the space. The “eyes on the street” will be provided by the hotel and residential windows above. Materials in the ground plane with the bollards help delineate the pedestrian space from the vehicle space. The visual connection through the woonerf and the sidewalk-level access void of steps help indicate the more public nature of this passage. Benches and landscape also provide a more “public” setting. Now that the sky bridge is gone, the visual connection through the passage is improved.

(c) B-5 and B-5b Urban Commercial Business Zones

Standard (1) a. Shared Infrastructure – Met – All phases of this project share infrastructure for parking and traffic circulation.

Standard (1) b. Buildings and Uses shall be located close to the street . . . – Met- The building is built close to the property line and continues the street wall established on Commercial Street and York Street. Retail and commercial uses are set close to the street. The residential portions of the building are set back slightly on York Street to provide a privacy buffer, to mitigate the scale of the buildings on a street with a narrow sidewalk, and to allow projections such as balconies to occur within the private property. Residential floors are slightly raised on this façade to provide privacy.

The corner of High and Commercial streets uses a rounded form to create an emphasis and encourage circulation up/down High Street without obstructed sight lines. **Staff question whether additional pedestrian amenities should be included here at the expanded sidewalk for scale and comfort.**

Standard (1) c. Buildings shall be oriented toward the street . . . – Met – Primary entrances are provided directly onto Commercial Street. Other commercial spaces on Commercial Street will be accessed from plaza spaces. There are also retail and residential entries on York Street. High Street is treated like a “B” street – because of the grade change and orientation to Commercial and York, no entrances are provided on High.

Standard (1) d. Parking lots shall be located to the maximum extent practicable toward the rear . . . – Met – Parking shall be provided interior to the lot in structured parking lined by active buildings on the street frontages.

(i) Multiple-family:

Standard (1) – Met – See comments above. Nearest residential context is the new multi-family building on York Street which is a similar scale and material palette. This building is mid-block and relates most immediately to the Old Port commercial buildings which is the rationale for the stylistic nod to the industrial building type in the fenestration patterns here. The building uses regular patterns in the vertical elements and window alignment. The Commercial Street facades are very regular in pattern and adopt the tall base with traditional materials as guided by the Historic Preservation, MDP, and staff review process.

Standard (2) – Met – This building is at the edge of existing development and is extending the existing built pattern and street wall edge established on Commercial Street. On York Street, this block is a transition area from the larger scale, more wharf buildings of the Old Port across High Street towards a smaller scale residential neighborhood. The architecture appropriately relates to the existing, brick industrial and medium-scale buildings preceding it to the east. These patterns include the height, the building materials, and an articulation and elements that make reference to those existing industrial and wharf buildings.

Standard (3) – Met – Open space is provided in the form of balconies for some units as well as an elevated, landscaped courtyard common area between the buildings for resident use only. The commercial courtyard from Commercial Street will be available to the public realm.

Standard (4) – Met – Project includes ample windows for light and air and storage opportunities.

Standard (5) – Parking is predominantly provided in structured parking interior to the lot and screened by active building liners.

Standard (6) – Not applicable

387 Commercial Development Review Comments

DPW

Site Plan

- The Applicant should show on the site plan where loading and delivery activities for the site will occur, as well as solid waste pick-up.
- The site plan indicates that brick sidewalks will only be partially rebuilt on all three frontages, and that some existing sidewalk will remain. It is unlikely that brick sidewalks adjacent to staging and laydown areas will remain in good condition throughout construction. Matching existing and new brick walkways may prove difficult, especially in the vicinity of pedestrian ramps. At the corner of Commercial and High streets, the breaks between new and existing sidewalk are curved and cannot be a realistic depiction of what is expected to be constructed. Breaks in grade along such sidewalks will not be permitted. It is strongly recommended that the Applicant show all new brick sidewalks along all frontages. Otherwise, the site plan should indicate that any damaged or heaved sections of brick sidewalk along the project's frontages shall be reconstructed (regardless of whether the damage was caused by construction activity). It is acceptable to remove and reuse existing bricks that are in good condition.
- 5-foot x 8-foot tree planters are large, and pinch the available sidewalk space to undesirable levels in some locations. The Applicant should work with DPW and Jeff Tarling to determine the appropriate size and material of these tree planters.
- One tree planter appears to be located directly in front of the entrances of two of the units in the proposed site. This tree planter should be moved elsewhere to avoid a pinch point where thru pedestrian traffic is not forced to walk through the door-opening zone of the building.
- All curbs are shown to be existing-to-remain with the exception of a short segment on Commercial Street. Similar to brick sidewalks, it is possible that construction activity damages, sinks, or shifts existing granite curbs. The Applicant shall be responsible for resetting, and possibly replacing, any failing curb or any curb that has less than 5 inches of reveal along the project's three frontages, regardless of whether the issue was caused by the project.
- The 5-foot pedestrian path crosses into the project ROW at several locations, typically at tree planters. Sidewalk access agreements will be required.
- It is unclear what is being proposed for the area where the existing driveway is being closed. The curb tapers in from a diagonal/perpendicular parking area to the existing curb line. Is this area intended for loading? The applicant should clarify.

- Any proposed changes to on-street parking shall be documented on the site plan. City-standard parking signs shall be installed in coordination with the Traffic Operations division.
- While 6 ADA spaces are provided, it does not appear that any of them are van-accessible spaces. One of every 6 ADA spaces (rounded up) is required to be van-accessible, with 11 feet in width adjacent to a 5-foot landing or 8 feet in width adjacent to an 8-foot landing.
- A summary of the total number of parking spaces provided on-site, (numbers of standard, compact, and ADA spaces) should be provided.
- Parking space dimensions should not be inclusive of any width taken up by columns. Spaces adjacent to columns are likely 8.5 feet in width or less, depending on the true size of the column. Parking space lines should be shifted so that columns do not occupy any portion of parking spaces. The true dimension of the parking space should be assessed and reflected on the table discussed in the above comment. The Applicant should confirm that the column sizes are representative of the actual columns that will be present in the parking area. If the actual columns are larger, than adjacent spaces will be narrowed even further. Note that ADA spaces cannot be smaller than 8 feet x 18 feet, exclusive of intrusion by columns or other vertical elements.

Grading and Utility Plan

- The proposed 6" water service runs through a tree planter, with the 4" water service within a few feet of the edge of the tree planter. Depending on the proposed tree species, a mature tree's roots may eventually interfere with water lines. The Applicant should consult with Jeff Tarling and PWD on proximity of tree roots to water services.
- Commercial Street is under a 5-year pavement moratorium until May 25, 2021. Any excavation before this date shall require Director of Public Works approval and shall require a moratorium repair of at least 100 feet in length, extending in width up to the closest undisturbed pavement seam. This moratorium was discussed in previous project phases. It is strongly recommended and preferred that no excavation occur in Commercial Street until the moratorium expires.

CM Plan

- The CM plan shows jersey barriers extending entirely across the westbound travel lanes. The CM plan should show how traffic will be managed in areas where construction equipment occupies travel lanes.

- Jersey barriers in the ROW shall be installed with the appropriate end treatment, such as a tapered approach, crash attenuation, etc. These details should be shown in the CM plan.
- The CM plan shows a sidewalk closure on High Street, with pedestrian access on the west side of High Street. There is no pedestrian access currently provided on this side of High Street. The Applicant should construct a temporary bituminous sidewalk to complete this connection, to remain after construction is completed. This CM plan does not work without an adequate pedestrian connection up High Street.
- The CM plan indicates that all construction traffic entering the site will come from Commercial Street eastbound. It seems likely that some traffic will arrive via Commercial Street eastbound; this traffic may have difficulty entering the angled site fence.
- The CM plan shows a staging and laydown area. It may be advantageous if this area could be accessed from both sides. The area could be shortened somewhat to allow an easterly gate. This could potentially serve traffic arriving from Commercial Street eastbound as well.
- The CM plan indicates that all traffic will arrive from Commercial Street WB and depart on Commercial Street EB or along York Street to the east. The applicant should clarify the regional traffic routes for construction vehicles; notably, the intersection of York/Center/Pleasant streets experiences congestion and safety issues and should be avoided.
- The CM plan should include all necessary vehicular and pedestrian detour signage, including, but not necessarily limited to, SIDEWALK CLOSED (Ahead) \ CROSS HERE signs for pedestrians, vehicle detour signs as needed, DO NOT ENTER signs on High Street near Gate 2 facing southbound, and any regional signage that may help the public navigate around the site. All signage shall be MUTCD-standard to the extent possible.
- Gate 2 includes a jersey barrier that juts into the York Street EB travel lane (or comes close). Traffic should be tapered using striping and/or vertical delineators to guide traffic around barriers. Barriers nearest to traffic should be made more visible using retroreflective tape or other means. This barrier also appears to make it quite difficult for vehicles, especially non-passenger vehicles, to make a right turn. The applicant should revisit.
- The Applicant should indicate the size of trucks that they expect to use Gate 1. It appears trucks will need to back in in order to utilize the staging and laydown area; this may cause additional traffic congestion and safety issues.

Transportation/ Traffic

A review of the most recent site plan (Civil Sheet 03) for the Phase III frontage of Hobson's Landing (PL1348-2020) shows that the design does not address a Condition of Approval from the Master Development Plan. That condition calls for the frontage to facilitate the West Commercial Street Pathway's extension to the enhanced crossing of Commercial Street (curb extensions, refuge island and RRFB flashing beacons which is mid-block on its frontage).

From High Street to the crossing, a minimum 10' clear width should be provided and the transition to the crossing should facilitate smooth and direct movements by bicyclists and pedestrians alike (tapered, not right angles). This will likely necessitate the reconfiguration of a portion of the curb line, light poles and tree wells and reconfiguration of the on-street parking and commercial loading zone.

The frontage would also benefit from the addition of bicycle racks to serve the retail customers and visitors to the residents of the development.

- It would be helpful for the applicant to define Phase 3 components and confirm that it meets assumptions in the Traffic Movement Permit traffic study.
- A similar effort should be documented for parking. That the proposed supply meets prior parking demand analyses.
- The applicant shall provide dimensions for the parking garage levels to confirm it meets City standards.

Stormwater

- The project is required to provide for stormwater management in accordance with MaineDEP Chapter 500 and Section 5 of the City of Portland's Technical Manual. The project's stormwater management plan includes the entire block of development (383 Commercial Street), which includes portions of areas that have already been constructed, and the area that is being proposed as part of this project. The stormwater management system has also been reviewed previously as part of prior phases.
 - o Basic Standards – The project is providing for erosion and sedimentation control in accordance with the Basic Standards. A written narrative has been provided along with a sheet of notes and details, but I do not see erosion control measures shown on any of the plan sheets. This should be added.
 - o General/Redevelopment Standards – The project is providing for stormwater treatment utilizing Stormfilters and Subsurface Detention within the parking areas. System components have already been installed.
 - o Flooding Standards – The project will adequately manage stormwater to maintain post development stormwater flows below predevelopment levels.
- It is noted that the plans show underdrain foundation drain that extends beyond the property boundary. A license for installation of the underdrain, and any associated foundation work will be required. This likely has already been done for previous phases.

- Letters from utilities verifying ability have not been included as part of this application, and have likely been included with prior phases. The Applicant should still provide verification from utilities for the current design. My experience in particular with the Portland Water District is that any changes from prior plans will need to be reviewed and approved by the district.
- The water service entrance is shown partially crossing through a tree planting area. The fire water service line crosses under the planter, and the associated 6" gate valve is very close to the planter's curb edge. I'd recommend adjusting the layout to avoid conflict with the planter.
- The grading plan should be clarified with regards to the drainage connection to High Street. The demolition plan shows this as existing to remain, and the grading plan appears to show two connection locations (one bold double line, one lighter single line). I believe it has already been installed, but the plan should clarify.



October 19th 2020
16324

Andrew Tufts
City Planner
Department of Planning and Urban Development City of Portland
4th Floor, City Hall
389 Congress Street
Portland, ME 04101

**RE: Phase 3- 387 Commercial Street
Project Summary**

Dear Andrew:

On behalf of DPD Lot 3 LLC, we are pleased to submit the attached plans and supporting documents for Site Plan review for Phase 3 of the former Rufus Deering Lumber site located at 387 Commercial Street. DPD Lot 3 LLC has retained Sebago Technics, and Archetype PA to provide planning, design, permitting and construction admin services for the project.

This project represents the final phase of a previously approved Master Plan of Development granted by the City of Portland in 2018. It includes the demolition of a 2-story wood-framed building currently being used as a construction office for the initial phases of the project. The remainder of the site has previously been cleared and is being used as parking, staging, and lay-down areas in support of phases 1 (the hotel) and 2 (the initial condo building.)

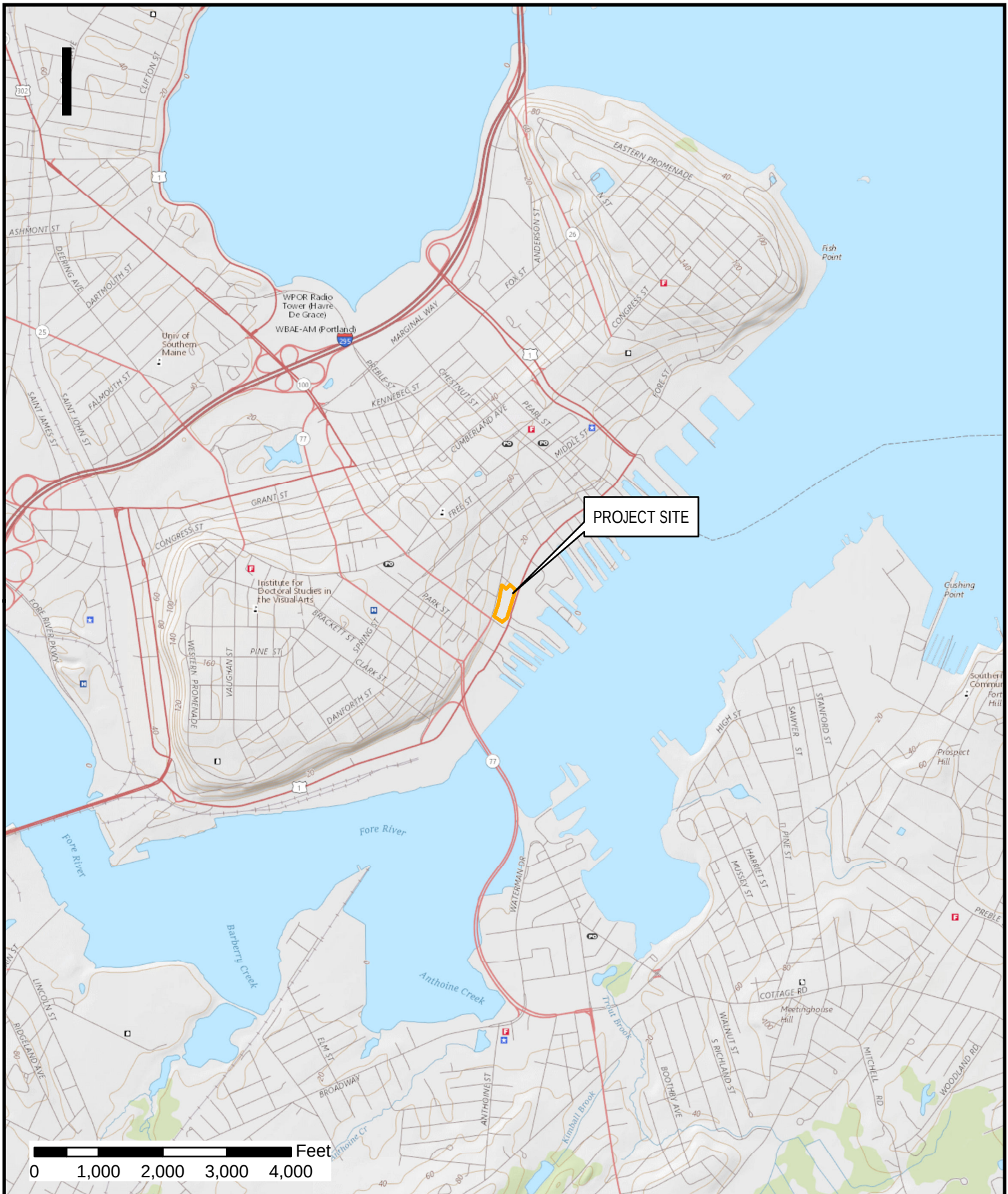
The proposed 35,100 sf building includes 7 stories of Residential and commercial spaces, with access from York Street, and Commercial Street. Parking for this phase is contained within the footprint of the buildings, and includes 130 parking spaces (12 ADA) to be connected to phase two's parking deck. The building's façade will match the other phases of this project to create a uniform block along both Commercial Street, and York Street. Street trees are proposed along Commercial street, and landscape beds along the façade are proposed along York Street.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink that reads "Richard L. Meek".

Richard L. Meek, P.E., LEED-AP
Sr. Project Engineer



0 1,000 2,000 3,000 4,000 Feet

SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM

75 John Roberts Rd., Suite 1A
South Portland, ME 04106
Tel. 207-290-2100

TITLE SITE LOCATION MAP
FOR: Deering Property Management, LLC

LOCATION:
383 Commercial Street
Portland, ME 04101

INFORMATION:
USGS Quadrangle: Portland West/ Portland East

SCALE: 1" = 2,000'

DATE: 08/06/2018

CITY OF PORTLAND
Planning & Urban Development Department

LEVEL II and LEVEL III SITE PLAN
GENERAL DOCUMENT AND DRAWINGS CHECKLIST

- * Please upload each document and drawing as a separate PDF file
- * Please upload all drawings in a 24 x 36 sheet size
- * Please confirm each item by electronically checking the boxes to the left for each document/drawing
- * Please fill out and upload separately the zoning assessment table and waiver table

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

GENERAL APPLICATION DOCUMENTS

Yes ☐	NA ☐	Project Description Cover Letter with detailed project description
Yes ☒	NA ☐	Completed Checklist – Level II and Level III Site Plan (this document)
Yes ☒	NA ☐	Right, Title and Interest Deeds, leases, or purchase and sales agreements
Yes ☒	NA ☐	Evidence of State or Federal Approvals Permits or letters of non-jurisdiction, if applicable
Yes ☒	NA ☐	Zoning Assessment Table listing required and proposed uses and dimensional standards Zoning Assessment Table
Yes ☒	NA ☐	Existing and/or Proposed Easements or Covenants, applicable. Evidence of existing easements and any proposed easements
Yes ☐	NA ☒	Waiver Requests Written request for waiver describing request and reason Waiver Table
Yes ☒	NA ☐	Financial Capability Letter or evidence from a financial institution or third party verifying financial capacity to undertake project
Yes ☒	NA ☐	Technical Capability Evidence of technical capability of applicant and consultants – resumes and/or examples of past projects

LEVEL II AND LEVEL III SITE PLAN STANDARDS AND SUBMISSION CHECKLIST

* Please provide assessment of compliance with standards and include supplemental documentation, as applicable

* Please upload each document as a separate PDF file

TRANSPORTATION

Yes ☒	NA ☐	Transportation Analysis- Traffic Impact (14-526 (a) 1) - Provisions for pedestrian, bicycle, vehicle, and loading circulation and incremental volume of traffic impacts - Traffic Impact Study (Technical Manual, Section 1) if applicable
Yes ☒	NA ☐	Access and Circulation (14-526 (a) 2 a) - Access and internal circulation, addressing ADA access - Access and egress impacts on traffic flows - Description and use of drive-up features, if applicable
Yes ☒	NA ☐	Loading and Servicing (14-526 (a) 2 b) - Loading and servicing needs, route and travel way geometrics for deliveries - Turning templates for delivery vehicles, if applicable
Yes ☒	NA ☐	Sidewalks (14-526 (a) 2 c) - Sidewalks and condition along street frontages and internal walkways - Engineered details for ADA ramps and public sidewalk details meeting sidewalk materials policy and ADA ramp construction details as applicable (Technical Manual, Section 1)
Yes ☒	NA ☐	Public Transit (14-526 (a) 3), if applicable - Existing available transit services - Proposed site plan design details, such as easement, pad base, and shelter
Yes ☒	NA ☐	Off-Street Parking: Vehicle & Motorcycle/Scooter) (14-526 (a) 4 a and c) - Expected parking demand, proposed parking supply, ADA parking, and applicable Zoning Requirements - Address Technical Manual standards (Section 1) for curb cut separation and parking lot layout and locate on site plan
Yes ☒	NA ☐	Bicycle Parking (14-526 (a) 4 b) - Address bicycle parking requirements and identify locations on-site - Construction details for bike racks (Technical Manual, Section 1)
Yes ☒	NA ☐	Snow Storage (14-526 (a) 4 d) Management plan for snow removal and locate snow storage areas on plan
Yes ☒	NA ☐	Traffic Demand Management (TDM) (14-526 (a) 5), if applicable Develop TDM with Trip Reduction Targets and Strategies

ENVIRONMENTAL AND LANDSCAPE FEATURES		
Yes ☒	NA ☐	Preservation of Significant Natural Features (14-526 (b) 1), if applicable • Trees, plants, habitats listed on State or Federal list of endangered or threatened • High and moderate value waterfowl and wading habitat • Aquifers on Casco Bay Islands • Waterbodies (including wetlands, watercourses, significant vernal pools and floodplains) • Proposed preservation areas and protection measures • Documentation from environmental consultants, determinations from applicable state agencies
Yes ☒	NA ☐	Landscaping and Landscape Preservation (14-526 (b) 2 a) • Preservation of trees and preservation within required zoning setbacks (Technical Manual, Section 4) • Protection measures of existing vegetation during construction • Protection measures within Shoreland Zone, if applicable
Yes ☒	NA ☐	Site Landscaping (14-526 (b) 2 b) • Screening and buffering of service areas and between non-residential and residential uses • Planting plans with plant schedule and sizes (Technical Manual, Section 4)
Yes ☒	NA ☐	Parking Lot Landscaping (14-526 (b) 2 b ii), if applicable • Landscaped islands within parking areas (Technical Manual, Section 4)
Yes ☒	NA ☐	Street Trees (14-526 (b) 2 b iii) • Existing Heritage or Feature Trees on site and measures to preserve • Identify street trees on the plan meeting the site plan and Technical Manual standards (Section 4) or identify alternative measures, if applicable
ENVIRONMENTAL AND STORMWATER		
Yes ☒	NA ☐	Water Quality, Stormwater Management and Erosion Control (14-526 (b)3 a) • Stormwater report in compliance with Section 5 of Technical Manual and DEP Chapter 500 stormwater for basic, general and flooding standards, as applicable • Erosion control plan and measures • Evidence of compliance with Urban Impaired Stream Standards pursuant to DEP Chapter 500 stormwater, as applicable • Subsurface sanitary sewage disposal and groundwater protection

PUBLIC INFRASTRUCTURE AND SAFETY		
Yes ☒	NA ☐	Consistency with City Master Plans (14-526 (c) 1) - Identify consistency with master plans - Proposed easements, rights and improvements to connect or continue off-premises public infrastructure, as applicable
Yes ☒	NA ☐	Public Safety and Fire Prevention (14-526 (c)) - Address Crime Prevention through Environmental Design (CPTED) (Technical Manual, Section 3) - Emergency vehicle access - Address consistency with public safety standards (Technical Manual, Section 3) - Submit a code summary referring NFPA 1 and all Fire Department standards (Technical Manual, Section 3) – Fire Checklist
Yes ☒	NA ☐	Availability and Adequacy of Public Utilities (14-526 (c) 3) (Technical Manual, Sections 2 & 9) - Electrical services, including providing underground services - Identify existing and proposed connections for public utilities and required public utility upgrades - Sewer line connections are required, if there is a main within 200 feet - Proposed solid waste management facilities on-site and management for the site - Written evidence of the ability to serve from utility companies, as applicable
SITE DESIGN		
Yes ☒	NA ☐	Massing, Ventilations and Wind Impact (14-526 (d) 1) - Wind and ventilation impacts on adjoining structures and/or adjacent public spaces. Wind study, if applicable - Bulk, location or height impacts on adjoining structures - Identify and locate HVAC equipment and venting away from public spaces and residential properties - Identify screening and manufacturing specifications for noise, if applicable
Yes ☒	NA ☐	Shadows (14-526 (d) 2), if applicable Shadow analysis of impacts on publicly accessible open space (Technical Manual, Section 11)
Yes ☒	NA ☐	Snow and Ice Loading (14-526 (d) 3) Building design to prevent snow and ice from loading or falling onto adjacent properties or public ways
Yes ☒	NA ☐	View Corridors (14-526 (d) 4), if applicable Protection of designated view corridors (Portland Design Manual, Appen. 1)

Yes ☐	NA ☐	Historic Resources (14-526 (d) 5), if applicable • Identify developments within Historic Districts or affecting Designated Landmarks • Certificate of Appropriateness or other evidence • Identify Developments within 100 feet of Historic Districts or affecting Designated Landmarks. Advisory HP review may be required • Address preservation and documentation of Archaeological Resources
Yes ☒	NA ☐	Exterior Lighting (14-526 (d) 6) • Cut sheets of on-site light fixtures and any architectural or specialty lights (Technical Manual, Section 12) • Engineered details for any lights proposed in street right-of-way (Technical Manual, Section 10)
Yes ☒	NA ☐	Noise and Vibration (14-526 (d) 7) • Evidence of noise levels for equipment, such as equipment specifications, to demonstrate consistency with zoning requirements
Yes ☒	NA ☐	Signage and Wayfinding (14-526 (d) 8), if applicable • Signage plan showing the location, dimensions, height and setback of all existing and proposed signs. Signs in Historic Districts are reviewed by Historic Preservation staff • Proposed commercial and directional signage on site
Yes ☒	NA ☐	Zone Related Design Standards (14-526 (d) 5) • Address Historic Preservation Design Review, if applicable • Address any applicable design review standards by zone • Address submission requirements from Design Manual, page 1, addressing neighborhood context • Description of exterior materials, color, finish, and samples
Construction Management Plan		
Yes ☒	NA ☐	Construction Management Plan • Construction Management Document and Plan

LEVEL II AND LEVEL III SITE PLAN DRAWINGS CHECKLIST

* Please upload the following drawings with the listed details as separate pdfs

(ALL drawings must be uploaded in a 24 x 36 sheet size)

RECENT BOUNDARY SURVEY (stamped by Maine Licensed Surveyor)

- ☒ Must be in compliance with Technical Manual, Section 13

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

Existing Conditions

- ☒ Approximate location of structures on abutting property
- ☒ Topography
- ☐ Locate water courses
- ☐ Delineate wetlands
- ☐ Zone lines

Proposed Site Plan

- ☒ Ground floor area, and grade elevations for all buildings

Access, Circulation, and Parking

- ☒ Streets and intersections adjacent to site, any proposed geometric modifications
- ☒ Location, dimensions and materials of all existing and proposed driveways, vehicle, bicycle, & pedestrian access ways with corresponding curb lines
- ☒ Engineered specifications/ cross-sections for proposed driveways, sidewalks & paved areas
- ☒ Location and dimensions of proposed loading areas
- ☒ Existing and proposed transit infrastructure with dimensions/ engineering specifications
- ☒ Location of vehicle and bicycle parking with dimensions and engineering specifications

Site Considerations

- ☐ Identify snow storage areas
- ☒ Location of fire hydrants
- ☒ Location of solid waste management facilities

UTILITY PLAN including:

- ☒ Existing utilities on site and within public streets
- ☒ Location, sizing and directional flows of all existing and proposed utilities
- ☒ Location and dimensions of off-premises public or publicly accessible infrastructure adjacent to site
- ☒ Electric utility infrastructure

GRADING AND DRAINAGE PLAN including:

- ☒ Existing grades and drainage
- ☒ Proposed grades
- ☒ Proposed stormwater management meeting Technical Manual (Section 5), standards
- ☐ Location and proposed alteration of a water course
- ☐ Preservation or alteration of wetlands

EROSION CONTROL

- ☒ Must be in compliance with Technical Manual, Section 5

LANDSCAPE PLAN including:

- ☒ Existing vegetation to be preserved and preservation measures
- ☒ Proposed landscaping and buffers
- ☒ Planting schedule

RECORDING PLAT, if applicable
☐ If Subdivision, must be in compliance with requirements of Section 14-496 (b)
ARCHITECTURAL PLANS AND RENDERINGS including:
☒ Exterior building elevations, color renderings, illustrations of all sides
☒ Location and dimensions of all existing and proposed HVAC and mechanical equipment, all proposed screening
☒ Provide context drawings, if applicable (Design Manual, page 1)
☒ Floor plans

QUITCLAIM DEED WITH COVENANT

DLN: 1001840046036

Deering Property Development LLC, a Maine limited liability company with a mailing address of 2730 Transit Road, West Seneca, New York, 14224, grants to **DPD Lot 3 LLC**, a Maine limited liability company with a mailing address of 2730 Transit Road, West Seneca, New York, 14224, WITH QUITCLAIM COVENANT, a parcel of land, together with all appurtenant rights and easements, located at or near 383 Commercial Street in the City of Portland, County of Cumberland and State of Maine, such parcel being more particularly described on **Exhibit A** attached hereto.

IN WITNESS WHEREOF, Deering Property Development LLC has caused this instrument to be executed and delivered by its duly-authorized Manager this 30th day of November, 2018.

Deering Property Development LLC

Witness

By:


Gordon Reger
Its Duly Authorized Manager

State of New York
County of Erie

November 30th, 2018

PERSONALLY APPEARED before me the above-named Gordon Reger, Manager of Deering Property Development LLC, and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said limited liability company.

Edith M Bluhm
Name:
Notary Public
My Commission Expires:

Edith M Bluhm
Notary Public State of New York
Erie County
Lic. #01BL6180099
Commission Expires 1/7/2020

Exhibit A

A parcel of land located at or near 383 Commercial Street, Portland, Cumberland County, Maine, and being Lot 3 as shown on that certain "Subdivision Plan of: 383 Commercial Street" (2 Sheets) prepared by Sebago Technics for Deering Property Development LLC, last dated October 22, 2018, and recorded in the Cumberland County Registry of Deeds in Plan Book 218, Pages 510-511.

Subject to and with the benefit of a Declaration of Reciprocal Easements dated November 30, 2018, and recorded in said Registry of Deeds in Book 35338, Page 45.

Received
Recorded Register of Deeds
Dec 10, 2018 03:08:43P
Cumberland County
Nancy A. Lane

PURCHASE AND SALE AGREEMENT

This Purchase and Sale Agreement ("Agreement") is made and entered into as of this 8TH day of July 2016 (the "Effective Date"), by and between Milliken Smith Block, LLC, a Maine limited liability company with a mailing address of c/o William M. Moody Jr., 5 High Street, Yarmouth, ME., 04096 ("Seller") and Deering Property Development LLC, a Maine limited liability company with a mailing address of 2730 Transit Road, West Seneca, New York 14224 Attn: Gordon Reger ("Buyer").

In consideration of the mutual covenants and promises hereinafter set forth, Seller and Buyer agree as follows:

1. PREMISES. Seller agrees to sell and Buyer agrees to purchase, on the terms and conditions contained in this Agreement, the approximately 110,000 square foot parcel of land located at or near 383 Commercial Street in Portland, Cumberland County, Maine, and bounded by Commercial Street, High Street, York Street, and Maple Street, and all other improvements remaining thereon on the date of Closing and all rights and easements appurtenant thereto (together, the "Premises"). The Premises is approximately depicted on Exhibit A attached hereto and shown on Tax Map 42, Block A as Lot 1. The Premises does not include the building currently occupied by the Charter School and related land located on the northwest corner of the block described above and depicted on Tax Map 42, Block A as Lot 7, and the related 15-foot wide passageway depicted on Tax Map 42, Block A as Lot 8 (together, the "Charter School Property"). The Premises does not include the lumber business currently operated on the Premises by Rufus Deering Lumber Company ("RDC") pursuant to a lease by and between Seller and RDC (the "RDC Lease").

2. PURCHASE PRICE Subject to any adjustments and prorations hereinafter described, the purchase price for the Premises shall be [REDACTED] Dollars per square foot of land area in the Premises, which would be [REDACTED] (\$ [REDACTED]) based on the estimated land area of 110,000 square feet, to be paid by immediately-available funds at the Closing. The actual purchase price paid by Buyer at Closing shall be calculated using the foregoing price per square foot and the actual land area of the Premises as determined according to an ALTA/NSPS survey of the Premises performed by a reputable surveyor, which Buyer agrees to obtain at Buyer's expense.

[Handwritten signature]
1-6-16

Promptly upon full execution of this Agreement, Buyer shall deliver to Malone Commercial ("Escrow Agent"), an earnest money deposit (the "Deposit") in the amount of [REDACTED] U.S. Dollars (\$ [REDACTED]), as security for Buyer's performance under this Agreement. The Deposit shall be held in escrow by Escrow Agent pursuant to this Agreement. Upon the expiration of the initial 60-day Inspection Contingency Period, unless Buyer has terminated this Agreement, the Deposit shall become non-refundable.

If Buyer has not terminated this Agreement by the expiration of the Inspection Contingency Period and not terminated this agreement pursuant to Buyer's Approvals Contingency in Paragraph 6 below, Buyer shall make the following monthly payments, all of which payments shall be nonrefundable (except in the event of a Seller default) and included in the definition of Deposit:

(a) Beginning on or before ninety (90) days from the Effective Date and continuing on or before the first day of each month until [REDACTED] Buyer shall deliver to Escrow Agent [REDACTED] Dollars (\$ [REDACTED]) per month, prorated for any portion of a month.

(b) Beginning [REDACTED], and continuing on or before the first day of each month until [REDACTED] Buyer shall deliver to Escrow Agent [REDACTED] Dollars (\$ [REDACTED]) per month, prorated for any portion of a month.

(c) Beginning [REDACTED], and continuing on or before the first day of each month until the Approvals Contingency Period Expiration, Buyer shall deliver to Escrow Agent [REDACTED] Dollars (\$ [REDACTED]) per month, prorated for any portion of a month.

Buyer shall not be in default of this Agreement for failure to make any of the Deposit payments above unless and until Buyer fails to make such payment within seven (7) days of when due. All of the Deposit shall be credited towards the purchase price at the Closing or otherwise disbursed in accordance with this Agreement.

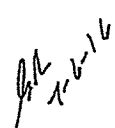
3. TITLE. Seller shall convey the Premises to Buyer at the Closing in fee simple, subject to the Permitted Encumbrances (as defined below), but free and clear of all liens, except for liens for real estate taxes not yet due and payable. Seller may, at the time of delivery of the deed, use the purchase proceeds or any portion thereof to clear the title of liens and encumbrances that are not Permitted Encumbrances, including without limitation consideration for the early termination of the RDC lease, provided that all instruments so procured are delivered simultaneously with the delivery of the deed.

Within sixty (60) days of the Effective Date (the "Title Review Period"), Buyer shall notify Seller in

Handwritten signature/initials

writing (the "Title Objection Notice") of matters of record at the Cumberland County Registry of Deeds adversely affecting title to the Premises that are objectionable to Buyer in Buyer's sole discretion ("Title Defects"). Buyer shall be deemed to have waived the right to object to any matter affecting title as of the Effective Date, excluding any mortgage, tax lien, mechanics' lien, judgment lien, or other liens encumbering the Premises (for which no title objection is required), if Buyer fails to specifically identify such matters in the Title Objection Notice (each matter not objected to being a "Permitted Encumbrance"). The RDC Lease shall not be a Permitted Encumbrance. Seller shall use good faith efforts to cure such Title Defects and shall have a period of not more than sixty (60) days after Seller's receipt of the Title Objection Notice within which to cure any such Title Defects (the "Title Cure Period"). Seller agrees that after the Effective Date, it shall not permit or suffer encumbrance of the Premises with any liens, easements, leases, or other encumbrances. On or before the Closing, Seller shall remove at its sole cost any matters affecting the title to the Premises suffered or created by or consented to by Seller, whether voluntarily or involuntarily, after the Effective Date that are not approved in writing by Buyer. If Seller fails to cure any Title Defects within the Title Cure Period, then Buyer shall elect, by written notice to Seller on or before ten (10) days from the expiration of the Title Cure Period, either (i) to accept title to the Premises subject to such uncured Title Defects without reduction of the purchase price and without any liability on the part of Seller therefor, in which case such Title Defects shall be Permitted Encumbrances, or (ii) to terminate this Agreement, whereupon the Deposit immediately shall be returned to Buyer and neither party shall have any further obligations under this Agreement, except for provisions that expressly survive termination. In the event that Buyer does not timely elect either option (i) or (ii) above, Buyer shall be deemed to have elected option (i).

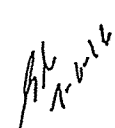
4. BUYER'S INSPECTION AND INVESTIGATIONS CONTINGENCY. Buyer or its agents may enter onto the Premises at any time after the date of this Agreement until the Closing, subject to compliance with the conditions below in this paragraph 4, in order to conduct surveys, engineering studies, soil studies, and such other investigations of the Premises as Buyer elects. Following the exercise of any of Buyer's inspection rights hereunder, Buyer promptly shall use reasonable efforts to restore any portion of the Premises disturbed to its condition prior to disturbance. Buyer shall indemnify and hold Seller harmless for all claims, damages, causes of action, judgments, penalties, fines, costs and expenses, including without limitation attorneys', paralegals' and expert witnesses' fees and court costs, incurred by Seller in connection with the exercise by Buyer or its employees, agents, or contractors, of the investigation and inspection rights contained in this paragraph except for pre-existing conditions and matters



resulting from Seller's negligence, which indemnity shall survive the Closing or any termination of this Agreement. Buyer also intends to investigate the zoning and other land use restrictions on the Premises, which investigations may include discussions with City of Portland officials, and investigate the feasibility of development of the Premises. In the event that Buyer is not satisfied with any of Buyer's inspections or other investigations of the Premises or the potential development of the Premises, in Buyer's sole discretion, Buyer shall so notify Seller in writing (which notice does not have to set forth the reasons for termination) within [REDACTED] days from the Effective Date (the "Inspection Contingency Period"), whereupon this Agreement shall automatically terminate, and the Deposit promptly shall be returned to Buyer, and thereafter, neither party shall have any further obligations under this Agreement, except for indemnities and other provisions that expressly survive termination. In the event that Buyer does not terminate this Agreement by the expiration of the Inspection Contingency Period, Buyer shall be deemed to have waived the foregoing inspection contingency. In the event that Buyer terminates this Agreement pursuant to this Section 4, Buyer shall deliver to Seller simultaneously with such termination notice copies of all reports, studies, plans, surveys, title insurance commitments, and other matters prepared by or for Buyer in connection with its inspections and investigations.

Buyer shall coordinate all due diligence that requires physical inspection or investigation on the Premises with Seller and have such on-site work performed when RDC is not open to the public and only after Seller approves by email the scope, time, and manner of any physical inspection or investigation on the Property, such approval not to be unreasonably withheld, conditioned, or delayed. All of Buyer's due diligence reports relating to the Premises will be owned by Buyer. Buyer shall have such reports certified to Seller, or provide Seller with a reliance letter from the consultant producing such reports, and deliver copies of such reports to Seller, all to the end that Seller may rely on such reports in the event that Buyer does not proceed with the purchase of the Premises. Seller shall not use or disclose the contents of any such report unless the Agreement is terminated or the Closing otherwise fails to occur. Buyer shall obtain from those due diligence consultants conducting on-site investigations confidentiality agreements reasonably satisfactory to Seller, for the benefit of Seller and RDC, the parties acknowledging that RDC's business could be adversely impacted if the potential sale of the Premises became known to RDC's employees or the public.

5. SELLER DELIVERABLES. Within five (5) days of the Effective Date, Seller shall deliver to Buyer the following: (i) a copy of any surveys and plans of the Premises; (ii) any Phase I or Phase II Environmental



Site Assessments; (iii) copies of any soils engineering reports, all to the extent such items are in Seller's possession or control that are in effect on the date of this Agreement (together, the "Seller Deliverables"). For purposes of this paragraph, "control" means in the possession of a person who Seller has contractually engaged to provide services to Seller. Buyer acknowledges and agrees that (a) the Seller Deliverables are being provided by Seller to Buyer as a courtesy, and therefore, Seller makes no representation or warranty regarding the accuracy and/or completeness of the Seller Deliverables, and (b) Buyer and any person to whom Buyer provides the Seller Deliverables shall rely on the same at their own risk.

Buyer agrees, acknowledges and represents that except as specifically set forth in this Agreement, Buyer is entering into this Agreement and shall perform all of its obligations hereunder and consummate the transaction contemplated by this Agreement solely in reliance on and as a result of Buyer's own investigations and efforts (including Buyer's inspection of the Premises and such other investigations, examinations and inspections as Buyer has chosen to make or has made) and at Buyer's sole risk, cost and expense, including, without limitation, the risk that Buyer's inspection of the Premises and such other investigations, examinations and inspections may not reveal any or all adverse or existing conditions, aspects or attributes of the Premises. Buyer acknowledges that Seller has afforded, and, during the Inspection Contingency Period, shall afford, Buyer the opportunity for full and complete investigation, examination and inspection of the Land. Buyer acknowledges that this paragraph was a negotiated part of this Agreement and serves as an essential component of consideration for the same. Without limiting the generality of the foregoing, the parties specifically acknowledge that Buyer has had, and, during the Inspection Contingency Period shall have, an opportunity to fully inspect the Premises, including, but not limited to, the physical condition of the Premises (including all environmental concerns), and the purchase price has been negotiated to eliminate all claims except those arising under representations, warranties or agreements contained in this Agreement, whether known or unknown, relating to the condition of the Premises as of the date of this Agreement and all aspects and attributes thereof, including, without limitation, all environmental matters. Buyer acknowledges and agrees that Seller has made and shall make no representation or warranty with respect to the Premises, except as expressly set forth in this Agreement. The Premises shall be sold and conveyed "AS IS, WHERE IS" without representation or warranty of any kind except as otherwise explicitly set forth herein.

6. BUYER APPROVALS CONTINGENCY. Buyer's obligation to close on the purchase of the

*PL
x'v'v'v'*

Premises shall be conditioned upon Buyer's receipt of all necessary, final and unappealable, land-use approvals (the "Approvals") for Buyer's intended development of the Premises (the "Development") by [REDACTED]. Buyer shall notify Seller of the Approvals required for the Development by [REDACTED], which notification shall include Buyer's estimate of the milestone dates to obtain the Approvals. In the event that Buyer is unable to obtain the Approvals by [REDACTED], Buyer's approvals contingency deadline automatically shall be extended to [REDACTED], provided that Buyer continues to make good faith effort to obtain the Approvals. In the event that Buyer is unable to obtain the Approvals (or Buyer's earlier determines in its sole discretion that the Approvals are unlikely to be obtained) by [REDACTED] or [REDACTED], if the Approvals deadline is extended as provided above (as such date is determined, the "Approvals Contingency Expiration"), Buyer shall so notify Seller in writing on or before the Approvals Contingency Expiration whereupon this Agreement shall automatically terminate, and the Deposit shall be delivered by Escrow Agent to Seller and thereafter neither party shall have any further obligations under this Agreement, except for indemnities and other provisions that expressly survive termination. Seller agrees to cooperate with Buyer is applying for and seeking any Approvals, such cooperation to include joining as the land owner in any applications for Approvals, provided that Seller shall not be obligated to incur any material out-of-pocket expense to provide such cooperation.

7. CLOSING: DEED. The closing shall take place on the business day that is closest to sixty (60) days from the Approvals Contingency Expiration at 10:00 a.m., at the offices of Bernstein Shur, 100 Middle Street, Portland, Maine, or at such other time and place as Seller and Buyer may mutually agree upon in writing (as determined, the "Closing"). At the Closing, Seller shall execute and deliver to Buyer, or Buyer's nominee, against payment of the balance of the purchase price, a Quitclaim Deed with Covenant for the Premises in accordance with the Short Form Deeds Act, 33 M.R.S.A. 761 et seq. (the "Deed"). Seller also shall execute and deliver to Buyer at the Closing the following: a customary and reasonable title insurance Seller's Affidavit regarding persons in possession and mechanics' liens; a 1099-S data form, a FIRPTA affidavit; REW-3; W-9 form; an underground storage tank affidavit to comply with 38 M.R.S.A. § 563(6); evidence of Seller's existence and authority to satisfy the customary seller authority requirements for issuance of an owner's title insurance policy; a real estate transfer tax declaration of value form; and a settlement statement.

8. REPRESENTATIONS.

- (a) Except as actually known to Buyer prior to Closing as a result of Buyer's investigations of the

GA
1-6-16

Land, Seller represents and warrants to Buyer as follows, which representations and warranties, and the restatement thereof at Closing, shall survive Closing for a period of one (1) year:

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

(ii) There are no tenancies, occupancies or licenses affecting the Premises, except for the RDC Lease.

(b) Buyer has the legal right, power and authority to enter into this Agreement and to perform all of its obligations hereunder, and the execution and delivery of this Agreement and the performance by Buyer of its obligations hereunder will not conflict with, or result in breach of any regulation, order, judgment, injunction or decree of any court or governmental authority or any agreement or instrument to which Buyer is a party or by which it is bound.

9. AFFIRMATIVE COVENANTS OF SELLER. Seller agrees, pending closing, that:

(a) Seller shall pay, when due, all taxes and assessments of every type or nature levied or assessed against the Premises and any valid lien against the Premises.

(b) Seller (i) shall not commit or suffer waste and (ii) shall materially comply with all laws, ordinances, regulations, covenants, conditions and restrictions affecting the Premises and will not suffer or permit any material violation thereof.

10. ADJUSTMENTS, PRORATIONS AND CLOSING COSTS.

(a) Real estate taxes and municipal assessments shall be prorated as of the Closing on the basis of the latest available tax bill.

(b) The Maine real estate transfer tax shall be paid equally by Seller and Buyer in accordance with 36 M.R.S.A. Section 4641-A.

(c) The recording fee for the deed of conveyance and any expenses related to any financing for Buyer in connection with the purchase of the Premises shall be paid by Buyer.

Handwritten signature/initials

(d) A portion of the purchase price shall be withheld at the Closing by Buyer if required by 36 M.R.S.A. § 5250-A.

11. POSSESSION. Seller shall deliver possession of the Premises to Buyer at the Closing, free of all leases, tenancies or occupancies, including without limitation the RDC Lease. Seller or RDC may remove from the Premises any and all equipment, fixtures and improvements provide that no debris or waste therefrom remains on the Premises and none of RDC's hazardous, toxic, or special materials inventory or wastes remain on the Premises. RDC shall have the right to occupy the Premises for the operation of its business until the Closing.

12. DEFAULT; REMEDIES. In the event that Buyer fails to close hereunder for a reason other than the default of Seller, Seller may terminate this Agreement by written notice to Buyer and thereupon Seller shall be entitled to the Deposit as Seller's sole and exclusive remedy for Buyer's breach, and Escrow Agent shall be authorized to disburse the Deposit to Seller. Seller and Buyer acknowledge and agree that the damages for Buyer's breach of this Agreement are difficult to calculate and that the Deposit is a reasonable estimate of such damages. In the event that Seller breaches this Agreement for a reason other than the default of Buyer, Buyer shall be entitled to either (i) terminate this Agreement by written notice to the Seller, in which case Buyer shall be entitled to a return of the Deposit and Escrow Agent shall be authorized to disburse the Deposit to Buyer or (ii) pursue the remedy of specific performance. In the event of litigation regarding breach of this Agreement by either party, the party who obtains a final, un-appealable judgment in its favor shall be entitled to collect its reasonable attorneys' and paralegals' fees and court costs from the other party.

13. BROKERAGE/ESCROW AGENT. Seller and Buyer each represent to the other that they have not dealt or had contact with any broker in connection with this transaction other than Malone Commercial. Seller shall pay Malone Commercial a commission equal to [REDACTED] of the purchase price at the Closing, and Buyer shall pay Malone Commercial a commission equal to [REDACTED] of the purchase price at the Closing.

14. MISCELLANEOUS.

(a) Time. Time is of the essence hereof.

(b) Notices. Except as expressly provided to the contrary in this Agreement, all notices,

Handwritten signature/initials

demands and other communications hereunder shall be in writing and shall be given by electronic mail: if to Seller:

William Moody ([REDACTED]) and Mike Pearce (mpearce@pearcedow.com), and if to Buyer: Gordon Reger ([REDACTED]) and Tom Hanson (thanson@bssn.com), with a copy of such notice to Seller or Buyer at their addresses set forth in the preamble to this Agreement sent by certified mail, return receipt requested. Notices and communications of any kind shall never be sent to Bill Moody or anyone else at RDC or care of the RDC address. All notices shall be deemed to have been duly given if the electronic mail time stamp is prior to the expiration date and time specified herein. Attorneys are authorized to give notices on behalf of their clients. Either party may change the notice electronic mail addresses and certified mail notice addresses for purposes of this subparagraph by giving the other party notice of the new address in the manner described herein.

(c) Assignment. Buyer's rights under this Agreement may not be assigned without Seller's prior written approval, which approval shall be conditioned on Seller being satisfied that Buyer's assignee has in Seller's opinion the financial ability to acquire the Premises; notwithstanding the foregoing, Buyer may assign this Agreement to any entity of which Reger Holdings, LLC or Gordon Reger or his family or some combination thereof are the controlling principals without Seller consent, but with notice to the Seller. Buyer shall remain liable under this Agreement notwithstanding any such assignment. This Agreement will inure to the benefit of and bind the respective successors and assigns of Seller and Buyer.

(d) 1031 Exchange. Seller may elect to perform an IRC §1031 tax deferred exchange. Buyer agrees to cooperate in such an exchange and to sign the documents customarily used in such an exchange, provided that such documents do not modify the terms and conditions of this Agreement or impose additional liabilities or obligations on Buyer.

(e) Entire Agreement. This Agreement constitutes the entire agreement between Seller and Buyer with respect to the sale of the Premises, and there are no representations, warranties, agreements or understandings between the parties except as set forth herein.

(f) Construction. This Agreement shall be governed by and construed in accordance with the laws of Maine, without taking into account choice of law principles. If any provision of this Agreement is determined to be invalid or unenforceable, it shall not affect the validity or enforcement of the remaining provisions hereof.

(g) Confidentiality. Seller, Buyer and Escrow Agent agree not to disclose the terms, conditions or existence of this Agreement to any persons except lawyers, accountants, financial advisors, lenders,

Handwritten signature/initials

appraisers, and consultants to the parties. The terms and conditions of a certain Confidentiality Agreement by and between Seller, RDC, Reger Holdings, LLC and Gordon Reger dated May 27, 2016 (the "CA"), are incorporated by reference. It shall not be a breach of this provision or the CA for Seller or its consultants to discuss the development of the Premises with City of Portland officials or to submit applications for Approvals to the City of Portland pursuant to Buyer's Approvals Contingency.

(h) Counterpart Execution. This Agreement may be executed in one or more counterpart signatures, and together the signed counterparts shall be deemed to be a fully-executed contract.

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

WITNESS:

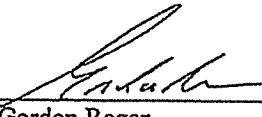
Seller: Milliken Smith Bock, LLC

By:

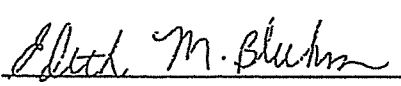
William Moody
Its duly-authorized Manager

Buyer: Deering Property Development LLC

By:



Gordon Reger
Its duly-authorized Manager



Malone Commercial Brokers as Escrow Agent

By:

Joseph Malone

appraisers, and consultants to the parties. The terms and conditions of a certain Confidentiality Agreement by and between Seller, RDC, Reger Holdings, LLC and Gordon Reger dated May 27, 2016 (the "CA"), are incorporated by reference. It shall not be a breach of this provision or the CA for Seller or its consultants to discuss the development of the Premises with City of Portland officials or to submit applications for Approvals to the City of Portland pursuant to Buyer's Approvals Contingency.

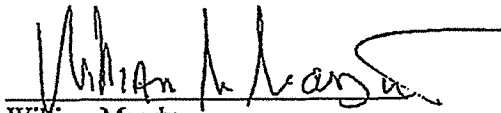
(h) Counterpart Execution. This Agreement may be executed in one or more counterpart signatures, and together the signed counterparts shall be deemed to be a fully-executed contract.

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

WITNESS:

Seller: Milliken Smith Bock, LLC



By: 
William Moody
Its duly-authorized Manager

Buyer: Deering Property Development LLC

By: _____
Gordon Reger
Its duly-authorized Manager

Malone Commercial Brokers as Escrow Agent

By: _____
Joseph Malone

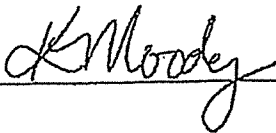
appraisers, and consultants to the parties. The terms and conditions of a certain Confidentiality Agreement by and between Seller, RDC, Reger Holdings, LLC and Gordon Reger dated May 27, 2016 (the "CA"), are incorporated by reference. It shall not be a breach of this provision or the CA for Seller or its consultants to discuss the development of the Premises with City of Portland officials or to submit applications for Approvals to the City of Portland pursuant to Buyer's Approvals Contingency.

(h) Counterpart Execution. This Agreement may be executed in one or more counterpart signatures, and together the signed counterparts shall be deemed to be a fully-executed contract.

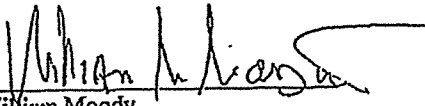
IN WITNESS WHEREOF, Seller and Buyer have executed this Agreement as of the date first above written.

WITNESS:

Seller: Milliken Smith Bock, LLC



By:



William Moody
Its duly-authorized Manager

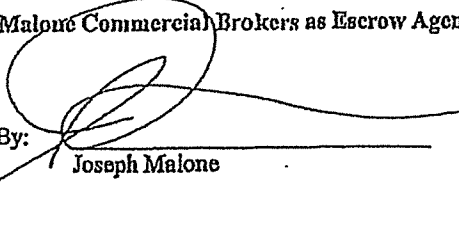
Buyer: Deering Property Development LLC

By:

Gordon Reger
Its duly-authorized Manager

Malone Commercial Brokers as Escrow Agent

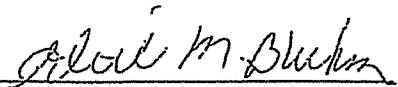
By:



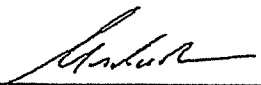
Joseph Malone

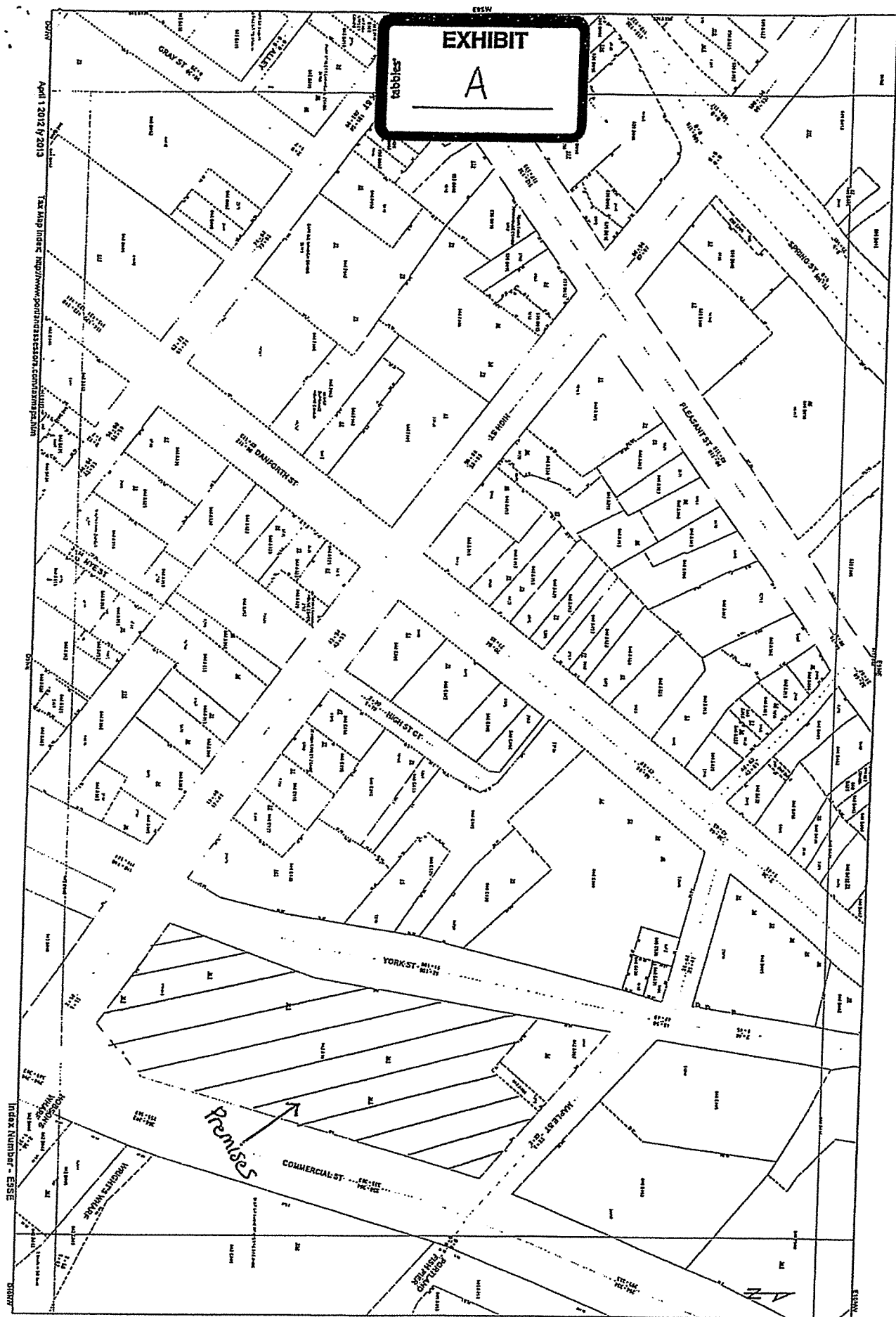
Reger Holdings, LLC hereby joins this Agreement, jointly and severally with Buyer, with respect to Buyer's obligations under this Agreement.

Reger Holdings, LLC



By:


Gordon Reger
Its duly-authorized Manager



Evidence of State or Federal Approvals

The parcel is subject to the conditions of approval associated with an Existing Chapter 500 – Stormwater permit, which was approved during the Master Plan process. No Federal permitting was required for the development of this parcel.

Portland, Maine



Yes. Life's good here.

Planning & Urban Development Department

ZONING ANALYSIS Relevant Zone(s) B5b Urban Commercial Business

All Projects:

	Required	Proposed
Lot Size	none	0.806 acre
Area Per Dwelling Unit		
Minimum Street Frontage	none	546 ft.
Front Yard Minimum	none	none
Front Yard Maximum	10 ft	0 ft.
Rear Yard	none	none
Yard Right	none	none
Yard Left	none	none
Side Street Setback	none	none
Step Back		
Maximum Lot Coverage	100%	100%
Minimum Lot Coverage		
Maximum Height	65 ft	65 ft
Open Space		
Maximum Impervious Area		
Pavement Setback		
Floor Area Ratio		
Off Street Parking Spaces		130
Loading Bays		On Com. St.
Other 1		
Other 2		
Other 3		

Planned Residential Unit Developments (PRUD) Requirements

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

Affordable Housing Density Bonuses (if applicable)

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

Inclusionary Zoning

The proposed project involves the construction of 64 residential units in a mixed-use development and therefore must comply with inclusionary zoning requirements. As outlined in Section 14-487 of the City Code:

All projects including ten or more residential units created through new construction, substantial rehabilitation or existing structures, adaptive reuse or conversion of a non-residential use to residential use, or any combination of these must comply with Section 14-487 of the Code.

The applicant will be utilizing the In-Lieu Fee option (Cash Payment In Lieu of Affordable Units) made available by the City. The applicant understands that all money shall be due prior to the issuance of a Certificate of Occupancy.

The fee is as follows:

64 units X 10% = 6.4

6.4 X \$100,000 = **\$640,000**

Existing Easements

There are no existing or proposed easements associated with the 387 Commercial Street parcel.

Standard to be Waived: Cite Ordinance or Technical Manual Standard	Cite Standard Language: Cite specific language of applicable Ordinance or Technical Manual Standard	Waiver Being Sought: Describe waiver being sought. Ex. – We are requesting a two-way parking lot drive aisle width of 20' feet.	Justification for Waiver: Address specific waiver criteria, if applicable, and document reasons for the waiver request.
None Anticipated			



December 22, 2016

Mrs. Barbara Barhydt
Portland Planning Staff
Portland City Hall
389 Congress Street
Portland, ME 04101

RE: Commercial Street in Portland

Dear Mrs. Barhydt:

I'm writing regarding the future development of Commercial Street in Portland being proposed by Reger Holdings. Our firm NGKF and my prior firm has acted as a financing intermediary for Reger Holdings for the past 15 years on numerous projects from condominiums to industrial. In the last 3 years alone, we arranged the financing for over \$100 million of development in Maine, Massachusetts and South Carolina. One example locally was the Bay House Condominiums in Downtown Portland; a \$20 million dollar construction loan arranged with a Boston Bank that had a very successful sellout.

NGKF Debt group in Boston has the capacity to finance large development projects thru our long term relationships. We also have access to sources thru our owner BGC Partners (NYSE: BGCP) and our proprietary lending platforms in Canter Commercial and Berkeley Point Capital.

Reger Holdings is a third generation well respected real estate company with numerous holdings and experience. The company is run and spearheaded by Mr. Gordon Reger. Our dealing with him and his firm have always been handled in a first class manner. As a result, we would highly recommend Reger Holdings for the development of Commercial Street.

If I can be of any assistance in your decision, please do not hesitate to give me a call. Thank you.

Regards,

David M. Douvadjian

A handwritten signature in dark ink, appearing to read "David M. Douvadjian", written over the printed name and title.

Head of Mortgage Banking

New England

(617) 863-8388

ddouvadjian@ngkf.com



HOLDINGS, LLC
2730 TRANSIT ROAD
WEST SENECA, NY 14224

PHONE: (716) 675-1200

www.REGERHOLDINGS.COM FAX: (716) 674-2947

SENT VIA EMAIL

March 13, 2017

To whom it may concern:

We are writing to help confirm the relationships between Gordon Reger, Reger Holdings, LLC, and Deering Property Development, LLC. Reger Holdings and our affiliated companies typically form a new LLC for each specific project we acquire which is the case with Deering Property Development LLC that was formed for the Commercial Street project. Gordon Reger is the majority shareholder and managing member of both Reger Holdings and Deering Property Development LLC. Therefore, Gordon Reger is the individual legally associated with and responsible for funding both of these entities.

The letter confirming financial capacity references Reger Holdings given that it is the portfolio company that is the main operating company for which Gordon Reger runs the day to day real estate investment and development operations. However, we believe the letter is intended to indirectly confirm the broader capacity of Gordon Reger as the individual with the financial capacity given the business dealings referenced in the letter have spanned across several companies affiliated directly with Reger Holdings and Gordon Reger all of which he has been the majority shareholder and managing member. We would be happy to request any clarification to the letter that may be necessary.

Should you need any additional information please feel free to contact me.

Regards,

Joseph Armenia
Chief Financial Officer

Financial Capability

The applicant's financial capability is evidenced by the attached letter from its financing partner. In addition, a letter from Reger Holdings, LLC is provided to clarify the connection between Gordon Reger and Deering Property Development, LLC.

Deering Property Development, LLC has retained Archetype PA as project Architect and Sebago Technics, Inc. as the Landscape Architect/Civil Engineer.

Technical Capability

There is a highly qualified team of developer, architects, and engineers for this proposed project.

The project team includes:

Reger Dasco Properties (applicant) is a Portland-based partnership between Gordon Reger, Principal of Reger Holdings in West Seneca, NY, Demetri Dasco, Principal of Atlas Investment Group in Boston, MA and Joseph Dasco, Principal of Boulder Hill Development in western Massachusetts. Please see the attached writeup for more detailed information.

The applicant has demonstrated its technical ability as evidenced by the successful completion of the Bay House, a mixed-use retail/residential project with a parking garage; and Seaport Lofts, a residential project. Both of these are located within the India Street project area.

Archetype is an experienced professional architecture and planning firm located on the Portland waterfront. Their staff, headed by Principal David Lloyd, have extensive design talent and knowledge of building construction requirements.

Sebago Technics, Inc. (STI) is a multi-disciplined engineering firm with over 35 years of experience, that offers a wide range of services specializing in land development, planning, permitting and engineering design services. We maintain a staff of multi-disciplinary professionals to provide services in the areas of general civil engineering, road and utility infrastructure design, construction management, permitting, landscape architecture, soil science, wetlands science, land surveying, and environmental engineering.

STI is the design firm of record for the Bay House, Seaport Lofts, Maine Medical Center, Whole Foods, and several additional project in Portland, including projects for the City.

Reger Dasco Properties

Reger Dasco Properties is a Portland-based partnership between Gordon Reger, Principal of Reger Holdings in West Seneca, NY, Demetri Dasco, Principal of Atlas Investment Group in Boston, MA and Joseph Dasco, Principal of Boulder Hill Development in western Massachusetts. Reger Dasco Properties has extensive experience with real estate investments, high-quality residential developments and mixed-use projects.

Gordon's career path began with Marc Equity Corporation, where he headed the company's new residential development division. His responsibilities included overseeing land development and new residential construction in western New York. Gordon also worked on numerous condominium conversions and new residential construction projects in Pennsylvania, Florida, South Carolina and Texas. Later in his career, as CEO of Reger Holdings, Gordon became involved in the redevelopment of historic buildings into luxury residences in Boston's Back Bay. One of his most notable projects was the Gateway Terraces, a premier, 230,000 sf, mixed-use development in the city's South End. Gordon led every aspect of the project, from concept to land acquisition, development, and retail sell-off.

Demetri established Atlas Investment Group in 2001 and currently oversees development acquisitions, construction management, and investment operations of the company's real estate portfolio. Under his leadership, Atlas has created transformational housing and retail opportunities, building strong, thriving, and diverse communities working in partnership with neighborhoods, residents, businesses and community groups. Demetri brings more than 25 years of experience to commercial real estate and development. Prior to founding Atlas Investment Group, Demetri was co-founder and president of his own specialty construction firm. Under his leadership, it grew into one of Boston's premier construction restoration companies

Joe started his career with Arthur Andersen and Company, a global accounting and consulting firm where he earned his CPA certification. Along with one of his Arthur Andersen associates, Joe later purchased AV Associates Inc., an Arthur Andersen client located in Storrs, CT. Together, they grew the multi-media/communications business from \$2.5 million annual revenues to a \$40 million business serving the large-scale needs of its Fortune 100 clients. Joe and his partner later sold the business to MCSI, a NASDAQ listed company. Joe then founded and continues to operate Boulder Hill Development, a boutique design-build real estate development and construction company located in western Massachusetts. Joe is also responsible for the day to day operations at Reger Dasco Properties.

Reger Dasco Properties has been working in Portland since 2006. The project resume in Portland includes, The Bay House, a mixed-use project which consists of 86 residential condominiums and over 6,000 square feet of commercial space, 113 Newbury Street, consisting of 35 residential condominiums, The Mason Block which consists of 27 condominiums and approximately 4,000 square feet of commercial space and Hobson's Landing which is currently under construction which is a multi-phase project consisting of a 150 room hotel (being developed by others), 85 condominiums, approximately 7,000 square feet of commercial space with an additional phase currently under design.

RICHARD L. MEEK, PE, LEED-AP

Senior Project Engineer



Mr. Meek joined the staff of Sebago Technics, Inc. in 2002 as a Design Engineer. Since then, he has performed project engineering for numerous municipal, commercial and residential design projects in Maine and New Hampshire. His specialties include hydrologic and hydraulic analyses for open and closed roadway drainage systems, roadway design and plan preparation, utility coordination, design of temporary traffic control schemes, and environmental permitting associated with state and municipal transportation related projects. Rick is LEED certified and as such he has a particular interest in providing our projects with innovative water quality treatment solutions to stormwater management. He is proficient in the use of the latest design software including AutoCAD and MicroStation, HydroCAD, Hydra-Flow, HY-8, and the full suite of Microsoft Office products. Rick is currently leading one of three Project Delivery Teams within the Engineering Group at Sebago Technics.

EXPERIENCE



Subdivisions:

- Shannon Woods – Saco, ME
- Mitchell Hill Heights – Scarborough, ME
- Sea Ridge at Blue Point – Scarborough, ME
- Park North and The Cascades – Saco, ME
- Dunstan Crossing – Scarborough, ME
- Heath Overlook – Saco, ME
- Regal Pines – South Portland, ME
- McKearney Village – Yarmouth, ME

Transportation:

- I-91 Bridge Replacement – Brattleboro, VT
- Sara Mildred Long Bridge Replacement – Kittery, ME and Portsmouth, NH
- Rochester St. Reconstruction – North Berwick, ME
- Boothbay Roundabout – Boothbay, ME
- MTA - York Toll Plaza – York, ME

Municipal:

- Portsmouth Public Library – Portsmouth, NH
- Yarmouth Public Works – Yarmouth, ME
- Bedford Street CSO – Portland, ME

Site Plans:

- Moody's Collision Center – Gorham, ME
- Shaw Brothers Site – Gorham, ME
- DoubleTree Hotel Redevelopment – South Portland, ME
- Western Avenue Crossing - South Portland, ME
- Monkey Trunks – Saco, ME
- L.L. Bean Order Fulfillment Center – Freeport, ME
- Freeport Village Station – Freeport, ME
- Allagash Brewing – Portland, ME
- Boothbay Harbor Country Club – Boothbay, ME

TRAINING

University of New Hampshire's
Stormwater Center, 2013

Certified Professional in Erosion and
Sediment Control, 2011

Phosphorus Management Design, 2008

Biofilter Media Design, 2008

Maintenance and Inspection of
Stormwater BMP's, 2009

Low Impact Development, 2005

EDUCATION



Auburn University, Auburn, AL
Bachelor of Science,
Civil Engineering, 1999

New Hampshire Technical College,
Stratham, NH
Associate in Applied Science,
Electro-Mechanical Drafting, 1990

REGISTRATIONS

Professional Engineer: Maine #10668

LEED Accredited Professional

MEMBERSHIPS

American Society of Civil Engineers



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

Provisions have been made at the site to allow for the safe circulation of vehicles and pedestrians within the site. Please see the vehicle tracking plan for additional information.

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

- (i) The development provides safe and reasonable access and internal circulation for the entire site for all users of the site and complies with the standards set forth in Section 1 of the Technical Manual. Please see the vehicle tracking plan.
- (ii) The points of access and egress have been located to avoid conflicts with the existing turning movements and traffic flows. Please see the vehicle tracking plan.
- (iii) Not applicable. There are no drive-up features associated with this project.

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

- (i) The development has been designed for proper circulation of delivery and other service vehicles. Please see the plan set for the designated loading areas.

Sidewalks (14-526 (a) 2 c)

- (i) The development has been designed with the appropriate sidewalk and curb layout. Please see the site plan.
- (ii) The proposed development will utilize the existing City sidewalk network.
- (iii) Internal sidewalks have been designed in accordance with the requirements of the City code. Please see the plan set for additional information.

Public Transit (14-526 (a) 3)

There are three South Portland bus lines that travel past the project site and make a loop around Monument Square. There is also a Portland bus route (the 8-line, Peninsula Loop) that runs north of the project site with the closest stop being near the intersection of High and Danforth Streets.

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

- a. The proposed project meets the parking requirements for the zone and development size. The parking spaces have been designed in accordance with City Regulations. The proposed project includes the construction of a parking garage that is integrated into the building design. Please see the site plan for additional information.
- c. The proposed parking areas can accommodate motorcycle and scooter parking, though no spaces have been created specifically for motorcycle or scooter parking. Please see the site plan.

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

The proposed project provides bicycle parking on site. Please see the site plan for the bicycle rack location. A detail for the proposed bicycle rack has been included on a detail sheet within the plan set.

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

- (i) The majority of the site will be developed with building structures. The majority of parking for the site is covered. As a result, it is not anticipated that large volumes of snow storage will occur onsite. The sidewalks and garage entry drive will be cleared after each snow event. Should a snow event result in such quantities of snow that safe passage of the sidewalks is hindered, snow will be hauled off site. Please see the site plan.
- (ii) There are no proposed snow storage areas that will encroach on areas designated to meet minimum parking requirements or pedestrian walkways. There are no snow storage areas located in such a way as will interfere with the storm water management plan of the site.

Traffic Demand Management (TDM) (14-526 (a) 5)

A TDM was submitted as part of the permitting process for Phase 1 and 2.

Environmental and Landscape Features

Preservation of significant Natural Features (14-526 (b) 1)

The proposed project involves the re-development of a previously developed urban lot. There are no existing significant natural features on the site. The site has been designed to complement the surrounding area and includes a landscaping plan. Please see the site plan and landscape plan for additional information.

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

- (i) The proposed project involves little tree removal. The existing conditions at the site are of a previously developed, urban parcel. The proposed design has incorporated landscaping in the site design. Please see the landscape plan.
- (ii) No trees with a 10-inch DBH or greater within the setback are to be impacted. Please see the site plan.
- (iii) Vegetation will be protected during construction in accordance with tree preservation standards listed in Section 4 of the Technical Manual.
- (iv) No waivers for vegetation are sought.
- (v) Not Applicable. The proposed project site is not located in the Shoreland Zone.

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

The proposed project has been designed in accordance to the requirements of the City Ordinance.

An additional street tree (red maple) is proposed in a raised granite tree well on York Street. The existing street trees along Commercial are to remain and no trees are proposed on High Street.

Please see the plan set for detailed information on the courtyard plantings.

Parking Lot Landscaping (14-526 (b) 2 b ii)

There are no landscaped islands proposed for the development as parking will predominately be provided by a proposed parking garage structure located within the development. There will also be some parking located along Commercial Street. There will be street trees included as part of the landscape plan.

Please see the Site Plan and Landscape Plan for more detailed information.

Street Trees (14-526 (b) 2 b iii)

The proposed planting plan was designed in accordance to the specifications of Section 4 of the City's Technical Manual. Please see the Site Plan and landscape plan for more detailed information on proposed street tree locations.

Environmental and Stormwater

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

The proposed site has been designed in accordance to City and Chapter 500 requirements to minimize the amount of stormwater leaving the site.

Please see this exhibit for the Stormwater Management Plan.

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

The proposed development is consistent with the City Master Plan. The development will not result in any unreasonable burdens to the City's resources, nor the unnecessary decrease of undeveloped parcels. The proposed use is consistent with the surrounding area.

The development of Lot 3 is part of the larger planned development of 383 Commercial Street which underwent Master Plan review and approval in 2018.

Public Safety and Fire Prevention (14-526 (c) 2)

- a. Crime Prevention - The proposed facility has been designed with planting that will complement the site but will not provide concealment for illegal activities. The parking area is secure and well lit.
- The site has been designed to allow for proper surveillance of walkways, entrances, and parking areas.
 - Lighting at the site meets the City's technical standards as detailed in Section 12 of the City Technical Manual.

Please see the plan set for additional information.

- b. There is adequate access to the site for emergency vehicles. Please see the plan set.
- c. The site has been designed to be consistent with the standards of the City of Portland Technical Manual. Please see the plan set.

Fire Checklist will be submitted under separate cover.

Availability and Adequacy of Public Utilities (14-526 (c) 3) (Technical Manual, Sections 2 & 9)

- a. The development will not overburden sanitary sewers and storm drains, water lines, or other public infrastructure and utilities.
- b. Electrical service has been designed to be underground.
- c. All proposed sanitary sewers, storm drains, water lines or other utilities meet the provisions of the City Technical manual.
- d. The proposed development will connect to an existing sewer line.
- e. All proposed sanitary sewer and stormwater utilities are designed to City standards.
- f. The proposed development will have a solid waste removal plan. Please see the Site Plan for the dumpster location.

Massing, Ventilations and Wind Impact (14-526 (d) 1)

- a. The bulk and height of the proposed building will not result in health or safety problems from a reduction in ventilation to abutting structures. Please see the site plan.
- b. The bulk, location, and height of the proposed building will not minimize the value or utility of the neighboring buildings. The proposed development is in keeping with the neighborhood. Please see the plan set.
- c. The HVAC venting mechanisms have not been sited on the plan as the appropriately sized system has not yet been determined. The building will be constructed with the all venting systems directed away from public spaces and residential properties.

Shadows (14-526 (d) 2)

Not applicable. There are no open public spaces surrounding the property.

Snow and Ice Loading (14-526 (d) 3)

The building will be designed to prevent significant amounts of accumulated snow and ice from loading or falling onto adjacent properties or public ways.

View Corridor (14-526 (d)4)

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

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

Historic Resources (14-526 (d) 5)

The proposed development will not impact nor is it in close proximity of any historic resources. Other than historic cobbles within Maple Street, no historic resources were discussed during the Master Plan process.

Exterior Lighting (14-526 (d) 6)

Included with this section please find the lighting product cutsheets. Please see the plan set for the lighting plan.

RSW Series

RSW™ LED Street Luminaire – Medium

TYPE S1 & S1a

Product Description

The RSW Series, utilizing WaveMax® Technology, will transform the way utilities and municipalities light their residential streets, interchanges, and expressways. With the first viable LED streetlight at warm CCT, the RSW Series delivers up to 121 LPW, enhanced visual comfort with reduced glare and high color contrast leading to improved overall illumination using less energy. The RSW Series provides warm, inviting dark sky friendly lighting that makes good economic sense.

Applications: Residential roads, collector roads, parking lots, and general area spaces

Performance Summary

Utilizes WaveMax® Technology

Assembled in the U.S.A. of U.S. and imported parts

Initial Delivered Lumens: Up to 9,325

Efficacy: Up to 121 LPW

CRI: Minimum 70 CRI (3000K, 4000K & 5000K); 80 CRI (2700K, 3000K, 4000K & 5000K)

CCT: 2700K, 3000K, 4000K, 5000K

Limited Warranty*: 10 years

* See <http://creelighting.com/warranty> for warranty terms

Accessories

Field-Installed	
Backlight Control Shield RSW-BLSM - Provides 1 mounting height cutoff - 0.5" (13mm) 301 stainless steel construction - Refer to initial delivered lumen tables for lumen output	Cul-De-Sac Shield RSW-CLSM - Provides backlight and sidelight control - 0.5" (13mm) 301 stainless steel construction - Lumen multiplier: 0.77
Bird Guard RSW-BRDGRDM - 5052-H32 aluminum construction	Front Light Shield RSW-FLSM - Provides front light control - 0.5" (13mm) 301 stainless steel construction - Lumen multiplier: 0.87
Shorting Cap XA-XSLSHRT	

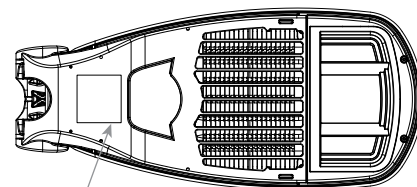
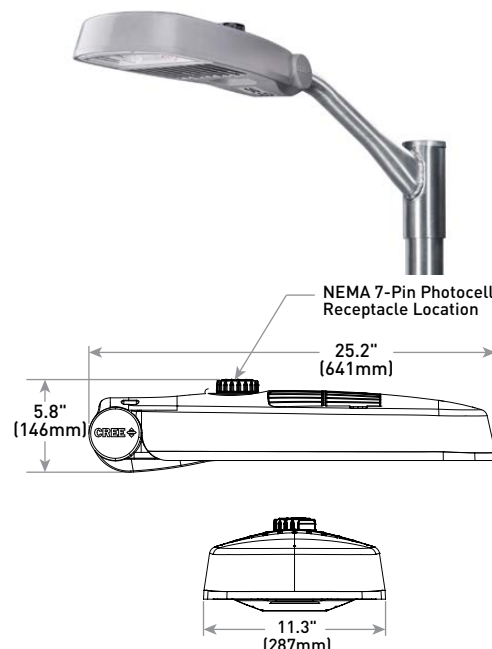
Ordering Information

Example: RSWM-A-HT-2ME-9L-27K8-UL-GY-N

RSWM	A	HT		9L		UL		N	
Product	Version	Mounting	Optic	Lumen Package**	CCT/CRI	Voltage	Color Options	Utility Label/Receptacle	Options
RSWM Medium	A	HT Horizontal Tenon	2LG* Type II Long 2ME* Type II Medium 3ME* Type III Medium	9L 9,000 Lumens	27K8 2700K, 80 CRI 30K7 3000K, 70 CRI 30K8 3000K, 80 CRI 40K7 4000K, 70CRI 40K8 4000K, 80 CRI 50K7 5000K, 70CRI 50K8 5000K, 80CRI	UL Universal 120-277V	BK Black BZ Bronze GY Grey	N Utility Label and NEMA® 7-Pin Photocell Receptacle - External wattage label per ANSI C136.15 - 7-pin receptacle per ANSI C136.41 - Factory connected 0-10V dim leads - Requires photocell or shorting cap by others	PP Pallet Packaging - Multiple luminaires (up to 22 maximum per pallet) Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Lumen Output - Must select Q8, Q7, Q6, Q5, Q4, Q3, Q2, or Q1 - Offers full range lumen adjustability - Includes wattage label for setting selected - Refer to pages 7 & 8 for power and lumen values - Luminaire may also be dimmed through 7-Pin receptacle with use of dimming control by others - Refer to dimming spec sheet for dimming multipliers SS Stainless Steel Bolts X7/X6/X5/X4/X3/X2/X1 Locked Lumen Output - Must select X7, X6, X5, X4, X3, X2, or X1 - Lumen output is permanently locked to the setting selected - Includes wattage label for setting selected - Refer to pages 7 & 8 for power and lumen values - Dimming is only available through 7-Pin receptacle with use of dimming control by others - Refer to dimming spec sheet for dimming multipliers

* Available with Backlight Shield when ordered with field-installed accessory (see table above)

** Lumen Package codes identify approximate light output only. Actual lumen output levels vary depending on CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values



Weight*
15.6 lbs. (7.1kg)

* RSW-BLSM Accessory: add 0.4 lbs. (0.2kg); RSW-CLSM or RSW-FLSM
Accessories: add 0.6 lbs. (0.3kg)

US: creelighting.com (800) 236-6800

Canada: creelighting-canada.com (800) 473-1234

RSW™ LED Street Luminaire – Medium

Product Specifications

WAVEMAX® TECHNOLOGY

Featuring up to 90% optical efficiency and precise control, WaveMax® Technology provides unmatched comfort and decreased LED source luminance by smoothly spreading brightness over a broader area. When integrated with luminous surfaces made of a polymer medium engineered with DiamondFacet™ optical elements, extremely high efficacy luminaires are the result – ultimately creating more visually comfortable and appealing environments while exceeding illumination performance.

CONSTRUCTION & MATERIALS

- Housing constructed of high strength, lightweight bulk molding compound for long weathering and durability
- UV stabilized polymeric door with handle pocket for tool-less entry
- Straight in wiring to terminal block for power input (#6-#14 AWG)
- Optic box and driver enclosure inside optic box meet IP66 requirements
- Mounts on 1.25" [32mm] IP, 1.66" [42mm] O.D. or 2" [51mm] IP, 2.375" [60mm] O.D. horizontal tenon (minimum 8" [203mm] in length) and is adjustable +/- 5° in 2.5° increments to allow for fixture leveling (two axis T-level included)
- Luminaire secures with two grade 5 steel mounting bolts w/clear zinc clad finish standard; optional 316 stainless steel mounting bolts available with SS option
- Comes standard with Utility Label per ANSI C136.15 and 7-pin NEMA® Photocell Receptacle per ANSI C136.41
- Weight:** 15.6 lbs. (7.1kg); add 0.4 lbs. (0.2kg) for RSW-BLSM accessory; add 0.6 lbs. (0.3kg) for RSW-CLSM or RSW-FLSM accessories

ELECTRICAL SYSTEM

- Input Voltage:** 120-277V, 50/60Hz, Class 1 drivers
- Power Factor:** > 0.9 at full load
- Total Harmonic Distortion:** < 20% at full load
- Integral 10kV surge suppression protection standard
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- 10V Source Current:** 0.15mA
- Operating Temperature Range:** -40°C - +50°C (-40°F - + 122°F)

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed
- Suitable for wet locations
- Certified to ANSI C136.31-2001, 3G bridge and overpass vibration standards
- Meets CALTrans 611 Vibration testing
- ANSI C136.2 10kV surge protection, tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Meets Buy American requirements within ARRA
- RoHS compliance. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 27K or 30K CCT. Please refer to <https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/fsa-products/> for most current information
- DLC and DLC Premium qualified versions available. Please refer to <https://www.designlights.org/search/> for most current information
- CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Electrical Data*								
Lumen Package	CCT/CRI	System Watts 120-277V	Utility Label Wattage	Efficacy	Total Current (A)			
					120V	208V	240V	277V
9L	27K8	83	80	98	0.74	0.42	0.36	0.32
	30K7	83	80	112	0.74	0.42	0.36	0.32
	30K8	83	80	105	0.74	0.42	0.36	0.32
	40K7	78	80	120	0.70	0.40	0.34	0.30
	40K8	83	80	111	0.74	0.42	0.36	0.32
	50K7	77	80	121	0.69	0.39	0.34	0.29
	50K8	80	80	117	0.72	0.41	0.35	0.31

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V +/- 10%

RSW Series (RSWM) Ambient Adjusted Lumen Maintenance ¹					
Ambient	Initial LMF	25K hr Reported ² LMF	50K hr Reported ² LMF	75K hr Estimated ³ LMF	100K hr Estimated ³ LMF
5°C (41°F)	1.04	1.04	1.04	1.04	1.04
10°C (50°F)	1.03	1.03	1.03	1.03	1.03
15°C (59°F)	1.02	1.02	1.02	1.02	1.02
20°C (68°F)	1.01	1.01	1.01	1.01	1.01
25°C (77°F)	1.00	1.00	1.00	1.00	1.00

¹ Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the [Temperature Zone Reference Document](#) for outdoor average nighttime ambient conditions.

² In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED

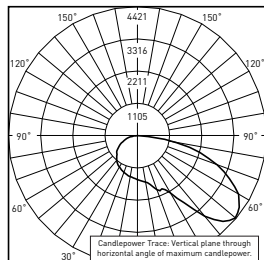
³ Estimated values are calculated and represent time durations that exceed the 6x test duration of the LED

RSW™ LED Street Luminaire – Medium

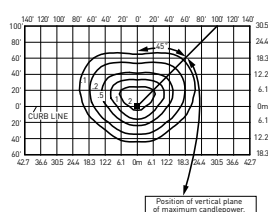
Photometry

All published luminaire photometric testing performed to IESNA LM-79-08 standards. To obtain an IES file specific to your project consult:
<https://creelighting.com/products/outdoor/street-and-roadway/rsw-series>

3ME



UL Verification Services Test Report #:
 12311460.02
 RSWM-A-**-3ME-9L-30K7-UL-**-N
 Initial Delivered Lumens: 9,302

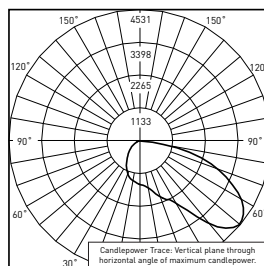


RSWM-A-**-3ME-9L-30K7-UL-**-N
 Mounting Height: 25' (7.6m) A.F.G.
 Initial Delivered Lumens: 9,325
 Initial FC at grade

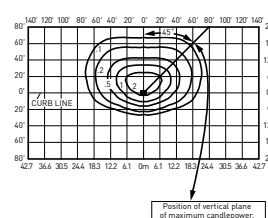
Type III Medium Distribution									
Lumen Package	CRI	2700K		3000K		4000K		5000K	
		Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
9L	70	N/A	N/A	9,325	B2 U0 G2	9,325	B2 U0 G2	9,325	B2 U0 G2
	80	8,175	B2 U0 G2	8,700	B2 U0 G2	9,200	B2 U0 G2	9,325	B2 U0 G2

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt



UL Verification Services Test Report #
 11705478.03
 RSWM-A-**-3ME-9L-30K7-UL-**-N
 w/RSW-BLSM
 Initial Delivered Lumens: 8,532



RSWM-A-**-3ME-9L-30K7-UL-**-N
 w/RSW-BLSM
 Mounting Height: 25' (7.6m) A.F.G.
 Initial Delivered Lumens: 8,550
 Initial FC at grade

Type III Medium w/BLS Distribution									
Lumen Package	CRI	2700K		3000K		4000K		5000K	
		Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11	Initial Delivered Lumens*	BUG Ratings** Per TM-15-11
9L	70	N/A	N/A	8,550	B2 U1 G2	8,550	B2 U1 G2	8,550	B2 U1 G2
	80	7,500	B1 U1 G2	7,975	B1 U1 G2	8,450	B2 U1 G2	8,550	B2 U1 G2

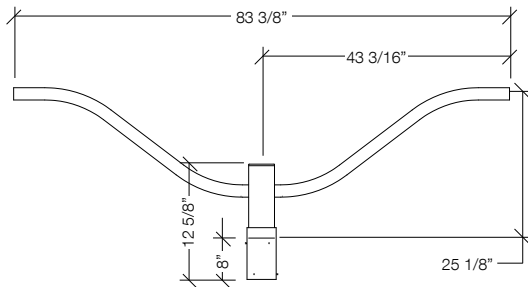
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: <https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf>. Valid with no tilt

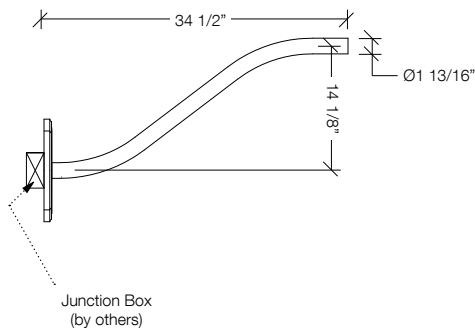
Type:
Project Name:
Notes:

Sample AA-10 S 4 B P BBT
Ordering / / / / /
A B C D E F

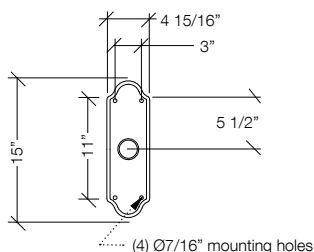
DETAILS



WALL BRACKET DETAILS



WALL PLATE DETAILS



A. MODEL

AA-10 Cobra

B. POST SHAFT PROFILE

W wall mount

S smooth

F fluted

C. POST SHAFT DIAMETER

4 4"

5 5"

6 6"

OTHER _____

D. ARRANGEMENT

_____ see arrangement table below

E. LUMINAIRE MOUNTING

P pendant

F. COLOR

BBT basic black textured

BMT black matte textured

WHT white textured

MBT metallic bronze textured

BZT bronze textured

DBT dark bronze textured

GYS gray smooth

DPS dark platinum smooth

GNT green textured

MST metallic silver textured

MTT metallic titanium textured

OWI old world iron

RAL _____

Construction: All cast aluminum parts shall be low copper alloy A356. All extruded aluminum parts shall be alloy 6061-T6, 6063-T5 or equal.

EPA (effective projected area): EPA is de-fined as (projected surface area X drag factor) and measured in ft². Allowable post, luminaire arm, luminaire and accessory EPAs are derived from the most current published AASHTO (American Association of State Highway and Transportation Officials) standard, currently AASHTO 2001 (50yr design life). Customer assumes all responsibility for selecting the appropriate post for installation (consult factory for assistance). Luminaire arm, luminaire and accessory EPA must be equal to or less than allowable EPA of post. Consult a professional engineer for compliance with local codes and standards.

Fasteners: All fasteners shall be Corrosion Resistant. When tamper resistant fasteners are required, spanner HD (snake eye) style shall be provided (special tool required, available at additional cost).

Finish: Finish shall be a Beacote V polyester powder-coat electro-statically applied and thermocured. Beacote V finish shall consist of a five stage iron phosphate chemical pretreatment regimen with a polymer primer sealer, oven dry off, and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pound.

Limited Warranty: Beacon Products warrants its products, to the original purchaser, against defects in materials and workmanship for proper usage for a period of 5 years after date of production, when properly installed, maintained and appropriately specified. See Warranty Information on www.beaconproducts.com for complete details and exclusions.

arrangement (EPA index ft² / weight (lbs))

shaft Ø		arrangement (EPA index ft ² / weight (lbs))									
		A	B	C	D	E	F	G	H	I	J
wall	weight	7	-	-	-	-	-	-	-	-	-
Ø4"	EPA	-	1.04	1.63	-	1.39	1.39	-	1.63	1.63	-
	weight	-	10	15	-	15	20	-	20	24	-
Ø5"	EPA	-	1.15	1.74	-	1.50	1.50	-	1.74	1.74	-
	weight	-	12	17	-	17	21	-	21	26	-
Ø6"	EPA	-	1.26	1.85	-	1.61	1.61	-	1.85	1.85	-
	weight	-	17	18	-	18	23	-	23	27	-

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

RSA-B-SHO-S SERIES POLES

ROUND STRAIGHT ALUMINUM

Cat.#

Job

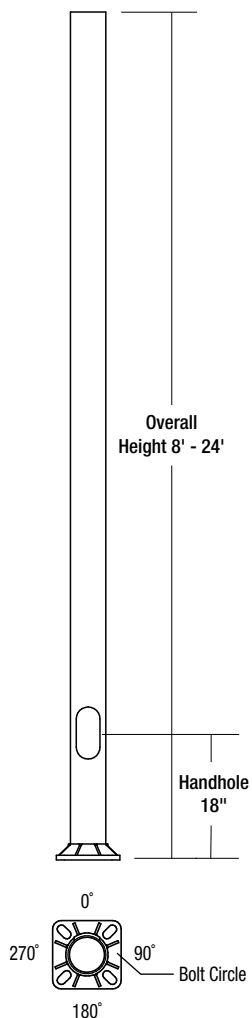
Type

Approvals



BEACON
design . performance . technology

TYPE S1



APPLICATIONS

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

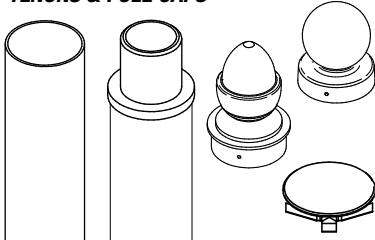
CONSTRUCTION

- SHAFT:** One-piece straight aluminum with round cross section; Extruded shafts of 6061-T6 aluminum in 1/8", 3/16", or 1/4" thickness. Base plate of 356 cast aluminum.
- POLE CAP OR FINALS:** Cap or decorative finials available for side mounted luminaires. Open top or tenons provided for post top mounted luminaires.
- HAND HOLE:** Aluminum hand hole frame; Mounting provisions for grounding lug located behind cover
- ANCHOR BOLTS:** Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

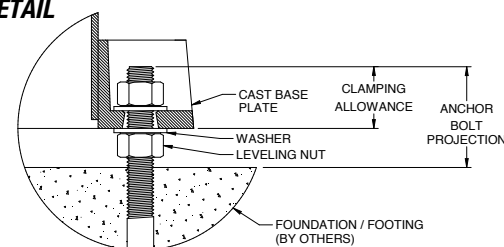
FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint finish coat available in twelve standard colors; Custom colors available; RAL number preferable.

TENONS & POLE CAPS



BASE DETAIL



ORDERING EXAMPLE:

RSA-B-SHO-S		16	40	A/B/C	CAP	2L	B3	DBT	VM2
SERIES		HEIGHT	SHAFT	THICKNESS	MOUNTING		FINISH		OPTIONS
RSA-B-SHO-S Round Straight Aluminum Pole Beacon Smooth		Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	1 Single arm mount 2 Two fixtures at 180° 2L Two fixtures at 90° 3T Three fixtures at 90° 3Y Three at 120° 4 Four fixtures at 90° OT ⁴ Open top (includes pole cap) TN3 ⁴ Tenon 3 x 3 ² TN4 ⁴ Tenon 3 x 4 ² TN5 ⁴ Tenon 4 x 5 ³ TN8 ⁴ Tenon 4 x 8 ³ ARC ⁴ Acorn Finial BAL ⁴ Ball Finial CAP ⁴ Flat Cap		BL Black Textured DB Dark Bronze Textured GT Graphite Textured GYS Light Gray Smooth PS Platinum Silver Smooth WH White Textured BBT Basic Black Textured BZT Bronze Textured CC Custom Color		GFI ¹ 20 Amp GFCI Receptacle and Cover EHH ¹ Extra Handhole C05 ¹ .5" Coupling C07 ¹ .75" Coupling C20 ¹ 2" Coupling VM2 2nd mode vibration damper LAB Less Anchor Bolts
MOUNTING ORIENTATION 1 2 2L 3T 3Y 4 Denotes handhole location									
DRILL PATTERN B1 Cruiser, "AM" arm B3 2 bolt (2-½" spacing), Viper "A" arm S2 2 bolt (3-½" spacing), Viper "AD" arm									

- Specify option location using logic found on page 2 (**Option Orientation**)
- TN3 and TN4 not available on 3" diameter poles
- TN5 and TN8 not available on 4" diameter poles
- Specify pole top



Beacon Products • 2041 58th Avenue Circle East Bradenton, FL 34203 • Phone: 800-345-4928
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

© 2019 BEACON PRODUCTS, All Rights Reserved • For more information visit our website: www.beaconproducts.com • Printed in USA **RSA-B-SHO-S POLES-SPEC** **APRIL 15, 2019 11:51 AM**

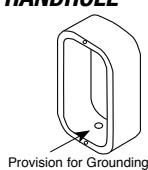
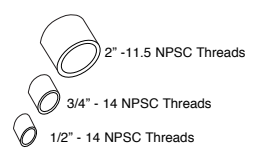
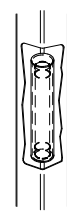
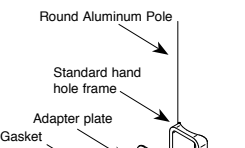


HUBBELL
Lighting

ORDERING INFORMATION Cont.

Catalog Number	Height		Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Square	Base Plate Size	Anchor Bolt Size	Bolt Projection	Pole weight (lbs)
	Feet	Meters								
RSA-B-SHO-S-08-30-A	8	2.4	3"	0.125	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	15
RSA-B-SHO-S-10-30-A	10	3	3"	0.125	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	18
RSA-B-SHO-S-12-30-A	12	3.7	3"	0.125	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	21
RSA-B-SHO-S-14-30-A	14	4.3	3"	0.125	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	23
RSA-B-SHO-S-12-30-C	12	3.7	3"	0.25	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	35
RSA-B-SHO-S-14-30-C	14	4.3	3"	0.25	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	40
RSA-B-SHO-S-16-30-C	16	4.9	3"	0.25	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	45
RSA-B-SHO-S-18-30-C	18	5.5	3"	0.25	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	50
RSA-B-SHO-S-20-30-C	20	6.1	3"	0.25	6"		7.25" TRIANGULAR	5/8 x 24 x 3	2-3/4"	55
RSA-B-SHO-S-08-40-A	8	2.4	4"	0.125	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	20
RSA-B-SHO-S-10-40-A	10	3	4"	0.125	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	24
RSA-B-SHO-S-12-40-A	12	3.7	4"	0.125	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	27
RSA-B-SHO-S-14-40-A	14	4.3	4"	0.125	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	31
RSA-B-SHO-S-12-40-B	12	3.7	4"	0.188	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	37
RSA-B-SHO-S-14-40-B	14	4.3	4"	0.188	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	43
RSA-B-SHO-S-16-40-B	16	4.9	4"	0.188	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	48
RSA-B-SHO-S-18-40-B	18	5.5	4"	0.188	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	53
RSA-B-SHO-S-20-40-B	20	6.1	4"	0.189	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	59
RSA-B-SHO-S-16-40-C	16	4.9	4"	0.25	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	61
RSA-B-SHO-S-18-40-C	18	5.5	4"	0.25	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	68
RSA-B-SHO-S-20-40-C	20	6.1	4"	0.25	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	75
RSA-B-SHO-S-22-40-C	22	6.7	4"	0.25	7"	4.95"	8.5" Square	5/8 x 24 x 3	3"	82
RSA-B-SHO-S-12-50-B	12	3.7	5"	0.188	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	46
RSA-B-SHO-S-14-50-B	14	4.3	5"	0.188	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	52
RSA-B-SHO-S-16-50-B	16	4.9	5"	0.188	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	59
RSA-B-SHO-S-18-50-B	18	5.5	5"	0.188	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	66
RSA-B-SHO-S-20-50-B	20	6.1	5"	0.188	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	73
RSA-B-SHO-S-18-50-C	18	5.5	5"	0.25	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	85
RSA-B-SHO-S-20-50-C	20	6.1	5"	0.25	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	93
RSA-B-SHO-S-22-50-C	22	6.7	5"	0.25	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	102
RSA-B-SHO-S-24-50-C	24	7.3	5"	0.25	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	111
RSA-B-SHO-S-25-50-C	25	7.6	5"	0.25	8.5"	6.0"	9.0" Square	3/4 x 30 x 3	3-1/4"	116
RSA-B-SHO-S-14-60-A	14	4.3	6"	0.125	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	44
RSA-B-SHO-S-16-60-A	16	4.9	6"	0.125	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	49
RSA-B-SHO-S-18-60-A	18	5.5	6"	0.125	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	55
RSA-B-SHO-S-20-60-A	20	6.1	6"	0.125	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	60
RSA-B-SHO-S-22-60-A	22	6.7	6"	0.125	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	65
RSA-B-SHO-S-24-60-A	24	7.3	6"	0.125	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	71
RSA-B-SHO-S-25-60-A	25	7.6	6"	0.125	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	74
RSA-B-SHO-S-18-60-C	18	5.5	6"	0.25	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	101
RSA-B-SHO-S-20-60-C	20	6.1	6"	0.25	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	112
RSA-B-SHO-S-22-60-C	22	6.7	6"	0.25	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	123
RSA-B-SHO-S-24-60-C	24	7.3	6"	0.25	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	133
RSA-B-SHO-S-25-60-C	25	7.6	6"	0.25	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	138
RSA-B-SHO-S-30-60-C	30	9.1	6"	0.25	9.5"	6.72"	10.25" Square	3/4 x 30 x 3	3-1/2"	163

NOTE Factory supplied template must be used when setting anchor bolts. Hubbell Lighting will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

EHH - EXTRA HANDHOLE  Provision for Grounding	C05 - C07 - C20 - COUPLING  2" - 11.5 NPSC Threads 3/4" - 14 NPSC Threads 1/2" - 14 NPSC Threads	VM2 - VIBRATION DAMPER 2ND MODE  Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.	GFI - 20 AMP GFCI RECEPTACLE & COVER  Round Aluminum Pole Standard hand hole frame Adapter plate Gasket 20 AMP GFCI Wet Locations In-use Cover
OPTION ORIENTATION Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: RSA-B-SHO-S16-40B-TN3-DBT-C05-0-15 (.5" coupling on the handhole/arm side of pole, 15 feet up from the pole base) 1' spacing required between option. Consult factory for other configurations.		VM2SXX - VIBRATION DAMPER 2ND MODE Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration. VM2S08 - 8' VM2S12 - 12' VM2S16 - 16' VM2S20 - 20' VM2S24 - 24'	

For more information about pole vibration and vibration dampers, please consult http://cdn.spauldinglighting.com/content/products/literature/literature_files/Pole_Wind_Induced_Flyer_HL010022.pdf
Due to our continued efforts to improve our products, product specifications are subject to change without notice.



Beacon Products • 2041 58th Avenue Circle East Bradenton, FL 34203 • Phone: 800-345-4928
Due to our continued efforts to improve our products, product specifications are subject to change without notice.
© 2019 BEACON PRODUCTS, All Rights Reserved • For more information visit our website: www.beaconproducts.com • Printed in USA



Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

FEATURES

- A unique vertically-finned die-cast housing that optimizes heat transfer to keep the fixture cool and maximize component life
- Mounting versatility with choice of traditional straight, architectural upswept die-cast aluminum or mast arm fitter designs
- Optional vandal resistant guard provides additional protection when necessary
- 20kA surge protection with an end of life LED indicator
- Maintenance free housing designed to IP65 and 60,000 hours life



RELATED PRODUCTS

- [Cimarron CL1S](#)
[RAR1 Ratio](#)
[RAR2 Ratio](#)
[Arceos™ ARA3](#)
[Airo](#)
[Viper](#)



*3000K and warmer CCTs only

SPECIFICATIONS

HOUSING

- Stylish vertically finned die-cast solid top housing for maximum heat dissipation; Stops collection of unsightly debris from gathering on top of the housing
- Rugged lower die-cast aluminum heat sink accelerates thermal management and optimizes PCB and optical performance
- One piece die cut silicone gasket ensures weather proof seal around each individual LED for IP65 rating
- Separate optical and electrical compartment for optimum component operation
- Backlight Control (BC) option available for 85% spill light reduction, doesn't change fixture appearance or EPA, recommended for Type III and Type IV distributions
- Stamped bezel provides mechanical compression to seal the optical assembly
- Suitable for applications requiring 3G testing prescribed by ANSI C136.31
- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

OPTICS

- Choice of 30, 60 or 90 high brightness LED with individual acrylic lenses specially designed for IES Type II, III, IV and V distributions

OPTICS (CONTINUED)

- Auto optics designed for front row 1A and interior rows 2A
- CCT: 3000K (70 CRI), 4000K (70 CRI), 5000K (70 CRI), and turtle friendly Amber LED options

INSTALLATION

- Two die-cast aluminum arm designs: The decorative arm offers a sleek upswept look while the straight arm follows the housing's contoured lines for continuity of style
- Fixture ships with arm installed for ease of installation and mounts to #2 drill pattern
- Wall bracket, mast arm fitter and pole accessories are also available allowing easy mounting for virtually any application

ELECTRICAL

- Drivers have greater than 90% power factor and less than 10% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Optional continuous dimming to 10% or dual circuitry available
- Universal input voltage 120-277 VAC, 50/60 Hz
- Surge protection – 20KA; Turns fixture off at end of life; Has LED for end of life indication

OPTIONS/CONTROLS

- Drivers are 0-10V dimming standard. Photocell, occupancy sensor and wireless controls available for complete on/off and dimming control

CERTIFICATIONS

- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 and CSA C22.2#250.024 for wet locations
- IDA approved
- IP65

WARRANTY

- 5 year limited warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	6,500–30,000
Wattage Range	70–350w
Efficacy Range (LPW)	73–122
Fixture Projected Life (Hours)	60K
Weights lbs. (kg)	45 (20.4)



Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ORDERING GUIDE

Example: CL1-A-90LU-5K-3-DB-RPA3

CATALOG #

ORDERING INFORMATION

CL1						
Series	Mounting	No. of LEDs	Voltage	CCT	Distribution	Drive Current
CL1 Cimarron LED	A Arm mount AD Decorative arm mount MAF Mast arm fitter	90L 90 High brightness LEDs 60L 60 High brightness LEDs 30L 90 High brightness LEDs	U¹ 120-277, 50/60 Hz 1 120 2 208 3 240 4 277 5 480, 60 Hz F 347, 60 Hz E⁴ 220, 50 Hz	3K 3000K 4K 4000K 5K 5000K AM⁴ Amber, 590 nm available	2 Type II 3 Type III 4 Type IV 5M V Medium 5S V Short 5W V Wide L Optic Rotation Left R Optic Rotation Right	Blank 700mA 035 350mA Amber CCT only 105 1050mA

ORDERING INFORMATION CONTINUED

Color	Options
DB Dark Bronze	BC³ Backlight control
BL Black	CD Continuous dimming
WH White	WB⁶ Wall Bracket
BR Gray	RPA3⁶ 3" Round pole adapter
PS Platinum Silver	RPA4⁶ 4" Round pole adapter
CC Custom Color	RPA5^{6,12} 5" Round pole adapter
	RPA6^{6,12} 6" Round pole adapter
	F(X)² Fusing (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, F-347)
	VG Vandal guard

CONTROLS

Control Options	
Standalone	
7PR	Photocell receptacle
SCO_F	On/Off control ^{6,7,9}
SCL_F	Add-on occupancy sensor for use with ext. wireless control device connected thru 7PR receptacle ^{6,7,9}
SCP_F	Programmable Occupancy Sensor w/ daylight control ^{9,13,14}
SWP	SiteSync Pre-Commission ^{5,6,7,9}
SWPM	SiteSync Pre-Commssion w/ Sensor ^{9,10,11}
Networked – Wireless	
WIR	wiSCAPE Fixture Module, in-fixture relay for wireless lighting control ⁸
WIRSC	wiSCAPE Fixture Module, in-fixture relay for wireless lighting control and motion/occupancy control ^{6,8}

Notes:

- Fuse option not available with universal voltage
- Select F3 fusing option for 220V
- Recommended for Type III and IV distributions only
- Available in 350mA drive current only Type IV, 5M
- 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, must order minimum of one SCP-REMOTE control to program dimming settings (see accessories)
- Not available with AD arm
- Not available with WIR or WIRSC
- Not available with SCO, SCL, or SCP
- Specify mounting height; 8 = 8' or less, 40 = 9' to 40'
- Specify group and zone. See SiteSync product page www.hubbellighting.com/controls/SiteSync for more details
- Not available in 90L-700mA or 1050mA versions
- Not available with AD decorative arm
- Not available with other wireless control or sensor options
- Order at least one SCP-REMOTE per project location to program and control the occupancy sensor





Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ENERGY SAVING DATA

# of LEDs	Drive Current	System Watts		Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 80 CRI)				
		120-277V	347-480V		Lumens	LPW ¹	B	U	G	Lumens	LPW ¹	B	U	G	Lumens	LPW ¹	B	U	G
30	700mA	70W	80W	1A	8244	118	1	0	1	8162	117	1	0	1	6775	97	1	0	1
				2A	8202	117	1	0	1	8121	116	1	0	1	6740	96	1	0	1
				2	7715	110	2	0	3	7639	109	2	0	2	6340	91	2	0	2
				3	7712	110	2	0	2	7635	109	2	0	2	6371	91	1	0	2
				4	7803	111	1	0	2	7726	110	1	0	2	6412	92	1	0	2
				5S	8374	120	3	0	0	8291	118	3	0	0	6882	98	3	0	0
				5M	7940	113	3	0	1	7862	112	3	0	1	6525	93	3	0	1
				5W	7667	110	3	0	2	7591	108	3	0	2	6301	90	3	0	2
60	700mA	135W	150W	1A	16171	120	1	0	2	16011	119	1	0	1	13289	98	1	0	1
				2A	16088	119	1	0	2	15929	118	1	0	2	13221	98	1	0	2
				2	15134	112	3	0	3	14984	111	3	0	3	12437	92	3	0	3
				3	15127	112	3	0	3	14977	111	3	0	3	12498	93	2	0	3
				4	15306	113	2	0	3	15154	112	2	0	3	12578	93	2	0	3
				5S	16426	122	4	0	0	16263	120	4	0	0	13498	100	4	0	0
				5M	15575	115	4	0	2	15421	114	4	0	2	12799	95	3	0	2
				5W	15040	111	4	0	3	14891	110	4	0	3	12360	92	4	0	3
60	1050mA	220W	235W	1A	21139	96	2	0	2	20929	95	2	0	2	17371	79	2	0	2
				2A	21030	96	2	0	2	20822	95	2	0	2	17282	79	2	0	2
				2	19783	90	4	0	5	19587	89	3	0	5	16257	74	3	0	5
				3	19774	90	3	0	4	19578	89	3	0	4	16250	74	3	0	4
				4	20007	91	3	0	5	19809	90	3	0	5	16442	75	3	0	5
				5S	21471	98	5	0	0	21259	97	5	0	0	17645	80	5	0	0
				5M	20359	93	5	0	3	20158	92	5	0	3	16731	76	5	0	3
				5W	19660	89	5	0	4	19465	88	5	0	4	16156	73	5	0	4
90	700mA	205W	225W	1A	23781	116	2	0	2	23546	115	2	0	2	19543	95	2	0	2
				2A	23659	115	2	0	2	23425	114	2	0	2	19443	95	2	0	2
				2	22255	109	3	0	4	22035	107	3	0	4	18289	89	3	0	4
				3	22246	109	3	0	4	22026	107	3	0	4	18379	90	3	0	3
				4	22509	110	3	0	4	22286	109	3	0	4	18497	90	2	0	4
				5S	24156	118	5	0	0	23916	117	5	0	0	19851	97	4	0	0
				5M	22905	112	4	0	2	22678	111	4	0	2	18823	92	4	0	2
				5W	22117	108	5	0	3	21899	107	5	0	3	18176	89	5	0	3
90	1050mA	325W	350W	1A	31708	98	2	0	2	31394	97	2	0	2	26057	80	2	0	2
				2A	31545	97	2	0	2	31233	96	2	0	2	25923	80	2	0	2
				2	29674	91	4	0	5	29380	90	3	0	5	24385	75	3	0	4
				3	29661	91	3	0	4	29367	90	3	0	4	24505	75	3	0	4
				4	30011	92	3	0	5	29714	91	3	0	5	24663	76	3	0	4
				5S	32207	99	5	0	0	31888	98	5	0	0	26467	81	5	0	0
				5M	30539	94	5	0	3	30237	93	5	0	3	25097	77	4	0	2
				5W	29490	91	5	0	4	29198	90	5	0	4	24234	75	5	0	4





Cimarron LED

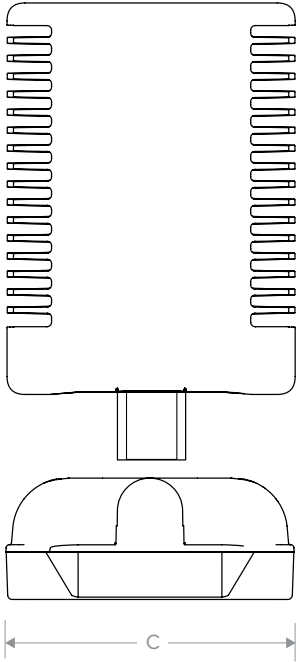
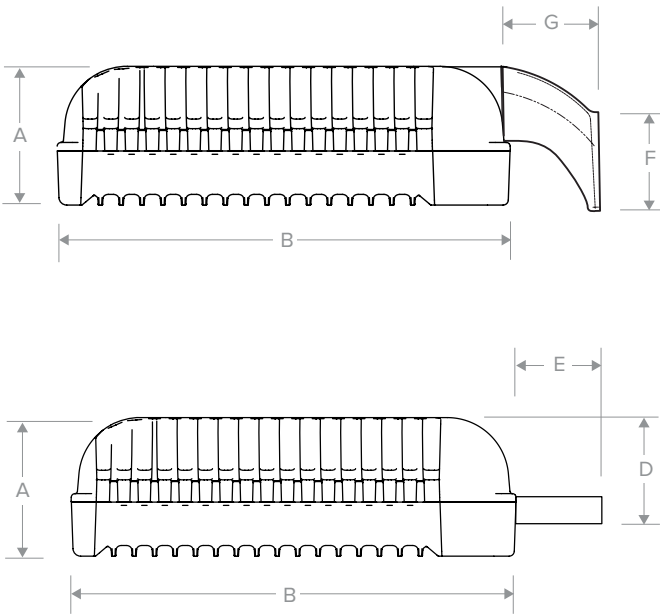
HIGH PERFORMANCE LED AREA/SITE LIGHTER

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ENERGY SAVING DATA

# of LEDs	Drive Current	System Watts	Amber			
		120-277V	Lumens	B	U	G
60	350mA	135W	2488	0	0	1
			2533	2	0	1
90	350mA	205W	3558	1	0	1
			3596	2	0	1

DIMENSIONS



A	B	C	D	E	F	G
6 3/4" (171mm)	21 3/4" (552mm)	16" (168mm)	6 5/8" (160mm)	6 5/16" (160mm)	5 5/8" (143mm)	6 1/8" (155mm)



Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

FEATURES

- A unique vertically-finned die-cast housing that optimizes heat transfer to keep the fixture cool and maximize component life
- Mounting versatility with choice of traditional straight, architectural upswept die-cast aluminum or mast arm fitter designs
- Optional vandal resistant guard provides additional protection when necessary
- 20kA surge protection with an end of life LED indicator
- Maintenance free housing designed to IP65 and 60,000 hours life



RELATED PRODUCTS

- [Cimarron CL1S](#)
[RAR1 Ratio](#)
[RAR2 Ratio](#)
[Arceos™ ARA3](#)
[Airo](#)
[Viper](#)



*3000K and warmer CCTs only

SPECIFICATIONS

HOUSING

- Stylish vertically finned die-cast solid top housing for maximum heat dissipation; Stops collection of unsightly debris from gathering on top of the housing
- Rugged lower die-cast aluminum heat sink accelerates thermal management and optimizes PCB and optical performance
- One piece die cut silicone gasket ensures weather proof seal around each individual LED for IP65 rating
- Separate optical and electrical compartment for optimum component operation
- Backlight Control (BC) option available for 85% spill light reduction, doesn't change fixture appearance or EPA, recommended for Type III and Type IV distributions
- Stamped bezel provides mechanical compression to seal the optical assembly
- Suitable for applications requiring 3G testing prescribed by ANSI C136.31
- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

OPTICS

- Choice of 30, 60 or 90 high brightness LED with individual acrylic lenses specially designed for IES Type II, III, IV and V distributions

OPTICS (CONTINUED)

- Auto optics designed for front row 1A and interior rows 2A
- CCT: 3000K (70 CRI), 4000K (70 CRI), 5000K (70 CRI), and turtle friendly Amber LED options

INSTALLATION

- Two die-cast aluminum arm designs: The decorative arm offers a sleek upswept look while the straight arm follows the housing's contoured lines for continuity of style
- Fixture ships with arm installed for ease of installation and mounts to #2 drill pattern
- Wall bracket, mast arm fitter and pole accessories are also available allowing easy mounting for virtually any application

ELECTRICAL

- Drivers have greater than 90% power factor and less than 10% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Optional continuous dimming to 10% or dual circuitry available
- Universal input voltage 120-277 VAC, 50/60 Hz
- Surge protection – 20KA; Turns fixture off at end of life; Has LED for end of life indication

OPTIONS/CONTROLS

- Drivers are 0-10V dimming standard. Photocell, occupancy sensor and wireless controls available for complete on/off and dimming control

CERTIFICATIONS

- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 and CSA C22.2#250.024 for wet locations
- IDA approved
- IP65

WARRANTY

- 5 year limited warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	6,500–30,000
Wattage Range	70–350w
Efficacy Range (LPW)	73–122
Fixture Projected Life (Hours)	60K
Weights lbs. (kg)	45 (20.4)



Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ORDERING GUIDE

Example: CL1-A-90LU-5K-3-DB-RPA3

CATALOG #

ORDERING INFORMATION

CL1						
Series	Mounting	No. of LEDs	Voltage	CCT	Distribution	Drive Current
CL1 Cimarron LED	A Arm mount AD Decorative arm mount MAF Mast arm fitter	90L 90 High brightness LEDs 60L 60 High brightness LEDs 30L 90 High brightness LEDs	U¹ 120-277, 50/60 Hz 1 120 2 208 3 240 4 277 5 480, 60 Hz F 347, 60 Hz E⁴ 220, 50 Hz	3K 3000K 4K 4000K 5K 5000K AM⁴ Amber, 590 nm available	2 Type II 3 Type III 4 Type IV 5M V Medium 5S V Short 5W V Wide L Optic Rotation Left R Optic Rotation Right	Blank 700mA 035 350mA Amber CCT only 105 1050mA

ORDERING INFORMATION CONTINUED

Color	Options
DB Dark Bronze	BC³ Backlight control
BL Black	CD Continuous dimming
WH White	WB⁶ Wall Bracket
BR Gray	RPA3⁶ 3" Round pole adapter
PS Platinum Silver	RPA4⁶ 4" Round pole adapter
CC Custom Color	RPA5^{6,12} 5" Round pole adapter
	RPA6^{6,12} 6" Round pole adapter
	F(X)² Fusing (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, F-347)
	VG Vandal guard

CONTROLS

Control Options

Standalone

7PR	Photocell receptacle
SCO_F	On/Off control ^{6,7,9}
SCL_F	Add-on occupancy sensor for use with ext. wireless control device connected thru 7PR receptacle ^{6,7,9}
SCP_F	Programmable Occupancy Sensor w/ daylight control ^{9,13,14}
SWP	SiteSync Pre-Commission ^{5,6,7,9}
SWPM	SiteSync Pre-Commssion w/ Sensor ^{9,10,11}

Networked – Wireless

WIR	wiSCAPE Fixture Module, in-fixture relay for wireless lighting control ⁸
WIRSC	wiSCAPE Fixture Module, in-fixture relay for wireless lighting control and motion/occupancy control ^{6,8}

Notes:

- Fuse option not available with universal voltage
- Select F3 fusing option for 220V
- Recommended for Type III and IV distributions only
- Available in 350mA drive current only Type IV, 5M
- 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, must order minimum of one SCP-REMOTE control to program dimming settings (see accessories)
- Not available with AD arm
- Not available with WIR or WIRSC
- Not available with SCO, SCL, or SCP
- Specify mounting height; 8 = 8' or less, 40 = 9' to 40'
- Specify group and zone. See SiteSync product page www.hubbellighting.com/controls/SiteSync for more details
- Not available in 90L-700mA or 1050mA versions
- Not available with AD decorative arm
- Not available with other wireless control or sensor options
- Order at least one SCP-REMOTE per project location to program and control the occupancy sensor





Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

DATE: _____ LOCATION: _____

TYPE: _____ PROJECT: _____

CATALOG #: _____

ENERGY SAVING DATA

# of LEDs	Drive Current	System Watts		Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 80 CRI)				
		120-277V	347-480V		Lumens	LPW ¹	B	U	G	Lumens	LPW ¹	B	U	G	Lumens	LPW ¹	B	U	G
30	700mA	70W	80W	1A	8244	118	1	0	1	8162	117	1	0	1	6775	97	1	0	1
				2A	8202	117	1	0	1	8121	116	1	0	1	6740	96	1	0	1
				2	7715	110	2	0	3	7639	109	2	0	2	6340	91	2	0	2
				3	7712	110	2	0	2	7635	109	2	0	2	6371	91	1	0	2
				4	7803	111	1	0	2	7726	110	1	0	2	6412	92	1	0	2
				5S	8374	120	3	0	0	8291	118	3	0	0	6882	98	3	0	0
				5M	7940	113	3	0	1	7862	112	3	0	1	6525	93	3	0	1
				5W	7667	110	3	0	2	7591	108	3	0	2	6301	90	3	0	2
60	700mA	135W	150W	1A	16171	120	1	0	2	16011	119	1	0	1	13289	98	1	0	1
				2A	16088	119	1	0	2	15929	118	1	0	2	13221	98	1	0	2
				2	15134	112	3	0	3	14984	111	3	0	3	12437	92	3	0	3
				3	15127	112	3	0	3	14977	111	3	0	3	12498	93	2	0	3
				4	15306	113	2	0	3	15154	112	2	0	3	12578	93	2	0	3
				5S	16426	122	4	0	0	16263	120	4	0	0	13498	100	4	0	0
				5M	15575	115	4	0	2	15421	114	4	0	2	12799	95	3	0	2
				5W	15040	111	4	0	3	14891	110	4	0	3	12360	92	4	0	3
60	1050mA	220W	235W	1A	21139	96	2	0	2	20929	95	2	0	2	17371	79	2	0	2
				2A	21030	96	2	0	2	20822	95	2	0	2	17282	79	2	0	2
				2	19783	90	4	0	5	19587	89	3	0	5	16257	74	3	0	5
				3	19774	90	3	0	4	19578	89	3	0	4	16250	74	3	0	4
				4	20007	91	3	0	5	19809	90	3	0	5	16442	75	3	0	5
				5S	21471	98	5	0	0	21259	97	5	0	0	17645	80	5	0	0
				5M	20359	93	5	0	3	20158	92	5	0	3	16731	76	5	0	3
				5W	19660	89	5	0	4	19465	88	5	0	4	16156	73	5	0	4
90	700mA	205W	225W	1A	23781	116	2	0	2	23546	115	2	0	2	19543	95	2	0	2
				2A	23659	115	2	0	2	23425	114	2	0	2	19443	95	2	0	2
				2	22255	109	3	0	4	22035	107	3	0	4	18289	89	3	0	4
				3	22246	109	3	0	4	22026	107	3	0	4	18379	90	3	0	3
				4	22509	110	3	0	4	22286	109	3	0	4	18497	90	2	0	4
				5S	24156	118	5	0	0	23916	117	5	0	0	19851	97	4	0	0
				5M	22905	112	4	0	2	22678	111	4	0	2	18823	92	4	0	2
				5W	22117	108	5	0	3	21899	107	5	0	3	18176	89	5	0	3
90	1050mA	325W	350W	1A	31708	98	2	0	2	31394	97	2	0	2	26057	80	2	0	2
				2A	31545	97	2	0	2	31233	96	2	0	2	25923	80	2	0	2
				2	29674	91	4	0	5	29380	90	3	0	5	24385	75	3	0	4
				3	29661	91	3	0	4	29367	90	3	0	4	24505	75	3	0	4
				4	30011	92	3	0	5	29714	91	3	0	5	24663	76	3	0	4
				5S	32207	99	5	0	0	31888	98	5	0	0	26467	81	5	0	0
				5M	30539	94	5	0	3	30237	93	5	0	3	25097	77	4	0	2
				5W	29490	91	5	0	4	29198	90	5	0	4	24234	75	5	0	4



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

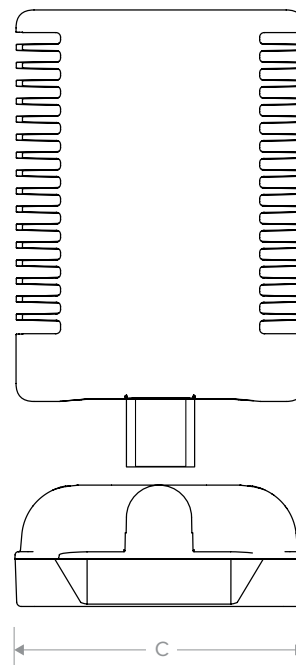
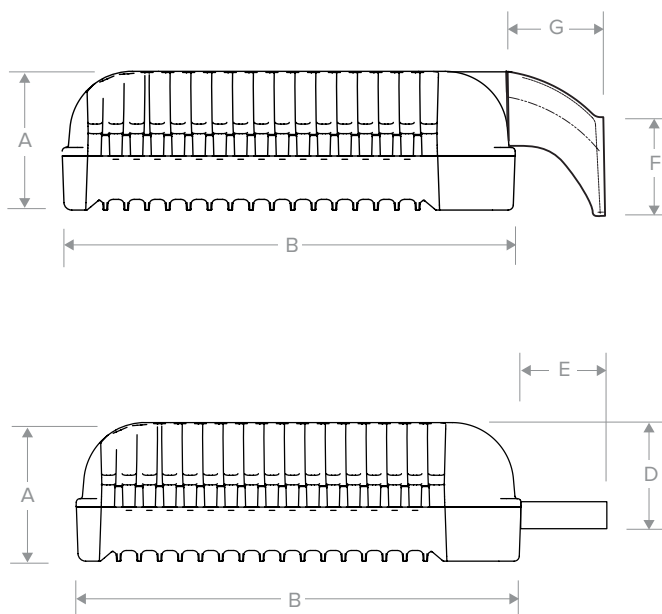
Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ENERGY SAVING DATA

# of LEDs	Drive Current	System Watts	Amber			
		120-277V	Lumens	B	U	G
60	350mA	135W	2488	0	0	1
			2533	2	0	1
90	350mA	205W	3558	1	0	1
			3596	2	0	1

DIMENSIONS



A	B	C	D	E	F	G
6 3/4" (171mm)	21 3/4" (552mm)	16" (168mm)	6 5/8" (160mm)	6 5/16" (160mm)	5 5/8" (143mm)	6 1/8" (155mm)



LED pole-top luminaires - asymmetric light distribution

Application

LED pole-top luminaires with asymmetric wide spread light distribution ideal for illuminating streets and pathways. Provided with slip fitter to fit 3" O.D. poles.

Materials

Luminaire housing and constructed of die-cast and spun marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy
Clear safety glass
Reflector made of pure anodized aluminum
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations

Protection class IP 65

Weight: 32.2 lbs.

EPA (Effective projection area): 1.5 sq. ft.

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-30° C
LED module wattage	23.6 W
System wattage	26.0 W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	2,397 lumens (3000K)
Lifetime at Ta = 15° C	> 500,000 h (L70)
Lifetime at Ta = 55° C	153,000 h (L70)

LED color temperature

4000K - Product number + **K4**

3500K - Product number + **K35**

3000K - Product number + K3

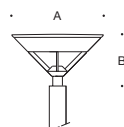
2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

Available colors	Black (BLK)	White (WHT)	RAL:
	Bronze (BRZ)	Silver (SLV)	CUS:



Pole-top - Asymmetric

	LED	A	B
84 403	23.6 W	28	14 1/4

Recommended for use with 14' to 16' poles.

BEGA 1000 BEGA Way, Carpinteria, CA 93013 (805) 684-0533 info@bega-us.com

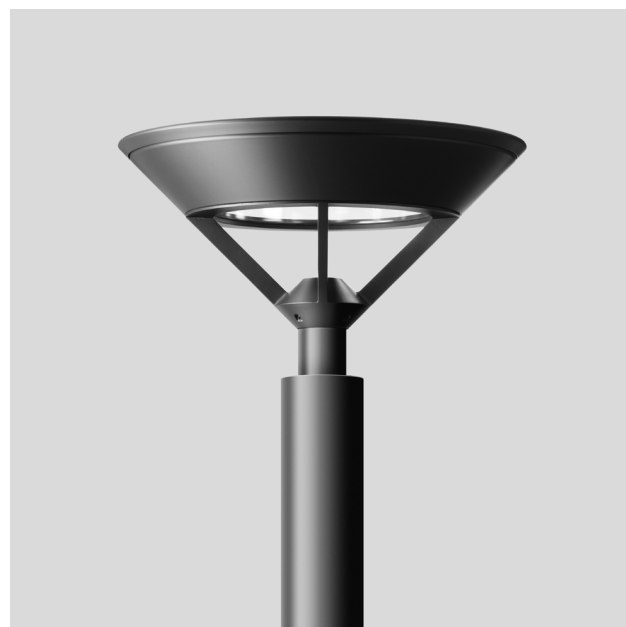
Due to the dynamic nature of lighting products and the associated technologies, luminaire data on this sheet is subject to change at the discretion of BEGA North America. For the most current technical data, please refer to bega-us.com
© copyright BEGA 2018 Updated 01/18/19

Type:

BEGA Product:

Project:

Modified:

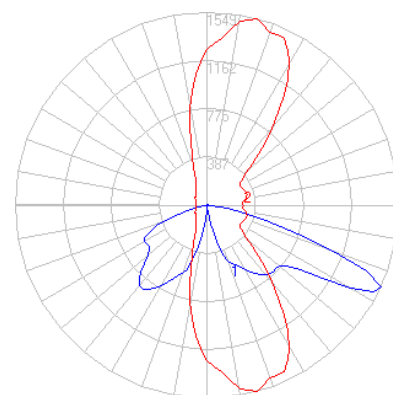


BEGA

TYPE S4

Photometric Filename: 84403.ies

TEST: BE_84403
TEST LAB: BEGA
DATE: 6/27/2017
LUMINAIRE: 84 403
LAMP: 23.6W LED



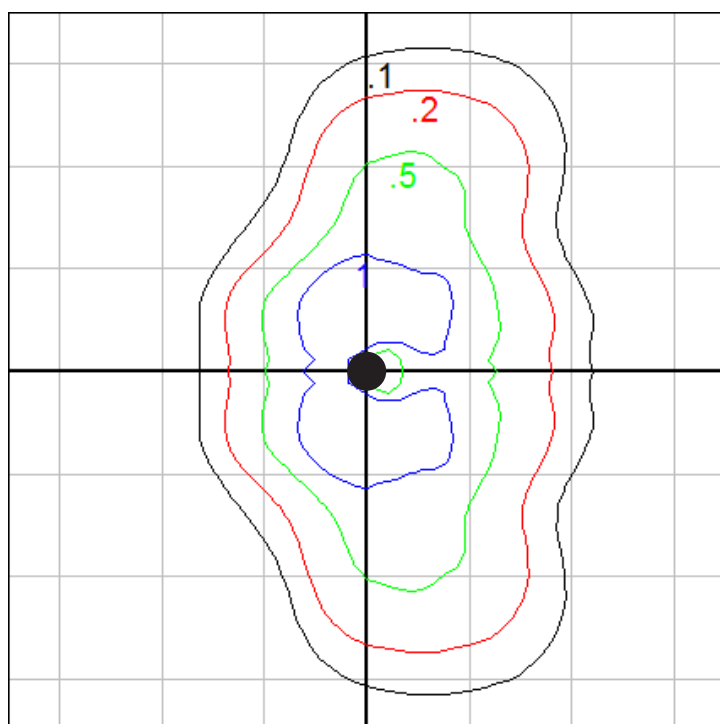
Characteristics

IES Classification	Type II
Longitudinal Classification	Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	2397
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	92
Total Luminaire Watts	26
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Max. Cd.	1549 (285H, 65V)
Max. Cd. (<90 Vert.)	1549 (285H, 65V)
Max. Cd. (At 90 Deg. Vert.)	3 (0.1%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	199.9 (8.3%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

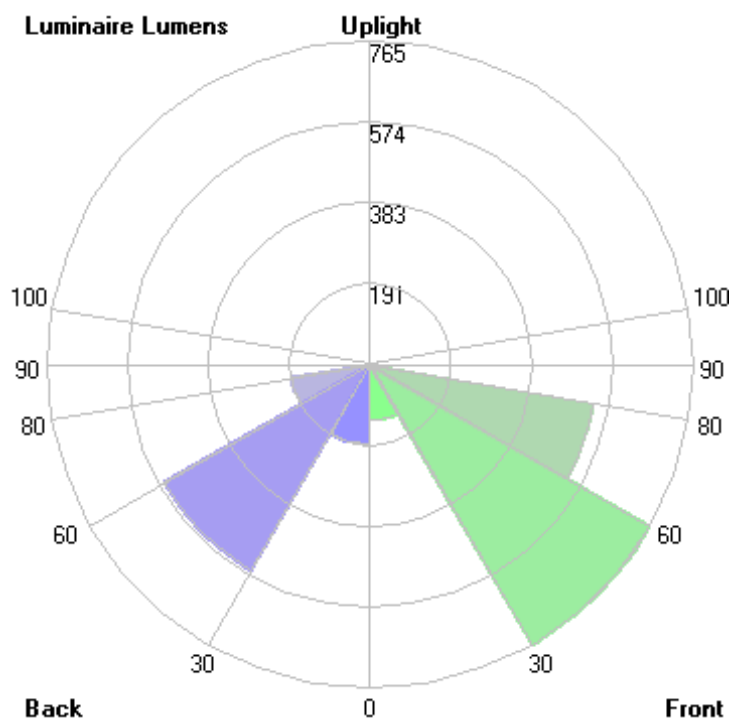
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	132.4	N.A.	5.5
FM (30-60)	765.2	N.A.	31.9
FH (60-80)	538.1	N.A.	22.5
FVH (80-90)	16.7	N.A.	0.7
BL (0-30)	188.2	N.A.	7.9
BM (30-60)	561.2	N.A.	23.4
BH (60-80)	187.6	N.A.	7.8
BVH (80-90)	7.2	N.A.	0.3
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	2396.6	N.A.	100.0

BUG Rating **B1-U0-G1**



Mounting Height = 15 ft. 8 in. (Pole - 1508HR)
Grid Spacing = 15 ft.



In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

BEGA 1000 Bega Way, Carpinteria, CA 93013 (805)684-0533 Fax (805)566-9474 www.bega-us.com © Copyright BEGA-US 2018

6/11/2018

Type:
 Project:
 Options:
 Modified:
 Luminaire:
 Fixture EPA:
 Optional Tenon: ☐ 2 $\frac{3}{8}$ " ϕ x 3 $\frac{1}{2}$ " H
 GCO: ☐
 GFI: ☐

Approval:

928 Tapered round base pole

Shaft: Extruded from all new seamless 6063 aluminum alloy tubing, heat treated to a T-6 condition.

Bell base: Round cast aluminum A356 alloy, heat treated to a T-6 condition. Anchor base and shaft continuously welded internally - no exposed welds..

Anchor base: Internal anchor base casting accepts bell base of pole. Four (4) socket head stainless steel bolts threaded into stainless steel inserts retain pole.

Access door: Flush, covered wiring access holesis provided, centered 27 $\frac{3}{8}$ " above base. Opening is 4" x 11 $\frac{1}{4}$ ".

Anchorage: Supplied with 8986A anchorage.

GCO or GFI: Standard GCO/GFI location inside the handhole.

Disclaimer

BEGA-US warrants the specific anchor bolts and pole combination according to the product number(s) and description(s) indicated on this submittal sheet. Structural changes to the pole requested by the customer, including changes to pole length, may affect the compatibility of the anchor bolts and corresponding poles. BEGA-US is not responsible for the incompatibility of the anchor bolts and poles resulting from such structural changes without review by the BEGA-US engineering department. This includes, but is not limited to, any labor charges, charges for replacement materials and shipping.

Pole wind load rating:

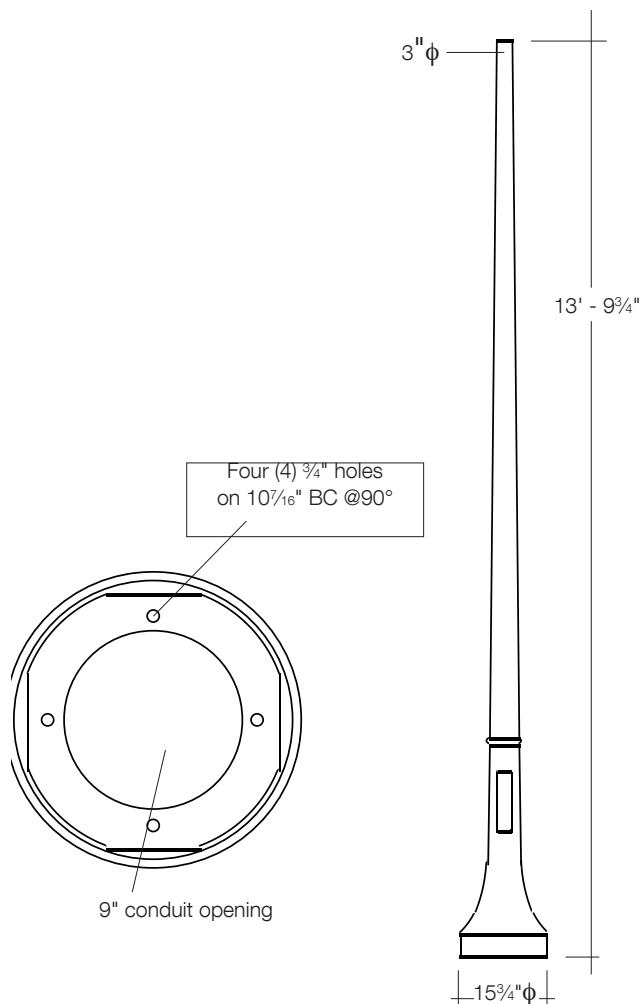
MPH: 70 80 90 100 120

EPA: 16.2 11.9 9.0 7.1 4.6

Note: Data above assumes grade level installation and a maximum luminaire weight of 50 lbs.

BEGA-US 1000 BEGA Way, Carpinteria, CA 93013 [P] 805-684-0533 [F] 805-684-6682

©copyright BEGA-US 2015 Updated 04/15



Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

FEATURES

- A unique vertically-finned die-cast housing that optimizes heat transfer to keep the fixture cool and maximize component life
- Mounting versatility with choice of traditional straight, architectural upswept die-cast aluminum or mast arm fitter designs
- Optional vandal resistant guard provides additional protection when necessary
- 20kA surge protection with an end of life LED indicator
- Maintenance free housing designed to IP65 and 60,000 hours life



*3000K and warmer CCTs only

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

TYPE S5



RELATED PRODUCTS

- ◊ [Cimarron CL1S](#)
- ◊ [RAR1 Ratio](#)
- ◊ [RAR2 Ratio](#)
- ◊ [Arceos™ ARA3](#)
- ◊ [Airo](#)
- ◊ [Viper](#)

SPECIFICATIONS

HOUSING

- Stylish vertically finned die-cast solid top housing for maximum heat dissipation; Stops collection of unsightly debris from gathering on top of the housing
- Rugged lower die-cast aluminum heat sink accelerates thermal management and optimizes PCB and optical performance
- One piece die cut silicone gasket ensures weather proof seal around each individual LED for IP65 rating
- Separate optical and electrical compartment for optimum component operation
- Backlight Control (BC) option available for 85% spill light reduction, doesn't change fixture appearance or EPA, recommended for Type III and Type IV distributions
- Stamped bezel provides mechanical compression to seal the optical assembly
- Suitable for applications requiring 3G testing prescribed by ANSI C136.31
- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

OPTICS

- Choice of 30, 60 or 90 high brightness LED with individual acrylic lenses specially designed for IES Type II, III, IV and V distributions

OPTICS (CONTINUED)

- Auto optics designed for front row 1A and interior rows 2A
- CCT: 3000K (70 CRI), 4000K (70 CRI), 5000K (70 CRI), and turtle friendly Amber LED options

INSTALLATION

- Two die-cast aluminum arm designs: The decorative arm offers a sleek upswept look while the straight arm follows the housing's contoured lines for continuity of style
- Fixture ships with arm installed for ease of installation and mounts to #2 drill pattern
- Wall bracket, mast arm fitter and pole accessories are also available allowing easy mounting for virtually any application

ELECTRICAL

- Drivers have greater than 90% power factor and less than 10% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Optional continuous dimming to 10% or dual circuitry available
- Universal input voltage 120-277 VAC, 50/60 Hz
- Surge protection – 20KA; Turns fixture off at end of life; Has LED for end of life indication

OPTIONS/CONTROLS

- Drivers are 0-10V dimming standard. Photocell, occupancy sensor and wireless controls available for complete on/off and dimming control

CERTIFICATIONS

- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 and CSA C22.2#250.024 for wet locations
- IDA approved
- IP65

WARRANTY

- 5 year limited warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	6,500–30,000
Wattage Range	70–350w
Efficacy Range (LPW)	73–122
Fixture Projected Life (Hours)	60K
Weights lbs. (kg)	45 (20.4)



Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ORDERING GUIDE

Example: CL1-A-90LU-5K-3-DB-RPA3

CATALOG #

ORDERING INFORMATION

CL1						
Series	Mounting	No. of LEDs	Voltage	CCT	Distribution	Drive Current
CL1 Cimarron LED	A Arm mount AD Decorative arm mount MAF Mast arm fitter	90L 90 High brightness LEDs 60L 60 High brightness LEDs 30L 90 High brightness LEDs	U 120-277, 50/60 Hz 1 120 2 208 3 240 4 277 5 480, 60 Hz F 347, 60 Hz E⁴ 220, 50 Hz	3K 3000K 4K 4000K 5K 5000K AM⁴ Amber, 590 nm available	2 Type II 3 Type III 4 Type IV 5M V Medium 5S V Short 5W V Wide L Optic Rotation Left R Optic Rotation Right	Blank 700mA 035 350mA Amber CCT only 105 1050mA

ORDERING INFORMATION CONTINUED

Color	Options
DB Dark Bronze	BC³ Backlight control
BL Black	CD Continuous dimming
WH White	WB⁶ Wall Bracket
BR Gray	RPA3⁶ 3" Round pole adapter
PS Platinum Silver	RPA4⁶ 4" Round pole adapter
CC Custom Color	RPA5^{6,12} 5" Round pole adapter
	RPA6^{6,12} 6" Round pole adapter
	F(X)² Fusing (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, F-347)
	VG Vandal guard

CONTROLS

Control Options	
Standalone	
7PR	Photocell receptacle
SCO_F	On/Off control ^{6,7,9}
SCL_F	Add-on occupancy sensor for use with ext. wireless control device connected thru 7PR receptacle ^{6,7,9}
SCP_F	Programmable Occupancy Sensor w/ daylight control ^{9,13,14}
SWP	SiteSync Pre-Commission ^{5,6,7,9}
SWPM	SiteSync Pre-Commssion w/ Sensor ^{9,10,11}
Networked – Wireless	
WIR	wiSCAPE Fixture Module, in-fixture relay for wireless lighting control ⁸
WIRSC	wiSCAPE Fixture Module, in-fixture relay for wireless lighting control and motion/occupancy control ^{6,8}

Notes:

- Fuse option not available with universal voltage
- Select F3 fusing option for 220V
- Recommended for Type III and IV distributions only
- Available in 350mA drive current only Type IV, 5M
- 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, must order minimum of one SCP-REMOTE control to program dimming settings (see accessories)
- Not available with AD arm
- Not available with WIR or WIRSC
- Not available with SCO, SCL, or SCP
- Specify mounting height; 8 = 8' or less, 40 = 9' to 40'
- Specify group and zone. See SiteSync product page www.hubbelllighting.com/controls/SiteSync for more details
- Not available in 90L-700mA or 1050mA versions
- Not available with AD decorative arm
- Not available with other wireless control or sensor options
- Order at least one SCP-REMOTE per project location to program and control the occupancy sensor





Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ENERGY SAVING DATA

# of LEDs	Drive Current	System Watts		Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 80 CRI)				
		120-277V	347-480V		Lumens	LPW ¹	B	U	G	Lumens	LPW ¹	B	U	G	Lumens	LPW ¹	B	U	G
30	700mA	70W	80W	1A	8244	118	1	0	1	8162	117	1	0	1	6775	97	1	0	1
				2A	8202	117	1	0	1	8121	116	1	0	1	6740	96	1	0	1
				2	7715	110	2	0	3	7639	109	2	0	2	6340	91	2	0	2
				3	7712	110	2	0	2	7635	109	2	0	2	6371	91	1	0	2
				4	7803	111	1	0	2	7726	110	1	0	2	6412	92	1	0	2
				5S	8374	120	3	0	0	8291	118	3	0	0	6882	98	3	0	0
				5M	7940	113	3	0	1	7862	112	3	0	1	6525	93	3	0	1
				5W	7667	110	3	0	2	7591	108	3	0	2	6301	90	3	0	2
60	700mA	135W	150W	1A	16171	120	1	0	2	16011	119	1	0	1	13289	98	1	0	1
				2A	16088	119	1	0	2	15929	118	1	0	2	13221	98	1	0	2
				2	15134	112	3	0	3	14984	111	3	0	3	12437	92	3	0	3
				3	15127	112	3	0	3	14977	111	3	0	3	12498	93	2	0	3
				4	15306	113	2	0	3	15154	112	2	0	3	12578	93	2	0	3
				5S	16426	122	4	0	0	16263	120	4	0	0	13498	100	4	0	0
				5M	15575	115	4	0	2	15421	114	4	0	2	12799	95	3	0	2
				5W	15040	111	4	0	3	14891	110	4	0	3	12360	92	4	0	3
60	1050mA	220W	235W	1A	21139	96	2	0	2	20929	95	2	0	2	17371	79	2	0	2
				2A	21030	96	2	0	2	20822	95	2	0	2	17282	79	2	0	2
				2	19783	90	4	0	5	19587	89	3	0	5	16257	74	3	0	5
				3	19774	90	3	0	4	19578	89	3	0	4	16250	74	3	0	4
				4	20007	91	3	0	5	19809	90	3	0	5	16442	75	3	0	5
				5S	21471	98	5	0	0	21259	97	5	0	0	17645	80	5	0	0
				5M	20359	93	5	0	3	20158	92	5	0	3	16731	76	5	0	3
				5W	19660	89	5	0	4	19465	88	5	0	4	16156	73	5	0	4
90	700mA	205W	225W	1A	23781	116	2	0	2	23546	115	2	0	2	19543	95	2	0	2
				2A	23659	115	2	0	2	23425	114	2	0	2	19443	95	2	0	2
				2	22255	109	3	0	4	22035	107	3	0	4	18289	89	3	0	4
				3	22246	109	3	0	4	22026	107	3	0	4	18379	90	3	0	3
				4	22509	110	3	0	4	22286	109	3	0	4	18497	90	2	0	4
				5S	24156	118	5	0	0	23916	117	5	0	0	19851	97	4	0	0
				5M	22905	112	4	0	2	22678	111	4	0	2	18823	92	4	0	2
				5W	22117	108	5	0	3	21899	107	5	0	3	18176	89	5	0	3
90	1050mA	325W	350W	1A	31708	98	2	0	2	31394	97	2	0	2	26057	80	2	0	2
				2A	31545	97	2	0	2	31233	96	2	0	2	25923	80	2	0	2
				2	29674	91	4	0	5	29380	90	3	0	5	24385	75	3	0	4
				3	29661	91	3	0	4	29367	90	3	0	4	24505	75	3	0	4
				4	30011	92	3	0	5	29714	91	3	0	5	24663	76	3	0	4
				5S	32207	99	5	0	0	31888	98	5	0	0	26467	81	5	0	0
				5M	30539	94	5	0	3	30237	93	5	0	3	25097	77	4	0	2
				5W	29490	91	5	0	4	29198	90	5	0	4	24234	75	5	0	4





DATE:	LOCATION:	TYPE S5
TYPE:	PROJECT:	
CATALOG #:		

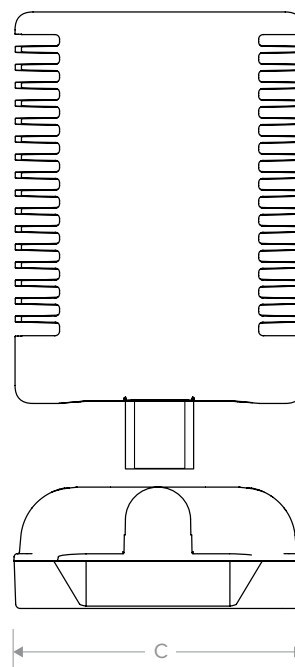
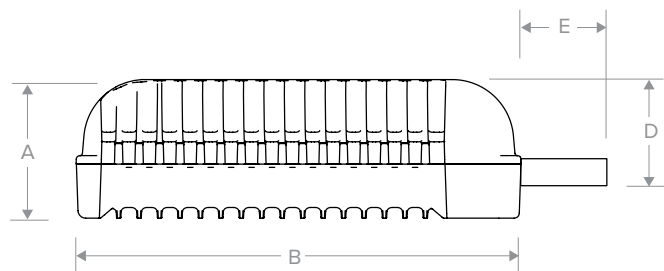
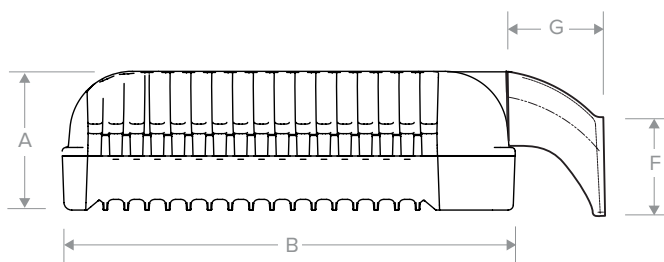
Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ENERGY SAVING DATA

# of LEDs	Drive Current	System Watts	Amber			
		120-277V	Lumens	B	U	G
60	350mA	135W	2488	0	0	1
			2533	2	0	1
90	350mA	205W	3558	1	0	1
			3596	2	0	1

DIMENSIONS



A	B	C	D	E	F	G
6 3/4" (171mm)	21 3/4" (552mm)	16" (168mm)	6 5/8" (160mm)	6 5/16" (160mm)	5 5/8" (143mm)	6 1/8" (155mm)

Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

FEATURES

- A unique vertically-finned die-cast housing that optimizes heat transfer to keep the fixture cool and maximize component life
- Mounting versatility with choice of traditional straight, architectural upswept die-cast aluminum or mast arm fitter designs
- Optional vandal resistant guard provides additional protection when necessary
- 20kA surge protection with an end of life LED indicator
- Maintenance free housing designed to IP65 and 60,000 hours life



RELATED PRODUCTS

- [Cimarron CL1S](#)
[RAR1 Ratio](#)
[RAR2 Ratio](#)
[Arceos™ ARA3](#)
[Airo](#)
[Viper](#)



*3000K and warmer CCTs only

SPECIFICATIONS

HOUSING

- Stylish vertically finned die-cast solid top housing for maximum heat dissipation; Stops collection of unsightly debris from gathering on top of the housing
- Rugged lower die-cast aluminum heat sink accelerates thermal management and optimizes PCB and optical performance
- One piece die cut silicone gasket ensures weather proof seal around each individual LED for IP65 rating
- Separate optical and electrical compartment for optimum component operation
- Backlight Control (BC) option available for 85% spill light reduction, doesn't change fixture appearance or EPA, recommended for Type III and Type IV distributions
- Stamped bezel provides mechanical compression to seal the optical assembly
- Suitable for applications requiring 3G testing prescribed by ANSI C136.31
- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

OPTICS

- Choice of 30, 60 or 90 high brightness LED with individual acrylic lenses specially designed for IES Type II, III, IV and V distributions

OPTICS (CONTINUED)

- Auto optics designed for front row 1A and interior rows 2A
- CCT: 3000K (70 CRI), 4000K (70 CRI), 5000K (70 CRI), and turtle friendly Amber LED options

INSTALLATION

- Two die-cast aluminum arm designs: The decorative arm offers a sleek upswept look while the straight arm follows the housing's contoured lines for continuity of style
- Fixture ships with arm installed for ease of installation and mounts to #2 drill pattern
- Wall bracket, mast arm fitter and pole accessories are also available allowing easy mounting for virtually any application

ELECTRICAL

- Drivers have greater than 90% power factor and less than 10% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Optional continuous dimming to 10% or dual circuitry available
- Universal input voltage 120-277 VAC, 50/60 Hz
- Surge protection – 20KA; Turns fixture off at end of life; Has LED for end of life indication

OPTIONS/CONTROLS

- Drivers are 0-10V dimming standard. Photocell, occupancy sensor and wireless controls available for complete on/off and dimming control

CERTIFICATIONS

- DesignLights Consortium® (DLC) qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Listed to UL1598 and CSA C22.2#250.024 for wet locations
- IDA approved
- IP65

WARRANTY

- 5 year limited warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	6,500–30,000
Wattage Range	70–350w
Efficacy Range (LPW)	73–122
Fixture Projected Life (Hours)	60K
Weights lbs. (kg)	45 (20.4)



Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ORDERING GUIDE

Example: CL1-A-90LU-5K-3-DB-RPA3

CATALOG #

ORDERING INFORMATION

CL1						
Series	Mounting	No. of LEDs	Voltage	CCT	Distribution	Drive Current
CL1 Cimarron LED	A Arm mount AD Decorative arm mount MAF Mast arm fitter	90L 90 High brightness LEDs 60L 60 High brightness LEDs 30L 90 High brightness LEDs	U¹ 120-277, 50/60 Hz 1 120 2 208 3 240 4 277 5 480, 60 Hz F 347, 60 Hz E⁴ 220, 50 Hz	3K 3000K 4K 4000K 5K 5000K AM⁴ Amber, 590 nm available	2 Type II 3 Type III 4 Type IV 5M V Medium 5S V Short 5W V Wide L Optic Rotation Left R Optic Rotation Right	Blank 700mA 035 350mA Amber CCT only 105 1050mA

ORDERING INFORMATION CONTINUED

Color	Options
DB Dark Bronze	BC³ Backlight control
BL Black	CD Continuous dimming
WH White	WB⁶ Wall Bracket
BR Gray	RPA3⁶ 3" Round pole adapter
PS Platinum Silver	RPA4⁶ 4" Round pole adapter
CC Custom Color	RPA5^{6,12} 5" Round pole adapter
	RPA6^{6,12} 6" Round pole adapter
	F(X)² Fusing (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, F-347)
	VG Vandal guard

CONTROLS

Control Options

Standalone

7PR	Photocell receptacle
SCO_F	On/Off control ^{6,7,9}
SCL_F	Add-on occupancy sensor for use with ext. wireless control device connected thru 7PR receptacle ^{6,7,9}
SCP_F	Programmable Occupancy Sensor w/ daylight control ^{9,13,14}
SWP	SiteSync Pre-Commission ^{5,6,7,9}
SWPM	SiteSync Pre-Commssion w/ Sensor ^{9,10,11}

Networked – Wireless

WIR	wiSCAPE Fixture Module, in-fixture relay for wireless lighting control ⁸
WIRSC	wiSCAPE Fixture Module, in-fixture relay for wireless lighting control and motion/occupancy control ^{6,8}

Notes:

- 1 Fuse option not available with universal voltage
- 2 Select F3 fusing option for 220V
- 3 Recommended for Type III and IV distributions only
- 4 Available in 350mA drive current only Type IV, 5M
- 5 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings, must order minimum of one SCP-REMOTE control to program dimming settings (see accessories)
- 6 Not available with AD arm
- 7 Not available with WIR or WIRSC
- 8 Not available with SCO, SCL, or SCP
- 9 Specify mounting height; 8 = 8' or less, 40 = 9' to 40'
- 10 Specify group and zone. See SiteSync product page www.hubbellighting.com/controls/SiteSync for more details
- 11 Not available in 90L-700mA or 1050mA versions
- 12 Not available with AD decorative arm
- 13 Not available with other wireless control or sensor options
- 14 Order at least one SCP-REMOTE per project location to program and control the occupancy sensor





Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ENERGY SAVING DATA

# of LEDs	Drive Current	System Watts		Dist. Type	5K (5000K NOMINAL 70 CRI)					4K (4000K NOMINAL 70 CRI)					3K (3000K NOMINAL 80 CRI)				
		120-277V	347-480V		Lumens	LPW ¹	B	U	G	Lumens	LPW ¹	B	U	G	Lumens	LPW ¹	B	U	G
30	700mA	70W	80W	1A	8244	118	1	0	1	8162	117	1	0	1	6775	97	1	0	1
				2A	8202	117	1	0	1	8121	116	1	0	1	6740	96	1	0	1
				2	7715	110	2	0	3	7639	109	2	0	2	6340	91	2	0	2
				3	7712	110	2	0	2	7635	109	2	0	2	6371	91	1	0	2
				4	7803	111	1	0	2	7726	110	1	0	2	6412	92	1	0	2
				5S	8374	120	3	0	0	8291	118	3	0	0	6882	98	3	0	0
				5M	7940	113	3	0	1	7862	112	3	0	1	6525	93	3	0	1
				5W	7667	110	3	0	2	7591	108	3	0	2	6301	90	3	0	2
60	700mA	135W	150W	1A	16171	120	1	0	2	16011	119	1	0	1	13289	98	1	0	1
				2A	16088	119	1	0	2	15929	118	1	0	2	13221	98	1	0	2
				2	15134	112	3	0	3	14984	111	3	0	3	12437	92	3	0	3
				3	15127	112	3	0	3	14977	111	3	0	3	12498	93	2	0	3
				4	15306	113	2	0	3	15154	112	2	0	3	12578	93	2	0	3
				5S	16426	122	4	0	0	16263	120	4	0	0	13498	100	4	0	0
				5M	15575	115	4	0	2	15421	114	4	0	2	12799	95	3	0	2
				5W	15040	111	4	0	3	14891	110	4	0	3	12360	92	4	0	3
60	1050mA	220W	235W	1A	21139	96	2	0	2	20929	95	2	0	2	17371	79	2	0	2
				2A	21030	96	2	0	2	20822	95	2	0	2	17282	79	2	0	2
				2	19783	90	4	0	5	19587	89	3	0	5	16257	74	3	0	5
				3	19774	90	3	0	4	19578	89	3	0	4	16250	74	3	0	4
				4	20007	91	3	0	5	19809	90	3	0	5	16442	75	3	0	5
				5S	21471	98	5	0	0	21259	97	5	0	0	17645	80	5	0	0
				5M	20359	93	5	0	3	20158	92	5	0	3	16731	76	5	0	3
				5W	19660	89	5	0	4	19465	88	5	0	4	16156	73	5	0	4
90	700mA	205W	225W	1A	23781	116	2	0	2	23546	115	2	0	2	19543	95	2	0	2
				2A	23659	115	2	0	2	23425	114	2	0	2	19443	95	2	0	2
				2	22255	109	3	0	4	22035	107	3	0	4	18289	89	3	0	4
				3	22246	109	3	0	4	22026	107	3	0	4	18379	90	3	0	3
				4	22509	110	3	0	4	22286	109	3	0	4	18497	90	2	0	4
				5S	24156	118	5	0	0	23916	117	5	0	0	19851	97	4	0	0
				5M	22905	112	4	0	2	22678	111	4	0	2	18823	92	4	0	2
				5W	22117	108	5	0	3	21899	107	5	0	3	18176	89	5	0	3
90	1050mA	325W	350W	1A	31708	98	2	0	2	31394	97	2	0	2	26057	80	2	0	2
				2A	31545	97	2	0	2	31233	96	2	0	2	25923	80	2	0	2
				2	29674	91	4	0	5	29380	90	3	0	5	24385	75	3	0	4
				3	29661	91	3	0	4	29367	90	3	0	4	24505	75	3	0	4
				4	30011	92	3	0	5	29714	91	3	0	5	24663	76	3	0	4
				5S	32207	99	5	0	0	31888	98	5	0	0	26467	81	5	0	0
				5M	30539	94	5	0	3	30237	93	5	0	3	25097	77	4	0	2
				5W	29490	91	5	0	4	29198	90	5	0	4	24234	75	5	0	4





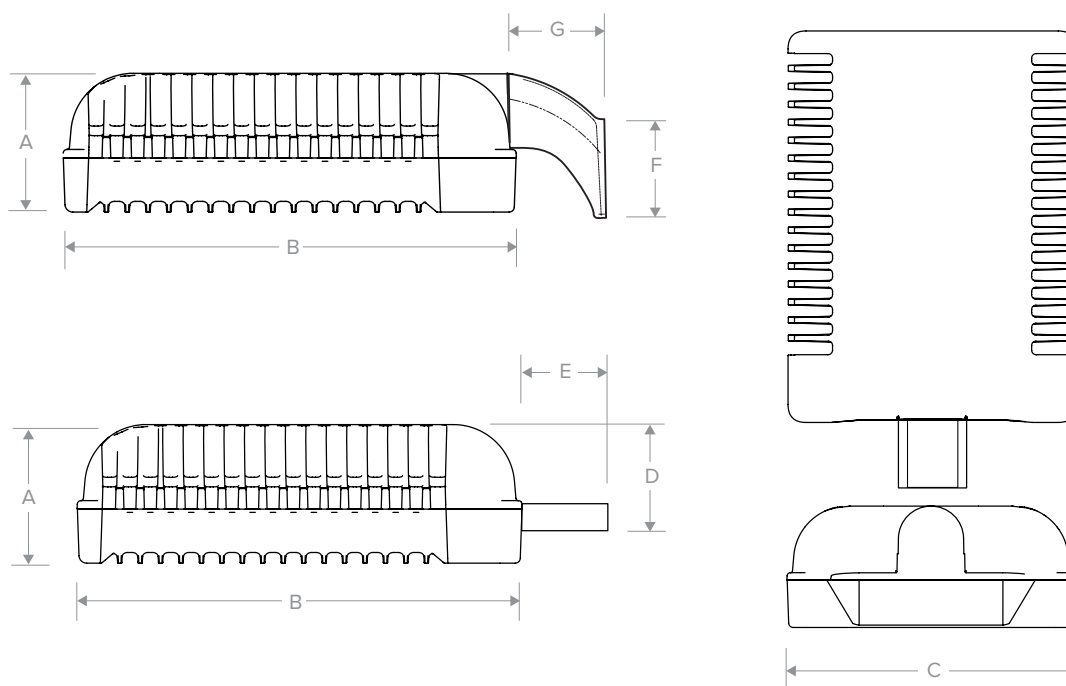
Cimarron LED

HIGH PERFORMANCE LED AREA/SITE LIGHTER

ENERGY SAVING DATA

# of LEDs	Drive Current	System Watts	Amber			
		120-277V	Lumens	B	U	G
60	350mA	135W	2488	0	0	1
			2533	2	0	1
90	350mA	205W	3558	1	0	1
			3596	2	0	1

DIMENSIONS



A	B	C	D	E	F	G
6 3/4" (171mm)	21 3/4" (552mm)	16" (168mm)	6 5/8" (160mm)	6 5/16" (160mm)	5 5/8" (143mm)	6 1/8" (155mm)

RSS-H SERIES POLES

ROUND STRAIGHT STEEL

Cat.#

Job

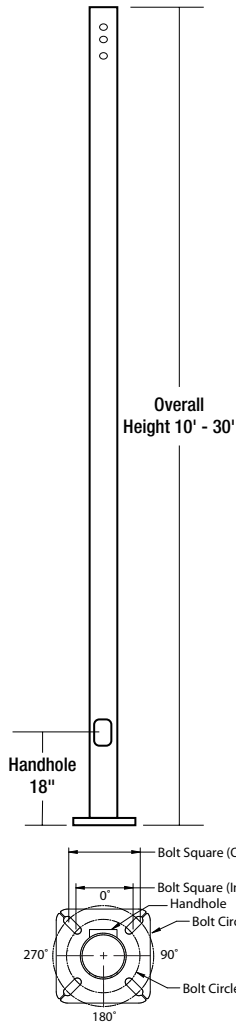
Type



HUBBELL
Outdoor Lighting

Approvals

TYPE S6



APPLICATIONS

- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

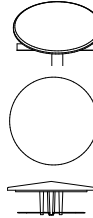
CONSTRUCTION

- SHAFT:** One-piece straight steel with round cross section, Minimum yield of 46,000 psi (ASTM-A500, Grade C); Longitudinal weld seam to appear flush in shaft wall; Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ASTM A36)
- BASE COVER:** Two-piece square aluminum base cover included standard
- POLE CAP:** Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE:** Rectangular 3x5 steel hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS:** Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

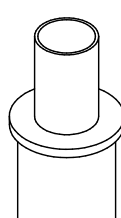
FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint prime applied over "white metal" steel substrate cleaned via mechanical shot blast method
- Decorative finish coat available in seven standard colors; Custom colors available; RAL number preferable; Internal protective coating available

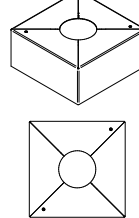
POLE CAP



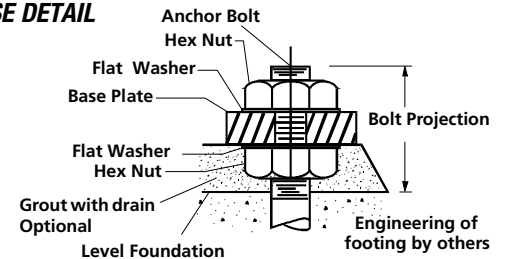
TENON



BASE COVER



BASE DETAIL



ORDERING INFORMATION

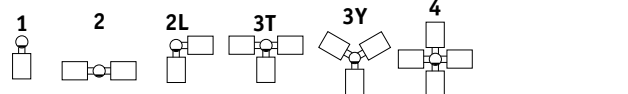
ORDERING EXAMPLE:

RSS-H - 20 - 40 - A/B/C - 2L - S2 - DB - UL

Reference page 2 for available configurations

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	DRILL PATTERN	FINISH	OPTIONS
RSS-H Round Straight Steel Pole Hubbell Outdoor	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	1 Single arm mount 2 Two fixtures at 180° 2L Two fixtures at 90° 3T Three fixtures at 90° 3Y Three fixtures at 120° 4 Four fixtures at 90° TA Tenon (2.375" OD) TB Tenon (2.875" OD) TC Tenon (3.5" OD) OT No drilling (includes pole cap)	S2 #2 2 bolt 3.5" pattern 	DB Dark Bronze Textured BL Black Textured WH White Textured GR Gray Textured PS Platinum Silver Smooth CC Custom Color	HSC Internal Coating (Hubbell Seal) GFI' 20 Amp GFCI Receptacle and Cover EHH' Extra Handhole C05' .5" Coupling C07' .75" Coupling C20' 2" Coupling MPB' Mid-pole Luminaire Bracket VM2 2nd mode vibration damper LAB Less Anchor Bolts UL UL Certified RBC Round Base Cover

MOUNTING ORIENTATION



ACCESSORIES- Order Separately

Catalog Number	Description
VM2SXX	2nd mode vibration damper

1 Specify option location using logic found on page 2 (Option Orientation)



HUBBELL
Outdoor Lighting

Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

© 2015 HUBBELL OUTDOOR LIGHTING. All Rights Reserved. For more information visit our website: www.hubbelloutdoor.com • Printed in USA **RSS-H POLES-SPEC 11/16**



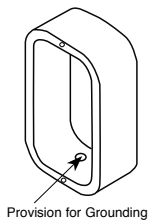
HUBBELL
Lighting

ORDERING INFORMATION Cont.

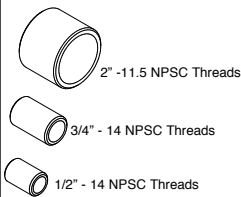
Catalog Number	Height		Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Circle (range)	Bolt Square (range)	Base Plate Square	Base Plate Thickness	Anchor bolt size	Bolt Projection	Pole weight
	Feet	Meters										
RSS-H-10-40-A	10	3.0	4" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	52
RSS-H-12-40-A	12	3.7	4" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	62
RSS-H-14-40-A	14	4.3	4" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	72
RSS-H-16-40-A	16	4.9	4" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	83
RSS-H-18-40-A	18	5.5	4" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	93
RSS-H-20-40-A	20	6.1	4" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	103
RSS-H-10-40-B	10	3.0	4" round	0.188"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	77
RSS-H-12-40-B	12	3.7	4" round	0.188"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	92
RSS-H-14-40-B	14	4.3	4" round	0.188"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	107
RSS-H-16-40-B	16	4.9	4" round	0.188"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	122
RSS-H-18-40-B	18	5.5	4" round	0.188"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	138
RSS-H-20-40-B	20	6.1	4" round	0.188"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	153
RSS-H-10-45-A	10	3.0	4.5" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	58
RSS-H-12-45-A	12	3.7	4.5" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	70
RSS-H-14-45-A	14	4.3	4.5" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	82
RSS-H-16-45-A	16	4.9	4.5" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	93
RSS-H-18-45-A	18	5.5	4.5" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	105
RSS-H-20-45-A	20	6.1	4.5" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	117
RSS-H-25-45-A	25	7.6	4.5" round	0.125"	9"	7.5" - 10"	5.30" - 7.07"	9"	0.75	3/4" x 30" x 3"	3.5"	146
RSS-H-10-50-B	10	3.0	5" round	0.188"	11"	8.0" - 11"	5.66" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	97
RSS-H-12-50-B	12	3.7	5" round	0.188"	11"	8.0" - 11"	5.66" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	116
RSS-H-14-50-B	14	4.3	5" round	0.188"	11"	8.0" - 11"	5.66" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	135
RSS-H-16-50-B	16	4.9	5" round	0.188"	11"	8.0" - 11"	5.66" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	155
RSS-H-18-50-B	18	5.5	5" round	0.188"	11"	8.0" - 11"	5.66" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	174
RSS-H-20-50-B	20	6.1	5" round	0.188"	11"	8.0" - 11"	5.66" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	193
RSS-H-25-50-B	25	7.6	5" round	0.188"	11"	8.0" - 11"	5.66" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	242
RSS-H-20-60-C	20	6.1	6" round	0.250"	11"	9.0" - 11"	6.36" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	307
RSS-H-25-60-C	25	7.6	6" round	0.250"	11"	9.0" - 11"	6.36" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	384
RSS-H-30-60-C	30	9.1	6" round	0.250"	11"	9.0" - 11"	6.36" - 7.78"	10.25	1.0	1" x 36" x 4"	4.5"	461

NOTE Factory supplied template must be used when setting anchor bolts. Hubbell Lighting will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

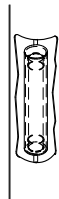
EHH - EXTRA HANDHOLE



C05 - C07 - C20 - COUPLING



VM2 - VIBRATION DAMPER 2ND MODE



Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

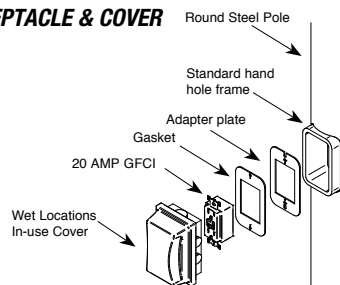
VM2SXX - VIBRATION DAMPER 2ND MODE



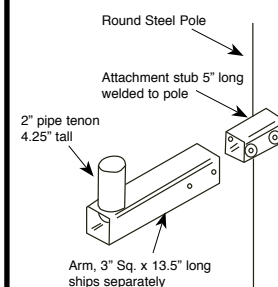
VM2S08 - 8'
VM2S12 - 12'
VM2S16 - 16'
VM2S20 - 20'
VM2S24 - 24'

Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

GFI - 20 AMP GFCI RECEPTACLE & COVER

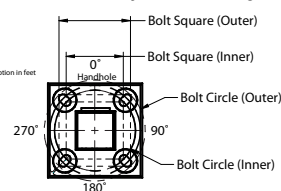


MPB - MID POLE BRACKET



OPTION ORIENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: **RSS-H-20-40-A-TA-DB-C05-0-15** (.5" coupling on the handhole/arm side of pole, 15 feet up from the pole base) 1' spacing required between option. Consult factory for other configurations.



For more information about pole vibration and vibration dampers, please consult http://cdn.hubbelloutdoor.com/content/products/literature/files/Pole_Wind_Induced_Flyer_HLOI0022.pdf
Due to our continued efforts to improve our products, product specifications are subject to change without notice.



HUBBELL
Outdoor Lighting

Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

© 2015 HUBBELL OUTDOOR LIGHTING, All Rights Reserved. For more information visit our website: www.hubbelloutdoor.com • Printed in USA



HUBBELL
Lighting

RSS-H POLES-SPEC 11/16



LOUVERED BRICK STAR™

PROJECT:

TYPE S7

TYPE:

CATALOG
NUMBER:

SOURCE:

NOTES:

CATALOG NUMBER LOGIC

Example: **B** - **BQL** - **LED** - **e101** - **A9** - **MAC** - **D**

Material

Blank - Aluminum
B - Brass
S - Stainless

Series

BQL - Louvered Brick Star™

Source

LED - 'e' Technology with Integral Dimming Driver (See Specifications for Dimming)
Designed for use with remote 12VAC BKSSL* transformers. Requires magnetic Low Voltage dimmer.

LED Type

e100 - 5WLED/2.7K
e101 - 5WLED/3K
e102 - 5WLED/4K
e103 - 5WLED/Amber

Adjust-e-Lume® Output Intensity (Choose factory setting)

A9 (Standard), A8, A7, A6, A5, A4, A3, A2, A1

Finish

Aluminum Finish

Powder Coat Color	Satin	Wrinkle
Bronze	BZP	BZW
Black	BLP	BLW
White (Gloss)	WHP	WHW
Aluminum	SAP	—
Verde	—	VER

Brass Finish

Machined	MAC
Polished	POL
Mitique™	MIT

Stainless Finish

Machined	MAC
Polished	POL
Brushed	BRU Interior use only.

Premium Finish

ABP Antique Brass Powder	CMG Cascade Mountain Granite	RMG Rocky Mountain Granite
AMG Aleutian Mountain Granite	CRI Cracked Ice	SDS Sonoran Desert Sandstone
AQW Antique White	CRM Cream	SMG Sierra Mountain Granite
BCM Black Chrome	HUG Hunter Green	TXF Textured Forest
BGE Beige	MDS Mojave Desert Sandstone	WCP Weathered Copper
BPP Brown Patina Powder	NBP Natural Brass Powder	WIR Weathered Iron
CAP Clear Anodized Powder	OCP Old Copper	Also available in RAL Finishes See submittal SUB-1439-00

Louver

D - Rectangular, 30°

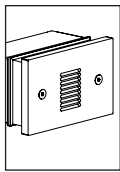
B-K LIGHTING

40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5900
www.bklighting.com • info@bklighting.com

RELEASED
01-04-18

DRAWING NUMBER
SUB001013

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF B-K LIGHTING, INC. AND ITS RECEIPT OR POSSESSION DOES NOT CONVEY ANY RIGHTS TO REPRODUCE, DISCLOSE ITS CONTENTS, OR TO MANUFACTURE, USE OR SELL ANYTHING IT MAY DESCRIBE. REPRODUCTION, DISCLOSURE OR USE WITHOUT SPECIFIC WRITTEN AUTHORIZATION OF B-K LIGHTING, INC. IS STRICTLY FORBIDDEN.



BKSSL
SOLID STATE LIGHTING



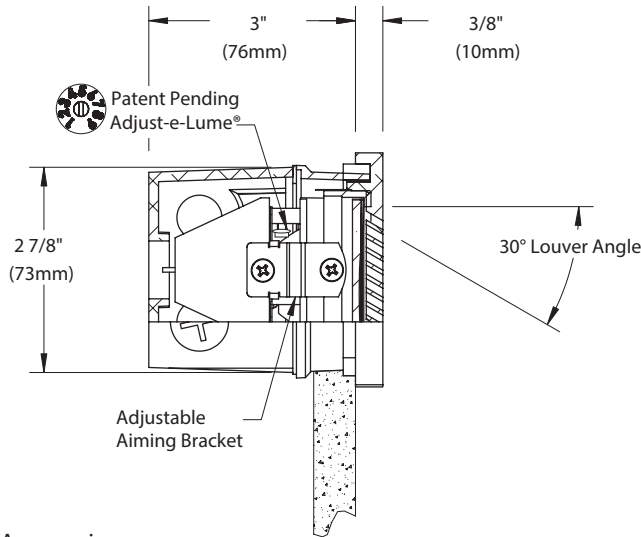
LOUVERED BRICK STAR™

PROJECT:

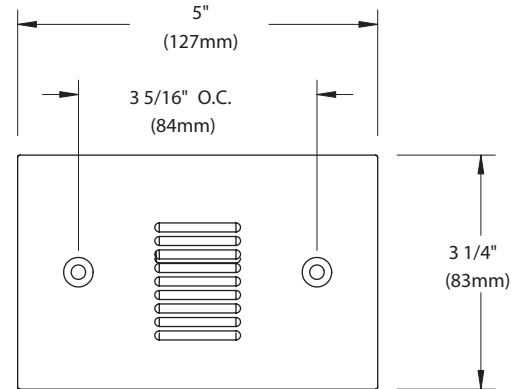
TYPE:

TYPE S7

SIDE VIEW



FACEPLATE DETAIL



Accessories (Configure separately)

Remote options:



TR Series



UPMRM™

All dimensions indicated on this submittal are nominal.
Contact Technical Sales if you require more stringent specifications.

SPECIFICATIONS

GreenSource Initiative™

Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials

Furnished in Copper-Free Aluminum (Type 6061-T6) or Brass (Type 360) or Stainless Steel (Type 304).

Backbox

Rectangular, 4-5/8" x 2-7/8" deep, cast aluminum construction. Front access for wire connection and inspection. Provided with [5] 1/2" NPS tapped holes (2 on each end and 1 on the back) and [4] plugs. Suitable for concrete pour.

Faceplate

Fully machined from solid billet. Countersunk holes provide for flush hardware mounting with [2] tamper-resistant, stainless steel mounting screws. 1/8" thick HT-805A silicone foam gasket with acrylic adhesive for water-tight seal.

Lens

Shock resistant, tempered, glass lens is factory adhered to faceplate.

BKSSL®

Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components.

Integral, constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to <1A (non-dimming). Conforms to Safety Std. C22.2 No. 250.13-12.

Dimming

Line voltage dimmable via magnetic low voltage dimmer. For use with low voltage dimmer with dedicated neutral conductor. For purposes of dimming: Remote magnetic transformer with BKSSL® Power of 'e' technology loads should be loaded to 25% of the transformer VA (watts) rated value.

Optics

Rectilinear design provides wide lateral distribution and long forward throw.

Adjust-e-Lume® (Pat. Pending)

Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Louvers and Aiming

Louver pattern is machined into faceplate to prevent direct view to the source at nadir. 30° optical cutoff for mounting heights well below typical visual glare angles. Adjustable lamp bracket provides up to 24° vertical aiming.

Remote Transformer

For use with 12VAC BKSSL remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.

Wiring

Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware

Tamper-resistant, stainless steel hardware. Faceplate screws are additionally black oxide treated for additional corrosion resistance.

Finish

StarGuard®, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

Warranty

5 year limited warranty.

Certification and Listing

ITL tested to IESNA LM-79. UL Listed. Certified to CAN/CSA/ANSI Standards. RoHs compliant. Suitable for indoor or outdoor use. Suitable for installation in combustible materials (Type Non-IC). Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP65 Rated. Made in USA.



*Teflon is a registered trademark of DuPont Corporation.

*Energy Star is a registered trademark of the United States Environmental Protection Agency.

B-K LIGHTING

40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5900
www.bklighting.com • info@bklighting.com

RELEASED
01-04-18

DRAWING NUMBER
SUB001013

LAMP & DRIVER DATA

e100, e101, e102, e103

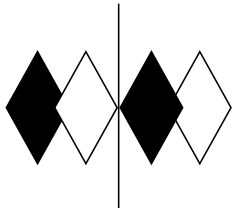
TYPE S7

DRIVER DATA	Input Volts	InRush Current	Operating	Dimmable	Operation Ambient Temperature
	12VAC/DC 50/60Hz	<250mA (non-dimmed)	500mA	Magnetic Low Voltage Dimmer	-22°F-194°F (-30°C - 90°C)

LM79 DATA				L70 DATA		OPTICAL DATA	
BK No.	CCT (Typ.)	CRI (Typ.)	Input Watts (Typ.)	Minimum Rated Life (hrs.) 70% of initial lumens (L70)		Louver Angle	Delivered Lumens
e100	2700K	80	5	50,000		C-30°	59
e101	3000K	80	5	50,000		C-30°	60
e102	4000K	80	5	50,000		C-30°	68
e103	Amber (590nm)	~	5	50,000		~	~

FOR USE WITH

SSL	Louvered Step Star™
BQL	Louvered Brick Star™
SQL	Louvered Square Step Star™
VBL	Louvered Vertical Brick Star™
PSL	Louvered Path Star™
BSL	Louvered Bollard Star™



itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

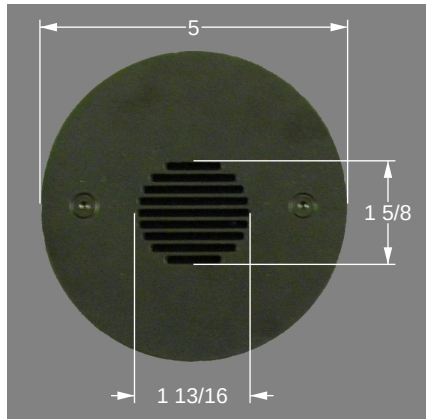
NVLAP
NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINATION

Values based on 1 foot mounting height.

TYPE S7



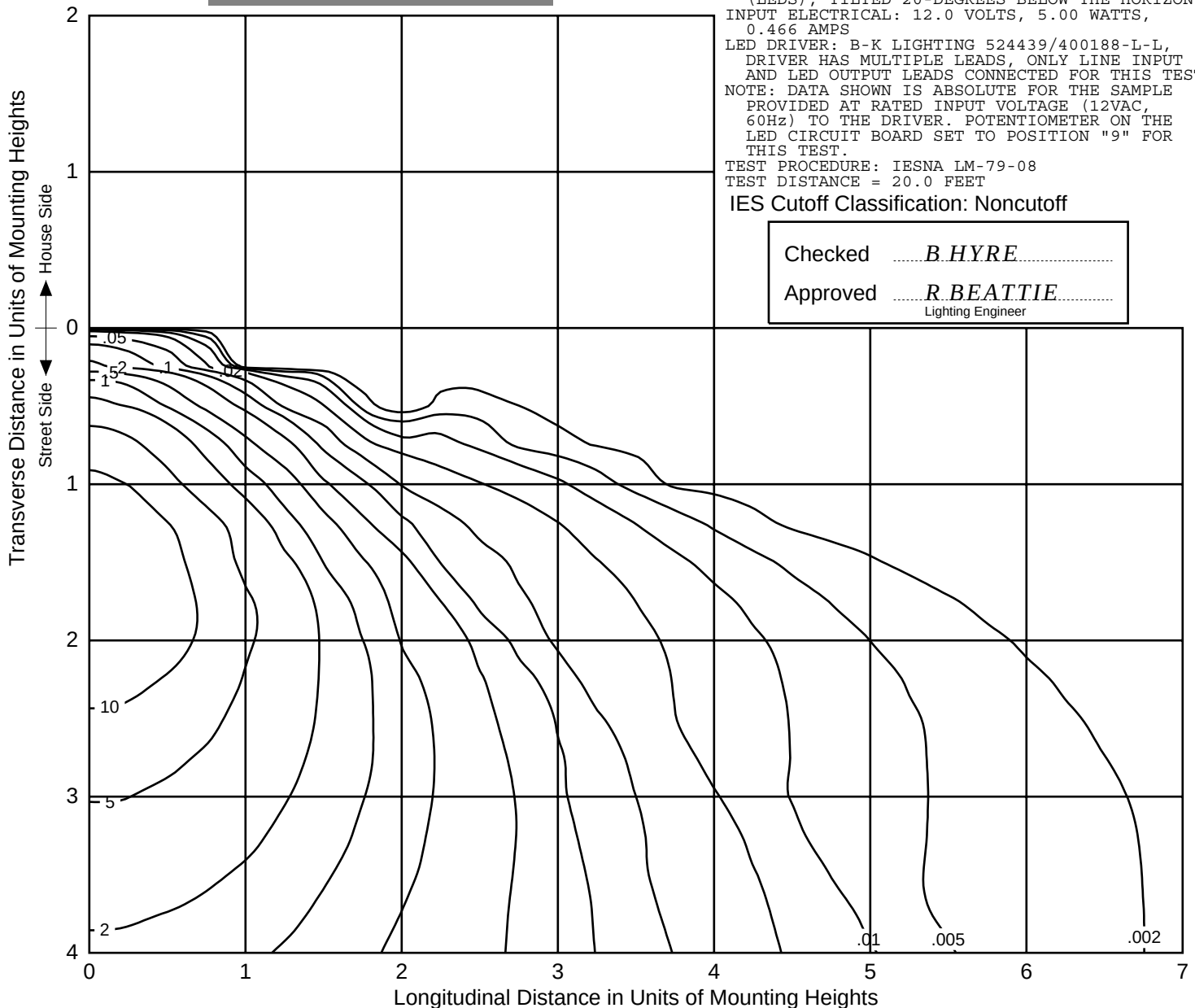
REPORT NUMBER: ITL86654
ISSUE DATE: 03/02/16 PAGE: 1 OF 8
PREPARED FOR: B-K LIGHTING, INC.
CATALOG NUMBER: SSL-LED-e102-C-20-DEGREES,
BQL-LED-e102-C-20-DEGREES, SQL-LED-e102-C-
20-DEGREES, VBL-LED-e102-C-20-DEGREES
LUMINAIRE: CAST METAL WALL MOUNTING HOUSING,
ONE ADJUSTABLE LED MODULE CONSISTING OF:
MACHINED BLACK FINISHED METAL HEAT SINK,
ONE BLACK CIRCUIT BOARD WITH 3 LEDS, ONE
CLEAR CONICAL PLASTIC OPTIC PER LED WITH
FROSTED SURFACE OPPOSITE LED, MOLDED BLACK
PLASTIC OPTIC MOUNTING FRAME. FABRICATED
DIFFUSE METAL LED MODULE MOUNTING BRACKETS,
MACHINED BLACK FINISHED METAL OPTIC
ASSEMBLY MOUNTING COLLAR, CLEAR FLAT LINEAR
PRISMATIC GLASS LENS, CAST BLACK PAINTED
LOUVERED METAL FACEPLATE, LENS PRISMS OUT
AND VERTICAL. LED MODULE TILTED 20-DEGREES
BELOW THE HORIZON.
LAMPS: THREE WHITE LIGHT EMITTING DIODES
(LEDS), TILTED 20-DEGREES BELOW THE HORIZON.
INPUT ELECTRICAL: 12.0 VOLTS, 5.00 WATTS,
0.466 AMPS
LED DRIVER: B-K LIGHTING 524439/400188-L-L,
DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT
AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.
NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE
PROVIDED AT RATED INPUT VOLTAGE (12VAC,
60Hz) TO THE DRIVER. POTENTIOMETER ON THE
LED CIRCUIT BOARD SET TO POSITION "9" FOR
THIS TEST.

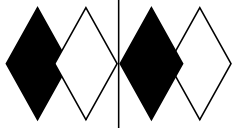
TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET

IES Cutoff Classification: Noncutoff

Checked *B. HYRE*
Approved *R. BEATTIE*
Lighting Engineer





itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

NVLAP
NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com

REPORT NUMBER: ITL86654

ISSUE DATE: 03/02/16 PAGE: 2 OF 8

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: SSL-LED-e102-C-20-DEGREES, BQL-LED-e102-C-20-DEGREES, SQL-LED-e102-C-20-DEGREES, VBL-LED-e102-C-20-DEGREES

LUMINAIRE: CAST METAL WALL MOUNTING HOUSING, ONE ADJUSTABLE LED MODULE CONSISTING OF: MACHINED BLACK FINISHED METAL HEAT SINK, ONE BLACK CIRCUIT BOARD WITH 3 LEDS, ONE CLEAR CONICAL PLASTIC OPTIC PER LED WITH FROSTED SURFACE OPPOSITE LED, MOLDED BLACK PLASTIC OPTIC MOUNTING FRAME. FABRICATED DIFFUSE METAL LED MODULE MOUNTING BRACKETS, MACHINED BLACK FINISHED METAL OPTIC ASSEMBLY MOUNTING COLLAR, CLEAR FLAT LINEAR PRISMATIC GLASS LENS, CAST BLACK PAINTED LOUVERED METAL FACEPLATE, LENS PRISMS OUT AND VERTICAL. LED MODULE TILTED 20-DEGREES BELOW THE HORIZON.

LAMPS: THREE WHITE LIGHT EMITTING DIODES (LEDs), TILTED 20-DEGREES BELOW THE HORIZON.

INPUT ELECTRICAL: 12.0 VOLTS, 5.00 WATTS, 0.466 AMPS

LED DRIVER: B-K LIGHTING 524439/400188-L-L, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (12VAC, 60Hz) TO THE DRIVER.

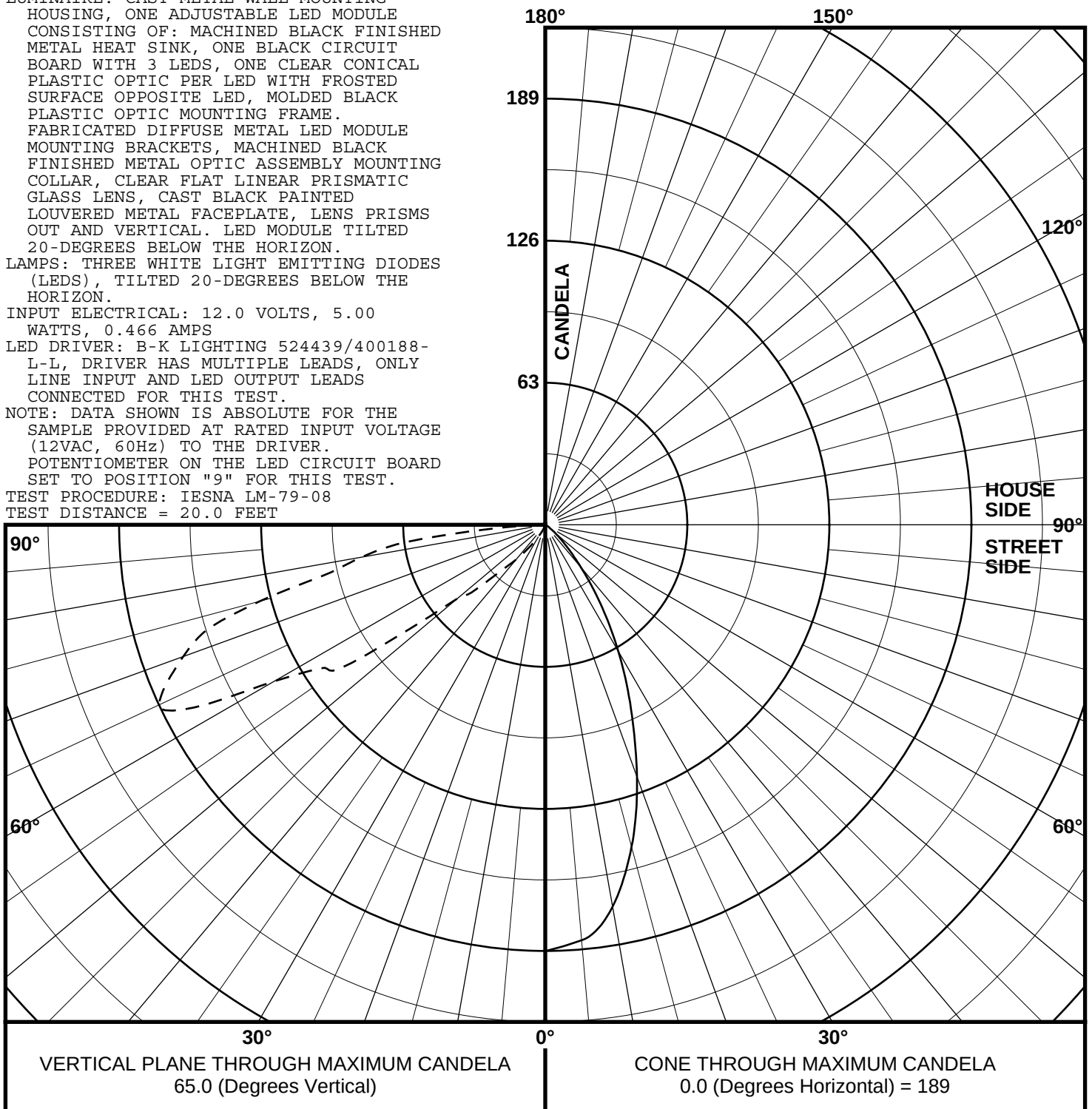
POTENTIOMETER ON THE LED CIRCUIT BOARD SET TO POSITION "9" FOR THIS TEST.

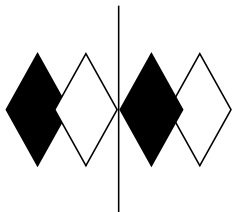
TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET

TYPE S7

MAXIMUM PLANE AND MAXIMUM CONE PLOTS OF CANDELA





itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

PHONE: (303) 442-1255 • FAX: (970) 535-3114 • E-MAIL: itl@itlboulder.com • WEBSITE: www.itlboulder.com



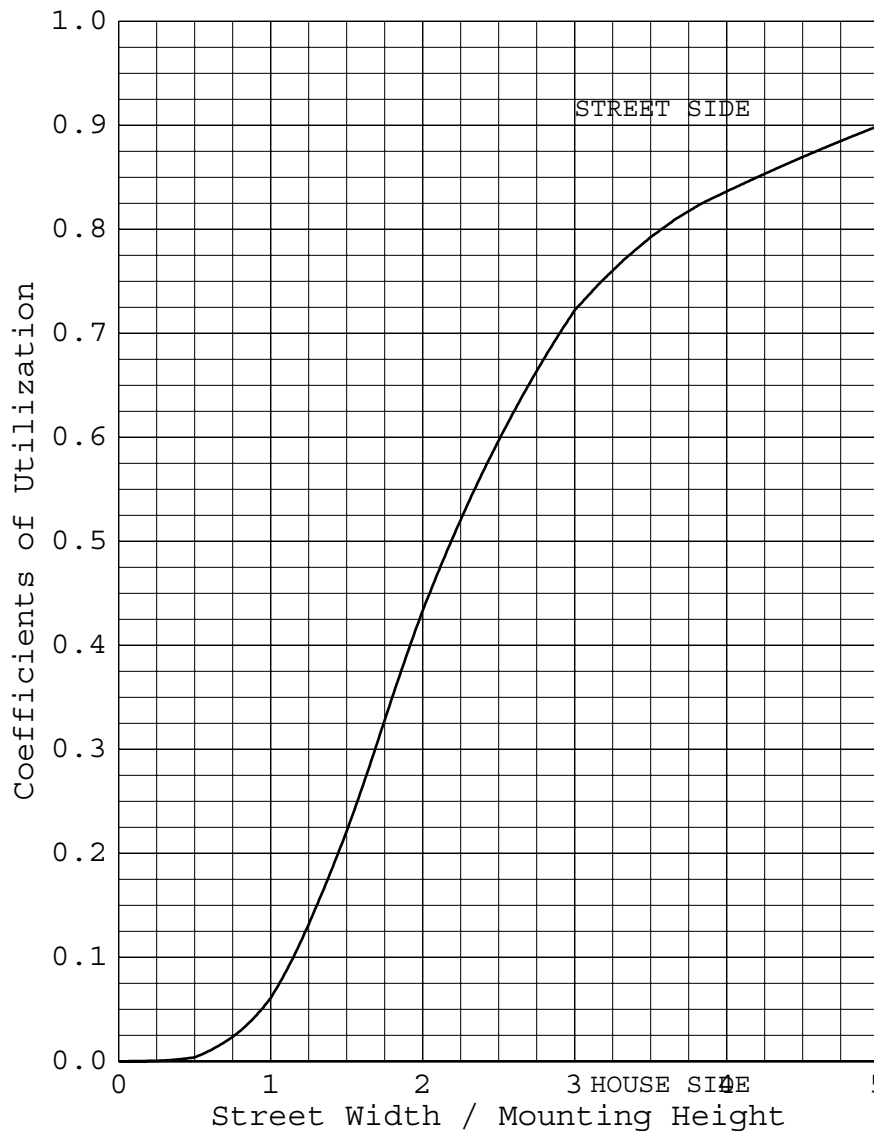
INDEPENDENT TESTING LABORATORIES, INC.
4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

REPORT NUMBER: ITL86654
ISSUE DATE: 03/02/16
PREPARED FOR: B-K LIGHTING, INC.

PAGE: 3 OF 8

COEFFICIENTS OF UTILIZATION AND FLUX DISTRIBUTION

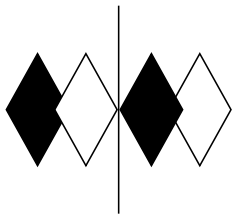
TYPE S7



	LUMENS	PERCENT OF FIXTURE
DOWNWARD STREET SIDE	67.3	99.6
DOWNWARD HOUSE SIDE	0.0	0.0
DOWNWARD TOTAL	67.3	99.6
UPWARD STREET SIDE	0.3	0.4
UPWARD HOUSE SIDE	0.0	0.0
UPWARD TOTAL	0.3	0.4
TOTAL FLUX	67.6	100.0

EFFICACY = 13.5 lm/W

ALL CANDELA AND LUMENS IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY.
THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE
LUMEN OUTPUT OF THIS LUMINAIRE SAMPLE.



itl boulder
THE LIGHT CENTER OF THE INDUSTRY SINCE 1955

PHONE: (303) 442-1255

FAX: (970) 535-3114

E-MAIL: itl@itlboulder.com

WEBSITE: www.itlboulder.com



NVLAP LAB CODE: 200925-0

INDEPENDENT TESTING LABORATORIES, INC.

4066 CAMELOT CIRCLE, LONGMONT, CO 80504 USA

TYPE S7

REPORT NUMBER: ITL86654

PAGE: 4 OF 8

ISSUE DATE: 03/02/16

PREPARED FOR: B-K LIGHTING, INC.

FLUX DISTRIBUTION BY SOLID ANGLE

(PER IESNA TM-15-11, LUMINAIRE CLASSIFICATION
SYSTEM FOR OUTDOOR LUMINAIRES)

	LUMENS	PERCENT OF FIXTURE	BUG ZONE RATINGS
FORWARD LIGHT	67.3	99.6	
FL (0- 30)	0.3	0.4	
FM (30- 60)	17.9	26.5	
FH (60- 80)	43.5	64.3	G0
FVH (80- 90)	5.7	8.4	G0
BACK LIGHT	0.0	0.0	
BL (0- 30)	0.0	0.0	B0
BM (30- 60)	0.0	0.0	B0
BH (60- 80)	0.0	0.0	B0 G0
BVH (80- 90)	0.0	0.0	G0
UPLIGHT	0.3	0.4	
UL (90-100)	0.2	0.3	U1
UH (100-180)	0.1	0.1	U1
TRAPPED LIGHT	0.0	0.0	
TOTAL FLUX	67.6	100.0	

BACKLIGHT, UPLIGHT, AND GLARE (BUG) RATINGS
(PER ADDENDUM A FOR IESNA TM-15-11)

BUG RATING: B0 U1 G0

CB12R – Contemporary Concrete Bollard – 12" Round | TYPE

TYPE S8

- Warm white (3000K), neutral white (4000K) or bright white (5000K)
- Body and cap are composed of precast concrete reinforced with an internal cage structure of steel
- Grilles are cast aluminum with stainless steel hardware
- Inner lens is sealed to the grille frame
- Integral prewired driver module
- Electrical module is silicone gasketed for weather tight operations
- Color of grilles feature TGIC polyester powder finish coating with choice of 13 standard colors.



CB12R

1. MODEL	2. STYLE	3. LIGHT ENGINE	3. CONCRETE FINISH	5. GRILLE FINISH	6. OPTIONS	7. MOUNTING
CB12 R						

1. MODEL

CB12R Concrete Bollard, 12"Ø

2. STYLE

24" OAH internal or external mounting
 24-CO-FLAT cutoff grille, flat top
 24-HORZ-FLAT horizontal grille, flat top
 24-VERT-FLAT vertical grille, flat top
 24-VERT-DOME vertical grille, dome top

26" OAH internal or external mounting
 26-CO-DOME cutoff grille, dome top
 26-HORZ-DOME horizontal grille, dome top

36" OAH internal mounting
 36-CO-FLAT cutoff grille, flat top
 36-HORZ-FLAT horizontal grille, flat top
 36-VERT-FLAT vertical grille, flat top
 36-VERT-DOME vertical grille, dome top

37" OAH external mounting
 37-CO-FLAT cutoff grille, flat top
 37-HORZ-FLAT horizontal grille, flat top
 37-VERT-FLAT vertical grille, flat top
 37-VERT-DOME vertical grille, dome top

38" OAH internal mounting
 38-CO-DOME cutoff grille, dome top
 38-HORZ-DOME horizontal grille, dome top

39" OAH external mounting
 39-CO-DOME cutoff grille, dome top
 39-HORZ-DOME horizontal grille, dome top

41" OAH internal mounting
 41-CO-FLAT cutoff grille, flat top
 41-HORZ-FLAT horizontal grille, flat top
 41-VERT-FLAT vertical grille, flat top
 41-VERT-DOME vertical grille, dome top

42" OAH external mounting
42-CO-FLAT cutoff grille, flat top
 42-HORZ-FLAT horizontal grille, flat top
 42-VERT-FLAT vertical grille, flat top
 42-VERT-DOME vertical grille, dome top

43" OAH internal mounting
 43-CO-DOME cutoff grille, dome top
 43-HORZ-DOME horizontal grille, dome top

44" OAH external mounting
 44-CO-DOME cutoff grille, dome top
 44-HORZ-DOME horizontal grille, dome top

3. LIGHT ENGINE

36LED-BW 5000K, 42w, 70 CRI
 36LED-NW 4000K, 42w, 70 CRI
36LED-WW 3000K, 42w, 70 CRI

4. CONCRETE FINISH

MSB Medium sandblast, natural color finish
 AGR Exposed aggregate finish
 MSB-CC Medium sandblast, custom color ^{1 2}
 AGR-CC Exposed aggregate finish, custom color ^{1 2}

5. GRILLE FINISH

Standard Color

WH Arctic White
 BL Black
 BLT Matte Black
 DB Dark Bronze
 DGN Dark Green
 TT Titanium
 WDB Weathered Bronze
 MDB Bronze Metallic
 VBU Verde Blue
 CRT Corten
 MAL Matte Aluminum
 MG Medium Grey
 AGN Antique Green
LG Light Grey

Premium Color

SHK Shamrock
 SPP Salt and Pepper
 SFM Seafoam
 WCP Weathered Copper
 RAL RAL 4 digit Color
 CUSTOM Custom Color

6. OPTIONS

HSS House side shield -180°
 RBC Single gang electrical box, cast in place with weatherproof cover. ¹

7. MOUNTING

INT Internal, for 24", 26", 36", 38", 41" or 43" OAH only
EXT External, for 24", 26", 37", 39", 42" or 44" OAH only

¹ Consult Factory.

² Based on Davis colors. For custom color and aggregate, customer must provide aggregate, sand, and colorant.

SPECIFICATIONS

CONCRETE BODY AND CAP

The body and caps are composed of precast concrete reinforced with an internal cage structure of steel. The concrete bodies are one-piece castings with a minimum wall thickness of 3"/75mm. All threaded inserts are welded to the steel reinforcing cage and cast in place. The base plate for anchoring is 1/4" hot dipped galvanized steel.

GRILLE

Grilles are cast aluminum, minimum wall thickness of .250 inches. All castings are pure aluminum #356 alloy, free of any foreign material or porosity. Grilles have cast-in-place, integral mounting lugs for attachment to the concrete base. The inner lens is sealed to the grille frame. All LED models have an opal DR acrylic lens. The grill assembly has a silicone gasket on the top and bottom for weather tight operation. Recessed stainless steel screws are loosened to remove the top cap for relamping.

CUTOFF

Models with cutoff grille provide IES cutoff classification meaning less than 2.5% of light is emitted above 90° horizontal.

ELECTRICAL MODULE

The electrical module consists of the electrical module and lamp housing. All housing parts are aluminum with stainless steel hardware. The electrical module is prewired on an aluminum strap mounted to the underside of the lamp housing. The electrical module is silicone gasketed for weather tight operation. LED components are 120 thru 277 volt. LED constant current driver operates at 350mA.

FINISH

Concrete surface finish is natural concrete with a medium sandblast etch or exposed aggregate. Medium sandblast finish includes a clear anti-vandal sealer.

Grill finish consists of a five stage pretreatment

See next page

JOB _____
 TYPE _____
 NOTES _____



ARCHITECTURAL AREA LIGHTING
 17760 Rowland Street | City of Industry | CA 91748
 P 626.968.5666 | F 626.369.2695 | www.aal.net
 Copyright © 2014 May 17, 2017 1:14 PM

TYPE

regimen with a polymer primer sealer, oven dry off and top coated with a thermoset super TGIC polyester powder coat finish. The finish shall meet the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance.

CERTIFICATION

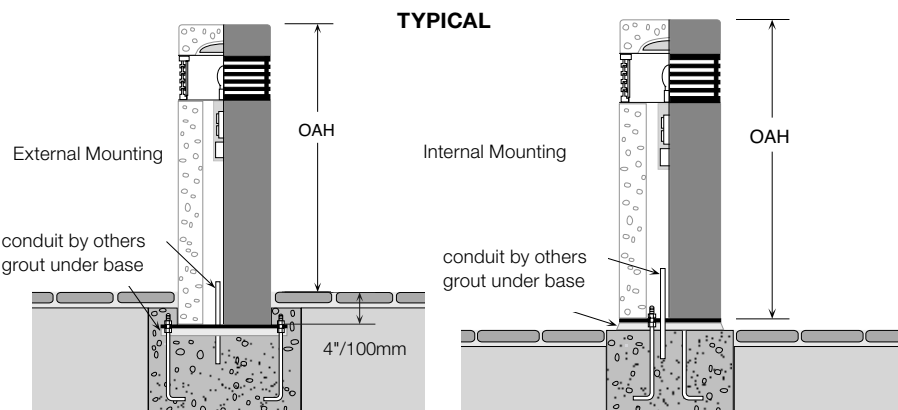
All bollards shall be listed with ETL for outdoor, wet location use, UL1598 and Canadian CSA Std. C22.2 no.250

WARRANTY / TERMS AND CONDITIONS OF SALE

Download:

<http://www.hubbellighting.com/resources/warranty/>

MODEL	OAH	GRILLE	TOP	MOUNTING	WT (LBS)
CB12R	24"	CO	FLAT	EXTERNAL	139
				INTERNAL	116
		HORZ	FLAT	EXTERNAL	139
				INTERNAL	116
		VERT	DOME	EXTERNAL	135
				INTERNAL	112
			FLAT	EXTERNAL	150
				INTERNAL	127
	26"	CO	DOME	EXTERNAL	135
				INTERNAL	112
		HORZ	DOME	EXTERNAL	135
				INTERNAL	112
	36"	CO	FLAT	INTERNAL	186
		HORZ			
		VERT	DOME	INTERNAL	182
			FLAT	INTERNAL	197
	37"	CO	FLAT	EXTERNAL	214
		HORZ			
		VERT	DOME	EXTERNAL	210
			FLAT	EXTERNAL	225
	38"	CO	DOME	INTERNAL	182
		HORZ			
	39"	CO	DOME	EXTERNAL	210
		HORZ			
	41"	CO	FLAT	INTERNAL	214
		HORZ			
		VERT	DOME	INTERNAL	210
			FLAT	INTERNAL	225
42"	CO	FLAT	EXTERNAL	244	
	HORZ	DOME	EXTERNAL	240	
		FLAT	EXTERNAL	255	
	43"	CO	DOME	INTERNAL	210
HORZ					
44"	CO	DOME	EXTERNAL	240	
	HORZ				



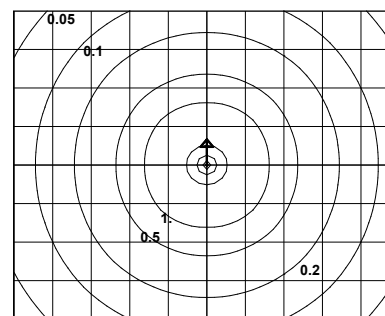
WATTAGE: 37.7

LUMEN OUTPUT: 663

EFFICACY: 17.6 Lm/W

B1 U2 G1

FORWARD LIGHT		LUMEN	
FL	30°	1.3%	8
FM	60°	16.5%	110
FH	80°	17.0%	113
FVH	90°	5.9%	39
BACK LIGHT			
BL	30°	1.3%	8
BM	60°	16.5%	110
BH	80°	17.0%	113
BVH	90°	5.9%	39
UPLIGHT			
UL	100°	6.8%	45
UH	180°	11.7%	78



UPLIGHT 18.5%
DOWNLIGHT 81.5%

3.5' MOUNTING HEIGHT

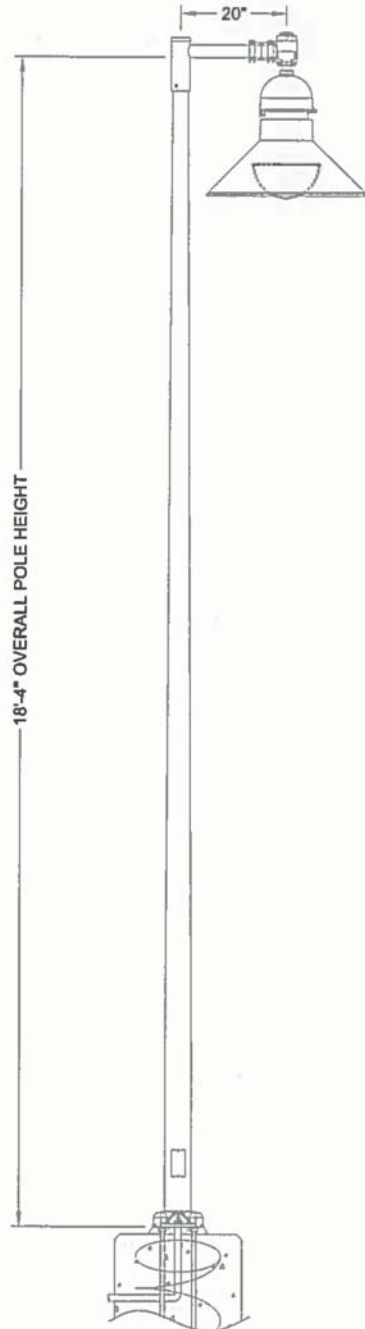
AAL reserves the right to change product specifications without notice.

IES files can be found at www.aal.net



PORTLAND | me

Street & Sidewalk Lighting DECORATIVE LIGHT - TRAIL/WATERFRONT



LUMINAIRE

Holophane GlasWerks LED Hallbrook Series
Model: GELB-050-3K-AS-4-B-3-P7E-DM

Pendant mount
IES Type IV Distribution
Thermal resistant prismatic glass lens held in a formed aluminum door frame.
50 watts
Universal Voltage (120-277V)
Dimming driver with 7-pin photocontrol receptacle
LED 3000K color temperature

BRACKET ARM

Aluminum crossarm with a post-top fitting for a 2-3/8" by 6" tenon.

SLIP FITTER

Holophane Glasswerks Slip Fitter
Model SG20/1-BK

2-3/8" O.D. with swivel cast fitter.

LIGHTING POLE

Holophane
Model: RTA1850E-PL-ND-BK-4

Aluminum pole shaft rated for a 90 mph wind load with a 1.3 gust factor.

Provide four hot-dipped galvanized steel L-type anchor bolts. Lighting pole shall be hot dipped galvanized prior to powder coat paint.

DIMENSIONS

Overall Height = 18' 4"
Bracket Arm = 1' 6"

FINISH

Black (standard) - polyester powder coat

APPLICATION

Trails: Appropriate for any city trail installation.
Waterfront (Commercial/Thames St): Supplemental pedestrian lighting to standard cobrahead lighting.

Spacing:
One side: 90' - 125' on center
Alternating sides: 175' - 225' ft on center

Follow established pattern. Single arm oriented over trail or street; Double-arm used in medians or similar.

Date:
March, 2019

**CITY OF PORTLAND, MAINE
TECHNICAL MANUAL**

**MUNICIPAL STREET
LIGHTING STANDARDS
SECTION 10**

Figure:

X-8B

Revised Date:

**TRAILS / WATERFRONT
(COMMERCIAL/THAMES STREET)**

TYPE S10

Application

As an individual luminaire with low mounting heights, it can be used for marking danger areas or in rows for illuminating corridors and passageways. With high mounting heights it can be used as a wall luminaire next to doors or for lighting small wall areas.

Materials

Luminaire housing constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Matte safety glass
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 64
Weight: 1.1 lbs

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-30° C
LED module wattage	3.0 W
System wattage	5.8 W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	204 lumens (3000K)
Lifetime at Ta = 15° C	>500,000 h (L70)
Lifetime at Ta = 40° C	250,000 h (L70)

LED color temperature

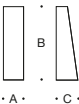
- ☐ 4000K - Product number + **K4**
- ☐ 3500K - Product number + **K35**
- ☒ 3000K - Product number + **K3 (EXPRESS)**
- ☐ 2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

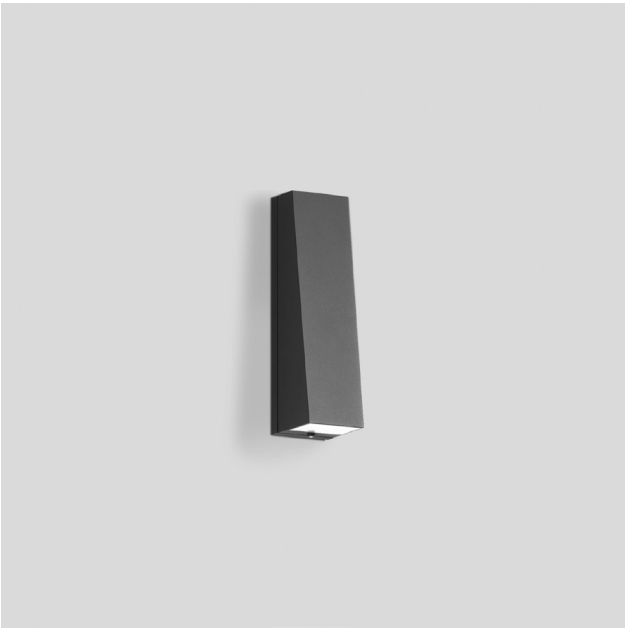
Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

- Available colors ☒ Black (BLK) ☐ White (WHT) ☐ RAL:
☐ Bronze (BRZ) ☐ Silver (SLV) ☐ CUS :



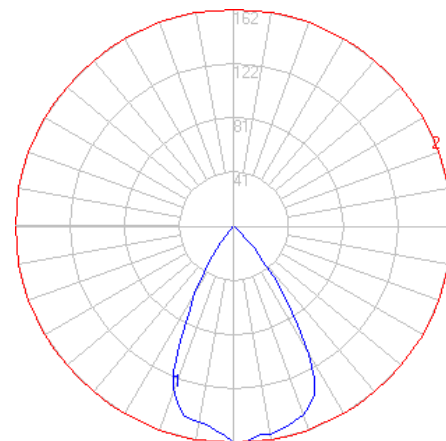
LED wall luminaire · directed light						
		LED	A	B	C	Required wiring box
33514	ADA	3.0W	2 1⁄8	7 7⁄8	2 3⁄8	19545



TYPE S10

Photometric Filename: 33514.IES

TEST: BE_33514
TEST LAB: BEGA
DATE: 9/20/2017
LUMINAIRE: 33 514
LAMP: 3W LED



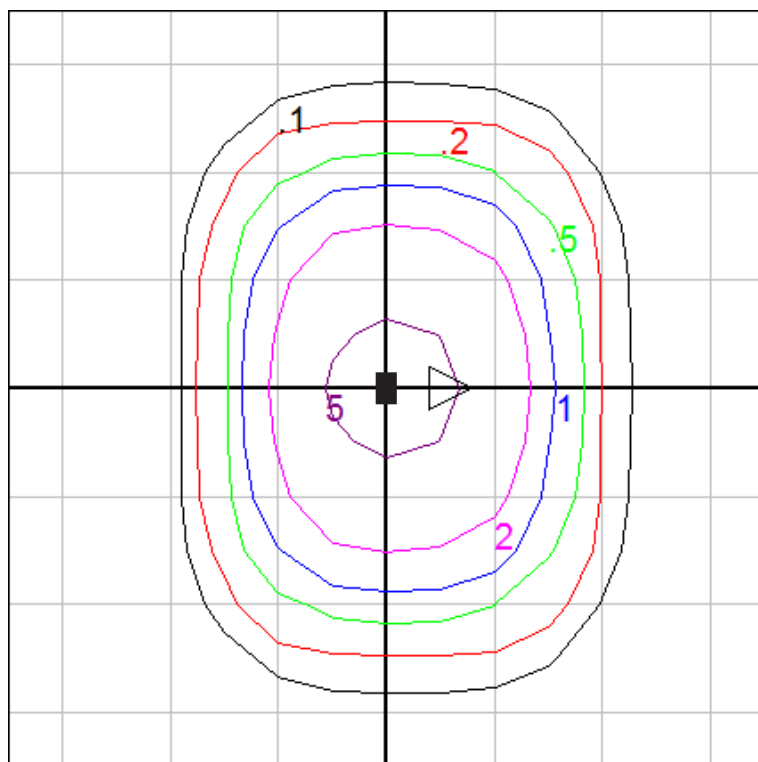
Characteristics

IES Classification	Type I
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	204
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	35
Total Luminaire Watts	5.8
Ballast Factor	1.00
Upward Waste Light Ratio	0.00
Max. Cd.	162.408 (180H, 0V)
Max. Cd. (<90 Vert.)	162.408 (180H, 0V)
Max. Cd. (At 90 Deg. Vert.)	0 (0.0%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	.202 (0.1%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

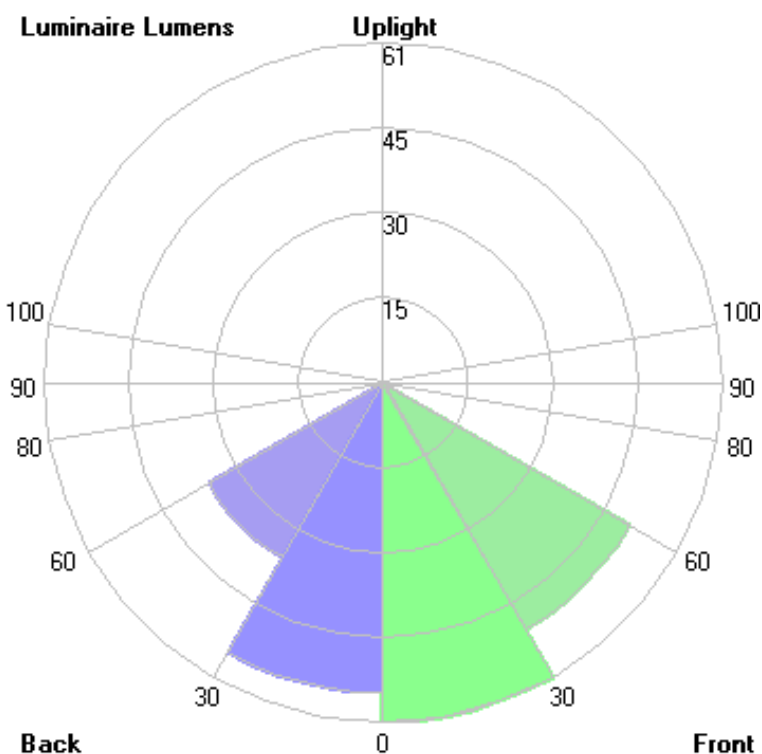
Lum. Classification System (LCS)

LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	60.5	N.A.	29.6
FM (30-60)	50.8	N.A.	24.9
FH (60-80)	0.9	N.A.	0.4
FVH (80-90)	< 0.05	N.A.	0.0
BL (0-30)	55.4	N.A.	27.1
BM (30-60)	35.9	N.A.	17.6
BH (60-80)	0.7	N.A.	0.3
BVH (80-90)	< 0.05	N.A.	0.0
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	204.2	N.A.	100.0

BUG Rating **B0-U0-G0**



Wall Mount - Iso-footcandle grid on floor
Mounting Height = 5 ft. Grid Spacing = 2.5 ft.



In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

TYPE S11

Application

LED wall luminaire with asymmetrical light distribution designed for illuminating horizontal surfaces from vertical mounting surfaces.

Materials

Luminaire housing and faceplate constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Clear safety glass
Reflector made of pure anodized aluminum
Silicone applied robotically to casting, plasma treated for increased adhesion
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65
Weight: 11.5 lbs

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-30° C
LED module wattage	55.3 W
System wattage	61.0 W
Controllability	0-10V dimmable
Color rendering index	Ra > 80
Luminaire lumens	6,674 lumens (4000K)
Lifetime at Ta = 15° C	232,000 h (L70)
Lifetime at Ta = 35° C	73,000 h (L70)

LED color temperature

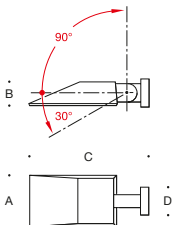
- ☐ 4000K - Product number + **K4**
- ☐ 3500K - Product number + **K35**
- ☒ 3000K - Product number + **K3**
- ☐ 2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

- | | | | |
|------------------|---|---------------------------------------|-------------------------------|
| Available colors | ☒ Black (BLK) | ☐ White (WHT) | ☐ RAL: |
| | ☐ Bronze (BRZ) | ☐ Silver (SLV) | ☐ CUS: |



LED wall luminaire · surface washer				
	LED	A	B	C
24816	55.3 W	8 7⁄8	4	19 1⁄4

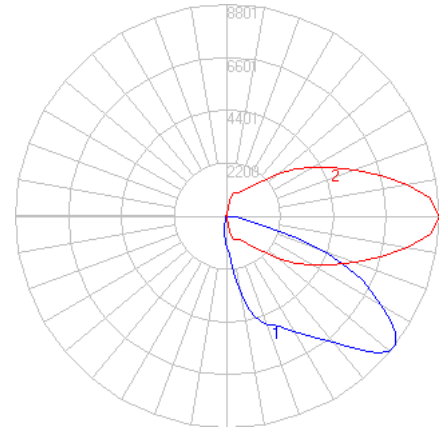


BEGA

TYPE S11

Photometric Filename: 24816.ies

TEST: BE_24816
TEST LAB: BEGA
DATE: 11/30/2016
LUMINAIRE: 24 816
LAMP: 55.3W LED



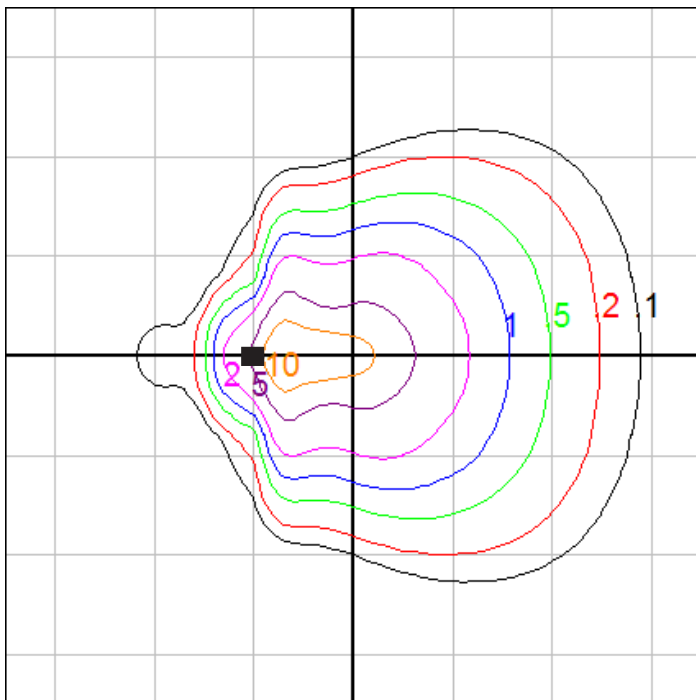
Characteristics

IES Classification	Type III
Longitudinal Classification	Very Short
Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6672
Downward Total Efficiency	N.A.
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	109
Total Luminaire Watts	61
Ballast Factor	1.00
Upward Waste Light Ratio	N.A.
Max. Cd.	8801 (0H, 52.5V)
Max. Cd. (<90 Vert.)	8801 (0H, 52.5V)
Max. Cd. (At 90 Deg. Vert.)	2.4 (0.0%Lum)
Max. Cd. (80 to <90 Deg. Vert.)	551.2 (8.3%Lum)
Cutoff Classification (deprecated)	N.A. (absolute)

Lum. Classification System (LCS)

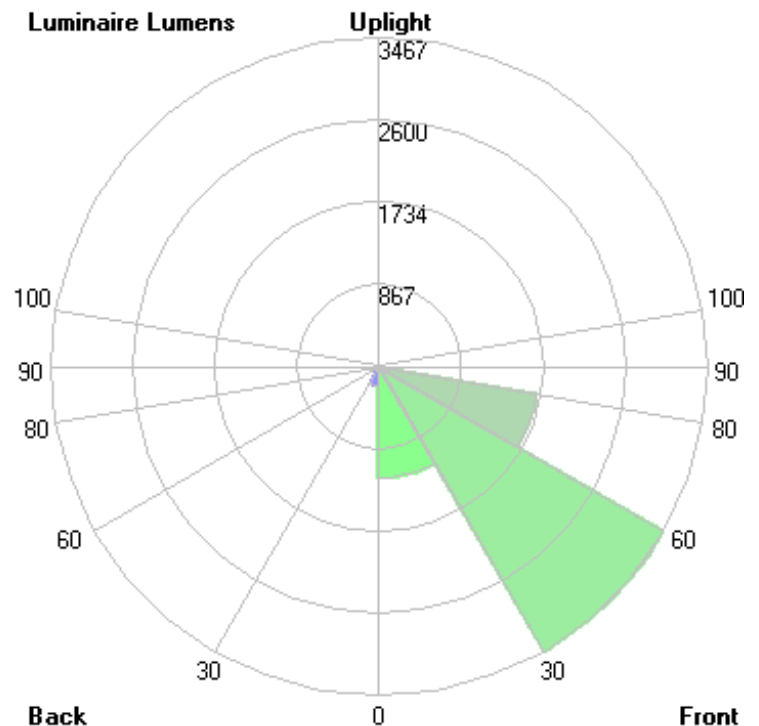
LCS Zone	Lumens	%Lamp	%Lum
FL (0-30)	1181.6	N.A.	17.7
FM (30-60)	3467.0	N.A.	52.0
FH (60-80)	1690.9	N.A.	25.3
FVH (80-90)	39.4	N.A.	0.6
BL (0-30)	203.0	N.A.	3.0
BM (30-60)	72.8	N.A.	1.1
BH (60-80)	14.8	N.A.	0.2
BVH (80-90)	2.4	N.A.	0.0
UL (90-100)	0.0	N.A.	0.0
UH (100-180)	0.0	N.A.	0.0
Total	6672.0	N.A.	100.0

BUG Rating B1-U0-G1



Mounting Height = 15 ft Grid Spacing = 15 ft.

Luminaire Lumens



In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

TYPE S12

Application

LED semi-recessed ceiling luminaire with partially frosted crystal glass and symmetrical wide beam light distribution designed for downlighting atriums, passages and other interior and exterior locations.

Materials

Luminaire housing constructed of die-cast marine grade, copper free ($\leq 0.3\%$ copper content) A360.0 aluminum alloy
Stainless steel trim ring
Partially frosted crystal glass
Reflector made of pure anodized aluminum
High temperature silicone gasket
Stainless steel screw clamps
Galvanized steel rough in ceiling pan with through wiring box

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 65
Weight: 2.6lbs

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-30° C
LED module wattage	12.7 W
System wattage	15.5 W
Controllability	0-10V dimming down to 0.1%
Color rendering index	Ra > 85
Luminaire lumens	802 lumens (3000K)
Lifetime at Ta = 15° C	450,000 h (L70)
Lifetime at Ta = 35° C	300,000 h (L70)

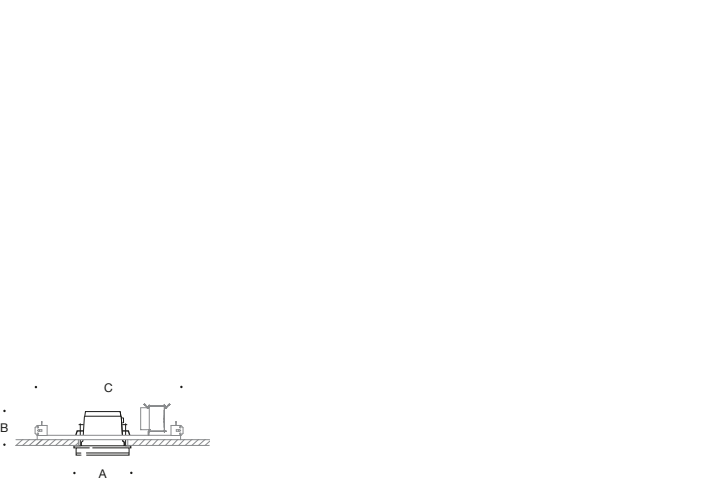
LED color temperature

- ☐ 4000K - Product number + **K4**
- ☐ 3500K - Product number + **K35**
- ☐ **3000K - Product number + K3**
- ☐ 2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

#4 brushed stainless steel.
Custom colors are not available.
Stainless steel requires regular cleaning and maintenance, much like household appliances to maintain its luster and prevent tarnishing or the appearance of rust like stains.



LED semi-recessed ceiling downlight · partially frosted crystal glass

	LED	A	B	C
55943	12.7 W	6	2 ¼	18



TYPE S13

Application

Wall luminaire with directed light. As individual luminaires with low mounting height, they can be used for marking danger areas or in rows for illuminating corridors and passageways. With high mounting heights they can be used as wall luminaires next to doors or for lighting small wall areas.

Materials

Luminaire housing constructed of die-cast marine grade, copper free (≤0.3% copper content) A360.0 aluminum alloy
Matte safety glass
High temperature silicone gasket
Mechanically captive stainless steel fasteners

NRTL listed to North American Standards, suitable for wet locations
Protection class IP 64
Weight: 0.9lbs

Electrical

Operating voltage	120-277V AC
Minimum start temperature	-20° C
LED module wattage	2.1 W
System wattage	3.0W
Controllability	Dimming not available
Color rendering index	Ra > 90
Luminaire lumens	172 lumens (4000K)
LED service life (L70)	60,000 hours

LED color temperature

- ☐ 4000K - Product number + **K4**
- ☐ 3500K - Product number + **K35**
- ☒ 3000K - Product number + **K3**
- ☐ 2700K - Product number + **K27**

BEGA can supply you with suitable LED replacement modules for up to 20 years after the purchase of LED luminaires - see website for details

Finish

All BEGA standard finishes are matte, textured polyester powder coat with minimum 3 mil thickness.

- | | | | |
|------------------|---|---------------------------------------|-------------------------------|
| Available colors | ☒ Black (BLK) | ☐ White (WHT) | ☐ RAL: |
| | ☐ Bronze (BRZ) | ☐ Silver (SLV) | ☐ CUS: |



Wall luminaire - directed light					Required wiring box
	LED	A	B	C	
22 215	ADA 2.1 W	3 1/2	3 3/4	2 3/8	19 538

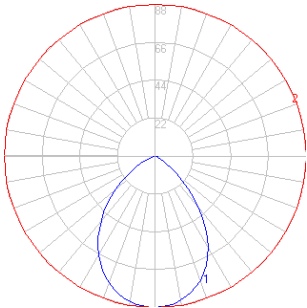


TYPE S13



Photometric Filename: 22215.ies

TEST: BE22215
TEST LAB: BEGA
DATE: 9/18/2015
LUMINAIRE: 22 215
LAMP: 2.1W LED

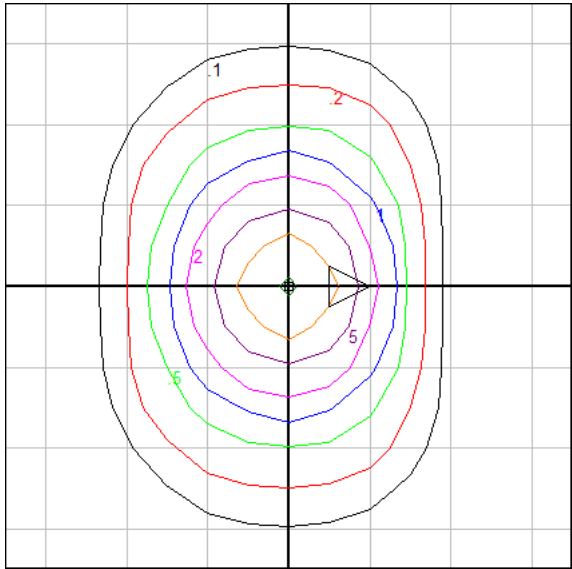


Characteristics

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	173
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	58
Total Luminaire Watts	3
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.08
Spacing Criterion (90-270)	1.18
Spacing Criterion (Diagonal)	1.22
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.10 ft
Luminous Width (90-270)	0.26 ft
Luminous Height	0.00 ft
R9 Value	54.10

Zonal Lumen Summary

Zone	Lumens
0-10	8.26
10-20	23.19
20-30	33.47
30-40	36.38
40-50	31.68
50-60	22.07
60-70	12.27
70-80	4.99
80-90	0.80
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



Mounting Height = 2 ft. Grid Spacing = 2 ft.

In the interest of product improvement, BEGA reserves the right to make technical changes without notice.

Noise and Vibration (14-526 (d) 7)

Not Applicable. There is no equipment associated with the proposed use that would result in the generation of noise or vibrations.

Signage and Wayfinding (14-526 (d) 8)

Please see the plan set for signage information.

Zone Related Design Standards (14-526 (d) 5)

The Proposed project has been designed to meet the design requirements of the B5b zone outlined in the City of Portland Design Manual:

- a. *Shared infrastructure: Shared circulation, parking, and transportation infrastructure shall be provided to the extent practicable, with utilization of joint curb cuts, walkways, service alleys, bus pull-out areas and related infrastructure shared with abutting lots and roadways. Easements of access for abutting properties and shared internal access points at property lines shall be provided where possible to facilitate present or future sharing of access and infrastructure.*

The proposed development is Phase 3 of the 383 Commercial Street project and has been designed to work in a cohesive manner with Phase 1 and 2 (Lots 1 & 2). The three phases share a parking garage. There are existing easements in place for drainage and utilities, as well as the Vehicular, pedestrian access and parking.

- b. *Buildings and uses shall be located close to the street where practicable. Corner lots shall fill into the corner and shall provide an architectural presence and focus to mark the corner.*

The proposed development has been designed with the appropriate street setbacks for the zone.

- c. *Buildings shall be oriented toward the street and shall include prominent facades with windows and entrances oriented toward the street. Uses that include public access to a building or commercial/office uses in mixed-use developments shall be oriented toward major streets whenever possible.*

The proposed development has been oriented towards Commercial Street. The development is mixed-use with retail space located along Commercial Street on the first floor and residential space on the upper levels.

- d. *Parking lots shall be located to the maximum extent practicable toward the rear of the property and shall be located along property lines where joint use or combined parking areas with abutting properties are proposed or anticipated.*

The proposed parking garage is shared by the three lots that comprise the 383 Commercial Street block. The garage is located behind the retail and residential space that is situated along Commercial Street.

For more detailed information please see the site plan.



STORMWATER MANAGEMENT REPORT

For

**383 COMMERCIAL STREET – PHASE 3
PORTLAND, MAINE**

Prepared for

Deering Property Development, LLC
2730 Transit Road
West Seneca, New York 14224

June 2020

Table of Contents

Contents

I. Introduction.....	1
II. Existing Conditions	1
III. Soils.....	2
IV. Proposed Site Improvements.....	2
V. Existing Conditions Model.....	3
VI. Proposed Conditions Model.....	3
VII. Stormwater Management.....	3
Basic Standard - Chapter 500, Section 4(B)	3
General Standard - Chapter 500, Section 4(C).....	3
Flooding Standard - Chapter 500, Section 4(F).....	4
City of Portland	5
VIII. Summary.....	6

Appendices

Appendix 1: Stormwater Quality Calculations	
Appendix 2A: Hydrologic Modeling– Existing Conditions (HydroCAD)Summary	
Appendix 2B: Hydrologic Modeling – Proposed Conditions (HydroCAD) Summary	
Appendix 3: Inspection, Maintenance and Housekeeping Plan	
Appendix 4: Subsurface Investigations	
Appendix 5: Stormwater Management Plans	
Appendix 6: Flood Insurance Rate Map	

**STORMWATER MANAGEMENT REPORT
383 COMMERCIAL STREET – PHASE 3
PORTLAND, MAINE**

I. Introduction

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

The project was originally proposed to be constructed in three phases and consist of redevelopment of a 2.59-acre parcel. In phases one and two, six of the seven existing buildings were removed to allow for the construction of a multi-story hotel, residential, and retail building with two parking levels. The three phases were permitted in 2018 through the City of Portland for Level III site plan approval. The first two phases were designed and permitted for the construction of a hotel as well as a residential and retail space. The third phase was originally designed as a vacant parking lot that would eventually be constructed into future building space. The third phase of the project was analyzed as full impervious area to take into account any future buildout.

An amendment to the current stormwater management plan is being prepared for a proposed building in phase 3 as well as additional landscaped area that will be associated with the new development. This new development will be a redevelopment of the parking area that was permitted for Phase 3 in 2018. The new redeveloped area in Phase 3 will be treated by the stormfilter system that was installed in Phase 2.

Based upon the anticipated development, the project is subject to the Chapter 500 Basic and General standards. The proposed erosion controls, inspection and maintenance criteria, and the stormwater management systems have been designed to meet MDEP and City of Portland requirements.

II. Existing Conditions

The site is located in the City block bordered by Commercial Street (east side), York Street (west side), High Street (south side) and Maple Street (north side). The parcel was originally fully developed with seven buildings and extensive paved areas and was the former location of Deering Lumber Company. The existing site currently consists of the construction of phase 1 and 2 as designed and permitted in the previous submittal, while the existing site at the phase 3 location consists of a paved area and an existing building that formerly served as the Rufus Deering Lumber Company building.

Stormwater from this site is currently collected through the new storm drainage systems that were constructed and is routed to the City's storm drainage infrastructure in Maple, Commercial, and High Streets. The City's storm drainage is discharged to the brackish portion of the Fore River.

The proposed development area of the site is not located in an identified flood zone per the FEMA Flood Insurance Rate Map for the City of Portland, Community Panel 230051 0013 B dated July 17, 1986. A copy of the Flood Insurance Rate Map is attached in appendix 6.

III. Soils

Soil information for the site was obtained via the USDS United States Department of Agriculture and natural Resource Conservation Service's Web Soil Survey. The Hydrologic Groups (HSG) of the soils on site as classified by the Soil Conservation Service is as follows:

Soil Map Symbol	Soil Name	Slope (%)	HSG
Cu	Cut and fill land	0-35	A
HIB	Hinckley loam sand	3-8	A

Hydrologic Soil Group boundaries are delineated on the Watershed Map. A copy of the Medium Intensity Soil Survey is included as Appendix 4.

IV. Proposed Site Improvements

The developer proposes to construct a multi-story residential and retail building with two parking levels. Phase 3 of this site is accessed via an existing driveway from Commercial Street and two driveway access aisles from the project that were constructed to the north.

Phases one and two are currently in the construction phase and the area of phase 3 will be redeveloped from the surface parking lot into the proposed residential and retail space. The stormwater analysis for the permitting of phases 1 and 2 was developed to consider the future development of phase 3 which will include the demolition of the remaining existing building and construction of a new building effectively redeveloping the remainder of the site.

The total proposed development (including phases 1, 2, and 3) will result in the following:

Total disturbed/developed area = 2.59 acres
Total impervious area = 2.38 acres

v. Existing Conditions Model

The pre-development watershed plan consists of three subcatchments labeled 1, through 3 in the HydroCAD model. One location is identified as Point of Analysis (POA) for comparing peak runoff rates. This POA models the City of Portland stormwater infrastructure in Commercial Street.

POA-1 is located along the easterly side of the lot where runoff leaves the site into the City of Portland Stormwater Infrastructure. Watersheds 1, 2, and 3 contribute runoff to this study point with an overall runoff area of approximately 2.70 acres.

vi. Proposed Conditions Model

The post-development watershed area consists of the same overall area as the pre-development plan, however, the pre-development subcatchments have been broken into smaller watersheds as a result of the proposed development.

POA1: Post-development subcatchments 13, 14, and 21 represent the areas that drain away from the site and are left untreated. Subcatchments 11, 12, 23, 24, 25, 27, and 28 represent the areas that were developed in Phases 1 and 2. Subcatchments 22 and 26 represent the proposed areas of development in Phase 3. The overall tributary area associated with POA-1 is approximately 2.70 acres.

The two Best Management Practices (Stormfilters) have been designed and sized by Contech Engineered Solutions for proper treatment and detention for the proposed impervious and developed area. Sizing calculations used for the 2018 design can be found in Appendix 1.

vii. Stormwater Management

Basic Standard - Chapter 500, Section 4(B)

Since the project will disturb more than one (1) acre of land area, MDEP Basic Standards apply, requiring that grading or other construction activities on the site do not impede or otherwise alter drainage ways to have an unreasonable adverse impact. We have avoided adverse impacts by providing an Erosion & Sedimentation Control Plan, and an Inspection, Maintenance and Housekeeping Plan (Appendix 3) to be implemented during construction and post-construction stabilization of the site. These construction requirements have been developed following Best Management Practice guidelines.

General Standard - Chapter 500, Section 4(C)

Since the project will create more than one (1) acre of impervious surface, MDEP General Standards apply, which require a project's stormwater management system to include

treatment measures that will mitigate for the increased frequency and duration of channel erosive flows due to runoff from smaller storms, provide for effective treatment of pollutants in stormwater, and mitigate potential temperature impacts. The General Standards require treatment of no less than 95% of the site's created impervious area and no less than 80% of the site's created developed area (landscaped area and impervious area combined). Redevelopment standards apply because the proposed building will replace existing buildings and pavement areas. After completing the calculations outlined in §4.C(2)(d) of Chapter 500, the ranked impact change due to redevelopment is calculated to be -0.10, requiring that 0.0% of developed area be treated. However, the minimum level of treatment required by the City of Portland Technical manual is 50% for redevelopment projects.

The attached treatment table summarizes the total impervious and developed areas for the proposed development and indicates the BMP measures proposed for treating the impervious areas. The conclusion is a tabulation of the effective treatment percentages for the proposed development. The results of this tabulation indicate the following:

- The post-development area requiring treatment includes approximately 2.38 acres of impervious area and a total of approximately 2.59 acres of developed area.
- The redevelopment standard requires treatment for 50% of the new impervious areas. As such, the site is required to provide treatment for a minimum of 1.19 acres. The total area receiving treatment is approximately 1.25 acres or 52.57%.
- The redevelopment standard requires treatment for 50% of the new developed areas. As such, the site is required to provide treatment for a minimum of 1.35 acres. The total area receiving treatment is approximately 1.39 acres or 51.71%.

To mitigate the changes in hydrologic patterns due to the development of this project, two stormfilter systems designed and sized by Contech Engineered Solutions have been implemented into the stormwater management infrastructure. Filtration BMPs are very effective at removing a wide range of pollutants through the use of organic soil filter media.

BMP sizing information from Contech and treatment calculations are provided in Appendix 1.

Through the use of the aforementioned BMP's 52.57% of new impervious area and 51.71% of new developed area will be receiving treatment. This meets the requirements for the Maine DEP Redevelopment Standards.

Flooding Standard - Chapter 500, Section 4(F)

Since the planned project will create less than three (3) acres of impervious surface, MDEP Flooding Standards are not required to be met. The Flooding Standard requires a project's

stormwater management system detain, retain, or result in the infiltration of stormwater from 24-hour storms of the 2, 10, and 25-year frequencies such that the peak flows of stormwater from the project site do not exceed the peak flows of stormwater prior to undertaking the project. As such, a runoff evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations. The stormwater system has been adequately sized however, to detain the stormwater such that the peak flow rates in the post-development model do not exceed the peak flow rates in the pre-development model.

City of Portland:

In accordance with Section 5.II.D of the City of Portland Technical manual, all projects not subject to requirements of an existing Site Law or Stormwater Management Law Permit that include redevelopment of non-roof impervious area greater than 5,000 square-feet and are subject to City of Portland review shall provide stormwater quality treatment in accordance with the General Standards for no less than 50% of the redeveloped impervious area. The runoff from any up-gradient area must be either directed away from the stormwater treatment measure or that measure must be sized to treat the runoff from the up-gradient area.

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

The 24-hour rainfall values utilized in the hydrologic model were obtained from Appendix H of MDEP's Chapter 500: Stormwater Management (effective date August 2015). Rainfall values for Cumberland County are listed in the table below.

Storm Frequency Precipitation (in./24 hr) Cumberland County	
2-year	3.1
10-year	4.6
25-year	5.8

The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions.

Peak Runoff Rate Summary Table			
Analysis Point	Storm Event	Existing Conditions (cfs)	Proposed Conditions (cfs)
POA-1	2-year	7.1	6.6
	10-year	11.0	10.6
	25-year	14.2	13.7

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

VIII. Summary

Erosion and sedimentation controls, inspection and maintenance procedures and general housekeeping requirements have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

By utilizing Best Management practices, stormwater quality treatment has been provided for at least 50% of the total impervious area and at least 50% of the total developed area. Based on the modeling data, the post-development peak rates of runoff for the 2-year, 10-year and 25-year storm events demonstrate decreases in the peak rates of runoff when compared to the pre-development peak rates of runoff.

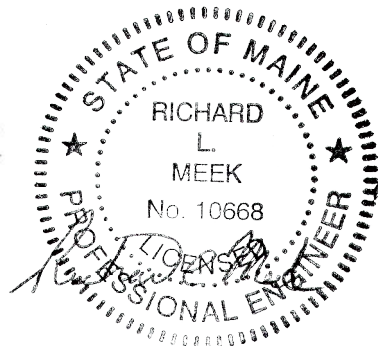
With the incorporation of the above referenced erosion control, treatment and detention measures, the project has been designed in conformance with the Maine Department of Environmental Protection Chapter 500 Stormwater Law and City of Portland Stormwater Management Standards. Accordingly, it is anticipated that stormwater runoff from the proposed development will not cause a significant adverse effect to off-site receiving channels or downstream properties.

Prepared by:
SEBAGO TECHNICS, INC.



Richard L. Meek, P.E.
Senior Project Engineer

RLM



Appendix 1

Stormwater Quality Calculations

Table 1: MDEP GENERAL STANDARD CALCULATIONS

Job # 16324

*

AREA ID	WATERSHED SIZE (S.F.)	EXISTING IMPERVIOUS AREA (S.F.)	NEW IMPERVIOUS AREA (S.F.)	EXISTING LANDSCAPED AREA (S.F.)	NEW ONSITE LANDSCAPED AREA (S.F.)	NET NEW DEVELOPED AREA (S.F.)	NET EXISTING DEVELOPED AREAS (S.F.)	TREATMENT PROVIDED?	IMPERVIOUS AREA TREATED (S.F.)	LANDSCAPED AREA TREATED* (S.F.)	DEVELOPED AREA TREATED (S.F.)	TREATMENT BMP
11	14,039	0	13,415	0	624	14,039	0	NO	0	0	0	None
12	21,188	0	19,144	0	2,044	21,188	0	YES	19,144	2,044	21,188	Storm Filter 1
13	678	678	0	0	0	0	678	NO	0	0	0	None
14	8,008	0	3,874	0	4,134	8,008	0	NO	0	0	0	None
21	2,427	0	2,427	0	0	2,427	0	NO	0	0	0	None
22	18,158	0	15,629	0	2,529	18,158	0	NO	0	0	0	None
23	13,872	0	13,872	0	0	13,872	0	NO	0	0	0	None
24	14,780	0	13,246	0	1,534	14,780	0	YES	13,246	1,534	14,780	Storm Filter 2
25	1,705	0	1,705	0	0	1,705	0	YES	1,705	0	1,705	Storm Filter 2
26	17,094	0	14,707	0	2,387	17,094	0	YES	14,707	2,387	17,094	Storm Filter 2
27	2,880	0	2,880	0	0	2,880	0	YES	2,880	0	2,880	Storm Filter 2
28	2,868	0	2,868	0	0	2,868	0	YES	2,868	0	2,868	Storm Filter 2
TOTAL (S.F.)	117,697	678	103,767	0	13,252	117,019	678		54,550	5,965	60,515	

TOTAL NEW IMPERVIOUS AREA (S.F.)	103,767	TOTAL DEVELOPED AREA (S.F.)	117,019
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT (S.F.)	54,550	TOTAL DEV. AREA RECEIVING TREATMENT (S.F.)	60,515
% OF IMPERVIOUS AREA RECEIVING TREATMENT	52.57%	% OF DEV. AREA RECEIVING TREATMENT	51.71%

Table 2: MDEP GENERAL STANDARD CALCULATIONS: 383 Commercial Street, Portland, Maine

Existing Areas by Pollutant Ranking (S.F.)							Proposed Areas by Pollutant Ranking (S.F.)						
0	1	2	3	4	5	SUM	0	1	2	3	4	5	SUM
10,554	0	1,473	105,670	0	0	117,697	0	5,105	34,563	78,029	0	0	117,697

Existing Areas by Pollutant Ranking (acres)							Proposed Areas by Pollutant Ranking (S.F.)						
0	1	2	3	4	5	SUM	0	1	2	3	4	5	SUM
0.24	0.00	0.03	2.43	0.00	0.00	2.70	0.00	0.12	0.79	1.79	0.00	0.00	2.70

Existing Weighted Average (Item A)	Proposed Weighted Average (Item B)
7.35	7.08

Total Existing Development Area (acres)	Total Redevelopment Area (acres)
2.70	2.70

Total Existing Development Area (acres) - Excludes Area With Pollutant Impact Ranking of 0	Ranked Impact Change Due to Redevelopment (Item E)
2.46	-0.10

Percent Increase in Developed Area
8.97%

Treatment Levels for Redevelopment Projects	
Ranked Impact Change Due to Redevelopment (Item E)	Percentage of Developed Area that Must be Treated
0.0 or less	0% (Stormwater projects) 50% (Site projects)
≤ 0.0 to ≥ 1.0	60%
> 1.0 to ≥ 2.0	70%
> 2.0 to ≥ 3.0	80%
> 3.0	Same treatment level as for new development



Determining Number of Cartridges for Systems Downstream of Detention

CONTECH Engineered Solutions Engineer:
Date Prepared:

NTB
5/3/2018

Site Information

Project Name
Project State
Project Location
Drainage Area, Ad
Impervious Area, Ai
Pervious Area, Ap
% Impervious
Runoff Coefficient, Rc

383 Commercial Street - Phase 2
Maine
Portland

0.44 ac
0.44 ac
0.00
100%
0.95

Upstream Detention System

Water Quality Volume
24-hr release rate
Detention pretreatment credit

1601 cf
8.32 gpm
50%

Mass loading calculations

Mean Annual Rainfall, P
Agency required % removal
Percent Runoff Capture
MEDEP Mean Annual Runoff, Vt
Event Mean Concentration of Pollutant, EMC
Annual Mass Load, M_{total}

47 in
85%
85%
64,402 ft³
70 mg/l
281.26 lbs

Filter System

Filtration brand
Cartridge height
Specific Flow Rate per MEDEP authorization

StormFilter
27 in
3.00 gpm/cart

Number of cartridges - mass loading

Mass removed by pretreatment system, M_{pre}
Mass load to filters after pretreatment, M_{pass1}
Estimate the required filter efficiency, E_{filter}
Mass to be captured by filters, M_{filter}
Allowable Cartridge Flow rate, Q_{cart}
Mass load per cartridge, M_{cart} (lbs)
Number of Cartridges required, N_{mass}
Treatment Capacity

140.63 lbs
140.63 lbs
0.70
98.44 lbs
22.50
54.00 lbs
2
6.00 gpm

Determine Critical Sizing Value

Number of Cartridges using $Q_{release\ treat}$, N_{flow}

3

Method to Use:

HYDRAULIC

SUMMARY	
Hydraulic	
Treatment Flow Rate (gpm)	8.32
Cartridge Flow Rate (gpm)	3.0
Number of Cartridges	3
Mass Loading	
Treatment Mass (lbs)	98.44
Cartridge Mass Capacity (lbs)	54.00
Number of Cartridges	2



Determining Number of Cartridges for Systems Downstream of Detention

CONTECH Engineered Solutions Engineer:
Date Prepared:

NTB
5/3/2018

Site Information

Project Name
Project State
Project Location
Drainage Area, Ad
Impervious Area, Ai
Pervious Area, Ap
% Impervious
Runoff Coefficient, Rc

383 Commercial Street - Phase 2
Maine
Portland

0.82 ac
0.82 ac
0.00
100%
0.95

Upstream Detention System

Water Quality Volume
24-hr release rate
Detention pretreatment credit

2977 cf
15.47 gpm
50%

Mass loading calculations

Mean Annual Rainfall, P
Agency required % removal
Percent Runoff Capture
MEDEP Mean Annual Runoff, Vt
Event Mean Concentration of Pollutant, EMC
Annual Mass Load, M_{total}

47 in
85%
85%
119,750 ft³
70 mg/l
522.99 lbs

Filter System

Filtration brand
Cartridge height
Specific Flow Rate per MEDEP authorization

StormFilter
27 in
3.00 gpm/cart

Number of cartridges - mass loading

Mass removed by pretreatment system, M_{pre}
Mass load to filters after pretreatment, M_{pass1}
Estimate the required filter efficiency, E_{filter}
Mass to be captured by filters, M_{filter}
Allowable Cartridge Flow rate, Q_{cart}
Mass load per cartridge, M_{cart} (lbs)
Number of Cartridges required, N_{mass}
Treatment Capacity

261.49 lbs
261.49 lbs
0.70
183.05 lbs
22.50
54.00 lbs
4
12.00 gpm

Determine Critical Sizing Value

Number of Cartridges using $Q_{release\ treat}$, N_{flow}

6

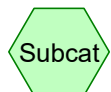
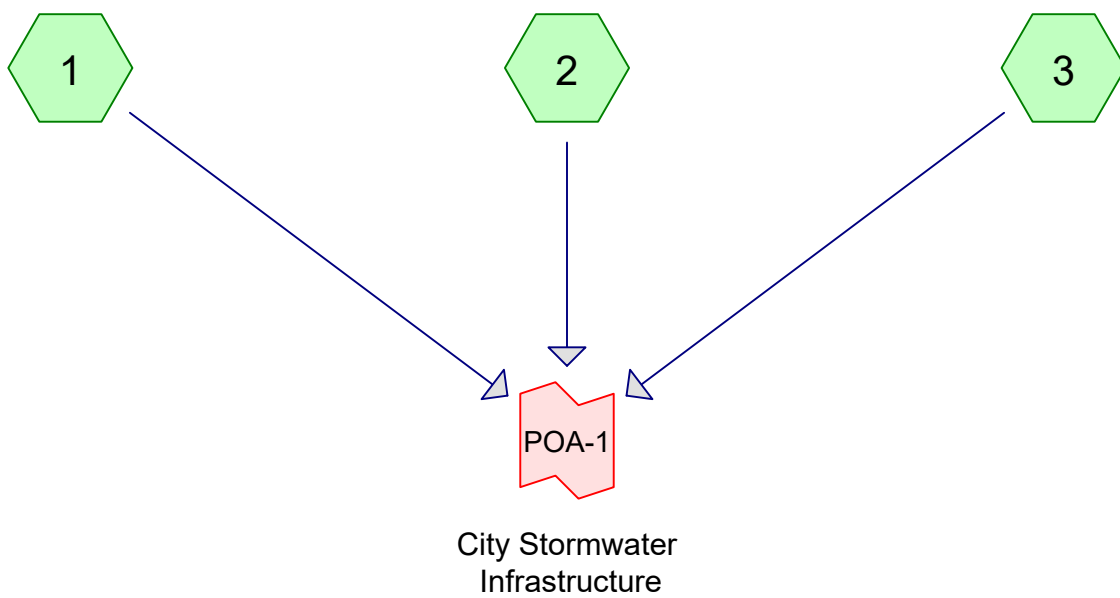
Method to Use:

HYDRAULIC

SUMMARY	
Hydraulic	
Treatment Flow Rate (gpm)	15.47
Cartridge Flow Rate (gpm)	3.0
Number of Cartridges	6
Mass Loading	
Treatment Mass (lbs)	183.05
Cartridge Mass Capacity (lbs)	54.00
Number of Cartridges	4

Appendix 2A

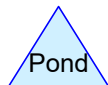
Hydrologic Modeling Existing Conditions HydroCAD Summary



Subcat



Reach



Pond



Link

Routing Diagram for 16324-Phase 3_Pre 2020-02-27
Prepared by Sebago Technics, Inc., Printed 3/24/2020
HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.206	39	>75% Grass cover, Good, HSG A (1, 3)
2.496	98	Impervious (1, 2, 3)
2.702	94	TOTAL AREA

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Runoff Area=52,431 sf 89.92% Impervious Runoff Depth>2.13"
Tc=6.0 min CN=92 Runoff=3.0 cfs 0.213 af

Subcatchment2: Runoff Area=60,163 sf 100.00% Impervious Runoff Depth>2.68"
Tc=6.0 min CN=98 Runoff=4.1 cfs 0.309 af

Subcatchment3: Runoff Area=5,103 sf 28.04% Impervious Runoff Depth>0.21"
Tc=6.0 min CN=56 Runoff=0.0 cfs 0.002 af

Link POA-1: City Stormwater Infrastructure Inflow=7.1 cfs 0.524 af
Primary=7.1 cfs 0.524 af

Total Runoff Area = 2.702 ac Runoff Volume = 0.524 af Average Runoff Depth = 2.33"
7.61% Pervious = 0.206 ac 92.39% Impervious = 2.496 ac

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Runoff Area=52,431 sf 89.92% Impervious Runoff Depth>3.50"
Tc=6.0 min CN=92 Runoff=4.9 cfs 0.351 af

Subcatchment2: Runoff Area=60,163 sf 100.00% Impervious Runoff Depth>4.05"
Tc=6.0 min CN=98 Runoff=6.1 cfs 0.467 af

Subcatchment3: Runoff Area=5,103 sf 28.04% Impervious Runoff Depth>0.75"
Tc=6.0 min CN=56 Runoff=0.1 cfs 0.007 af

Link POA-1: City Stormwater Infrastructure Inflow=11.0 cfs 0.825 af
Primary=11.0 cfs 0.825 af

Total Runoff Area = 2.702 ac Runoff Volume = 0.825 af Average Runoff Depth = 3.66"
7.61% Pervious = 0.206 ac 92.39% Impervious = 2.496 ac

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

Subcatchment1: Runoff Area=52,431 sf 89.92% Impervious Runoff Depth>4.60"
Tc=6.0 min CN=92 Runoff=6.3 cfs 0.462 af

Subcatchment2: Runoff Area=60,163 sf 100.00% Impervious Runoff Depth>5.15"
Tc=6.0 min CN=98 Runoff=7.7 cfs 0.592 af

Subcatchment3: Runoff Area=5,103 sf 28.04% Impervious Runoff Depth>1.33"
Tc=6.0 min CN=56 Runoff=0.2 cfs 0.013 af

Link POA-1: City Stormwater Infrastructure

Inflow=14.2 cfs 1.067 af
Primary=14.2 cfs 1.067 af

Total Runoff Area = 2.702 ac Runoff Volume = 1.067 af Average Runoff Depth = 4.74"
7.61% Pervious = 0.206 ac 92.39% Impervious = 2.496 ac

Summary for Subcatchment 1:

Runoff = 6.3 cfs @ 12.09 hrs, Volume= 0.462 af, Depth> 4.60"

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

Area (sf)	CN	Description
5,284	39	>75% Grass cover, Good, HSG A
* 47,147	98	Impervious
52,431	92	Weighted Average
5,284		10.08% Pervious Area
47,147		89.92% Impervious Area

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

Summary for Subcatchment 2:

Runoff = 7.7 cfs @ 12.09 hrs, Volume= 0.592 af, Depth> 5.15"

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

Area (sf)	CN	Description
* 60,163	98	Impervious
60,163		100.00% Impervious Area

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

Summary for Subcatchment 3:

Runoff = 0.2 cfs @ 12.10 hrs, Volume= 0.013 af, Depth> 1.33"

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

Area (sf)	CN	Description
3,672	39	>75% Grass cover, Good, HSG A
* 1,431	98	Impervious
5,103	56	Weighted Average
3,672		71.96% Pervious Area
1,431		28.04% Impervious Area

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

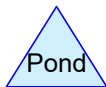
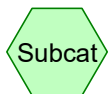
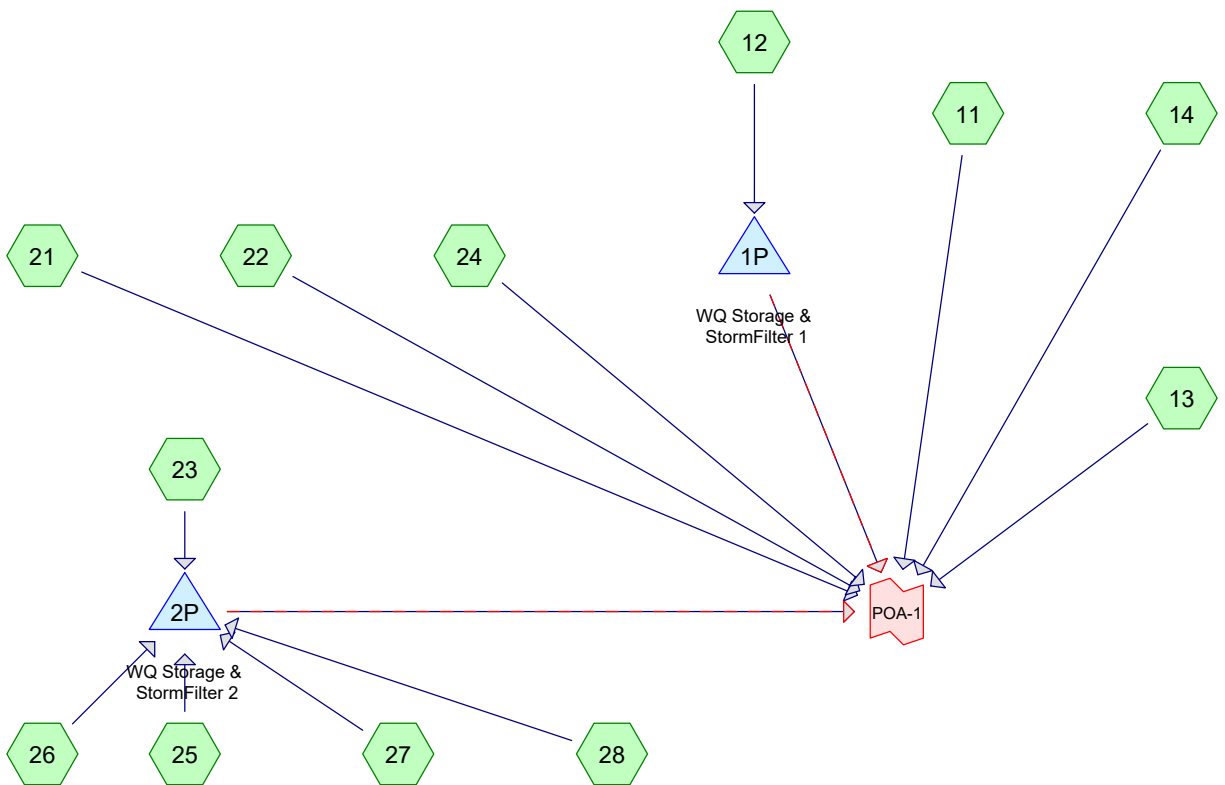
Summary for Link POA-1: City Stormwater Infrastructure

Inflow Area = 2.702 ac, 92.39% Impervious, Inflow Depth > 4.74" for 25-Year event
 Inflow = 14.2 cfs @ 12.09 hrs, Volume= 1.067 af
 Primary = 14.2 cfs @ 12.09 hrs, Volume= 1.067 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Appendix 2B

Hydrologic Modeling Proposed Conditions HydroCAD Summary



Routing Diagram for 16324-Phase 3_Post 2020-02-27
 Prepared by Sebago Technics, Inc., Printed 3/24/2020
 HydroCAD® 10.00-24 s/n 01856 © 2018 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.304	39	>75% Grass cover, Good, HSG A (11, 12, 14, 22, 24, 26)
2.398	98	Impervious (11, 12, 13, 14, 21, 22, 23, 24, 25, 26, 27, 28)
2.702	91	TOTAL AREA

Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment11: Runoff Area=14,039 sf 95.56% Impervious Runoff Depth=2.55"
 Tc=6.0 min CN=95 Runoff=0.9 cfs 0.068 af

Subcatchment12: Runoff Area=21,188 sf 90.35% Impervious Runoff Depth=2.26"
 Tc=6.0 min CN=92 Runoff=1.2 cfs 0.091 af

Subcatchment13: Runoff Area=678 sf 100.00% Impervious Runoff Depth=2.87"
 Tc=6.0 min CN=98 Runoff=0.0 cfs 0.004 af

Subcatchment14: Runoff Area=8,008 sf 48.38% Impervious Runoff Depth=0.68"
 Tc=6.0 min CN=68 Runoff=0.1 cfs 0.010 af

Subcatchment21: Runoff Area=2,427 sf 100.00% Impervious Runoff Depth=2.87"
 Tc=6.0 min CN=98 Runoff=0.2 cfs 0.013 af

Subcatchment22: Runoff Area=18,158 sf 86.07% Impervious Runoff Depth=2.08"
 Tc=6.0 min CN=90 Runoff=1.0 cfs 0.072 af

Subcatchment23: Runoff Area=13,872 sf 100.00% Impervious Runoff Depth=2.87"
 Tc=6.0 min CN=98 Runoff=0.9 cfs 0.076 af

Subcatchment24: Runoff Area=14,780 sf 89.62% Impervious Runoff Depth=2.26"
 Tc=6.0 min CN=92 Runoff=0.9 cfs 0.064 af

Subcatchment25: Runoff Area=1,705 sf 100.00% Impervious Runoff Depth=2.87"
 Tc=6.0 min CN=98 Runoff=0.1 cfs 0.009 af

Subcatchment26: Runoff Area=17,094 sf 86.04% Impervious Runoff Depth=2.08"
 Tc=6.0 min CN=90 Runoff=0.9 cfs 0.068 af

Subcatchment27: Runoff Area=2,880 sf 100.00% Impervious Runoff Depth=2.87"
 Tc=6.0 min CN=98 Runoff=0.2 cfs 0.016 af

Subcatchment28: Runoff Area=2,868 sf 100.00% Impervious Runoff Depth=2.87"
 Tc=6.0 min CN=98 Runoff=0.2 cfs 0.016 af

Pond 1P: WQ Storage & StormFilter 1 Peak Elev=8.03' Storage=610 cf Inflow=1.2 cfs 0.091 af
 Primary=0.0 cfs 0.028 af Secondary=1.2 cfs 0.064 af Outflow=1.2 cfs 0.091 af

Pond 2P: WQ Storage & StormFilter 2 Peak Elev=9.16' Storage=1,888 cf Inflow=2.4 cfs 0.185 af
 Primary=0.0 cfs 0.089 af Secondary=2.3 cfs 0.096 af Outflow=2.4 cfs 0.185 af

Link POA-1: Inflow=6.6 cfs 0.508 af
 Primary=6.6 cfs 0.508 af

Total Runoff Area = 2.702 ac Runoff Volume = 0.508 af Average Runoff Depth = 2.26"
11.26% Pervious = 0.304 ac 88.74% Impervious = 2.398 ac

Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment11: Runoff Area=14,039 sf 95.56% Impervious Runoff Depth=4.02"
Tc=6.0 min CN=95 Runoff=1.4 cfs 0.108 af

Subcatchment12: Runoff Area=21,188 sf 90.35% Impervious Runoff Depth=3.70"
Tc=6.0 min CN=92 Runoff=2.0 cfs 0.150 af

Subcatchment13: Runoff Area=678 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.1 cfs 0.006 af

Subcatchment14: Runoff Area=8,008 sf 48.38% Impervious Runoff Depth=1.60"
Tc=6.0 min CN=68 Runoff=0.3 cfs 0.025 af

Subcatchment21: Runoff Area=2,427 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.2 cfs 0.020 af

Subcatchment22: Runoff Area=18,158 sf 86.07% Impervious Runoff Depth=3.49"
Tc=6.0 min CN=90 Runoff=1.6 cfs 0.121 af

Subcatchment23: Runoff Area=13,872 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=1.4 cfs 0.116 af

Subcatchment24: Runoff Area=14,780 sf 89.62% Impervious Runoff Depth=3.70"
Tc=6.0 min CN=92 Runoff=1.4 cfs 0.105 af

Subcatchment25: Runoff Area=1,705 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.2 cfs 0.014 af

Subcatchment26: Runoff Area=17,094 sf 86.04% Impervious Runoff Depth=3.49"
Tc=6.0 min CN=90 Runoff=1.5 cfs 0.114 af

Subcatchment27: Runoff Area=2,880 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.3 cfs 0.024 af

Subcatchment28: Runoff Area=2,868 sf 100.00% Impervious Runoff Depth=4.36"
Tc=6.0 min CN=98 Runoff=0.3 cfs 0.024 af

Pond 1P: WQ Storage & StormFilter 1 Peak Elev=8.13' Storage=652 cf Inflow=2.0 cfs 0.150 af
Primary=0.0 cfs 0.029 af Secondary=1.9 cfs 0.121 af Outflow=1.9 cfs 0.150 af

Pond 2P: WQ Storage & StormFilter 2 Peak Elev=9.32' Storage=1,905 cf Inflow=3.7 cfs 0.292 af
Primary=0.0 cfs 0.099 af Secondary=3.7 cfs 0.194 af Outflow=3.7 cfs 0.292 af

Link POA-1: Inflow=10.6 cfs 0.827 af
Primary=10.6 cfs 0.827 af

Total Runoff Area = 2.702 ac Runoff Volume = 0.827 af Average Runoff Depth = 3.67"
11.26% Pervious = 0.304 ac 88.74% Impervious = 2.398 ac

Time span=0.00-60.00 hrs, dt=0.05 hrs, 1201 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment11: Runoff Area=14,039 sf 95.56% Impervious Runoff Depth=5.21"
Tc=6.0 min CN=95 Runoff=1.8 cfs 0.140 af

Subcatchment12: Runoff Area=21,188 sf 90.35% Impervious Runoff Depth=4.87"
Tc=6.0 min CN=92 Runoff=2.6 cfs 0.198 af

Subcatchment13: Runoff Area=678 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.1 cfs 0.007 af

Subcatchment14: Runoff Area=8,008 sf 48.38% Impervious Runoff Depth=2.47"
Tc=6.0 min CN=68 Runoff=0.5 cfs 0.038 af

Subcatchment21: Runoff Area=2,427 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.3 cfs 0.026 af

Subcatchment22: Runoff Area=18,158 sf 86.07% Impervious Runoff Depth=4.65"
Tc=6.0 min CN=90 Runoff=2.1 cfs 0.162 af

Subcatchment23: Runoff Area=13,872 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=1.8 cfs 0.148 af

Subcatchment24: Runoff Area=14,780 sf 89.62% Impervious Runoff Depth=4.87"
Tc=6.0 min CN=92 Runoff=1.8 cfs 0.138 af

Subcatchment25: Runoff Area=1,705 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.2 cfs 0.018 af

Subcatchment26: Runoff Area=17,094 sf 86.04% Impervious Runoff Depth=4.65"
Tc=6.0 min CN=90 Runoff=2.0 cfs 0.152 af

Subcatchment27: Runoff Area=2,880 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.4 cfs 0.031 af

Subcatchment28: Runoff Area=2,868 sf 100.00% Impervious Runoff Depth=5.56"
Tc=6.0 min CN=98 Runoff=0.4 cfs 0.031 af

Pond 1P: WQ Storage & StormFilter 1 Peak Elev=8.20' Storage=681 cf Inflow=2.6 cfs 0.198 af
Primary=0.0 cfs 0.030 af Secondary=2.5 cfs 0.168 af Outflow=2.5 cfs 0.198 af

Pond 2P: WQ Storage & StormFilter 2 Peak Elev=9.42' Storage=1,905 cf Inflow=4.7 cfs 0.379 af
Primary=0.0 cfs 0.102 af Secondary=4.6 cfs 0.277 af Outflow=4.7 cfs 0.379 af

Link POA-1: Inflow=13.7 cfs 1.087 af
Primary=13.7 cfs 1.087 af

Total Runoff Area = 2.702 ac Runoff Volume = 1.087 af Average Runoff Depth = 4.83"
11.26% Pervious = 0.304 ac 88.74% Impervious = 2.398 ac

Summary for Subcatchment 11:

Runoff = 1.8 cfs @ 12.09 hrs, Volume= 0.140 af, Depth= 5.21"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	13,415	98	Impervious
	624	39	>75% Grass cover, Good, HSG A
	14,039	95	Weighted Average
	624		4.44% Pervious Area
	13,415		95.56% Impervious Area

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

Summary for Subcatchment 12:

Runoff = 2.6 cfs @ 12.09 hrs, Volume= 0.198 af, Depth= 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	19,144	98	Impervious
	2,044	39	>75% Grass cover, Good, HSG A
	21,188	92	Weighted Average
	2,044		9.65% Pervious Area
	19,144		90.35% Impervious Area

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

Summary for Subcatchment 13:

Runoff = 0.1 cfs @ 12.09 hrs, Volume= 0.007 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

	Area (sf)	CN	Description
*	678	98	Impervious
	678		100.00% Impervious Area

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

Summary for Subcatchment 14:

Runoff = 0.5 cfs @ 12.10 hrs, Volume= 0.038 af, Depth= 2.47"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 3,874	98	Impervious
4,134	39	>75% Grass cover, Good, HSG A
8,008	68	Weighted Average
4,134		51.62% Pervious Area
3,874		48.38% Impervious Area

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

Summary for Subcatchment 21:

Runoff = 0.3 cfs @ 12.09 hrs, Volume= 0.026 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 2,427	98	Impervious
2,427		100.00% Impervious Area

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

Summary for Subcatchment 22:

Runoff = 2.1 cfs @ 12.09 hrs, Volume= 0.162 af, Depth= 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 15,629	98	Impervious
2,529	39	>75% Grass cover, Good, HSG A
18,158	90	Weighted Average
2,529		13.93% Pervious Area
15,629		86.07% Impervious Area

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

Summary for Subcatchment 23:

Runoff = 1.8 cfs @ 12.09 hrs, Volume= 0.148 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 13,872	98	Impervious
13,872		100.00% Impervious Area

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

Summary for Subcatchment 24:

Runoff = 1.8 cfs @ 12.09 hrs, Volume= 0.138 af, Depth= 4.87"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 13,246	98	Impervious
1,534	39	>75% Grass cover, Good, HSG A
14,780	92	Weighted Average
1,534		10.38% Pervious Area
13,246		89.62% Impervious Area

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

Summary for Subcatchment 25:

Runoff = 0.2 cfs @ 12.09 hrs, Volume= 0.018 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 1,705	98	Impervious
1,705		100.00% Impervious Area

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

Summary for Subcatchment 26:

Runoff = 2.0 cfs @ 12.09 hrs, Volume= 0.152 af, Depth= 4.65"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 14,707	98	Impervious
2,387	39	>75% Grass cover, Good, HSG A
17,094	90	Weighted Average
2,387		13.96% Pervious Area
14,707		86.04% Impervious Area

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

Summary for Subcatchment 27:

Runoff = 0.4 cfs @ 12.09 hrs, Volume= 0.031 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 2,880	98	Impervious
2,880		100.00% Impervious Area

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

Summary for Subcatchment 28:

Runoff = 0.4 cfs @ 12.09 hrs, Volume= 0.031 af, Depth= 5.56"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=5.80"

Area (sf)	CN	Description
* 2,868	98	Impervious
2,868		100.00% Impervious Area

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

Summary for Pond 1P: WQ Storage & StormFilter 1

Inflow Area = 0.486 ac, 90.35% Impervious, Inflow Depth = 4.87" for 25-Year event
 Inflow = 2.6 cfs @ 12.09 hrs, Volume= 0.198 af
 Outflow = 2.5 cfs @ 12.10 hrs, Volume= 0.198 af, Atten= 1%, Lag= 0.9 min
 Primary = 0.0 cfs @ 12.10 hrs, Volume= 0.030 af
 Secondary = 2.5 cfs @ 12.10 hrs, Volume= 0.168 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
 Peak Elev= 8.20' @ 12.10 hrs Surf.Area= 415 sf Storage= 681 cf

Plug-Flow detention time= 77.0 min calculated for 0.197 af (100% of inflow)
 Center-of-Mass det. time= 77.6 min (855.7 - 778.2)

Volume	Invert	Avail.Storage	Storage Description
#1	6.21'	1,135 cf	41.3" Round Pipe Storage x 2 L= 61.0'

Device	Routing	Invert	Outlet Devices (Turned on 1 times)
#1	Primary	5.68'	Tube/Siphon/Float Valve X 3.00 0.350" Diameter, C= 0.600, 0.250" Trickle Diameter Starts@7.93' Breaks@6.05'
#2	Secondary	7.75'	2.8' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.0 cfs @ 12.10 hrs HW=8.20' TW=0.00' (Dynamic Tailwater)

↑**1=Tube/Siphon/Float Valve** (Orifice Controls 0.0 cfs @ 7.64 fps)

Secondary OutFlow Max=2.5 cfs @ 12.10 hrs HW=8.20' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Weir Controls 2.5 cfs @ 1.99 fps)

Summary for Pond 2P: WQ Storage & StormFilter 2

Inflow Area = 0.882 ac, 93.79% Impervious, Inflow Depth = 5.16" for 25-Year event
 Inflow = 4.7 cfs @ 12.09 hrs, Volume= 0.379 af
 Outflow = 4.7 cfs @ 12.08 hrs, Volume= 0.379 af, Atten= 1%, Lag= 0.0 min
 Primary = 0.0 cfs @ 12.08 hrs, Volume= 0.102 af
 Secondary = 4.6 cfs @ 12.08 hrs, Volume= 0.277 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs
 Peak Elev= 9.42' @ 12.08 hrs Surf.Area= 0 sf Storage= 1,905 cf

Plug-Flow detention time= 147.2 min calculated for 0.379 af (100% of inflow)
 Center-of-Mass det. time= 147.9 min (909.7 - 761.8)

Volume	Invert	Avail.Storage	Storage Description
#1	4.39'	1,905 cf	59.1" Round Pipe Storage L= 100.0'

Device	Routing	Invert	Outlet Devices (Turned on 1 times)
#1	Primary	3.83'	Tube/Siphon/Float Valve X 6.00 0.350" Diameter, C= 0.600, 0.250" Trickle Diameter Starts@6.08' Breaks@4.20'
#2	Secondary	8.65'	2.1' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Primary OutFlow Max=0.0 cfs @ 12.08 hrs HW=9.41' TW=0.00' (Dynamic Tailwater)

↑**1=Tube/Siphon/Float Valve** (Orifice Controls 0.0 cfs @ 11.37 fps)

Secondary OutFlow Max=4.5 cfs @ 12.08 hrs HW=9.41' TW=0.00' (Dynamic Tailwater)

↑**2=Broad-Crested Rectangular Weir** (Weir Controls 4.5 cfs @ 2.83 fps)

Summary for Link POA-1:

Inflow Area = 2.702 ac, 88.74% Impervious, Inflow Depth = 4.83" for 25-Year event
 Inflow = 13.7 cfs @ 12.09 hrs, Volume= 1.087 af
 Primary = 13.7 cfs @ 12.09 hrs, Volume= 1.087 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-60.00 hrs, dt= 0.05 hrs

Appendix 3

Inspection, Maintenance and Housekeeping Plan

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

383 Commercial Street – Phase 3 Portland, ME

**Prepared by Richard Meek, P.E.
Sebago Technics, Inc.**

Introduction

The owner of the development is Deering Property Development, LLC. The owner's address is 2730 Transit Road, West Seneca, NY 14224. The owner of the proposed project will be responsible for the maintenance of all stormwater management structures, the establishment of any contract services required to implement the program, and the keeping of records and maintenance logbook. The owner will assure that the following maintenance program will be adhered.

Records of all inspections and maintenance work accomplished must be kept on file and retained for a minimum 5-year time span. The maintenance logbook will be made available to the Maine Department of Environmental Protection (MDEP) and the City of Portland upon request. At a minimum, the appropriate and relevant activities for each of the stormwater management systems will be performed on the prescribed schedule.

The following plan outlines the anticipated inspection, maintenance, and housekeeping procedures for the erosion and sedimentation controls as well as stormwater management devices for the project site. Also, this plan outlines several housekeeping requirements that shall be followed during and after construction. These procedures should be followed in order to ensure the intended function of the designed measures and to prevent unreasonable adverse impacts to the surrounding environment.

The procedures outlined in the Inspection, Maintenance, and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional details on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the MDEP.

During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the

site. These areas shall be inspected at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven (7) calendar days and prior to any storm event (rainfall).
3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken.

The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three (3) years from the completion of permanent stabilization.

4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on a silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event. They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Erosion Control Blankets:

- Inspect these reinforced areas semi-annually and after significant rainfall events for slumping, sliding, seepage, and scour. Pay close attention to unreinforced areas adjacent to the erosion control blankets, which may experience accelerated erosion.
- Review all applicable inspection and maintenance procedures recommended by the specific blanket manufacturer. These tasks shall be included in addition to this plan.

C. Temporary Storm Drain Inlet Protection:

- The inlet protection structure shall be inspected before each rain event and repaired as necessary.
- Sediment shall be removed and the storm drain sediment barrier restored to its original dimensions when the sediment has accumulated to half of the design depth of the trap.
- Structures shall be removed upon permanent stabilization of the tributary area.
- Upon removal of the structure, all accumulated sediments downstream of the structure shall be cleaned from the storm drain system.

D. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

E. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

F. Stabilized Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
- The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
- In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.

5. **Housekeeping:** The following general performance standards apply to the proposed project.

- A. Spill Prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
- B. Groundwater Protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
- C. Fugitive Sediment and Dust: Actions must be taken to ensure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.
- D. Debris and Other Materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
- E. Trench or Foundation Dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

After Construction

1. **Inspection:** After construction, the owner or operator shall hire a qualified post-construction stormwater inspector to at least annually, inspect the BMPs, in accordance with all municipal and state inspection, cleaning and maintenance requirements of the approved post-construction stormwater management plan.

Maintenance, and repair: If a BMP requires maintenance, repair or replacement to function as intended by the approved post-construction stormwater management plan, the owner or operator shall take corrective actions to address the deficiency or deficiencies as soon as possible after the deficiency is discovered and shall provide a record of the deficiency and corrective actions to the Department of Public Services (DPS). The following is a list of permanent erosion control and stormwater management measures and the inspection, maintenance, and housekeeping tasks to be performed after construction.

A. Vegetated Areas:

- Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems.
- Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.

B. Winter Sanding:

- Clear accumulations of winter sand in parking lots and along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

C. Catch Basins:

- Inspect and, if required, clean-out catch basins at least once a year, preferably in early spring.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.

D. Stormfilter:

- Refer to Contech – Stormfilter operation manual for guidance on required maintenance and inspection.

3. **Annual Report:** The owner or operator or a qualified post-construction stormwater inspector hired by that person, shall, on or by June 30 of each year, provide a completed and signed certification that the person has inspected the BMPs and that they are adequately maintained and functioning as intended by the approved post-construction stormwater management plan, or that they require maintenance or repair, including the record of the deficiency and corrective actions taken.
4. **Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the MDEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with MDEP standards. Upon such assumption of responsibility, and approval by the MDEP, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

Attachments

Attachment 1 – Sample Stormwater Inspection and Maintenance Form

Attachment 1 - Sample Stormwater Inspection and Maintenance Form

383 Commercial Street Portland, ME

This log is intended to accompany the stormwater Inspection, Maintenance and Housekeeping Plan for 383 Commercial Street. The following items shall be checked, cleaned and maintained on a regular basis as specified in the Maintenance Plan and as described in the table below. This log shall be kept on file for a minimum of five (5) years and shall be available for review. Qualified personnel familiar with drainage systems and soils shall perform all inspections. Attached is a copy of the construction and post-construction maintenance logs.

Item	Maintenance Required & Frequency	Date Completed	Maintenance Personnel	Comments
Ditches and Swales	Inspect after major rainfall event producing greater than 3" of rain in 2 hours.			
	Repair erosion or damage immediately.			
Catch Basins and Culverts	Remove accumulated sediment and debris			
	Sump depth			
Vegetated Areas	Inspect Slopes			
	Replant Bare Areas			
	Check after Major Storms			
Winter Sanding	Clean annually (Spring)			
	Remove sand and sediment from roadway shoulders			
Stormfilter	Inspect annually			

StormFilter Inspection and Maintenance Procedures



Maintenance Guidelines

The primary purpose of the Stormwater Management StormFilter® is to filter and prevent pollutants from entering our waterways. Like any effective filtration system, periodically these pollutants must be removed to restore the StormFilter to its full efficiency and effectiveness.

Maintenance requirements and frequency are dependent on the pollutant load characteristics of each site. Maintenance activities may be required in the event of a chemical spill or due to excessive sediment loading from site erosion or extreme storms. It is a good practice to inspect the system after major storm events.

Maintenance Procedures

Although there are many effective maintenance options, we believe the following procedure to be efficient, using common equipment and existing maintenance protocols. The following two-step procedure is recommended::

1. Inspection

- Inspection of the vault interior to determine the need for maintenance.

2. Maintenance

- Cartridge replacement
- Sediment removal

Inspection and Maintenance Timing

At least one scheduled inspection should take place per year with maintenance following as warranted.

First, an inspection should be done before the winter season. During the inspection the need for maintenance should be determined and, if disposal during maintenance will be required, samples of the accumulated sediments and media should be obtained.

Second, if warranted, a maintenance (replacement of the filter cartridges and removal of accumulated sediments) should be performed during periods of dry weather.

In addition to these two activities, it is important to check the condition of the StormFilter unit after major storms for potential damage caused by high flows and for high sediment accumulation that may be caused by localized erosion in the drainage area. It may be necessary to adjust the inspection/maintenance schedule depending on the actual operating conditions encountered by the system. In general, inspection activities can be conducted at any time, and maintenance should occur, if warranted, during dryer months in late summer to early fall.

Maintenance Frequency

The primary factor for determining frequency of maintenance for the StormFilter is sediment loading.

A properly functioning system will remove solids from water by trapping particulates in the porous structure of the filter media inside the cartridges. The flow through the system will naturally decrease as more and more particulates are trapped. Eventually the flow through the cartridges will be low enough to require replacement. It may be possible to extend the usable span of the cartridges by removing sediment from upstream trapping devices on a routine as-needed basis, in order to prevent material from being re-suspended and discharged to the StormFilter treatment system.

The average maintenance lifecycle is approximately 1-5 years. Site conditions greatly influence maintenance requirements. StormFilter units located in areas with erosion or active construction may need to be inspected and maintained more often than those with fully stabilized surface conditions.

Regulatory requirements or a chemical spill can shift maintenance timing as well. The maintenance frequency may be adjusted as additional monitoring information becomes available during the inspection program. Areas that develop known problems should be inspected more frequently than areas that demonstrate no problems, particularly after major storms. Ultimately, inspection and maintenance activities should be scheduled based on the historic records and characteristics of an individual StormFilter system or site. It is recommended that the site owner develop a database to properly manage StormFilter inspection and maintenance programs..





Inspection Procedures

The primary goal of an inspection is to assess the condition of the cartridges relative to the level of visual sediment loading as it relates to decreased treatment capacity. It may be desirable to conduct this inspection during a storm to observe the relative flow through the filter cartridges. If the submerged cartridges are severely plugged, then typically large amounts of sediments will be present and very little flow will be discharged from the drainage pipes. If this is the case, then maintenance is warranted and the cartridges need to be replaced.

Warning: In the case of a spill, the worker should abort inspection activities until the proper guidance is obtained. Notify the local hazard control agency and Contech Engineered Solutions immediately.

To conduct an inspection:

Important: Inspection should be performed by a person who is familiar with the operation and configuration of the StormFilter treatment unit.

1. If applicable, set up safety equipment to protect and notify surrounding vehicle and pedestrian traffic.
2. Visually inspect the external condition of the unit and take notes concerning defects/problems.
3. Open the access portals to the vault and allow the system vent.
4. Without entering the vault, visually inspect the inside of the unit, and note accumulations of liquids and solids.
5. Be sure to record the level of sediment build-up on the floor of the vault, in the forebay, and on top of the cartridges. If flow is occurring, note the flow of water per drainage pipe. Record all observations. Digital pictures are valuable for historical documentation.
6. Close and fasten the access portals.
7. Remove safety equipment.
8. If appropriate, make notes about the local drainage area relative to ongoing construction, erosion problems, or high loading of other materials to the system.
9. Discuss conditions that suggest maintenance and make decision as to whether or not maintenance is needed.

Maintenance Decision Tree

The need for maintenance is typically based on results of the inspection. The following Maintenance Decision Tree should be used as a general guide. (Other factors, such as Regulatory Requirements, may need to be considered)

1. Sediment loading on the vault floor.
 - a. If $>4"$ of accumulated sediment, maintenance is required.
2. Sediment loading on top of the cartridge.
 - a. If $>1/4"$ of accumulation, maintenance is required.
3. Submerged cartridges.
 - a. If $>4"$ of static water above cartridge bottom for more than 24 hours after end of rain event, maintenance is required. (Catch basins have standing water in the cartridge bay.)
4. Plugged media.
 - a. If pore space between media granules is absent, maintenance is required.
5. Bypass condition.
 - a. If inspection is conducted during an average rain fall event and StormFilter remains in bypass condition (water over the internal outlet baffle wall or submerged cartridges), maintenance is required.
6. Hazardous material release.
 - a. If hazardous material release (automotive fluids or other) is reported, maintenance is required.
7. Pronounced scum line.
 - a. If pronounced scum line (say $\geq 1/4"$ thick) is present above top cap, maintenance is required.



Maintenance

Depending on the configuration of the particular system, maintenance personnel will be required to enter the vault to perform the maintenance.

Important: If vault entry is required, OSHA rules for confined space entry must be followed.

Filter cartridge replacement should occur during dry weather. It may be necessary to plug the filter inlet pipe if base flows is occurring.

Replacement cartridges can be delivered to the site or customers facility. Information concerning how to obtain the replacement cartridges is available from Contech Engineered Solutions.

Warning: In the case of a spill, the maintenance personnel should abort maintenance activities until the proper guidance is obtained. Notify the local hazard control agency and Contech Engineered Solutions immediately.

To conduct cartridge replacement and sediment removal maintenance:

1. If applicable, set up safety equipment to protect maintenance personnel and pedestrians from site hazards.
2. Visually inspect the external condition of the unit and take notes concerning defects/problems.
3. Open the doors (access portals) to the vault and allow the system to vent.
4. Without entering the vault, give the inside of the unit, including components, a general condition inspection.
5. Make notes about the external and internal condition of the vault. Give particular attention to recording the level of sediment build-up on the floor of the vault, in the forebay, and on top of the internal components.
6. Using appropriate equipment offload the replacement cartridges (up to 150 lbs. each) and set aside.
7. Remove used cartridges from the vault using one of the following methods:

Method 1:

- A. This activity will require that maintenance personnel enter the vault to remove the cartridges from the under drain manifold and place them under the vault opening for lifting (removal). Disconnect each filter cartridge from the underdrain connector by rotating counterclockwise 1/4 of a turn. Roll the loose cartridge, on edge, to a convenient spot beneath the vault access.

Using appropriate hoisting equipment, attach a cable from the boom, crane, or tripod to the loose cartridge. Contact Contech Engineered Solutions for suggested attachment devices.

- B. Remove the used cartridges (up to 250 lbs. each) from the vault.



Important: Care must be used to avoid damaging the cartridges during removal and installation. The cost of repairing components damaged during maintenance will be the responsibility of the owner.

- C. Set the used cartridge aside or load onto the hauling truck.
- D. Continue steps a through c until all cartridges have been removed.

Method 2:

- A. This activity will require that maintenance personnel enter the vault to remove the cartridges from the under drain manifold and place them under the vault opening for lifting (removal). Disconnect each filter cartridge from the underdrain connector by rotating counterclockwise 1/4 of a turn. Roll the loose cartridge, on edge, to a convenient spot beneath the vault access.
- B. Unscrew the cartridge cap.
- C. Remove the cartridge hood and float.
- D. At location under structure access, tip the cartridge on its side.
- E. Empty the cartridge onto the vault floor. Reassemble the empty cartridge.
- F. Set the empty, used cartridge aside or load onto the hauling truck.
- G. Continue steps a through e until all cartridges have been removed.

8. Remove accumulated sediment from the floor of the vault and from the forebay. This can most effectively be accomplished by use of a vacuum truck.
9. Once the sediments are removed, assess the condition of the vault and the condition of the connectors.
10. Using the vacuum truck boom, crane, or tripod, lower and install the new cartridges. Once again, take care not to damage connections.
11. Close and fasten the door.
12. Remove safety equipment.
13. Finally, dispose of the accumulated materials in accordance with applicable regulations. Make arrangements to return the used **empty** cartridges to Contech Engineered Solutions.

Related Maintenance Activities - Performed on an as-needed basis

StormFilter units are often just one of many structures in a more comprehensive stormwater drainage and treatment system.

In order for maintenance of the StormFilter to be successful, it is imperative that all other components be properly maintained. The maintenance/repair of upstream facilities should be carried out prior to StormFilter maintenance activities.

In addition to considering upstream facilities, it is also important to correct any problems identified in the drainage area. Drainage area concerns may include: erosion problems, heavy oil loading, and discharges of inappropriate materials.

Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads.

Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.



Inspection Report

Date: Personnel:

Location: _____ System Size: _____

System Type: Vault ☐ Cast-In-Place ☐ Linear Catch Basin ☐ Manhole ☐ Other ☐

Sediment Thickness in Forebay: _____ Date: _____

Sediment Depth on Vault Floor: _____

Structural Damage: _____

Estimated Flow from Drainage Pipes (if available): _____

Cartridges Submerged: Yes ☐ No ☐ Depth of Standing Water: _____

StormFilter Maintenance Activities (check off if done and give description)

☐ Trash and Debris Removal: _____

☐ Minor Structural Repairs: _____

☐ Drainage Area Report _____

Excessive Oil Loading: Yes ☐ No ☐ Source: _____

Sediment Accumulation on Pavement: Yes ☐ No ☐ Source: _____

Erosion of Landscaped Areas: Yes ☐ No ☐ Source: _____

Items Needing Further Work: _____

Owners should contact the local public works department and inquire about how the department disposes of their street waste residuals.

Other Comments:

Review the condition reports from the previous inspection visits.

StormFilter Maintenance Report

Date: _____ Personnel: _____

Location: _____ System Size: _____

System Type: Vault ☐ Cast-In-Place ☐ Linear Catch Basin ☐ Manhole ☐ Other ☐

List Safety Procedures and Equipment Used: _____

System Observations

Months in Service: _____

Oil in Forebay (if present): Yes ☐ No ☐

Sediment Depth in Forebay (if present): _____

Sediment Depth on Vault Floor: _____

Structural Damage: _____

Drainage Area Report

Excessive Oil Loading: Yes ☐ No ☐ Source: _____

Sediment Accumulation on Pavement: Yes ☐ No ☐ Source: _____

Erosion of Landscaped Areas: Yes ☐ No ☐ Source: _____

StormFilter Cartridge Replacement Maintenance Activities

Remove Trash and Debris: Yes ☐ No ☐ Details: _____

Replace Cartridges: Yes ☐ No ☐ Details: _____

Sediment Removed: Yes ☐ No ☐ Details: _____

Quantity of Sediment Removed (estimate?): _____

Minor Structural Repairs: Yes ☐ No ☐ Details: _____

Residuals (debris, sediment) Disposal Methods: _____

Notes:



© 2018 CONTECH ENGINEERED SOLUTIONS LLC, A QUIKRETE COMPANY

800-338-1122

www.ContechES.com

All Rights Reserved. Printed in the USA.

Contech Engineered Solutions LLC provides site solutions for the civil engineering industry. Contech's portfolio includes bridges, drainage, sanitary sewer, stormwater and earth stabilization products. For information on other Contech division offerings, visit www.ContechES.com or call 800.338.1122.

Support

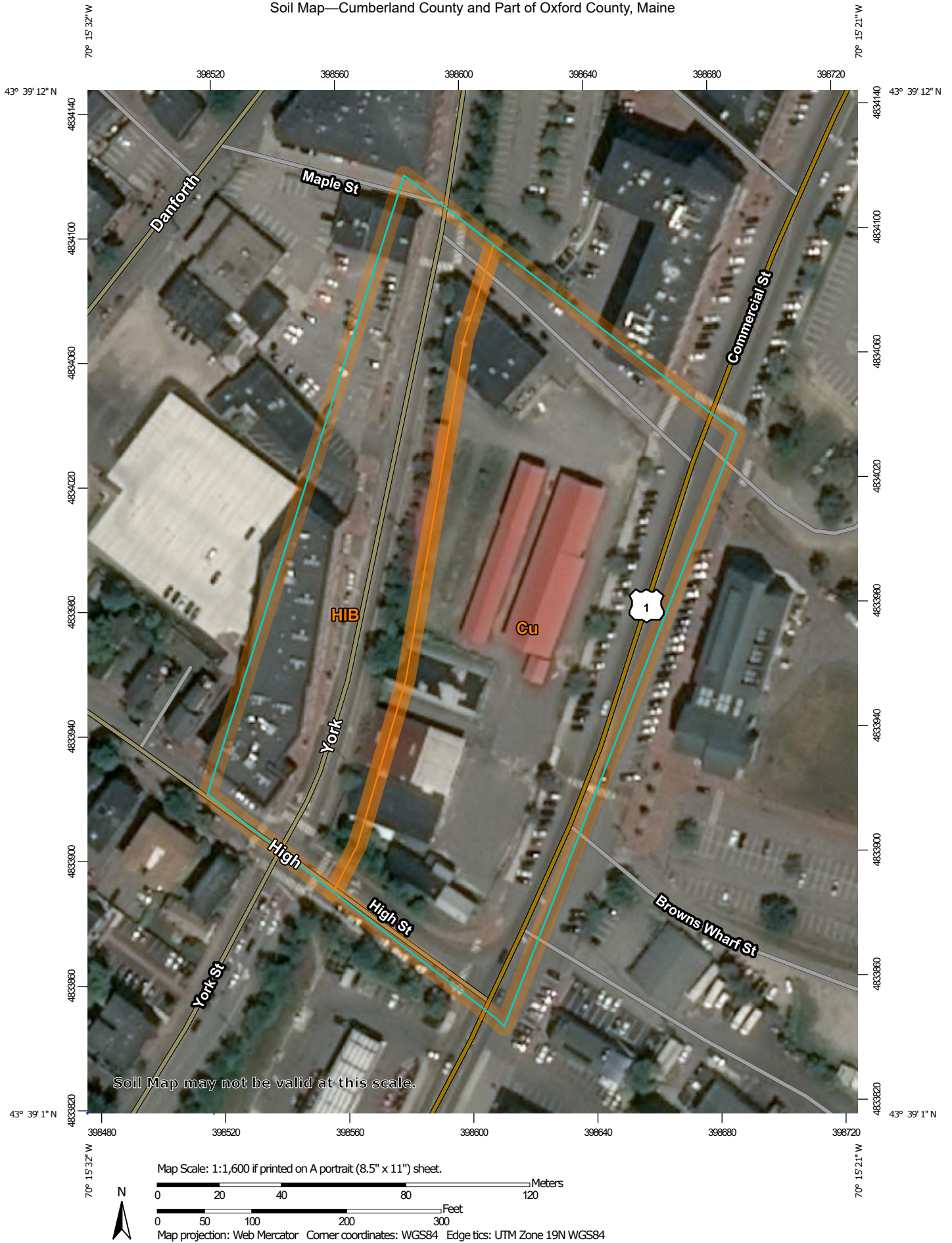
- Drawings and specifications are available at www.conteches.com.
- Site-specific design support is available from our engineers.

NOTHING IN THIS CATALOG SHOULD BE CONSTRUED AS A WARRANTY. APPLICATIONS SUGGESTED HEREIN ARE DESCRIBED ONLY TO HELP READERS MAKE THEIR OWN EVALUATIONS AND DECISIONS, AND ARE NEITHER GUARANTEES NOR WARRANTIES OF SUITABILITY FOR ANY APPLICATION. CONTECH MAKES NO WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, RELATED TO THE APPLICATIONS, MATERIALS, COATINGS, OR PRODUCTS DISCUSSED HEREIN. ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND ALL IMPLIED WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE ARE DISCLAIMED BY CONTECH. SEE CONTECH'S CONDITIONS OF SALE (AVAILABLE AT WWW.CONTECHES.COM/COS) FOR MORE INFORMATION.

Appendix 4

Subsurface Investigations

Soil Map—Cumberland County and Part of Oxford County, Maine



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 16, Sep 16, 2019

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.

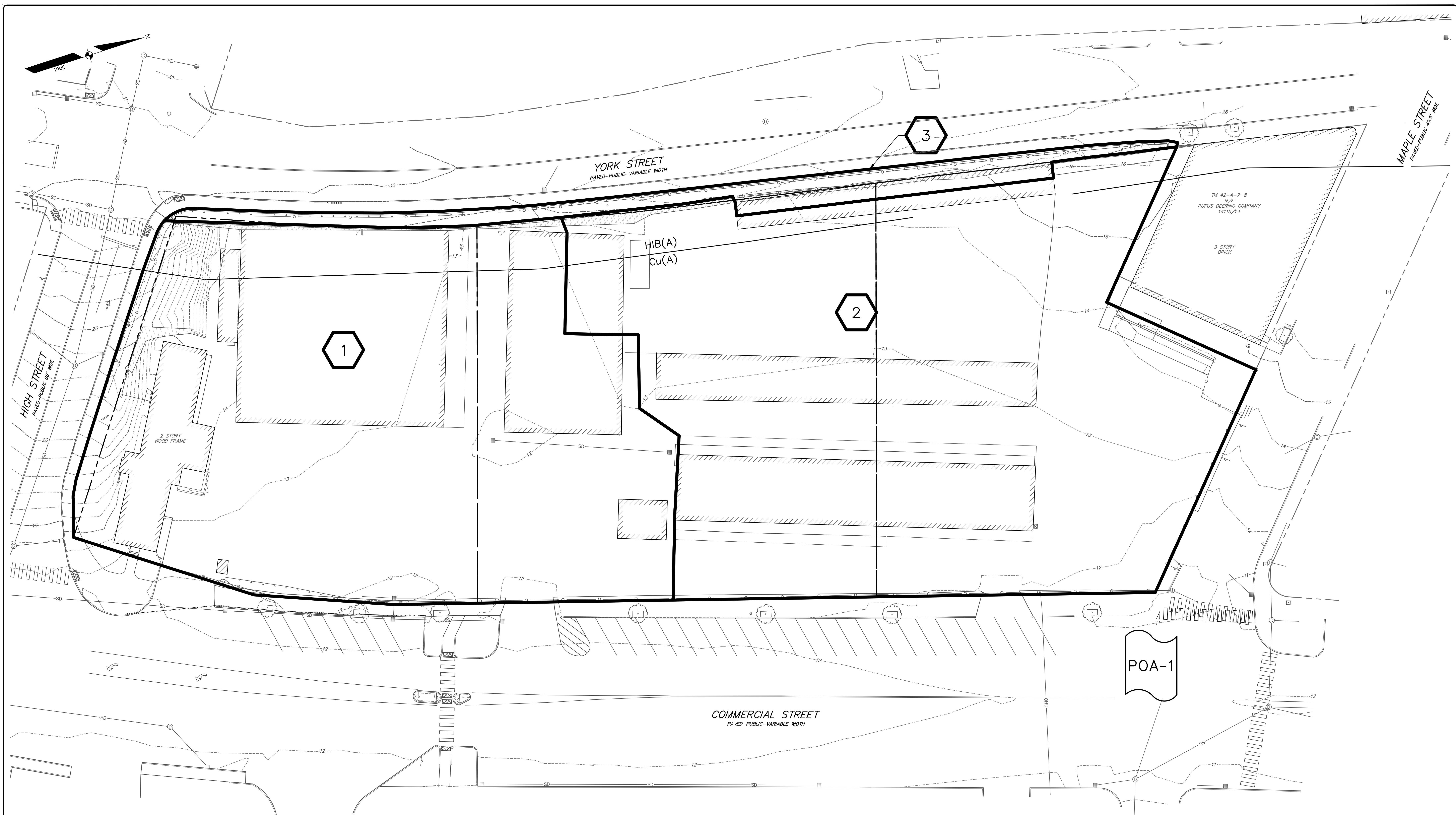
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cu	Cut and fill land	4.0	63.7%
HIB	Hinckley loamy sand, 3 to 8 percent slopes	2.3	36.3%
Totals for Area of Interest		6.2	100.0%

Appendix 5

Stormwater Management Plans



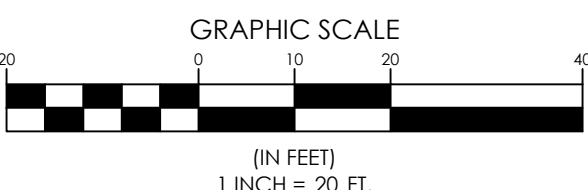
STORMWATER PEAK DISCHARGE SUMMARY TABLE						
STUDY POINT	2-YEAR STORM		10-YEAR STORM		25-YEAR STORM	
	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)
POA-1	7.1	6.6	11.0	10.6	14.2	13.7

LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION
- REACH
- SUB-CATCHMENT LABEL
- REACH
- POINT OF ANALYSIS
- SOILS BOUNDARY

LEGEND

- EXISTING
- PROPERTY LINE/R.O.W.
- MONUMENT
- IRON PIPE/ROD
- BUILDING
- DECK/STEPS/OVERHANG
- EDGE PAVEMENT
- EDGE CONCRETE
- EDGE GRAVEL
- CURB LINE
- CONTOURS
- CHAIN LINK FENCE
- GUARD RAIL
- RETAINING WALL
- DECIDUOUS TREE
- CONIFEROUS TREE
- BOLLARD
- SIGN
- STORM DRAIN
- DRAINAGE MANHOLE
- CATCH BASIN



PRE-DEVELOPMENT WATERSHED PLAN
OF:
383 COMMERCIAL STREET
PORTLAND, MAINE
FOR:
DEERING PROPERTY DEVELOPMENT, LLC
2730 TRANSIT ROAD
WEST SENeca, NEW YORK 14224

PROJECT NO. 16324
SCALE 1" = 20'

SHEET 1 OF 2

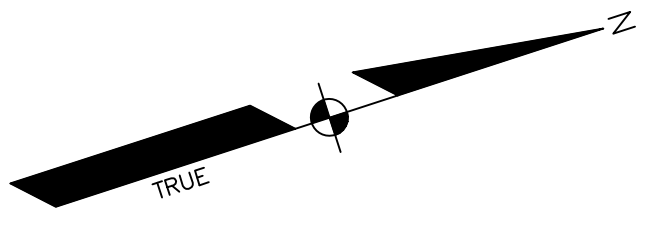
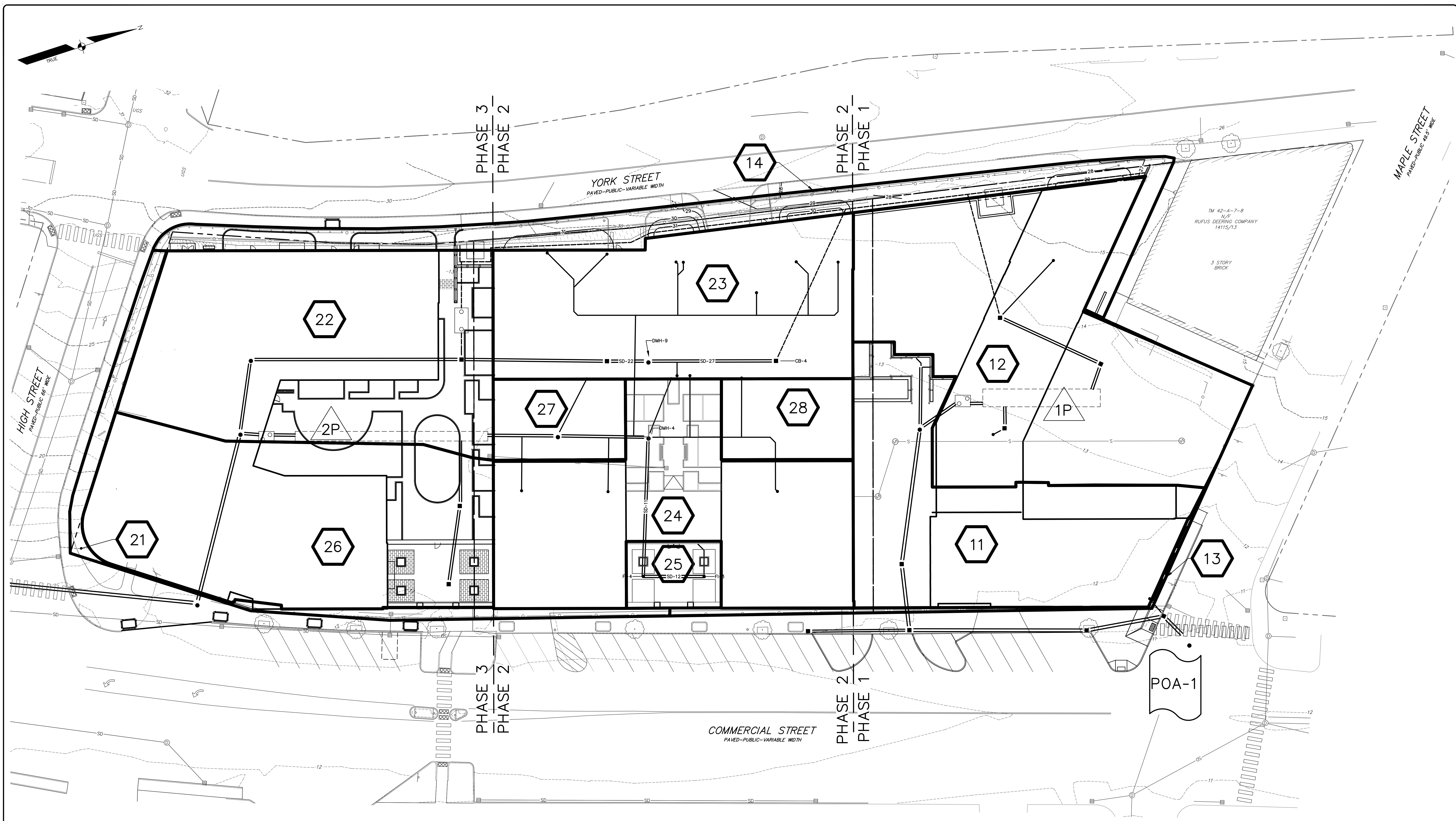
SEBAGO TECHNICALS
75 John Roberts Rd.
Suite 400
South Portland, ME 04106
Tel: 207-200-2100
WWW.SEBAGOTECHNICALS.COM

DESIGNED: DJS
CHECKED: RLM

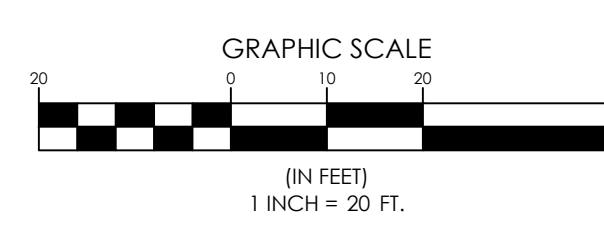
DATE: 06/26/2018
STATUS: SITE PLAN SUBMISSION
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICALS, INC. ANY ALTERATIONS AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICALS, INC.

RICHARD L. MEER, P.E. 10668

06/26/20



STORMWATER PEAK DISCHARGE SUMMARY TABLE						
STUDY POINT	2-YEAR STORM		10-YEAR STORM		25-YEAR STORM	
	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)	PRE (CFS)	POST (CFS)
POA-1	7.1	6.6	11.0	10.6	14.2	13.7



- LEGEND**
- Watershed Boundary
 - Time of Concentration
 - Reach
 - Watershed Label
 - Reach
 - Point of Analysis
 - Soils Boundary

- LEGEND**
- | EXISTING | PROPOSED |
|----------------------|----------|
| Property Line/R.O.W. | |
| Monument | |
| Iron Pipe/Rod | |
| Building | |
| Deck/Steps/Overhang | |
| Edge Pavement | |
| Pavement Sawcut | |
| Edge Concrete | |
| Edge Gravel | |
| Curb Line | |
| Contours | |
| Spot Grade | |
| Chain Link Fence | |
| Guard Rail | |
| Retaining Wall | |
| Deciduous Tree | |
| Coniferous Tree | |
| Mulch Line | |
| Bollard | |
| Sign | |
| Storm Drain | |
| Under Drain | |
| Drainage Manhole | |
| Catch Basin | |

POST-DEVELOPMENT WATERSHED PLAN
OF:
383 COMMERCIAL STREET
FOR: DEERING PROPERTY DEVELOPMENT, LLC
2230 TRANSIT ROAD
WEST SENeca, NEW YORK 14224

PROJECT NO. 16324
SHEET 2 OF 2

SCALE 1" = 20'

SEBAGO TECHNICALS
75 John Roberts Rd.
South Saline Ave 04106
Tel: 207-200-2100

DESIGNED: DJS
CHECKED: RLM

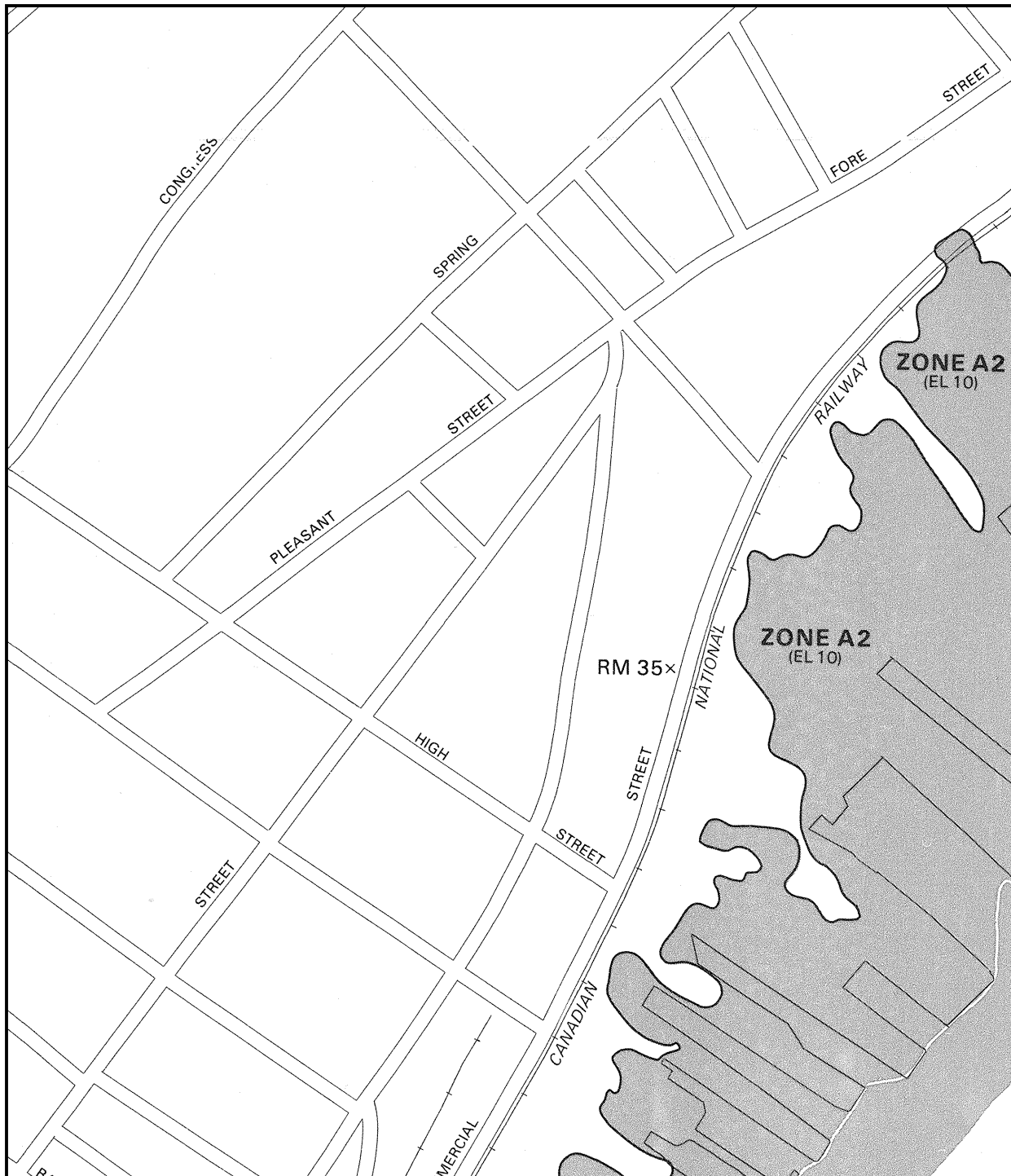
DATE: 06/26/20
SUBMITTER: DEERING PROPERTY DEVELOPMENT, LLC
PROJECT: 383 COMMERCIAL STREET
SHEET: 2 OF 2

RICHARD L. MEER, P.E. 10668

06/26/20

Appendix 6

Flood Insurance Rate Map



APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM
FLOOD INSURANCE RATE MAP

CITY OF
PORTLAND, MAINE
CUMBERLAND COUNTY

PANEL 13 OF 17
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230051 0013 B

EFFECTIVE DATE:
JULY 17, 1986



Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at www.msc.fema.gov

September 24, 2020



CONSIGLI
Est. 1905

387 Commercial Street Construction Management Plan

Prepared For: Portland Department of Planning & Urban Development Department
Project Proponent: Deering Property Development LLC
Construction Manager: Consigli Construction

Table of Contents

1. Construction Principles	2
2. Construction Administration and Communication	3
3. Construction Schedule	4
a. Project Work Hours	4
b. Project Schedule/Logistics	4
c. Material Deliveries	4
d. Material Storage and Laydown Areas	5
e. Contractor Parking	5
4. Fire Protection for Construction Activities	6
5. Public Safety	7
a. Snow Removal	7
b. Noise	7
c. Dust Control/Air Quality	8
d. Vibration Monitoring	8
e. Traffic Control	8
6. Site Logistics Plan	9

Construction Principles

The purpose of this Construction Management plan is to identify, mitigate and plan for all potential impacts throughout the duration of building the Mixed-Use Development at 387 Commercial Street. Consigli Construction will be the contractor associated with the mix use retail and residential project.

Throughout this CM plan we will refer to specific examples of potential construction practices, traffic control scenarios, neighboring building considerations and public safety; as well as measures in which these items will be managed throughout the project to accommodate the community as much as possible. While we will take the necessary precautions to meet City and State requirements for traffic, noise, dust, vibration, etc., this project will be disruptive to adjacent properties compared to the current condition. Along with our subcontractor team members, it is imperative that we have complete participation from all parties affiliated with the project to maintain our strict safety requirements and ensure a quality building for DPD.

The Mixed-Use Development at 387 Commercial Street includes the construction of a new 5 - 7 story building, consisting of 64 Residential Units, 130 structured parking spaces, and 5 Retail Shell Spaces. The building totals approximately 132,000 sf that will be primarily built out of steel and concrete.

Consigli has planned the project's site logistics and safety protocols that will be thoroughly covered in this report with graphics and narratives. This CM plan will continually be updated to meet the needs of the project, community and the city as the project progresses. We aim to deliver a safe and quality project to DPD, their employees and the City of Portland by means of communication, teamwork and stewardship.

Construction Administration and Communication

Consigli Construction will be the Construction Manager on site throughout the duration of the project. As such, there will be a dedicated team of individuals tasked with managing quality, schedule, site logistics and safety. These personnel will manage and enforce the proposed CMP with all associated subcontractors and material vendors.

Thomas Weeks – Project Executive
207.232.6416, tweeks@consigli.com

Andy Miller – Project Manager
207.405.1288, amiller@consigli.com

Mike Carpentier – Project Superintendent
774.217.2233, mcarpentier@consigli.com

Site Communication

With the proximity to occupied buildings, community outreach and communication will be imperative throughout construction to keep the public informed of the expected turbulence caused by the project. Site signage will be prominently displayed to show pedestrian access around the site and any updates to the proposed CMP.

Quarterly reporting and updating of the CMP will be required to update the City and community of the following activities:

- 1) Construction schedule updates
- 2) Material deliveries, including notice of any oversized loads that may impact public traffic
- 3) Requests for upcoming off-hours work including weekends and holidays
- 4) Notice of any upcoming activities that may produce strong noise, vibration or dust that could adversely affect the neighboring communities.
- 5) Requests for any street closings or public sidewalk work to be completed as part of the construction contract

Construction Schedule

Project Work Hours

Construction work hours will be in accordance with section 17-18.

The project site is located within zoning group B2 – Business Community but is within 500 feet of buildings used for residential purposes. As such, work hours will be limited to Monday – Friday 7:00 am – 6:00 pm. Should work extend into Saturdays, the use of heavy equipment will be kept within the time constraints of 8:00 am – 4:00 pm.

Project Schedule/Logistics

The project is anticipated to be approximately 21 months in duration. Beginning in June 2021 the project will be turned over to DPD in March 2023.

Regarding scheduled work to take place within public streets and sidewalks, this work will comply with Section 25-129 – Noise, dust and debris. The installation and connection to public utilities, traffic lane reconfigurations, and sidewalk construction will require work to be executed within Commercial Street, York Street, and High Street. This work will be scheduled and planned with the City of Portland prior to the execution. All logistical concerns will be addressed with the City prior to starting the work. The connection to public utilities is tentatively scheduled to happen in the Fall of 2021, with sidewalk construction tentatively scheduled to occur during the late Summer of 2022 and Spring of 2023. Temporary barricades, fencing, and signage will be required during the installation to control pedestrian/vehicle movements around the work.

Material Deliveries

The construction will require coordination of material deliveries throughout the duration of the project. The Site Logistics Plan included in this CMP shows the planned lay-down areas, truck routes and safety protocols that will be in place throughout the duration of construction.

1. During the concrete and steel work or other large deliveries, traffic turning off Commercial Street from the south into the project site may be tight. A flagger will be employed as needed to assist in navigating these loads to the project site.

Construction activities whether it be work going in place or material and equipment deliveries will create more activity along Commercial Street, York Street, and High Street.

Material Storage and Laydown Areas

The construction will require careful planning and management of the daily occurrences within the site limits. The proposed Site Logistics Plan requires closing one lane of High Street, leaving the remaining lane open to one-way traffic heading north on High Street. In addition, the plan is for construction to occupy the parking spaces directly in front of the site on the north side of Commercial Street. This will allow for the construction staging, lay down and temporary storage the project needs, all secured by temporary fencing and barricades.

Contractor Parking

At the peak of construction, Consigli anticipates that up to 100 people will be on site working various trades associated with the building. All contractors, subcontractors and their employees will be prohibited from parking in on-street City spaces in the vicinity of the site and be required to park off-site in private parking lots secured specifically for the project. All subcontractors will be educated during the bidding process of this requirement. Language restricting off-street parking will be incorporated into the contract, and each employee will be informed of this requirement during their site safety orientation their first day on-site.

Consigli on-site construction staff will monitor parking abutting the construction site on Commercial, High, and York Street. Fines may be issued to construction workers associated with Hobson Landing found parking anywhere within a two-block district of the construction site. The area would extend to Park, Danforth and Center Street.

Fire Protection for Construction Activities

The 2013 Standard for Safeguarding Construction, Alteration and Demolition Operations will be enforced on this project by utilizing best management practices to mitigate the fire risks associated with the construction. Consigli and its subcontractors will execute the following measures to provide a safe and secure work place:

- 1) PFD Fire Command Center: This centralized location will hold all current project information and will act as the first responders meeting point to obtain the most up to date information of construction. The following documents will be found at this location:
 - a. Hot Work Permits: To be filled out daily by any person performing work that will generate a spark or create a potential fire risk on the job site. The permits are to be completed and approved by Consigli prior to work starting.
 - b. Updated Construction Schedule
 - c. Updated Site Logistics Plan
 - d. Pre-Incident Fire Plan
- 2) On-Site Fuel Storage: There will be a requirement for different flammable liquids throughout construction. A free-standing, 30-minute fire-rated enclosure will be built to safely and securely store all flammable liquids and gases. Fueling trucks will be used as needed but under no circumstances be allowed to be parked or stored on site for any extended period.
- 3) Means of Egress: The buildings will be permanently equipped with (3) 2-way stair assemblies for means of egress. During construction it is the intent to install the stair leading to the roof in the building first to provide emergency egress throughout construction. These stairs will be identified with temporary signage throughout construction indicating the floor level and exit path direction.
- 4) Good Housekeeping: Consigli Construction will provide necessary dumpsters for the removal of debris from the site. All subcontractors are responsible for the daily clean-up of their work areas to ensure that no materials or tools are left out over night that could pose a hazard to the building. Daily safety walks by the Construction Superintendent will be utilized to ensure that all working floors are equipped with an inspected fire extinguisher and clear means of egress in the event of an emergency. Trash chutes and/or material hoists may be utilized to safely and efficiently remove all debris from the project.
- 5) On-site Security: The project site will be secured everyday by means of a temporary, post driven construction fence and scrim. Lockable gates will be located at (2) locations for site access.

- 6) Rapid Communication: Evacuation notification will be provided by means of 2-way radios/cellular devices as well as strategically positioned air horns. Upon evacuation of the building all project personnel will report to the muster point location where the Construction Manager and all subcontractor foremen will perform accountability checks. The General Contractor field staff will then be dispatched to all project entry points and the PFD Command Center. Upon arrival of the first responders to the PFD Command Center the General Contractor will provide an accountability and incident briefing.

Public Safety

The construction will be near pedestrian right of ways and will interact with public traffic throughout the duration of the project. Material deliveries, the use of cranes, lifts and other heavy machinery all have the potential to impact typical public activity. As a member of the Portland community, Consigli will strive to limit, mitigate and avoid these potential impacts as much as possible by means of controlling noise, on-site dust, vibrations and traffic. By educating and informing the neighborhoods to the construction activities taking place we will aim to build a project that produces the minimal of impacts to the Commercial Street, York Street, and High Street communities.

Snow Removal

Jersey Barriers will be utilized to separate the construction site from Commercial Street and High Street to facilitate snow removal operations along these public streets.

Noise

Construction activities throughout the project will create noise that leaves the project site. It is the intent of the project team to limit the exposure to the noise by following section 17-18 of the City of Portland Code of Ordinances. This project site is located within 500 feet of buildings classified as residential. As such, the project hours will be limited the 7:00 am – 6:00 pm, Monday – Friday. Should any weekend or holiday work be required the use of heavy machinery will not commence before 8:00 am. When this work is required, no less than 2-week advanced notice will be provided to DPD and the neighboring communities.

Work related to the ground improvements, foundations, and structural steel will likely be the loudest activity experienced during construction. This work will take place from June 2021 – February 2022. Recently, many local projects have utilized similar means of construction to much success around Portland.

Dust Control/Air Quality

Maintaining an environmentally conscious project site will be a major priority for the project team to ensure safety not only for the neighboring communities but also for the construction workers on site day after day. All soils and debris will be kept within the project limits following the State of Maine Department of Environmental Protection erosion control Best Management Practices:

- 1) Erosion controlled construction entrances
- 2) Tarped dump trucks leaving the site with soil/debris
- 3) On-going sidewalk and street cleaning activities
- 4) The installation of temporary, compacted staging areas within the job site
- 5) Using wetting agents to control dust
- 6) Covering stock piles when material is to be piled for long periods of time
- 7) Smoking will not be allowed on the job site

Vibration Monitoring

Some of construction practices required for this project will result in ground vibration waves that may transmit to nearby buildings. Prior to any potential vibration causing activities taking place a pre-construction survey will be conducted to review and document existing conditions. The survey will encompass all properties abutting the proposed project site to include the following addresses:

- 350 Commercial St (Gulf of Maine Research Institute)
- 25 High St. (Corner of High & York Street)

Structure demolition, site removals, vibratory compaction and ground improvements will be employed on this project and will be monitored by a third-party monitoring company. A pre-construction meeting will be planned with abutting property owners to discuss geological conditions, construction specifications and methods of installation that create vibration.

Traffic Control

Throughout the construction process Commercial Street, York Street, and High Street will experience increased traffic due to construction activities. Material deliveries, contractor access and public utility integration will be encountered and mitigated through a coordinated Site Logistics Plan (provided within this CM Plan), on-site safety personnel, way-finding signage and well-organized traffic control devices. Consigli will strive to inform and direct the neighborhood to the activities taking place in public areas as they progress through completion. During the Summer of 2022 public utility connections will be made in Commercial Street and York Street. During the Summer/Fall of 2022 and Spring of 2023, sidewalk improvements will be made adjacent to Commercial Street, High Street, and York Street.

The main access points to the construction project will be through the Southwest gate off Commercial Street. To navigate tractor-trailers and other large vehicles to the project site a flagger may be stationed at Commercial Street as needed to usher the trucks into the right of way.

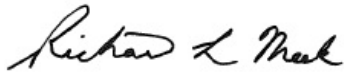
Neighborhood Meeting Certification

I, Richard Meek, PE, hereby certify that a neighborhood meeting was held on February 2, 2021 via a zoom meeting at 5:00 pm for the proposed project located at 383-387 Commercial St., Portland, ME.

I also certify that on January 22, 2021, notices were mailed to the following:

1. All addresses on the mailing list provide by the Planning Division which includes property owners within 500 feet of the proposed development.
2. Residents on the "interested parties" list.

Signed,



Richard Meek, PE
Sr. Project Engineer
February 3, 2021

Attachments:

1. Copy of notice sent
2. Sign-in Sheet
3. Meeting minutes
4. Abutter comments (email)

January 22, 2021
16324

Dear Neighbor:

DPD Lot 3 LLC, invites you to a virtual neighborhood meeting to discuss plans for the development at 383-387 Commercial Street in Portland. The proposed construction is the final phase of the Approved Master Plan for this property and includes an approximately 35,100 square foot building with seven stories of residential and commercial spaces. The development will include two levels of parking, including 130 parking spaces, which will connect to the previously constructed parking decks. The property is located within the B5-B Urban Commercial Mixed-Use Zone and is identified as lot A-001 on Tax Maps 42, with a total land area of approximately 2.59 acres.

As a property owner within 500 feet of the project, you are invited to participate in a neighborhood meeting. Attendance will be recorded and minutes of the meeting will be taken. Both the attendance list and minutes will be submitted to the Planning Department. The virtual meeting will take place via Zoom and can be accessed online using the link shown below.

Meeting Date: February 2, 2021
Meeting Time: 5:00PM

Meeting Location: Virtual - Zoom
Register in advance for this webinar:

https://us02web.zoom.us/webinar/register/WN_DqK11bY1RNWktYqH5WR1yg

(You may type the link into your web browser)

After registering, you will receive a confirmation email containing information about joining the webinar. If you have any questions, please call Richard Meek at Sebago Technics, Inc. at 207-200-2100.

Sincerely,

SEBAGO TECHNICS, INC.

A handwritten signature in black ink that reads "Richard L. Meek". The signature is written in a cursive, flowing style.

Richard L. Meek, P.E.
Senior Project Engineer

RLM

Neighborhood Meeting Sign-in Sheet

February 2, 2021

Zoom Meeting

PL-001348-2020.Level III Site Plan (383 (387) Commercial St)

Members of the Public in Attendance:

Name:	Email:
Sandra Welch	stanw522@yahoo.com
Tim Reich	treich@gmri.org
Tom Lyons	stly0ns1@gmail.com
Paul Smith	psmith@hakins.com
Patricia O'Donnell	podonnel@maine.edu
Kristy Morse	kristy.morse@ey.com
Mark Rosenshein	mark@trademark.boston
Jason Price	Jason.price14@gmail.com

Developer and Consultant Team in Attendance:

Name:	Email:
Joe Dasco	joedasco@comcast.net
Ginny Stanley	virginie@archetypepa.com
Rick Meek	rmeek@sebagotechnics.com
Dan Danvers	ddanvers@sebagotechnics.com
Dylan Stuart	dstuart@sebagotechnics.com

Neighborhood Meeting 387 Commercial Street- 5:00 pm 02/02/2021

Participants (8)

- Sandra Welch
- Tim Reich
- Tom Lyons
- Paul Smith
- Patricia O'Donnell
- Kristy Morse
- Mark Rosenshein
- Jason Price

Meeting began at 5:03 pm via zoom

Project team introduces themselves

- Joe Dasco- Applicant
- Ginny Stanley – Archetype
- Dan Danvers RLA- Sebago Technics
- Richard Meek PE- Sebago Technics
- Dylan Stuart- Sebago Technics

Project team introduces the master plan and highlights the final phase of design

Joe highlights that phase three is labeled to be 94 residences in the master plan is currently being proposed as 64 residential units. However- the project was previously approved at a master plan level.

Rick Meek presents an early rendering depicting phase 2 with an open-air parking area in the footprint of phase three. The applicant clarified that the plan for the parking area was in case there was an extended period of time between construction of phase 2 and 3.

Ginny Stanley describes the mixed-use characteristic of the project.

Rick introduced the construction management plan describing vehicle traffic during construction. He describes that a portion of high street will be closed to facilitate construction- but one-way traffic heading uphill would remain open.

Rick and Ginny discuss the first, second and third floor architectural plans

Questions from Attendees

Tim Reich asks: Would the City put in a temporary crosswalk across commercial street. Say from Becky's to the Irving?

Response: The applicant- We can consider adding a Jersey barrier protected path for pedestrians adjacent to the construction site at Commercial St.

Tim Continues: With the construction deliveries, staff, workers etc.- Wants to ensure the Gulf of Maine parking area is respected and not utilized by any construction operations.

Response: The applicant offered additional signage clarifying that Gulf of Maine parking area is not allowed to be utilized by construction vehicles.

Sandra Welch: What is the distance between the courtyard facing edges of the balconies in Phase 2 and phase three. In other words what is the narrowest distance?

Response: 29 feet building-to-building

Tom Lyons: What about putting in a sidewalk along the other side of High Street (for construction purposes)

Response: We don't own the land on the other side of High Street. Not sure if the city wants to encourage pedestrian traffic on the other side of High Street.

Mrs. Lyons: Is there a sidewalk? Will the existing sidewalk be retained through construction? Concerned they will be left without a pedestrian access along High Street. Requests clarification regarding vehicular and pedestrian circulation.

Response: We will consider additional provisions to facilitate a pedestrian connection from York Street to Commercial Street in coordination with the City. Noted that during construction of Phase 3 the pedestrian connection between phase two and the hotel will be open to the public.

Mark Rosenshein: Representing the Hotel next door- Speaking in favor of the project. And comments about the pedestrian connection between phase 2 and the hotel.

Kristy Morse: When will construction starts and finish

Response: If all goes well-, we are looking at construction beginning late spring- early summer 2021. Anticipating an 18 month – 24-month construction period.

No further questions at 5:40

Richard Meek

From: Henry Hess
Sent: Tuesday, January 26, 2021 9:28 AM
To: Richard Meek
Subject: FW: questions regarding DPD Lot 3 LLC, 387 Commercial St. Portland ME.
Attachments: 383 Commercial Street.docx

Importance: High

See comment from concerned neighbor who would like a response to her questions.

--

Regards,

Henry Hess, RLA

Maine Licensed Landscape Architect

Sebago Technics, Inc. | An Employee-Owned Company
75 John Roberts Rd., Suite 4A, South Portland, ME 04106
Office: 207.200.2100 | Direct: 207.200.2086 | Fax: 207.856.2206
hhess@sebagotechnics.com | www.sebagotechnics.com



This notice and disclaimer regards the transmittal and use of electronic files generated and forwarded by Sebago Technics, Inc. This message contains confidential information and is intended only for the individual named. If you are not the named addressee, you should not disseminate, distribute or copy this email. Please notify the sender immediately by email if you have received this email by mistake and delete this email from your system. Email transmission cannot be guaranteed to be secure or error-free, as information could be intercepted, corrupted, lost, destroyed, arrive late or incomplete, or contain viruses. The sender, therefore, does not accept liability for any errors or omissions in the contents of this message which arise as a result of email transmission. If verification is required, please request a hard-copy version. The information contained in these electronic files is privileged and confidential and is intended only for the use of the individual or entity stated in the address above. Any dissemination, distribution or copying of these electronic files is strictly prohibited. The recipient of the electronic file acknowledges and consents to the fact that the sender, Sebago Technics, Inc. makes no claim that electronic files are current, accurate or correct. Any use or reuse of the electronic file in any manner whatsoever is at the user's sole risk and the user agrees, to the fullest extent permitted by law, to hold Sebago Technics, Inc. harmless and to indemnify it from all claims, losses, damages, expenses and costs including all reasonable attorneys fees that may arise from its use or reuse.

From: Susan Lyons <susan.lyons01@gmail.com>
Sent: Tuesday, January 26, 2021 9:05 AM
To: Henry Hess <hhess@sebagotechnics.com>
Subject: questions regarding DPD Lot 3 LLC, 387 Commercial St. Portland ME.

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Dear H. Hess,
You've indicated in your link (My husband and I are attending via his computer) that we could address questions to you, and so I'm sending you via attachment the same concerns I addressed in this attachment to Andrew Tufts, the Portland planner for this project.

In short, they're based on the artist's renderings that show phase 3 taking up the entire remaining footprint but do not show the existence of the 25 High Street condos; they express concerns about staging, and, in particular, the impacts of construction so close to High Street and its intersections at York and Commercial.

I understand this zoom meeting is a webinar which, in my experience, limits discussion. I would appreciate your comments, especially any that speak to a change in the building footprint, an error in the artist's renditions, or staging during construction.

Thank you.

Susan Lyons
25 High Street, #301
860-235-4786

Concerns based on artists renderings in “the vicinity of 383 Commercial Street”



The rendering above from the Hobson’s Landing brochure indicates a big parking lot and small tavern on the north side of York Street. The third phase building visualized here takes up the entire remaining space abutting York, High, and Commercial Streets.

Photo below shows 25 High Street condos (63 residences) and an underground parking garage on York Street, already in existence in 2018 when Hobson’s Landing was still Deering Lumberyard. Note the breadth of the sidewalk between High Street and 25 High Street condos.



Questions

- **Where is the staging area for new construction?** Currently, the proposed new building site is used for the staging and construction of phases one and two. The project seems to be running about six months behind schedule, despite what seems like a very well-run project. Onsite equipment includes but has not been limited to cranes, dumpsters, loaders, dozers, elevators and other scaffolding as well as the building materials, contractors' trucks and vans, and portable toilets. Where will all this go during phase three?
- **How will High Street, York Street, and Commercial Street and their intersections be impacted?** During phases 1 and 2, Commercial Street has jersey barriers around the construction site. York Street has lost a sidewalk and bike path and, on occasion, has been closed as well, including access to and from the York Street garage. Additionally, Maple Street off Commercial Street has been regularly closed to traffic. Assuming the same construction techniques are used in phase 3, we would expect to see at least the same amount of disruption during construction. Presumably, Commercial Street could continue to absorb the impact. However, York Street will have to be further blocked. Also, the rendition has the building so close to High Street that it will have to be closed as well for significant periods of time. As you probably know, the intersection of York and High already floods easily and significantly during storms. It can only get worse during additional construction.
- **How are the impacts on bicyclists, pedestrians, and vehicle traffic being addressed?**
 - **Bicyclists** In the 2018 photo, you can see bike paths on both sides of York Street. One bike path has since been lost to construction. Bicyclists riding into Portland from the Casco Bay Bridge stay on York Street as an alternative to Danforth and Commercial Streets.
 - **Pedestrians** Many residents on York, High, or Danforth live in this neighborhood because of its walkability. The tourist season (which we hope to see one of these days!) adds additional walkers, particularly from the West End. Many of our neighborhood residents who are in city or sheltered housing are walkers, not drivers, and regularly walk to the nearest convenience store (Circle K). That being said, the intersection of High and York Streets is already one of the trickiest pedestrian intersections (right up there with State and Congress, or Congress and High Streets). Additionally, the section of High between York and Commercial has only one sidewalk, which abuts the phase 3 proposal.
 - **Vehicles** This should be a city concern as well as a neighborhood one. Prior to the pandemic, Friday night and weekly commuting traffic were already chaotic at the intersection of York and High, and even with reduced traffic we continue to hear lots of horns and screeching brakes. The most recent accident we witnessed at this intersection happened during a storm and was caused by a large loaded truck taking too tight a turn and knocking over a pedestrian light pole. During the December 2020 snowstorm cars and trucks got stuck on the High Street ascent. One truck had to be towed. Other vehicles had to detour. Police closed the road at the intersection of York and High. One woman using a walker was trying to navigate her way down High, probably to the Circle K, using the street because the sidewalks were impassable (The

police officer who stopped for the truck ended up escorting the woman through the intersection).

Here's why all this is so problematic: York Street carries a significant amount of commercial, local, and commuting traffic from the Casco Bay Bridge, including emergency vehicles which routinely turn onto High Street. Vehicles coming into downtown Portland via 295 or 95 on Commercial Street also turn onto High. The last thing this intersection needs is more stress from construction.

Additional concerns related to accuracy of any studies on density and traffic impacts

- As noted earlier, the rendition does not indicate the presence of 25 High Street (63 residential units plus the York Street Garage and currently-unleased commercial space). Is this presence considered in the approved Master Development Plan PL-001348-2020? If not, it should be. Phases one and two add 89 residential units plus commercial space to the preexisting 63 condos and commercial space at 25 High Street.

Suggestions

- Delay any permits until the impact of the presence of both 25 High Street and the occupied portion of Hobson's Landing phases 1 and 2 (plus potential parking and traffic density) are better understood (Sooner or later we'll return to more regular patterns than we've seen during the pandemic.)
- Put a sidewalk on the west side of High Street between York and Commercial.
- Describe how the staging will work in this third phase, including what non-site spaces will be needed during construction.
- Construct the phase 3 building on a smaller footprint that leaves enough space for staging onsite and does not require that High Street be closed to traffic. This may be the most difficult, but also the most important, change.

Susan Lyons <susan.lyons01@gmail.com>

11:07 AM (17 minutes ago)



to planningboard@portlandmaine.gov

Dear Planning Board,

I've been in recent contact with Andrew Tufts, planner, about the second condominium for Hobson's Landing. I also attended the webinar presented by Sebago Technics this past Tuesday and have requested the slides used in that presentation to better understand what's going on during the construction phase. What I've heard is pretty alarming. Because the remaining space for the footprint of this building is so tight, the construction management proposal is to use off-site lots for storage, parking, machinery, supplies, etc. and to use Commercial Street, York Street, and High Street for staging and building, etc.

I would like to remind everyone that this is an existing neighborhood with a vibrant residential presence--condos, apartments, sheltered and city housing, and lots and lots of joggers, runners, walkers, and bicyclists. 25 High Street has added 63 residences to this neighborhood since 2018; The first condominium for Hobson's Landing will add 80 or so at about the time or before this new construction is proposed. Zillow up to now has rated this neighborhood as a walker's paradise (rating of 91), a factor that drew many of us here and is an important asset for those in sheltered and city housing.

We currently coexist with heavy traffic from residents, commuters, bridge traffic from the Casco Bay Bridge (York Street) and I-295,

I-95 and Fore River Parkway traffic into Portland, where High Street is the first available turn into the Arts District, Congress Street, etc.

In 2019, the last summer prior to covid, our summer traffic on High Street from Commercial to Congress; and York Street between High and State was regularly congested leading to backups all the way down to Commercial.

We see additional congestion along York Street between High and State particularly during commuting traffic or bridge closures. York Street is a transit route for Buses 21, 24A, and 24B.

Emergency vehicles coming from South Portland use York Street and turn onto High. The Mercy Shuttle from the Fore River Parkway uses Commercial to turn onto High. All of this is to say that this area is already a choke point for pedestrians, cyclists, and vehicles.

While I understand the advantage to the builders in taking the sidewalk and lane(s) from High Street, I see only serious, and likely dangerous, disadvantages to the neighborhood and to the City for the next one to two years estimated for this third phase.

Consider the impact of the additional traffic from the heavy machinery and vehicles used during construction. Making High Street one-way will only push further traffic onto Park Street (which already sees backups onto York) or Maple. I can't see

how traffic lights are useful when the length of Park Street between York and Commercial is relatively short. I can't see a traffic light being useful at High and Commercial given the presence of another traffic light up the short run between Commercial and York and the current configuration of the turn lanes. I can only imagine how this will impact Becky's, Circle K, and Free Range.

Incidentally, I see on Maine's DOT work calendar the following:

<https://www1.maine.gov/mdot/projects/workplan/data/workplan/town/Portland.pdf>

Work Plan Year: 2021 Municipalities(s): Portland Asset(s): York Street/High Street Description: Beginning at State Street and extending north 0.16 of a mile to

High Street. Beginning at Commercial Street and extending northwest 0.05 of a mile to York Street. PACTS Sponsored. ID 024105.00 Scope of Work Bicycle/Pedestrian On-Road Sidewalk/Trail Multimodal Improvements - PE Only

Highway Corridor Priority HCP 2, 3 Estimated Funding \$100,000.

I would like to suggest that all residents along High Street up to Congress as well as residents on York between State and High be contacted about this proposal, not just "abutters."

Additionally, I'd like to see a new traffic/use study that takes into account the presence of 25 High Street and the first condominium of Hobson's Landing.

Given what we hope will be a return to normal summer traffic patterns this year as well as the DOT work, it would be good to minimize disruption as we try to open the City this summer by delaying any approval until the implications are better understood.

From what I've seen and heard so far, I see a considerable advantage to the developer in taking High Street to use for off-site construction because it allows for a bigger building, but I see sufficient disruption and danger to the neighborhood

and City over the next one to two years that a smaller footprint for this building that doesn't require altering High Street should be the minimum requirement for construction going forward.

Thank you.

I look forward to your reply.

Susan Lyons
25 High Street, #301
[850-235-4786](tel:850-235-4786)

From: **Susan Lyons** <susan.lyons01@gmail.com>
 Date: Mon, Jan 11, 2021 at 9:23 AM
 Subject: DPD Lot 3, for 387 Commercial Street, PL-001348-2020
 To: <atufts@portlandmaine.gov>

Dear Andrew Tufts:

We are writing in response to the notice from your planning division regarding the development of a mixed-use building at 387 Commercial Street.

We have watched for the last couple years the construction of Hobson's Landing. The construction crews have generally been good neighbors, but we've experienced sidewalk closings and parking disruptions., including the occasional closing of the JBBrown parking lot under 25 High Street and the closing of York Street itself for cranes or other heavy equipment.

We have two questions about this proposal.

The first one is about parking and disruption during this second phase, and follows our experience with the first building. Our greater concern here, though, is that the space used for storage, materials, construction parking and machinery will no longer be available as that space becomes this proposed building. By the way, this also occurs when there's no occupancy in the buildings currently under construction, so we don't yet see the impact of the new residences. Where will construction materials, supplies, equipment, vehicles park during this second phase? What additional street parking and pedestrian sidewalks will be lost on York, High, and Commercial Streets?

The second question has potentially more permanent consequences. This new building will abut two intersections: Commercial & High and High & York Streets. York Street in particular carries Casco Bay bridge traffic. Even during the pandemic, the traffic is already challenging for pedestrians and vehicles. You are also aware, no doubt, how prone the High Street/York Street intersection is to flooding and crowding. We note in particular the most recent accident in which a pedestrian traffic light was knocked over by a heavily-loaded truck taking a corner too tightly.

What will heighten the current issues will be the increased residential traffic of the completed portion of Hobson's Landing ; the presence of the construction apparatus and traffic related to the new building, and the proximity of the proposed building to York, High, and Commercial Streets. Could we see the original impact statements for the area? Do they take the increased traffic and tight space into account? If they don't, we recommend that PL-001348-2020 be deferred until after the impacts of the Hobson Landings' move-ins are better understood.

Thank you.

Tom and Susan Lyons
 25 High Street, #301
 Portland 04101
 860-235-4786

—
 Andrew Tufts
 Planner
 Planning and Urban Development Department

389 Congress Street 4th Floor
 Portland, ME 04101
atufts@portlandmaine.gov
 (207) 874-8724

387 COMMERCIAL STREET-PHASE 3

387 COMMERCIAL STREET
PORTLAND, MAINE

APPLICANT:
DEERING PROPERTY
DEVELOPMENT, LLC
2730 TRANSIT ROAD
WEST SENECA, NEW YORK

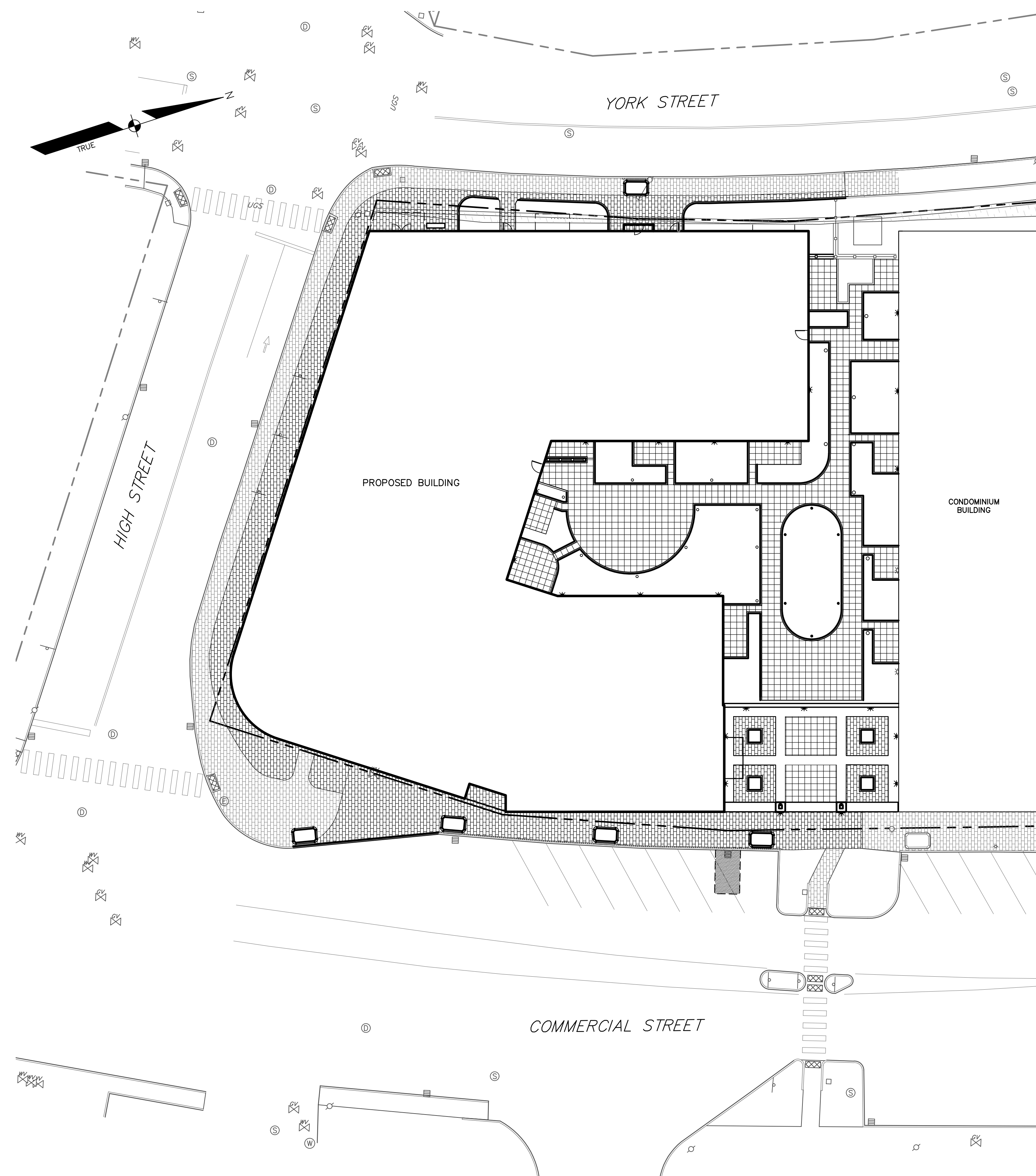
ENGINEER/SURVEYOR:

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel: 207-200-2100

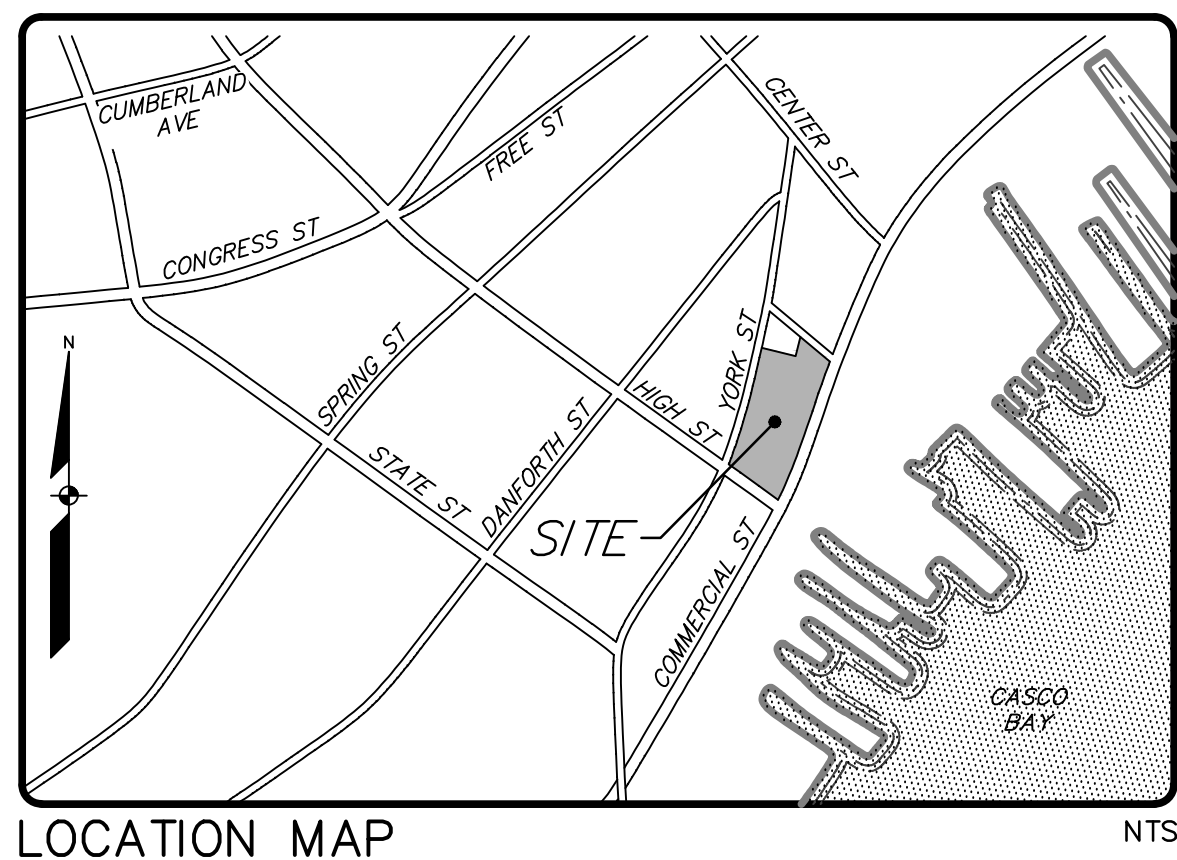
PROJECT ARCHITECT:

ARCHETYPE
ARCHITECTS
48 UNION WHARF
PORTLAND, MAINE 04101

LEGEND (TYPICAL ALL SHEETS)		
EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE/R.O.W.	---
---	ABUTTER LINE/R.O.W.	---
---	DEED LINE/R.O.W.	---
---	TIE LINE	---
---	SETBACK	---
---	EASEMENT	---
---	BUFFER	---
---	CENTERLINE	---
---	BUILDING	---
---	EDGE PAVEMENT	---
---	PAVEMENT SAWCUT	---
---	EDGE CONCRETE	---
---	PAVEMENT PAINT	---
---	EDGE GRAVEL	---
---	CURB LINE	---
---	EDGE OF WATER	---
---	TREELINE	---
---	CONTOURS	---
---	SPOT GRADE	---
---	CHAIN LINK FENCE	---
---	STOCKADE FENCE	---
---	RETAINING WALL	---
---	DECIDUOUS TREE	---
---	CONIFEROUS TREE	---
---	MULCH LINE	---
---	BOLLARD	---
---	SIGN	---
---	RAILROAD	---
---	GAS	---
---	GAS GATE VALVE	---
---	GAS METER	---
---	GAS MANHOLE	---
---	WATER	---
---	WATER GATE VALVE	---
---	WATER SHUT OFF	---
---	HYDRANT	---
---	WATER MANHOLE	---
---	WELL	---
---	SANITARY SEWER	---
---	FORCE MAIN	---
---	SANITARY MANHOLE	---
---	STORM DRAIN	---
---	UNDER DRAIN	---
---	DRAINAGE MANHOLE	---
---	CATCH BASIN	---
---	OVERHEAD UTILITY	---
---	UNDERGROUND UTILITY	---
---	TRANSFORMER PAD	---
---	ELECTRICAL MANHOLE	---
---	ELECTRIC METER	---
---	HVAC UNIT	---
---	TELEPHONE MANHOLE	---
---	LIGHT POLE	---
---	UTILITY POLE	---
---	GUY WIRE	---
---	FILTER BARRIER	---
---	INLET PROTECTION	---

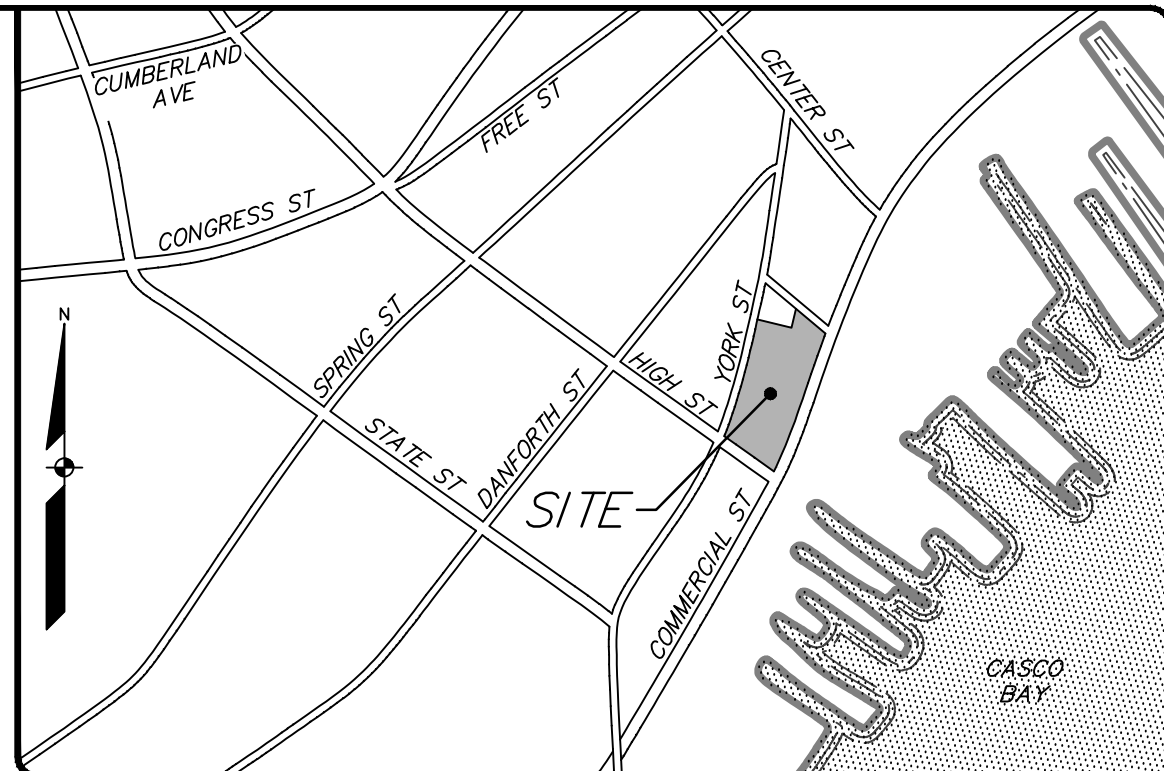
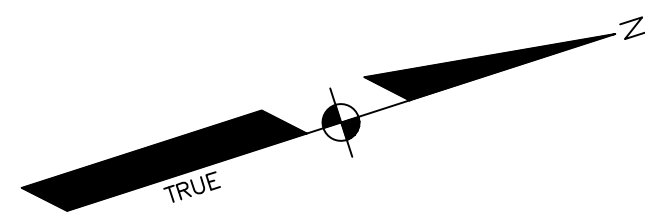


SCALE: 1" = 20'



INDEX OF PLANS

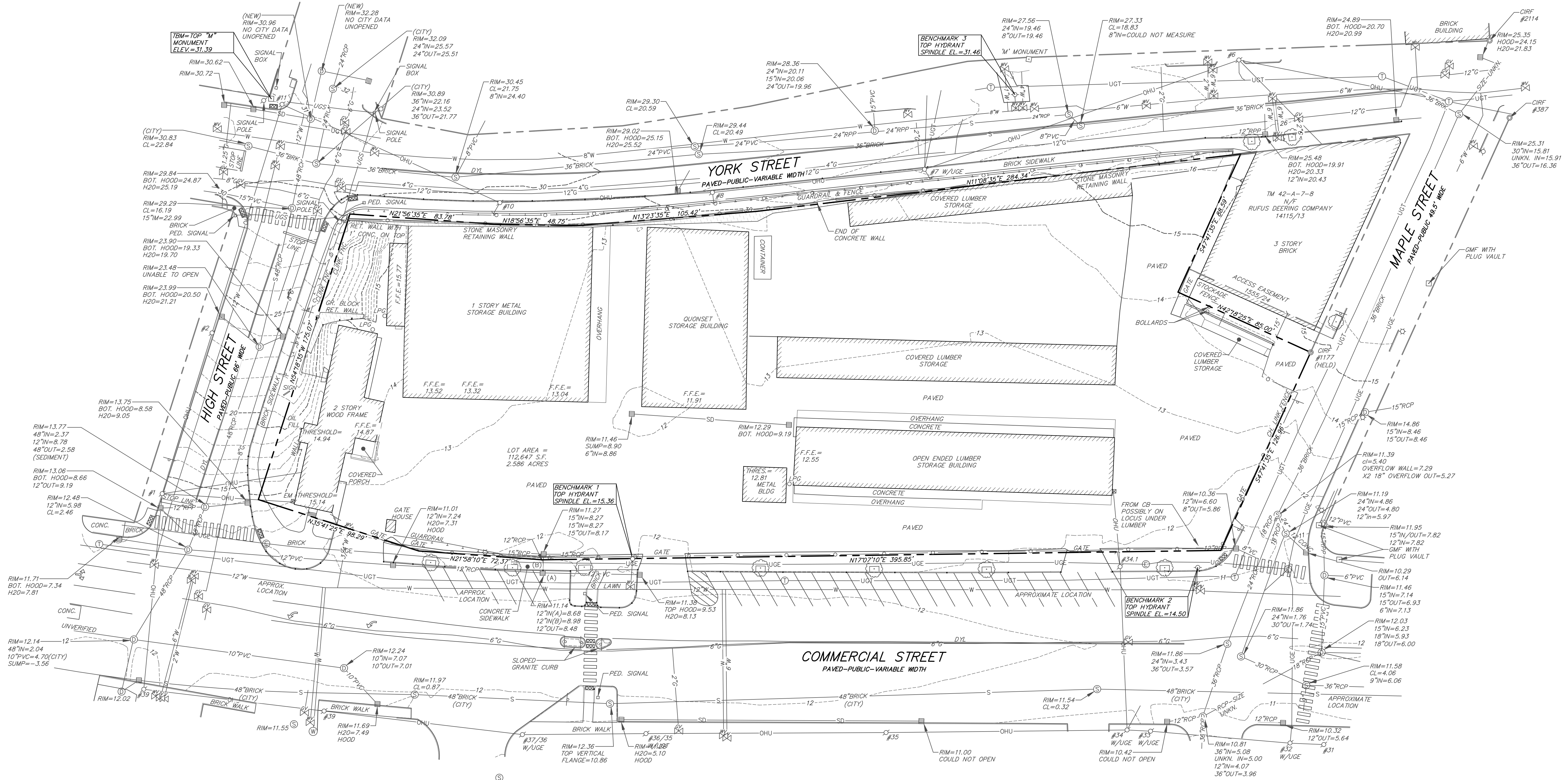
SHEET NO.	SHEET TITLE
1	COVER
2	DEMOLITION PLAN
3	SITE PLAN - LOWER LEVEL
4	SITE PLAN - UPPER LEVEL
5	GRADING & UTILITY PLAN - LOWER LEVEL
6	GRADING & UTILITY PLAN - UPPER LEVEL
7	LANDSCAPE PLAN - LOWER LEVEL
8	LANDSCAPE PLAN - UPPER LEVEL
9	EROSION CONTROL NOTES & DETAILS
10	DETAILS
11	DETAILS
1 OF 1	EXISTING CONDITIONS PLAN



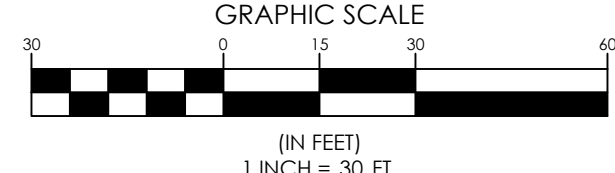
LOCATION MAP N.T.S.

GENERAL NOTES

- THE RECORD OWNER OF THE PARCEL IS MILKEN BLOK BLOCK LLC BY DEED RECORDED AT THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN BOOK 22473, PAGE 307. THE PROPERTY IS SHOWN AS LOT A-001 ON THE CITY OF PORTLAND TAX MAP 42 AND IS LOCATED IN THE B5-b URBAN COMMERCIAL MIXED USE ZONE.
- SPACE AND BULK CRITERIA FOR THE B5-b URBAN COMMERCIAL MIXED USE ZONE ARE AS FOLLOWS:
MINIMUM LOT SIZE: NONE
MINIMUM STREET FRONTAGE: NONE
MINIMUM FRONT YARD: NONE
MINIMUM SIDE YARD: NONE
MINIMUM REAR YARD: NONE
MAXIMUM FRONT YARD: 10 FEET
MAXIMUM BUILDING HEIGHT: 35 FEET
MAXIMUM BUILDING COVERAGE: 100%
* SEE ORDINANCE FOR MORE PARTICULAR INFORMATION.
- TOTAL AREA OF PARCEL IS APPROXIMATELY 2.586 ACRES.
- BOUNDARY AND TOPOGRAPHIC INFORMATION SHOWN HEREON IS BASED SOLELY UPON PLAN REFERENCE A.
- ELEVATIONS ARE BASED ON CITY DATUM.
- PLAN REFERENCE:
A. PLAN ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY ON 383 COMMERCIAL STREET, PORTLAND, MAINE" FOR BERNSTEIN SHUR, PREPARED BY OWEN HASKELL, INC. DATED SEPTEMBER 6, 2016.
- BEARINGS ARE TRUE NORTH.
- UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS, INC. (1-888-DIG-SAFE) AND FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION.
- THE LOCUS PROPERTY AS DEPICTED HEREON DOES/DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA AS DELINEATED ON THE FLOOD INSURANCE RATE MAP FOR PORTLAND, MAINE, CUMBERLAND COUNTY, COMMUNITY-PANEL NUMBER 230051-0013-B, HAVING AN EFFECTIVE DATE OF JULY 17, 1986. THE LOCUS FALLS WITHIN AN AREA IDENTIFIED AS ZONE G, AREAS OF MINIMAL FLOODING.



- LEGEND**
- EXISTING**
- PROPERTY LINE/R.O.W.
 - ABUTTER LINE/R.O.W.
 - EASEMENT
 - MONUMENT
 - IRON PIPE/ROD
 - CURVE/LINE NO.
 - BENCHMARK
 - BENCHMARK DESCRIPTION WITH ELEVATION
 - BUILDING
 - DECK/STEPS/OVERHANG
 - EDGE PAVEMENT
 - EDGE CONCRETE
 - PAVEMENT PAINT
 - CURB LINE
 - CONTOURS
 - CHAIN LINK FENCE
 - BARB WIRE FENCE
 - STOCKADE FENCE
 - GUARD RAIL
 - RETAINING WALL
 - DECIDUOUS TREE
 - CONIFEROUS TREE
 - MULCH LINE
 - BOLLARD
 - SIGN
 - GAS
 - GAS GATE VALVE
 - WATER
 - WATER GATE VALVE
 - HYDRANT
 - SANITARY SEWER
 - SANITARY MANHOLE
 - STORM DRAIN
 - DRAINAGE MANHOLE
 - CATCH BASIN
 - OVERHEAD UTILITY
 - UNDERGROUND UTILITY
 - ELECTRIC MANHOLE
 - TELEPHONE MANHOLE
 - LIGHT POLE
 - UTILITY POLE
 - GUY WIRE



DESIGNED
RLM

CHECKED
WTC

DATE: 09/28/2016

STATUS: SUBMIT TO CITY

REVISIONS:

NO.	DATE	DESCRIPTION
1	09/28/2016	01. RLM 09/28/2016 SUBMIT TO CITY
2	10/05/2016	02. WTC 10/05/2016 SUBMIT TO CITY
3	10/12/2016	03. RLM 10/12/2016 SUBMIT LEVEL II APPLICATION TO CITY

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS, REVISIONS, OR CORRECTIONS SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICS, INC.

SEBAGO TECHNICS

WWW.SEAGOTECHNICS.COM

75 John Stevens Rd.
South Portland, ME 04106
Tel: 207-200-2100

EXISTING CONDITIONS PLAN
OF
383 COMMERCIAL STREET-PHASE 1
PORTLAND, MAINE

FOR:
DEERING PROPERTY DEVELOPMENT, LLC

2730 TRINITY ROAD
WEST BENECA, NEW YORK

PROJECT NO. 16324

SCALE 1" = 30'

SHEET 1 OF 1

DEMOLITION KEY

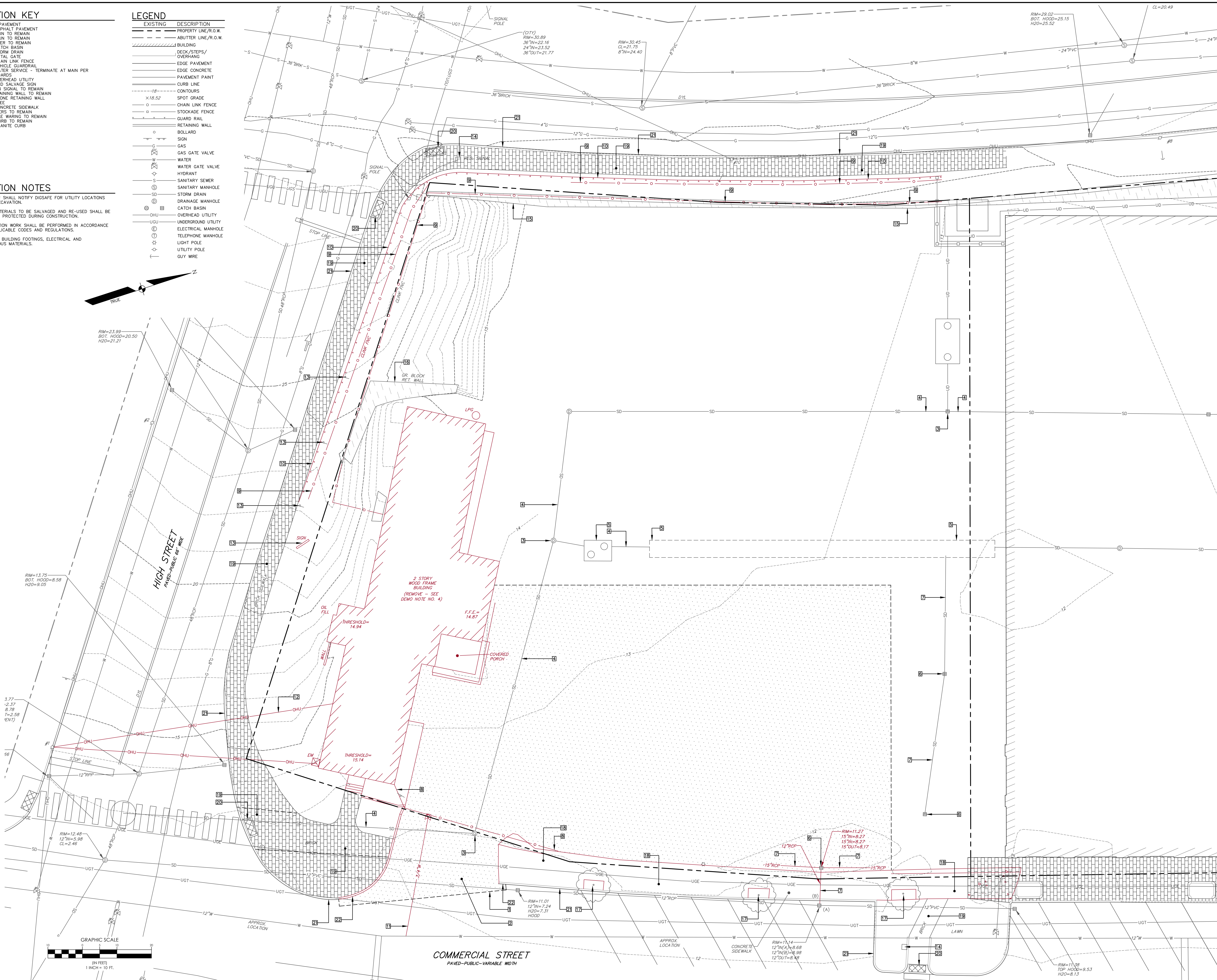
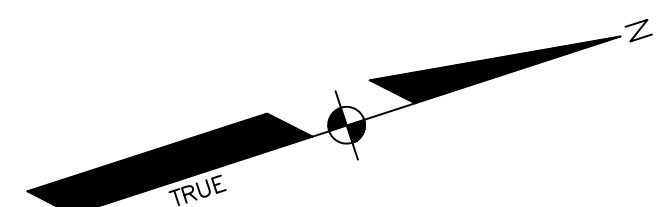
- 1 SAW CUT PAVEMENT
- 2 REMOVE ASPHALT PAVEMENT
- 3 CATCH BASIN TO REMAIN
- 4 STORM DRAIN TO REMAIN
- 5 STORM FILTER TO REMAIN
- 6 REMOVE CATCH BASIN
- 7 REMOVE STORM DRAIN
- 8 REMOVE METAL GATE
- 9 REMOVE CHAIN LINK FENCE
- 10 REMOVE VEHICLE GUARDRAIL
- 11 REMOVE WATER SERVICE - TERMINATE AT MAIN PER PWD STANDARDS
- 12 REMOVE OVERHEAD UTILITY
- 13 REMOVE AND SALVAGE SIGN
- 14 PEDESTRIAN SIGNAL TO REMAIN
- 15 STONE RETAINING WALL TO REMAIN
- 16 REMOVE STONE RETAINING WALL
- 17 REMOVE TREE
- 18 REMOVE CONCRETE SIDEWALK
- 19 BRICK PAVERS TO REMAIN
- 20 ADA TACTILE WARNING TO REMAIN
- 21 GRANITE CURB TO REMAIN
- 22 REMOVE GRANITE CURB

LEGEND

- | EXISTING | DESCRIPTION |
|----------|----------------------|
| --- | PROPERTY LINE/R.O.W. |
| --- | ABUTTER LINE/R.O.W. |
| --- | BUILDING |
| --- | DECK/STEPS/ OVERHANG |
| --- | EDGE PAVEMENT |
| --- | EDGE CONCRETE |
| --- | PAVEMENT PAINT |
| --- | CURB LINE |
| --- | CONTOURS |
| X18.52 | SPOT GRADE |
| --- | CHAIN LINK FENCE |
| --- | STOCKADE FENCE |
| --- | QUARD RAIL |
| --- | RETAINING WALL |
| --- | BOLLARD |
| --- | SIGN |
| --- | GAS |
| --- | GAS GATE VALVE |
| --- | WATER |
| --- | WATER GATE VALVE |
| --- | HYDRANT |
| --- | SANITARY SEWER |
| --- | SANITARY MANHOLE |
| --- | STORM DRAIN |
| --- | DRAINAGE MANHOLE |
| --- | CATCH BASIN |
| --- | OVERHEAD UTILITY |
| --- | UNDERGROUND UTILITY |
| --- | ELECTRICAL MANHOLE |
| --- | TELEPHONE MANHOLE |
| --- | LIGHT POLE |
| --- | UTILITY POLE |
| --- | GUY WIRE |

DEMOLITION NOTES

1. CONTRACTOR SHALL NOTIFY DIGSAFE FOR UTILITY LOCATIONS PRIOR TO EXCAVATION.
2. EXISTING MATERIALS TO BE SALVAGED AND RE-USED SHALL BE STORED AND PROTECTED DURING CONSTRUCTION.
3. ALL DEMOLITION WORK SHALL BE PERFORMED IN ACCORDANCE TO ALL APPLICABLE CODES AND REGULATIONS.
4. REMOVE ALL BUILDING FOOTINGS, ELECTRICAL AND MISCELLANEOUS MATERIALS.



DESIGNED
DMD

CHECKED
RLM

B	RLM 09-28-20	SUBMIT TO CITY	
A	RLM 06-26-20	SUBMIT TO CLIENT	
REV	BY	DATE	STATUS

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, APPROVED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.

SEBAGO
TECHNIQS

WWW.SEBAGOTECHNIQS.COM
75 J. J. FORDS RD.
SOUTH PORTLAND, ME 04106
TEL: 207-200-2100

DEMOLITION PLAN
OF
387 COMMERCIAL STREET
PORTLAND, MAINE

FOR:
DEERING PROPERTY DEVELOPMENT, LLC
2730 TRANT ROAD
WEST SENECA, NEW YORK 14224

PROJECT NO.
16324

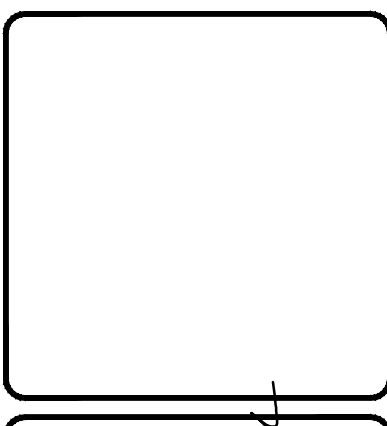
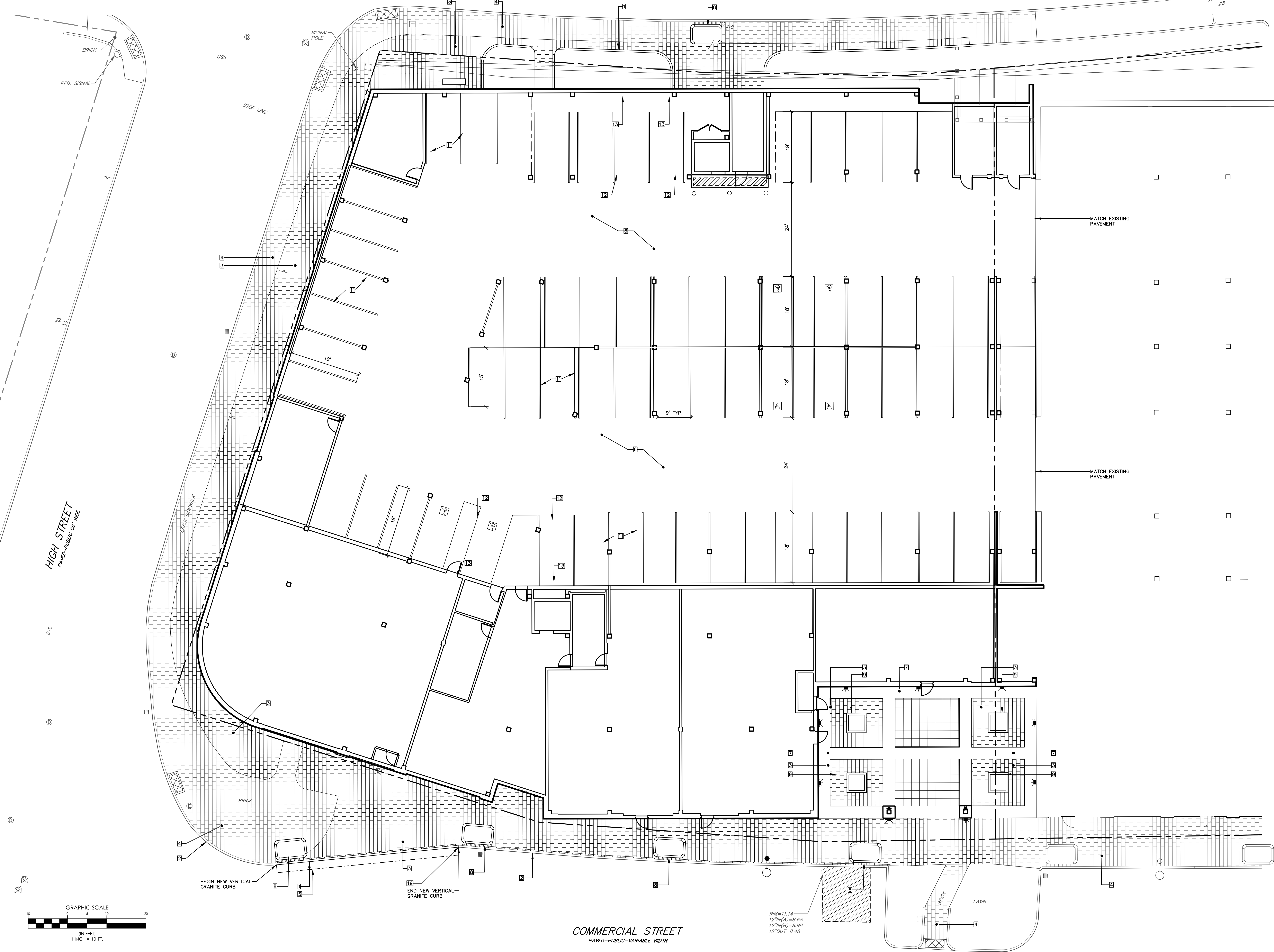
SCALE
1"=10'

SHEET 2 OF 11

16324DEM01.dwg, TAB:06A0

GENERAL NOTES:

- 1 NEW VERTICAL GRANITE CURB
- 2 EXISTING GRANITE CURB TO REMAIN
- 3 BRICK PAVEMENT SIDEWALK
- 4 EXISTING BRICK SIDEWALK TO REMAIN
- 5 PAVEMENT SAW CUT
- 6 VEHICULAR ASPHALT PAVING
- 7 4" CONCRETE PAVING
- 8 6" RAISED GRANITE CURB / TREE WELL - 5 FT. X 8 FT. OUTSIDE DIMENSIONS
- 9 6" RAISED GRANITE CURB / TREE WELL - 5 FT. X 5 FT. OUTSIDE DIMENSIONS
- 10 BIKE RACK - DERO BIKE HITCH, COLOR BLACK
- 11 NEW 4" WHITE PAINT STRIPING
- 12 BLUE ADA PAINTED SYMBOL
- 13 ADA PARKING SIGN - WALL MOUNTED 5 FT. ABOVE GRADE
- 14 EXISTING TREE TO REMAIN
- 15 24" X 24" PEDESTAL PAVERS, TYPICAL
- 16 6" X 12" X 48" PRECAST CONCRETE CURB, TYPICAL
- 17 24" X 24" CONCRETE PAVERS, TYPICAL
- 18 BENCH, LANDSCAPE FORMS FOR 70" BACKLESS, IPE WOOD SEATS, TYPICAL
- 19 FINAL DETAIL AT CURB ANGLES TO BE AGREED IN WRITING WITH THE CITY PLANNING AUTHORITY PRIOR TO ORDERING MATERIALS
- 20 MILL AND GRIND 1.5" OF EXISTING ASPHALT, REPLACE WITH 1.5" COURSE OF 9.5MM PAVEMENT
- 21 BRICK HEADER COURSE, TYPICAL
- 22 (2) 6" STEP RISERS
- 23 12" X 18" SERVICE VEHICLES ONLY/NO PARKING SIGN, WALL MOUNTED 5 FT. ABOVE GRADE



DESIGNED	CHECKED
DMD	RLM
B RLM 09-28-20 SUBMIT TO CITY	
A RLM 06-26-20 SUBMIT TO CLIENT	
REV: BY:	DATE: STATUS:
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, APPROVED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.	

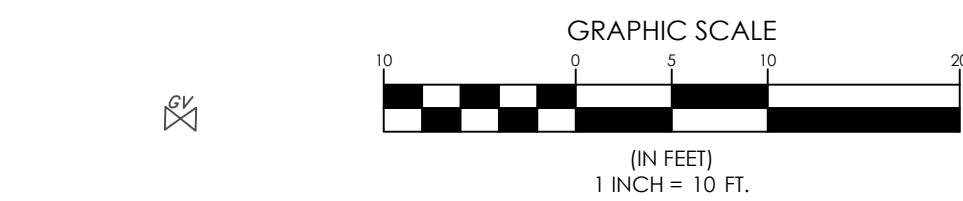


SITE PLAN - LOWER LEVEL
OF:
387 COMMERCIAL STREET
PORTLAND, MAINE
FOR:
DEERING PROPERTY DEVELOPMENT, LLC
2730 TRANSIT ROAD
WEST SENECA, NEW YORK 14224

PROJECT NO.	SCALE
16324	1"=10'

SHEET 3 OF 11

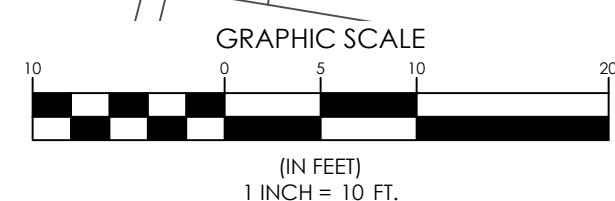
- 3 NEW VERTICAL GRANITE CURB
- 4 EXISTING GRANITE CURB TO REMAIN
- 5 BRICK PAVEN SIDEWALK
- 6 EXISTING BRICK SIDEWALK TO REMAIN
- 7 PAVEMENT SAW CUT
- 8 VEHICULAR ASPHALT PAVING
- 9 4" CONCRETE PAVING
- 10 6" RAISED GRANITE CURB / TREE WELL - 5 FT. x 5 FT. OUTSIDE DIMENSIONS
- 11 6" RAISED GRANITE CURB / TREE WELL - 5 FT. x 5 FT. OUTSIDE DIMENSIONS
- 12 BIKE RACK - DERBY BICYCLE COLOR BLACK
- 13 NEW 4" WHITE PAINT STRIPING
- 14 BLUE ADA PAINTED SYMBOL
- 15 ADA PARKING SIGN, WALL MOUNTED 5 FT. ABOVE GRADE
- 16 EXISTING TREE TO REMAIN
- 17 24" x 24" PEDESTAL PAVES, TYPICAL
- 18 6" x 12" x 48" PRECAST CONCRETE CURB, TYPICAL
- 19 24" x 24" CONCRETE PAVES, TYPICAL
- 20 BEND, LANDSCAPE FORMS FP# 707 BACKLESS, IPE WOOD SEATS, TYPICAL
- 21 BENCH, 14" AT CURB, 18" TO BE AGREED IN WRITING WITH THE CITY PLANNING AUTHORITY PRIOR TO ORDERING MATERIALS
- 22 18" GRIND 1.5" OF EXISTING ASPHALT, REPLACE WITH 1.5" COURSE OF 9.5MM PAVEMENT
- 23 BRICK HEADER COURSE, TYPICAL
- 24 (2) 6" STEP RISERS
- 25 12" x 18" SERVICE VEHICLES ONLY NO PARKING SIGN, WALL MOUNTED 5 FT. ABOVE GRADE



COMMERCIAL STREET
PAVED-PUBLIC-VARIABLE WIDTH

[illegible]

- 1 PRIOR TO ORDERING ANY WATER INSTALLATION MATERIALS, EXCAVATE TEST PITS TO
2 DETERMINE INVERT OF 12" WATER MAIN, WIDTH, TOP AND BOTTOM ELEVATIONS OF ELECTRIC
3 AND TELEPHONE DUCT BANKS, REPORT FINDINGS IMMEDIATELY TO DESIGNER
4 TAPPING SLEEVES AND GATE VALVES AT EXISTING 12" WATER MAIN PER PORTLAND WATER
5 DISTRICT STANDARDS
6 4" AND 6" GATE VALVES IN C.1. VALVE BOXES, PER PORTLAND WATER DISTRICT
7 STANDARDS
8 WATER MAINS ENTER CONDO SPRINKLER ROOM, PROVIDE DOUBLE CHECK VALVE ASSEMBLIES
9 ON FIRE AND DOMESTIC LINES
10 EXISTING SUBSURFACE CHAMBER SYSTEM 2



DESIGNED		CHECKED	
DMD		RLM	
B	RLM 09-28-20	Submit to City	
A	RLM 06-26-20	Submit to Client	
REV:	BY:	DATE:	STATUS:
THIS PLAN HAS BEEN MODIFIED FROM SEBAGO TECHNICAL ANY ALTERATIONS, THE PLANS WILL BE MODIFIED BY THE DESIGNER. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN. THE DESIGNER SHALL BE RESPONSIBLE FOR THE DESIGN.			

SEBAGO
TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

GRADING & UTILITIES PLAN - LOWER LEVEL
OF:
387 COMMERCIAL STREET
387 COMMERCIAL STREET
PORTLAND, MAINE
FOR:
ORDERING PROPERTY DEVELOPMENT, LLC
2730 TRANSIT ROAD
WEST SENeca, NEW YORK 14274

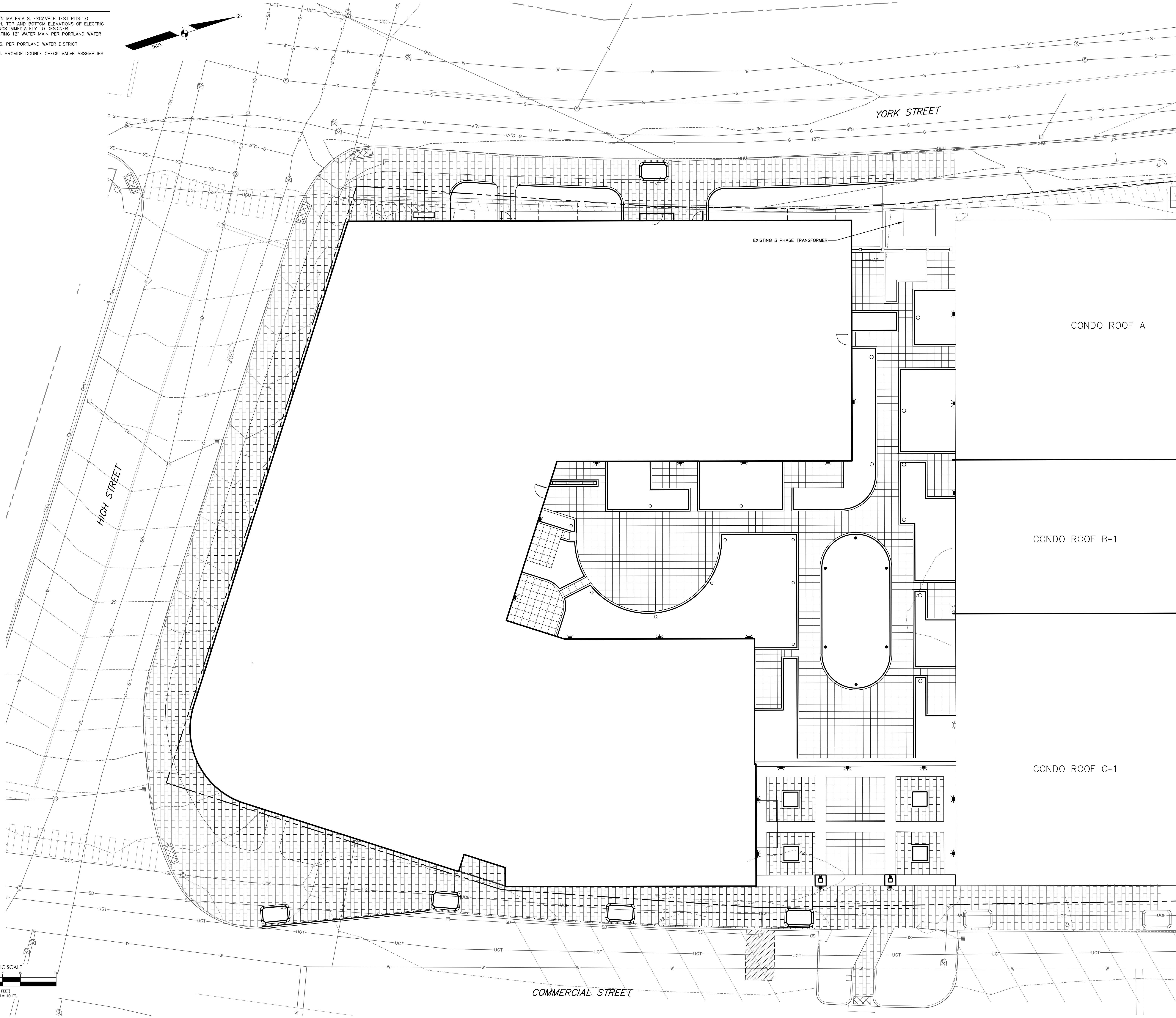
PROJECT NO.	SCALE
16324	1"=10'

SHEET 5 OF 11

16324GU-LL-01.dwg, TAB:GU-LL-3

UTILITY PLAN NOTES:

1. PRIOR TO ORDERING ANY WATER INSTALLATION MATERIALS, EXCAVATE TEST PITS TO DETERMINE INVERT OF 12" WATER MAIN, WIDTH, TOP AND BOTTOM ELEVATIONS OF ELECTRIC AND TELEPHONE DUCT BANKS. REPORT FINDINGS IMMEDIATELY TO DESIGNER.
2. TAPPING SLEEVES AND GATE VALVES AT EXISTING 12" WATER MAIN PER PORTLAND WATER DISTRICT STANDARDS.
3. 4" AND 6" GATE VALVES IN C.I. VALVE BOXES, PER PORTLAND WATER DISTRICT STANDARDS.
4. WATER MAINS ENTER CONDO SPRINKLER ROOM. PROVIDE DOUBLE CHECK VALVE ASSEMBLIES ON FIRE AND DOMESTIC LINES.
5. EXISTING SUBSURFACE CHAMBER SYSTEM 2.



DESIGNED
DMD

CHECKED
RLM

OF:
387 COMMERCIAL STREET
PORTLAND, MAINE

FOR:
DEERING PROPERTY DEVELOPMENT, LLC
2730 TRANIST ROAD
WEST SENECA, NEW YORK 14224

PROJECT NO.
16324

SCALE
1"=10'

SHEET 6 OF 11

16324-GU-UL-01.dwg, TAB:GU-UL

SEBAGO
TECHNICS

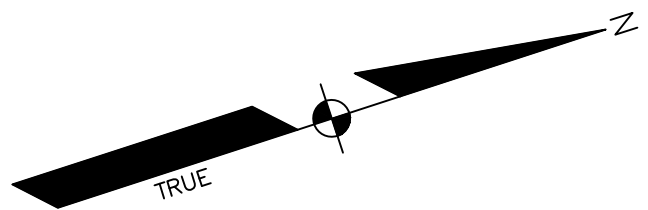
WWW.SEBAGOTECHNICS.COM
75 JOHNSON RD.
SOUTH PORTLAND, ME 04106
TEL: 207-200-2100

RICHARD L. WEEK, P.E. 10668

STATE OF MAINE
REGISTERED PROFESSIONAL ENGINEER
RICHARD L. WEEK
No. 10668
EXPIRATION DATE: 09-28-2020

PLAN SCHEDULE:

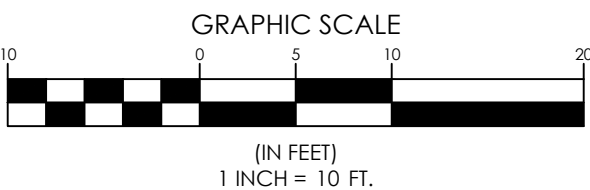
KEY BOTANICAL NAME / COMMON NAME	SIZE / REMARKS
AF ABIES FRASERI / FRASER FIR	14 FT. HEIGHT
BN BETULA NIGRA 'RIVER BIRCH' - SINGLE LEADER	10'-12' HIGHT / MIN. 3" CALIPER
NS NYSSA SYLVATICA / TUPELO	4" CALIPER
AR ACER R. 'AUTUMN BLAZE' / RED MAPLE	3" CALIPER
PX PRUNUS X. 'ACCOLADE' / ACCOLADE CHERRY	3" CALIPER
MY MAGNOLIA X. 'YELLOW BIRD' / YELLOW MAGNOLIA	3" CALIPER
CB CARPINUS B. 'FASTIAGATA' / UPRIGHT HORNBEEAM	3" CALIPER
GT QLEDITSIA T. 'STREETKEEPER' / HONEY LOCUST	3" CALIPER
AE AZALEA E. 'KNAPHILL RED' / AZALEA	NO. 7 CONTAINER
KN KALMIA L. 'NATHAN HALE' MOUNTAIN LAUREL	NO. 7 CONTAINER
RW RHODODENDRON 'WINDBEAM' / RHODODENDRON	NO. 7 CONTAINER
HA HYDRANGEA A. 'ANNABELLE' / HYDRANGEA	NO. 7 CONTAINER
HM HYDRANGEA A. 'MINI MAUVETTE' /MINI MAUVETTE HYDRANGEA	NO. 7 CONTAINER
JS JUNIPERUS VAR. 'SARGENT' / SARGENT JUNIPER	NO. 5 CONTAINER
MS MISCANTHUS S. 'PURPURASCENS' / FLAME GRASS	NO. 2 CONTAINER
HP HOSTA 'PATRIOT' / HOSTA	NO. 2 CONTAINER @ 36" O.C.
SN SALVIA 'MAY NIGHT' / MAY NIGHT SALVIA	NO. 2 CONTAINER @ 24" O.C.
PA PEROVSKIA A. 'LITTLE SPIRE' / RUSSIAN SAGE	NO. 2 CONTAINER @ 30" O.C.
CA CARAX 'PENNSYLVANICA' / SEDGE	NO. 2 CONTAINER @ 12" O.C.
PT PACHYSANDRA TERMINALIS / JAPANESES SPURGE	FLATS @ 12" O. C.
SK SEDUM KAMTSCHATICUM / GREEN SEDUM	3" POTS @ 18" O.C.
ST SEDUM T. 'AUTUMN JOY' / RED SEDUM	3" POTS @ 18" O.C.
LN LYSIMACHIA N. 'AUREA' / MONEYWORT	3" POTS @ 18" O.C.
NR NARCISSUS 'ROSE OF MARY' / WHITE DAFFODIL	BULBS @ 18" O.C.



YORK STREET

HIGH STREET

COMMERCIAL STREET



DANIEL M. DAWERS, R.L.A. #815

09/28/2020

DESIGNED	CHECKED
DMD	RLM
B RLM 09-28-20 SUBMIT TO CITY	
A RLM 06-26-20 SUBMIT TO CLIENT	
REV. BY:	DATE: STATUS:
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, APPROVED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.	

WWW.SEBAGOTECHNIQS.COM
75 JOSEPH ROAD, SUITE 404
SOUTH PORTLAND, ME 04106
TEL: 207-200-2100

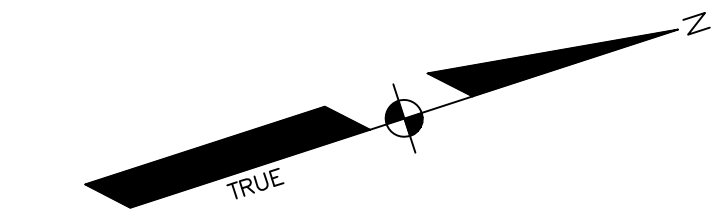
LANDSCAPE PLAN - LOWER LEVEL
OF:
387 COMMERCIAL STREET
PORTLAND, MAINE

FOR:
DEERING PROPERTY DEVELOPMENT, LLC
2730 TRANSIT ROAD
WEST SENECA, NEW YORK 14224

PROJECT NO.	SCALE
16324	1"=10'

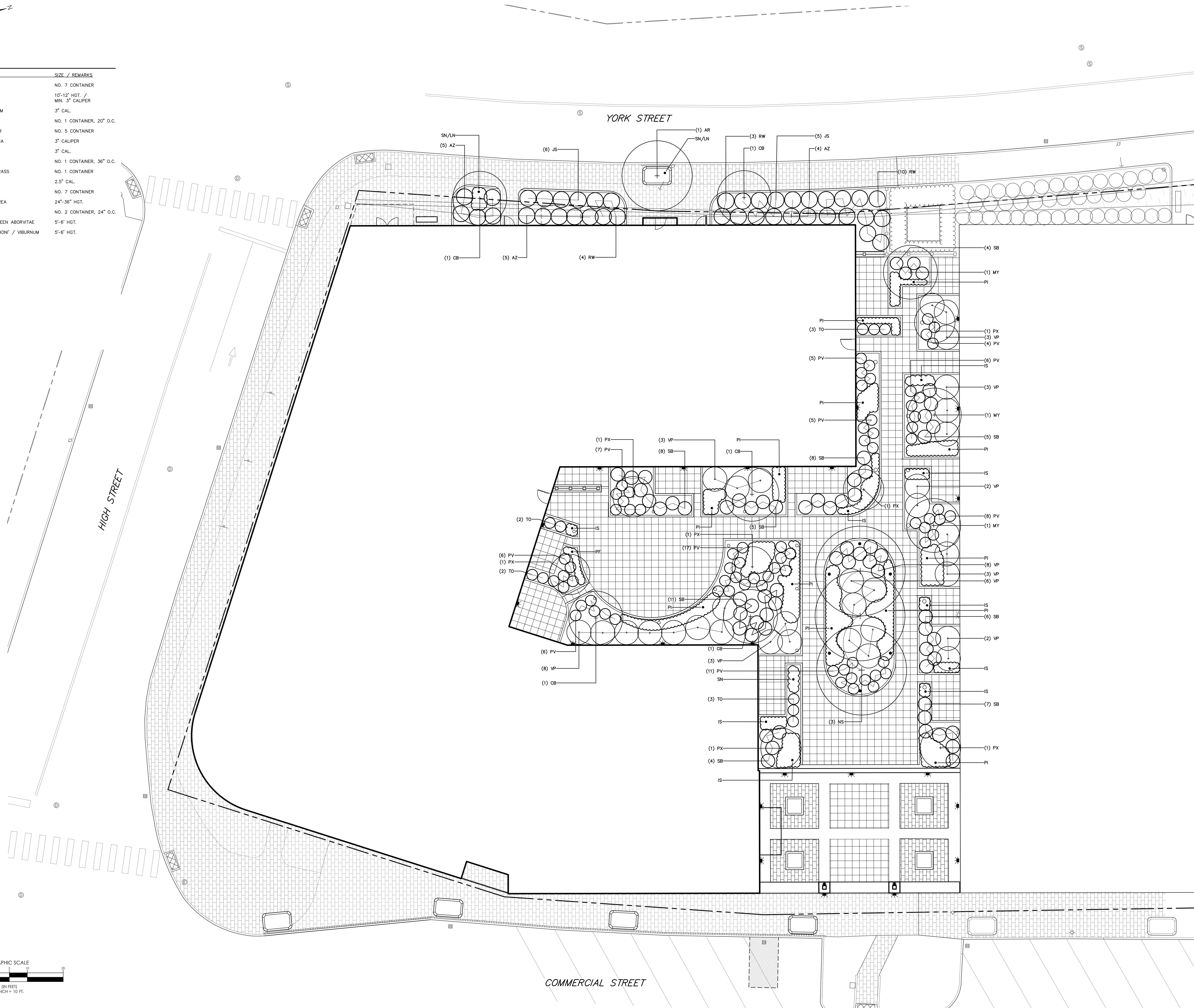
SHEET 7 OF 11

16324-LL-01.dwg, 7/8/17-LL-3



PLAN SCHEDULE:

KEY BOTANICAL NAME / COMMON NAME	SIZE / REMARKS
AZ AZLEA E. 'KNAPHILL RED' / AZALEA	NO. 7 CONTAINER
BN BETULA NIGRA 'RIVER BIRCH' - SINGLE LEADER	10'-12" HGT. / MIN. 3" CALIPER
CB CARPINUS B. 'FASTIGIATA' / UPRIGHT HORNBEAM	3" CAL.
IS IRIS SIBERICA 'CEASERS BROTHER' / IRIS	NO. 1 CONTAINER, 20" O.C.
JS JUNIPERUS VAR. 'SARGENT' / SARGENT JUNIPER	NO. 5 CONTAINER
MY MAGNOLIA X. 'YELLOW BIRD' / YELLOW MAGNOLIA	3" CALIPER
NS NYSSA SYLVATICA / BLACK TUPELO	3" CAL.
PI PEONIA ITOH 'FIRST ARRIVAL' / PEONY	NO. 1 CONTAINER, 36" O.C.
PV PANICUM VIRGATUM 'CAPE BREEZE' / SWITCHGRASS	NO. 1 CONTAINER
PX PRUNUS X. 'ACCOLADE' / ACCOLADE CHERRY	2.5" CAL.
RW RHODODENDRON 'WINDBEAM' / RHODODENDRON	NO. 7 CONTAINER
SB SPIREA X. BUMALDA 'ANTHONY WATERER' / SPIREA	24"-36" HGT.
SN SALVIA 'MAYNIGHT' / MAY NIGHT SALVIA	NO. 2 CONTAINER, 24" O.C.
TO TUJA OCCIDENTALIS 'SMARAGO' / EMERALD GREEN ABORVITAE	5'-6" HGT.
VP VIBURNUM PULCATUM VAR. TOMENTOSUM 'SHOSHONI' / VIBURNUM	5'-6" HGT.



DANIEL M. DAWERS, RLA #815

09/28/2020

DESIGNED	CHECKED
DMD	RLM
B RLM 09-28-20 SUBMIT TO CITY	
A RLM 06-26-20 SUBMIT TO CLIENT	
REV. BY:	DATE:
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQUES, INC. ANY ALTERATIONS, APPROVED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQUES, INC.	

WWW.SEBAGOTECHNIQUES.COM

75 JOE ROCKS RD.
SOUTH PORTLAND, ME 04106
TEL: 207-200-2100

LANDSCAPE PLAN - UPPER LEVEL
OF:
387 COMMERCIAL STREET
PORTLAND, MAINE

FOR:
DEERING PROPERTY DEVELOPMENT, LLC
2730 TRANSIT ROAD
WEST SENECA, NEW YORK 14224

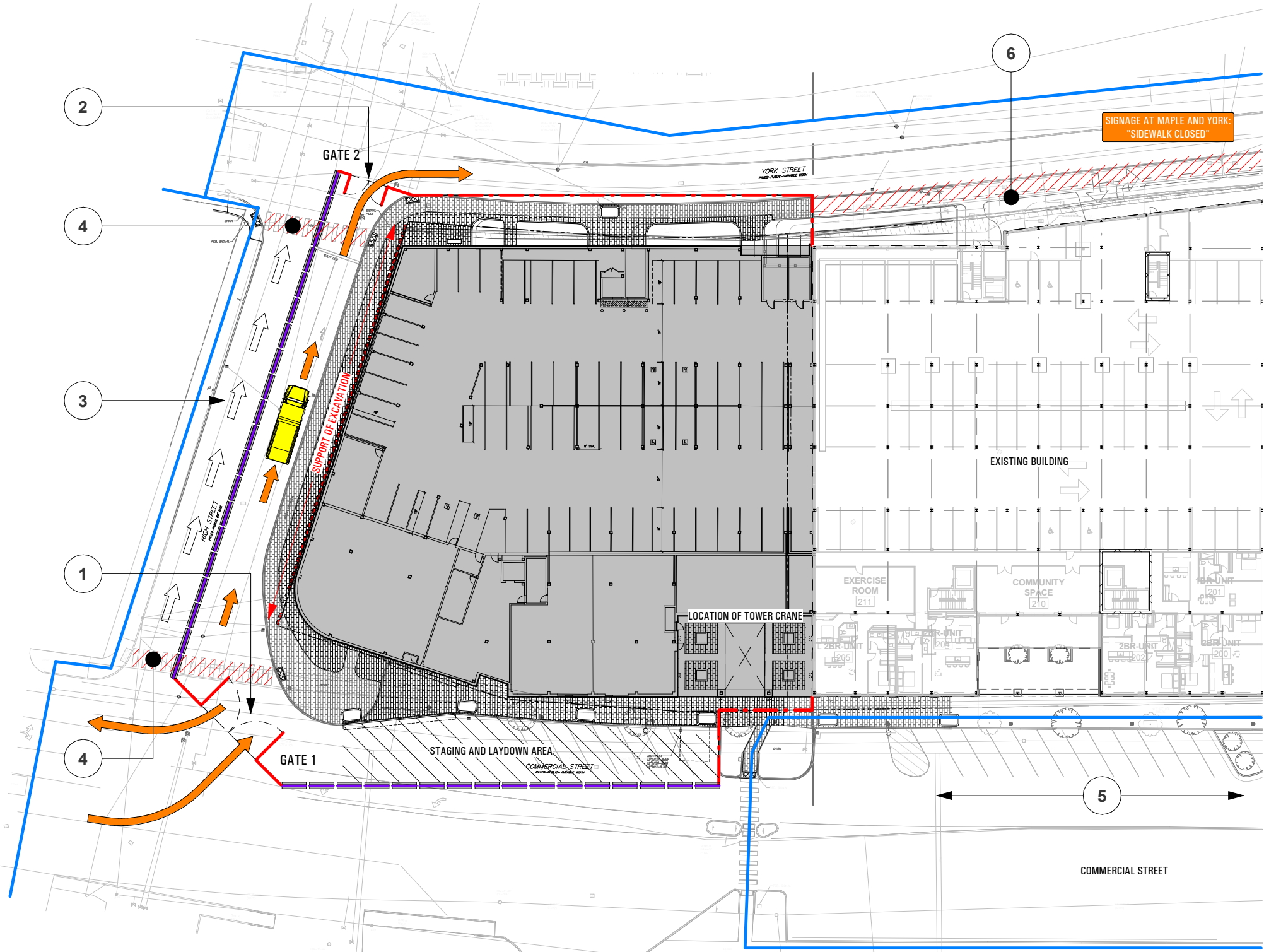
PROJECT NO.	SCALE
16324	1"=10'

SHEET 8 OF 11

16324-UL-01.dwg, TABEL-UL-3

387 Commercial Street

9.24.2020



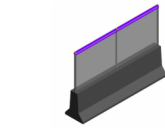
TMP LEGEND

- 1 BI-DIRECTIONAL CONSTRUCTION TRAFFIC AT GATE 1
- 2 EXITING CONSTRUCTION TRAFFIC ONLY AT GATE 2
- 3 ONE-WAY TRAFFIC ON HIGH STREET DURING CONSTRUCTION
- 4 CROSSWALK USAGE SUSPENDED FOR CONSTRUCTION DURATION
- 5 PARKING ALONG COMMERCIAL TO REMAIN ACCESSIBLE
- 6 SIDEWALK CLOSED FOR CONSTRUCTION ACTIVITY

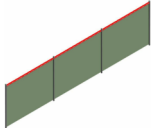
GRAPHIC KEY



CONSTRUCTION ACCESS ONLY



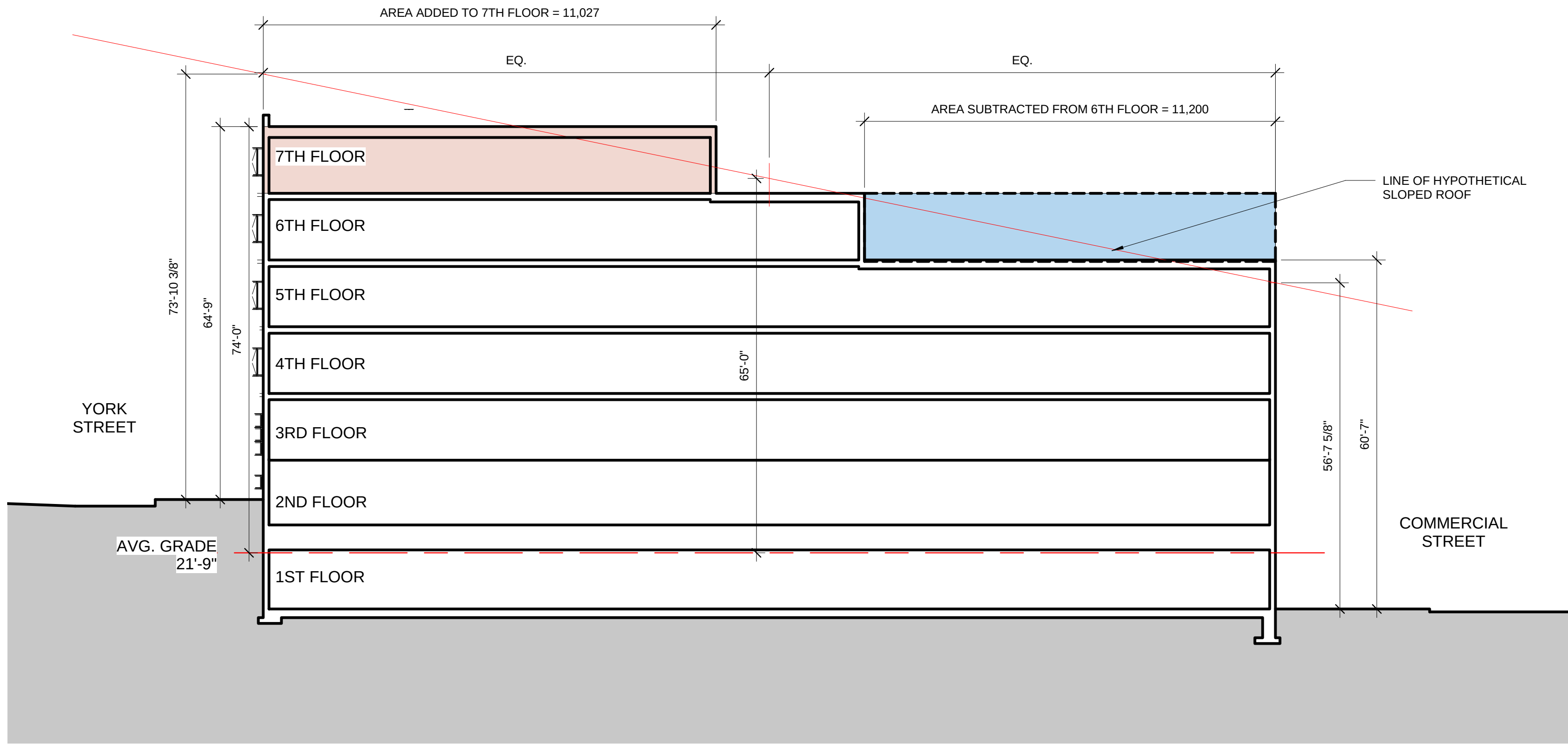
JERSEY BARRIER / FENCING



CHAINLINK FENCING / GATE

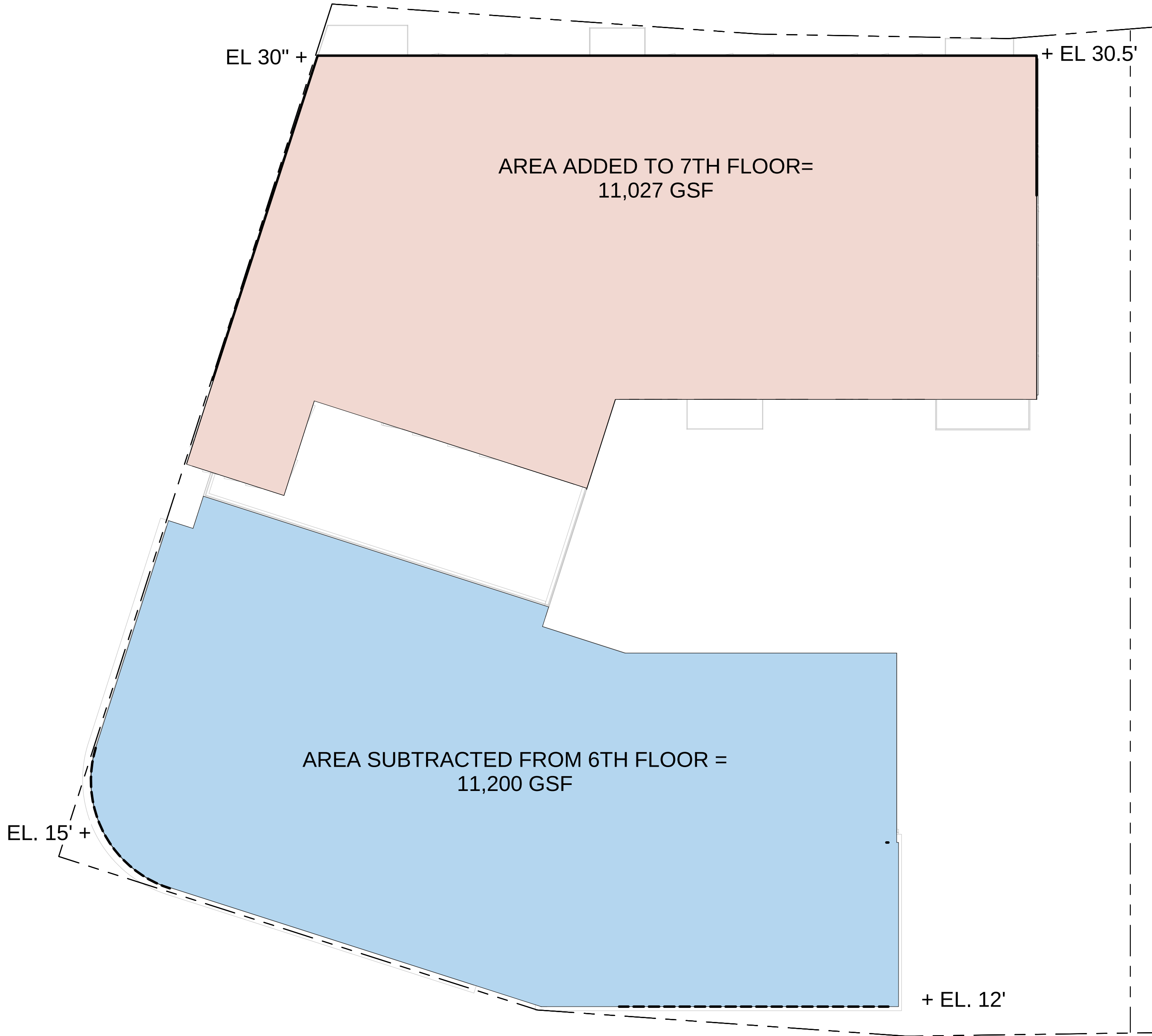


PEDESTRIAN ACCESS



2 | STEPPED BUILDING HEIGHT DIAGRAM
1/16" = 1'-0"

GENERAL NOTES:
1. AVERAGE GRADE BY DEFINITION: GRADE TAKEN AT THE FOUR (4) BUILDING CORNERS DIVIDED BY FOUR (4):
 $30' + 30.5' + 12' + 15' = 87.5' / 4 = 29.5'$
2. BUILDING HEIGHT: 65 FEET - THE VERTICAL MEASUREMENT FROM THE AVERAGE GRADE TO THE CENTER POINT OF THE LINE OF HYPOTHETICAL SLOPED ROOF BEAM - VOLUME ABOVE LINE SHOULD BE LESS THAN VOLUME BELOW THE LINE.

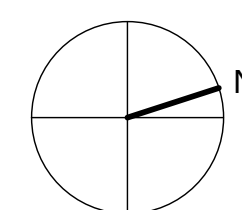


1 | ROOF - VOLUME STUDY
1/16" = 1'-0"



1 | LEVEL 1 FIRST FLOOR AREA: 33022 GSF
 1/8" = 1'-0" 0 4'-0" 8'-0" 12'-0" 16'-0" 20'-0"

A1.01	Date: SEP 28, 2020		Scale: 1/8" = 1'-0"	FIRST FLOOR PLAN
	Revisions:			
	Project: 387 COMMERCIAL STREET PORTLAND, MAINE			
Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056				Consultant:
Declarant and Owner of Record:				Deering Property Development LLC



1 LEVEL 2 SECOND FLOOR AREA: 33022 GSF
1/8" = 1'-0"

Deering Property
Development LLC

ARCHETYPE
ARCHITECTS
48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

387
COMMERCIAL
STREET
PORTLAND, MAINE

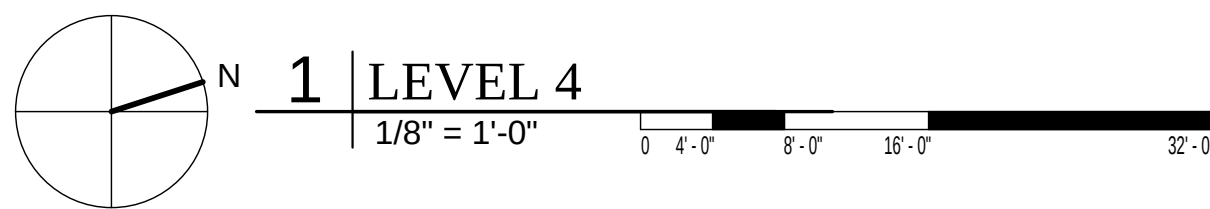
SEP 28, 2020
SECOND FLOOR PLAN

A1.02

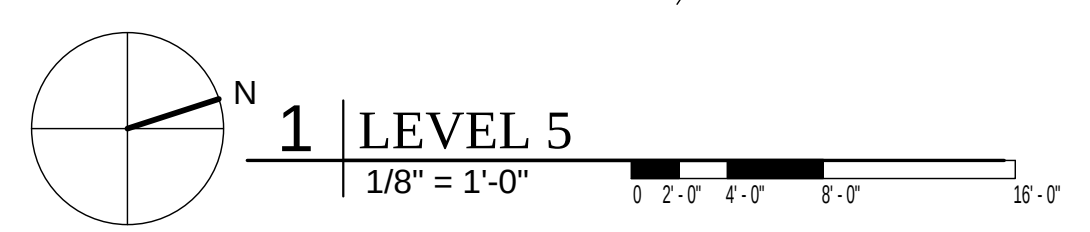


1 LEVEL 3
1/8" = 1'-0"

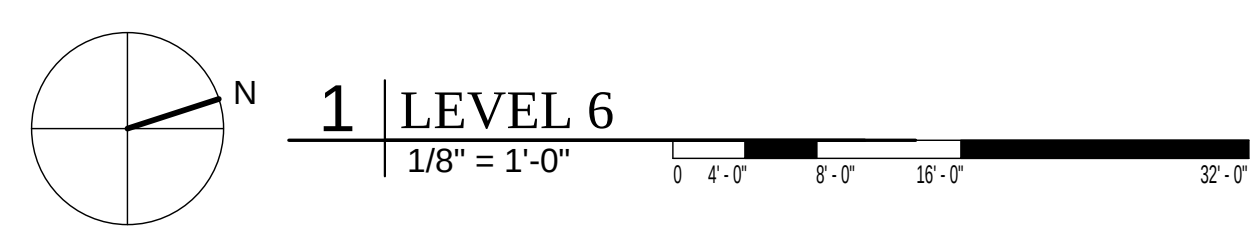
A1.03		Date: SEP 28, 2020		Scale: 1/8" = 1'-0"	Revisions:		Project: 387 COMMERCIAL STREET PORTLAND, MAINE		Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056		Consultant:		Declarant and Owner of Record: Deering Property Development LLC			
THIRD FLOOR PLAN																



Date: SEP 28, 2020		Scale: 1/8" = 1'-0"		FOURTH FLOOR PLAN	
Revisions:					
Project: 387 COMMERCIAL STREET PORTLAND, MAINE		Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056		Consultant:	
Declarant and Owner of Record: Deering Property Development LLC					
A1.04					



Date: SEP 28, 2020		Scale: 1/8" = 1'-0"	Revisions:		Project: 387 COMMERCIAL STREET PORTLAND, MAINE		Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056		Consultant:		Declarant and Owner of Record: Deering Property Development LLC			
A1.05			FIFTH FLOOR PLAN											



COMMERCIAL STREET

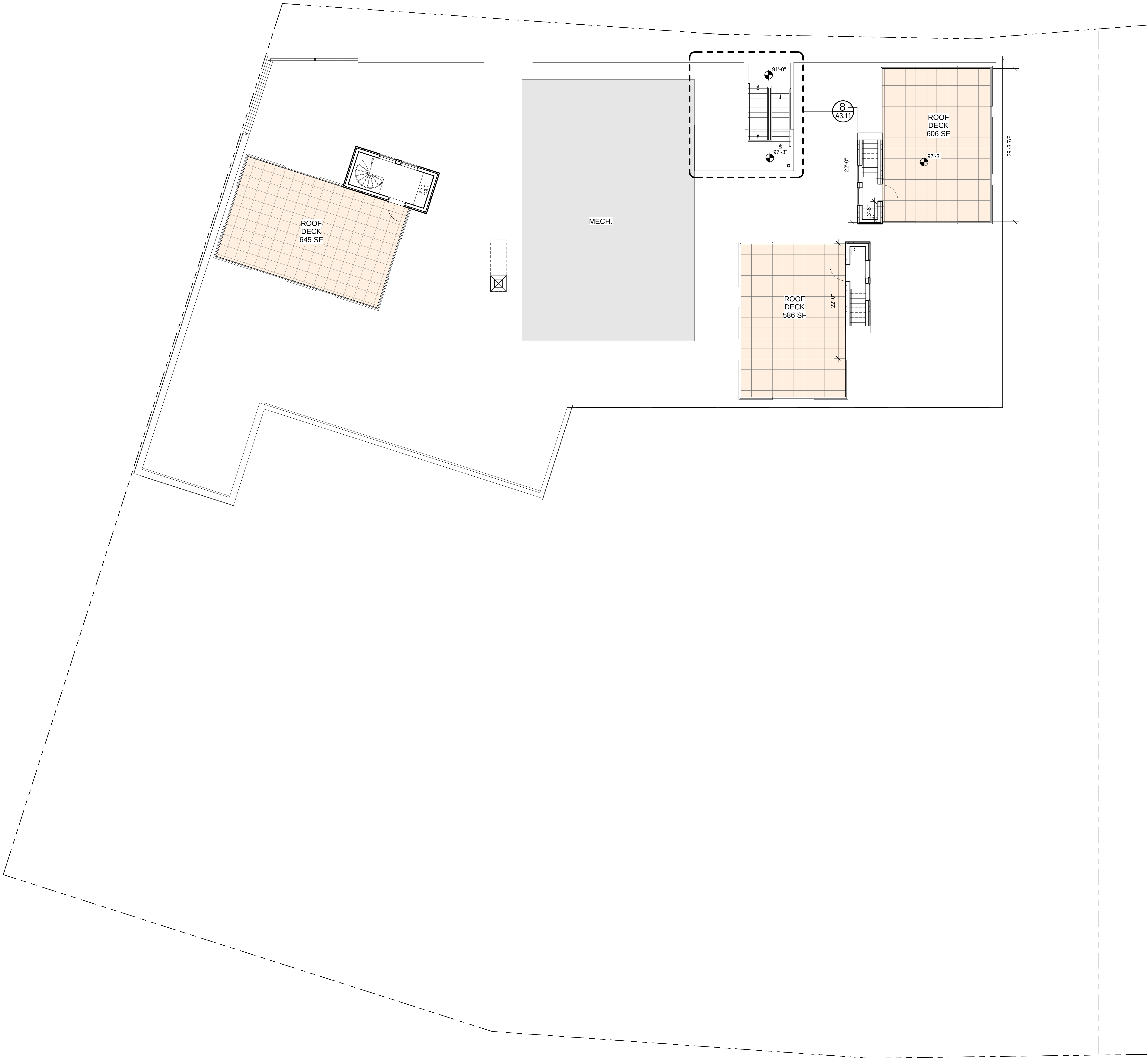
YORK STREET

HIGH STREET

PHASE II
HOBSON'S
LANDING

A1.06		Date: SEP 28, 2020		Scale: 1/8" = 1'-0"	Revisions:		Project: 387 COMMERCIAL STREET PORTLAND, MAINE	Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056	Consultant:	Declarant and Owner of Record: Deering Property Development LLC	
SIXTH FLOOR PLAN											





1 | ROOF
1/8" = 1'-0" 0 2'-0" 4'-0" 6'-0" 12'-0"

A1.08

Date:
SEP 28, 2020

Scale:
1/8" = 1'-0"

Revisions:

Project:
387
COMMERCIAL
STREET

PORTLAND, MAINE

Architect:

**ARCHETYPE
ARCHITECTS**

48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

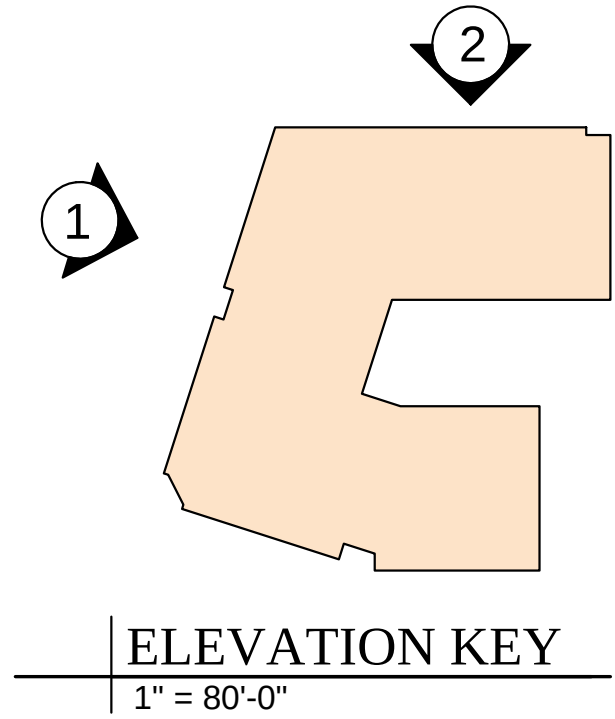
Consultant

Declarant and Owner of Record:

Deering Property
Development LLC



1 HIGH ST. ELEVATION
1/8" = 1'-0"



2 YORK ST. ELEVATION
1/8" = 1'-0"

Date: SEP 28, 2020		Scale: AS indicated	Revisions:	Project: 387 COMMERCIAL STREET PORTLAND, MAINE	Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056	Consultant:	Declarant and Owner of Record: Deering Property Development LLC		
ELEVATIONS									
A2.01									



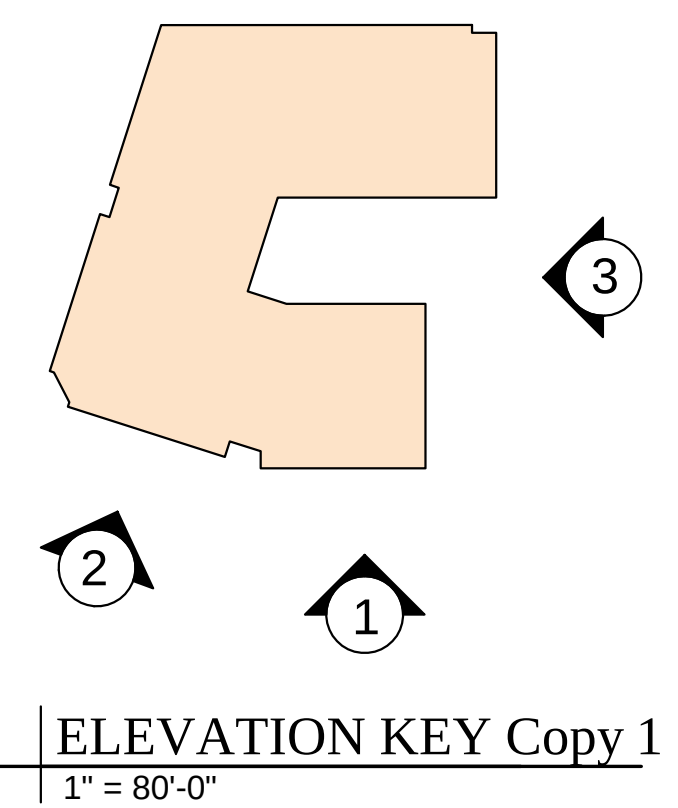
2 | COMMERCIAL ST. ELEVATION 2
1/8" = 1'-0"



1 | COMMERCIAL ST. ELEVATION 1
1/8" = 1'-0"



3 | EAST ELEVATION
3/32" = 1'-0"



Declarant and Owner of Record:
Deering Property
Development LLC

Consultant

Architect:
**ARCHETYPE
ARCHITECTS**
48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

Project:
387
COMMERCIAL
STREET
PORTLAND, MAINE

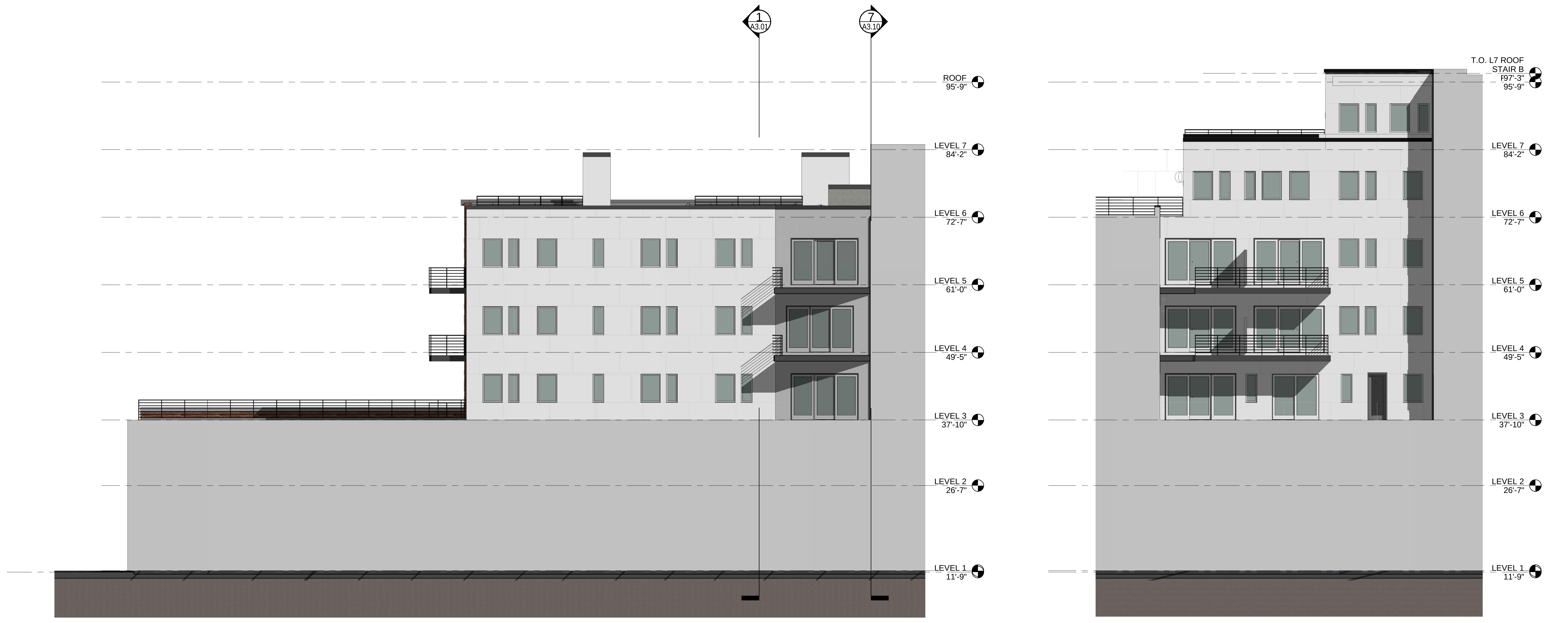
Revisions:

Scale:
As indicated

Date:
SEP 28, 2020

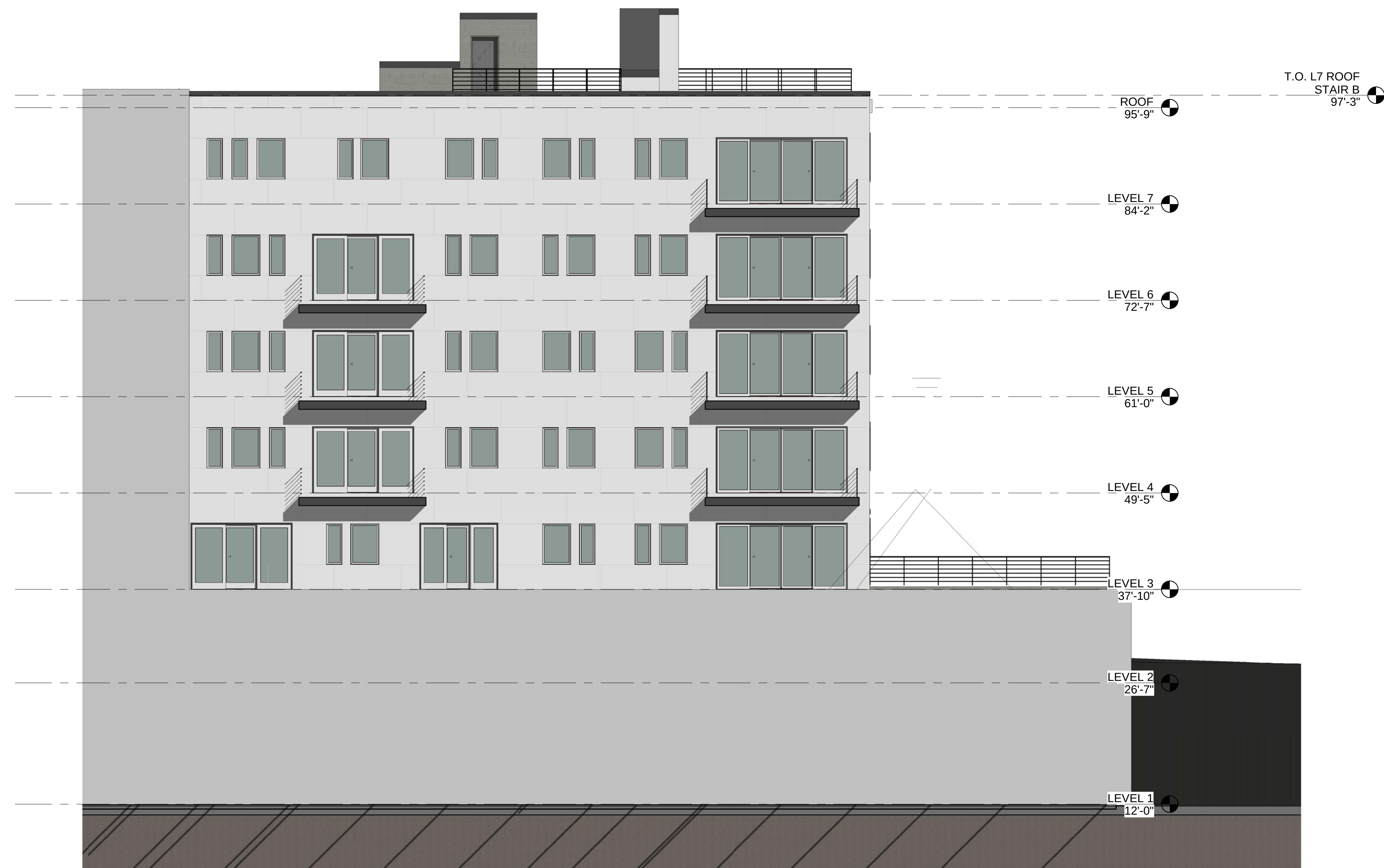
ELEVATIONS

A2.02



2 | COURTYARD SOUTH
1/8" = 1'-0"
0 2'-0" 4'-0" 8'-0" 16'-0"

1 | COURTYARD WEST
1/8" = 1'-0"
0 2'-0" 4'-0" 8'-0" 16'-0"



3 | COURTYARD NORTH
1/8" = 1'-0"
0 2'-0" 4'-0" 8'-0" 16'-0"

Declarant and Owner of Record:		Deering Property Development LLC	
Consultant:		ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056	
Architect:		387 COMMERCIAL STREET PORTLAND, MAINE	
Project:		ELEVATIONS	
Date:		SEP 28, 2020	
Scale:		1/8" = 1'-0"	
Revisions:			
A2.03			

EROSION CONTROL MEASURES

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH THE GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND DETAILS IN THIS PLAN SET. THIS NETWORK IS TO BE INSTALLED BY THE CONTRACTOR PRIOR TO THE BEGINNING OF ANY CONSTRUCTION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION. TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAY TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE WORK AND KEY DATES SHOWING DATE OF DISTURBANCE AND COMPLETION OF THE WORK. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE PROVIDED TO THE MUNICIPALITY THREE DAYS PRIOR TO THE SCHEDULED PRE-CONSTRUCTION MEETING. SPECIAL ATTENTION SHALL BE GIVEN TO THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD, SUCH AS ACTIVE EXCAVATION AND ACTIVE GRADING. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS ACTIVELY OCCURRING AND CAN BE MULCHED IN THE SAME DAY. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN IN THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN SEVEN (7) DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100 FEET OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES

THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BELOW PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT FINAL GRADED WITHIN 14 DAYS SHALL BE MULCHED. DISTURBED AREAS ADJACENT TO NATURAL RESOURCES THAT ARE NOT GRADED WITHIN SEVEN (7) DAYS SHALL BE MULCHED. ALSO, AREAS WHICH HAVE TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASSED WATERWAYS AND ON SLOPES GREATER THAN 33%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WINTER EROSION CONTROL NOTES).

TYPES OF MULCH:

HAY OR STRAW: SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE).

EROSION CONTROL MIX: SHALL BE PLACED EVENLY AND MUST PROVIDE 100% SOIL COVERAGE. EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1.

EROSION CONTROL BLANKET: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. SEDIMENT BARRIERS SHALL BE INSTALLED DOWNGRADEMENT OF STOCKPILES, AND STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO THE STOCKPILE.

3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1 OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT. SEDIMENT BARRIERS (AS DESCRIBED IN PART 4 OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SLOPES HAVE AT LEAST 90% VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL NOT BE INSTALLED ADJACENT TO WETLAND. INSTALL PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETEGRATION OF THE BINDINGS. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

EROSION CONTROL MIX: SHALL NOT BE USED ADJACENT TO WETLANDS. INSTALL PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF GRAVEL MATERIALS AND CONTAIN NEGLIGIBLE AMOUNTS OF PETROLEUM PRODUCTS. THE MIX SHALL BE APPLIED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

HAY-BALE CHECK DAMS: BALES SHALL BE WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER. HAY BALES SHALL BE PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

STORMDRAIN INLET PROTECTION: INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET OR CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF CAPTURED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULTANT PONDING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY-BALE DROP INLET PROTECTION: IT DOES NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEEP TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. THE TERM "SWEEP" IS UNDERSTOOD TO MEAN REMOVAL AND RECOVERY OF TRACKED SEDIMENT WITH A STREET SWEEPER. STRUCTURES WITH A MECHANICAL DRAINAGE SYSTEM SHALL BE INSTALLED PRIOR TO CONSTRUCTION. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND AS DETAILED ON THE PLANS. THE CONTRACTOR SHALL MAINTAIN THE STABILIZED CONSTRUCTION ENTRANCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

8. DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST. THE MONITORING AND CONTROL OF DUST SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE. IF OFFSITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NOT LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS.

9. TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDED PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUALS FOR CONTRACTORS AND ENGINEERS, 2016 OR LATEST REVISION. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

10. PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOADED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR, PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDED PREPARATION:

A. FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER SELECTABLE MATERIAL.

B. SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P20S-K20 OR EQUAL)	18.4 LBS./1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS./1,000 S.F.

C. WORK LINE AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICABLE TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.

APPLICATION OF SEED:

A. SEEDING: SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (MDEP SEED MIX 2 IS DISPLAYED)

SEED TYPE	APPLICATION RATE
CREeping RED FESCUE	0.46 LBS./1,000 S.F. (20 LBS./ACRE)
REDTOP	0.05 LBS./1,000 S.F. (2 LBS./ACRE)
FALL FESCUE	0.46 LBS./1,000 S.F. (20 LBS./ACRE)
TOTAL	0.97 LBS./1,000 S.F. (42 LBS./ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDEP RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 2016 OR LATEST REVISION.

B. HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LINE AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

C. MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

FOLLOWING SEEDED PREPARATION, SOO CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOO SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST POINT AND TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN WHERE FLOW IS PREVALENT THE SOO MUST BE PROPERLY ANCHORED DOWN. IRRIGATE THE SOO IMMEDIATELY AFTER INSTALLATION. IN MOST CASES, SOO CAN BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDEP WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 3C) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOO -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOO BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOO ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOO TO GUARANTEE CONTACT BETWEEN THE SOO AND UNDERLYING SOIL, AND WATERING THE SOO TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- STABILIZE THE SLOPE WITH MULCH -- BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SLOPE BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.
- STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SLOPE BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SLOPES ON AREAS HAVING A SLOPE LESS THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE THESE SLOPES BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BEFORE NOVEMBER 15, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 3C) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOO -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOO BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOO ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOO TO GUARANTEE CONTACT BETWEEN THE SOO AND UNDERLYING SOIL, AND WATERING THE SOO TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
- STABILIZE THE SOIL WITH MULCH -- BY NOVEMBER 15 THE APPLICANT WILL MULCH THE DISTURBED SLOPE BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE APPLICANT WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

1. MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF PROLONGED THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS NO LATER THAN THE END OF THE NEXT WORKDAY. TO ALLOW CONTINUED PROTECTION OF THE DISTURBED AREAS, THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES MEETING THE REQUIREMENTS OF THIS PLAN WITHIN SEVEN (7) DAYS.

2. FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. REPAIRS TO AREAS VEGETATED WITH VIGOROUS GROWTH (SEEDINGS SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

HOUSEKEEPING:

1. SPILL PREVENTION, CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

2. GROUNDWATER PROTECTION: DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN THE AREA OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL, DRAINS, BIRMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAMINANT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

3. FUGITIVE SEDIMENT AND DUST ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WASTE ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SEE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEP IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS: MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. EXCAVATION DE-WATERING: EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTY AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODS BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

6. AUTHORIZED NON-STORMWATER DISCHARGES: IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES, WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

- DISCHARGES FROM FIREFIGHTING ACTIVITY;
- FIRE HYDRANT FLUSHINGS;
- VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
- DUST CONTROL RINSEOFF IN ACCORDANCE WITH PERMIT CONDITIONS;
- CRUISE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
- PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAS BEEN REMOVED);
- DETERGENTS ARE NOT USED;
- UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
- UNCONTAMINATED GROUNDWATER OR SPRING WATER;
- FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
- UNCONTAMINATED EXCAVATION DEWATERING;
- POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
- LANDSCAPE IRRIGATION.

7. UNAUTHORIZED NON-STORMWATER DISCHARGES: THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES. SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

- WASTEWATER FROM THE WASHOUT OR CLEAN OUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
- FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- COAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
- TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

WINTER EROSION CONTROL MEASURES

THE WINTER CONSTRUCTION PERIOD IS FROM OCTOBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% PRIOR TO NOVEMBER 15, THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING CONSTRUCTION YEAR. THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL THE SUBGRADE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS./1,000 S.F. (1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS./1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

2. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.

PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

4. MULCHING

ALL AREA SHALL BE CONSIDERED TO BE DENIED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF SEEDING OR MULCHING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES ARE EITHER EITHER MULCHED WITH STRAW OR MULCH AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

BETWEEN THE DATES OF SEPTEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACK OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

5. MULCHING ON SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS./1,000 S.F. ON ALL SLOPES GREATER THAN 8% MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 5%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8% OR UNSTABILIZED SPOTS. ESTABLISHED VEGETATION COVER MEANS A MINIMUM OF 30% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

6. SEEDING

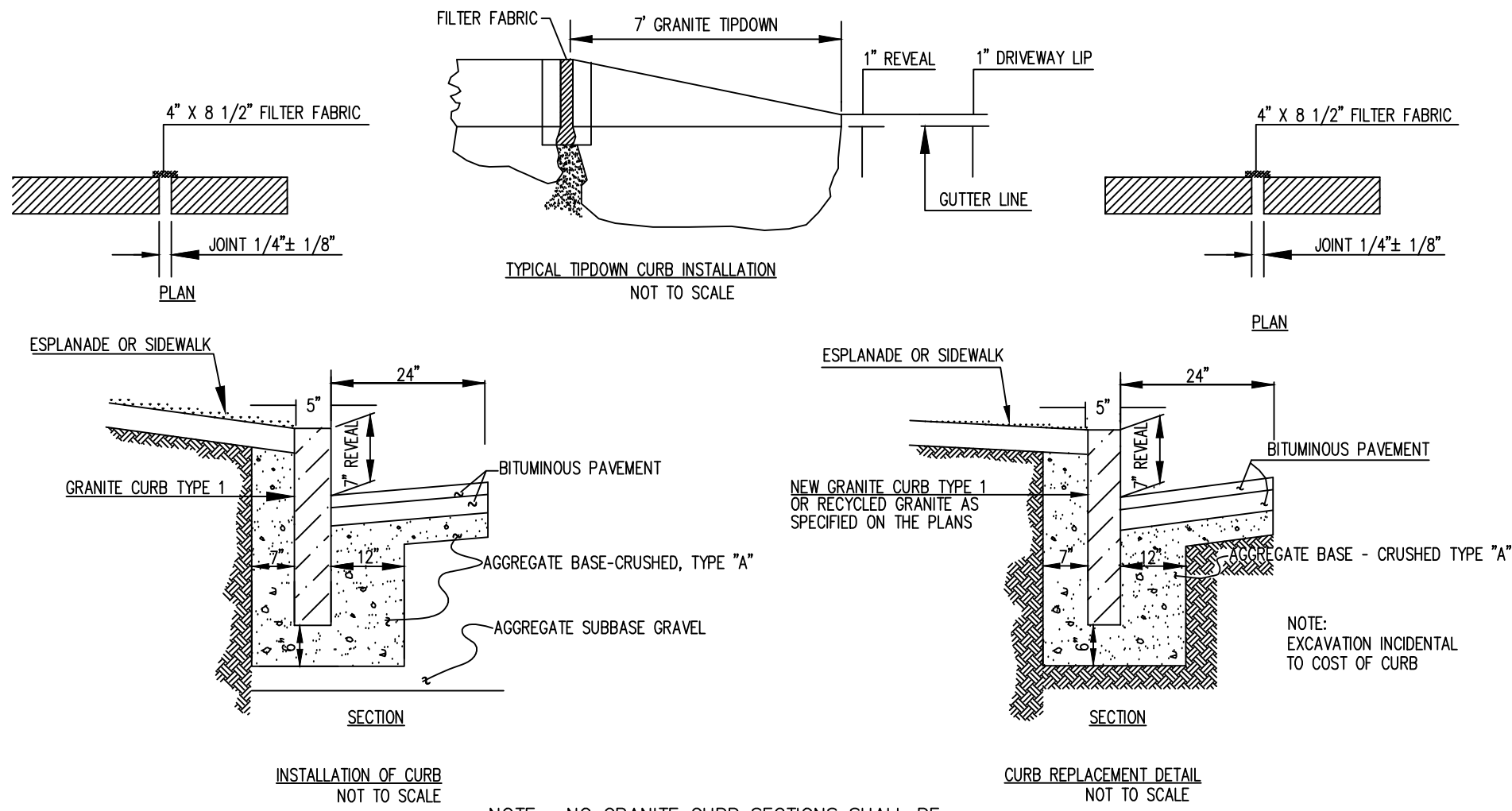
BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1ST, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS AFTER NOVEMBER 1ST AND IF THE EXPOSED AREA HAS BEEN LOOSED, FINELY GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE RESEED PRIOR TO APPLICATION. AFTER EACH DAY OF SEEDING OR MULCHING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES ARE EITHER EITHER MULCHED WITH STRAW OR MULCH AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

7. INSPECTION AND MONITORING

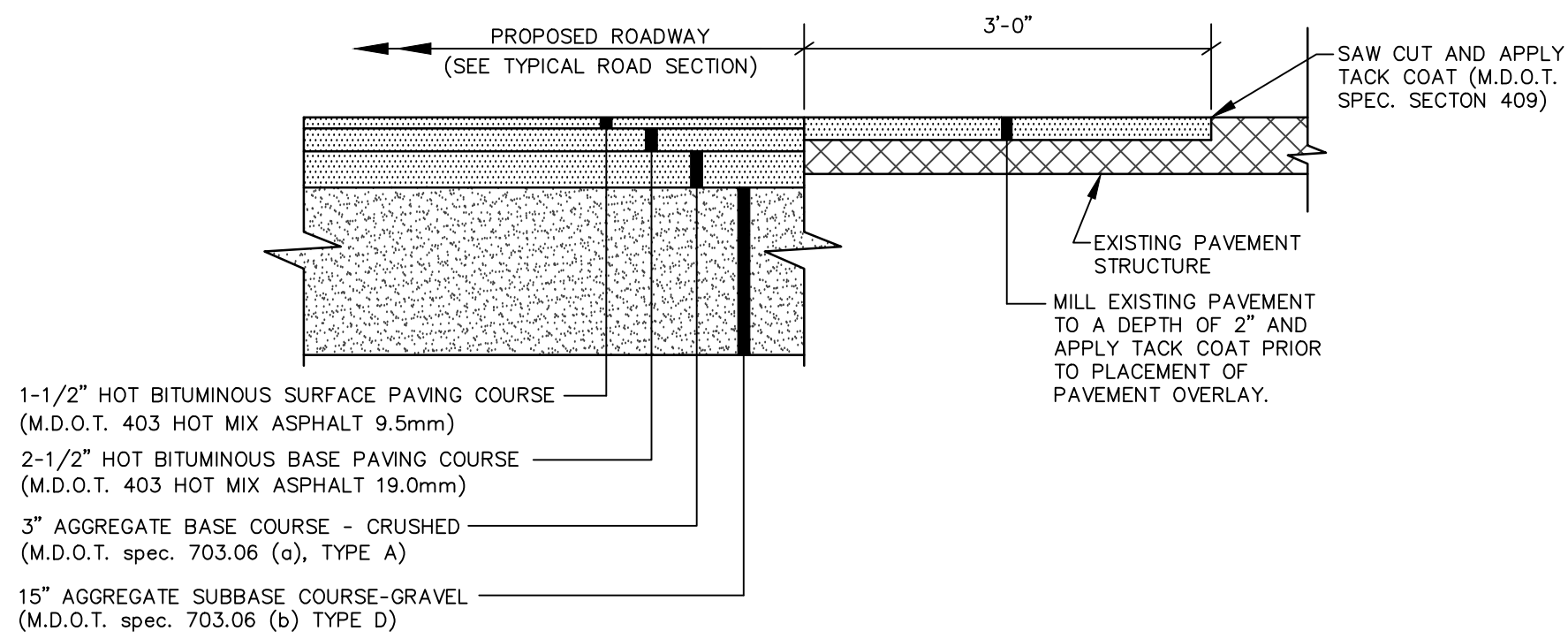
MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AT A MINIMUM, AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF PROLONGED THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR UNSTABILIZED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 30% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

STANDARDS FOR TIMELY STABILIZATION OF CONSTRUCTION SITES DURING WINTER

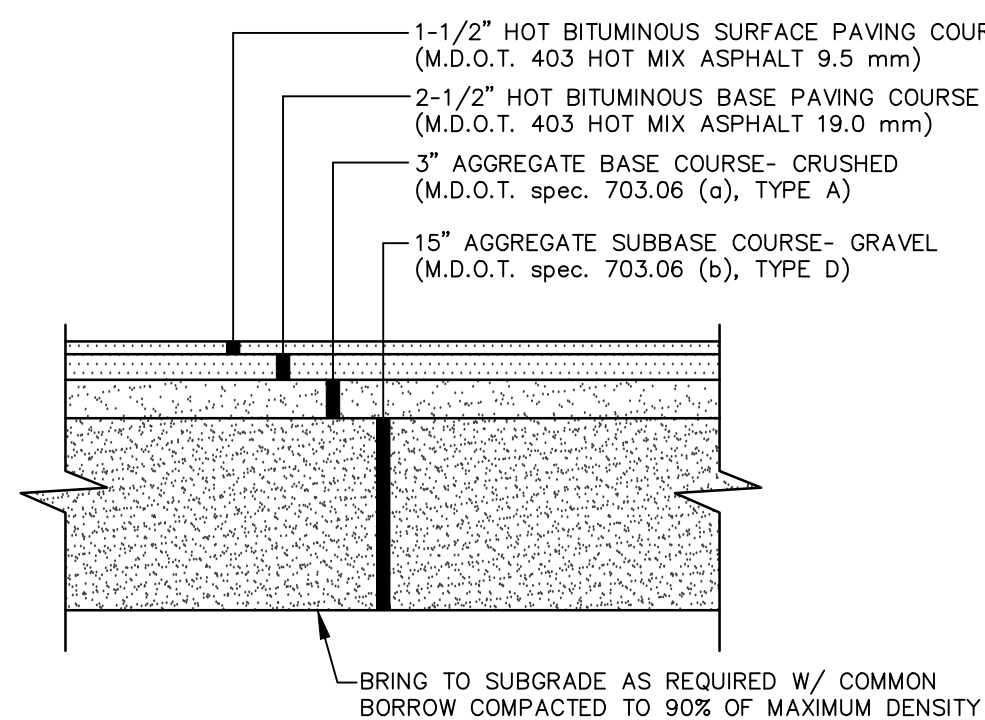
1. STANDARD FOR THE TIMELY STABILIZATION OF DITCHES AND CHANNELS -- THE APPLICANT WILL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 15. THE APPLICANT WILL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 15. IF THE APPLICANT FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 15, THEN THE APPLICANT WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER.



INSTALLATION OF CURB, TYPE 1
NOT TO SCALE

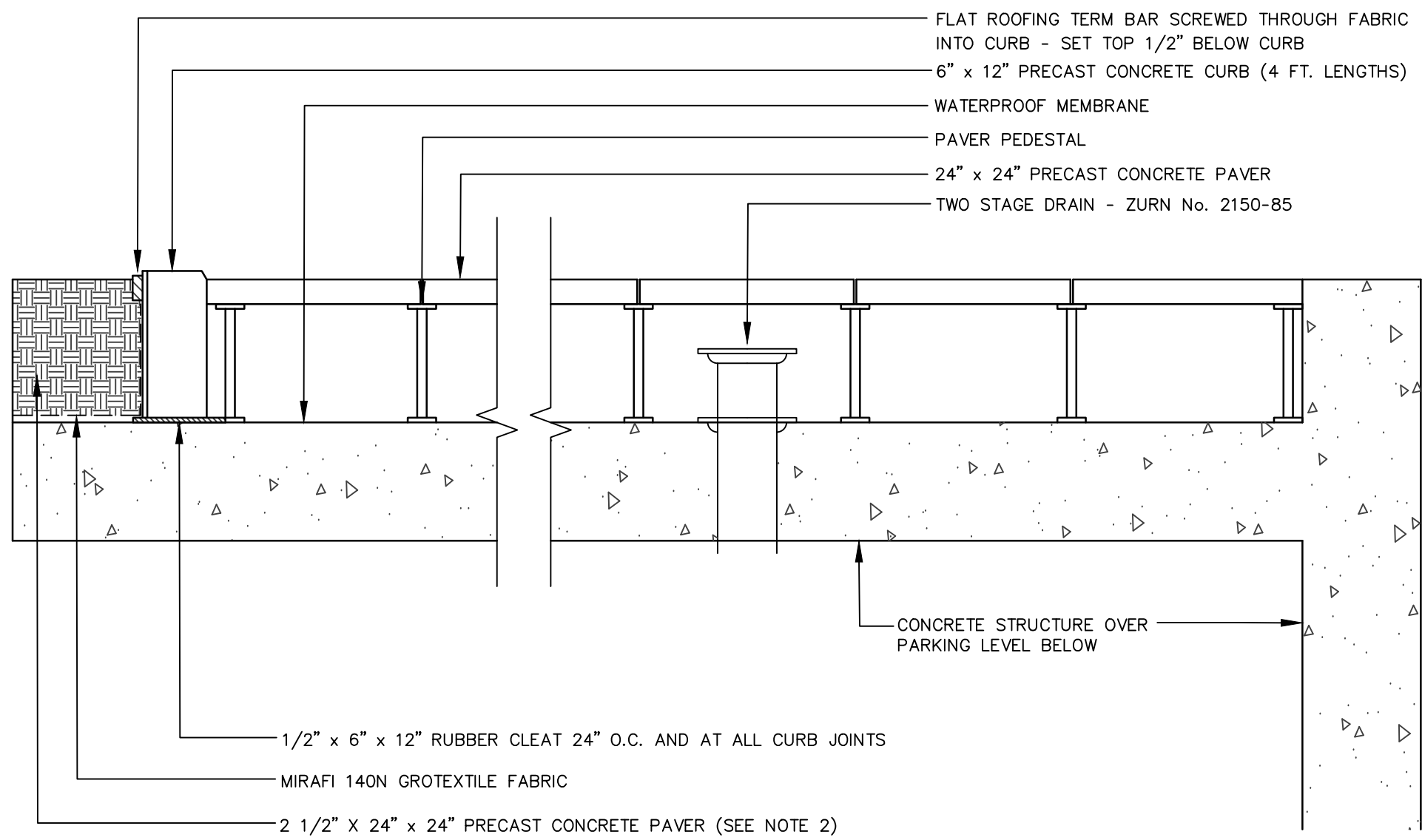


TYPICAL PAVEMENT JOINT
NOT TO SCALE

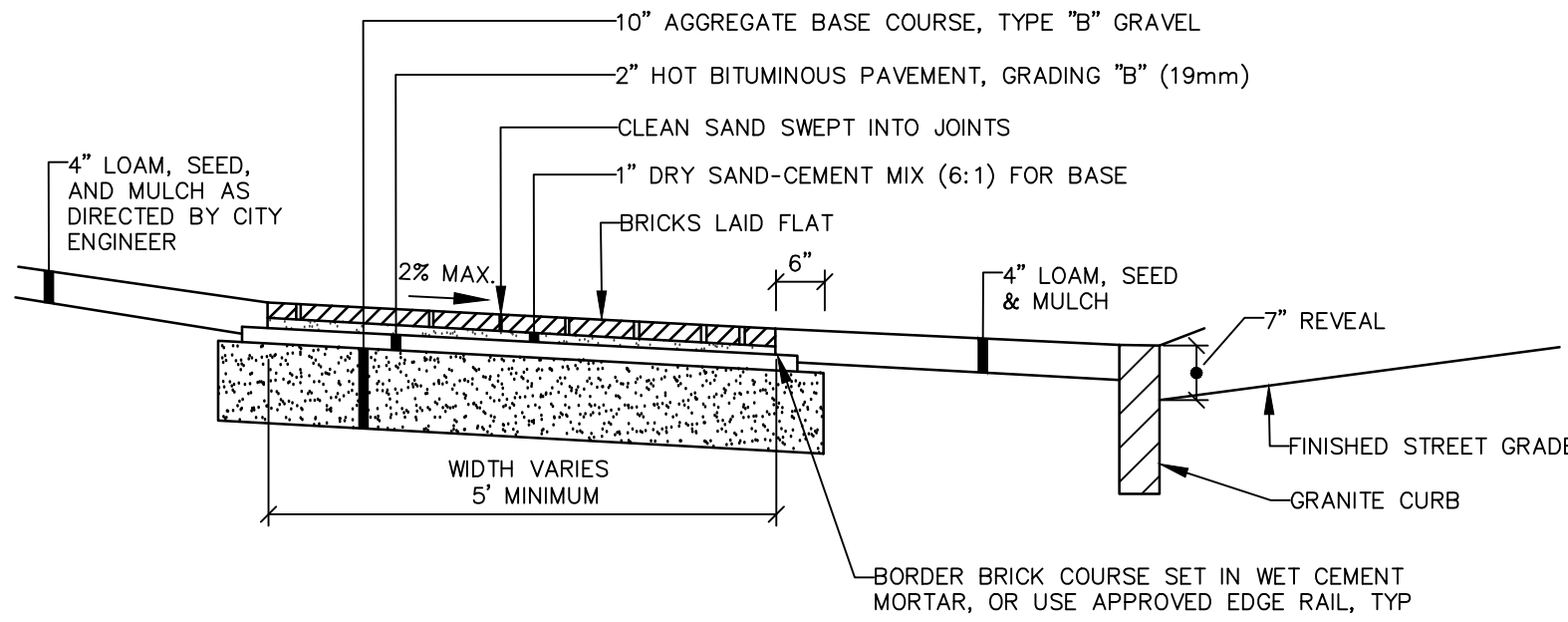


- NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
 2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.
 3. CONTRACTOR MAY REPLACE BITUMINOUS PAVING SECTION WITH TWO (2) 1-1/2\"/>

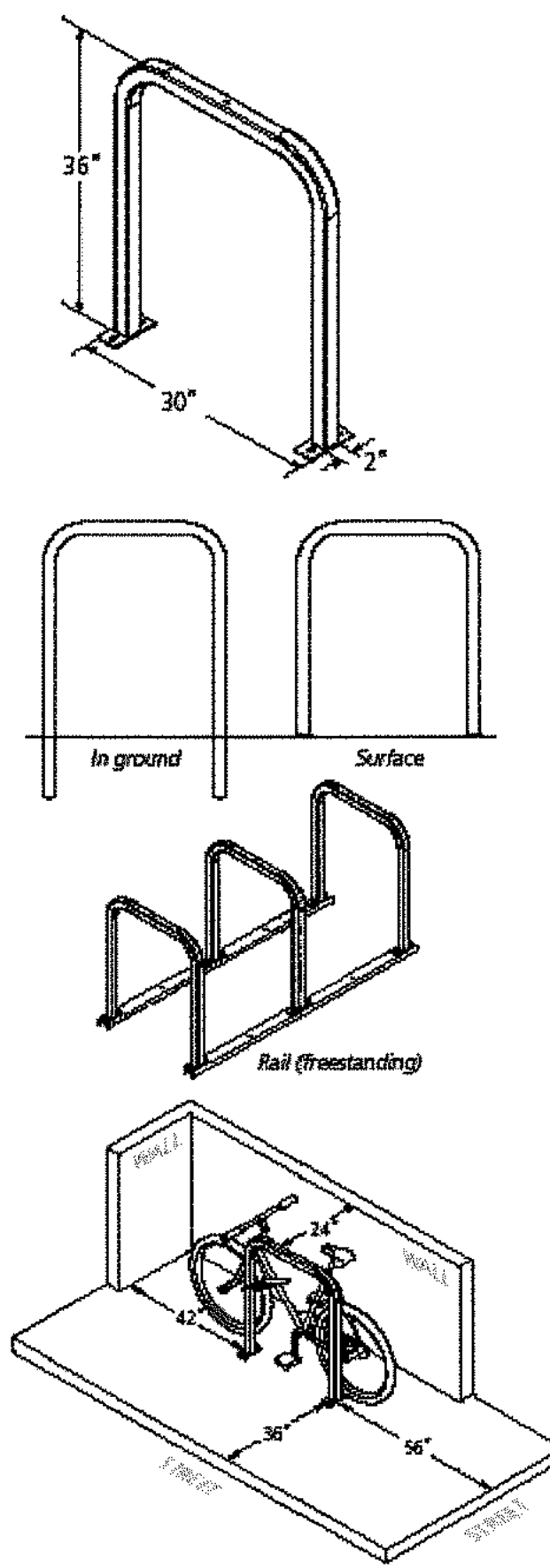
TYP. PAVED ASPHALT SECTION
NOT TO SCALE



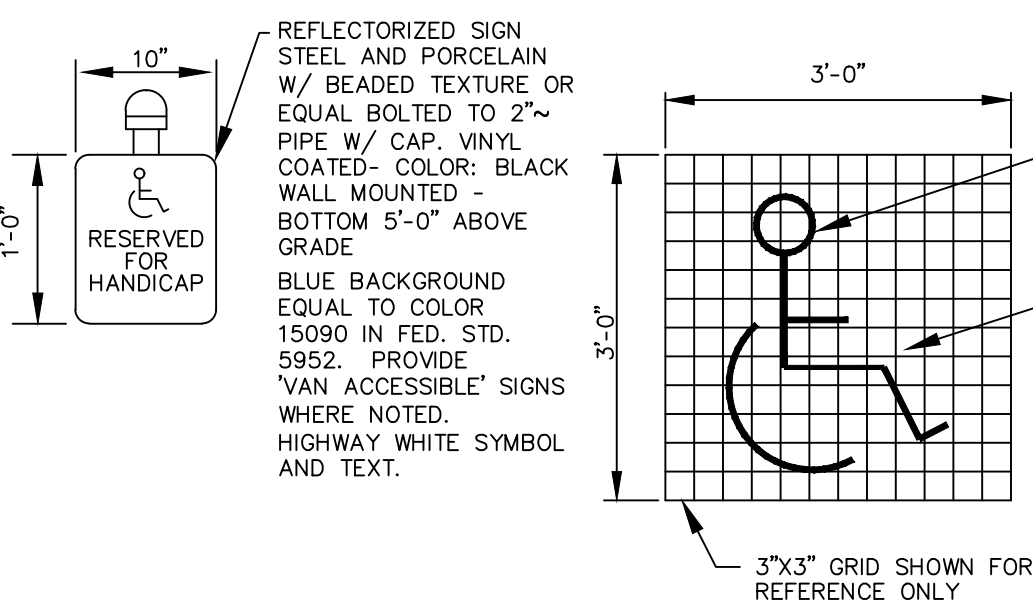
PEDESTAL PAVERS
NOT TO SCALE



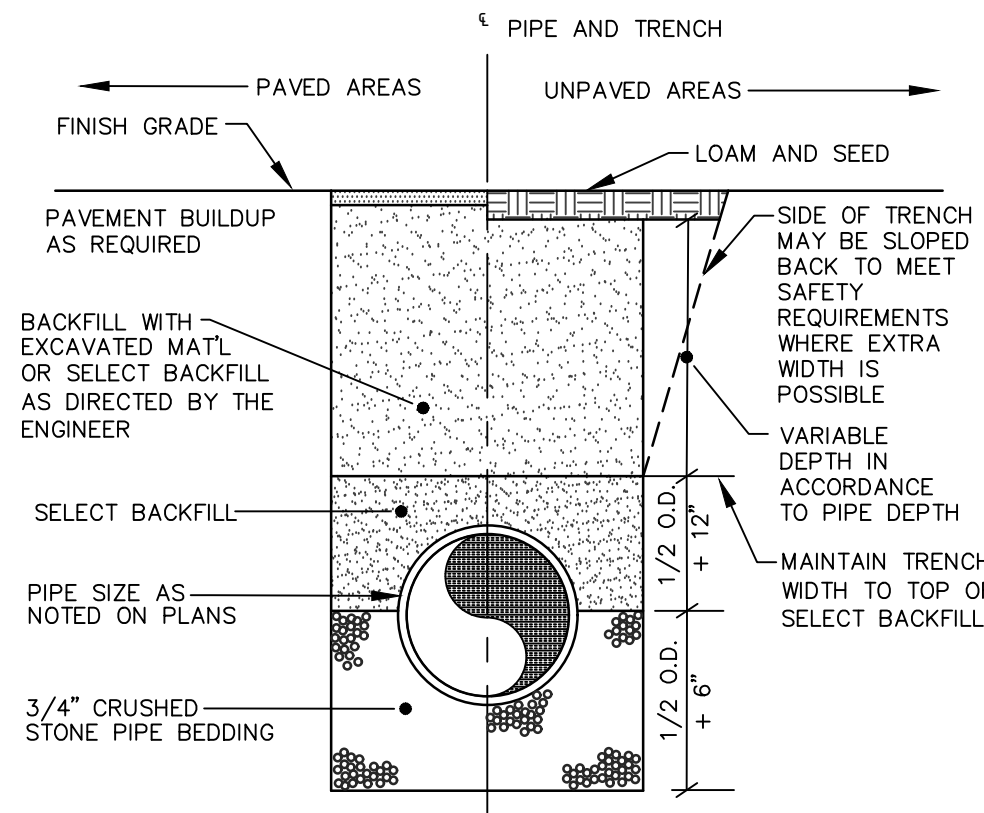
BRICK SIDEWALK WITH BITUMINOUS BASE
NOT TO SCALE



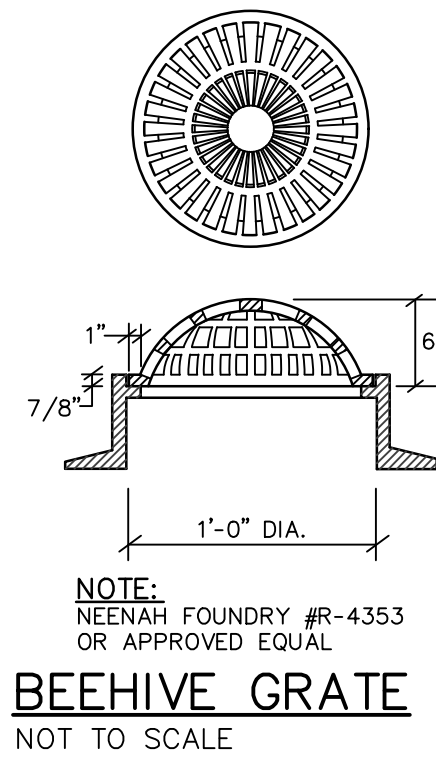
BIKE RACK DETAIL
NOT TO SCALE



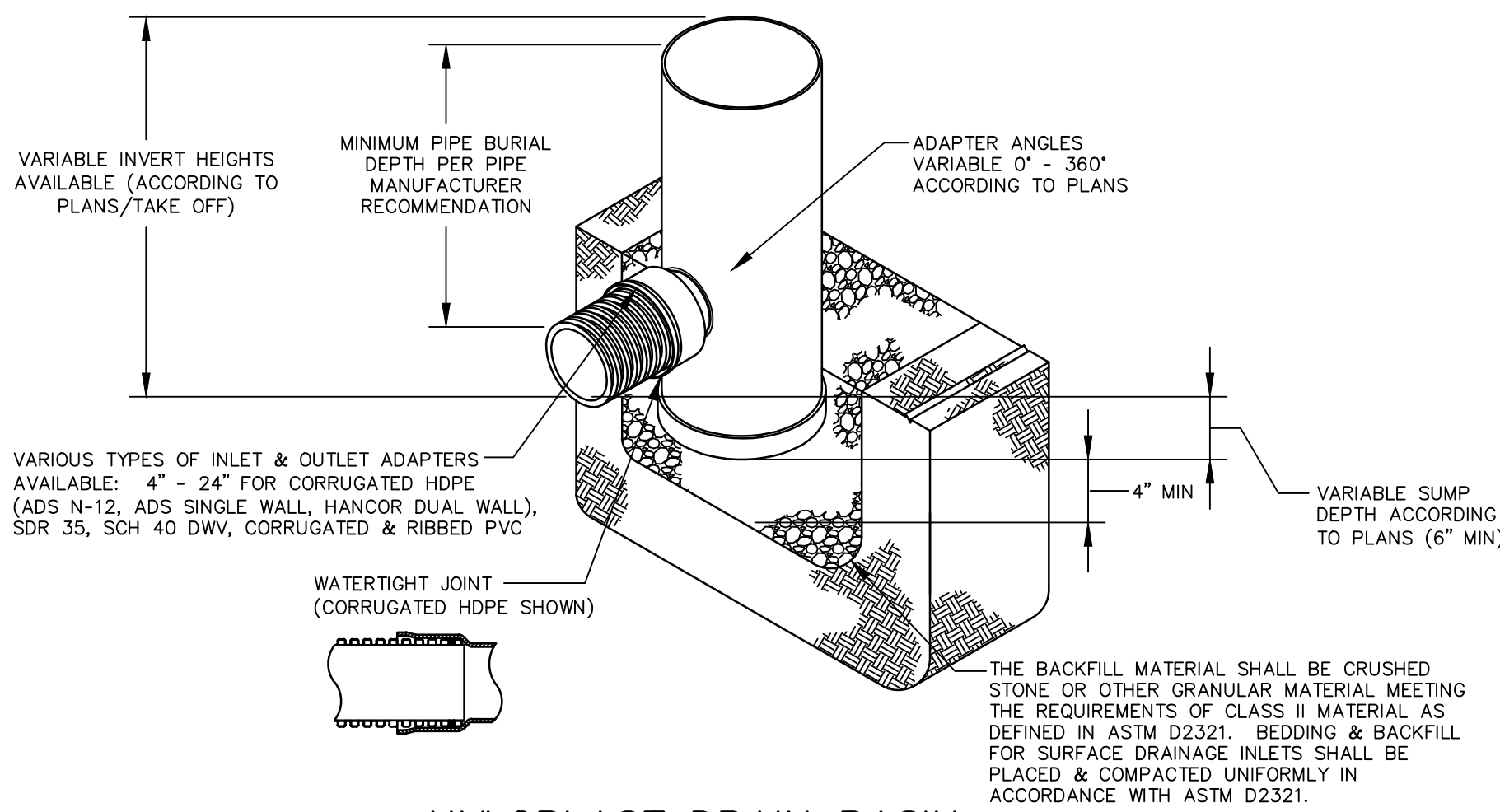
HANDICAP SIGNS AND STRIPING
NOT TO SCALE



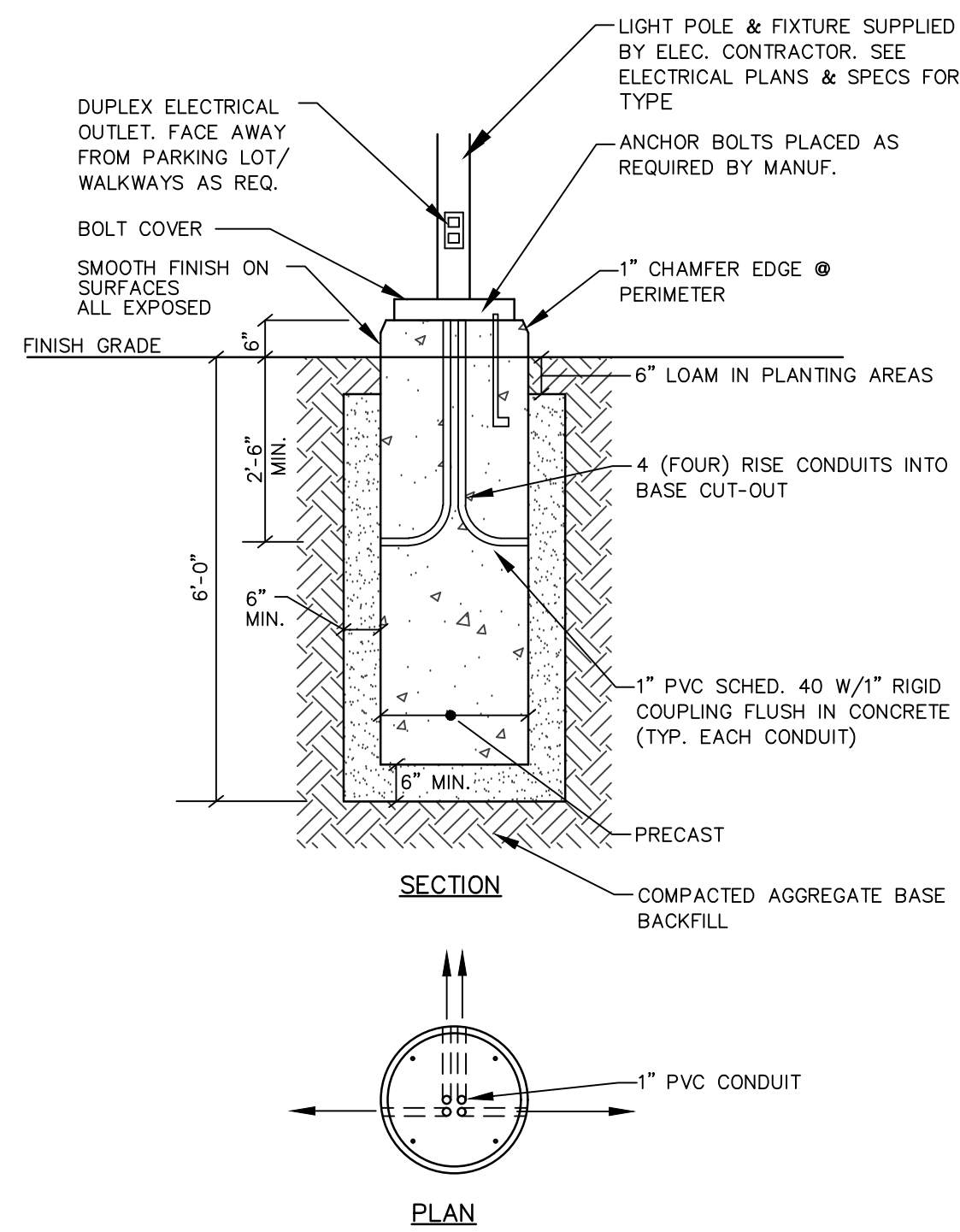
TYPICAL TRENCH SECTION
NOT TO SCALE



BEEHIVE GRATE
NOT TO SCALE



NYLOPLAST DRAIN BASIN
NOT TO SCALE



- NOTES:
1. CONCRETE f'c=5000 psi. @ 28 DAYS WITH STEEL REINFORCEMENT.
 2. CONDUIT AND ANCHOR BOLTS PLACED AS REQUIRED PROVIDED BY ELECTRICAL CONTRACTOR.
 3. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.

STANDARD LIGHT POLE BASE
NOT TO SCALE

DESIGNED

DMD

CHECKED

RLM

PROJECT NO.

16324

SCALE

N.T.S.

DETAILS

OF

387 COMMERCIAL STREET

PORTLAND, MAINE

FOR

DEERING PROPERTY DEVELOPMENT, LLC

2730 TRANSIT ROAD

WEST SEBENCA, NEW YORK 14224

PROJECT NO.

16324

SCALE

N.T.S.

SHEET 9 OF 11

SEBAGO

TECHNICS

WWW.SEBAGOTECHNICS.COM

75 Judd Road

South Portland, ME 04106

Tel. 207-200-2100

SEBAGO

TECHNICS

WWW.SEBAGOTECHNICS.COM

75 Judd Road

South Portland, ME 04106

Tel. 207-200-2100

SEBAGO

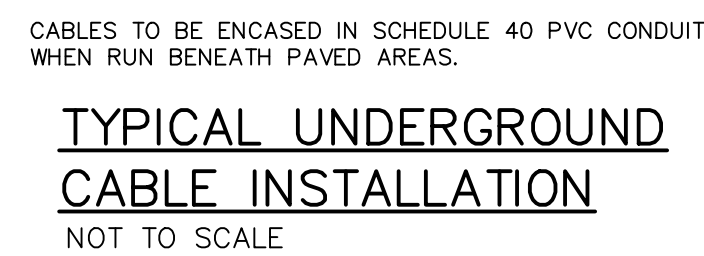
TECHNICS

WWW.SEBAGOTECHNICS.COM

75 Judd Road

South Portland, ME 04106

Tel. 207-200-2100



1. ALL TREE WELLS SHALL COMPLY WITH CITY TECHNICAL STANDARDS AND MUST BE APPROVED BY THE CITY ARBORIST: JEFF TARLING (207) 808-5400.
2. SIDEWALK MATERIAL PER CITY SIDEWALK MATERIAL POLICY.
3. NEW CONSTRUCTION:
4"x8" PINE HALL PATHWAY PAVEMENT BRICK; MFG. BY PINE HALL BRICK CO., MADISON, NORTH CAROLINA.
LACHANCE ITEM #193623, PINE HALL PATHWAY PAVEMENT BRICK.

TREEWELL IN BRICK SIDEWALK
NOT TO SCALE



- INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY:
1. THE TREE IS OF SUBSTANTIAL SIZE.
 2. THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
 3. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
 4. IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

DECIDUOUS TREES

NOT TO SCALE



- INSTALL STAKES AND GUYS TO TREES IF THE FOLLOWING APPLY
1. THE TREE IS OF SUBSTANTIAL SIZE.
 2. THE PLANTING LOCATION IS EXTREMELY WINDY, AS ON OPEN UNDEVELOPED SITES.
 3. THE PLANTING LOCATION IS COMPRISED OF SAND OR OTHER LOOSE TEXTURED SOILS.
 4. IF STAKES AND GUYS ARE REQUIRED, REMOVE AFTER ONE YEAR TIME.

DECIDUOUS TREES
EVERGREEN TREES

NOT TO SCALE



DETAILS
OF: 387 COMMERCIAL STREET
387 COMMERCIAL STREET
PORTLAND, MAINE
FOR: DEERING PROPERTY DEVELOPMENT, LLC
2730 TRANSIT ROAD
WEST SENeca, NEW YORK 14224

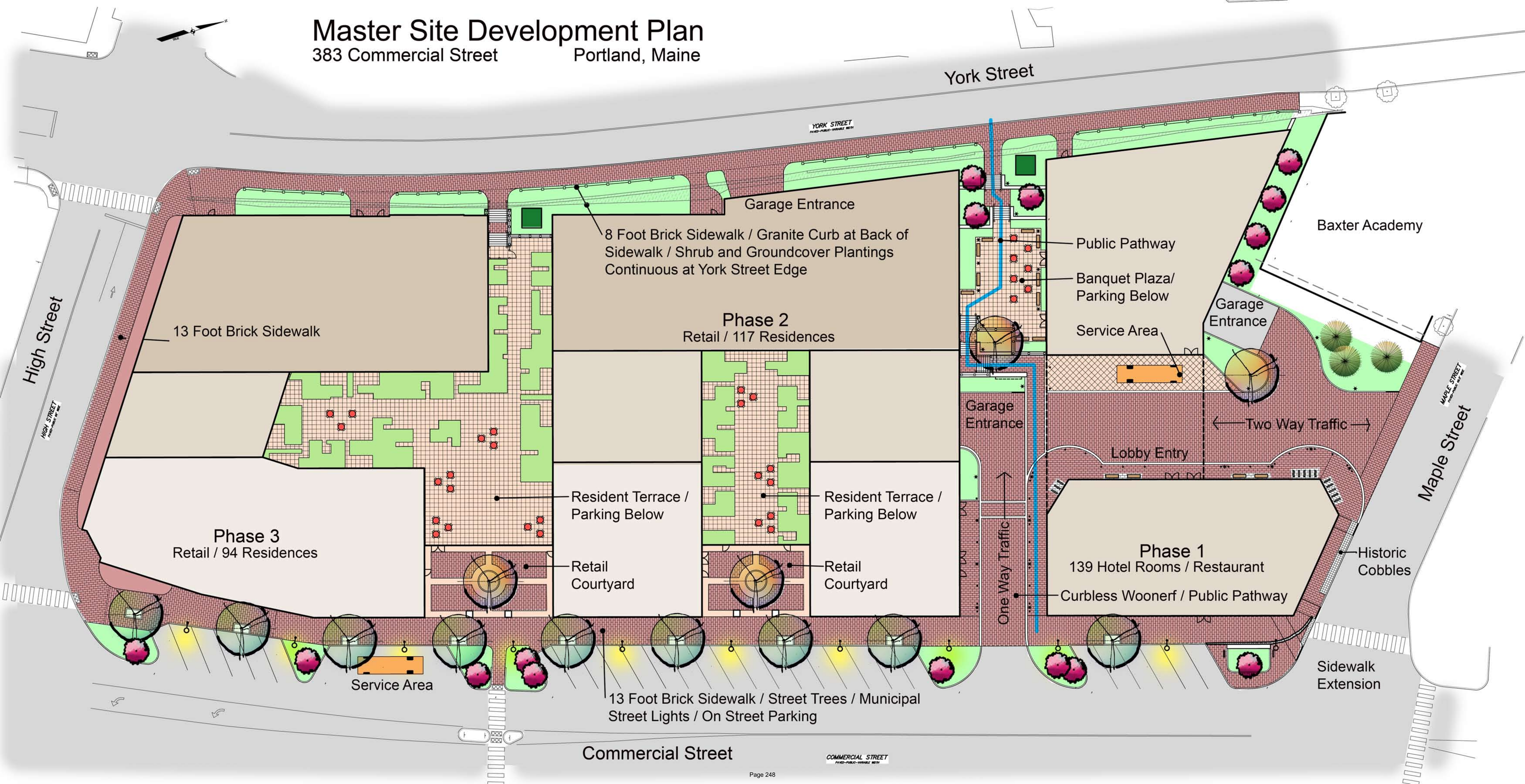
PROJECT NO.	SCALE
16324	N.T.S.

SHEET 11 OF 11

Master Site Development Plan

383 Commercial Street

Portland, Maine



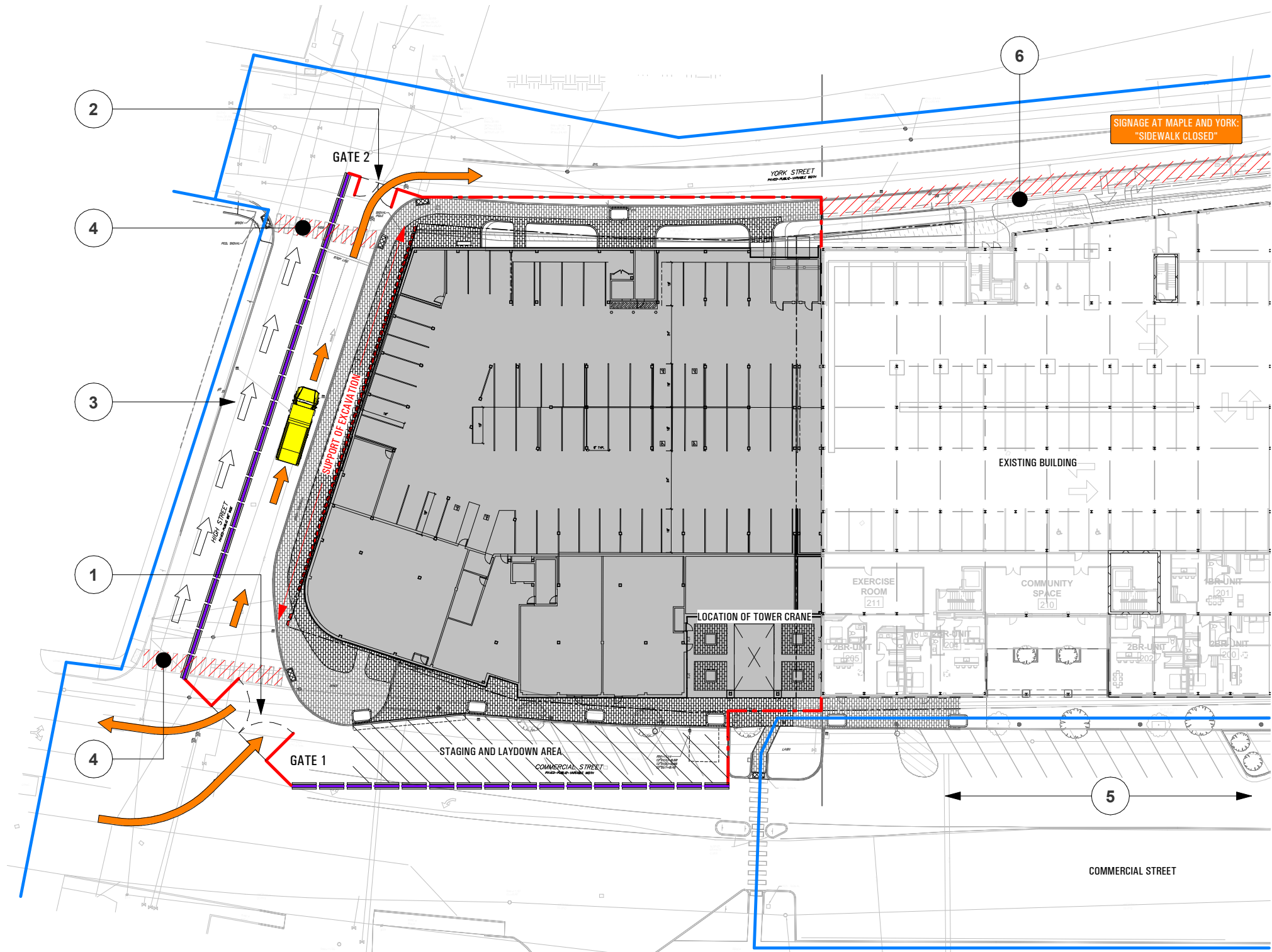






387 Commercial Street

9.24.2020



TMP LEGEND

- 1 BI-DIRECTIONAL CONSTRUCTION TRAFFIC AT GATE 1
- 2 EXITING CONSTRUCTION TRAFFIC ONLY AT GATE 2
- 3 ONE-WAY TRAFFIC ON HIGH STREET DURING CONSTRUCTION
- 4 CROSSWALK USAGE SUSPENDED FOR CONSTRUCTION DURATION
- 5 PARKING ALONG COMMERCIAL TO REMAIN ACCESSIBLE
- 6 SIDEWALK CLOSED FOR CONSTRUCTION ACTIVITY

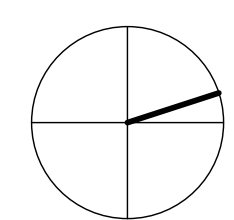
GRAPHIC KEY

- CONSTRUCTION ACCESS ONLY
- JERSEY BARRIER / FENCING
- CHAINLINK FENCING / GATE
- PEDESTRIAN ACCESS

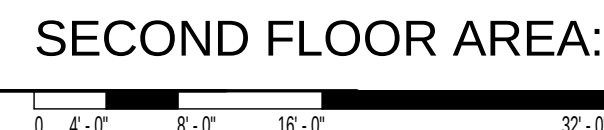


1 | LEVEL 1 FIRST FLOOR AREA: 33022 GSF
 1/8" = 1'-0" 0 4'-0" 8'-0" 12'-0"

A1.01	Date: SEP 28, 2020		Scale: 1/8" = 1'-0"	FIRST FLOOR PLAN
	Revisions:			
	Project: 387 COMMERCIAL STREET PORTLAND, MAINE			
Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056				Consultant:
Declarant and Owner of Record:				Deering Property Development LLC



1 | LEVEL 2
1/8" = 1'-0"



SECOND FLOOR AREA: 33022 GSF



Declarant and Owner of Record:

Deering Property
Development LLC

Consultant

ARCHETYPE
ARCHITECTS
48 Union Wharf Portland, Maine 04101
(207) 772-6022 Fax (207) 772-4056

Architect:

Project: 387
COMMERCIAL
STREET
PORTLAND, MAINE

Revisions:

Scale: 1/8" = 1'-0"

Date: SEP 28, 2020

SECOND FLOOR PLAN

A1.02



1 LEVEL 3
1/8" = 1'-0"

Date: SEP 28, 2020		Scale: 1/8" = 1'-0"	Revisions:		Project: 387 COMMERCIAL STREET PORTLAND, MAINE		Architect: ARCHETYPE ARCHITECTS 48 Union Wharf Portland, Maine 04101 (207) 772-6022 Fax (207) 772-4056		Consultant:		Declarant and Owner of Record: Deering Property Development LLC			
A1.03			THIRD FLOOR PLAN											



A Guide to Holding Neighborhood Meetings Portland, Maine

Planning and Urban Development Department

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

Projects Requiring a Neighborhood Meeting

- Proposed map amendments or contract zones that would result in projects subject to major site plan review;
- Subdivisions of five or more lots;
- Master development plans; and
- Major site plan proposals as defined in Article 14 of the land use code.

Timing of Meeting

- The meeting shall be conducted within 30 days of an application being deemed complete and no less than seven calendar days before a public hearing.

Location of Meeting

- 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 1st and 3rd Monday of each month and the Planning Board generally meets on the 2nd and 4th Tuesday of each month; however, additional meetings may be scheduled. An updated schedule may be found on the City's website at portlandmaine.gov

Notice of Meeting

A notice must be sent to neighbors alerting them of the neighborhood meeting time and location. The notice must contain a brief description of the proposal and the date, time, and place of the neighborhood meeting. A template for a neighborhood meeting notice is included in this packet.

Notice List

The notice shall be mailed to the following:

- Property owners within 500 feet of the proposed development (1,000 feet for subdivisions in and industrial zone or industrial zone changes)
- Interested citizens and neighborhood groups.

The Planning Department will make the above lists available for downloading (in excel format) under the attachments folder within the project in the Customer Self Service Portal (CSS). If you have any questions obtaining these lists, please contact the Planning Department at 874-8719 or 874-8721 or e-

mail at planning@portlandmaine.gov.

When to Send Notice

- The notice must be sent no less than 10 days (to include weekends) prior to the neighborhood meeting.
- Notices may be sent by regular mail and do not need to be sent by certified mail.
- **For confirmation purposes, please email a copy of the notice to planning@portlandmaine.gov**

Hosting the Meeting & Keeping a Record

- A sign-in sheet must be circulated for those in attendance. The sign-in sheet should serve as a record of the public in attendance, as well as a record of all presenters and/or representatives of the applicant in attendance.
- The applicant shall provide an explanation of the proposal and provide an opportunity for public comment.
- The applicant must keep a record of public comment received during the meeting, including comments, questions, data, or other feedback collected. The record must also include a list of plans, documents, and drawings that were shared by the applicant, as well as start and end times of the meeting.
- The sign-in sheet and record of feedback shall be submitted to the Planning Department. A public hearing will not be scheduled until the sign-in sheet and record of feedback are submitted to the Planning Department.

A certification form is included with this packet to be completed and signed by the applicant.

Attachments

1. Neighborhood Meeting Notice Template
2. Neighborhood Meeting Certification
3. Attendance Sign in Sheet Example

EXAMPLE: Neighborhood Meeting Invitation Format

Applicant/Consultant Letterhead

(Date)

Dear Neighbor:

Please join us for a neighborhood meeting to discuss our plans for a (proposed project description) located at (proposed project address).

Meeting Location:

Meeting Date:

Meeting Time:

(The Land Use Code requires that neighboring property owners and residents on an “interested parties list” be invited to participate in this neighborhood meeting. A sign-in sheet will be circulated and a record of the meeting will be taken. Both the sign-in sheet and record will be submitted to the Planning Board.)

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

Signed,

(Applicant’s Signature)

(Date)

Note:

Under the City of Portland land use code, an applicant for a major site plan, master development plan, subdivision of over five lots, or zoning map amendment is required to hold a neighborhood meeting within 30 days of an application being deemed complete and no less than seven calendar days before a public hearing. Should you wish to offer additional comments on this proposed development, you may forward them by e-mail to planning@portlandmaine.gov or by mail to the Planning and Urban Development Department, Planning Division, 4th Floor, 389 Congress Street Portland, ME 04101.

EXAMPLE: Neighborhood Meeting Certification

I, (applicant/consultant) hereby certify that a neighborhood meeting was held on (date) at (location) at (time) for the proposed project located at (proposed project address).

I also certify that on (date at least ten (10) days prior to the neighborhood meeting), notices were mailed to the following:

1. All addresses on the mailing list provided by the Planning Division which includes property owners within 500 feet of the proposed development (1,000 feet for subdivisions within an industrial zone or industrial zone changes).
2. Residents on the “interested parties” list.

Signed,

(Applicant's Signature)

(Date)

Attachments

1. Copy of the notice sent
2. Sign-in sheet
3. Record of feedback

EXAMPLE: Neighborhood Meeting Sign-In Sheet

(Date of Meeting)

(Location of Meeting)

(Proposed Project Name and Address)

Members of the Public in Attendance:

Name	Email

Developer and Consultant Team in Attendance:

Name	Email

Memorandum

Planning and Urban Development Department



To: Chair Mazer & Members of the Planning Board
From: Jimmy Dealaman, Planner
Date: February 19, 2021
Re: Longfellow Elementary School Addition & Renovations Project
Project ID: CU-001340-2020
Meeting Date: February 23, 2021
CBL: 175 Boo1, 175 Boo2, 175 Coo2, 181 Hoo1

I. INTRODUCTION

Portland Public Schools has applied for a Conditional Use Permit and a Level II Site Plan approval to facilitate the development of a new two-story, 7,250 square foot addition to the existing Longfellow Elementary School located at 432 Stevens Avenue in the Deering Center neighborhood.

The 21.4-acre educational campus (Figure 1) consists of four City owned parcels occupied by Deering High School and Longfellow Elementary School. The lots are situated within 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 as well as the requirements of the R-5 Conditional Use standards in Section 14-118 and Section 14-474 (general standards that apply to all conditional uses).



Figure 1: Longfellow Elementary (highlighted) and Deering High Schools Educational Campus

Pursuant to site plan review thresholds, the Level II Site Plan application (PL-001319-2020) is under review by Planning staff for conformance with the standards of Portland's site plan ordinance. As this application was under review prior to the December 1, 2020 effective date of the new land use code, all code citations in this memo refer to the previous code.

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>Review</i>	<i>Applicable Standards</i>
New Structure Under 50, 000 SF	Level II Site Plan
Conditional Use (Institutional Use in R-5 zone)	Conditional Use in the R-5 zone (Section 14-118 & 14-474)

III. PROJECT DATA

Total area of the site (campus)	930,101 SF
Total Disturbed Area (development)	30,490 SF
Existing Zoning	R-5
Existing Use	Institutional (School)
Proposed Use	Institutional (School)

Longfellow Elementary School	<i>Existing</i>	<i>Proposed</i>	<i>Net Change</i>
Impervious Surface Area	66,778 SF	73,486 SF	+6,708 SF
Building Floor Area	49,820 SF	59,120 SF	+9,300 SF
Estimated Cost of Project	\$10.5 million (construction budget), \$14 million (total project cost)		

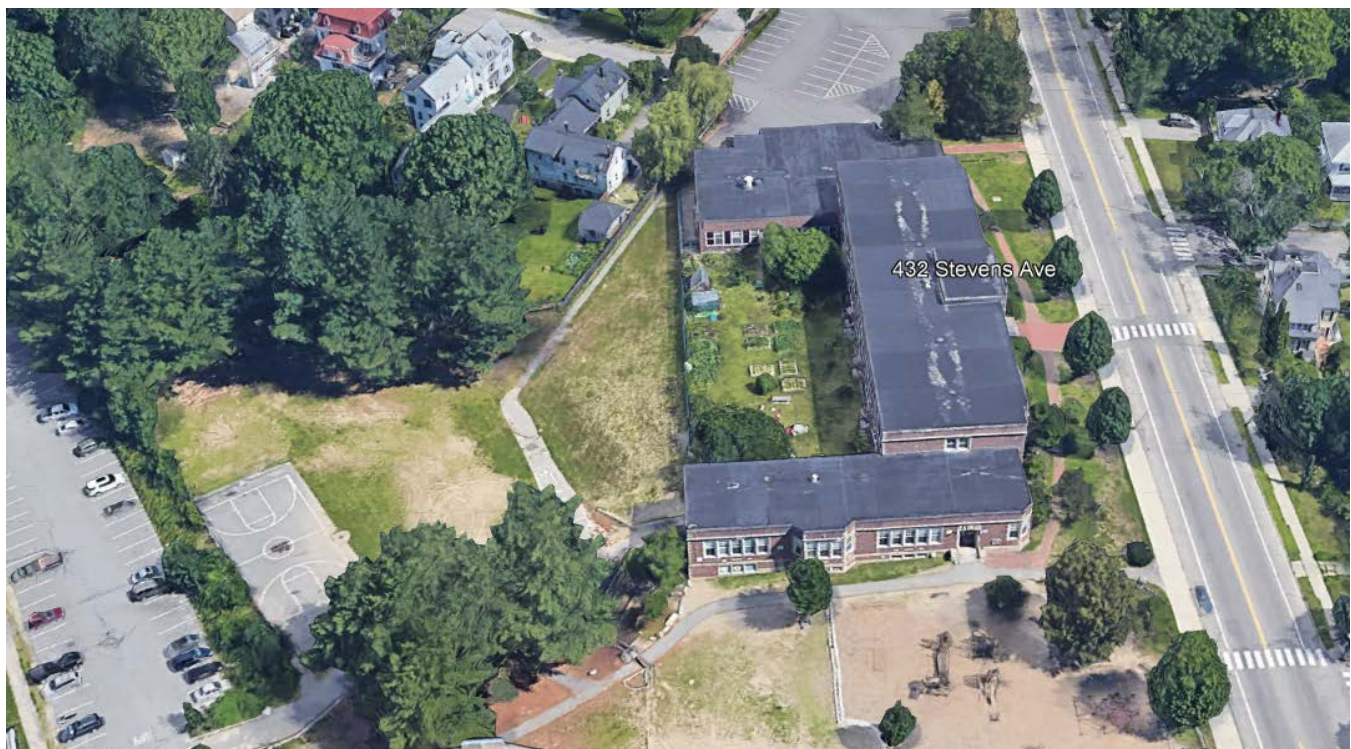


Figure 2: Aerial View of Development Site Existing Conditions – Source: Google Earth

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). 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

Longfellow Elementary School was constructed in 1952 and currently has approximately 323 students and 51 staff. The existing two-story building contains 29 classrooms and instruction rooms. The site fronts Stevens Avenue, a priority corridor identified in the City's Comprehensive Plan and shares an educational campus with Deering High School. The existing Longfellow Elementary School building contains an interior courtyard at the rear of the building. To the south is a playground and passive lawn area with pathways that separate the elementary and high schools. To the north is a surface parking lot. There is a parking lot at the rear of the two schools, further west are various athletic fields and facilities which are also known as "Presumpscot Park."

The surrounding area consists primarily of residential uses with a mix of commercial retail along Stevens Avenue.



Figure 3: Existing Conditions (Image from Rear of Deering High School) – Source: Google Earth

VI. PROPOSED DEVELOPMENT

The proposal seeks to add a new two-story 7,250 square foot addition to the existing elementary school as well as interior renovations to update the current facilities (Attachment A). The addition will consist of an approximately 5,100 square foot single-story wing on the west side of the existing school that will include a cafeteria and warming kitchen. Connected to the single-story wing will be a new 2,050 square foot, two-story addition consisting of classroom space. A 100 square foot space to accommodate an elevator would be located within the southeast corner of the existing interior courtyard area (Figure 5). The northeast corner of the school is planned to become an accessible/primary entrance with a new entry stair and accessible ramp proposed. School doorways are proposed to be lit with wall-mounted lights or canopy mounted lights for security.

As part of the addition, the applicant proposes to add pavement at the rear and side of the new addition as well as a loading dock and ramp on the north side of the property. Using a scaled measure, staff estimates the widened paved area totals approximately 9,812 square feet. The extent of pavement proposed was increased in the current plan in response to staff comments which necessitated widening the existing access/way in order to allow for emergency vehicle access and turning.

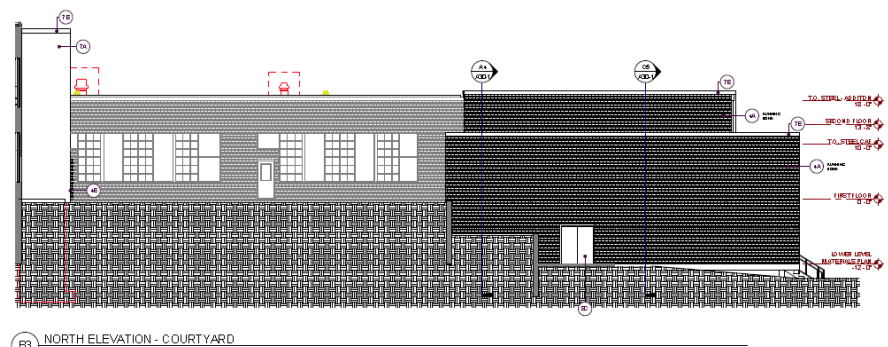


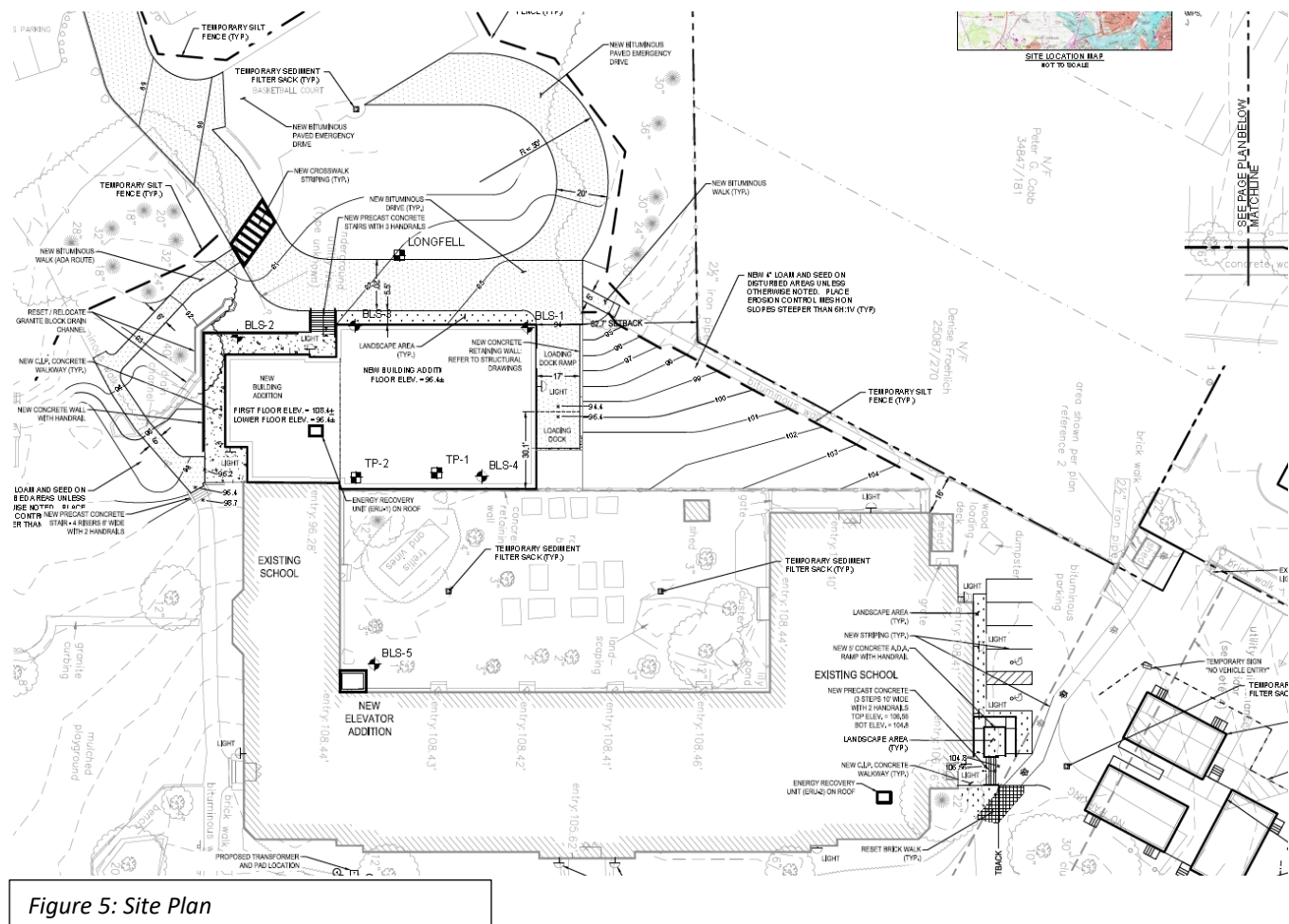
Figure 4: North Elevation Showing Proposed Addition

The delivery loading dock location to the north will be enclosed with a structural wall to accommodate the topography. The loading area is adjacent to an existing three family home at 240 Concord Street, and set back from the neighboring lot line by approximately 45 feet. To minimize any impacts, the applicant has proposed a vegetated buffer to help screen the operation (Plan 12).

Other improvements include a new storm drainage collection and treatment system to capture and treat rainfall from the building addition to the west, as well as a new subsurface chamber sand filter in a crushed stone bed, beneath an outdoor grass area to the north of the building addition which will filter stormwater runoff (Plans 5, 6, 7).

There are also three (3) temporary modular classroom units proposed to be placed in the parking lot to the north during construction which is expected to occur between June 2021 and removed at the end of construction around Fall 2023. Each of these modular units will have wall-mounted porch lights at exterior doors for security. Once the modular units are removed after construction the existing parking lot will be restriped and re-painted and returned to existing conditions.

The level of student population and staff are not expected to increase as a result of these facility improvements.



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 02074 Page 173), which demonstrates their right, title and interest in the property (Attachment B).

The estimated cost of the construction is \$10.5 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-5 zone and the school meets all of the R-5 dimensional requirements.

B. ZONE-SPECIFIC CONDITIONAL USE STANDARDS – SEC. 14-118

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 E) and staff confirm that the project meets the requirements of the conditional use standards as follows:

Sec. 14-118. Conditional uses. The following uses shall be permitted only upon the issuance of a conditional use permit, subject to the provisions of section 14-474 (conditional uses) and any special provisions, standards or requirements specified below:

(b) Institutional: Any of the following conditional uses provided that, notwithstanding section 14-474(a) (conditional uses) of this article, or any other provision of this Code, the Planning Board shall be substituted for the board of appeals as the reviewing authority:

1. Elementary, middle, and secondary school;

Such uses shall be subject to the following conditions and standards in addition to the provisions of section 14-474:

- a. 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; and

Staff Comments: The existing Longfellow Elementary School building is situated on multiple lots/parcels all held in common ownership by the City of Portland, which make up the educational campus shared with Deering High School. The proposed addition, which expands the existing use, is located on the existing site of the principal use, therefore this standard is not applicable.

- b. The proposed use will not cause significant displacement or conversion of residential uses existing as of June 1, 1983, or thereafter; and

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

- c. 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; and

Staff Comments: The educational campus hosts two schools (Longfellow Elementary School & Deering High School), and is subject to the dimensional requirements of Section 14-120 (d) which require each school to have a minimum of 30,000 square feet. The two schools together require 60,000 square feet, and with the educational campus making up approximately 21.4-acres (930,101 square feet), both uses continue to meet the minimum lot size requirements of the R-5 zone.

d-g. **Staff Comments:** These provisions do not apply to the subject proposal.

C. GENERAL CONDITIONAL USE STANDARDS – SEC. 14-474

The following standards in 14-474 apply to all conditional uses:

2. *Standards. The Board shall, after review of required materials, authorize issuance of a conditional use permit, upon a showing that the proposed 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 zoning district. The Board 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; and*

Staff comment: Based on the plan (Plan 1) and documents (Attachments E, G) submitted by the applicant, the project is not expected to have a substantial impact on traffic and parking given there are no increases in student population or staffing, or an increase in parking supply.

All deliveries currently access the north parking lot through Concord Street. The current proposal would instead utilize the west access drive (at the rear of the building) and be utilized for deliveries at a loading dock off the proposed cafeteria. The applicant has reported that very few vehicles will be using the new delivery area; only one or two per day. The delivery vehicles come between 8:00 a.m. and 2:00 p.m.

In response to initial staff comments, the applicant has recently submitted a plan showing the west access drive widened in order to allow for emergency vehicle access to the rear of the new building.

As currently proposed, staff review has found that this conditional use standard is sufficiently met due to anticipated traffic, hours of operation, expanse of pavement, and parking not to be substantially greater or have a substantial impact on adjacent properties compared to its current use. Additional staff comments supporting this finding are attached to this report (Attachments 1, 2).

- 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; and*

Staff comment: The project is not expected to create unsanitary or harmful conditions from any of the above categories. The applicants Conditional Use analysis (Attachment E) provides details regarding potential impacts, and 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 the same as the existing school, and will not have a substantially greater impact on the surrounding properties (Attachment E). The existing school receives deliveries via the north parking lot through Concord Street. The applicant has responded that the new enlarged west drive is expected to be used by one or two delivery vehicles per day accessing the new cafeteria space between 8:00 am and 2:00 pm (Attachment G). The design and operation of the proposed use is anticipated to be only slightly greater where the deliveries are proposed for a formalized/designated loading dock setting, however staff find that the location of this facility is expected to improve the loading/ delivery to the existing site by providing a designated space designed for that function. Overall, there are generally the same effects/impacts anticipated from the existing elementary school use - which is allowed in the R-5 zone – based on a student population that is not anticipated to change as a result of the proposal.

Planning Staff also received initial feedback from the City's Arborist (Attachment 3), regarding landscaping improvements which include updating the hedge and fencing surrounding the parking lot off of Concord Street, as well as replanting several trees elsewhere on the school grounds. Prior to a public hearing date, staff will work with the applicant to address these preliminary comments. Staff site plan review will also continue and some changes to the plan set may be expected to occur to address landscaping and other site plan requirements.

VI. PUBLIC COMMENT

A notice of this Workshop was sent to three hundred five (305) property owners within 500 feet and interested citizens, and appeared in the February 12th and 13th, 2021 editions of the *Portland Press-Herald*. A Neighborhood Meeting is not required for this project and the Planning Department has not received any public comments.

VII. NEXT STEPS

1. Obtain Planning Board Feedback at Workshop
2. Hold Planning Board Hearing

VIII. ATTACHMENTS

PLANNING BOARD REPORT ATTACHMENTS

1. Department of Public Works Comments (email dated 2.12.2021)
2. Consulting Traffic Engineer Comments (email dated 2.11.2021)
3. City Arborist Comments (email dated 2.22.2021)

APPLICANT'S SUBMITTAL

- A. Project Summary
- B. Right Title Interest
- C. Financial Capability
- D. Technical Capability
- E. Response to Section. 14-474 & 14-118
- F. Zoning Assessment
- G. Response to Staff Comment

PLANS

- Plan 1 SITE PLAN (updated on 2.10.2021)
- Plan 2 SITE-NOTES
- Plan 3 SITE-EROSION-CONTROL-NOTES
- Plan 4 EXISTING-SITE-CONDITIONS-PLAN
- Plan 5 PRE-DEVELOPMENT-DRAINAGE-PLAN
- Plan 6 POST-DEVELOPMENT-DRAINAGE-PLAN
- Plan 7 SITE-GRADING-AND-EROSION-CONTROL-PLAN

Plan 8	SITE-UTILITY-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	LOWER-LEVEL-FLOOR-PLAN
Plan 16	FIRST-FLOOR-PLAN
Plan 17	SECOND-FLOOR-PLAN
Plan 18	EXTERIOR-ELEVATIONS
Plan 19	COURTYARD-ELEVATIONS
Plan 20	EXISTING-CONDITIONS-SURVEY
Plan 21	CONSTRUCTION MANAGEMENT PLAN
Plan 22	SNOW PLAN



Jimmy Dealaman <jdealaman@portlandmaine.gov>

432 Stevens Ave - Conditional Use Application

Mike Tremblay <mtremblay@portlandmaine.gov> Fri, Feb 12, 2021 at 9:53 AM
To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

Jimmy,

I do not have any comments with regard to this conditional use application. I do not expect the project to have a substantial impact on the adjacent properties compared to its current use.

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



On Wed, Feb 10, 2021 at 3:32 PM Jimmy Dealaman
<jdealaman@portlandmaine.gov> wrote:
[Quoted text hidden]



Jimmy Dealaman <jdealaman@portlandmaine.gov>

432 Stevens Ave - Conditional Use Application

Tom Errico <thomas.errico@tylin.com>

Thu, Feb 11, 2021 at 8:13 AM

To: Jimmy 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

2/16/2021

City of Portland Mail - 432 Stevens Ave - Conditional Use Application

Visit us online at www.tylin.com

[Twitter](#) | [Facebook](#) | [LinkedIn](#) | [Instagram](#)

[Quoted text hidden]



Jimmy Dealaman <jdealaman@portlandmaine.gov>

432 Stevens Ave - Conditional Use Application

Jeff Tarling <jst@portlandmaine.gov>

Thu, Feb 11, 2021 at 4:13 PM

To: Jimmy Dealaman <jdealaman@portlandmaine.gov>

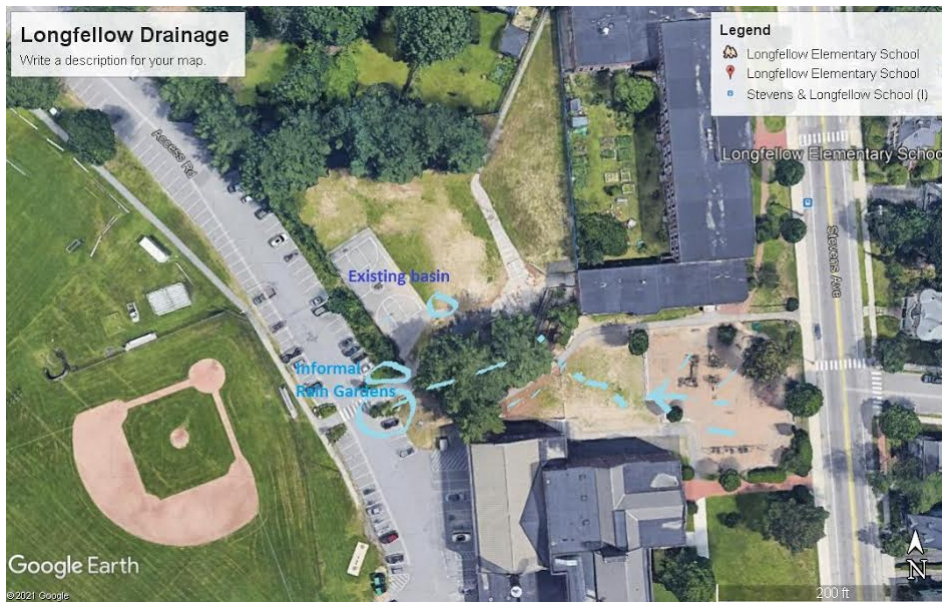
Cc: "lswett@woodardcurran.com" <lswett@woodardcurran.com>

Hi Jimmy -

In review of the proposed addition to Longfellow School wanted to check the following topics:

a) Parking lot hedge and fencing - The fence and hedge surrounding the parking lot is not in great shape and thought should be given to a) replace the fence with a low wooden guardrail or 4' high black vinyl chain link fencing. The hedge surrounding the fence does provide screening of the parked cars and has value, groups of shrub planting might be as effective or infilling the missing hedge plants.

b) Existing trees, drainage and entrance from Deering High School Parking lot - There are several recently planted trees near the proposed construction site that should be replanted elsewhere on the School grounds. Drainage from the Longfellow School playground has been an issue as it surface flows to the parking lot below. Part of the in-house science storm water project has creatively channeled the water flow through the school playground site to the closest catch basin. The basin near the existing basketball court has routinely been a problem of clogging and impaired function. Hopefully the project drainage plan looks close at the flow.



Existing hedge and fencing -





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

**LONGFELLOW ELEMENTARY SCHOOL
ADDITIONS AND RENOVATIONS
SITE PLAN LEVEL II REVIEW AND CONDITIONAL USE**

September 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 two-story Longfellow Elementary School, at 432 Stevens Avenue in Portland, is proposed to have 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 on an educational campus together with Deering High School, occupies approximately 2.8 acres of the total 18.8-acre parcel. The elementary school was constructed in 1952, and currently has approximately 323 students and 51 staff. No additional students or staff are anticipated, due to these facility improvements. The existing two-story school has a ground coverage area of approximately 24,910 SF, and a total floor area of approximately 49,820 SF. The additions will consist of approximately 5,100 sq.ft. Cafeteria and Warming Kitchen single-story wing on the west side of the existing school, with a connected 2,050 sq.ft. two-story Classroom addition. In the interior courtyard, a small 100 sq.ft. elevator addition will be located, and a new entry stair and accessible ramp

will be added to the northeast corner of the school. This new accessible entrance will become the primary entry to the building. The total ground floor additions will equal 7,250 sq.ft., while the total for all floors will be approximately 9,300 sq.ft. 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. The current 58 parking spaces in the parking lot north of the building will remain, including 2 ADA-accessible spaces.

A new storm drainage collection and treatment system will be installed to capture and treat the rainfall from the building addition to the west side of the school. A subsurface chamber sand filter will be installed utilizing 25 plastic stormwater chambers in a crushed stone bed, beneath an outdoor grass area to the north 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 connect to the existing catch basin and storm drain in the westerly play area.



2a. RIGHT, TITLE, & INTEREST

A deed for the Longfellow Elementary School property is attached.

Know all Men by these Presents, That

173

We, Randal L. Gullifer, Greta M. Gullifer, Arthur G. Estabrook and Bertha M. Estabrook, all of Portland, in the County of Cumberland and State of Maine

in consideration of one dollar and other valuable considerations paid by City of Portland, a municipal corporation organized for governmental purposes and located in said Portland

the receipt whereof we do hereby acknowledge, do hereby remise, release, bargain, sell and convey, and forever quit-claim unto the said City of Portland, its successors and Assigns forever, A certain lot or parcel of land situated in said Portland beginning at a point in the Northeasterly side line of Concord Street said point being distant Northwesterly along the Northeasterly side line of Concord Street One Hundred eighty-five and six tenths (185.6) feet more or less, from the point of intersection formed by the Northeasterly side line of Concord Street and the Northwesterly side line of Stevens Avenue; thence Northeasterly and at a right angles to the said Northeasterly side line of Concord Street a distance of eighty-eight (88) feet, more or less, to a point in the Southwesterly side line of land of the City of Portland; thence Northwesterly along the said Southwesterly side line of land of the City of Portland and at right angles to the last described course a distance of twenty-seven and eight tenths (27.8) feet, more or less, to a point in the Northwesterly side line of Concord Street as laid out and accepted by order of the City Council on November 19, 1951; thence Southwesterly along the Northwesterly side line of said Concord Street as laid out and accepted by order of the City Council on November 19, 1951; a distance of eighty-eight (88) feet, more or less, to the Northeasterly side line of Concord Street as laid out and accepted March 8, 1875; thence Southeasterly along the said Northeasterly side line of Concord Street as laid out and accepted March 8, 1875, a distance of twenty-seven and eight tenths (27.8) feet, more or less, to the point of beginning.

Meaning and intending hereby to convey a strip of land twenty-seven and eight tenths (27.8) feet wide off the Southeasterly side of Lot Number 46 as shown on Plan of land of Thomas S. Files, said plan being recorded in Cumberland County Registry of Deeds, in Plan Book 3, Page 23.

Being a portion of the same premises conveyed to Randal L. Gullifer et als by Adelaid N. Blake by Warranty Deed dated November 8, 1948 and recorded in Cumberland County Registry of Deeds in Book 1933, Page 378.

To Have and to Hold the same, together with all the privileges and appurtenances thereunto belonging, to it the said City of Portland, its successors assigns forever.

U.S.I.R.
\$1.10
R.L.G.&
2-28-52

And we do covenant with the said Grantee, its successors

heirs and assigns, that we will warrant and forever defend the premises to it the said Grantee, its successors

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

In Witness Whereof, the said Randal L. Gullifer and Greta M. Gullifer, being husband and wife and Arthur G. Estabrook and Bertha M. Estabrook, being husband and wife each joining in this deed as Grantor and each relinquishing and conveying our right by descent and all other rights in the above described premises,

have hereunto set our hand and seals this 28th day of February in the year of our Lord one thousand nine hundred and fifty-two.

Signed, Sealed and Delivered in presence of
Patricia E. Meally

Randal L. Gullifer	Seal
Arthur G. Estabrook	Seal
Bertha M. Estabrook	Seal
Greta M. Gullifer	Seal

State of Maine, CUMBERLAND, SS. February 28, 1952
the above named Randal L. Gullifer

Personally appeared

and acknowledged the above instrument to be his free act and deed.
Before me, Patricia E. Meally, Notary Public, Notarial Seal.

g Received March 4, 1952, at 3 o'clock 31 m. P. M., and recorded according to the original.



6. FINANCIAL CAPABILITY

Portland Public Schools has furnished the attached Statement of Financial Capacity for the Longfellow 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 Longfellow Elementary School Renovation Project has available the sum of \$14,000, 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 Fawcett
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 Longfellow 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 Longfellow 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 (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,"

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



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

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.

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 1-27-21

Conditional Use Standards – (14-474)

- **Traffic:** The Longfellow 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. An added delivery area for the new cafeteria west of 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: One added rooftop air-handler unit will be located outdoors on the existing building roof. This unit will more than 100' away from the nearest property line, and the sound level measured at the nearest property line will be approximately 34 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: An additional sanitary sewer line will be extended to a City sewer main, to service the new school building addition. No on-site sewage disposal will occur.
 5. Air Emissions: The existing Longfellow Elementary School receives its heat through underground heating lines from the adjacent Deering High School heating system. The new additions will utilize the existing heating system, so no additional fuel-burning equipment will be added to either the elementary school or the high 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 Longfellow 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 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 II 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'.



4. ZONING ASSESSMENT

The Longfellow 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.	121,968 sq.ft.
Area Per Dwelling Unit	NA	NA
Minimum Street Frontage	50 ft.	600 ft.
Front Yard Minimum	20 ft.	70 ft.
Front Yard Maximum	NA	NA
Rear Yard	20 ft.	800 ft.
Yard Right	8 ft.	60 ft.
Yard Left	8 ft.	600 ft.
Side Street Setback	NA	NA
Step Back	NA	NA
Maximum Lot Coverage	40%	27%
Minimum Lot Coverage	NA	NA
Maximum Height	35 ft.	25 ft.
Open Space	6,000 sq.ft.	55,000 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		

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):			

This Page Intentionally Blank



February 9, 2021

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

Re: Longfellow Elementary School Additions
432 Stevens Avenue
Portland, ME
No. 19150
Response to Comments, dated 02-02-21

Dear Jim,

Thank you for providing these 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.

Transportation:

1. The bicycle path shown on drawing C00-1 is existing. It will remain in the site access drive.
2. Most students ride bicycles or walk to the Longfellow school. One bus picks up and drops off a few students in front of the school, on Stevens Avenue. Most parent vehicles also line up in front of the school on Stevens Avenue. Many parents also walk to the school to get their children. Three small busses pickup students from 'after-school' activities within the parking lot, which is accessed from Concord Street. These busses circulate into the school from the southerly drive on Concord Street, and back through the parking lot and out the northerly drive onto Concord Street. The busses have no issue making this route daily.
3. Regarding the access path/drive to the west of the school, no deliveries currently use that access way. All deliveries access the north parking lot through Concord Street. The enlarged west access drive will only be used by delivery vehicles because of the cafeteria building addition. There will be very few vehicles using this new westerly drive to the new cafeteria delivery area; only one or two per day. The delivery vehicles come between 8:00 am and 2:00 pm.
4. Currently there are 29 classrooms/instruction rooms in the school. The proposed addition will add one instructional room, for a new total of 30.

Environmental Quality:

5. Waiting for City Arborist comments.
6. Waiting for City Stormwater Consulting Engineer comments.

AUBURN

BOSTON

PORTLAND

PORTSMOUTH

harriman.com



7. Waiting for confirmation on the High School parking lot drainage problems.
8. Yes, the Emergency/Fire response document on the School Department website applies to the Longfellow Elementary School.
9. The west access path will be reconstructed to a 20' width, as required, and is shown on the attached C00-1 Site Plan.
10. The west access drive has been tested with the Auto-turn computer model for a fire truck, and the printout is attached.
11. Changes to the curbing for the west access drive will be shown on C00-1 Site Plan.

Site Design:

12. A note has been added to the attached revised Snow Plan SP-1, that states, "If snow accumulation exceeds on-site storage space, Portland Public Schools will remove the snow from the site as necessary."
13. Two new heat recovery units(HRU-1 and HRU-2) are shown on the roof of the existing school and the new addition, on attached revised drawing C00-1 Site Plan. The unit catalogue sheet is attached in the original submission in Exhibit 21 – Noise and Vibration. The units are both the same size and are only 3'-8" tall and set back at least 15' from the existing roof edge, and therefore, should not be objectionable from public streets or nearby sites. No separate screening is proposed.
14. The new electrical pad-mounted transformer will be located in front of the existing school building toward the south end of the building. The transformer will be screened from Stevens Avenue by six new 6' to 8' Dwarf Emerald Green Arborvitae, as shown on the attached revised C00-1 Site Plan.
15. There are no existing site light poles in the parking lot to the north of the building. However, City light poles on the adjacent streets shed sufficient light for the parking lot. The City street light pole on the corner of Pleasant Street has a spotlight aimed to light the parking lot. And there is a light fixture on the pole on the corner of Concord Street West and the school access drive, aimed into the lot. These existing light poles have been added to drawing C00-1 Site Plan. Proposed building-mounted site light fixture locations are also shown on the attached revised C00-1 Site Plan.
16. The attached revised catalogue sheets show the selected fixture model, which meets the maximum lumen and CCT levels.
17. There are no existing site light poles in the parking lot to the north of the building. However, City light poles on the adjacent streets shed sufficient light for the parking lot. The City street light pole on the corner of Pleasant Street has a spotlight aimed to light the parking lot. And there is a light fixture on the pole on the corner of Concord Street West and the school access



drive, aimed into the lot.

18. The modular units will have wall-mounted porch lights at exterior doors for security.
19. The existing parking lot striping will be retained and re-painted, once the modular classroom units are removed from the site. The parking lot will be returned to existing condition as shown on drawing C10-1, as originally submitted. This project does not have a second phase.
20. Distances to adjacent property lines from the existing and proposed buildings are shown on the attached revised C00-1 Site Plan.

Construction Management Plan:

21. The modular classroom units are proposed to be placed in the parking lot approximately in June 2021 and removed at the end of construction in approximately Fall 2023.
22. The Construction Management Plan and the attached C00-1 Site Plan have been revised to exclude parking in partial spaces by the proposed jersey barriers.
23. During construction, the parking lot will lose 15 parking spaces, due to the modular classroom units. The remaining spaces will be reserved for the school's use. For contractor use, approximately 30 spaces will be available in the high school parking lot to the west of the elementary school site.

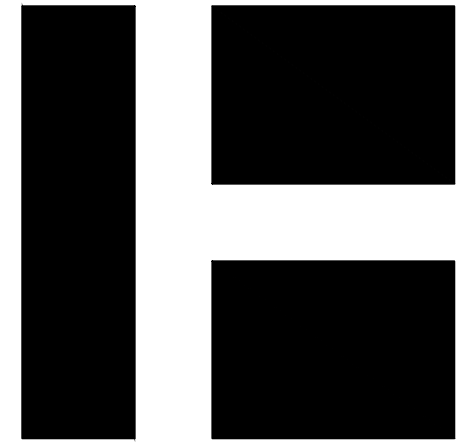
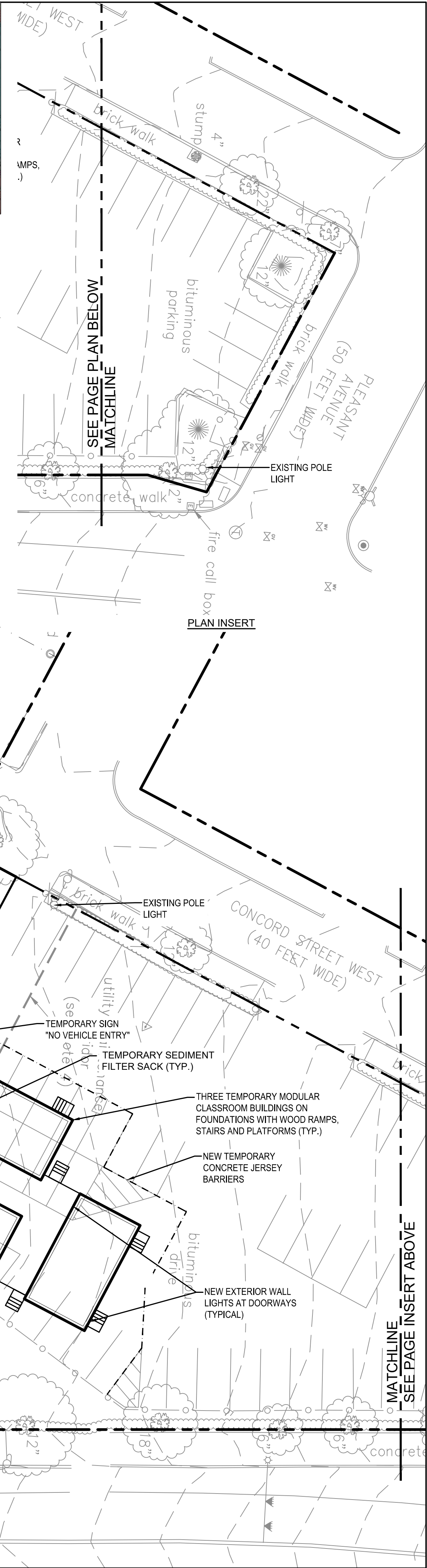
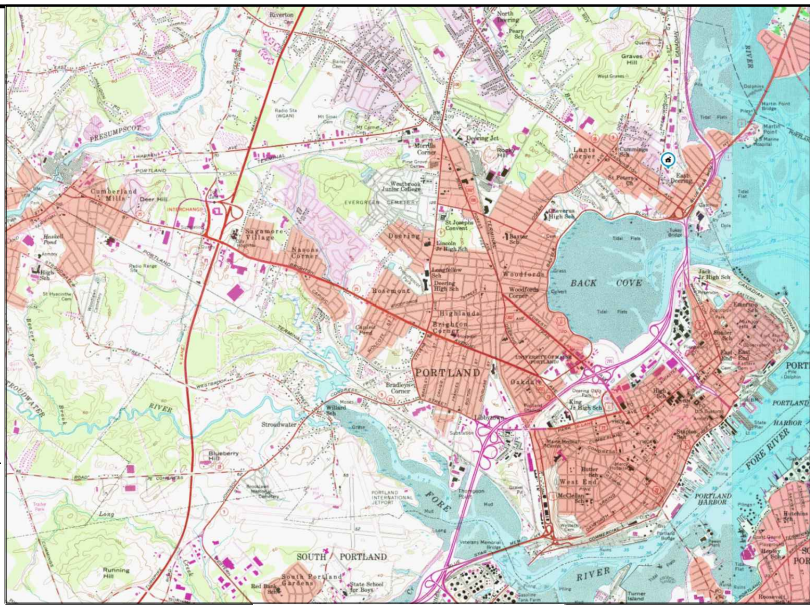
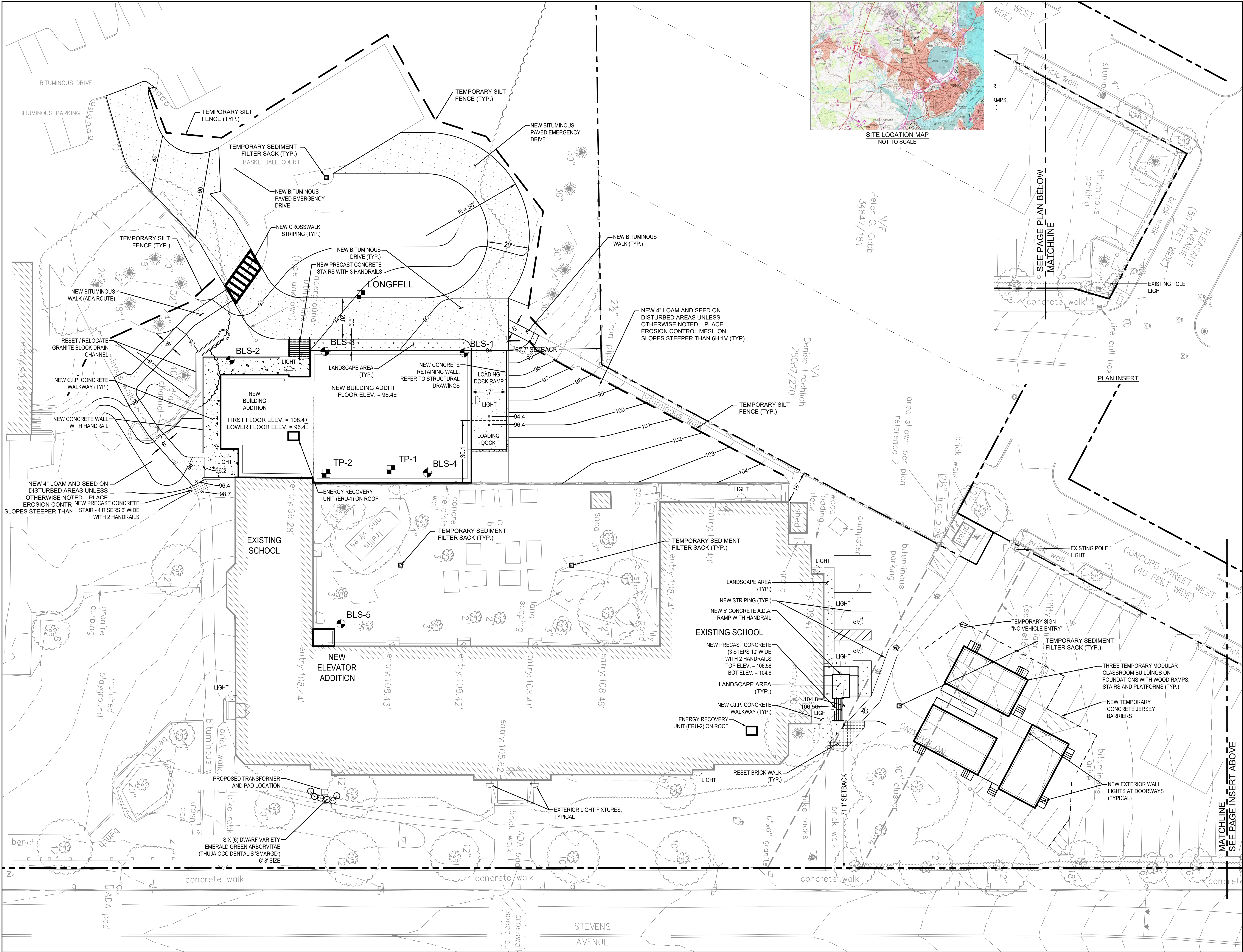
We trust these noted revisions and revised documents address the concerns. Let us know if you need any further documentation.

Thank you very much.

Sincerely,
Harriman

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

Enclosures: Revised drawing and exhibits

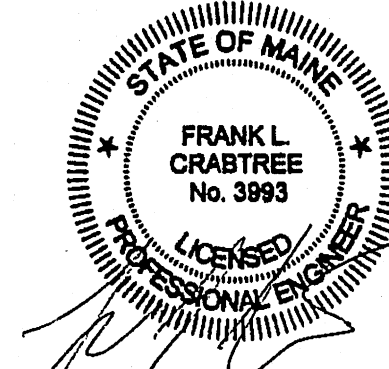


LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE

Harriman Project No. 19150

Key Plan Proj North



PLANNING BOARD
SEPTEMBER 28, 2020

Rev Date Revision Description
02-10-2021 Planning Board Review Comments

Drawing Status

PRELIMINARY
NOT FOR
CONSTRUCTION

Drawing Scales
1" = 20'

PA / PE: FLC © 2021
Drawn By: HAS / BAW Harriman Associates

SITE PLAN

C00-1

1. GENERAL

- 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. AFTER SUBSURFACE CHAMBER FILTER BEDS ARE CONSTRUCTED, INSTALL TEMPORARY PLUGS IN INLET PIPES TO PREVENT SILTY STORMWATER FROM ENTERING THE CHAMBERS DURING CONSTRUCTION. AFTER UPSTREAM AREAS ARE FULLY STABILIZED REMOVE THE PLUGS.
- C. 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.
- D. (NOT USED)

- E. WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 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.

- F. 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 ITS NORMAL DIAMETER. 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.

- G. 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.

H. SILT FENCE:

POST: 1"x1" HARDWOOD POST, 4.5 FEET IN LENGTH.

- FABRIC: PERVIOUS 36" WIDE SHEET OF SYNTHETIC POLYMER OF 12-MIL THICKNESS, SUCH AS MIRAFI 100X; TERRA TEX-SG 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.

- I. EROSION CONTROL SOIL/BARK 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.

- J. HAY BALES: BALES SHALL BE AT LEAST 14" X 16" 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.

- K. CATCH BASIN SEDIMENT FILTER SACK: A FILTER FABRIC BAG WHICH HANGS UNDER THE GRATE TO CATCH SEDIMENTS. PROVIDE "STREAMGUARD MODEL 3003," "BASIN BAG" BY EMCO DISTRIBUTION, "SILT SACKS HIGH FLOW" BY ACF ENVIRONMENTAL, OR APPROVED EQUAL. INSTALL THE BAG DEVICE PER MANUFACTURER'S RECOMMENDATION.

- L. BEFORE EARTHWORK IS STARTED, A SILT FENCE, FILTER BERM, OR STONE SEDIMENT DAM 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.

- M. EROSION CONTROLS 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.

- N. 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.

- O. 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 BERM IS STILL REQUIRED, WHICH HAS DECOMPOSED, CLOGGED WITH SEDIMENT, ERODED, 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.

- P. 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 WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL, OR PRIOR TO A STORM EVENT, WHICHEVER COMES FIRST. REMOVE TEMPORARY 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.

- Q. 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, SOD, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS, AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS, PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS, AND SCHEDULE SODDING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDD OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. PERMANENT STABILIZATION IS DEFINED AS FOLLOWS:

1. SEEDD 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 SOD 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 CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION, WITH A WELL-GRADED RIPRAP LINING, TURF REINFORCEMENT MAT, OR WITH ANOTHER NON-EMISVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS OR DOWN-CUTTING OF THE CHANNEL.

2. TEMPORARY SEEDING AND MULCHING

- A. TOPSOIL STRIPPED AND STOCKPILED ON SITE SHALL BE IMMEDIATELY SEEDDED WITH EROSION CONTROL SEED MIX AND MULCHED WITH HAY. MULCH SHALL BE CURED STRAW FREE FROM NOXIOUS WEED SEEDS AND ROUGH OR WOODY MATERIALS.

- B. EROSION CONTROL SEED:

Seed Type	% Weight	% Purity	% Germination
Domestic Rye	70	85	80
Perennial Rye	30	85	80

- C. EXPOSED EARTHWORK AREAS WHICH WILL NOT BE WORKED ON FOR ONE WEEK SHALL BE MULCHED WITH STRAW.

- D. UNFINISHED AREAS WHICH ARE NOT TO BE WORKED ON FOR ONE MONTH OR WILL BE WINTERED SHALL BE SEEDDED 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. ANCHOR MULCH TO PREVENT WIND BLOWN MOVEMENT.

- E. IN SENSITIVE AREAS (WITHIN 25 FT. OF STREAM OR WETLAND 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.

3. PERMANENT SEEDING AND MULCHING

- A. GRASS SEED SHALL BE FREE FROM NOXIOUS WEED SEEDS AND RECLEANED. GRADE A RECENT CROP SEED, TREATED WITH APPROPRIATE FUNGICIDE AT TIME OF MIXING. DELIVERED TO THE SITE IN SEALED CONTAINERS WITH DEALER'S GUARANTEED ANALYSIS AND EACH VARIETY OF SEED SHALL HAVE PERCENTAGES OF GERMINATION OF NOT LESS THAN 80% AND A PERCENTAGE OF PURITY OF NOT LESS THAN 85%. SOW SEEDS AT A RATE OF 50# PER 1,000sq.ft.

- B. WEED SEED CONTENT SHALL NOT EXCEED 0.25% WET, MOLDY OR OTHERWISE DAMAGED SEED WILL BE REJECTED.

- C. SEED MIX PROPORTIONS BY WEIGHT:

Seed Type	% Weight	% Purity	% Germination
Chewing Fescue	35	85	80
Creeping Red Fescue	35	85	80
Perennial Rye	30	85	80

4. WINTER CONSTRUCTION

- A. WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.

- B. SITE STABILIZATION: FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.

- C. SEDIMENT BARRIERS: ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.

- D. DITCH: ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1 OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.

- E. SLOPES: MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE SLOPES.

5. DRAINAGE DITCHES AND EMBANKMENTS

- A. DRAINAGE DITCHES SHALL BE PROVIDED WITH TEMPORARY STONE CHECK DAMS SPACED NO GREATER THAN 100 FEET APART. TEMPORARY DITCH CHECK DAMS SHALL BE CONSTRUCTED WHERE INDICATED. ADDITIONAL TEMPORARY DITCH DAMS SHALL BE INSTALLED DURING THE CONSTRUCTION, WHERE NECESSARY TO PREVENT SOIL FROM LEAVING THE WORK AREA.

- B. GRASSED DRAINAGE DITCHES AND SWALES SHALL BE LINED WITH A CONTINUOUS MAT OF EROSION CONTROL MESH FOR FULL BOTTOM WIDTH AND SIDE SLOPES TO 12" ABOVE BOTTOM. WITHIN 48 HOURS OF FINAL GRADING AND PRIOR TO A STORM EVENT, IN ORDER TO STABILIZE THE LOAM, SEED AND MULCH.

- C. WHERE EROSIIVE VELOCITIES IN DITCHES OR EMBANKMENTS ARE ANTICIPATED OR EXPERIENCED AND SOIL CANNOT BE STABILIZED WITH MULCH AND MESH, SUBSTITUTE EROSION CONTROL SOIL/BARK MIX IN PLACE OF LOAM. SCREEN THE EROSION CONTROL SOIL/BARK MIX TO REMOVE WOOD, BARK AND STONES ONE INCH IN SIZE AND GREATER. IF EROSIIVE VELOCITIES ARE EXCESSIVE, PROVIDE A 12" THICK STONE RIP-RAP LINING ALONGS DITCH BOTTOM AND UP SIDE SLOPES TO ONE FOOT ABOVE THE BOTTOM ELEVATION. PLACE NON-WOVEN GEOTEXTILE BENEATH RIP-RAP.

- D. STABILIZE POND EMBANKMENT (INTERIOR AND EXTERIOR), SLOPES STEEPER THAN THREE HORIZONTAL TO ONE VERTICAL AND DRAINAGE DITCHES BY SEPTEMBER 15, CONSISTING OF PERMANENT SEEDING AND MULCH. IF THIS DATE CANNOT BE MET, PROVIDE ALTERNATIVE PERMANENT OR TEMPORARY STABILIZATION DESCRIBED AS FALL AND WINTER STABILIZATION.

- E. INSTALL EROSION CONTROL MESH OVER MULCH ON SLOPES STEEPER THAN SIX HORIZONTAL TO ONE VERTICAL (16%) AND IN CONFORMANCE TO DOT STANDARD SPECIFICATION, LATEST EDITION, SECTION 8.48, PARAGRAPHS 613.03 THROUGH 613.06. ANCHOR MESH AS RECOMMENDED BY MANUFACTURER.

- F. PERMANENTLY RIP-RAP INLETS AND OUTLETS OF CULVERTS AND PIPE OUTFALLS WITHIN 48 HOURS OF INSTALLATION, AS SPECIFIED IN SECTION 312000 - EARTH MOVING AND AS SHOWN ON THE DRAWINGS.

- G. INSTALL PERMANENT EROSION CONTROL BLANKET AROUND CULVERT INLETS AND OUTLETS AS SHOWN ON THE DRAWINGS AND ACCORDING TO MANUFACTURERS' RECOMMENDATIONS.

1. PREPARE SOIL WITH LOAM, FERTILIZER AND SEED AS SPECIFIED IN SECTION 328200 PRIOR TO INSTALLING THE EROSION CONTROL BLANKET.
2. INSTALL PERMANENT EROSION CONTROL BLANKET FIVE FEET MINIMUM IN ALL DIRECTIONS AROUND CULVERT INLETS.
3. INSTALL PERMANENT EROSION CONTROL BLANKET FIVE FEET MINIMUM IN ALL DIRECTIONS AROUND CULVERT OUTLETS AND A SIX FOOT WIDTH CENTERED ALONG THE OUTLET CHANNEL FOR TEN FEET.
4. INSTALL STAPLES AS SHOWN ON THE EROSION CONTROL BLANKET DETAIL ON THE DRAWINGS AND THROUGHOUT THE BLANKET IN AN 18 BY 18 INCH GRID.

6. PARKING AND DRIVES

- A. PLACE A TEMPORARY STABILIZED CONSTRUCTION EXITS WHERE VEHICLES LEAVE THE SITE AND ENTER EXISTING PAVED ROADS, CONSISTING OF A 6" LAYER OF 1 1/2" TO 3" CRUSHED STONE, TRACKING A SPILLING OF EARTH AND/OR DEBRIS ON PUBLIC STREETS SHALL BE AVOIDED TO THE MAXIMUM EXTENT POSSIBLE. CLEAN UP AND REMOVE SUCH SPILLAGE.

- B. AS THE CRUSHED STONE STABILIZED CONSTRUCTION EXITS CONTINUE TO SCRUB THE SOIL FROM THE TRUCKS, THE STONE LAYER WILL TEND TO FILL WITH SEDIMENTS. WHEN THIS OCCURS, REMOVE THE STONE AND SEDIMENT AND REPLACE IT WITH A CLEAN LAYER OF STONE.

- C. AS SOON AS POSSIBLE AFTER ROADS AND PARKING AREAS ARE CLEARED, GRUBBED AND GRADED TO THE REQUIRED SUBGRADE, THE BASE GRAVEL SHALL BE PLACED.

7. REMOVAL AND DISPOSAL

- WHEN PERMANENT SOIL STABILIZATION HAS BEEN ACHIEVED, TEMPORARY MATERIALS AND DEVICES THAT ARE NOT READILY DEGRADABLE SHALL BE REMOVED AND DISPOSED OF OFF SITE. SILT FENCES, FILTER BERMS AND CATCH BASIN SEDIMENT FILTERS MUST BE FULLY REMOVED. REUSABLE MATERIALS ARE AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.

8. STONES FOR RIP-RAP

- A. SIZE THE STONE MIXTURE SUCH THAT 50% OF THE STONES, BY WEIGHT, ARE LARGER THAN THE SPECIFIED D50 SIZE. STONES SHALL NOT BE SCHISTOSIC.

- B. PLAIN RIP-RAP: 4" TO 12" DIAMETER, HARD, SOUND ANGULAR STONES. D50 = 6".

- C. SPECIAL RIP-RAP: 8" TO 18" WIDE SOUND STONES WITH FLAT TOP SURFACE. D50 = 11".

- D. THE STONES SHALL BE PLACED WITH THEIR BENDS AT RIGHT ANGLES TO THE SLOPE, THE LARGER STONES BEING USED IN BOTTOM COURSES.

- E. THE FINISHED WORK SHALL PRESENT AN EVEN, TIGHT AND REASONABLY SMOOTH SURFACE CONFORMING TO THE REQUIRED CONTOUR AND HAVE A NEAT ORDERLY APPEARANCE WITHOUT SCATTERED STONES.

- F. SPECIAL: RIP-RAP SHALL BE HAND-PLACED IN CLOSE CONTACT TO FORM AN EVEN, TIGHT AND REASONABLY SMOOTH SURFACE WITH RELATIVELY FLAT TOP SURFACES. USE NO SMALL STONES OR SPALL.

9. PLANTING TIME

- A. SEEDING: SEEDING SHALL BE DONE BETWEEN AUGUST 15TH TO SEPTEMBER 15TH AND/OR APRIL 15TH TO JUNE 15TH.

- B. SODDING: SODDING MAY BE DONE BETWEEN APRIL 15TH AND NOVEMBER 15TH.

- C. VARIANCE: IF SPECIAL CONDITIONS EXIST WHICH MAY WARRANT A VARIANCE IN THE ABOVE PLANTING DATES, A WRITTEN REQUEST SHALL BE SUBMITTED TO THE ARCHITECT STATING THE SPECIAL CONDITIONS FOR THE PROPOSED VARIANCE. PERMISSION FOR THE VARIANCE WILL BE GIVEN IF WARRANTED IN THE OPINION OF THE ARCHITECT. REGARDLESS OF THE TIME OF SEEDING, THE CONTRACTOR SHALL BE RESPONSIBLE FOR A FULL GROWTH OF GRASS.

- D. PLACE PERMANENT SOIL STABILIZATION WITHIN 15 DAYS OF FINAL GRADING.

10. SPILL PREVENTION AND GROUNDWATER PROTECTION

- A. AREAS INSIDE AND OUTSIDE THE CONTRACT WORK LIMITS SHALL BE PROTECTED FROM LUBRICANTS, FUEL, SEDIMENT, LITTER, CONSTRUCTION DEBRIS, CHEMICALS AND OTHER POLLUTANTS.

- B. TAKE PRECAUTIONS AND CONFORM TO ALL FEDERAL, STATE AND LOCAL REGULATIONS TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. IMPLEMENT SPILL PREVENTION, CONTAINMENT AND RESPONSE.
- C. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BE DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. IMPERVIOUS LINERS OR MATERIALS MUST BE USED TO STORE OR CONTAIN THE HAZARDOUS MATERIALS AND PREVENT THEM FROM ENTERING THE GROUNDWATER.

11. ELUVIATE SEDIMENT AND DUST

- A. USE TRAFFIC CONTROL TO RESTRICT TRAFFIC TO PREDETERMINED ROUTES. MAINTAIN AS MUCH NATURAL VEGETATION AS IS PRACTICABLE. USE PHASING OF CONSTRUCTION TO REDUCE THE AREA OF LAND DISTURBED AT ANY ONE TIME. THE USE OF TEMPORARY MULCHING, PERMANENT MULCHING, TEMPORARY VEGETATIVE COVER, PERMANENT VEGETATIVE COVER, OR SODDING WILL REDUCE THE NEED FOR DUST CONTROL. USE MECHANICAL SWEEPERS ON PAVED SURFACES WHERE NECESSARY TO PREVENT DUST BUILDUP, STATIONARY SOURCES OF DUST, I.E. ROCK CRUSHERS, SHOULD UTILIZE FINE WATER SPRAYS TO CONTROL DUST.

- B. THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.

- C. CALCIUM CHLORIDE SHALL BE EITHER LOOSE DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH A SPREADER AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. LIQUID CALCIUM CHLORIDE CAN ALSO BE USED. TO REDUCE POTENTIAL FOR ENVIRONMENTAL DEGRADATION, USE ONLY WHEN OTHER METHODS ARE NOT PRACTICAL.

- D. COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. IN AREAS ADJACENT TO WATERWAYS, USE CHEMICALLY STABLE AGGREGATE.

- E. WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHALL BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.

12. DEBRIS AND OTHER MATERIALS - MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF.

13. EXCAVATION DE-WATERING

- A. WATER FROM CONSTRUCTION DEWATERING OPERATIONS SHALL BE CLEANED OF SEDIMENT BEFORE REACHING WETLANDS, WATER BODIES, STREAMS, OR SITE BOUNDARIES. UTILIZE TEMPORARY SEDIMENT BASINS, EROSION CONTROL SOIL, FILTER BERMS BACKED BY STAKED HAY BALES, A DIRT BAG 55" SEDIMENT FILTER BAG BY ACF ENVIRONMENTAL, INC. OR OTHER APPROVED BEST MANAGEMENT PRACTICES (BMPs).

- B. IN SENSITIVE AREAS, NEAR STREAMS OR PONDS, DISCHARGE THE WATER FROM THE DE-WATERING OPERATION INTO A TEMPORARY SEDIMENT BASIN CREATED BY A SURROUNDING FILTER BERM OF UNCOMPACTED EROSION CONTROL MIX IMMEDIATELY BACKED BY STAKED HAY BALES (SEE THE SITE DETAILS). LOCATE THE TEMPORARY SEDIMENT BASIN AT LEAST 100 FEET FROM THE NEAREST WATER BODY, SUCH THAT THE FILTERED WATER WILL FLOW THROUGH UNDISTURBED VEGETATED SOIL AREAS PRIOR TO REACHING THE WATER BODY OR PROPERTY LINE.

- C. PREPARE A DE-WATERING PLAN TO ADDRESS EXCAVATION DE-WATERING FOLLOWING HEAVY RAINFALL EVENTS OR WHERE THE EXCAVATION MAY INTERCEPT THE GROUNDWATER TABLE DURING CONSTRUCTION. THE COLLECTED WATER NEEDS TREATMENT AND A DISCHARGE POINT THAT WILL NOT CAUSE DOWNGRADIENT EROSION AND OFF-SITE SEDIMENTATION OR WITHIN A RESOURCE. FOLLOW THE DETAIL OF THE PLAN THROUGHOUT CONSTRUCTION DURATION.

- D. THE OWNER OR REGULATORY AGENCIES DO NOT AUTHORIZE A WATER DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, INCLUDING THE FOLLOWING: WASTEWATER FROM CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS; FUELS; OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE; SOAPS, SOLVENTS OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

14. UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT OF ENVIRONMENTAL PROTECTION DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

- WASTEWATER FROM THE WASHOUT OR CLEAN UP OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS.
- FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE.
- SOAPS, SOLVENTS OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING.
- TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

15. AUTHORIZED NON-STORMWATER DISCHARGES. IMPLEMENT APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE FOLLOWING DISCHARGES.

- FIREFIGHTING ACTIVITY.
- FIRE HYDRANT FLUSHINGS.
- VEHICLE WASH-WATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED).
- DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND DEP CHAPTER 500 APPENDIX C(1)(3)
- ROUTINE EXTERNAL BUILDING WASH-DOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS.
- PAVEMENT WASH-WATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOTE USED
- UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE.
- UNCONTAMINATED GROUNDWATER OR SPRING WATER.
- FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED.
- UNCONTAMINATED EXCAVATION DE-WATERING (SEE REQUIREMENTS IN DEP CHAPTER 500 APPENDIX C(5)).
- POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS.
- LANDSCAPING IRRIGATION.

16. CONSTRUCTION INSPECTION AND MAINTENANCE

- 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.

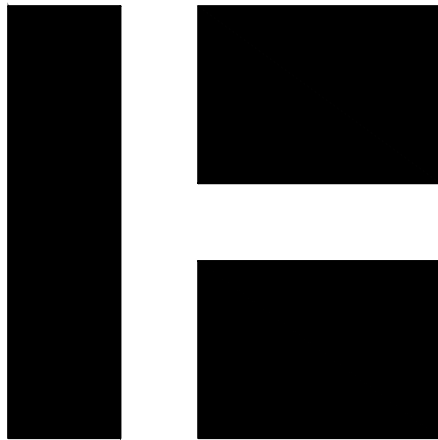
- B. UPON DISCOVERY OF A PROBLEM, REPAIR BMPs NO LATER THAN THE END OF THE NEXT WORK DAY. IF ADDITIONAL BMPs OR SIGNIFICANT REPAIRS ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO A RAIN EVENT.

- 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 AREAS AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED 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 PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

17. CONSTRUCTION OBSERVATIONS NOTES

- A. CONSTRUCTION OBSERVATIONS: THE OWNER WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO OBSERVE THE CONSTRUCTION AND STABILIZATION OF ALL STORMWATER MANAGEMENT STRUCTURES. CONTRACTOR MUST NOTIFY THE ENGINEER OF THE SCHEDULE FOR CONSTRUCTION OF STORM PONDS AND FILTER BEDS. IF NECESSARY, THE ENGINEER WILL INTERPRET THE POND'S CONSTRUCTION PLAN FOR THE CONTRACTOR.

- B. UNDERDRAINED SUBSURFACE SOIL FILTER: REFER TO NOTES ON DRAWING C60-1.

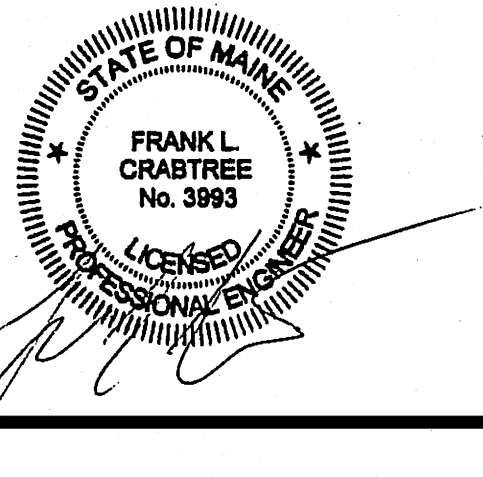


HARRIMAN

LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE

Harriman Project No.	19150
Key Plan	Proj North



PLANNING BOARD

SEPTEMBER 28, 2020

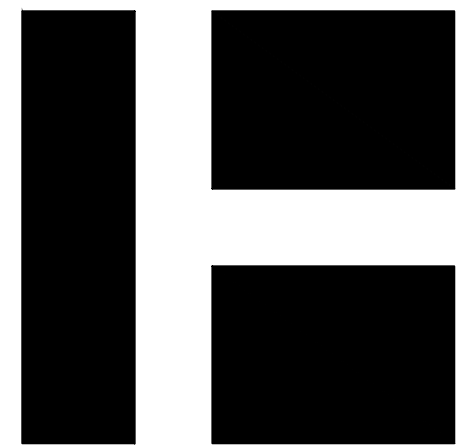
Rev	Date	Revision Description

PRELIMINARY
NOT FOR
CONSTRUCTION

1" = 20'		
PA / PE:	FLC	© 2020 Harriman Associates
Drawn By:	HAS	

SITE EROSION
CONTROL NOTES

C00-3

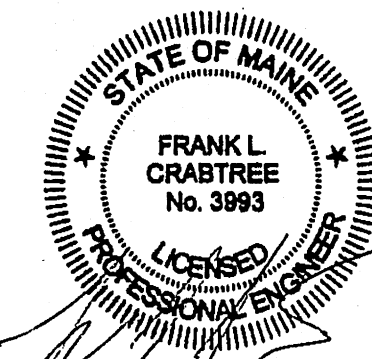


HARRIMAN

LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE

Harriman Project No.	19150
Key Plan	Proj North



PLANNING BOARD
SEPTEMBER 28, 2020

Rev Date	Revision Description

Drawing Status

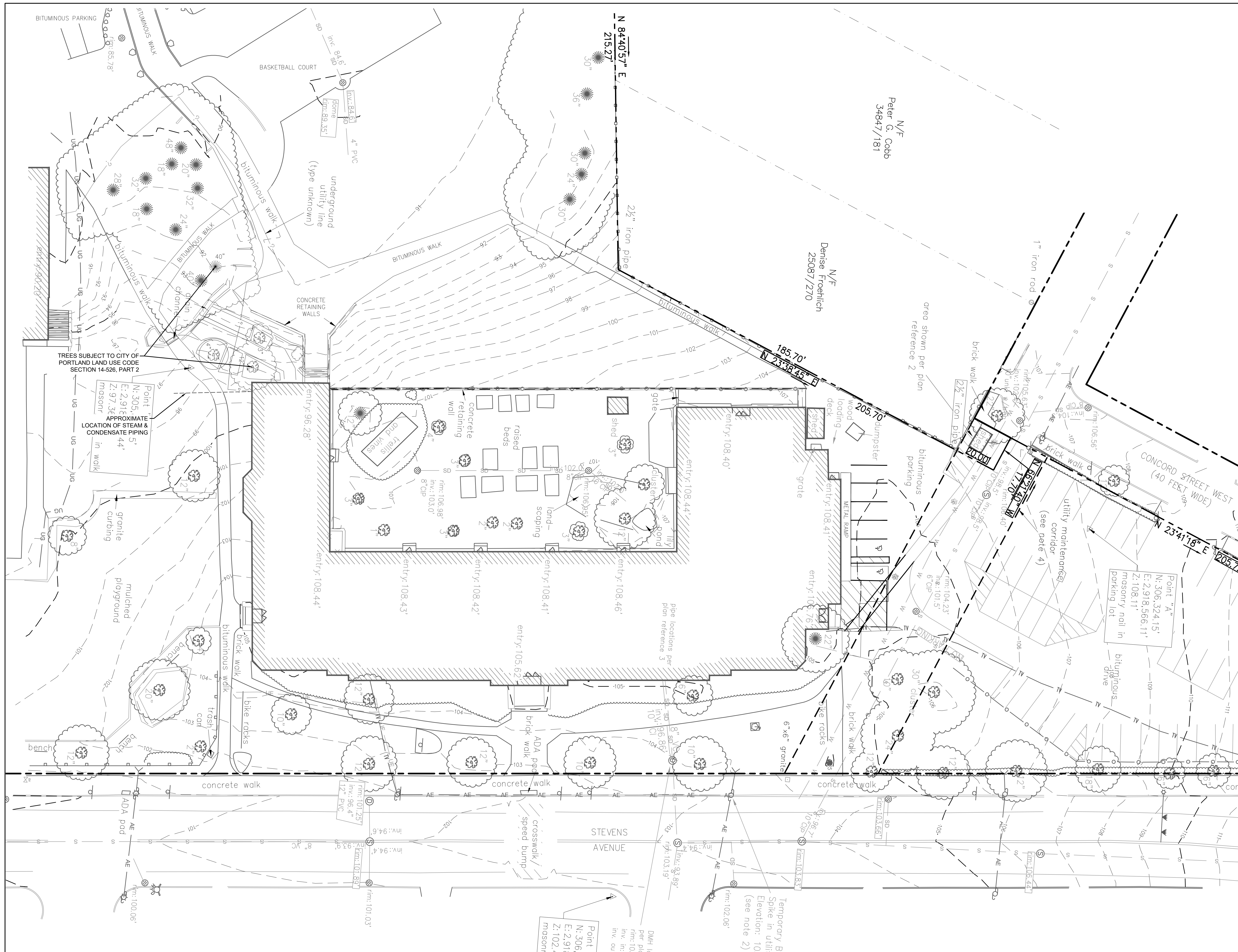
PRELIMINARY
NOT FOR
CONSTRUCTION

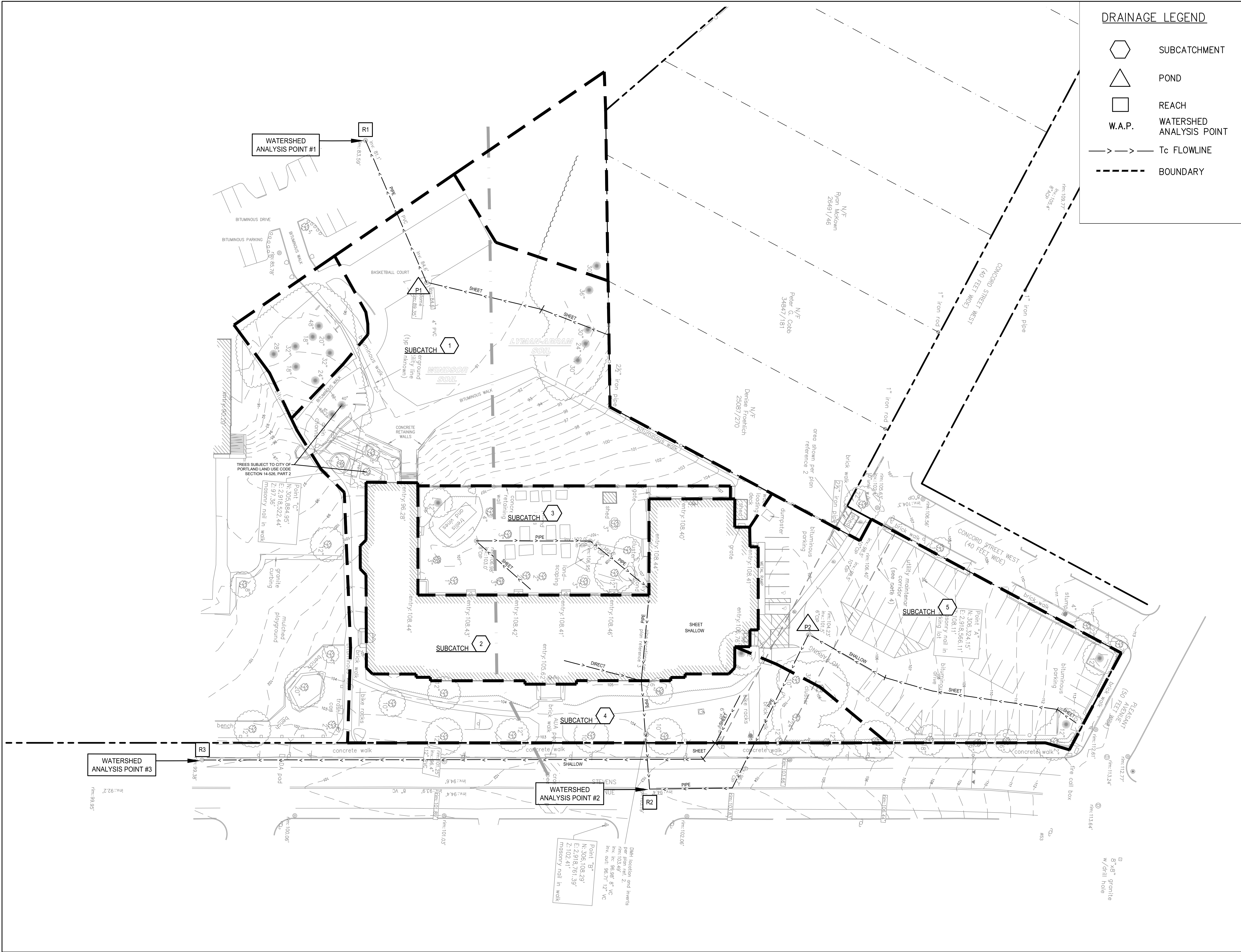
Drawing Scales	0 10' 20' 30'
1" = 20'	

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

EXISTING
SITE CONDITIONS PLAN

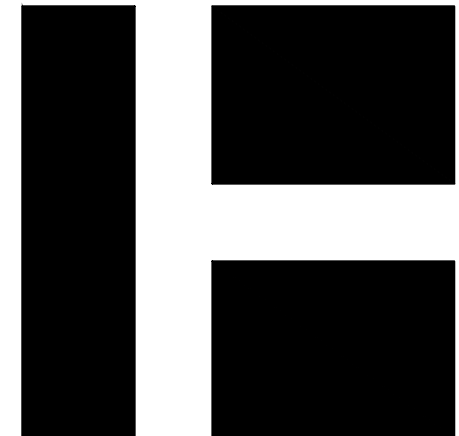
C10-1





DRAINAGE LEGEND

- SUBCATCHMENT
- POND
- REACH
- W.A.P. WATERSHED ANALYSIS POINT
- Tc FLOWLINE
- BOUNDARY



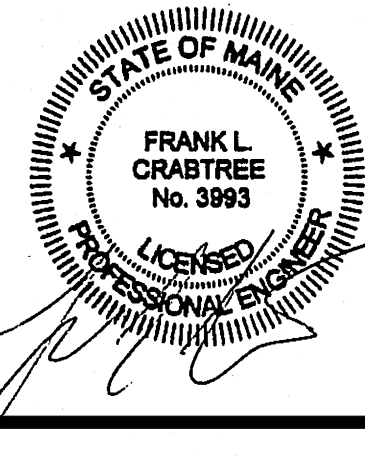
HARRIMAN

LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE

Harriman Project No. 19150

Key Plan Proj North



PLANNING BOARD
SEPTEMBER 28, 2020

Rev Date	Revision Description

Drawing Status

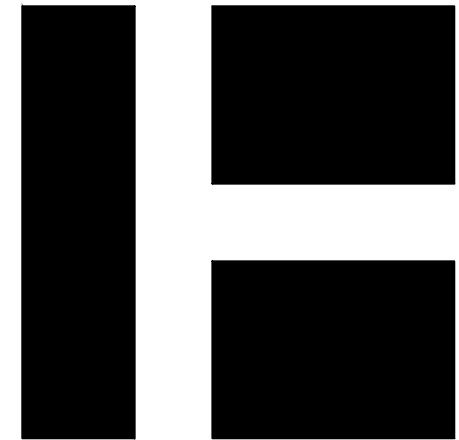
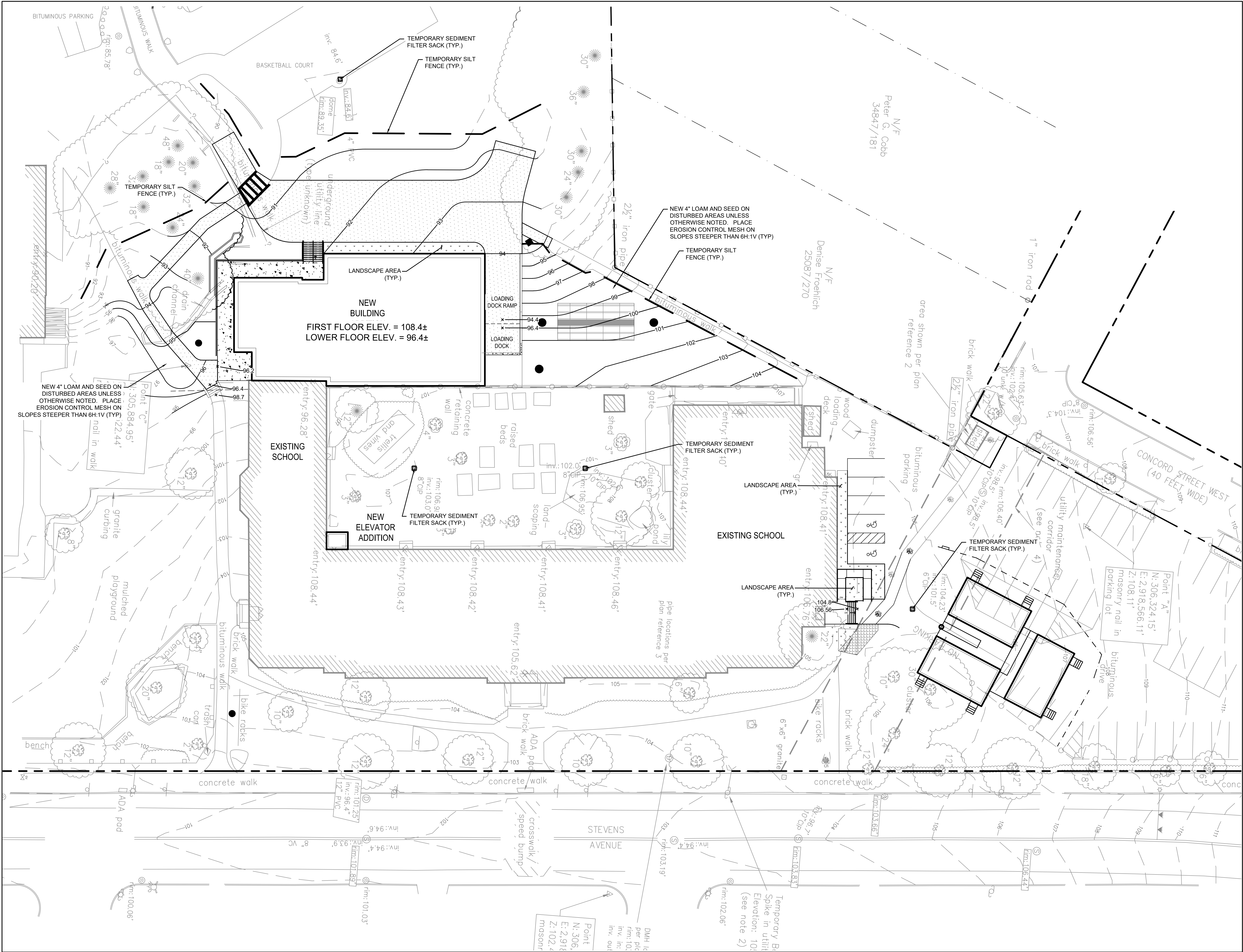
PRELIMINARY
NOT FOR
CONSTRUCTION

Drawing Scales	0 15' 30' 45'
1" = 30'	

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

PRE-DEVELOPMENT
DRAINAGE PLAN

C11-1



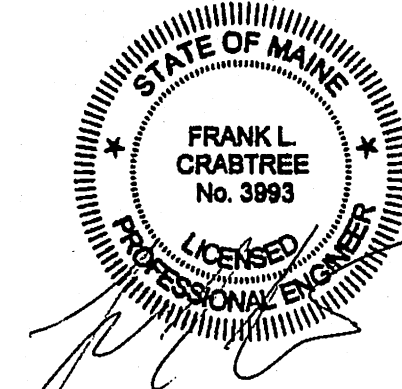
HARRIMAN

LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE

Harriman Project No. 19150

Key Plan Proj North



PLANNING BOARD

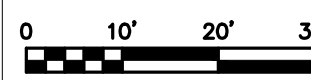
SEPTEMBER 28, 2020

Rev Date Revision Description

Drawing Status

PRELIMINARY
NOT FOR
CONSTRUCTION

Drawing Scales
1" = 20'

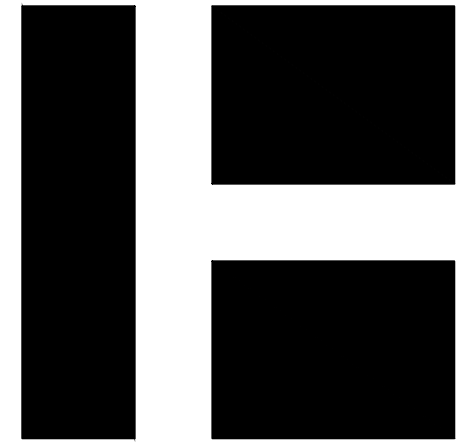
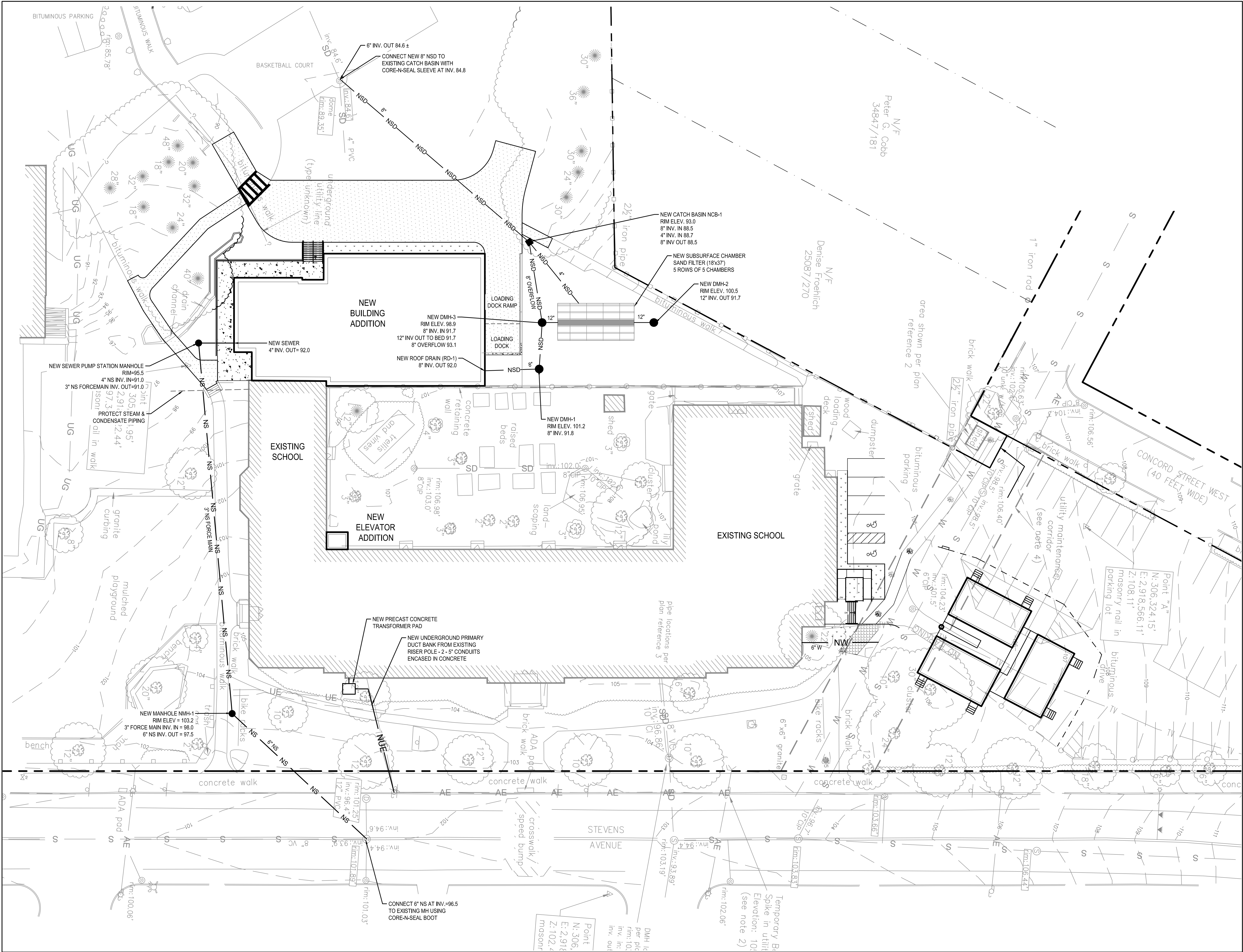


PA / PE: FLC
Drawn By: BAW/HAS

© 2020
Harriman Associates

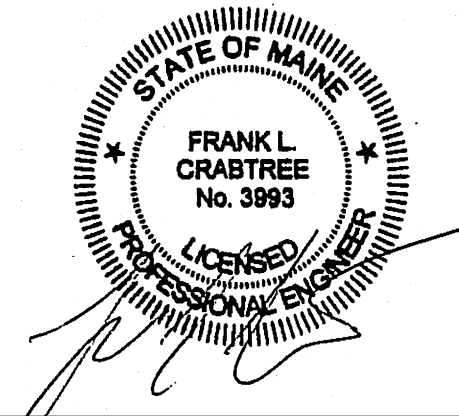
SITE GRADING AND
EROSION CONTROL PLAN

C30-1



LONGFELLOW
ELEMENTARY SCHOOL

Portland, Maine	
Harriman Project No.	19150
Key Plan	Proj North



PLANNING BOARD
SEPTEMBER 28, 2020

Rev Date	Revision Description

Drawing Status

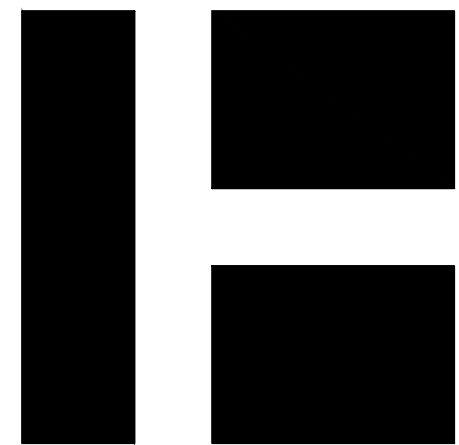
**PRELIMINARY
NOT FOR
CONSTRUCTION**

Drawing Scales	0 10' 20' 30'
1" = 20'	

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

SITE UTILITY PLAN

C40-1

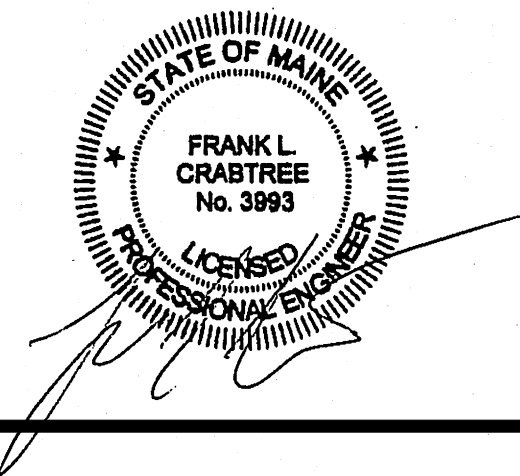


HARRIMAN

LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE

Harriman Project No.	19150
Key Plan	Proj North



PLANNING BOARD
SEPTEMBER 28, 2020

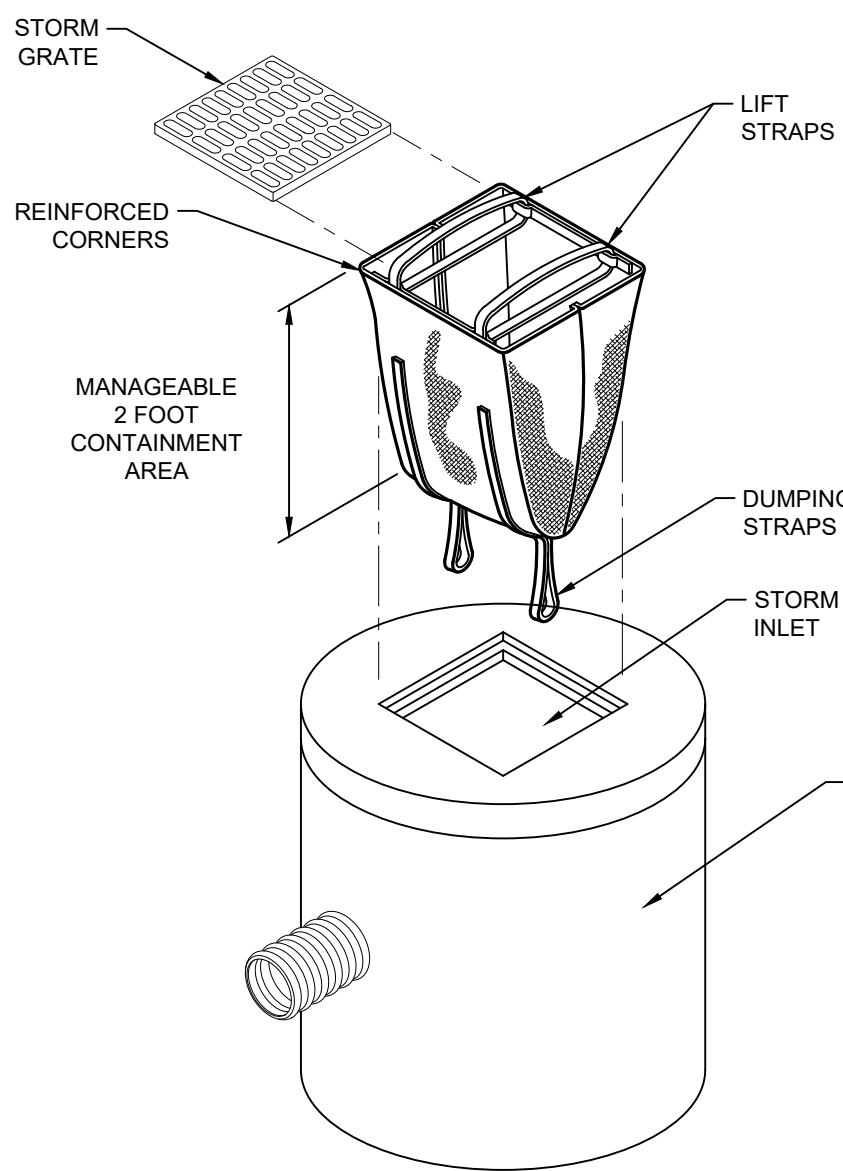
Rev	Date	Revision Description

PRELIMINARY
NOT FOR
CONSTRUCTION

1" = 20'	
PA / PE: FLC	© 2020 Harriman Associates
Drawn By: HAS	

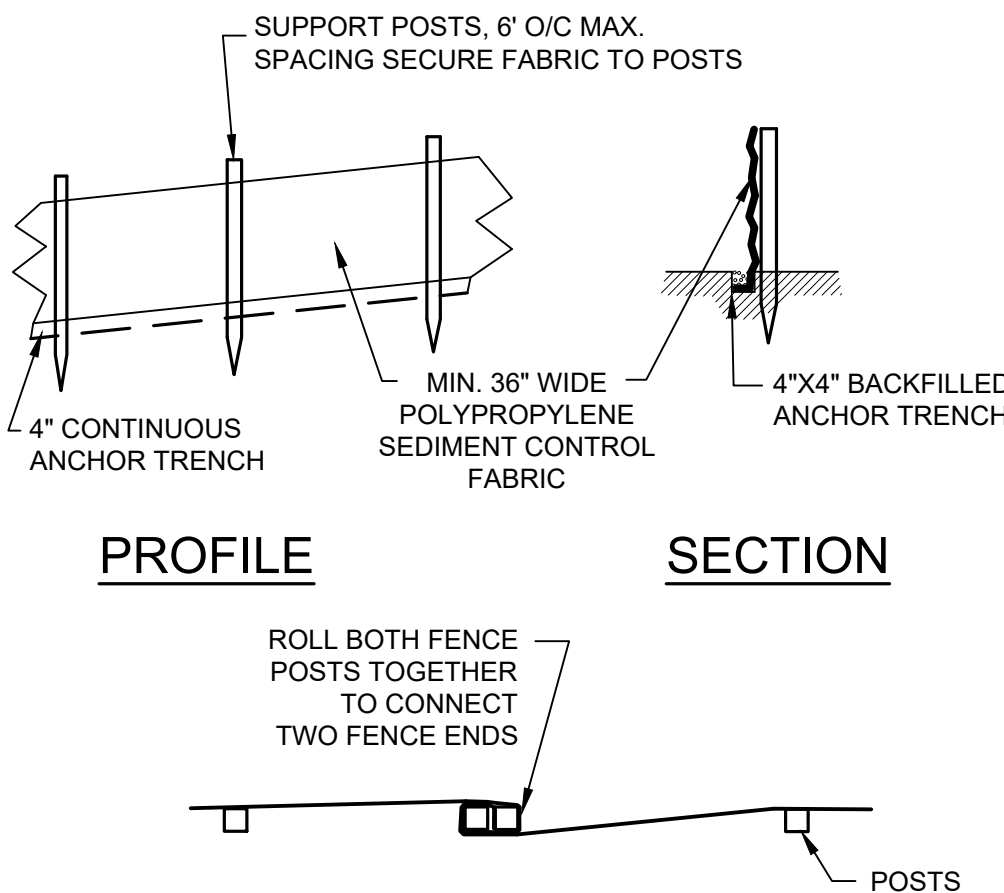
SITE DETAILS

C50-2

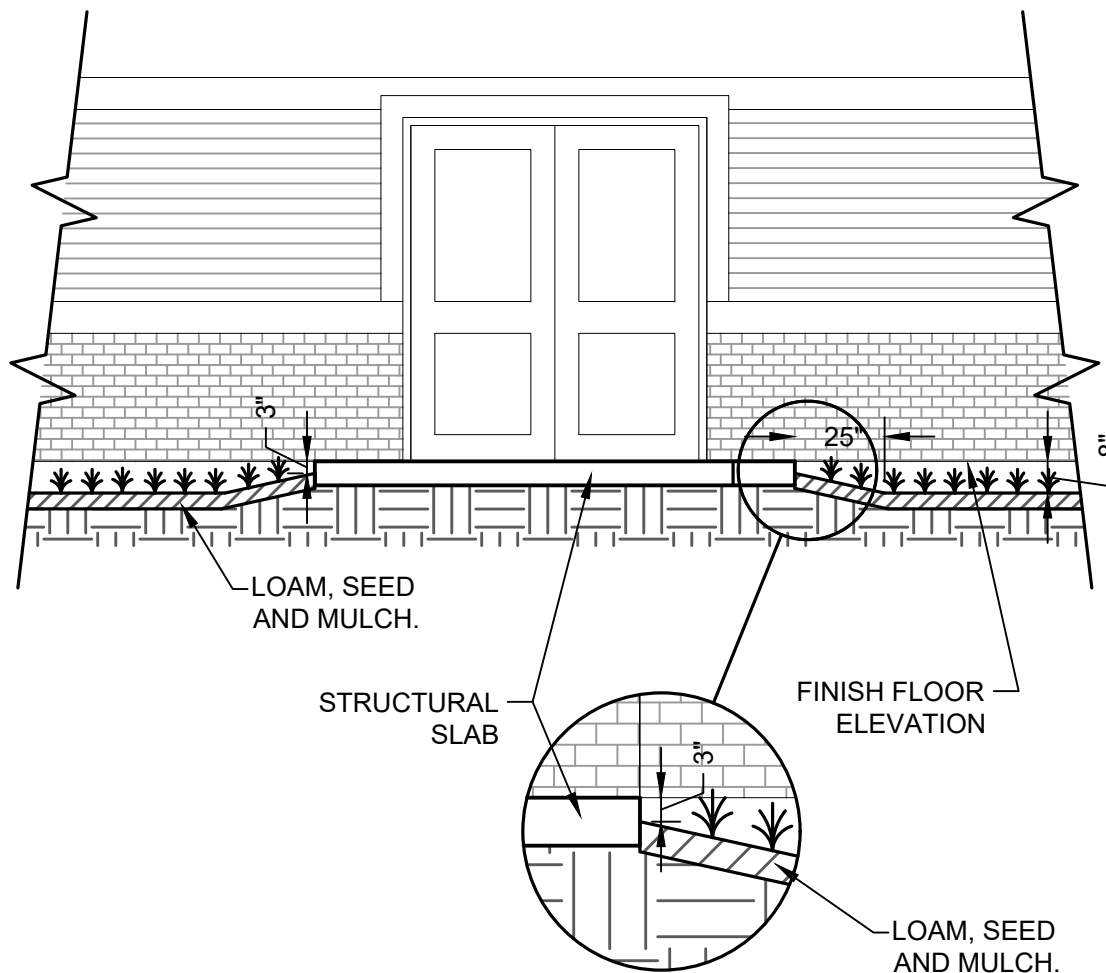


A4 SEDIMENT FILTER SACK
SCALE: N.T.S

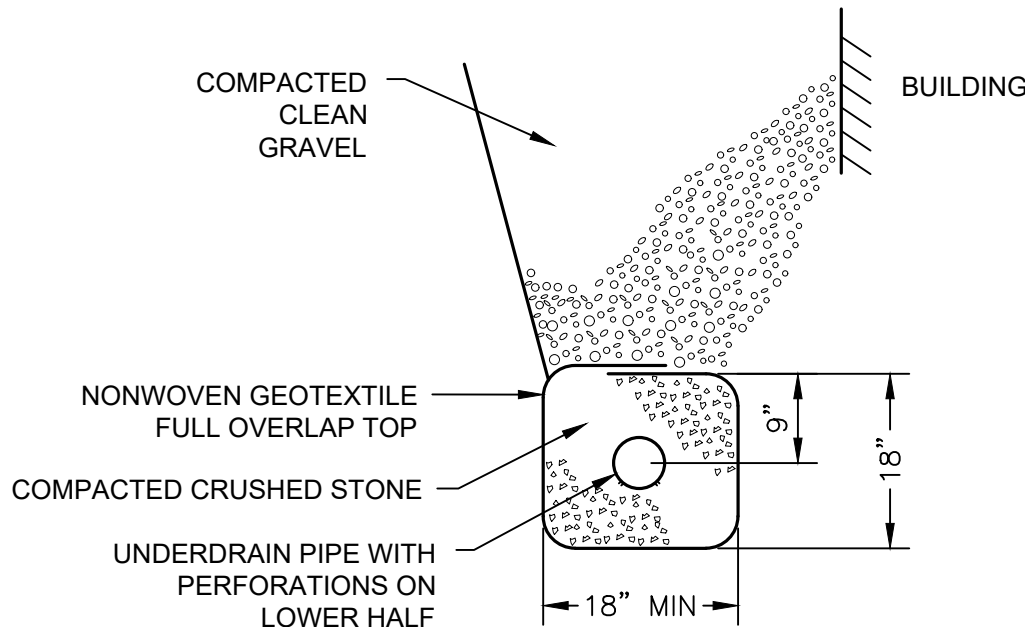
NOTE:
1.) PLACE SILT FENCE OR FILTER BERMS ALONG
UNIFORMLY SLOPED SURFACE.
2.) EROSION CONTROL MIX FILTER BERM MAY BE
SUBSTITUTED FOR A SILTFENCE. SEE THE SITE
GRADING AND EROSION CONTROL PLAN.



A3 SILT FENCE
SCALE: N.T.S



A2 TYPICAL GRADE AT DOOR SLABS
SCALE: N.T.S



A1 UNDERDRAIN OR FOUNDATION DRAIN
SCALE: N.T.S

1. BASIN EXCAVATION: THE AREA OF THE BASIN MAY BE EXCAVATED IN PREPARATION OF THE INSTALLATION OF THE UNDERDRAIN AND CAN BE USED FOR A SEDIMENT TRAP FROM THE SITE DURING CONSTRUCTION. AFTER EXCAVATION OF THE BASIN, THE OUTLET STRUCTURE AND PIPING SYSTEM MUST BE INSTALLED AT THE APPROPRIATE ELEVATION AND PROTECTED WITH A SEDIMENT BARRIER. IF THE BASIN IS TO BE USED AS A SEDIMENT TRAP, THE SIDES OF THE EMBANKMENTS MUST BE MULCHED AND MAINTAINED TO PREVENT EROSION.
2. COMPACTION OF SOIL FILTER: FILTER SAND AND UNDERDRAIN BEDDING MATERIAL MUST BE ONLY COMPACTED LIGHTLY BY INSTALLATION EQUIPMENT. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS TO PREVENT POCKETS OF LOOSE MATERIAL.
3. OUTLET DISCHARGE: OUTFLOW OF THE FILTER BASIN UNDERDRAIN CAN BE CONTROLLED BY A VALVE (2" PLASTIC BALL VALVE, TYPE 346, WITH A BALL VALVE HANDLE EXTENSION, TYPE 615, WITH A THREE-PIECE VALVE BOX INSTALLED OVER THE VALVE). UPON COMPLETION OF THE INSTALLATION OF THE SOIL FILTER MEDIA, THE CONTRACTOR SHALL FLOOD THE BASIN TO THE DESIGN ELEVATION WITH CLEAN WATER AND ADJUST THE OUTFLOW TO OBTAIN A 24 HOUR TO 48 HOUR RELEASE TIME.
4. CONSTRUCTION SEQUENCE: EROSION AND SEDIMENTATION FROM UNSTABLE SUBCATCHMENTS IS THE MOST COMMON REASON FOR FILTER FAILURE. NOT HEEDING THE CONSTRUCTION SEQUENCING CRITERIA IS LIKELY TO RESULT IN THE NEED TO REPLACE THE SOIL FILTER. THE FILTER SAND MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION. OTHERWISE, THE RUNOFF FROM THE CONTRIBUTING DRAINAGE AREA MUST BE DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED UNLESS THE DEPARTMENT HAS DETERMINED THAT SUFFICIENT MEASURES ARE BEING TAKEN TO PREVENT EROSION OF MATERIAL FROM THE UNSTABLE CATCHMENT AREA AND DEPOSITION ON THE FILTER.
5. TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MATERIAL. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:

B. PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES; 1996A) ON EACH MATERIAL.

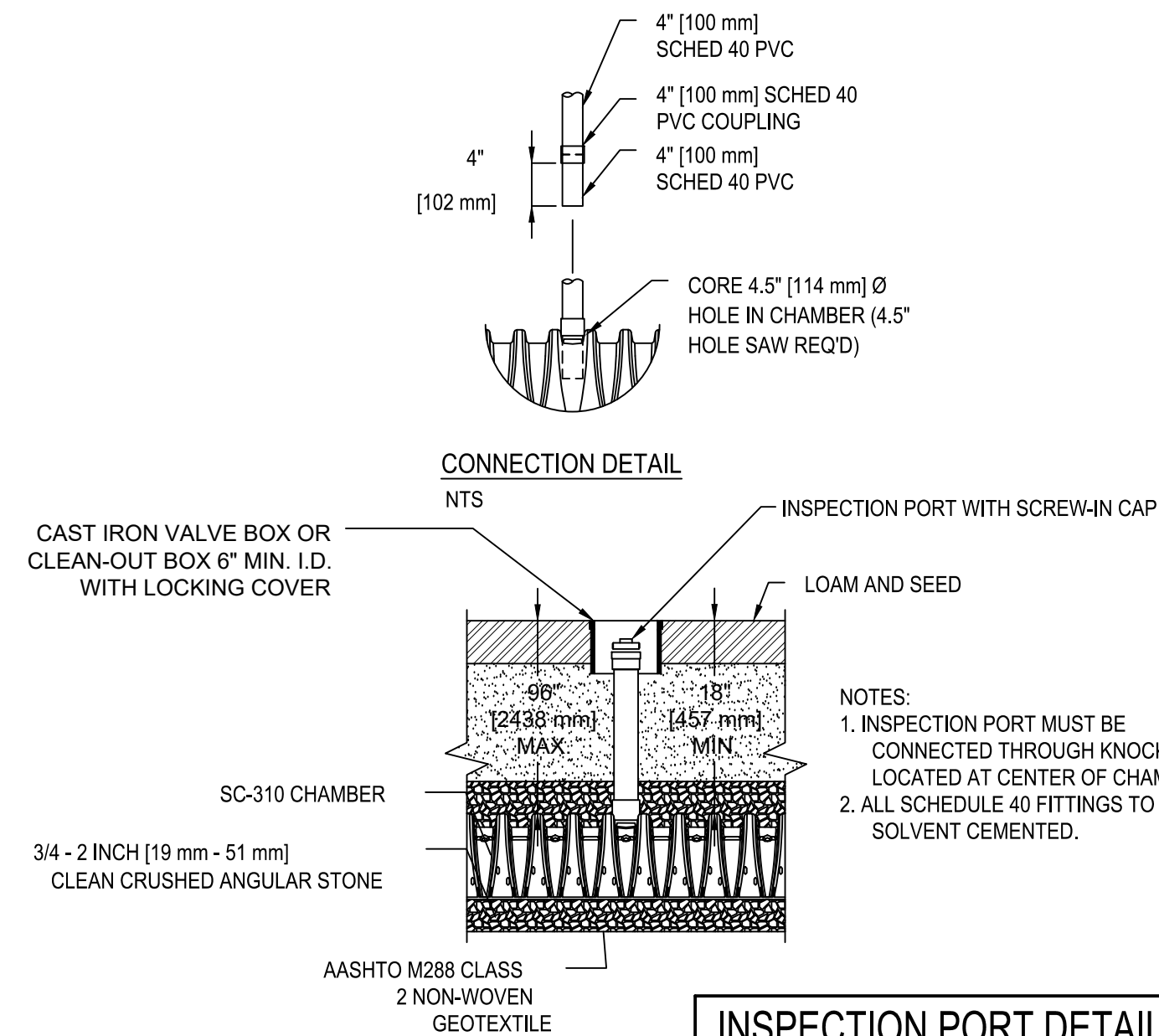
COARSE FILTER
SAND LAYER
(MEDOT #703.01)

SIEVE SIZE	% BY WEIGHT
#4	100
#10	95-100
#20	80-100
#40	50-85
#60	25-60
#100	10-30
#200	2-10
#400	0-5* (8 TO 10)

COARSE GRAVEL	MEDOT
SPECIFICATIONS FOR UNDERDRAINS (MEDOT #703.22)	

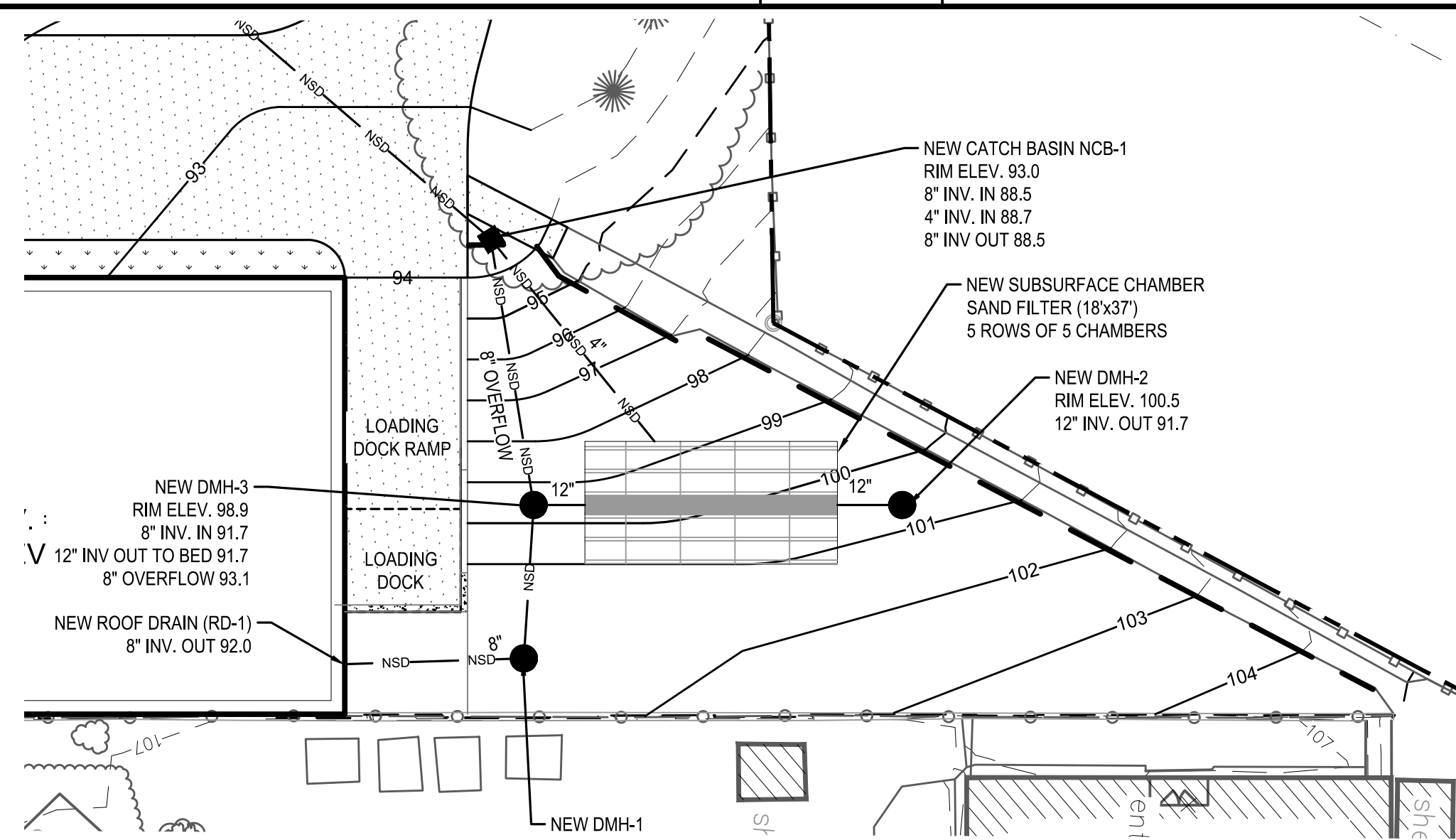
SIEVE SIZE	% PASSING BY WEIGHT
UNDERDRAIN TYPE B	
1"	90-100
$\frac{3}{4}$ "	75-100
#4	50-100
#20	15-80
#50	0-15
#200	0-5

1. FIELD OBSERVATION OF THE FILTER BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER.
AT A MINIMUM, CONTRACTOR SHALL NOTIFY ARCHITECT ONE WEEK PRIOR TO THE FOLLOWING:
 - 1) AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED;
 - 2) AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER SAND;
 - 3) AFTER THE FILTER SAND HAS BEEN PLACED AND CHAMBERS ARE BEING INSTALLED;
 - 4) ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS SHOWN ON THIS SHEET.
2. CHAMBER MANUFACTURER'S REPRESENTATIVE SHALL INSPECT THE CHAMBER INSTALLATION AT THE FOLLOWING TIMES:
 - A. DURING INSTALLATION OF CHAMBERS.
PARTICULARLY OBSERVING THE ISOLATOR ROW.
 - B. FOLLOWING COMPLETION OF SYSTEM INSTALLATION AND BACK FILL.
 - C. FOLLOWING STABILIZATION OF GRADED SURFACE AREAS DRAINING INTO THE CHAMBERS.
3. MAINTENANCE: PROVIDE THE MANUFACTURER'S REPRESENTATIVE FOR ONE YEAR OF MAINTENANCE FROM THE DATE OF SUBSTANTIAL COMPLETION.



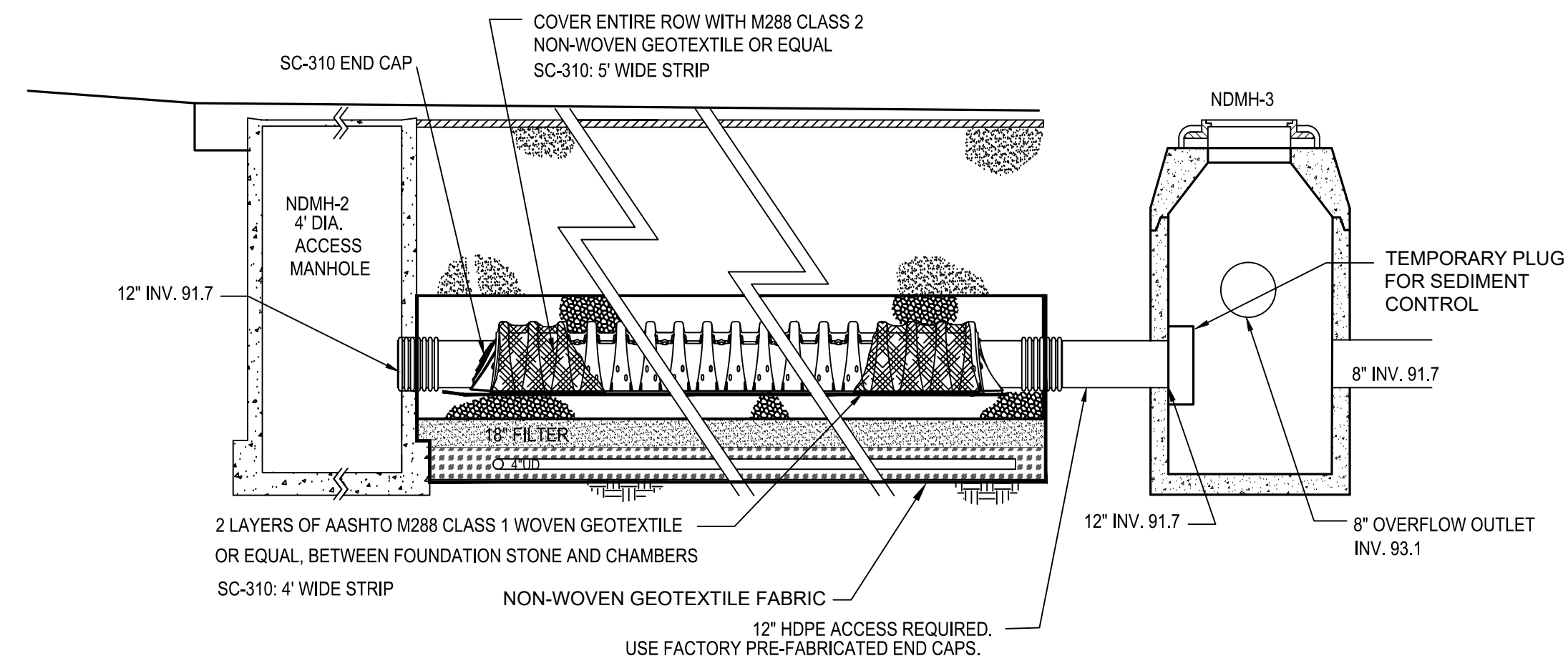
NOT TO SCALE

C2



SCALE: 1"=20'

B3



NOT TO SCALE

C1

WATER-TIGHT JOINT

WATER-TIGHT BOOT SKIRT TO SLEEVE JOINT

WATER-TIGHT JOINT CONSISTS OF (2) STAINLESS STEEL BANDINGS, A FLEXIBLE GASKET, AND WATERPROOF CAULK

BOOT SLEEVE

BOOT SKIRT

WATER-TIGHT BOOT SKIRT TO SLEEVE JOINT

EXAMPLE OF AN PIPE BOOT ON A

NOTE: CONSIDERATION MUST BE GIVEN DURING DESIGN TO ENSURE WORKABLE SPACE ON ALL SIDES OF BOOT TO ALLOW FOR SOUND JOINTS TO BE CREATED

EXAMPLE OF AN ANGLED PIPE BOOT ON A SLOPE

PIPE BOOTS ARE FABRICATED FROM THE SAME LINER TYPE USED WITHIN THE FILTER. THEY ARE DESIGNED TO BE SEALED WATER-TIGHT TO THE PIPE AND LINING SYSTEM.

NOT TO SCALE

A3

(18'x37'±)

NON-WOVEN GEOTEXTILE FABRIC OVER STONE TOP

ISOLATOR ROW SECTION SEE B1

CHAMBER BASE ELEV = 91.7

LOAM AND SEED

INSPECTION PORT (TYP.)

4" LOAM AND SEED

ELEV=93.6

12" MIN.

18" FILTER SAND

ELEV=91.2

ELEV=89.7

ELEV=88.7

12" COARSE GRAVEL

CRUSHED STONE

12" PIPE INLET INV. = 91.7

4" PERFORATED UNDERDRAIN PIPES INV. = 89.0

NATIVE EARTH

NON-WOVEN GEOTEXTILE FABRIC

8" MAX

6"

1.33'

18"

12"

VARIES

COMMON BORROW UNDER GRASS

SUBSURFACE FILTRATION CHAMBER TO BE STORMTECH SC-310 CHAMBER OR APPROVED EQUAL.

NOT TO SCALE

A1



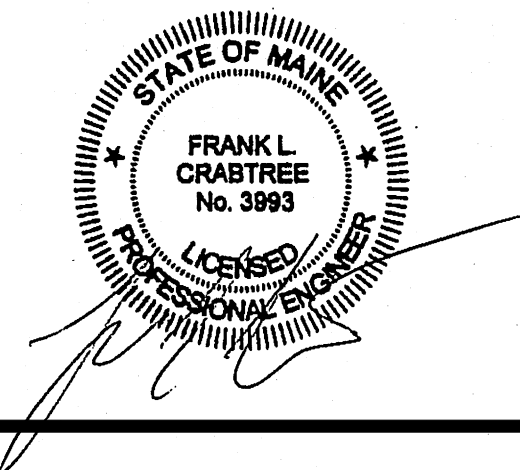
LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE

Harriman Project No.	19150
----------------------	-------

Key Plan

Proj Nort



PLANNING BOARD

SEPTEMBER 28, 2020

Rev Date	Revision Description
----------	----------------------

PRELIMINARY
NOT FOR
CONSTRUCTION

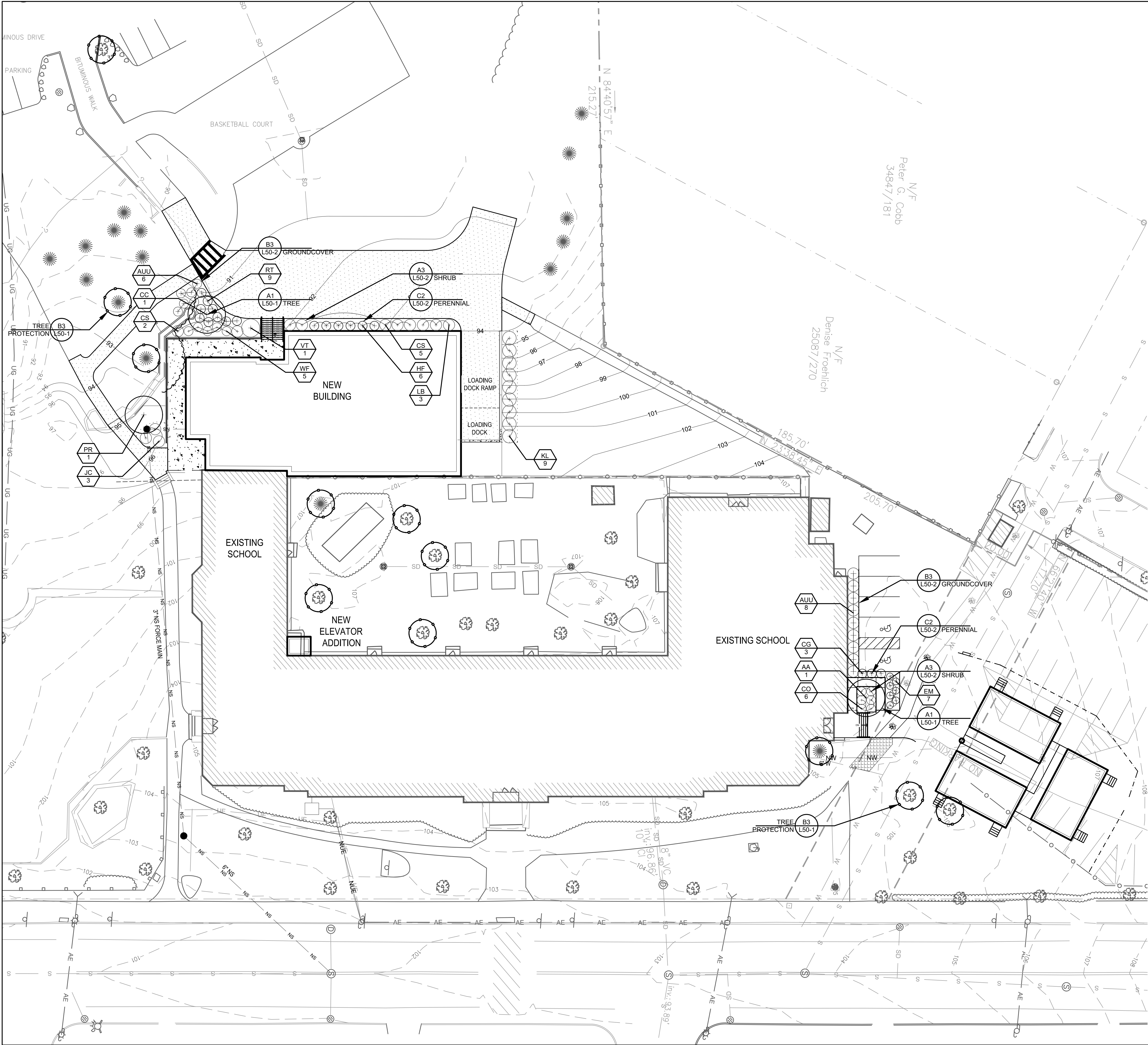
1" = 20'

A horizontal graphic scale bar with alternating black and white segments. It is marked with '0' at the left end, '10'' in the middle, and '20'' at the right end.

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

STORMWATER DETAILS

C60-1



PLANT LEGEND

SHADE TREES	SIZE	NOTES	QTY
Existing Tree to Remain Preserve and Protect in Place		Verify in Field	
+	Carpinus caroliniana American Hornbeam	2.0" - 2.5" Cal. Zone: 3a CPRTL	1
ORNAMENTAL TREES	SIZE	NOTES	QTY
+	Amelanchier arborea Downey Serviceberry	1.5" - 2.0" Cal. Zone: 4 CPRTL	1
CONIFER TREES	SIZE	NOTES	QTY
+	Pinus resinosa Red Pine	14" - 16" Zone: 2 CPRTL	1

DECIDUOUS SHRUBS	SIZE	NOTES	QTY
+	Cephalanthus occidentalis Butterbush	3 Gallon Zone: 5	6
+	Cornus sericea Redosier Dogwood	3 Gallon Zone: 3 Fall Plant Hazard	7
+	Lindera benzoin Spice bush	3 Gallon Zone: 3	3
+	Viburnum trilobum Cranberry bush	3 Gallon Zone: 2	1
+	Weigela florida 'My Money' Weigela - Dwarf variegated variety	2 Gallon Zone: 4	5

EVERGREEN SHRUBS	SIZE	NOTES	QTY
+	Juniperus communis Common Juniper	3 Gallon Zone: 2	3
+	Kalmia latifolia Mountain Laurel	3 Gallon Zone: 3	9

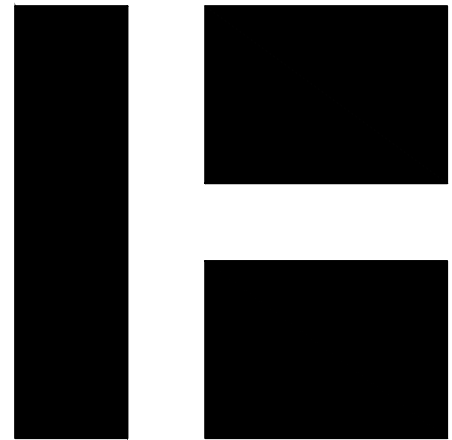
GROUNDCOVERS	SIZE	NOTES	QTY
+	Arctostaphylos uva-ursi Kinnikinnick	1 Gallon Zone: 2	14

PERENNIALS	SIZE	NOTES	QTY
+	Coreopsis grandiflora Large Flowered Tickseed	#2 Container Zone: 4a	3
+	Echinacea magna Purple Cone Flower	#2 Container Zone: 4a	7
+	Hemerocallis fulva Orange Daylily	#2 Container Zone: 3	6
+	Rudbeckia trioba Black-eyed Susan	#2 Container Zone: 4a	9

SEED MIX	QTY
Turf and Lawn Mix of grass seed varieties best adapted to site conditions and use -- S.F.	

LANDSCAPE MATERIALS	QTY
Bark Mulch Shredded Organic Bark Mulch	3" depth 1,975 S.F. all planting areas
Landscape Border Landscape edging material	80 LN. FT.

1. Plant material symbols represent anticipated size at 75% maturity.
2. CPRTL = City of Portland Recommended Tree List, 2018 edition
3. 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.
4. Plant material specified shall conform to ANLA American Standard for Nursery Stock, ANSI Z60.1 current edition.
5. No permanent irrigation system is proposed.

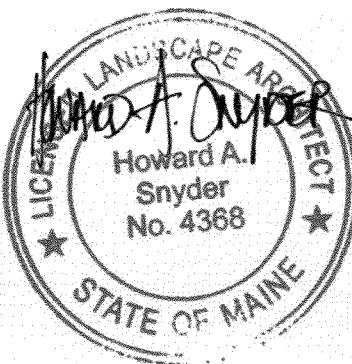


HARRIMAN

LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE

Harriman Project No.	19150
Key Plan	Proj North



PLANNING BOARD
SEPTEMBER 28, 2020

Rev Date	Revision Description

Drawing Status

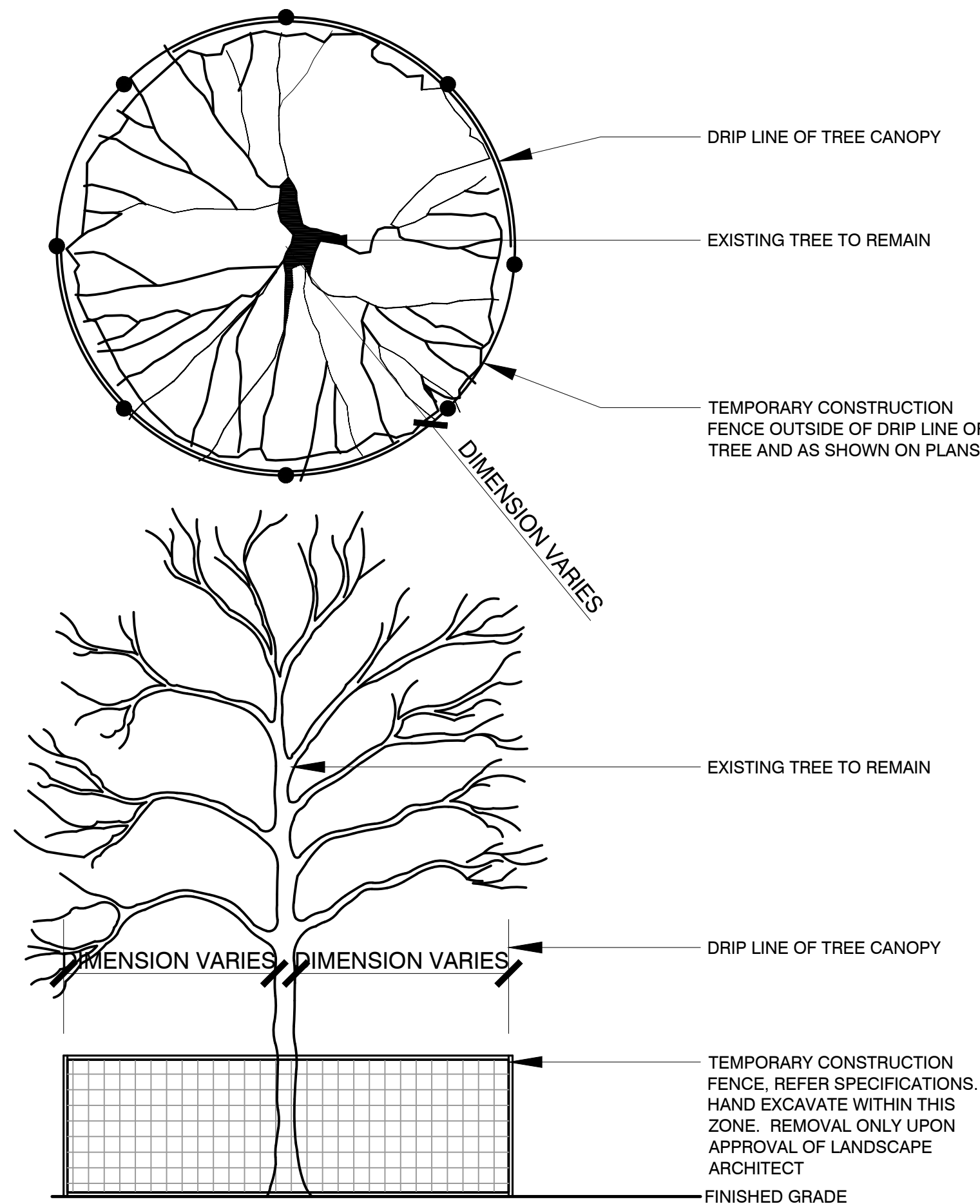
PRELIMINARY
NOT FOR
CONSTRUCTION

Drawing Scales	0 10' 20'
1" = 20' - 0"	

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

PLANTING
PLAN

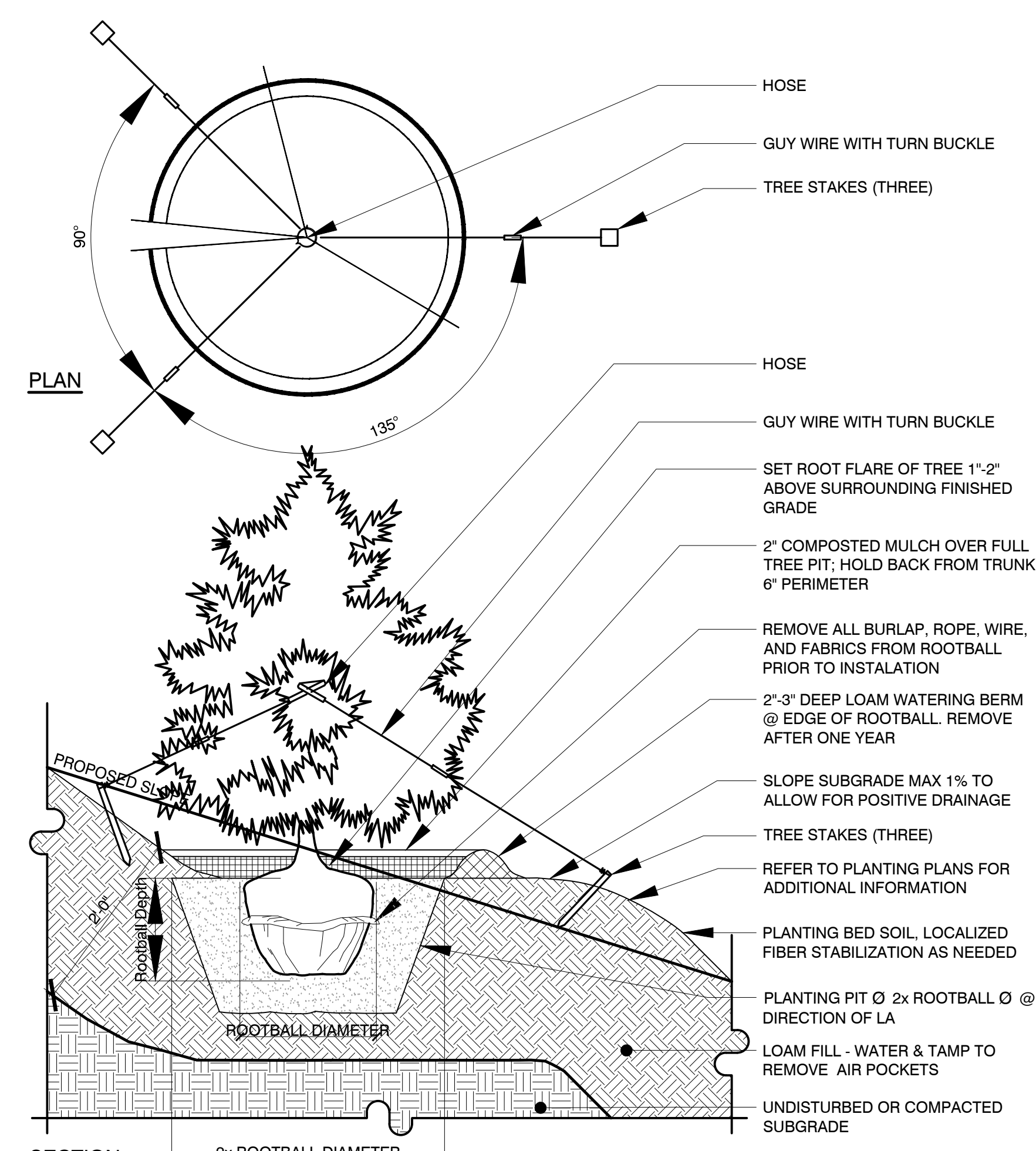
L40-1



PLAN

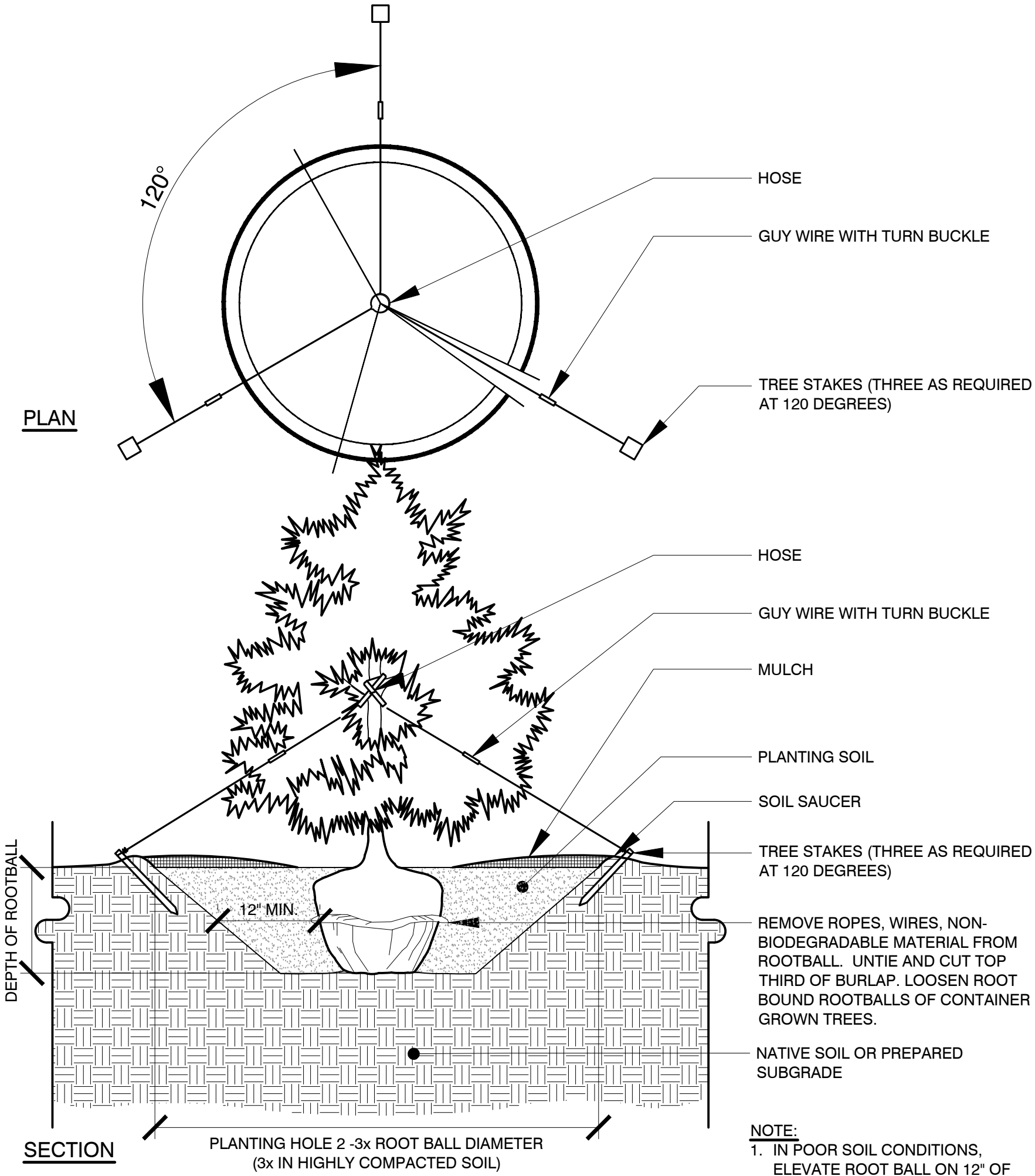
SECTION

B3 PROTECTION FOR EXISTING TREES
Scale: Not To Scale



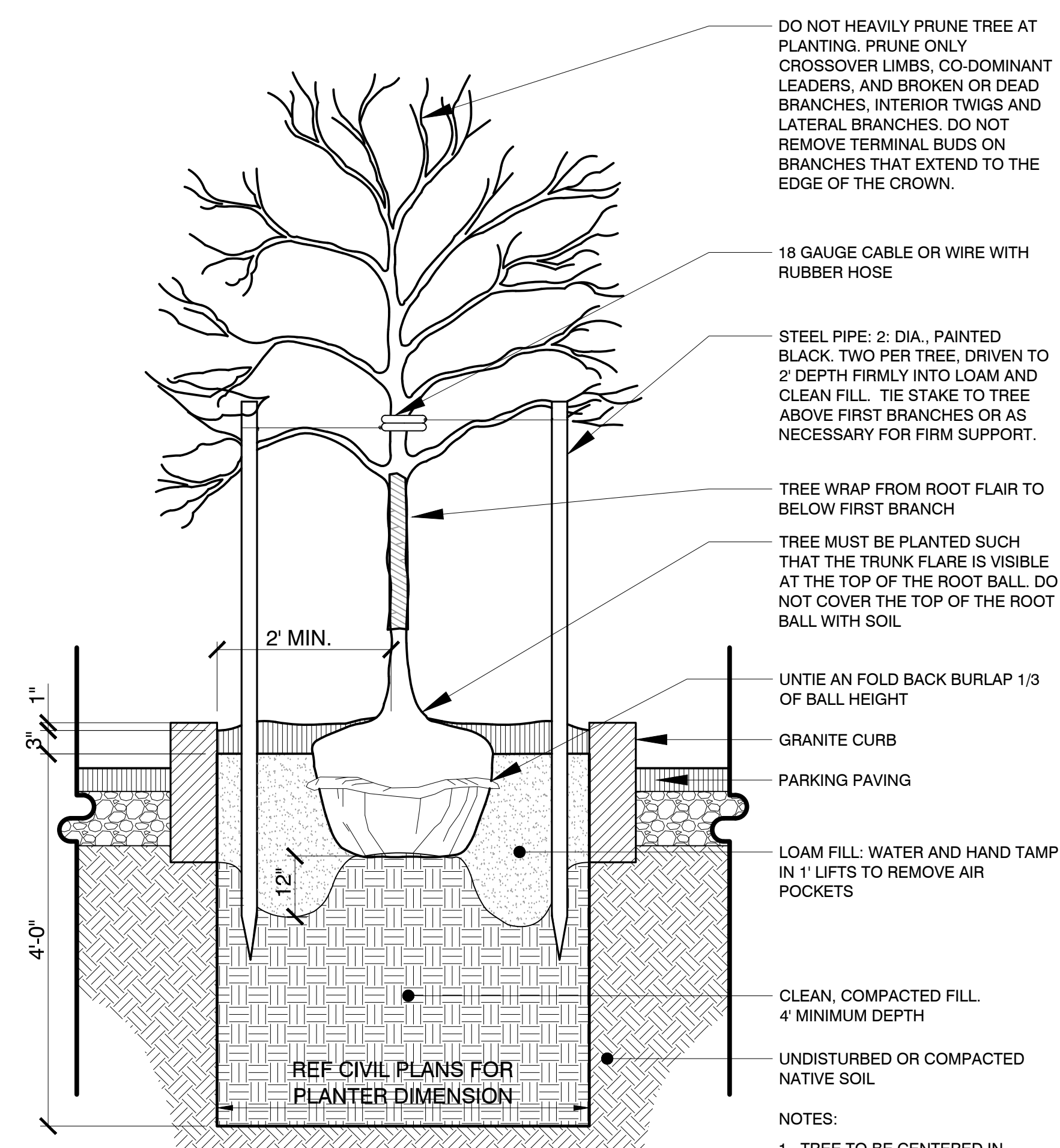
SECTION

B2 EVERGREEN TREE PLANTING, STEEP TO MODERATE SLOPES
Scale: Not To Scale



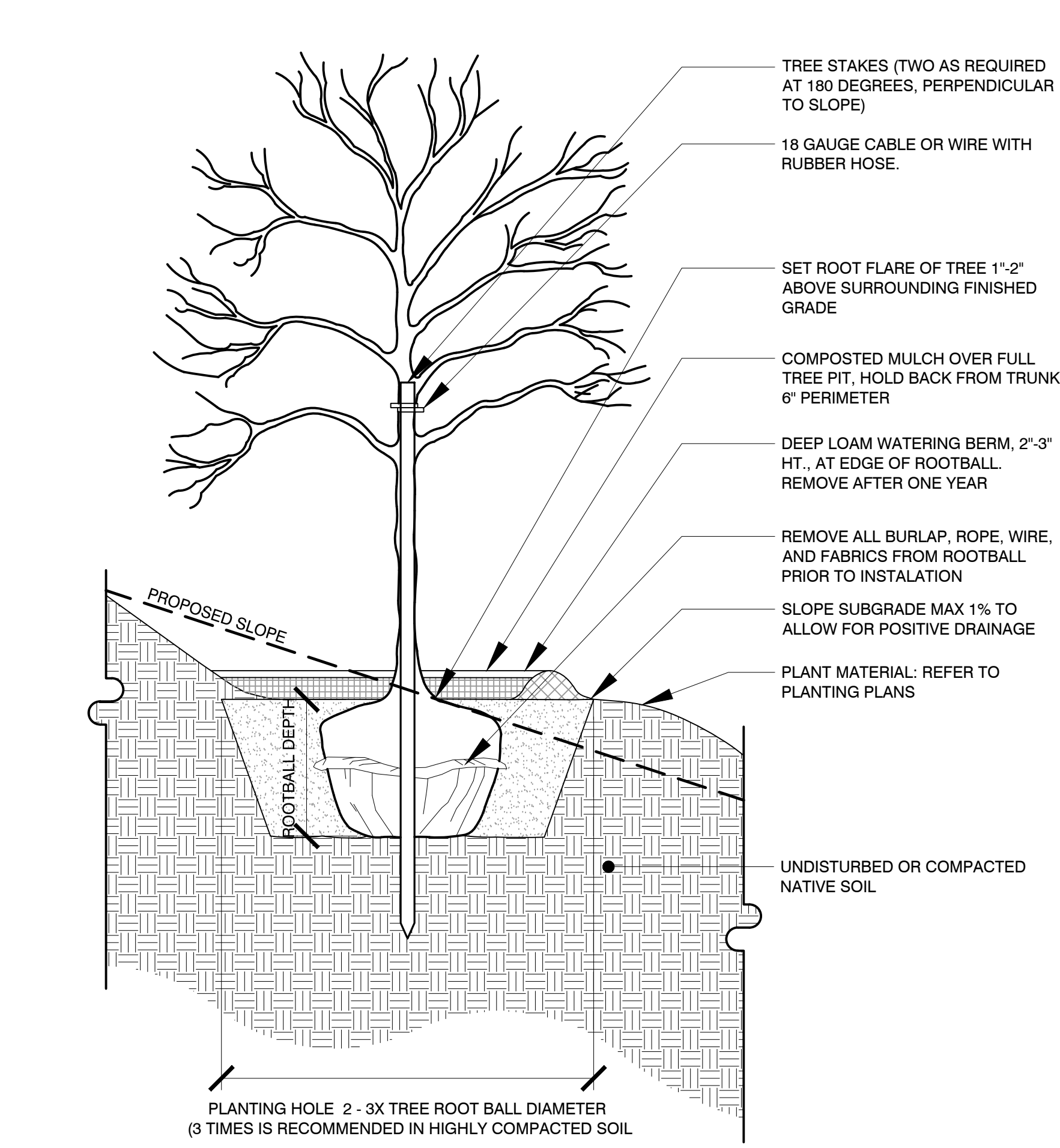
SECTION

B1 CONIFER TREE PLANTING
Scale: Not To Scale



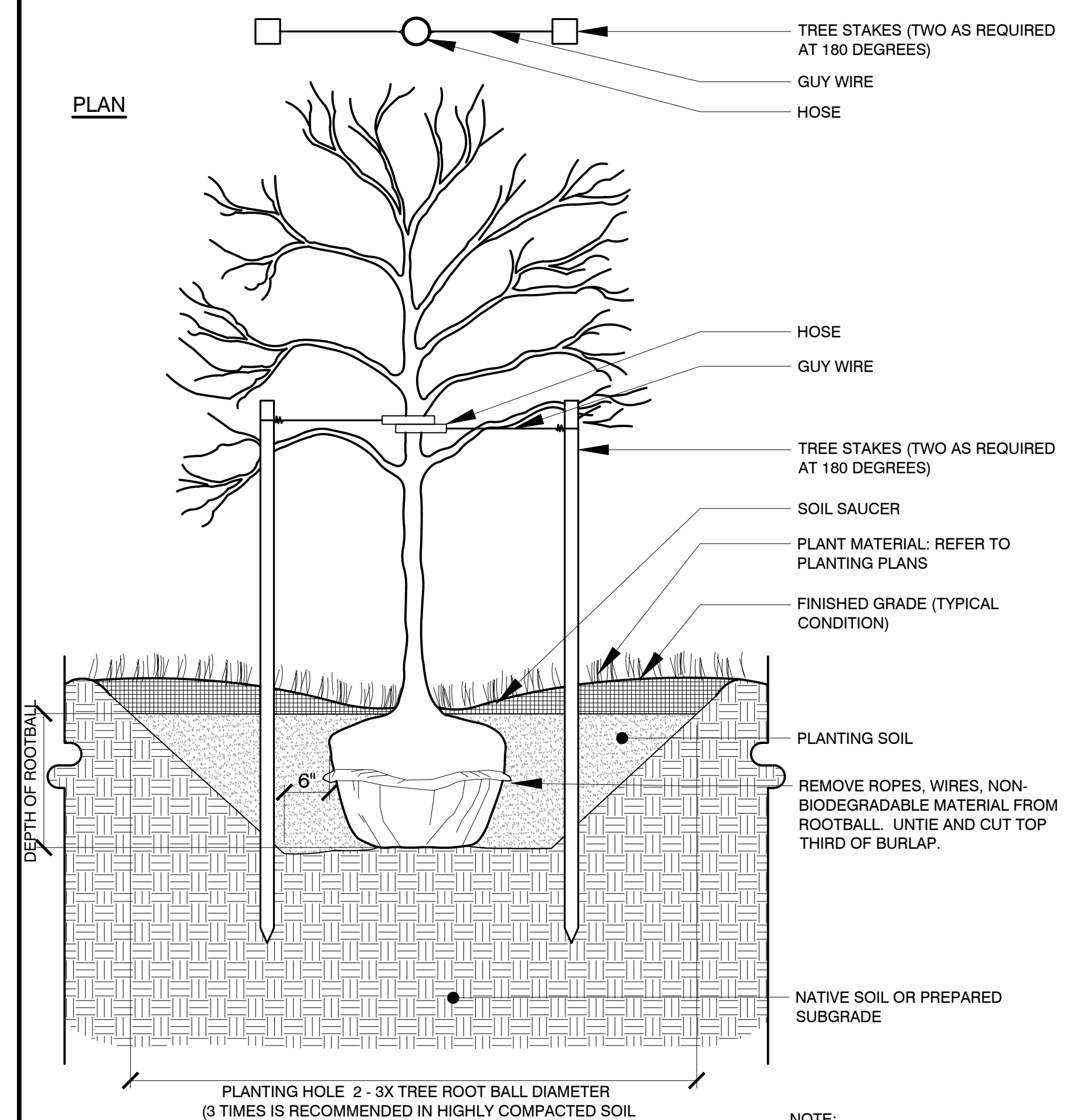
SECTION

A3 DECIDUOUS TREE PLANTING: PARKING ISLAND
Scale: Not To Scale



SECTION

A2 DECIDUOUS TREE PLANTING: MODERATE TO STEEP SLOPES
Scale: Not To Scale



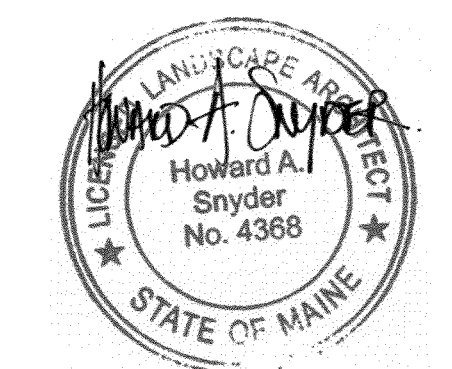
SECTION

A1 DECIDUOUS TREE PLANTING
Scale: Not To Scale



LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE	
Harriman Project No.	19150
Key Plan	



PLANNING BOARD
SEPTEMBER 28, 2020

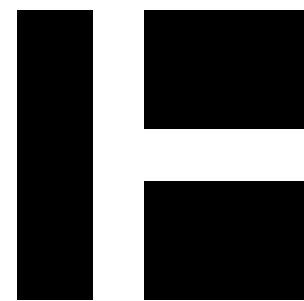
Rev	Date	Revision Description

PRELIMINARY
NOT FOR
CONSTRUCTION

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

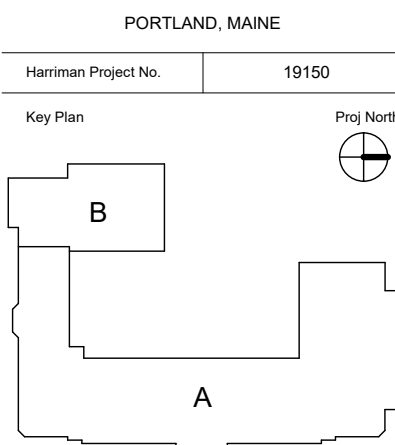
PLANTING
DETAILS

L50-1



HARRIMAN

LONGFELLOW
ELEMENTARY SCHOOL



GENERAL NOTES

- SEE DRAWING A40.1 FOR PARTITION TYPES.
- DIMENSIONS LOCATING INTERIOR PARTITIONS ARE TO FACE OF GPWD OR CMU UNLESS NOTED OTHERWISE.
- SEE DRAWING A60.1 FOR DOOR SCHEDULE.
- SEE DRAWING A61.1 FOR ROOM FINISH SCHEDULE. NEW WALLPAPERS AND PATCHING OF EXISTING WALLPAPERS NOT LABELED SHALL BE PAINTED TO MATCH EXISTING ADJACENT WALLS U.N.O.
- SEE EXTERIOR ELEVATIONS ON DRAWINGS A20.1, A20.2 & A20.3 FOR WINDOW TYPES.
- PROVIDE CONTROL JOINTS IN GPWD PARTITIONS AT A MAX SPACING OF 30'-0" UNLESS NOTED OTHERWISE. MAX SPACING AT ABUSE GPWD IS 28'-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 PARGE 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 A40.1 FOR PARTITION TAG KEY & PARTITION DEFINITION DETAILS
- ROOM NAME
SEE A61.1 FOR SCHEDULE
- DOOR & BORROWED LITE NUMBERS
SEE A60.1 FOR SCHEDULE
- MISCELLANEOUS ITEMS MARKER
SEE SCHEDULE ON A60.1

PLANNING BOARD

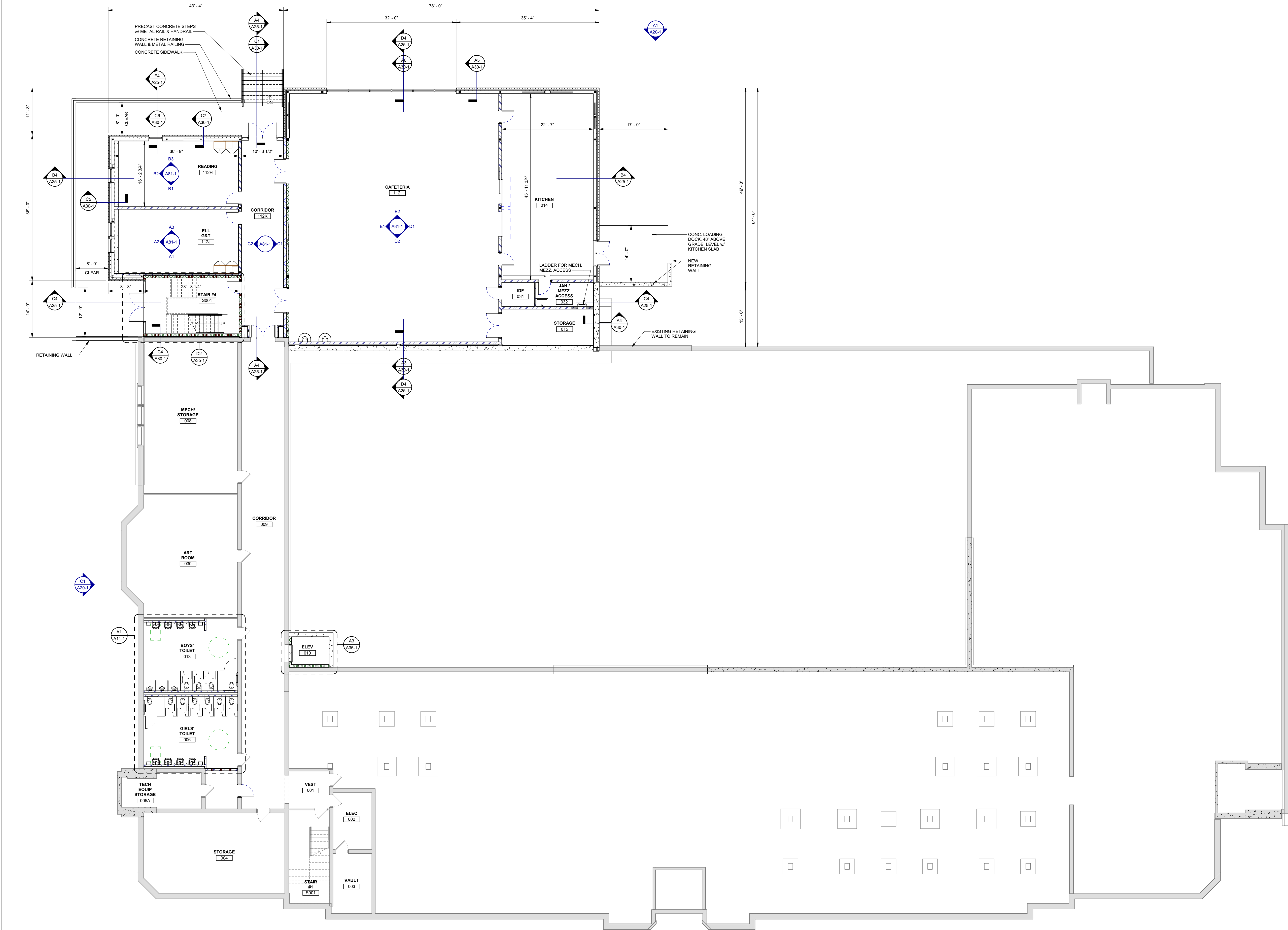
SEPTEMBER 28, 2020

Rev. Date	Revision Description

PRELIMINARY
NOT FOR
CONSTRUCTION

LOWER LEVEL FLOOR
PLAN

A10-1





PORTLAND, MAINE

Harriman Project No.	19150
----------------------	-------

Key Plan

1. SEE DRAWING A401 FOR PARTITION TYPES.
2. DIMENSIONS LOCATING INTERIOR PARTITIONS ARE TO FACE OF GIPWD OR CMU UNLESS OTHERWISE NOTED.
3. SEE DRAWING A401 FOR DOOR SCHEDULE.
4. SEE DRAWING A411 FOR ROOM FINISH SCHEDULE. NEW WALLPAPER AND PATCHING OF EXISTING WALLPAPER SHALL BE PAINTED TO MATCH EXISTING ADJACENT WALLS.
5. SEE EXTERIOR ELEVATIONS ON DRAWINGS A401, A420 & A420.3 FOR WINDOW TYPES.
6. PROVIDE CONTIGUOUS JOINTS IN GIPWD AT MAXIMUM 10' ON CENTER UNLESS NOTED OTHERWISE. MAX SPACING AT JOINTS IS 8" IF GIPWD IS USED FOR DOOR FRAME UP TO CEILING WHERE NOTED. PROVIDE LOCATIONS WITH THE ARCHITECT.
7. AT REMOVED FIXTURES, PARTITIONS, CASEWORK, ETC., EXPOSED SURFACES WILL BECOME EXPOSED TO VIEW. PATCH AND FINISH TO MATCH EXISTING SURFACES TO SURFACE. PAINT TO MATCH EXISTING SURFACES TO SURFACES.
8. PATCH ALL OPENINGS CRAWLED, ETC. FOR INSTALLATION OF NEW MECH., PLUMB, ELEC. OR OTHER MATERIALS TO MATCH ADJACENT CONSTRUCTION.
9. REFER TO A401 CODE PLAN FOR DHI, CR, AND PARTITION LOCATIONS TO MATCH ADJACENT CONSTRUCTION.

ROOM NAME	PARTITION TAG SEE A40.1 FOR PARTITION TAG KEY & PARTITION DEFINITION DETAILS ROOM NAME AND NUMBER SEE A61.1 FOR SCHEDULE DOOR & BORROWED LITE NUMBERS SEE A60.1 FOR SCHEDULE MISCELLANEOUS ITEMS MARKER SEE SCHEDULE ON A80.1
---	---

SEPTEMBER 28, 2020

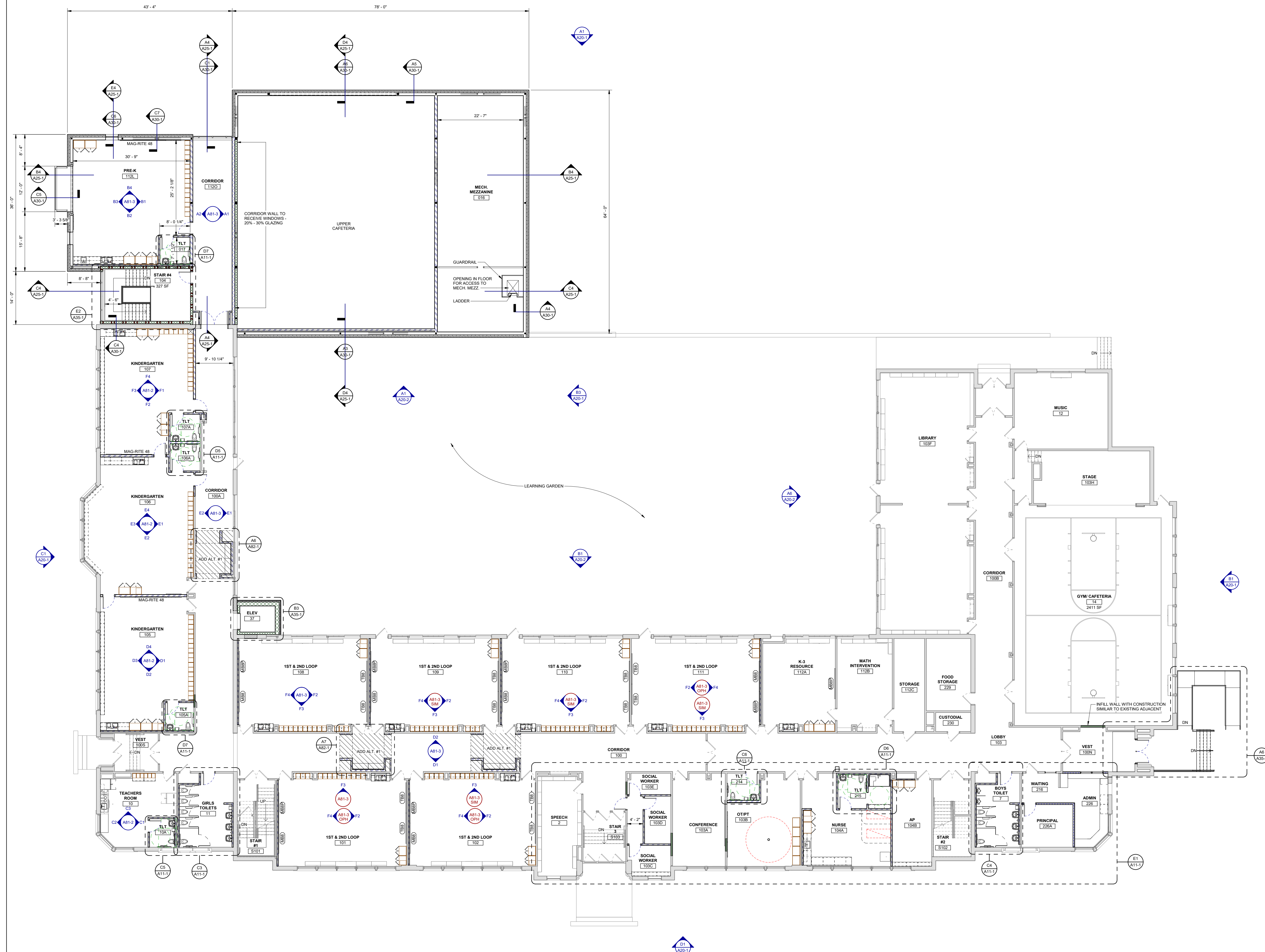
[illegible]

PRELIMINARY
NOT FOR
CONSTRUCTION

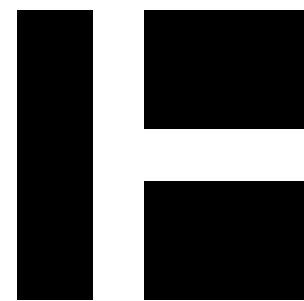
PA / PE: MDL	© 2020 Harriman Associates
Drawn By: EJR	

FIRST FLOOR PLAN

A10-2

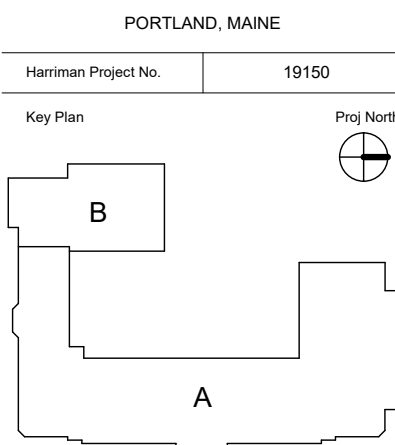


A1 FIRST FLOOR PLAN
NO SCALE



HARRIMAN

LONGFELLOW
ELEMENTARY SCHOOL



GENERAL NOTES

- SEE DRAWING A40.1 FOR PARTITION TYPES.
- DIMENSIONS LOCATING INTERIOR PARTITIONS ARE TO FACE OF GPDW OR CMU UNLESS NOTED OTHERWISE.
- SEE DRAWING A60.1 FOR DOOR SCHEDULE.
- SEE DRAWING A61.1 FOR ROOM FINISH SCHEDULE. NEW WALLPAPERS AND PATCHING OF EXISTING WALLPAPERS NOT LABELED SHALL BE PAINTED TO MATCH EXISTING ADJACENT WALLS U.N.O.
- SEE EXTERIOR ELEVATIONS ON DRAWINGS A20.1, A20.2 & A20.3 FOR WINDOW TYPES.
- PROVIDE CONTROL JOINTS IN GPDW PARTITIONS AT A MAX SPACING OF 30'-0" UNLESS NOTED OTHERWISE. MAX SPACING AT ABUSE GPDW IS 28'-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 PARGE 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 A40.1 FOR PARTITION TAG KEY & PARTITION DEFINITION DETAILS |
| | ROOM NAME AND NUMBER
SEE A61.1 FOR SCHEDULE |
| | DOOR & BORROWED LITE NUMBERS
SEE A60.1 FOR SCHEDULE |
| | MISCELLANEOUS ITEMS MARKER
SEE SCHEDULE ON A60.1 |

PLANNING BOARD

SEPTEMBER 28, 2020

Rev. Date	Revision Description

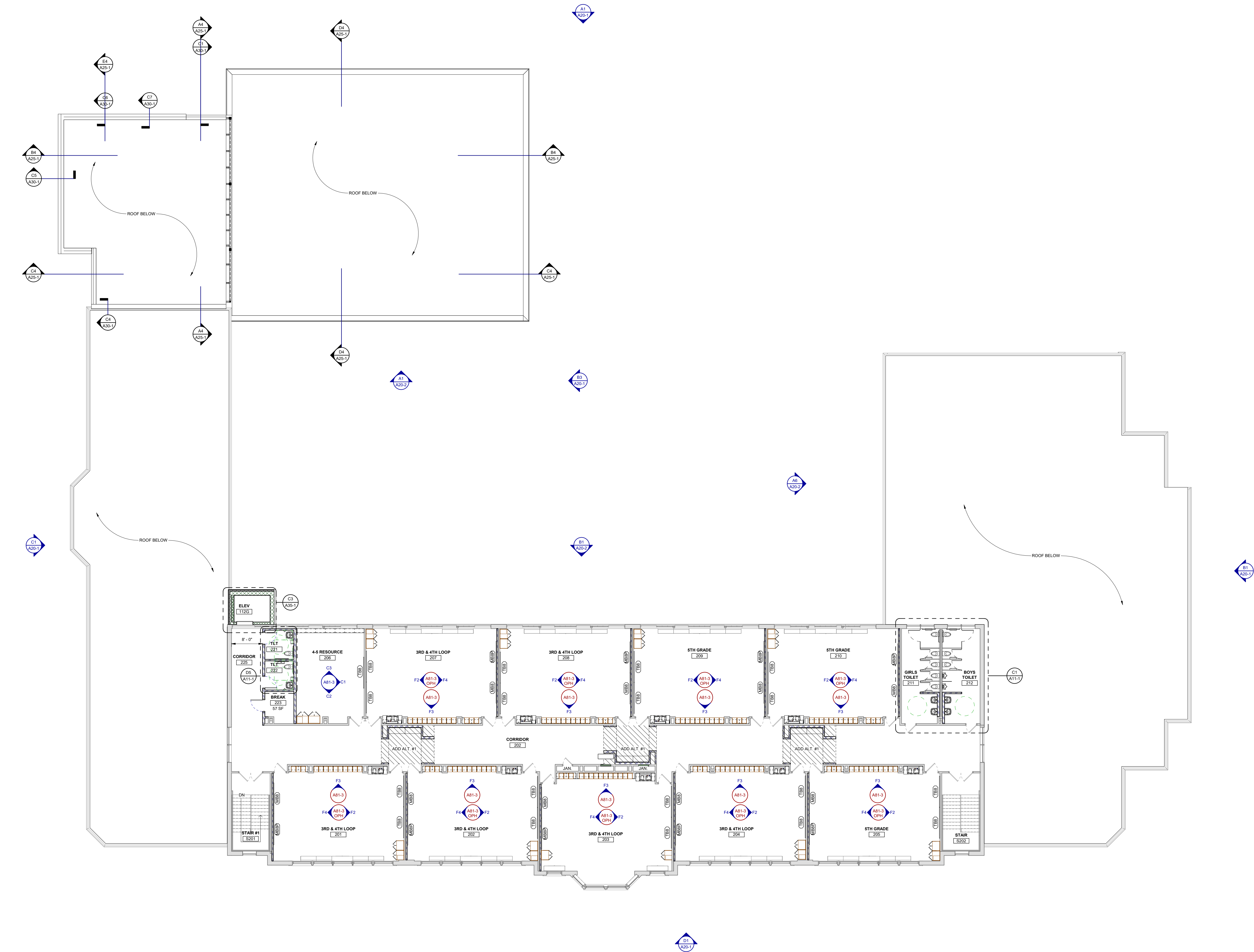
PRELIMINARY
NOT FOR
CONSTRUCTION

PA / PE: MDL
Drawn By: EJR

© 2020
Harriman Associates

SECOND FLOOR PLAN

A10-3





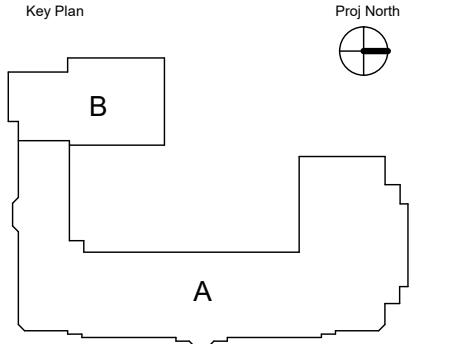
PORTLAND, MAINE

Hamman Project No.	19150
--------------------	-------

Key Plan

Proj North

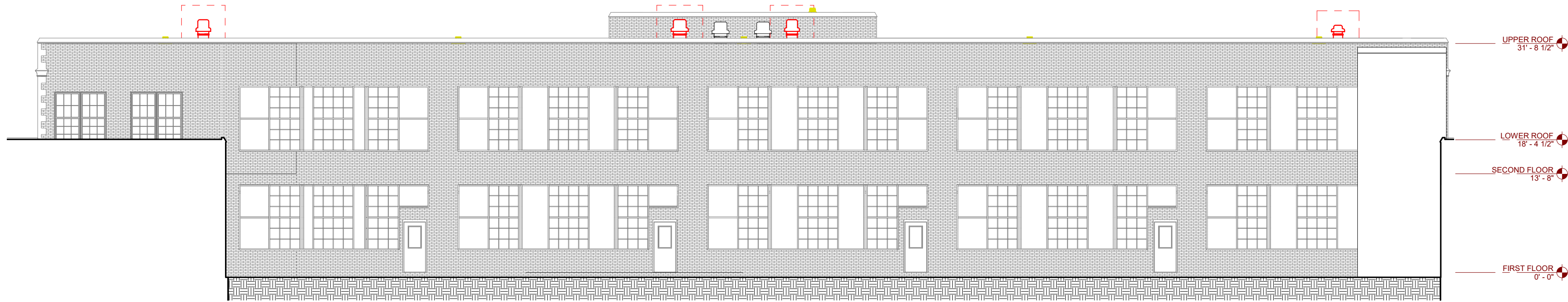
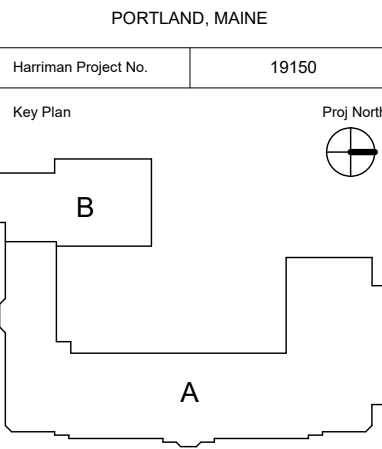
The key plan shows the layout of the Hamman site. Area A is the main rectangular area, and Area B is a smaller rectangular area located to the northwest of Area A. A north arrow is located in the upper right corner of the map area.



PA / PE: MDL	© 2020 Harriman Associates
Drawn By: EJR	

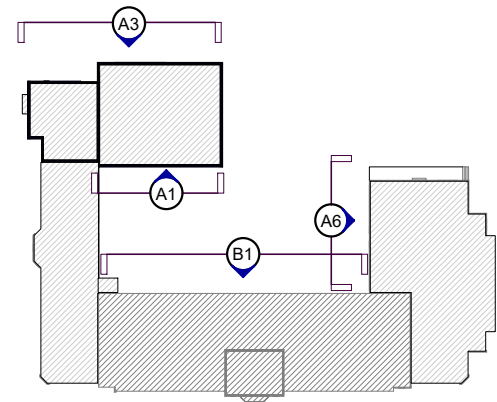
A20-1

LONGFELLOW
ELEMENTARY SCHOOL



B1 WEST ELEVATION - COURTYARD
NO SCALE

EXTERIOR MATERIALS LEGEND	
CODE	DESCRIPTION
4A	BRICK VENEER (FIELD)
4E	BRICK VENEER (FIELD)
7A	COMPOSITE METAL PANEL
7E	PREFINISHED ROOF EDGE STRIP
8C	HM DOOR AND FRAME



B7 KEY PLAN
NO SCALE

PLANNING BOARD
SEPTEMBER 28, 2020

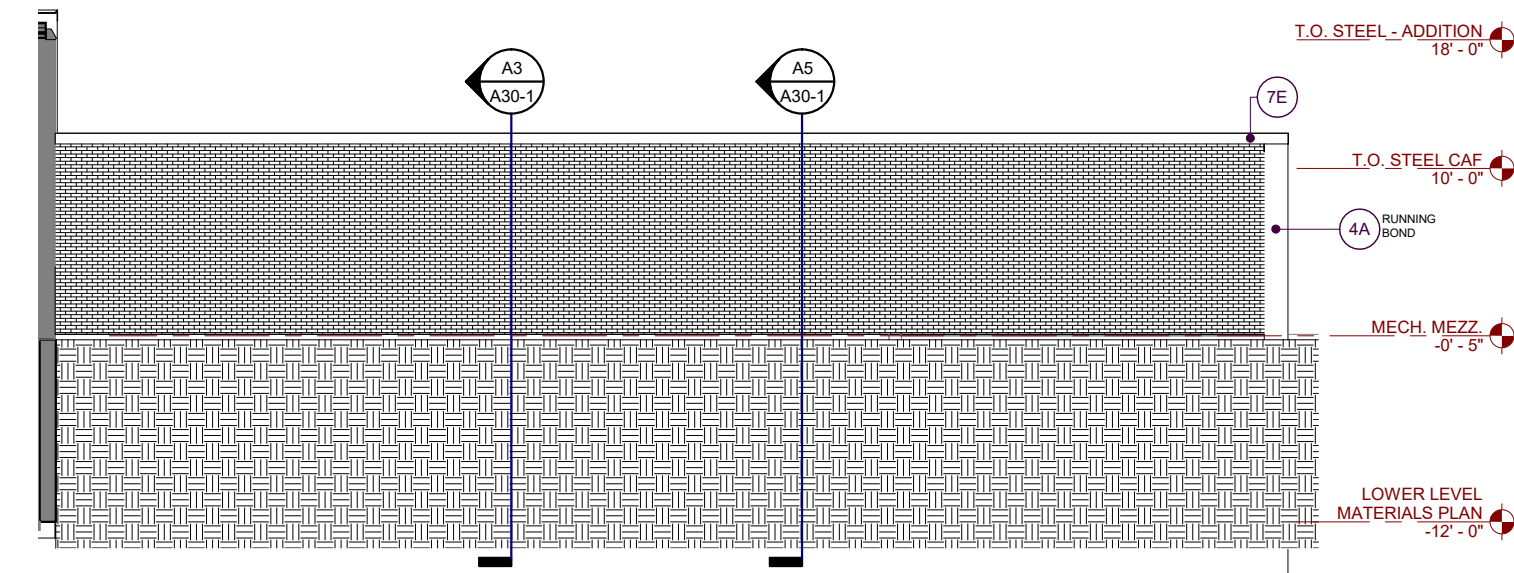
Rev Date	Revision Description

PRELIMINARY
NOT FOR
CONSTRUCTION

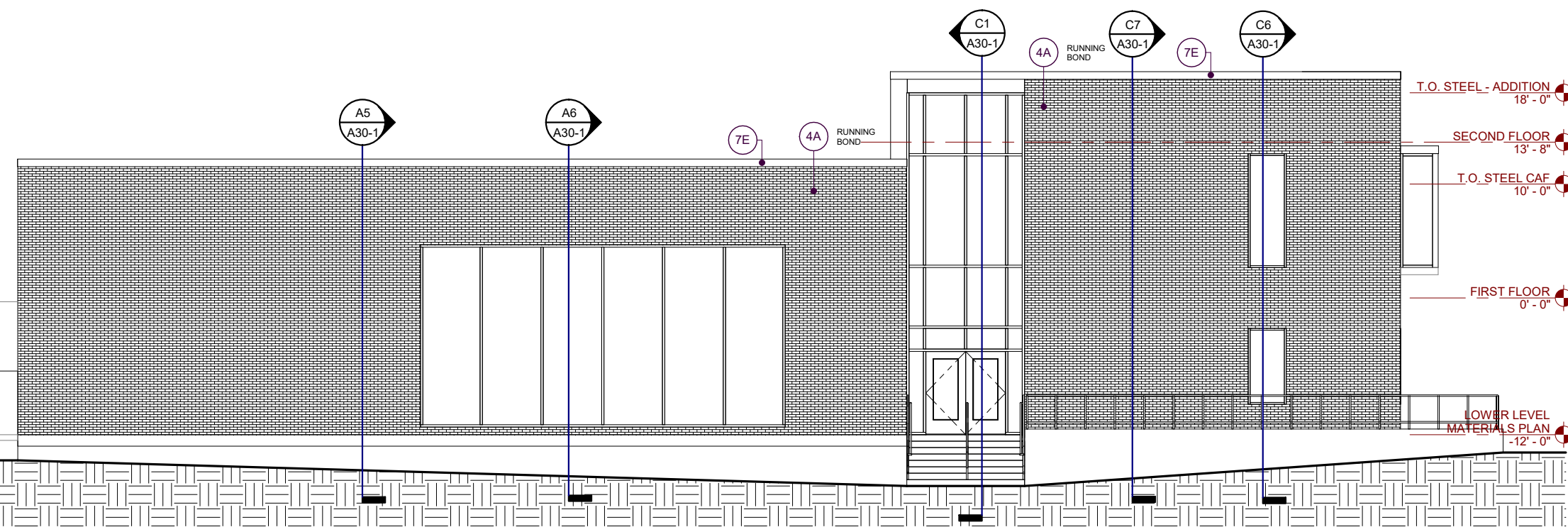
PA / PE: MDL	© 2020 Harriman Associates
Drawn By: EJR	

COURTYARD ELEVATIONS

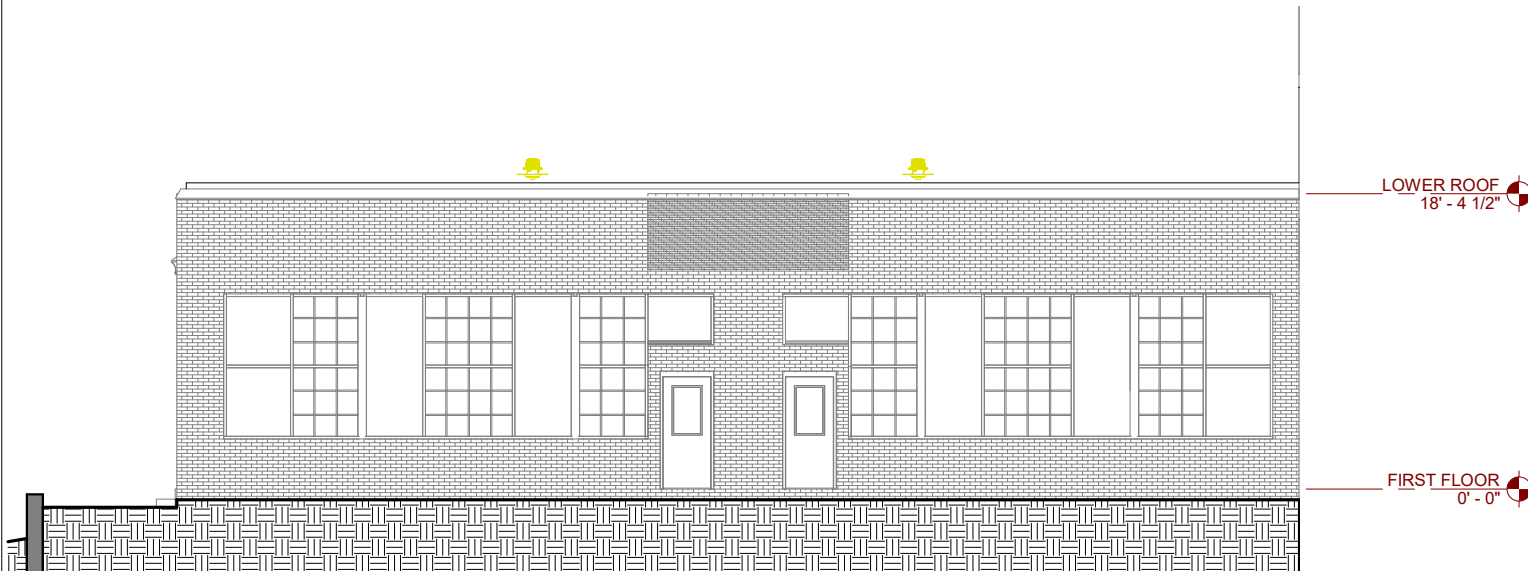
A20-2



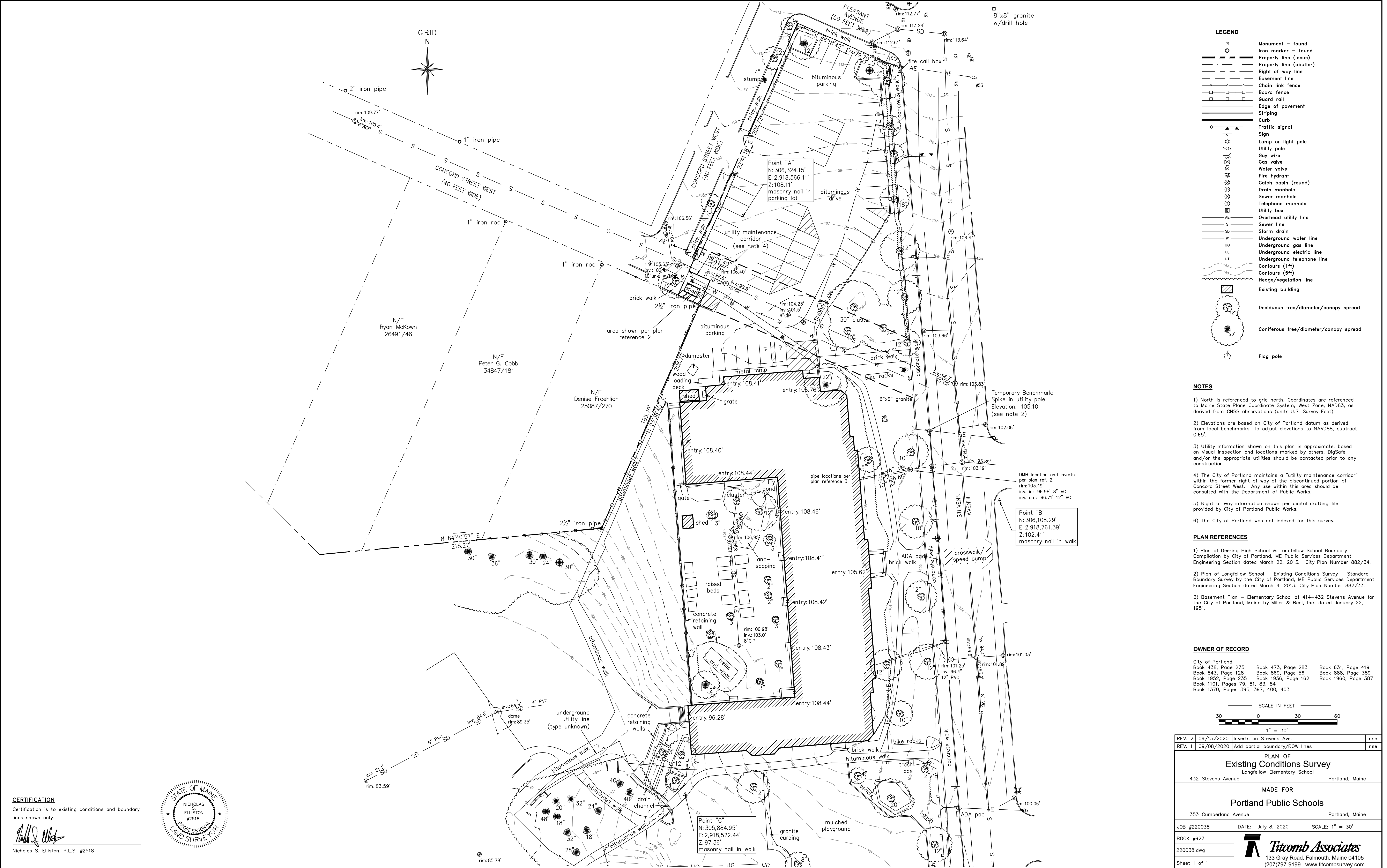
A1 EAST ELEVATION - ADDITION
NO SCALE



A3 WEST ELEVATION - ADDITION
NO SCALE



A6 SOUTH ELEVATION - COURTYARD
NO SCALE



CERTIFICATION
Certification is to existing conditions and boundary lines shown only.

Nicholas S. Elliston
Nicholas S. Elliston, P.L.S. #2518





23. CONSTRUCTION MANGEMENT PLAN

- The General Construction Management Plan Template for the Longfellow Elementary School is attached, with proposed construction schedule included.
- Construction Management drawing CM-1 for the Longfellow School construction project is attached.

**Construction Management Plan
for
Portland Public Schools
Longfellow Elementary School
Additions and Renovations
September 2020**

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 the Applicant 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 432 Stevens Avenue in Portland near the intersection of Pleasant Avenue. To separate construction traffic from daily school bus and parent traffic, it is intended to have the contractors enter and exit through the Deering High School parking lot driveway from Leland Street, while the school students and staff enter and exit through the Stevens Avenue and Concord Street entries. To maintain the full number of existing classrooms through the construction duration, three temporary modular classroom buildings will be located in the paved parking lot to the north of the building, away from most of the new building construction. 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. The safety of the

site, the scheduling of deliveries, and construction means and methods must be the responsibility of the Contractor to maintain an effective and safe corridor for the workers and site users. It is understood that the information provided in this document is provided as general information, and the Contractor will provide more specific information to the City upon award of the contract.

Both electric and sanitary utility connections are anticipated to be constructed in the Stevens Avenue right-of-way.

B. Development Review of Construction Management Plan

The Contractor 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, Contractor 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

The Contractor will work diligently to implement a communication strategy as outlined below. The communication strategy is intended to ensure that all construction operations are performed in accordance with all agreements, ordinances and special permits applicable to this project. The Contractor will work closely with adjacent abutters, businesses and all

parties informed, as far in advance as possible, of scheduled work, particularly work anticipated to cause significant noise, vibrations, or dust. The final construction management plan shall provide for the following:

1. Contact Person and contact information for the applicant and 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
 - Directional and safety signage
 - On-site safety/coordination meetings
4. All construction site signage is temporary and shall be removed at project completion. Signage will be included in the final construction management plan provided by the Contractor.

E. Construction Schedule

1. The contractor shall submit a schedule or time line for the construction project.
2. The construction schedule is proposed to follow the general timeline as follows:

The Longfellow Elementary School project anticipates a general schedule as follows:
(see Construction Management Plan CM-1)

Summer 2021 – Winter 2021

- a. Install erosion control measures
- b. Establish contractor and school occupant traffic routes, and install temporary construction fencing and gates
- c. Locate modular classroom buildings to north side of Longfellow School
- d. Demolish trees, pavements, etc
- e. Excavate and install building foundations
- f. Begin construction of Cafeteria/Classroom building addition
- g. Install subsurface storm treatment bed and connect to storm drain
- h. Install electrical primary ductbank in front of building
- i. Install sanitary sewer line from new Cafeteria/Classroom addition

Spring 2022 – Fall 2022

- j. Maintain erosion control and remove sediment as needed
- k. Remove erosion control where stabilization is complete
- l. Complete Cafeteria/Classroom building construction.
- m. Construct Administration area steps and ADA ramp
- n. Construct finish pavements adjacent to finished building additions
- o. Install landscaping and finished grass areas throughout the school site
- p. Remove temporary construction fence where not needed
- q. Remove temporary erosion control measures, remove captured sediments, and clean storm drain system

Winter 2022 – Fall 2023

- r. Continue and complete interior renovations in the existing school

- s. Remove modular classroom buildings and foundations, and restore pavement and grass surfaces
3. 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).
4. Extended Hours or Night Work: Pursuant to Section 17-18, this section does 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.”
5. Material Deliveries: Schedule and designated location for delivery of materials and boxed goods.

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
 - 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 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.

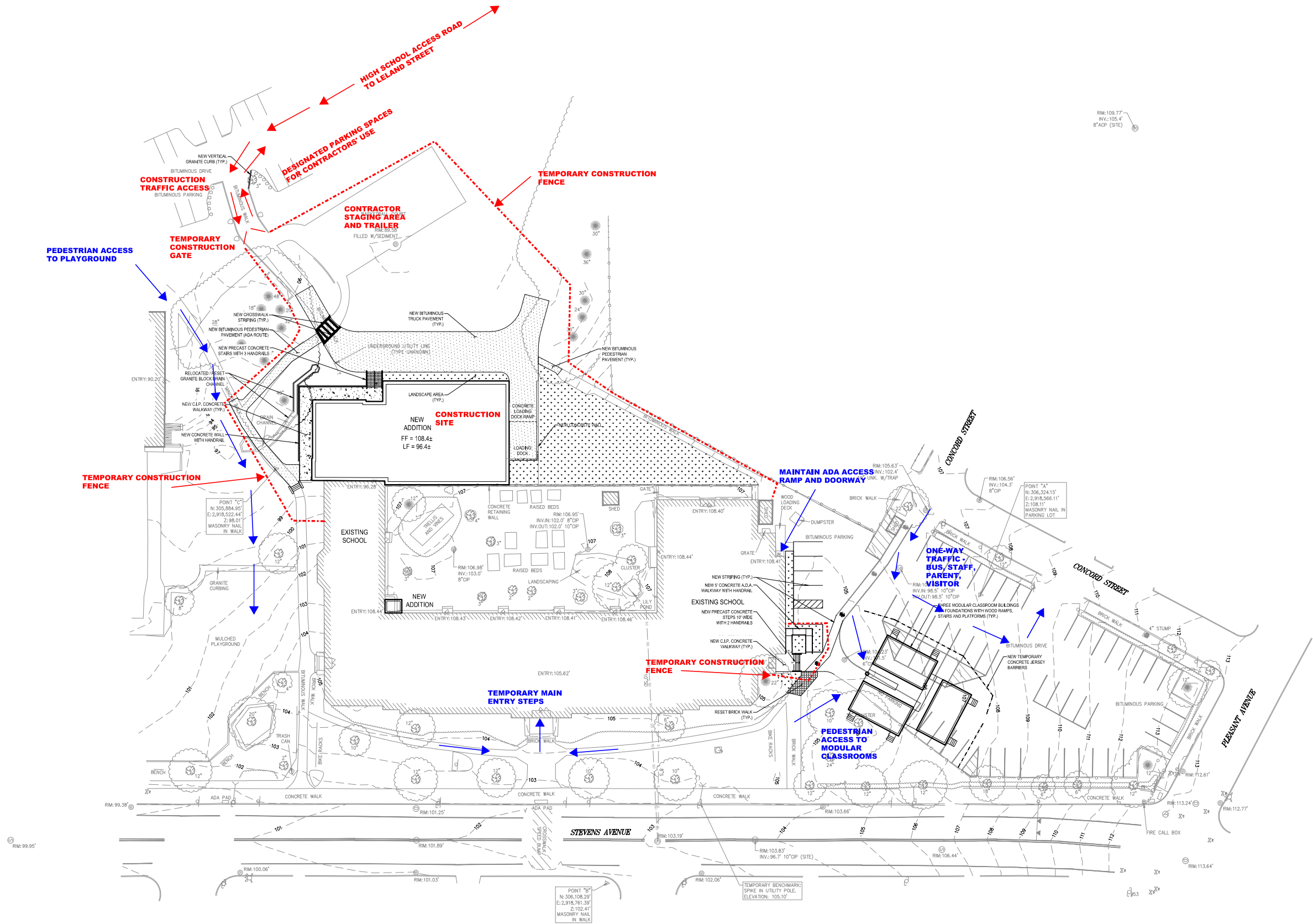
2. **Delivery Truck Holding Areas On-Site:** The delivery holding area shall be shown on the plan and shall not be blocked during construction. On days when the construction activities require multiple truck deliveries, these deliveries will be carefully scheduled so that there is always adequate on-site 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 either 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. Special Measures as Necessary

This construction work will take place over a 2-year or long period. 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.



SEPTEMBER 10, 2020

Rev	Date	Description

PRELIMINARY
NOT FOR
CONSTRUCTION

Drawing Scale: 1" = 20' - 0"	0 10' 20' 30'

CONSTRUCTION
MANAGEMENT
PLAN - 1

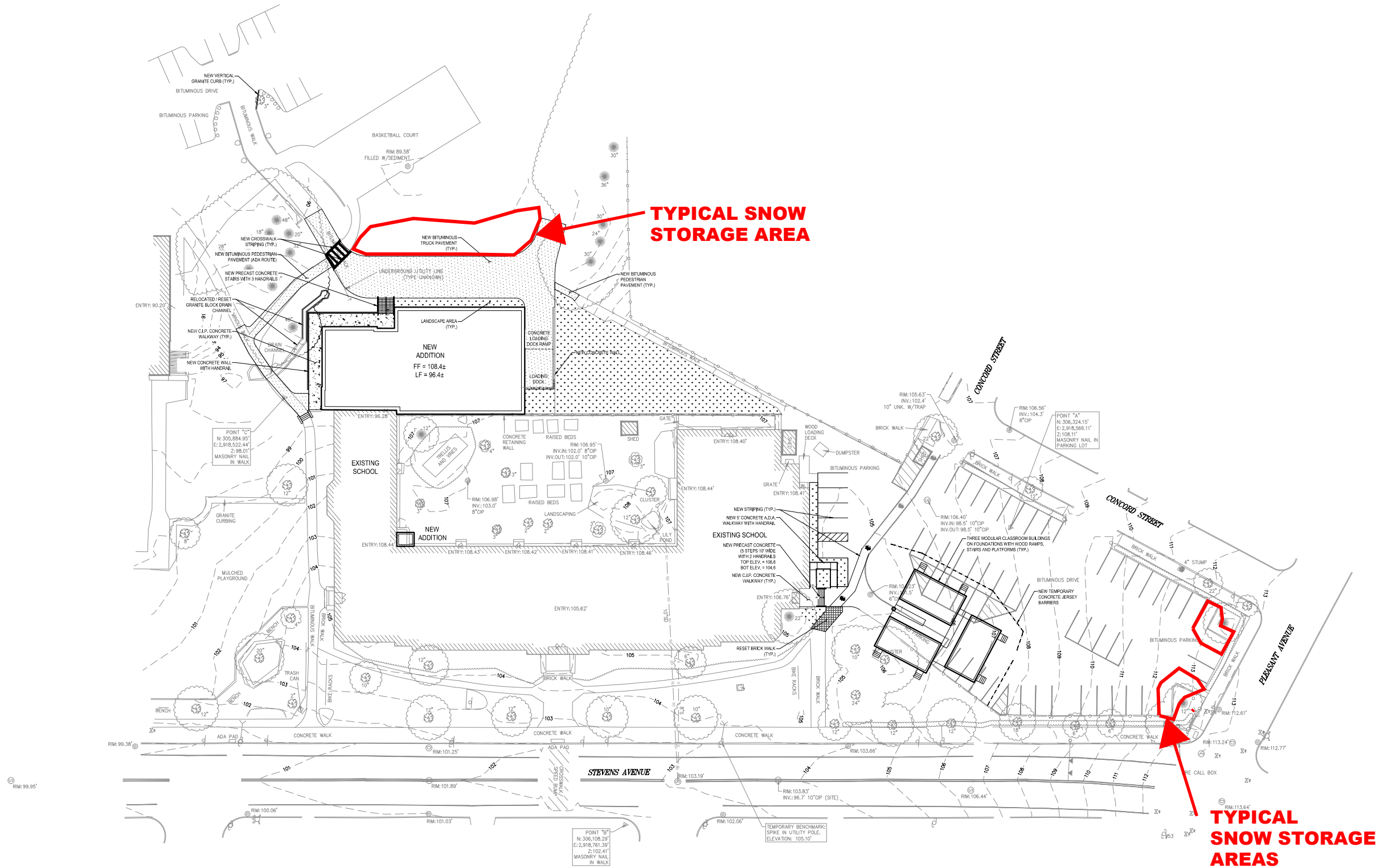
CM-1

This Page Intentionally Blank



LONGFELLOW
ELEMENTARY SCHOOL

PORTLAND, MAINE	
Harriman Project No.	19150
Key Plan	Proj North



SEPTEMBER 10, 2020	
Rev	Description

PRELIMINARY
NOT FOR
CONSTRUCTION

Drawing Scale	0' 10' 20' 30'

SNOW PLAN

SP-1

PLANNING BOARD REPORT PORTLAND, MAINE



Zoning Text Amendment
Jill C. Duson Housing Trust Fund
City of Portland

Submitted to: Portland Planning Board Public Hearing Date: February 23, 2021	Prepared by: Kevin Kraft Date: February 19, 2021
---	---

I. INTRODUCTION

During the December 7, 2020, City Council Inauguration Meeting, Mayor Kate Snyder announced that in honor and recognition of Councilor Jill Duson's contribution to housing, including "...helping to create a municipal environment conducive to the development of affordable and low income eligible housing..." she asked the Housing and Economic Development Committee to review a request to rename the Housing Trust Fund the "Jill C. Duson Housing Trust Fund". The City Council's Housing and Economic Development Committee met on January 5, 2021, and voted unanimously (3-0; Ali absent) to support this recommendation.

The Housing Trust Fund Ordinance is located in the City Code, Chapter 14, Article 18.3. A copy of a marked revised version of the code which reflects the name change is presented as a request that the Portland Planning Board consider a text amendment renaming the City's Housing Trust Fund as the *Jill C. Duson Housing Trust Fund*.

II. ZONING TEXT AMENDMENT

The City of Portland proposes a text amendment to Land Use Code Article 18.3 to rename the Housing Trust Fund to the Jill C. Duson Housing Trust Fund as shown in red below:

Table of Contents

Article 18. HOUSING

18.3 Jill C. Duson Housing Trust Fund

Section 18.3.2 Establishment of the Jill C. Duson Housing Trust Fund

The City Council shall establish a special revenue account under the name "City of Portland Jill C. Duson Housing Trust Fund." (Housing Trust Fund).

III. COMPREHENSIVE PLAN CONSISTENCY

Staff finds the proposed text amendment to be administrative in nature, as it does not constitute a substantive change to any policies and procedures associated with the Housing Trust Fund or with the Land Use Code at large.

IV. PUBLIC COMMENT

One public comment was submitted in opposition to the proposed text amendment.

V. PROPOSED MOTIONS FOR THE BOARD TO CONSIDER

1. On the basis of materials submitted by the applicant, the City of Portland Land Use Code, Portland's Comprehensive Plan, public comment, and the information provided in public hearing on February 23, 2021 for the text amendment, the Planning Board finds that the proposed text amendment to the Table of Contents (Article 18 Housing) and Article 18, Section 18.3.2 of the City's Land Use Code (Renaming the City's Housing Trust Fund to the Jill C. Duson Housing Trust Fund) [~~is~~/is not] consistent with the Comprehensive Plan for the City of Portland.

Therefore, the Planning Board [~~recommends~~/does not recommend] to the City Council adoption of the zoning text amendment.

VI. ATTACHMENTS

1. Article 18 Proposed Text Amendment
2. Memo Renaming of Housing Trust Fund (Mary Davis, Division Director 2/18/2021)

Public Comment

1. PC 1 (George Rheault 2/19/2021)

TABLE OF CONTENTS

Article 1.	INTRODUCTORY PROVISIONS	1-1
1.1	Title	
1.2	Zoning Map	
1.3	Purpose	
1.4	Applicability	
1.5	Enforcement	
1.6	Relationship with Other Laws	
1.7	Delegation of Authority	
1.8	Rules of Interpretation	
1.9	Successive Applications	
1.10	Amendments	
1.11	Transition Rules	
Article 2.	ADMINISTRATION	2-1
2.1	Planning Board	
2.2	Historic Preservation Board	
2.3	Zoning Board of Appeals	
Article 3.	DEFINITIONS.....	3-1
Article 4.	NONCONFORMING USES, STRUCTURES, & LOTS.....	4-1
4.1	Continuation	
4.2	Nonconforming Uses	
4.3	Nonconforming Lots	
4.4	Nonconforming Buildings/Structures	
Article 5.	ZONES	5-1
5.1	Establishment of Zones	
5.2	Zoning Map	
5.3	Conditional or Contract Zoning	
5.4	Base Zone Purpose Statements	
Article 6.	USE STANDARDS.....	6-1
6.1	Applicability	
6.2	Determination of Use	
6.3	Change of Use	
6.4	Supplemental Use Standards	
6.5	Conditional Uses	
6.6	Accessory Uses	
6.7	Temporary Uses	
6.8	Performance Standards	



TABLE OF CONTENTS

Article 7.	DIMENSIONAL STANDARDS	7-1
7.1	Applicability	
7.2	Rules of Measurement	
7.3	Dimensional Standards	
7.4	Supplemental Dimensional Standards	
7.5	Space and Bulk Exceptions	
Article 8.	OVERLAY ZONES.....	8-1
8.1	Compact Urban Residential (R-7) Overlay	
8.2	Downtown Entertainment Overlay	
8.3	Fort Sumner Park Overlay	
8.4	Helistop Overlay	
8.5	Institutional Overlay	
8.6	Island Transfer Station Overlay	
8.7	Munjoy Hill Neighborhood Conservation Overlay District	
8.8	Pedestrian Activities District (PAD) Overlay	
8.9	Stream Protection Overlay	
8.10	University of Southern Maine Overlay	
8.11	Waynflete School Overlay	
Article 9.	FORM-BASED ZONES.....	9-1
9.1	India Street Form-Based Zone	
Article 10.	WATERFRONT ZONES	10-1
10.1	In General	
10.2	Eastern Waterfront Port Zone	
10.3	Waterfront Central Zone	
10.4	Waterfront Port Development Zone	
Article 11.	SHORELAND ZONE.....	11-1
11.1	Purpose	
11.2	Applicability	
11.3	Review Procedure	
11.4	Use-Specific Land Use Standards	
11.5	Supplemental Site Plan Standards	
Article 12.	FLOOD PLAIN MANAGEMENT.....	12-1
12.1	Purpose	
12.2	Applicability	
12.3	Definitions	
12.4	Flood Hazard Development Permit	
12.5	Certificate of Compliance	

12.6	Variances	
12.7	Records and Reporting	
12.8	Penalties	
Article 13.	RESOURCE PROTECTION ZONE.....	13-1
13.1	Use	
13.2	Dimensional Requirements	
13.3	Off-Street Parking	
13.4	Shoreland and Floodplain Management Regulations	
Article 14.	SITE PLAN.....	14-1
14.1	Purpose	
14.2	Applicability	
14.3	Project Classification	
14.4	Review and Approval Authority	
14.5	Review Procedures	
14.6	Site Plan Review Standards	
14.7	Master Development Plan Review Standards	
14.8	Waivers	
14.9	Phasing	
14.10	Conditions of Approval	
14.11	Post-Approval Procedures	
14.12	Expiration of Approvals	
14.13	Extension of Approvals	
14.14	Amendments to Approved Plans	
14.15	Consistency with Approved Site Plans	
14.16	Appeals	
Article 15.	SUBDIVISIONS.....	15-1
15.1	Purpose	
15.2	Applicability	
15.3	Review Procedures	
15.4	Review Standards	
15.5	Technical and Development Standards	
15.6	Waivers	
15.7	Guarantees and Associated Fees	
15.8	Construction Records and Inspection	
15.9	Transfer of Ownership	
15.10	Plat Amendments	
15.11	Vacation of Plats	
15.12	Exemptions	
15.13	Appeals	
Article 16.	IMPACT FEES	16-1
16.1	Purpose	
16.2	Applicability	



TABLE OF CONTENTS

16.3	Calculation of Impact Fee	
16.4	Annual Adjustment of Impact Fee	
16.5	Modification of Impact Fees	
16.6	Reduction in Fees for Affordable Housing	
16.7	Collection of Impact Fee	
16.8	Segregation of Impact Fees from General Revenues	
16.9	Use of Impact Fees	
16.10	Refund of Unused Impact Fees	
16.11	Review and Revision	
16.12	Administrative Rules and Regulations	
16.13	Effective Date	
Article 17.	HISTORIC PRESERVATION.....	17-1
17.1	Purpose	
17.2	Definitions	
17.3	Administrative Procedures	
17.4	Categories and Criteria for Designation	
17.5	Nomination, Consideration, and Designation	
17.6	Interim Protections for Nominations	
17.7	Certificates of Appropriateness and Non-Applicability	
17.8	Standards for Review of Application for Certificate of Appropriateness	
17.9	Certificate of Economic Hardship	
17.10	Maintenance	
17.11	Penalties	
17.12	Appeals	
Article 18.	HOUSING	18-1
18.1	Housing Preservation and Replacement	
18.2	Affordable Housing	
18.3	<u>Jill C. Duson</u> Housing Trust Fund	
18.4	Condominium Conversion	
18.5	Relocation of Displaced Tenants	
Article 19.	OFF-STREET PARKING & LOADING	19-1
19.1	Off-Street Parking	
19.2	Off-Street Loading	
19.3	Sustainable Transportation Fund	
Article 20.	SIGNS	20-1
20.1	Purpose	
20.2	Definitions	

20.3	Applicability	
20.4	Review Procedures	
20.5	Sign Districts Established	
20.6	General Restrictions for all Signs	
20.7	General Requirements for all Signs	
20.8	Standards for Permanent Signs	
20.9	Standards for Temporary Signs	
20.10	Nonconforming Signs	
20.11	Enforcement	
Article 21.	PUBLIC ART	21-1
21.1	Establishment	
21.2	Purpose	
21.3	Definitions	
21.4	Funding	
21.5	Administration	
Article 22.	REGULATION OF EXPLOSIVES	22-1
22.1	Purpose	
22.2	Applicability	
22.3	Review Process	
22.4	Storage and Handling	
22.5	Enforcement	
22.6	Penalties	
22.7	Notice Requirements	
22.8	Hours of Blasting	
22.9	Waivers	
22.10	Suspension of Blasting Operations	



18 HOUSING

18.1 HOUSING PRESERVATION AND REPLACEMENT

18.1.1 Purpose

The purpose of the housing preservation and replacement ordinance is:

- A. To promote and facilitate an adequate supply of housing, particularly affordable housing for all economic groups.
- B. To limit the net loss of housing units in the city.
- C. To preserve housing in zones where housing is permitted in the city for all residents in order to promote the health, safety, and welfare of its citizens.

18.1.2 Applicability

- A. Except as otherwise provided in this section, the housing preservation and replacement ordinance shall apply to the loss of three or more dwelling units in a five-year period, provided that such dwelling units were a legally registered residential use as of July 1, 2002. For the purposes of this section, dwelling units shall be as defined in Article 3, but also include rooming units that people rent in or sleep in within lodging houses, dormitories, shelters, and sheltered care group homes.
- B. Except as otherwise provided in this section, the housing preservation and replacement ordinance shall also apply to proposals that result in the loss of fewer than three dwelling units which were legally registered residential use as of July 1, 2002 for the purposes of creating surface parking.
- C. For the purposes of this section, loss of dwelling units shall mean the elimination or conversion to nonresidential use of a dwelling

unit and dwelling units that remain vacant for three years or more or are lost due to demolition unless the vacancy or demolition results from accidents outside of the owner's control, fire, natural disasters, or acts of war.

- D. Determination of number of the dwelling units within a structure or structures and the number of units lost will be based on the records of the Building Authority indicating the legal, registered use of the property since July 1, 2002 through the time of application. The actual use of the property for purposes of applicability of this section may be rebutted by the owner by proof of documentary evidence including but not limited to photographs, letters, and sworn affidavits. The Planning Authority may conduct its own investigation of the actual use and shall determine the applicability of this section based on the totality of the evidence.

18.1.3 Exemptions

This section does not apply to:

- A. Consolidation, elimination, or reconfiguration of one or more dwelling units within an existing structure, as long as all the resulting units remain as dwelling units after such consolidation, elimination, or reconfiguration, except as provided by (E) below. Conversion of a dwelling unit to a hotel or motel room shall not qualify for the exemption provided by the paragraph.
- B. Proposals that result in a number of units equal to or greater than the number of units lost as determined by the Planning Authority.
- C. Legally nonconforming dwelling units existing in zones which no longer permit residential uses.

- D. Property which has been ordered demolished by the City, pursuant to 17 M.R.S. § 2851, et seq., as amended, except where it is determined by the Building Authority that the deterioration was caused by neglect or lack of maintenance.
- E. Paragraph (A) above notwithstanding, the conversion to a nonresidential use of any dwelling units located on the ground floor of a building within a mixed-use zone.

18.1.4 Planning Authority approval required

Notwithstanding any other provision of this section, a proposal to demolish or to convert three or more dwelling units to a nonresidential use in a zone where such use is otherwise permitted must first obtain approval from the Planning Authority. In addition to any other requirements of the Land Use Code, the applicant must submit a statement certifying the number of dwelling units to be demolished or converted to nonresidential use, as well as a description of the characteristics of each of those units.

18.1.5 Tenant notification requirements

Prior to elimination as a result of demolition or conversion to nonresidential use, the owner shall:

- A. Provide the Planning Authority a list containing the name of each tenant currently residing in the dwelling units to be demolished or converted to nonresidential use, as well as verification of compliance with tenant notice requirements of this subsection.
- B. Deliver to each tenant who occupies such a dwelling unit a written notice to vacate the unit. The notice shall either be sent by certified mail, return receipt requested, or served in-hand. The notice will grant the tenant not less than

90 days from the date of receipt of the notice to vacate the unit.

- C. File proof of service of the notice with the Planning Authority.

18.1.6 Housing replacement requirements

- A. The Planning Authority shall require, as a condition of approval, that an owner shall replace any dwelling units that are demolished or converted to nonresidential use.
- B. This requirement may be satisfied in any one of the following ways, which may be used in combination:
 1. *Construction of units.* The construction of housing units within a new structure or a new addition either on site or off-site.
 2. *Residential conversion.* The conversion of a nonresidential building to residential use.

18.1.7 Replacement unit requirement

In addition to the foregoing, all replacement units built pursuant to Subsection 18.1.6.B above shall:

- A. Be located within the same United States census block group as the parcel from which the dwelling units are being removed or within 1,500 feet of the dwelling units being removed.
- B. Not previously have been on the market as of the date of application.
- C. Be situated within a development which has not been a candidate for site plan approval as of the date of the application.
- D. Be comparable in size to the units replaced. For the purpose of this section, “comparable in size” means that the aggregate size of the replacement units will be no less than 80% of the size of the aggregate of the original units to be replaced.

18.1.8 Contribution to the Housing Trust Fund

- A. The applicant may meet the requirements of this housing replacement ordinance by depositing \$50,000 for each dwelling unit into the City's Housing Trust Fund.
- B. Beginning on January 1, 2004 and annually thereafter, the amount of the contribution shall be adjusted by multiplying this amount originally deposited for each unit by a fraction, the denominator of which shall be the "Consumer Price Index for Urban Wage Earners and Clerical Workers ("CPI-W"), U.S. City Average, "All Items Index," as published by the United States Bureau of Labor Statistics ("the index") for January 1, 2003 year, and the numerator of which shall be the index for the same month in each subsequent year. In the event that the index is not then in existence, the parties shall use such equivalent price index as is published by any successor governmental agency then in existence, or, if none, then by such nongovernmental agency as may then be publishing an equivalent price index, in lieu of and adjusted to the index. If the index shall cease to use 1982-84 equals 100 as the basis of calculation, or if a substantial change is made in the terms or number of items contained in the index, the base index shall be adjusted to conform to such change, using such computation thereof, if available, as shall be employed by the United States Department of Labor in computing same. Notwithstanding anything herein to the contrary, contributions made after January 1, 2004 shall not be less than the amount originally required to be deposited for each rooming or dwelling unit.

18.1.9 Performance guarantee

Owners or affiliates must post a performance guarantee in the form of a letter of credit, or other security acceptable to the City attorney, in the amount equivalent to the amount the applicant would have been required to contribute to the City's Housing Trust Fund if the applicant had chosen that option pursuant to Subsection 18.1.8. Such a performance guarantee shall be valid for no more than three years, after which the full amount due shall be provided to the City's Housing Trust Fund if replacement units satisfying the conditions of this housing replacement ordinance do not have certificates of occupancy.

18.1.10 Partial waiver of replacement requirements

- A. Any owner who has applied for site plan review for elimination or conversion to nonresidential use of dwelling units may apply to the Zoning Board of Appeals for a partial waiver from the housing replacement requirements of this section. Such waiver may be a downward adjustment of up to 50% of the owner's housing replacement obligation if the owner establishes to the board's satisfaction that:
 1. The proposed development is consistent with the Comprehensive Plan.
 2. The proposed development provides significant value and benefit to the immediate and surrounding neighborhood, including, but not limited to, community enhancement, social benefits or job creation.
 3. The applicant demonstrates with objective evidence that the imposition of the

requirements of this section would impose such an economic burden upon the project relative to its scope that it renders the project impossible to develop.

4. The requested relief does not constitute a grant of a special privilege inconsistent with the limitations upon similar properties.
- B.** The Zoning Board of Appeals must make positive findings on each of the four criteria above in order for any such adjustment to be valid. An applicant aggrieved of a decision of the Zoning Board of Appeals may appeal a decision under this subsection pursuant to the provisions of Article 2.

18.1.11 Effect of other City ordinances

- A.** Nothing in this section shall permit the demolition or conversion to nonresidential use of dwelling units in residential property protected by Article 17, except as permitted by that ordinance.
- B.** A conditional zone may not be used to circumvent the application of this section. The terms of this section shall apply to any conditional zone which involves dwelling units affected by this section. Notwithstanding the foregoing, nothing herein shall be deemed to prevent the City and the applicant from agreeing to terms which exceed those imposed by this section by means of a conditional zone.

18.1.12 Appeals

Any applicant aggrieved by a decision of the Planning Authority under this section may appeal to the Zoning Board of Appeals within 30 days of that decision.

18.2 AFFORDABLE HOUSING

18.2.1 Purpose

It is in the public interest to promote an adequate supply of housing that is affordable to a range of households at different income levels. The purpose of this section therefore is to offer incentives to developers to include units of affordable and workforce 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. The City believes that this section will 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, and by doing so promote the health, safety, and welfare of its citizens.

TABLE 18-A: AFFORDABLE HOUSING FEE REDUCTIONS

% of New Units That are Low-Income or Workforce	Development Fee Discount	Cost of Work (Building Permit) Fees
5% up to but not including 10%	5% reduction	\$10.50 per \$1,000
10% up to but not including 15%	10% reduction	\$9.90 per \$1,000
15% up to but not including 20%	15% reduction	\$9.35 per \$1,000
20% up to but not including 25%	20% reduction	\$8.80 per \$1,000
25% or more	25% reduction	\$8.25 per \$1,000



18.2.2 Reduction of fees

- A. Notwithstanding any other provision of this Land Use Code or Chapter 6 to the contrary, development fees shall be reduced by the City for an eligible project in the manner described in Table 18-A.
- B. Development fees shall include:
1. Site plan review and inspection fees.
 2. Subdivision review and inspection fees.
 3. Impact fees.
 4. Administrative fees.
 5. Construction and permit fees as described in Chapter 6 of the City of Portland Code of Ordinances.
- Development fees do not include any fees charged for review conducted by any party other than the City.
- C. Eligible project shall mean a development project:
1. That is permissible under the provisions of this Land Use Code in the zone in which it is proposed.
 2. That will be a single-family or multi-family dwelling, or subdivision consisting of a group of dwellings, and will not be located in an R-1 or R-2 zone.
 3. That creates new dwelling units, among which is at least one low-income or workforce housing unit for rent or sale, through new construction, substantial rehabilitation of existing structures, adaptive reuse or conversion of a nonresidential use to residential use, or any combination of these elements. Affordable housing units for sale or rent

may not differ in exterior design from other units within an eligible project.

4. Projects shall not be considered “eligible projects” solely because they are subject to Subsection 18.2.3.
- D. The Planning Authority shall perform its review of an eligible project in as expedited a manner as is practical, without impairing the scope or thoroughness of the review. The Planning Authority may adopt administrative procedures to prioritize review of eligible projects and facilitate this expedited review.
- E. The Planning Board shall make its best efforts to give priority in scheduling workshops and public hearings related to any plans or applications required for an eligible project that are within the Planning Board’s jurisdiction, without impairing the scope or thoroughness of its review. At the conclusion of these public meetings, the Planning Board shall promptly issue a decision on all such plans and applications before it for consideration.

18.2.3 Ensuring workforce housing

- A. **Purpose.** Based on the City’s Comprehensive Plan and the City’s 2015 housing study, it is in the public interest to promote an adequate supply of housing that is affordable to a range of households at different income levels. The purpose of this subsection is to ensure that housing developments over a certain size provide a portion of workforce housing units and, by doing so, promote the health, safety, and welfare of Portland citizens.
- B. **Applicability.** This subsection shall apply to development projects that create ten or more net new dwelling units for rent or for sale through new construction, substantial

rehabilitation of existing structures, adaptive reuse or conversion of a nonresidential use to residential use, or any combination of these elements, with the exception that projects using public financing requiring affordability restrictions, as defined by tax increment financing, U.S. Department of Housing and Urban Development funds such as HOME or CDBG, other federal, state, or local housing program, or the Low-income Housing Tax Credit program, shall be considered exempt.

C. Standards. Development projects subject to this subsection shall be subject to the following requirements:

1. Notwithstanding any language to the contrary in this Land Use Code, all developments of ten units or more are conditional uses subject to Planning Board review on the condition that they comply with the requirements of this subsection, unless they are within the India Street Form-Based Code Zone, in which case the review will be conducted administratively or by the Planning Board in accordance with the thresholds of site plan review for the district.
2. At least 25% of the units in the project shall meet the definition of workforce housing unit for sale or for rent as defined in Article 3. The project shall have the option of paying a partial fee-in-lieu as per (6) below or providing an additional unit on-site for any fractional value.
3. Projects shall not be segmented or phased to avoid compliance with these provisions. In cases where projects are completed in phases, affordable units shall be provided in proportion to the development of market rate units unless otherwise permitted through regulations.
4. Workforce units must be integrated with the rest of the development, must use a common entrance, and must provide no indications from common areas that these units are workforce housing units.
5. Workforce units need not be the same size as other units in the development but the number of bedrooms in such units, either on- or off-site, shall be no less than 10 percent of the total number of bedrooms in the development. For the purposes of calculating the number of bedrooms in a development, every 400 square feet in each market rate unit will count as a bedroom if the Planning Authority determines this method is appropriate in lieu of counting actual bedrooms.
6. As an alternative to providing workforce housing units, projects may pay a fee-in-lieu of some or all of the units. In-lieu fees shall be paid into the Housing Trust Fund. The fee for affordable units not provided shall be \$150,000 per unit, adjusted annually in the same way as the fee under Subsection 18.1.8.
7. Workforce housing units for sale, if converted to workforce housing units for rent, shall become subject to the income limits and other requirements of such units.
8. If at least 33% of the units in a development are workforce units, the development is eligible for subsidy through an Affordable Housing TIF, subject to City Council approval.



TABLE 18-C: BONUSES FOR ELIGIBLE PROJECTS

% Low- income Units	% Work- force 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.

¹ “Base” is the number of units allowed under the zoning without this bonus but with any other bonuses applied. In R-P zones, multifamily is permitted with a “base” no less than 1 unit per 1,500 SF. of land area. If an eligible project is providing both workforce and affordable housing units, the applicant shall have the option of utilizing applicable incentives, but not cumulatively.

² The maximum additional height permitted in the B-1/B-1b zones and the R-P zone shall be 15 feet. In addition, the maximum structure height is 50 feet within 750 feet of the Portland Observatory.

³ Setback reductions are absolute reductions in front, side, and/or rear setback requirements. The maximum setback reductions in the B-1/B-1b and R-P zones shall be 5 ft.

9. The term of affordability for the required 25% workforce units provided shall be defined as shown in Table 18-B.

D. Implementing regulations. Regulations to further specify the details of this subsection shall be developed, including, but not limited to:

1. Specific methodology for income verification.
2. Situations where less than permanent affordability might be considered.
3. Guidelines for meeting the requirement that off-site units be “in the same neighborhood.”

TABLE 18-B: MINIMUM TERM OF AFFORDABILITY FOR REQUIRED WORKFORCE UNITS

% of Workforce Units Provided	Minimum Term of Affordability
25%	30 years
50%	20 years
100%	10 years

E. Reporting to City Council. In conjunction with the annual report on the Housing Trust Fund, the Planning Authority shall annually report on developments subject to this subsection, the number of units produced, the amount of fee-in-lieu collected, and the overall effectiveness of this subsection in achieving its stated purpose.

18.2.4 Density and dimensional bonuses and reductions

Notwithstanding any other provision of this Land Use Code to the contrary, in order to encourage low-income and workforce units in designated growth areas, eligible projects as defined under Subsection 18.2.2 may avail themselves of the following options:

A. Density bonuses. The maximum number of units that would otherwise be allowed under this Land Use Code shall be increased for an eligible project in the manner described in Table 18-C, applicable in the B-1/B-1b, B-2/B-2b/B-2c, B-3/B-3b/B-3c, B-5, R-7, and R-P zones.

B. Planned Residential Unit Developments (PRUDs). In order to promote orderly development of low- and moderate-income development as PRUDs, any project in which more than 50% of the units are low-income or workforce units for rent or for sale may utilize the following dimensional bonuses and changes:

1. Minimum lot area per dwelling unit is reduced by 50%.
2. Maximum number of units and maximum length of buildings do not apply but may be set through site plan review.
3. Minimum building setbacks may be reduced to 10 feet.

4. The PRUD may cross public rights of way provided that the right of way does not count towards minimum lot size nor towards any open space requirements.
 5. Minimum recreation open space area is reduced to 200 square feet per dwelling unit of common area designated for recreational purposes by the residents. Minimum contiguous size and setbacks do not apply and shall be set through site plan review.
 6. The Planning Board's *Design Manual*, design standards, and guidelines with respect to PRUDs shall apply in full to PRUDs utilizing this subsection.
- C. Unit size and term of affordability.** In order to be eligible for this subsection, the low-income and workforce housing units must meet Subsections 18.2.3(C)(3), (4), and (5) and be affordable for the longest term permitted under federal, state, and local laws.
- D. Required public process.** The developer of the project must also commit to a good faith effort to communicate openly with affected properties as their process moves forward. At a minimum, no less than 30 days prior to application for site plan review, any project that wishes to take advantage of this subsection must hold a public meeting noticed to all properties within 500 feet of their site and post a sign on the property in question describing the proposed project, intent to submit an application to the City in 30 days (cite anticipated submission date), and contact information for the developer and the Planning Authority. The Planning Board may adopt regulations regarding the content and

processes for noticing as part of the *Technical Manual*.

- E. Projects under 18.2.3.** Projects that are subject to Subsection 18.2.3 that choose to provide the required workforce housing units on site are eligible for a 25% increase in total permitted units. If an eligible project as defined under Subsection 18.2.2 is also subject to Subsection 18.2.3, the applicant shall have the option of utilizing either this bonus or any bonuses they are eligible for under Subsections 18.2.4(A) and (B) but not both.

18.2.5 Inclusionary zoning for hotel projects

- A. Purpose.** This subsection is based on City analysis, most specifically the analysis documented in the Greater Portland Council of Government study *Proposed Hotel Linkage Fee: Supportable Range* dated August 29, 2018, that finds that new hospitality developments create a need for new affordable housing. This need is the result of the fact that hospitality developments necessarily create a number of jobs that do not pay employees at a rate sufficient to allow those employees to afford market-rate housing in the City of Portland.
- B. Hotel projects.** For the purposes of this subsection, hotel projects shall include any hotel as defined in Article 3 consisting of 10 or more guest rooms for rent. Any expansion of an existing hotel by 10 or more rooms within any five-year period will also be considered a hotel project.
- C. Hotel projects conditional uses.** Notwithstanding anything to the contrary in this Land Use Code, all hotel projects are conditional uses subject to Planning Board



review on the condition that they comply with the requirements of this Subsection 18.2.5.

- D. **Low-income housing minimum.** All hotel projects shall provide one unit of low-income housing for rent in the City of Portland for every 28 rooms in the hotel project, which shall meet the standards outlined in Subsections 18.2.3(C)(3), (4), and (5) and in the implementing regulations governing low-income units. This amount shall be rounded up to the nearest increment of 28 rooms. These units shall be deed restricted for the longest period permitted by law, shall not be used for short-term rentals of less than 30 days, and must be provided with distinct entrances from the street to delineate them from the hotel itself.
- E. **Fee-in-lieu alternative.** As an alternative to providing low-income housing units under Subsection 18.2.5(D) above, a hotel project may pay a fee-in-lieu of \$3,806 per hotel guest room. This amount shall be paid into the City's Housing Trust Fund and used for the purposes set forth in the ordinance and regulations applicable to that trust.
- F. **Annual adjustments.** The amounts in Subsection 18.2.5(E) above shall be adjusted annually in the same way as the fee under Section 18.1.8.
- G. **Regulations.** The Planning Board may promulgate implementing regulations based on this subsection.

18.3 HOUSING TRUST FUND

18.3.1 Purpose

The purpose of enacting this section is:

- A. To establish a City of Portland Housing Trust Fund for the promotion, retention, and

creation of an adequate supply of housing, particularly affordable housing, for all economic groups and to limit the net loss of housing units in the city.

- B. To serve as a vehicle for addressing very low, low, and median income housing needs through a combination of funds as set out in this article.

18.3.2 Establishment of the Jill C. Duson Housing Trust Fund

The City Council shall establish a special revenue account under the name "City of Portland Jill C. Duson Housing Trust Fund;" (Housing Trust Fund).

Deposits into the fund shall include:

- A. Contributions from the City's housing replacement ordinance under Subsection 18.1.8.
- B. In-lieu fees under Subsections 18.2.3 and 18.2.5.
- C. Funds appropriated to be deposited into the fund by vote of the City Council.
- D. Voluntary contributions of money or other liquid assets to the fund.
- E. Any federal, state, or private grant or loan funds provided to the fund.
- F. Interest from fund deposits and investments.
- G. Repayments of loans made from the fund.

18.3.3 Management of the trust fund

The City Manager, or his or her designee, shall serve as the manager of the Housing Trust Fund. The responsibilities of the manager, subject to the orders of the City Council, shall include:

- A. Maintaining the financial and other records of the Housing Trust Fund.
- B. Disbursing and collecting Housing Trust Fund monies in accordance with the Housing Trust Fund annual plan.

- C. Monitoring the use of monies distributed to successful applicants for Housing Trust Fund support to assure on-going compliance with the purposes of the fund and the conditions under which these monies were granted or loaned.

18.3.4 Housing Trust Fund annual plan

- A. Each fiscal year, the City Council shall adopt a Housing Trust Fund annual plan. The City Manager shall submit to the City Council a recommended Housing Trust Fund annual plan, utilizing the revenues of the Housing Trust Fund as well as any other funds the manager may propose as appropriate. The housing committee of the City Council or such other committee as the council shall designate shall conduct public hearings on the recommended plan and refer the matter to the council for action.
- B. The Housing Trust Fund annual plan shall include:
 1. A description of all programs to be funded in part or in full by the Housing Trust Fund.
 2. A description of how funds from the Housing Trust Fund will be distributed among very low-income, low-income and moderate-income households.
 3. The amount of funds budgeted for programs funded in part or in full from the Housing Trust Fund.
- C. Priority for the expenditure of funds collected pursuant to Section 18.1 shall be given to the creation of new housing stock, through either new construction or conversion of nonresidential buildings to residential use.

18.3.5 Distribution and use of the Housing Trust Fund's assets

- A. All distribution of principal, interest, or other assets of the Housing Trust Fund shall be made in furtherance of the public purposes set out in Section 18.1.
- B. During each year, the Housing Trust Fund shall disburse as grants or loans so much of the Housing Trust Fund's assets as the City Council in its discretion has approved in the Housing Trust Fund annual plan.
- C. Funds shall not be used for City administrative expenses.
- D. Funds shall not be used for property operating expenses or supporting services.
- E. No grants or loans shall be awarded by the Housing Trust Fund to corporations, partnerships, or individuals who are delinquent at the time of application in the payment of property taxes or other fees to the City of Portland, who have been convicted of arson, who have been convicted of discrimination in the sale or lease of housing under the fair housing laws of the State of Maine, or who have pending violations of current City electrical, plumbing, building, or housing codes or zoning ordinances.

18.3.6 Term of affordability

- A. Whenever funds from the Housing Trust Fund are used for the acquisition, construction, or substantial rehabilitation of an affordable rental or cooperative unit, the City of Portland shall impose enforceable requirements on the owner of the housing unit that the unit remain affordable for the remaining life of the housing unit, assuming good faith efforts by the owner to maintain the housing unit and rehabilitate it



as necessary. The remaining life of the housing unit shall be presumed to be a minimum of 30 years.

- B. Whenever funds from the Housing Trust Fund are used for the acquisition, construction, or substantial rehabilitation of ownership housing, the City of Portland shall impose enforceable resale restrictions on the owner to keep the housing unit affordable for the longest feasible time, while maintaining and equitable balance between the interests of the owner and the interests of the City of Portland.
- C. The affordability restriction requirements described in this subsection shall run with the land and the City of Portland shall develop appropriate procedures and documentation to enforce these requirements and shall record such documentation in the Cumberland County Registry of Deeds.

18.4 CONDOMINIUM CONVERSION

18.4.1 Purpose

The purpose of this section is to regulate the conversion of rental housing to condominiums, to minimize the potential adverse impacts of such conversion on tenants, to ensure that such converted housing is safe and decent, and to maintain a reasonable balance of housing alternatives within the city for persons of all incomes.

18.4.2 Applicability

This section shall apply to the conversion of any rental unit to a condominium unit. For the purposes of this section, developer shall mean any person or other legal entity, but not including an established lending institution unless it is an active participant in a common promotional scheme, who,

whether acting as principal or agent, records a declaration of condominium that includes real estate, any portion of which was previously a rental unit.

18.4.3 Protection of tenants

- A. **Notice of intent to convert.** A developer shall give to each tenant, meaning any occupant in lawful possession of a rental unit, whether by lease, sublease, or otherwise, written notice of intent to convert at least one 120 days before the tenant is required by the developer to vacate. If a tenant has been in possession of any unit within the same building for more than four consecutive years, the notice period shall be increased by 30 additional days for each additional year, or fraction thereof, to a maximum of 240 additional days. The notice shall set forth specifically the rights of tenants under (A), (B), and (C) of this subsection and Subsection 18.4.4, and shall contain the following statement:

If you do not buy your apartment, the developer of this project is required by law to assist you in finding another place to live and in determining your eligibility for relocation payments. If you have questions about your rights under the law, or complaints about the way you have been treated by the developer, you may contact the Department of Permitting & Inspections, City of Portland, 389 Congress Street, Portland, Maine 04101.

- B. If the notice specifies a date by which the tenant is required to vacate, the notice may also serve as a notice of termination under the applicable law of forcible entry and detainer, if it meets the requirements thereof. The notice shall be hand delivered to the tenant or mailed,

by certified mail, return receipt requested, postage prepaid, to the tenant at the address of the unit or such other address as the tenant may provide. The notice shall be effective when actually received. No tenant may be required by a developer to vacate without having been given notice as required herein, except for the reasons specified in the applicable law of forcible entry and detainer, and in accordance with the procedures thereof. The terms of a tenancy, including rent, may not be altered during the notice period, except as expressly provided in a preexisting written lease. If, within 120 days after a tenant is required by a developer to vacate, the developer records a declaration of condominium without having given notice as required herein, the developer shall be presumed to have converted in violation of this article.

- C. Option to purchase.** For a 60-day period following the giving of notice as required in Subsection 18.4.3(A), the developer shall grant to the tenant an exclusive and irrevocable option to purchase the unit of which the tenant is then possessed, which option may not be assigned. If the tenant does not purchase or contract to purchase the unit during the 60-day period, the developer may not convey or offer to convey the unit to any other person during the following 180 days at a price or on terms more favorable than the price or terms previously offered to the tenant, unless the more favorable price or terms are first offered exclusively and irrevocably to the tenant for an additional 60-day period. This subsection shall not apply to any rental unit that, when converted, will be restricted exclusively to nonresidential use. If, within two years after a

developer records a declaration of condominium, the use of any such unit is changed such that but for the preceding sentence, this subsection would have applied, the developer shall be presumed to have converted in violation of this article.

18.4.4 Relocation payments

If the tenant does not purchase the unit, the developer shall, before the tenant is required by the developer to vacate, make a cash payment to the tenant in an amount equal to the amount of rent paid by the tenant for the immediately preceding two months, provided that this requirement shall not apply to any tenant whose gross income exceeds 80% of the median income of the Portland SMSA, adjusted for family size, as determined by the U.S. Department of Housing and Urban Development at the time notice is given as required in Subsection 18.4.3. Additionally, the developer shall, upon demand, provide assistance to the tenant in the form of referrals to other reasonable accommodations and in determining the tenant's eligibility for relocation payments as provided herein.

18.4.5 Conversion permit

Before conveying or offering to convey a converted unit, the developer shall obtain a conversion permit from the Building Authority. The permit shall issue only upon receipt of a completed application therefore in a form to be devised for that purpose, payment of a fee as established by the City Council, and a finding, upon inspection, that each unit, together with any common areas and facilities appurtenant thereto, is in full compliance with all applicable provisions of Chapter 6, Articles II, III, and V and Chapter 10, Article II of the City of Portland



Code of Ordinances, and the Life Safety Code as adopted by the state. The developer shall post a copy of the permit in a conspicuous place in each unit and shall make copies available to prospective purchasers upon request.

18.4.6 Variation by agreement

No provision of or right conferred by this Section 18.4 may be waived by a tenant, by agreement or otherwise, and any such waiver shall be void. Any attempt to require, encourage, or induce a tenant to waive any provision hereof, or right conferred hereby, shall be a violation of this article. Nothing herein shall be construed to void any term of a lease which offers greater rights than those conferred hereby.

18.5 RELOCATION OF DISPLACED TENANTS

18.5.1 Purpose

The purpose of this section is to encourage the retention of a diverse housing supply throughout the downtown and in areas readily accessible to the downtown, to ensure that persons displaced as the result of redevelopment of residential units to nonresidential uses within the B-3 Downtown Business zone are treated fairly and consistently, and to ensure that persons so displaced will be relocated at the reasonable expense of the developer to comparable housing at a location providing comparable access to services and amenities.

18.5.2 Notice and eligibility for relocation assistance

When a proposed development will result in the displacement of residents of an existing structure, the developer of the property shall give all tenants written notice as set forth below and shall provide

relocation assistance as set forth below for any tenant whose gross income is 80% or less of the median income of the Portland SMSA, adjusted for family size, as determined by the U.S. Department of Housing and Urban Development at the time the developer gives the tenant written notice of intent to cause removal of the residential unit. Such written notice shall be given to the tenant at least 120 days before the tenant shall be required to vacate the premises and shall contain the following statement:

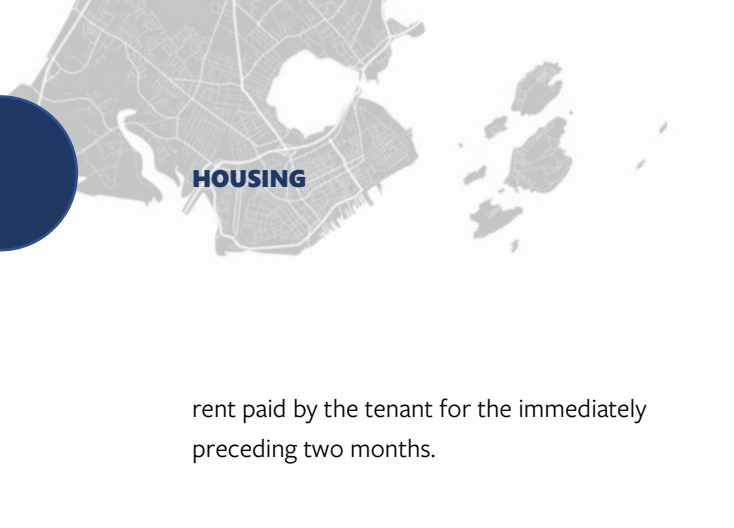
The developer of this project is required by law to assist you in finding another place to live and in determining your eligibility for relocation payments. If you have questions about your rights under the law, or complaints about the way you have been treated by the developer, you may contact the Department of Planning and Urban Development, City of Portland, 389 Congress Street, Portland, Maine 04101.

18.5.3 Relocation assistance for all tenants

The developer shall provide, upon demand, assistance to all tenants who will be displaced by the development in the form of referrals to other reasonable accommodations and in determining the tenants' eligibility for relocation payments as provided herein. The developer shall make relocation payments to eligible tenants in accordance with the schedule adopted by the City Council in Subsection 18.5.4.

18.5.4 Schedule of relocation payments for eligible tenants

The developer shall, before the tenant is required by the developer to vacate, make a cash payment to the tenant in an amount equal to the amount of



HOUSING

rent paid by the tenant for the immediately preceding two months.



CITY OF PORTLAND
Housing and Economic Development Department
Housing and Community Development Division

TO: Councilor Spencer Thibodeau, Chair
 Members of the Housing and Economic Development Committee

FROM: Mary Davis, Division Director
 Housing and Community Development Division

DATE: December 28, 2020

SUBJECT: Public Hearing and Vote on Recommendation to the City Council to
 Rename the Housing Trust Fund the “Jill C. Duson Housing Trust Fund”

During the December 7, 2020 City Council Inauguration Meeting, Mayor Kate Snyder announced that in honor and recognition of Councilor Jill Duson’s contribution to housing, including “...helping to create a municipal environment conducive to the development of affordable and low income eligible housing...” she asked the Housing and Economic Development Committee (HEDC) to review a request to rename the Housing Trust Fund the “Jill C. Duson Housing Trust Fund”.

Below are a few of the accomplishments of the Housing Committee over the last 5 years, under the leadership of Councilor Duson.

- (1) Recommended a package of five housing insecurity policy items, including an increase notification period for residential rent increases from 45 days to 75 days, which were adopted by the City Council in November 2016.
- (2) Recommended city investment of over \$3 million in HOME funding, over \$2.5 million in Housing Trust Funds and 11 Affordable Housing TIF Districts to incentivize the creation or maintenance of 763 units of affordable housing.
- (3) Recommended a regulatory framework for the short term rental market that was adopted by the City Council.
- (4) Supported amendments to Division 30 that help to create affordable housing.
- (5) Identified city-owned property suitable for housing development and facilitated public/private partnerships on three parcels that will add a minimum of 140 units to the city’s housing inventory

The Housing Trust Fund Ordinance is located in the City Code, Chapter 14, Article 18.3, which would need Planning Board review and recommendation to the City Council on the proposed amendments. A copy of a marked revision version of the Code which reflects the name change is attached for the HEDC review, vote, and recommendation to the City Council, as well as to direct staff to bring this item to the Planning Board for their review and vote to the City Council, that the name of the Housing Trust Fund be changed to the Jill C. Duson Housing Trust Fund.

Attachments: Proposed Revisions to Chapter 14 Article 18.3

TABLE OF CONTENTS

Article 1.	INTRODUCTORY PROVISIONS	1-1
1.1	Title	
1.2	Zoning Map	
1.3	Purpose	
1.4	Applicability	
1.5	Enforcement	
1.6	Relationship with Other Laws	
1.7	Delegation of Authority	
1.8	Rules of Interpretation	
1.9	Successive Applications	
1.10	Amendments	
1.11	Transition Rules	
Article 2.	ADMINISTRATION	2-1
2.1	Planning Board	
2.2	Historic Preservation Board	
2.3	Zoning Board of Appeals	
Article 3.	DEFINITIONS.....	3-1
Article 4.	NONCONFORMING USES, STRUCTURES, & LOTS.....	4-1
4.1	Continuation	
4.2	Nonconforming Uses	
4.3	Nonconforming Lots	
4.4	Nonconforming Buildings/Structures	
Article 5.	ZONES	5-1
5.1	Establishment of Zones	
5.2	Zoning Map	
5.3	Conditional or Contract Zoning	
5.4	Base Zone Purpose Statements	
Article 6.	USE STANDARDS.....	6-1
6.1	Applicability	
6.2	Determination of Use	
6.3	Change of Use	
6.4	Supplemental Use Standards	
6.5	Conditional Uses	
6.6	Accessory Uses	
6.7	Temporary Uses	
6.8	Performance Standards	



TABLE OF CONTENTS

Article 7.	DIMENSIONAL STANDARDS	7-1
7.1	Applicability	
7.2	Rules of Measurement	
7.3	Dimensional Standards	
7.4	Supplemental Dimensional Standards	
7.5	Space and Bulk Exceptions	
Article 8.	OVERLAY ZONES.....	8-1
8.1	Compact Urban Residential (R-7) Overlay	
8.2	Downtown Entertainment Overlay	
8.3	Fort Sumner Park Overlay	
8.4	Helistop Overlay	
8.5	Institutional Overlay	
8.6	Island Transfer Station Overlay	
8.7	Munjoy Hill Neighborhood Conservation Overlay District	
8.8	Pedestrian Activities District (PAD) Overlay	
8.9	Stream Protection Overlay	
8.10	University of Southern Maine Overlay	
8.11	Waynflete School Overlay	
Article 9.	FORM-BASED ZONES.....	9-1
9.1	India Street Form-Based Zone	
Article 10.	WATERFRONT ZONES	10-1
10.1	In General	
10.2	Eastern Waterfront Port Zone	
10.3	Waterfront Central Zone	
10.4	Waterfront Port Development Zone	
Article 11.	SHORELAND ZONE.....	11-1
11.1	Purpose	
11.2	Applicability	
11.3	Review Procedure	
11.4	Use-Specific Land Use Standards	
11.5	Supplemental Site Plan Standards	
Article 12.	FLOOD PLAIN MANAGEMENT.....	12-1
12.1	Purpose	
12.2	Applicability	
12.3	Definitions	
12.4	Flood Hazard Development Permit	
12.5	Certificate of Compliance	

12.6	Variances	
12.7	Records and Reporting	
12.8	Penalties	
Article 13.	RESOURCE PROTECTION ZONE.....	13-1
13.1	Use	
13.2	Dimensional Requirements	
13.3	Off-Street Parking	
13.4	Shoreland and Floodplain Management Regulations	
Article 14.	SITE PLAN.....	14-1
14.1	Purpose	
14.2	Applicability	
14.3	Project Classification	
14.4	Review and Approval Authority	
14.5	Review Procedures	
14.6	Site Plan Review Standards	
14.7	Master Development Plan Review Standards	
14.8	Waivers	
14.9	Phasing	
14.10	Conditions of Approval	
14.11	Post-Approval Procedures	
14.12	Expiration of Approvals	
14.13	Extension of Approvals	
14.14	Amendments to Approved Plans	
14.15	Consistency with Approved Site Plans	
14.16	Appeals	
Article 15.	SUBDIVISIONS.....	15-1
15.1	Purpose	
15.2	Applicability	
15.3	Review Procedures	
15.4	Review Standards	
15.5	Technical and Development Standards	
15.6	Waivers	
15.7	Guarantees and Associated Fees	
15.8	Construction Records and Inspection	
15.9	Transfer of Ownership	
15.10	Plat Amendments	
15.11	Vacation of Plats	
15.12	Exemptions	
15.13	Appeals	
Article 16.	IMPACT FEES	16-1
16.1	Purpose	
16.2	Applicability	



TABLE OF CONTENTS

16.3	Calculation of Impact Fee	
16.4	Annual Adjustment of Impact Fee	
16.5	Modification of Impact Fees	
16.6	Reduction in Fees for Affordable Housing	
16.7	Collection of Impact Fee	
16.8	Segregation of Impact Fees from General Revenues	
16.9	Use of Impact Fees	
16.10	Refund of Unused Impact Fees	
16.11	Review and Revision	
16.12	Administrative Rules and Regulations	
16.13	Effective Date	
Article 17.	HISTORIC PRESERVATION.....	17-1
17.1	Purpose	
17.2	Definitions	
17.3	Administrative Procedures	
17.4	Categories and Criteria for Designation	
17.5	Nomination, Consideration, and Designation	
17.6	Interim Protections for Nominations	
17.7	Certificates of Appropriateness and Non-Applicability	
17.8	Standards for Review of Application for Certificate of Appropriateness	
17.9	Certificate of Economic Hardship	
17.10	Maintenance	
17.11	Penalties	
17.12	Appeals	
Article 18.	HOUSING	18-1
18.1	Housing Preservation and Replacement	
18.2	Affordable Housing	
18.3	<u>Jill C. Duson</u> Housing Trust Fund	
18.4	Condominium Conversion	
18.5	Relocation of Displaced Tenants	
Article 19.	OFF-STREET PARKING & LOADING	19-1
19.1	Off-Street Parking	
19.2	Off-Street Loading	
19.3	Sustainable Transportation Fund	
Article 20.	SIGNS	20-1
20.1	Purpose	
20.2	Definitions	

20.3	Applicability	
20.4	Review Procedures	
20.5	Sign Districts Established	
20.6	General Restrictions for all Signs	
20.7	General Requirements for all Signs	
20.8	Standards for Permanent Signs	
20.9	Standards for Temporary Signs	
20.10	Nonconforming Signs	
20.11	Enforcement	
Article 21.	PUBLIC ART	21-1
21.1	Establishment	
21.2	Purpose	
21.3	Definitions	
21.4	Funding	
21.5	Administration	
Article 22.	REGULATION OF EXPLOSIVES	22-1
22.1	Purpose	
22.2	Applicability	
22.3	Review Process	
22.4	Storage and Handling	
22.5	Enforcement	
22.6	Penalties	
22.7	Notice Requirements	
22.8	Hours of Blasting	
22.9	Waivers	
22.10	Suspension of Blasting Operations	



18 HOUSING

18.1 HOUSING PRESERVATION AND REPLACEMENT

18.1.1 Purpose

The purpose of the housing preservation and replacement ordinance is:

- A. To promote and facilitate an adequate supply of housing, particularly affordable housing for all economic groups.
- B. To limit the net loss of housing units in the city.
- C. To preserve housing in zones where housing is permitted in the city for all residents in order to promote the health, safety, and welfare of its citizens.

18.1.2 Applicability

- A. Except as otherwise provided in this section, the housing preservation and replacement ordinance shall apply to the loss of three or more dwelling units in a five-year period, provided that such dwelling units were a legally registered residential use as of July 1, 2002. For the purposes of this section, dwelling units shall be as defined in Article 3, but also include rooming units that people rent in or sleep in within lodging houses, dormitories, shelters, and sheltered care group homes.
- B. Except as otherwise provided in this section, the housing preservation and replacement ordinance shall also apply to proposals that result in the loss of fewer than three dwelling units which were legally registered residential use as of July 1, 2002 for the purposes of creating surface parking.
- C. For the purposes of this section, loss of dwelling units shall mean the elimination or conversion to nonresidential use of a dwelling unit and dwelling units that remain vacant for three years or more or are lost due to demolition unless the vacancy or

demolition results from accidents outside of the owner's control, fire, natural disasters, or acts of war.

- D. Determination of number of the dwelling units within a structure or structures and the number of units lost will be based on the records of the Building Authority indicating the legal, registered use of the property since July 1, 2002 through the time of application. The actual use of the property for purposes of applicability of this section may be rebutted by the owner by proof of documentary evidence including but not limited to photographs, letters, and sworn affidavits. The Planning Authority may conduct its own investigation of the actual use and shall determine the applicability of this section based on the totality of the evidence.

18.1.3 Exemptions

This section does not apply to:

- A. Consolidation, elimination, or reconfiguration of one or more dwelling units within an existing structure, as long as all the resulting units remain as dwelling units after such consolidation, elimination, or reconfiguration, except as provided by (E) below. Conversion of a dwelling unit to a hotel or motel room shall not qualify for the exemption provided by the paragraph.
- B. Proposals that result in a number of units equal to or greater than the number of units lost as determined by the Planning Authority.
- C. Legally nonconforming dwelling units existing in zones which no longer permit residential uses.
- D. Property which has been ordered demolished by the City, pursuant to 17 M.R.S. § 2851, et seq., as amended, except where it is determined by the Building Authority that the deterioration was caused by neglect or lack of maintenance.



- E. Paragraph (A) above notwithstanding, the conversion to a nonresidential use of any dwelling units located on the ground floor of a building within a mixed-use zone.

18.1.4 Planning Authority approval required

Notwithstanding any other provision of this section, a proposal to demolish or to convert three or more dwelling units to a nonresidential use in a zone where such use is otherwise permitted must first obtain approval from the Planning Authority. In addition to any other requirements of the Land Use Code, the applicant must submit a statement certifying the number of dwelling units to be demolished or converted to nonresidential use, as well as a description of the characteristics of each of those units.

18.1.5 Tenant notification requirements

Prior to elimination as a result of demolition or conversion to nonresidential use, the owner shall:

- A. Provide the Planning Authority a list containing the name of each tenant currently residing in the dwelling units to be demolished or converted to nonresidential use, as well as verification of compliance with tenant notice requirements of this subsection.
- B. Deliver to each tenant who occupies such a dwelling unit a written notice to vacate the unit. The notice shall either be sent by certified mail, return receipt requested, or served in-hand. The notice will grant the tenant not less than 90 days from the date of receipt of the notice to vacate the unit.
- C. File proof of service of the notice with the Planning Authority.

18.1.6 Housing replacement requirements

- A. The Planning Authority shall require, as a condition of approval, that an owner shall replace any

dwelling units that are demolished or converted to nonresidential use.

- B. This requirement may be satisfied in any one of the following ways, which may be used in combination:
 1. *Construction of units.* The construction of housing units within a new structure or a new addition either on site or off-site.
 2. *Residential conversion.* The conversion of a nonresidential building to residential use.

18.1.7 Replacement unit requirement

In addition to the foregoing, all replacement units built pursuant to Subsection 18.1.6.B above shall:

- A. Be located within the same United States census block group as the parcel from which the dwelling units are being removed or within 1,500 feet of the dwelling units being removed.
- B. Not previously have been on the market as of the date of application.
- C. Be situated within a development which has not been a candidate for site plan approval as of the date of the application.
- D. Be comparable in size to the units replaced. For the purpose of this section, "comparable in size" means that the aggregate size of the replacement units will be no less than 80% of the size of the aggregate of the original units to be replaced.

18.1.8 Contribution to the Jill C. Dusen Housing Trust Fund

- A. The applicant may meet the requirements of this housing replacement ordinance by depositing \$50,000 for each dwelling unit into the City's Jill C. Dusen Housing Trust Fund.
- B. Beginning on January 1, 2004 and annually thereafter, the amount of the contribution shall be



adjusted by multiplying this amount originally deposited for each unit by a fraction, the denominator of which shall be the "Consumer Price Index for Urban Wage Earners and Clerical Workers ("CPI-W")," U.S. City Average, "All Items Index," as published by the United States Bureau of Labor Statistics ("the index") for January 1, 2003 year, and the numerator of which shall be the index for the same month in each subsequent year. In the event that the index is not then in existence, the parties shall use such equivalent price index as is published by any successor governmental agency then in existence, or, if none, then by such nongovernmental agency as may then be publishing an equivalent price index, in lieu of and adjusted to the index. If the index shall cease to use 1982-84 equals 100 as the basis of calculation, or if a substantial change is made in the terms or number of items contained in the index, the base index shall be adjusted to conform to such change, using such computation thereof, if available, as shall be employed by the United States Department of Labor in computing same. Notwithstanding anything herein to the contrary, contributions made after January 1, 2004 shall not be less than the amount originally required to be deposited for each rooming or dwelling unit.

18.1.9 Performance guarantee

Owners or affiliates must post a performance guarantee in the form of a letter of credit, or other security acceptable to the City attorney, in the amount equivalent to the amount the applicant would have been required to contribute to the City's [Jill C. Duson](#) Housing Trust Fund if the applicant had chosen that option pursuant to Subsection 18.1.8. Such a performance guarantee shall be valid for no more than three years, after which the full

amount due shall be provided to the City's [Jill C. Duson](#) Housing Trust Fund if replacement units satisfying the conditions of this housing replacement ordinance do not have certificates of occupancy.

18.1.10 Partial waiver of replacement requirements

- A.** Any owner who has applied for site plan review for elimination or conversion to nonresidential use of dwelling units may apply to the Zoning Board of Appeals for a partial waiver from the housing replacement requirements of this section. Such waiver may be a downward adjustment of up to 50% of the owner's housing replacement obligation if the owner establishes to the board's satisfaction that:
1. The proposed development is consistent with the Comprehensive Plan.
 2. The proposed development provides significant value and benefit to the immediate and surrounding neighborhood, including, but not limited to, community enhancement, social benefits or job creation.
 3. The applicant demonstrates with objective evidence that the imposition of the requirements of this section would impose such an economic burden upon the project relative to its scope that it renders the project impossible to develop.
 4. The requested relief does not constitute a grant of a special privilege inconsistent with the limitations upon similar properties.
- B.** The Zoning Board of Appeals must make positive findings on each of the four criteria above in order for any such adjustment to be valid. An applicant aggrieved of a decision of the Zoning Board of Appeals may appeal a decision under this subsection pursuant to the provisions of Article 2.

18.1.11 Effect of other City ordinances



- A.** Nothing in this section shall permit the demolition or conversion to nonresidential use of dwelling units in residential property protected by Article 17, except as permitted by that ordinance.
- B.** A conditional zone may not be used to circumvent the application of this section. The terms of this section shall apply to any conditional zone which involves dwelling units affected by this section. Notwithstanding the foregoing, nothing herein shall be deemed to prevent the City and the applicant from agreeing to terms which exceed those imposed by this section by means of a conditional zone.

18.1.12 Appeals

Any applicant aggrieved by a decision of the Planning Authority under this section may appeal to the Zoning Board of Appeals within 30 days of that decision.

18.2 AFFORDABLE HOUSING

18.2.1 Purpose

It is in the public interest to promote an adequate supply of housing that is affordable to a range of households at different income levels. The purpose of this section therefore is to offer incentives to developers to include units of affordable and workforce 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. The City believes that this section will 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,

and by doing so promote the health, safety, and welfare of its citizens.

TABLE 18-A: AFFORDABLE HOUSING FEE REDUCTIONS

% of New Units That are Low-Income or Workforce	Development Fee Discount	Cost of Work (Building Permit) Fees
5% up to but not including 10%	5% reduction	\$10.50 per \$1,000
10% up to but not including 15%	10% reduction	\$9.90 per \$1,000
15% up to but not including 20%	15% reduction	\$9.35 per \$1,000
20% up to but not including 25%	20% reduction	\$8.80 per \$1,000
25% or more	25% reduction	\$8.25 per \$1,000

18.2.2 Reduction of fees

- A.** Notwithstanding any other provision of this Land Use Code or Chapter 6 to the contrary, development fees shall be reduced by the City for an eligible project in the manner described in Table 18-A.
- B.** Development fees shall include:
1. Site plan review and inspection fees.
 2. Subdivision review and inspection fees.
 3. Impact fees.
 4. Administrative fees.
 5. Construction and permit fees as described in Chapter 6 of the City of Portland Code of Ordinances.
- Development fees do not include any fees charged for review conducted by any party other than the City.
- C.** Eligible project shall mean a development project:



1. That is permissible under the provisions of this Land Use Code in the zone in which it is proposed.
 2. That will be a single-family or multi-family dwelling, or subdivision consisting of a group of dwellings, and will not be located in an R-1 or R-2 zone.
 3. That creates new dwelling units, among which is at least one low-income or workforce housing unit for rent or sale, through new construction, substantial rehabilitation of existing structures, adaptive reuse or conversion of a nonresidential use to residential use, or any combination of these elements. Affordable housing units for sale or rent may not differ in exterior design from other units within an eligible project.
 4. Projects shall not be considered “eligible projects” solely because they are subject to Subsection 18.2.3.
- D.** The Planning Authority shall perform its review of an eligible project in as expedited a manner as is practical, without impairing the scope or thoroughness of the review. The Planning Authority may adopt administrative procedures to prioritize review of eligible projects and facilitate this expedited review.
- E.** The Planning Board shall make its best efforts to give priority in scheduling workshops and public hearings related to any plans or applications required for an eligible project that are within the Planning Board’s jurisdiction, without impairing the scope or thoroughness of its review. At the conclusion of these public meetings, the Planning Board shall promptly issue a decision on all such plans and applications before it for consideration.
- A. Purpose.** Based on the City’s Comprehensive Plan and the City’s 2015 housing study, it is in the public interest to promote an adequate supply of housing that is affordable to a range of households at different income levels. The purpose of this subsection is to ensure that housing developments over a certain size provide a portion of workforce housing units and, by doing so, promote the health, safety, and welfare of Portland citizens.
- B. Applicability.** This subsection shall apply to development projects that create ten or more net new dwelling units for rent or for sale through new construction, substantial rehabilitation of existing structures, adaptive reuse or conversion of a nonresidential use to residential use, or any combination of these elements, with the exception that projects using public financing requiring affordability restrictions, as defined by tax increment financing, U.S. Department of Housing and Urban Development funds such as HOME or CDBG, other federal, state, or local housing program, or the Low-income Housing Tax Credit program, shall be considered exempt.
- C. Standards.** Development projects subject to this subsection shall be subject to the following requirements:
1. Notwithstanding any language to the contrary in this Land Use Code, all developments of ten units or more are conditional uses subject to Planning Board review on the condition that they comply with the requirements of this subsection, unless they are within the India Street Form-Based Code Zone, in which case the review will be conducted administratively or by the Planning Board in accordance with the thresholds of site plan review for the district.

18.2.3 Ensuring workforce housing



2. At least 25% of the units in the project shall meet the definition of workforce housing unit for sale or for rent as defined in Article 3. The project shall have the option of paying a partial fee-in-lieu as per (6) below or providing an additional unit on-site for any fractional value.
3. Projects shall not be segmented or phased to avoid compliance with these provisions. In cases where projects are completed in phases, affordable units shall be provided in proportion to the development of market rate units unless otherwise permitted through regulations.
4. Workforce units must be integrated with the rest of the development, must use a common entrance, and must provide no indications from common areas that these units are workforce housing units.
5. Workforce units need not be the same size as

TABLE 18-B: MINIMUM TERM OF AFFORDABILITY FOR REQUIRED WORKFORCE UNITS

% of Workforce	
Units Provided	Minimum Term of Affordability
25%	30 years
50%	20 years
100%	10 years

other units in the development but the number of bedrooms in such units, either on- or off-site, shall be no less than 10 percent of the total number of bedrooms in the development. For the purposes of calculating the number of bedrooms in a development, every 400 square feet in each market rate unit will count as a bedroom if the Planning Authority determines this method is appropriate in lieu of counting actual bedrooms.

6. As an alternative to providing workforce housing units, projects may pay a fee-in-lieu of some or all of the units. In-lieu fees shall be paid into the **Jill C. Duson** Housing Trust Fund. The fee for affordable units not provided shall be \$150,000 per unit, adjusted annually in the same way as the fee under Subsection 18.1.8.
7. Workforce housing units for sale, if converted to workforce housing units for rent, shall become subject to the income limits and other requirements of such units.
8. If at least 33% of the units in a development are workforce units, the development is eligible for subsidy through an Affordable Housing TIF, subject to City Council approval.
9. The term of affordability for the required 25% workforce units provided shall be defined as shown in Table 18-B.

D. Implementing regulations. Regulations to further specify the details of this subsection shall be developed, including, but not limited to:

1. Specific methodology for income verification.
2. Situations where less than permanent affordability might be considered.
3. Guidelines for meeting the requirement that off-site units be “in the same neighborhood.”

E. Reporting to City Council. In conjunction with the annual report on the **Jill C. Duson** Housing Trust Fund, the Planning Authority shall annually report on developments subject to this subsection, the number of units produced, the amount of fee-in-lieu collected, and the overall effectiveness of this subsection in achieving its stated purpose.

18.2.4 Density and dimensional bonuses and reductions



Notwithstanding any other provision of this Land Use Code to the contrary, in order to encourage low-income and workforce units in designated growth areas, eligible projects as defined under Subsection 18.2.2 may avail themselves of the following options:

A. Density bonuses. The maximum number of units that would otherwise be allowed under this Land

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.

¹ "Base" is the number of units allowed under the zoning without this bonus but with any other bonuses applied. In R-P zones, multifamily is permitted with a "base" no less than 1 unit per 1,500 SF. of land area. If an eligible project is providing both workforce and affordable housing units, the applicant shall have the option of utilizing applicable incentives, but not cumulatively.

² The maximum additional height permitted in the B-1/B-1b zones and the R-P zone shall be 15 feet. In addition, the maximum structure height is 50 feet within 750 feet of the Portland Observatory.

³ Setback reductions are absolute reductions in front, side, and/or rear setback requirements. The maximum setback reductions in the B-1/B-1b and R-P zones shall be 5 ft.

Use Code shall be increased for an eligible project in the manner described in Table 18-C, applicable in the B-1/B-1b, B-2/B-2b/B-2c, B-3/B-3b/B-3c, B-5, R-7, and R-P zones.

B. Planned Residential Unit Developments (PRUDs). In order to promote orderly development of low- and moderate-income development as PRUDs, any project in which more than 50% of the units are low-income or workforce units for rent or for sale may utilize the following dimensional bonuses and changes:

1. Minimum lot area per dwelling unit is reduced by 50%.

2. Maximum number of units and maximum length of buildings do not apply but may be set through site plan review.
3. Minimum building setbacks may be reduced to 10 feet.
4. The PRUD may cross public rights of way provided that the right of way does not count towards minimum lot size nor towards any open space requirements.
5. Minimum recreation open space area is reduced to 200 square feet per dwelling unit of common area designated for recreational purposes by the residents. Minimum contiguous size and setbacks do not apply and shall be set through site plan review.
6. The Planning Board's *Design Manual*, design standards, and guidelines with respect to PRUDs shall apply in full to PRUDs utilizing this subsection.

C. Unit size and term of affordability. In order to be eligible for this subsection, the low-income and workforce housing units must meet Subsections 18.2.3(C)(3), (4), and (5) and be affordable for the longest term permitted under federal, state, and local laws.

D. Required public process. The developer of the project must also commit to a good faith effort to communicate openly with affected properties as their process moves forward. At a minimum, no less than 30 days prior to application for site plan review, any project that wishes to take advantage of this subsection must hold a public meeting noticed to all properties within 500 feet of their site and post a sign on the property in question describing the proposed project, intent to submit an application to the City in 30 days (cite anticipated submission date), and contact information for the developer and the Planning Authority. The Planning



HOUSING

Board may adopt regulations regarding the content and processes for noticing as part of the *Technical Manual*.

- E. Projects under 18.2.3.** Projects that are subject to Subsection 18.2.3 that choose to provide the required workforce housing units on site are eligible for a 25% increase in total permitted units. If an eligible project as defined under Subsection 18.2.2 is also subject to Subsection 18.2.3, the applicant shall have the option of utilizing either this bonus or any bonuses they are eligible for under Subsections 18.2.4(A) and (B) but not both.

18.2.5 Inclusionary zoning for hotel projects

- A. Purpose.** This subsection is based on City analysis, most specifically the analysis documented in the Greater Portland Council of Government study *Proposed Hotel Linkage Fee: Supportable Range* dated August 29, 2018, that finds that new hospitality developments create a need for new affordable housing. This need is the result of the fact that hospitality developments necessarily create a number of jobs that do not pay employees at a rate sufficient to allow those employees to afford market-rate housing in the City of Portland.
- B. Hotel projects.** For the purposes of this subsection, hotel projects shall include any hotel as defined in Article 3 consisting of 10 or more guest rooms for rent. Any expansion of an existing hotel by 10 or more rooms within any five-year period will also be considered a hotel project.
- C. Hotel projects conditional uses.** Notwithstanding anything to the contrary in this Land Use Code, all hotel projects are conditional uses subject to Planning Board review on the condition that they comply with the requirements of this Subsection 18.2.5.

- D. Low-income housing minimum.** All hotel projects shall provide one unit of low-income housing for rent in the City of Portland for every 28 rooms in the hotel project, which shall meet the standards outlined in Subsections 18.2.3(C)(3), (4), and (5) and in the implementing regulations governing low-income units. This amount shall be rounded up to the nearest increment of 28 rooms. These units shall be deed restricted for the longest period permitted by law, shall not be used for short-term rentals of less than 30 days, and must be provided with distinct entrances from the street to delineate them from the hotel itself.
- E. Fee-in-lieu alternative.** As an alternative to providing low-income housing units under Subsection 18.2.5(D) above, a hotel project may pay a fee-in-lieu of \$3,806 per hotel guest room. This amount shall be paid into the City's [Jill C. Duson](#) Housing Trust Fund and used for the purposes set forth in the ordinance and regulations applicable to that trust.
- F. Annual adjustments.** The amounts in Subsection 18.2.5(E) above shall be adjusted annually in the same way as the fee under Section 18.1.8.
- G. Regulations.** The Planning Board may promulgate implementing regulations based on this subsection.

18.3 JILL C. DUSON HOUSING TRUST FUND 18.3.1 Purpose

The purpose of enacting this section is:

- A.** To establish a City of Portland Housing Trust Fund for the promotion, retention, and creation of an adequate supply of housing, particularly affordable housing, for all economic groups and to limit the net loss of housing units in the city.
- B.** To serve as a vehicle for addressing very low, low, and median income housing needs through a combination of funds as set out in this article.

Commented [CG1]: Deliberately left it off here



18.3.2 Establishment of the Jill C. Duson Housing Trust Fund

The City Council shall establish a special revenue account under the name “City of Portland Jill C. Duson Housing Trust Fund.” Deposits into the fund shall include:

- A. Contributions from the City’s housing replacement ordinance under Subsection 18.1.8.
- B. In-lieu fees under Subsections 18.2.3 and 18.2.5.
- C. Funds appropriated to be deposited into the fund by vote of the City Council.
- D. Voluntary contributions of money or other liquid assets to the fund.
- E. Any federal, state, or private grant or loan funds provided to the fund.
- F. Interest from fund deposits and investments.
- G. Repayments of loans made from the fund.

18.3.3 Management of the trust fund

The City Manager, or his or her designee, shall serve as the manager of the Jill C. Duson Housing Trust Fund. The responsibilities of the manager, subject to the orders of the City Council, shall include:

- A. Maintaining the financial and other records of the Jill C. Duson Housing Trust Fund.
- B. Disbursing and collecting Jill C. Duson Housing Trust Fund monies in accordance with the Jill C. Duson Housing Trust Fund annual plan.
- C. Monitoring the use of monies distributed to successful applicants for Jill C. Duson Housing Trust Fund support to assure on-going compliance with the purposes of the fund and the conditions under which these monies were granted or loaned.

18.3.4 Jill C. Duson Housing Trust Fund annual plan

- A. Each fiscal year, the City Council shall adopt a Jill C. Duson Housing Trust Fund annual plan. The City Manager shall submit to the City Council a

recommended Jill C. Duson Housing Trust Fund annual plan, utilizing the revenues of the Jill C. Duson Housing Trust Fund as well as any other funds the manager may propose as appropriate. The housing committee of the City Council or such other committee as the council shall designate shall conduct public hearings on the recommended plan and refer the matter to the council for action.

- B. The Jill C. Duson Housing Trust Fund annual plan shall include:
 - 1. A description of all programs to be funded in part or in full by the Jill C. Duson Housing Trust Fund.
 - 2. A description of how funds from the Jill C. Duson Housing Trust Fund will be distributed among very low-income, low-income and moderate-income households.
 - 3. The amount of funds budgeted for programs funded in part or in full from the Jill C. Duson Housing Trust Fund.
- C. Priority for the expenditure of funds collected pursuant to Section 18.1 shall be given to the creation of new housing stock, through either new construction or conversion of nonresidential buildings to residential use.

18.3.5 Distribution and use of the Jill C. Duson Housing Trust Fund’s assets

- A. All distribution of principal, interest, or other assets of the Jill C. Duson Housing Trust Fund shall be made in furtherance of the public purposes set out in Section 18.1.
- B. During each year, the Jill C. Duson Housing Trust Fund shall disburse as grants or loans so much of the Jill C. Duson Housing Trust Fund’s assets as the City Council in its discretion has approved in the Jill C. Duson Housing Trust Fund annual plan.

Commented [CG2]: Not sure if the account name changes with the text change



- C. Funds shall not be used for City administrative expenses.
- D. Funds shall not be used for property operating expenses or supporting services.
- E. No grants or loans shall be awarded by the Jill C. Duson Housing Trust Fund to corporations, partnerships, or individuals who are delinquent at the time of application in the payment of property taxes or other fees to the City of Portland, who have been convicted of arson, who have been convicted of discrimination in the sale or lease of housing under the fair housing laws of the State of Maine, or who have pending violations of current City electrical, plumbing, building, or housing codes or zoning ordinances.

18.3.6 Term of affordability

- A. Whenever funds from the Jill C. Duson Housing Trust Fund are used for the acquisition, construction, or substantial rehabilitation of an affordable rental or cooperative unit, the City of Portland shall impose enforceable requirements on the owner of the housing unit that the unit remain affordable for the remaining life of the housing unit, assuming good faith efforts by the owner to maintain the housing unit and rehabilitate it as necessary. The remaining life of the housing unit shall be presumed to be a minimum of 30 years.
- B. Whenever funds from the Jill C. Duson Housing Trust Fund are used for the acquisition, construction, or substantial rehabilitation of ownership housing, the City of Portland shall impose enforceable resale restrictions on the owner to keep the housing unit affordable for the longest feasible time, while maintaining an equitable balance between the interests of the owner and the interests of the City of Portland.

- C. The affordability restriction requirements described in this subsection shall run with the land and the City of Portland shall develop appropriate procedures and documentation to enforce these requirements and shall record such documentation in the Cumberland County Registry of Deeds.

18.4 CONDOMINIUM CONVERSION

18.4.1 Purpose

The purpose of this section is to regulate the conversion of rental housing to condominiums, to minimize the potential adverse impacts of such conversion on tenants, to ensure that such converted housing is safe and decent, and to maintain a reasonable balance of housing alternatives within the city for persons of all incomes.

18.4.2 Applicability

This section shall apply to the conversion of any rental unit to a condominium unit. For the purposes of this section, developer shall mean any person or other legal entity, but not including an established lending institution unless it is an active participant in a common promotional scheme, who, whether acting as principal or agent, records a declaration of condominium that includes real estate, any portion of which was previously a rental unit.

18.4.3 Protection of tenants

- A. **Notice of intent to convert.** A developer shall give to each tenant, meaning any occupant in lawful possession of a rental unit, whether by lease, sublease, or otherwise, written notice of intent to convert at least one 120 days before the tenant is required by the developer to vacate. If a tenant has been in possession of any unit within the same building for more than four consecutive years, the notice period shall be increased by 30 additional days for each additional year, or fraction thereof, to



a maximum of 240 additional days. The notice shall set forth specifically the rights of tenants under (A), (B), and (C) of this subsection and Subsection 18.4.4, and shall contain the following statement:

If you do not buy your apartment, the developer of this project is required by law to assist you in finding another place to live and in determining your eligibility for relocation payments. If you have questions about your rights under the law, or complaints about the way you have been treated by the developer, you may contact the Department of Permitting & Inspections, City of Portland, 389 Congress Street, Portland, Maine 04101.

- B.** If the notice specifies a date by which the tenant is required to vacate, the notice may also serve as a notice of termination under the applicable law of forcible entry and detainer, if it meets the requirements thereof. The notice shall be hand delivered to the tenant or mailed, by certified mail, return receipt requested, postage prepaid, to the tenant at the address of the unit or such other address as the tenant may provide. The notice shall be effective when actually received. No tenant may be required by a developer to vacate without having been given notice as required herein, except for the reasons specified in the applicable law of forcible entry and detainer, and in accordance with the procedures thereof. The terms of a tenancy, including rent, may not be altered during the notice period, except as expressly provided in a preexisting written lease. If, within 120 days after a tenant is required by a developer to vacate, the developer records a declaration of condominium without having given notice as required herein, the developer shall be presumed to have converted in violation of this article.

- C. Option to purchase.** For a 60-day period following the giving of notice as required in Subsection 18.4.3(A), the developer shall grant to the tenant an exclusive and irrevocable option to purchase the unit of which the tenant is then possessed, which option may not be assigned. If the tenant does not purchase or contract to purchase the unit during the 60-day period, the developer may not convey or offer to convey the unit to any other person during the following 180 days at a price or on terms more favorable than the price or terms previously offered to the tenant, unless the more favorable price or terms are first offered exclusively and irrevocably to the tenant for an additional 60-day period. This subsection shall not apply to any rental unit that, when converted, will be restricted exclusively to nonresidential use. If, within two years after a developer records a declaration of condominium, the use of any such unit is changed such that but for the preceding sentence, this subsection would have applied, the developer shall be presumed to have converted in violation of this article.

18.4.4 Relocation payments

If the tenant does not purchase the unit, the developer shall, before the tenant is required by the developer to vacate, make a cash payment to the tenant in an amount equal to the amount of rent paid by the tenant for the immediately preceding two months, provided that this requirement shall not apply to any tenant whose gross income exceeds 80% of the median income of the Portland SMSA, adjusted for family size, as determined by the U.S. Department of Housing and Urban Development at the time notice is given as required in Subsection 18.4.3. Additionally, the developer shall, upon demand, provide assistance to the tenant in the form of referrals to other reasonable accommodations



and in determining the tenant's eligibility for relocation payments as provided herein.

18.4.5 Conversion permit

Before conveying or offering to convey a converted unit, the developer shall obtain a conversion permit from the Building Authority. The permit shall issue only upon receipt of a completed application therefore in a form to be devised for that purpose, payment of a fee as established by the City Council, and a finding, upon inspection, that each unit, together with any common areas and facilities appurtenant thereto, is in full compliance with all applicable provisions of Chapter 6, Articles II, III, and V and Chapter 10, Article II of the City of Portland Code of Ordinances, and the Life Safety Code as adopted by the state. The developer shall post a copy of the permit in a conspicuous place in each unit and shall make copies available to prospective purchasers upon request.

18.4.6 Variation by agreement

No provision of or right conferred by this Section 18.4 may be waived by a tenant, by agreement or otherwise, and any such waiver shall be void. Any attempt to require, encourage, or induce a tenant to waive any provision hereof, or right conferred hereby, shall be a violation of this article. Nothing herein shall be construed to void any term of a lease which offers greater rights than those conferred hereby.

18.5 RELOCATION OF DISPLACED TENANTS

18.5.1 Purpose

The purpose of this section is to encourage the retention of a diverse housing supply throughout the downtown and in areas readily accessible to the downtown, to ensure that persons displaced as the result of redevelopment of residential units to nonresidential uses within the B-3 Downtown Business zone are treated fairly

and consistently, and to ensure that persons so displaced will be relocated at the reasonable expense of the developer to comparable housing at a location providing comparable access to services and amenities.

18.5.2 Notice and eligibility for relocation assistance

When a proposed development will result in the displacement of residents of an existing structure, the developer of the property shall give all tenants written notice as set forth below and shall provide relocation assistance as set forth below for any tenant whose gross income is 80% or less of the median income of the Portland SMSA, adjusted for family size, as determined by the U.S. Department of Housing and Urban Development at the time the developer gives the tenant written notice of intent to cause removal of the residential unit. Such written notice shall be given to the tenant at least 120 days before the tenant shall be required to vacate the premises and shall contain the following statement:

The developer of this project is required by law to assist you in finding another place to live and in determining your eligibility for relocation payments. If you have questions about your rights under the law, or complaints about the way you have been treated by the developer, you may contact the Department of Planning and Urban Development, City of Portland, 389 Congress Street, Portland, Maine 04101.

18.5.3 Relocation assistance for all tenants

The developer shall provide, upon demand, assistance to all tenants who will be displaced by the development in the form of referrals to other reasonable accommodations and in determining the tenants' eligibility for relocation payments as provided herein. The developer shall make relocation payments to eligible



tenants in accordance with the schedule adopted by the City Council in Subsection 18.5.4.

18.5.4 Schedule of relocation payments for eligible tenants

The developer shall, before the tenant is required by the developer to vacate, make a cash payment to the tenant in an amount equal to the amount of rent paid by the tenant for the immediately preceding two months.



Kevin Kraft <kkraft@portlandmaine.gov>

Public Comment: Jill Duson and the Politicization of Our City Code

George Rheault <george.rheault@gmail.com>

Fri, Feb 19, 2021 at 11:13 AM

To: planningboard@portlandmaine.gov, jmy <jmy@portlandmaine.gov>, Christine Grimando <cdg@portlandmaine.gov>, Kevin Kraft <kkraft@portlandmaine.gov>, James Rather <jrather@portlandmaine.gov>

I urge the Planning Board to reject the proposed "naming" of a defined term in our city's code of ordinances (specifically the land use code) in honor of a politician who left office a mere few months ago.

The reasons are many but break down into 3 main arguments:

1) Our city politics are roiled enough without one side using our city's code as a flashing billboard for unnecessary hagiography. Where will this stop if the Planning Board permits this inappropriate use of the legislative space? Will we soon see a "Kim Cook Accessory Dwelling Unit" or a "Belinda Ray Emergency Shelter Conditional Use" down the road? No better example of this kind of partisanship exists than the fact that two current Planning Board members contributed to Councilor Duson's last campaign (one even maxed out the contribution limit) as well as a business partner (retired?) of another Planning Board member. See attachment for details. Why should Portland's residents interpret this effort as anything other than naked political action especially when campaign contributors and those who owe their places to the same political machine that appointed them are mindlessly going along with the charade? What are we really celebrating here?

2) Enshrinement of any person with a permanent honor (especially in our legislative code) should only be done when a person is either dead or it is clear they have no further intent to actively participate in our city's politics. Jill Duson is very much still alive and could very well serve again in office through election or appointment. Her statements about "retirement" are not binding and it is unfair to the rest of the City that may oppose her on policy grounds to have this proposed honorific embedded in our land use code burden and influence future debates she may be a participant in, especially with the passage of time.

3) Jill Duson's record on housing issues is actually poor (remember the Noyes Street fire in 2014 that killed 6 young Portlanders including a person of color which was a direct result of the regulatory negligence and forbearance that Duson endorsed?). Indeed based on the November 2020 housing referendum results which Councilor Duson actively campaigned against, it is a real insult to many voters and actual history that Councilor Duson is being held up as some kind of purely objective hero on housing funding when in fact she was deeply controversial and her views very much both reactionary and pro-status quo throughout her tenure.

The fact is Jill Duson stands for a pretty stock character in Portland politics - by which I mean a pro-landlord, pro-incumbent homeowner, pro-housing scarcity booster who will do nothing to disturb the status quo until other politicians (in Jill's case, Ethan Strimling) and events (worsening gentrification and the Trump era) forced her hand. Anyone trying to move into Portland or merely hang on here met an ever escalating wall of expense which Councilor Duson mostly just wrung her hands about rather than aggressively addressing with effective policies that had any chance of ameliorating the problem in any helpful time frame.

Instead of working hard to loosen up Portland's absurd anti-housing zoning policies, Councilor Duson did virtually nothing to expedite the promise of the ReCode effort (now stalled indefinitely and years away from producing much progress). On the actual Housing Trust Fund front, Councilor Duson did nothing to close the many loopholes in the housing replacement ordinance that would have helped fill the Trust Fund sooner and faster (examples - Eastland Hotel skipping out on paying for lost units as well as Donald Sussman using a luxury development at 118 Congress Street as a substitute for affordable units lost in the India Street area). Councilor Duson's legacy is mostly a cautionary tale about window-dressing and political paralysis - not a vigorous leader forcing contested but needed solutions on a wary and anxious polity.

And let's be honest, the Housing Trust fund is not a game-changer in terms of appreciably producing more units. The amount of subsidy given mostly is a bribe to affordable housing developers who then get to plump up their developer and management fees at taxpayer expense rather than tightening their overhead in order to make their projects viable. No surprise Jill Duson and her Council allies received campaign contributions from many of the same developers in this space - which simply highlights the sad nexus of how NIMBY politics has enabled developer interests to distort our housing production in this city by getting special privileges and benefits from cozying up with selected politicians while those same elected officials leave largely untouched the pervasive anti-housing policies deeply embedded in Portland's land-use code that are the primary sources of our long-simmering housing insecurity crisis.

There are many ways for our current City Council to use its power to pump up the memory of a former colleague they wish to honor. For instance, Clifford Robertson's family had to wait about 27 years before his service and legacy were honored with a conference room plaque.

See here:

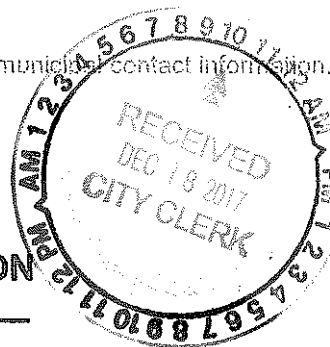
<https://www.pressherald.com/2021/02/15/portland-honors-memory-of-citys-first-black-elected-office-holder/>

Please do the right thing here and firmly and politely decline this effort by requesting that the City Council find some other (hopefully physical) object with which to play their politics.



Duson 2017 Campaign Contributions.pdf

735K



2017 CAMPAIGN FINANCE REPORT — NOVEMBER ELECTION

For Municipal Candidates

Please complete all entries.

Name of Candidate:	Jill C. Duson		☐ Check if any information has changed from previous report
Street Address:	101 Pennell Ave.		
City and Zip Code:	Portland 04103	Telephone Number: (207) 878-1769	
E-mail:	jillduson@gmail.com		
Office Sought:	City Council at Large	District Number (if applicable):	
Name of Treasurer:	Anne M. Haskell		☐ Check if any information has changed from previous report
Mailing Address:	31 Higgins St.		
City and Zip Code:	Portland 04103	Telephone Number: (207) 712-1244	
E-mail:	annehask@maine.rr.com		

TYPE OF REPORT	DUE DATE	DATES OF REPORTING PERIOD
☐ July Semiannual (If required)	July 17, 2017	Beginning of campaign — June 30, 2017
☐ 11-Day Pre-Election	October 27, 2017	July 1, 2017 — October 24, 2017
☒ 42-Day Post-Election	December 19, 2017	October 25, 2017 — December 12, 2017
☐ July Semiannual	July 16, 2018	December 13, 2017 — June 30, 2018
☐ Amendment to:		
☐ Other (specify):		
☐ Check if campaign had no activity for the reporting period (no other pages are required).		

I CERTIFY THAT I HAVE EXAMINED THIS REPORT AND TO THE BEST OF MY KNOWLEDGE IT IS TRUE, CORRECT, AND COMPLETE.

Treasurer Signature

Date

Candidate Signature

Date

03/2017

Candidate's Full Name

**SCHEDULE A
CASH CONTRIBUTIONS**

- Itemize all cash contributions from contributors who have given you more than \$50 in this report period.
- Both cash and in-kind contributions count toward the \$50 threshold.
- Report the occupation and employer for individual contributors who contributed more than \$50 in this report period. If you requested employment information but did not receive it, write "information requested."
- Cash contributions of \$50 or less may be aggregated and reported as a lump sum. Use "Contributors giving \$50 or less" as the contributor type.
- If you transferred surplus funds from a previous campaign to your current campaign, report that amount in the first report for the current election cycle.

Total contributions from the same source (except candidate and candidate's spouse/domestic partner) may NOT exceed \$800 in any election for municipal office.

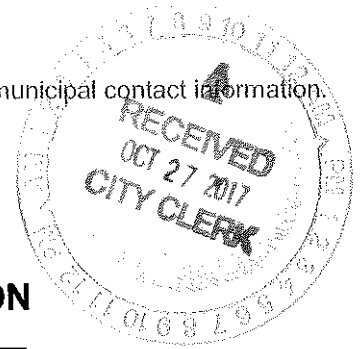
Contributor Types

- | | | | |
|---|---|---|----------------------------------|
| 1 | Candidate and Candidate's Spouse/Domestic Partner | 5 | Political Party Committees |
| 2 | Other Individuals | 6 | Other Candidates and Committees |
| 3 | Commercial Sources (corporations, etc.) | 7 | Contributors giving \$50 or less |
| 4 | Political Action Committees | 8 | Transfer from previous campaign |

Date Received	Contributor's Name, Address, Zip	Occupation	Employer	Type	Amount
	see attached page				
Total Cash Contributions (this page only) → (combined totals from all Schedule A pages must be listed on Schedule F, Line 1)					

DATE RECEIVED	CONTRIBUTOR'S NAME ADDRESS, ZIP	OCCUPATION	EMPLOYER	TYPE	AMOUNT
10-26-17	Thomas Moulton 10 Dana Street Portland ME 04101	Partner	The Dunham Group	2	800.00
10-26-17	Steven Dimillo 113 Pleasant Ave. Portland ME 04103	Owner	Dimillo's Restaurant	2	800.00
10-26-17	Nick Mavodones 79 Chenery St. Portland, ME 04103	Operations Manager	Casco Bay Lines	2	200.00
10/26/17	Proprietors of Union Wharf 36 Union Wharf Portland, ME 04112	Business		3	250.00
10/26/17	Eco Hospitality Consultants Inc 55 Lisbon St., Ste 2400 Lewiston, ME 040240	Business		3	300.00
10/26/17	Greg Groves 45 Eastern Prom Portland, ME 04101	Customer Service	Martin's Point Healthcare	2	100.00
10/27/17	Atlantic Bayside Trust LLC 50 Portland Pier Ste. 400 Portland, ME 04101	Business		3	800.00
10/27/17	Catherine Francoeur 33 Autumn Lane Portland, ME 04103	Training Consultant	UNUM	2	100.00
10/27/17	John Watson PO Box 807 York Harbor, ME 03911	retired		2	800.00
10/30/17	Commerical Street Pilots Inc. 40 Commerical St. #700 Portland, ME 04101	Business		3	500.00
10/30/17	Kelly J. Hasson 79 Chenery St. Portland, ME 04103	retired		2	100.00
11/1/17	Pauline Kane 279 Spurwink Ave. Cape Elizabeth, ME 04107	Realtor	Self Employed	2	250.00
10--25 to 12/12/17	Contributions \$50 or less			2	200.00
	TOTAL				5,200.00

For municipal contact information



2017 CAMPAIGN FINANCE REPORT — NOVEMBER ELECTION

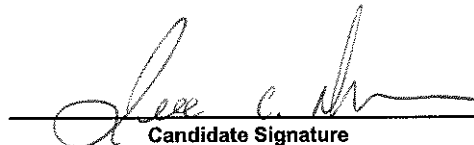
For Municipal Candidates

Please complete all entries.

Name of Candidate:	Jill C. Duson		☐ Check if any information has changed from previous report
Street Address:	101 Pennell Avwe		
City and Zip Code:	Portland 04103	Telephone Number:	(207) 878-0769
E-mail:	jduson@gmail.com		
Office Sought:	City Council at Large	District Number (if applicable):	
Name of Treasurer:	Anne M. Haskell		☐ Check if any information has changed from previous report
Mailing Address:	31 Higgins St.		
City and Zip Code:	Portland 04103	Telephone Number:	(207) 712-1244
E-mail:	annehask@maine.rr.com		

TYPE OF REPORT	DUE DATE	DATES OF REPORTING PERIOD
☐ July Semiannual (If required)	July 17, 2017	Beginning of campaign — June 30, 2017
☒ 11-Day Pre-Election	October 27, 2017	July 1, 2017 — October 24, 2017
☐ 42-Day Post-Election	December 19, 2017	October 25, 2017 — December 12, 2017
☐ July Semiannual	July 16, 2018	December 13, 2017 — June 30, 2018
☐ Amendment to:		
☐ Other (specify):		
☐ Check if campaign had no activity for the reporting period (no other pages are required).		

I CERTIFY THAT I HAVE EXAMINED THIS REPORT AND TO THE BEST OF MY KNOWLEDGE IT IS TRUE, CORRECT, AND COMPLETE.

Treasurer Signature

Date

Candidate Signature

Date

03/2017

Candidate's Full Name

**SCHEDULE A
CASH CONTRIBUTIONS**

- Itemize all cash contributions from contributors who have given you more than \$50 in this report period.
- Both cash and in-kind contributions count toward the \$50 threshold.
- Report the occupation and employer for individual contributors who contributed more than \$50 in this report period. If you requested employment information but did not receive it, write "information requested."
- Cash contributions of \$50 or less may be aggregated and reported as a lump sum. Use "Contributors giving \$50 or less" as the contributor type.
- If you transferred surplus funds from a previous campaign to your current campaign, report that amount in the first report for the current election cycle.

Total contributions from the same source (except candidate and candidate's spouse/domestic partner) may NOT exceed \$800 in any election for municipal office.

Contributor Types

- | | | | |
|---|---|---|----------------------------------|
| 1 | Candidate and Candidate's Spouse/Domestic Partner | 5 | Political Party Committees |
| 2 | Other Individuals | 6 | Other Candidates and Committees |
| 3 | Commercial Sources (corporations, etc.) | 7 | Contributors giving \$50 or less |
| 4 | Political Action Committees | 8 | Transfer from previous campaign |

Date Received	Contributor's Name, Address, Zip	Occupation	Employer	Type	Amount
	See attached 4 pages				
Total Cash Contributions (this page only) → (combined totals from all Schedule A pages must be listed on Schedule F, Line 1)					

DATE RECEIVED	CONTRIBUTOR'S NAME ADDRESS, ZIP	OCCUPATION	EMPLOYER	TYPE	AMOUNT
7/5/17	James Cohen 62 Deepwood Dr. Portland ME 04103	Attorney	Verrill Dana	2	200.00
7/7/17	Debbie Fisher 9 High Bluff Rd. Cape Elizabeth ME 04106	Real Estate Developer	self	2	100.00
7/18/17	Jeb Troubh 35 Paddock Way Falmouth ME 04105	Real Estate	self	2	250.00
7/28/17	Anne Pringle 44 Neal St. Portland ME 04101	retired		2	100.00
8/5/17	Jay Norris 172 Eastern Prom Portland ME 04101	Professional Consult- ant/Entrepreneur	Self	2	400.00
8/5/17	Craig Young 1 Canal Plaza Portland ME 04101	Real Estate	CBRE/Boulos C.	2	100.00
8/9/17	Marty Pottenger 121 High St. So. Portland ME 04106	Artist	Self	2	100.00
8/9/17	Carol Wishcamper 35 Little River Lane Freeport ME 04032	retired		2	75.00
8/21/17	Liz Cotter Schlax 206 Sligo Rd. Yarmouth ME 04096	Executive Director	UWGP	2	100.00
8/22/17	George Earley 29 William St. Portland ME 04103	Retired		2	100.00
8/25/17	Sean Dundon 5 Stratton Pl. Portland ME 04103	Environmental Engin Engineer	Blackstone Consulting LLC	2	500.00
8/25/17	James Erwin 254 Commercial St. Yarmouth ME 04096	Attorney	Pierce Atwood	2	100.00
8/26/17	Mary Costigan 86 Chenery St. Portland ME 04103	Attorney	Bernstein Shur	2	100.00
8/29/17	James Brady 118 Congress St. 202 Portland ME 04102	Management	Brady Enterprises	2	400.00
8/30/17	David Brenerman 32 Overset Rd. Portland ME 04103	retired		2	352.50
8/30/17	David Brenerman 32 Overset Rd. Portland ME 04103	retired		2	200.00
8/30/17	Briton Vitalius 48 South St. Falmouth, ME 04096	Owner/Broker	Vitalius Real Estate Group	2	200.00
8/30/17	Leslie Clark 12 Texas St. Portland ME 04103	retired		2	100.00
8/31/17	Ty Hobbs 340 Eastern Prom #226 Portland ME 04101	Associate Broker	The Boulos Company	2	100.00
9/14/17	Karen Sudbay 108 Monument St. Portland ME 04101	Congressional Staff	US House of Representatives	2	100.00
9/18/17	Sharon Sudbay 108 Monumant St. Portland ME 04101	consultant	self	2	100.00
				Page 1	3,777.50

9/19/17	Ann Marie Swenson	2 Goldenwood Drive Scarborough ME 04032	Commercial Lending Manager	People's United Bank	2	100.00
9/21/17	Danielle Conway	21 Northledge Terrace Falmouth ME 04105	Dean	University of Maine School of Law	2	400.00
9/21/17	Drummond Woodsum	84 Marginal way Portland ME 04101	company		3	250.00
9/25/17	Lawrence Wold	40 Lambert St. Freeport ME 04132	Banker	TD Bank	2	200.00
9/25/17	Angela Helton	141 Brigham St. So. Portland ME 04106	Business Owner	Northeast Media Associates	2	100.00
9/26/17	James Boyle	25 Dundee Rd. Gorham ME 04038	retired		2	800.00
9/28/17	Thomas Watson	94 Pine St. Portland ME 04102	Self	Watson & son	2	300.00
9/28/17	Edward Suslovic	46 Kenwood St. Portland ME 04103	program staff	University of Southern Maine	2	100.00
9/28/17	Jennifer Southard	46 Kenwood St. Portland ME 04103	nonprofit director	Maine Communit Foundation	2	100.00
9/28/17	Felicia Knight	11 Sylvan Rd. Scarborough ME 04032	President	The KnightCanney Group	2	100.00
9/28/17	Quincy Hentzel	7 Old Farm Lane Cape Elizabeth 04107	Executive	Portland Regional Chamber	2	100.00
9/29/17	Thomas Watson	94 Pine St. Portland ME 04101	Self	Watson & son	2	500.00
10/6/17	Tom Landry	44 Coyle st. Portland, ME 04102	Owner, broker	Benchmark Real Estate		250.00
10/6/17	Joseph Gray	263 State St. Portland ME 04102	retired		2	250.00
10/6/17	James Cloutier	465 Congress St. Portland ME 04101	Attorney	Cloutier, Conley, Duffett PA	2	100.00
10/10/17	Lot 5 Liberty LLC	PO Box 910 Westbrook ME 04092	LLC		3	750.00
10/10/17	Marty Sittig	2108 Ellicott Dr. Tallahassee, FL 32308	owner	Cottage Living	2	250.00
10/10/17	Aquarius Property M	780 Broadway So. Portland ME 04106	company		2	100.00
10/10/17	Harold Pacios	882 Shore Rd. Cape Elizabeth 04107	attorney	Preti Flaherty	2	100.00
10/10/17	Sean Kerwin	18 Parris St. Portland ME 04102	Builder	Self	2	100.00
10/10/17	Mark Ethan Boxer Macomber	34 Glenwood Ave Portland 04103	community development	Anew Development LLC	2	100.00
10/10/17	Edward Lewis Payne	139 Ashmont St. Portland ME 04103	self	Housing Provider	2	100.00
10/11/17	Bryan Dench	78 Hersey St. Portland ME 04103	lawyer	Skelton Taintor and Abbott	2	100.00
					Page 2	5,250.00

10/16/17	Portland Public Mark	PO Box 535 Buxton, ME 04093	LLC		3	800.00
10/16/17	Maine Wharf LLC	PO Box 535 Buxton, ME 04093	LLC		3	800.00
10/16/17	Lionel Plante Associates	98 Island Ave. Portland ME 04102	LLC		3	800.00
10/16/17	J. David Pirone	1 Partridge Circle Portland ME 04103	retired		2	500.00
10/16/17	Stephen Goodrick	760 Harbour Isles Ct. No. Palm Beach FL 33410	requested		2	400.00
10/16/17	Sidney St. F. Thaxter	40 Summer st. Portland ME 04101	attorney	Curtis, Thaxter, et	2	250.00
10/16/17	Daniel Haley	140 Eastern Promenade Portland ME 04102	requested		2	250.00
10/16/17	David Pierson	6 Partridge Circle Portland ME 04103	attorney	Eaton Peabody	2	200.00
10/17/17	Kevin Costello	59 Washington St. Marblehead, MA 01945	Real estate	CPB2	2	250.00
10/17/17	John Lufkin	39 Shannon Lane Saco ME 04072	Business Banker	Key Bank	2	100.00
10/17/17	Benjamin Dudley	9 Ponce St. Portland ME 04102	consultant	self	2	100.00
10/17/17	Juliet Browne	142 Pine st. Portland ME 04102	lawyer	Verrill Dana LLP	2	100.00
10/18/17	James Cohen	62 Deepwood Dr Portland M 04103	attorney	Verrill Dana LLP	2	150.00
10/18/17	Brandon Mazer	45 Eastern Prom 9F Portland ME 04101	attorney	Shipyard Brewing	2	100.00
10/18/17	Nathaniel Hull	12 Pine St. Portland ME 04101	lawyer	Verrill Dana LLP	2	100.00
10/20/17	Malone Commercial Brokers	5 Moulton St. Portland ME 04101	Business		3	500.00
10/20/17	Ready Seafood	PO Box 17562 Portland ME 04112	Business		3	500.00
10/20/17	Roger Berle	6 Island Ave. Cliff Island, ME	self	Construction	2	350.00
10/20/17	Portland Longshore- men's Society	PO Box 8141 Portland ME 04104	Business		3	250.00
10/20/17	Harborview Properties	147 Fore St. Portland ME 04101	Business		3	250.00
10/20/17	Ruben Flores	107 Pennell Ave Portland ME 04103	Self	construction	2	150.00
10/20/17	Michael Burton	118 Hope Ave Portland ME 04101	Team Member	Acadia Benefits	2	100.00
10/20/17	Dan Anderson	1326 Washington Ave Portland ME 04103	Real estate	self	2	100.00
					Page 3	7,100.00

10/20/17	Elizabeth Whitman	40 Pitt St. Portland ME 04102	retired		2	100.00
10/12/17	Jack Humeniuk		Business Agent	ILA	3	200.00
10/21/17	Russ Pierce	6 Masefield Terrace Cape Elizabeth ME 04106	Asset mgnt and Operations	Port Properties	2	250.00
10/22/17	Sean Dundon	5 Stratton Place Portland ME 04102	Environmental Engineer	Blackstone Consulting LLC	2	300.00
10/22/17	Phineas Sprague	159 Charles E. Jordan Rd. Cape Elizabeth ME 04106	manager	Portland Yacht Services	2	250.00
10/22/17	Casey Prentice	254 Commercial St. Portland ME 04101	Hospitality	Prentice Hospital Group	2	225.00
10/24/17	Port Property Management	104 Grant St. Portland ME 04101	business		3	800.00
10/24/17	Crandall Toothaker	PO Box 4271 Portland ME 04112	Real Estate	Portland Maine Rentals	2	750.00
10/24/17	Joseph Morris	172 Eastern Prom Portland ME 04101	requested		2	500.00
10/24/17	Eric Higgins	PO Box 600 Scarborough ME 04032	contractor.	LR Higgins Inc	2	200.00
10/24/17	Leslie Merrill	5 Edgecomb Court Portland ME 04103	constituent services	US House of Representatives	2	100.00
10/24/17	Crunch Consulting	142 High St. Portland ME 04101	business		3	100.00
10/24/17	Ralph Baldwin	305 Commercial St. Portland ME 04101	retired		2	\$ 100.00
10/24/17	Francis Cloutier	PO Box 4271 Portland ME 04112	requested		2	100.00
10/24/17	June Delano	38 Hastings St. Portland ME 04103	retired		2	100.00
10/24/17	John Baldacci	18 Plymouth St. Portland ME 04102	econ development	Pierce Atwood	2	100.00
7/1/2017 - 10/24/17	Contributions \$50 or less				2	1,496.99
					Page 4	5,671.99